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A Longitudinal Study of Chinese Managerial Behaviour:
An Inside View of Decision-making Under the Economic Reform

**A Thesis Submitted for Consideration
for the Award of Doctor of Philosophy**

by

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May 1991

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SUMMARY

A Longitudinal Study of Chinese Managerial Behaviour: An Inside View of Decision-making Under the Economic Reform

This research compared decision making processes in six Chinese state-owned enterprises during the period 1985 to 1988. The research objectives were:

- a) To examine changes in the managerial behaviour over a period 1985 to 1988 with a focus on decision-making;
- b) Through this examination, to throw light on the means by which government policies on economic reform were implemented at the enterprise level;
- c) To illustrate problems encountered in the decentralization programme which was a major part of China's economic reform.

The research was conducted by means of intensive interviews with more than eighty managers and a survey of documents relating to specific decisions. A total of sixty cases of decision-making were selected from five decision topics: purchasing of inputs, pricing of outputs, recruitment of labour, organizational change and innovation, which occurred in 1985(or before) and in 1988/89. Data from the interviews were used to investigate environmental conditions, relations between the enterprise and its higher authority, interactions between management and the party system, the role of information, and effectiveness of regulations and government policies on enterprise management.

The analysis of the data indicates that the decision processes in the different enterprises have some similarities in regard to actor involvement, the flow of decision activities, interactions with the authorities, information usage and the effect of regulations. Comparison of the same or similar decision contents over time indicates that the achievement of decentralization varied according to the topic of decision. Managerial authority was delegated to enterprises when the authorities relaxed their control over resource allocation. When acquisition of necessary resources is dependent upon the planning system or the decision matter is sensitive, because it involves change to the institutional framework(e.g the Party), then a high degree of centralization was retained, resulting in a marginal change in managerial behaviour. The economic reform failed to increase decision efficiency and effectiveness of decision-making. The prevailing institutional frameworks were regarded as negative to the change.

The research argues that the decision process is likely to be more contingent on the decision content than the organization. Three types of decision process have been conceptualized, each of them related to a certain type of decision content. This argument gives attention to the perspectives of institution and power in a way which facilitates an elaboration of organizational analysis.

The problems encountered in the reform of China's industrial enterprises are identified and discussed. General recommendations for policies of further reform are offered, based on the analysis of decision process and managerial behaviour.

Decision-making, China, Industrial Management, Economic Reform (1985 and 1988)

Yuan Lu

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PART I: INTRODUCTION

CHAPTER 1: INTRODUCTION

How do enterprise managers behave when they are given more decision making powers than before? Does decentralization encourage managers to respond to the environment more quickly and to improve organizational performance more efficiently than the decision made centrally by top executives? Do managers act more rationally in pursuit of profits than when they are subject to centralized instructions and commands? Or do they still rely upon their higher authorities' instructions rather than their own judgement? Do they repeat what they did last time, because their behaviour could only be changed marginally and they must have sufficient time to learn a new pattern through the new experience? Are they still constrained by their relations with external and internal parties in a power game as before? Answering these questions is not trivial but it is indeed vital to the understanding of changes underway in China and even more dramatically in Eastern Europe.

This thesis is about the study of managerial behaviour in six Chinese state-owned industrial enterprises¹, during the period from 1985 to 1989 when economic reform was both generalized and accelerated within the industrial sector. The research has a simple purpose: to examine how enterprise management, economic and political institutional structures, and decision making processes, are interrelated in circumstances where economic reform intended to expand the autonomy of enterprise management. The processes through which enterprise managers made decisions reveal that decentralization was a not simple matter of delegating decision making power from administrative bodies to enterprises. It required complex and wide practices of re-institutionalizing the society. This re-institutionalization process is seen to have a double effect. On the one hand, the prevailing institutions - the central planning bureaucracies in particular - were eroded. On the other hand, it had to generate a set of new institutions, such as markets, for the governance of economic transactions.

Because of the underdevelopment of both bureaucratic and market modes of economic coordination in China, decentralization was liable to be rescinded when answers led to sudden changes in government policy. The implementation of decentralization has been bounded by the limitations of institutions for macro-economic regulation. Decision making in this context is distinguished by the dynamics of negotiations, bargaining, and the seeking of consensus among institutional forces. The decision process, therefore, is highly politicalized.

There are several reasons for choosing this topic. First, industrial enterprises, particularly state-owned enterprises in China, were targeted to carry out changes in management. From 1984, the urban reform was conducted on a national scale. Industrial enterprises were officially granted more decision making powers than before, over aspects of production, sales, purchasing, organizational change, labour incentives and financial investment. These measures of decentralization were specifically aimed at state-owned enterprises, with expectations of 'activating' such enterprises to achieve better performance and efficiency.

The second consideration is one of research opportunities. The author was in a position to maintain contacts with six local state-owned enterprises in Beijing, over a period (from 1985 to 1989) during which the decentralization was implemented. This made it possible to adopt a longitudinal perspective on their development under the reform. Third, although there are now a number of studies of decision making in Western countries, they remain undeveloped in China. This research was designed, by means of detailed case studies, to compare systematically changes in management, in different decision areas within each of the six enterprises, and the same area among these different enterprises. It was intended to open a window on managerial behaviour in China through this investigation of decision making. The result of this research is likely to provide a basis for a further comparative study between China and other countries.

The study of management in China raises a number of issues. China, since 1949, has been committed to establishing a socialist society. The dominant position of the Communist Party is presented in every corner of the society, from organizational structure to decision making processes, in both macro-institutions of the state² and micro-collectivities such as enterprises.

The dominance of the Party is consistent with the primacy of political ideology - Marxist, Leninist and Maozedong doctrine - although components of this ideology were changed time to time at the highest level of political leadership. The building of political consensus by deploying mass movements and ideological campaigns has been, and still is, the principal way of achieving official objectives set by the central authority, either the state administrative bureaucracy or the political regime. Management in grass-roots organizations cannot avoid the influence of these politically-oriented pressures.

The economic management system in such a context is also subject to a strong and singular institution, the central planning system³, which consisted of a number of commissions and ministries. This bureaucratic body was based on the Soviet model and was established to centralize economic activities. Its control, however, extended beyond the economical sphere. From resource allocation to labour employment, most activities, social and political as well as economic, were arranged according to commands from the higher hierarchies. Managerial tasks were limited to implementation of these planning instructions.

China's effort to modernize the country was, therefore, conducted through a politicalization of economic management and centralization of state control. Leaving aside ideological claims, China has achieved some economic prosperity in her socialist construction, which was seen as a further attempt to realize industrialization. Up to the 1980s, China has already established her own industrial system, with more over 421,000 industrial enterprises in 1989(The State Statistical Bureau, 1990:271). But this progress has been costly. Large scale waste, low quality of social services, huge intensity of population, and political

uncertainty, all contributed to the stop-go pattern of the past forty years. Enterprise management, of course, was affected by these fluctuations.

On the other hand, given five thousand years history of Chinese civilization, neither the industrialization process nor the communist revolution could not be expected to set aside established traditions. The study of contemporary China has to take into account the significance of traditions inherited from her history, especially its philosophy and culture. Social hierarchies, networks and relations between persons and organizations were deeply rooted in these traditions. Behaviour patterns in China are largely moulded and regulated within the framework of the traditional culture.

These three factors - political supremacy, processes of industrialization and inherited traditional behaviour patterns - give rise to the contextual dimensions of this research. Although modern China has experienced a number of irregular changes, for instance the socialist-transformation of the early 1950s, the Great Leap Forward, the Culture Revolution, and the economic reform since 1978, each of which seemed to be different in political motivation and outcomes, the author believes that these changes were directed by some 'underlying' forces. This research hopes to discover through light on these forces, which are particular to China.

The economic reform starting in China since late 1970s has been considered as an attempt to get rid of the bureaucratic failures inherent in socialist planning systems. This attempt was expressed by a model, officially called, "The State regulates the market, and the market directs enterprises"(guojia zhidao shichang, shichang yindao qiye). China's reformers sought to combine central planning with the market system. This naive design intended to take advantage of 'socialist' plans and 'capitalist' markets(Kornai, 1986). According to this model, the state would remain supreme in economic management, but it did not impose its intervention directly upon enterprises. Enterprises were acting accordingly in the "market", which was regulated by the state. At the same time, reform in China was not intended to

abandon basic ideological concepts of state socialism, which claimed to retain a central planning system and the significance of the Party in decision making. It was logical then, derived from this model, that the core of the reform was to focus on relaxation of control over enterprises, more than on change to the whole complex of political and economical institutions. This was termed as 'expansion of enterprise autonomy' (**kuoda qiye zishu quan**) or simply as 'decentralization' (**fangquan**), which meant to delegate some decision making authorities to enterprises.

Decentralization in China has been progressed through several distinct practices. First, there was a re-allocation of tasks and functions between the central planning authorities and other socio-economic institutions. Before the economic reform, an enterprise was entitled only to act as an operational unit, responsible for the technical process of transferring inputs to outputs, according to planning quotas. The planning system imposed detailed instructions concerning pricing, technological innovation, personal and labour management, purchases and organizational design onto enterprise management.

The decentralization policy started to disassemble the tasks of the central planning into different elements, then transferred these elements to other socio-economic institutions concerned with issues such as tax, bank, employment security, and labour mobilization. This created a new environmental setting for enterprises. Categories of product subject to mandatory planning were reduced from 316 items in 1979 to 45 in 1988, and the number of inputs produced by central government from 256 in 1979 to only 27 in 1988 (**Beijing Review**, No. 46, 1989). The coordination of production activities now relied more upon market relations. In other words, the central planning system which dominated inter-enterprise coordination beforehand were partially taken over by market coordination and some functional institutions now operated mainly at the level of local government.

Parallel to the reform in the planning bodies, efforts to establish markets were pursued in order to create a competitive environment. The market, which had been criticized as a characteristic of capitalism, was now expected to play a role in coordinating economic transactions among enterprises. At the same time, some functional institutions, such as banking systems, tax, law, and social services, were established to create an environment based on overt rules which was intended to reduce arbitrary interference from the state administrative bureaucracy.

The second process was to delegate a measure of decision autonomy to individual enterprises, in order to encourage them to pursue profit targets in markets, rather than the physical quota of production outputs according to planning commands. Under the reform an enterprise was seen as an economic unit for making profit, whereas previously it had been defined as a social/political community to carry out revolutionary tasks. Managers have been encouraged to pursue profits and to increase economic efficiency, such as productivity. The enterprise was granted some degree of power to formulate its own strategy, according to its market niche, and to decide the input-output exchange.

Third, beyond re-institutionalization within government between central and local levels and the delegation of decision authority to enterprises, within enterprises themselves decisions on specific issues were to be left in the hands of a trained body of managers. This process called for the director to assume full responsibility for operations and staffing within the enterprise, without requiring permission from its communist Party committee. This opened the way for delegation within the managerial hierarchy at the enterprise director's discretion. The political system, the Party which used to be a dominant coalition in decision making, was turned to the tasks of helping and supervising management decisions.

A major tool deployed to implement these reform measures was the legislation of policies and regulations which identified the authority and autonomy held by managers in decision making. In other words, decentralization was reinforced by the state itself, through a top-down process.

In practice the implementation of economic reform has taken a zigzag path. Changes in institutional structures provoked political uncertainty and instability. Ideological arguments about 'socialism vs capitalism' have continued throughout the last decade. China's economy has not escaped a stop-go pattern. Decentralization was replaced by centralization at times when the central government felt uncertain about its macro-economic control. Decentralization was, sometimes, blamed for an anarchy or disorder in China.

But is China's shift in its economic reform just to be explained by the conflict of vertical relations vs market coordination? Or is it a result of undeveloped market legislation, or does it stem from China's unique traditions?

The present research explores two linked continuous processes. One is focused on vertical relations between enterprises themselves and their higher authorities--local industrial bureaux-- which allocated resource to enterprises and supervise their activities among enterprises and relations with other organizations.

The other process is concerned with decisions formulated according to market trends and organizational tasks. A requirement for the enterprise to act as an independent unit to increase its economic efficiency has been demonstrated to be unpractical and unrealistic in the context of China. Profit maximization is never the only target to be chased. The research is going to focus on how Chinese managers make decisions themselves under social and political constraints to reach their targets, including profit. Horizontal inter-organizational relationships can also be taken into account through this focus, in addition to the vertical relationship between enterprises and their higher authorities.

Throughout this thesis the emphasis is on describing the impact of the reform on management, analyzing the processes of management decision making in its context, and illustrating why and how the changes are constrained by these two different coordination mechanisms of hierarchy and market(Williamson, 1975)

The thesis has thirteen chapters. This chapter offers an introduction and a general outline of the study. Chapter 2 reviews relevant organizational theories. Attention is given to several influential and important schools of organizational decision-making. These theories propose different models for understanding organizational behaviour through studies of decision making. The perspectives of organizational decision-making are differentiated and they offer a broad range of concepts and assumptions. But, it is argued in Chapter 2, there is a lack of systematical research which examines the same or similar decision issues in different organizations.

Chapter 3 discusses the context of decision making and tries to conceptualize dimensions of environment for the subsequent research, from the perspectives of industrial development, traditional culture and political system.

The perspectives which are developed in Chapter 4 help to outline the decision-making environment in China. Discussions are drawn to the notion of industrialization in China, Chinese traditions and practice of China's socialist construction. The analysis in this chapter indicates that some concepts of China traditional culture was incorporated into the ideological doctrine of the state socialism. These concepts, derived from the tradition and state socialism, are seen to encourage a kind of neo-traditional management, which obliterates the professional management required by industrialization. The decision context in China is characterized by its lack of the legitimate rationale in the traditional bureaucracy and highly politicalized economic governance.

Chapter 5, 'Research Design and Methodology', sets out the research design. There are two principal methods used in this research: detailed fieldwork for construction of cases and historical investigation. Moreover, the Aston organizational methodology and a survey of documentary evidence were employed to complement the qualitative methods. Several key hypotheses are developed.

Chapter 6 provides a detailed background of the six Beijing state-owned enterprises, which were selected for the field study. The vertical institutional structure, connecting the principal authorities in government and planning system to individual enterprises is depicted. A chronicle of changes in management systems since 1984 traces the impact of the reform on these enterprises. Internal structure and organizational processes are also introduced, for further clarification of Chinese enterprise management.

Chapter 7, 'Decisions on Transactions: Purchasing of Inputs and Product Pricing', presents findings for two principal transaction activities, purchasing of inputs and product pricing. Since the reform intended to create a model for combining state planning with market forces, it is interesting to discover how Chinese managers determined their priorities and what final outcomes were reached when they faced the two different systems.

Chapter 8 draws attention to labour recruitment decisions. It examines processes of labour resource management. The chapter describes the balance and conflict between an increase of economic efficiency (labour productivity) and avoidance of unemployment in society.

Chapter 9 concentrates on another decision area, organizational change. Compared to other decisions studied, this issue is internal to the enterprises. An important concern in this chapter is to investigate the relationship between managers and the Party system. It uncovers the complex and difficult processes of decision making on an organizational change even when enterprise directors were officially presumed to possess total power to determine the issue.

Chapter 10 concerns investment on the innovation of products and production processes. For an enterprise operating under market competition, both technological innovation and capital investment are vital for its competitive advantages and long-term development. But for an enterprise in a centrally planned economy, the motive of innovation and capital inputs was derived from the wish to secure resources and from conditions of bureaucratic coordination. Through investigations of innovation decisions with investment, this chapter presents the incentives for and constraints on investment for enterprises under the reform.

A summary of the investigation findings on decision processes in these five areas is presented in Chapter 11. It focuses on a comparison of decision processes over time, between different decision contents, and between different enterprises.

Chapter 12 begins with a test of hypotheses addressed in Chapter 5. Then the discussion turns to general theories of management, compares and contrasts other researches to the findings in this research. The purpose is to conceptualize the nature of decision-making in Chinese industrial enterprises and identify the differences and similarities in management perspectives.

This Chapter further puts forward to the understanding of management process in China and address the questions of the unit of organizational analysis in China. The empirical findings in this research are compared with some studies in other nations.

Chapter 13 is the final chapter, 'Conclusions', takes account for the consequence of the economic reform in China through the presentation of the research. The emphasis is put on specificity of management in China. A comprehensive policy is needed, not only focusing on the delegation of decision-making autonomy to enterprises, but also on re-institutionalizing a whole environmental complex as well. It is important for reform to change managerial processes, and not to confine itself to the re-arrangement of structures.

Notes:

- 1 It is necessary to define the term "state-owned". The state-owned industrial enterprises in China are formally named as the industrial enterprises owned by the whole people. According to the Enterprise Law, an industrial enterprise owned by the whole people refers to a socialist business unit with independent responsibility for its performance (profit or loss). The enterprise assets are owned by the whole people, while the state, on behalf of the people, delegates a certain autonomy of day-to-day management to enterprises. The enterprises enjoy the right to use and dispose of the property that the state puts under its control. The enterprise director can be appointed or chosen from applicants by department empowered by the government, as well as chosen from applicants or elected by the workers' congress. The role of the Party committee in the enterprises is described as "guaranteeing and supervising the implementation of Party and State principles and policies and supporting the factory director in fully exercising power according to law.
- 2 The term 'state' is used here to refer to the totality of political institutions, including the Communist Party, the government, and the mass organizations associated with them.
- 3 The central planning system refers to Riskin's (1987) definition:
"Central planning' can refer to any regime in which central planners set and attempt to implement priorities for economic activity. However, it has come to imply a particular form of central intervention: one in which virtually all enterprises are either state-owned or treated as though they were, and in which the central government not only sets priorities, but carries them out **administratively** by distributing materials and finance to, and ordering output from, the various enterprises". (Riskin, 1987: 9; emphasis is original)

CHAPTER 2: FRAGMENTED PERSPECTIVES: STUDIES OF DECISION MAKING AND ORGANIZATIONAL THEORY

2.1 Theoretical Perspectives of Decision-making in Organization Theory

Making decision is without doubt one of the most important activities in management. Decisions made by top managers will determine the future of their organization. These decisions are usually termed as "strategic decisions" or "top decisions". As Mintzberg (1988a: 25) noted:

‘One of the more important things managers do is make strategy for their organizations, or at least oversee the process by which they and others make strategies. In a narrow sense, strategy-making deals with the positioning of an organization in market niches, in other words, deciding on what necessary changes, its basic orientation. Strategy-making also takes up the complex issues of collective intention - how an organization composed of many people makes up its mind, so to speak.’(Emphasis is original)

The recognition of decision-making as an important managerial activity has encourage the development of various theoretical schemes and models. There are coexisting meanings of decision-making among researches, expressed through different perspectives on its content, processes and outcomes. For the purpose of this research, a decision is considered to be a specific commitment to action and a decision process as a set of actions that starts with a formal proposal(s) triggered by a stimulus for action and ends with a specific commitment to action(Hickson et al., 1986; Mintzberg at al., 1976). A decision could concern an economic transaction, organizational change, innovation, and other matters which are formulated collectively within organizations. Such decisions are often important, complex, collective and consequential. They are important because of the issues or decision outcomes have a bearing upon the performance or survival of an organization. They are complex, because the solution is multisided and uncertain in its outcome when the environment is complicated and dynamic. They are collective, because each solution often hinges on the decisional inputs of the various interest groups involving in the processes. Finally, they are consequential, because they impart distinct and relatively enduring commitments that have profound internal and external effects.

Attached to these decisions are the properties of organizations, in terms of hierarchical levels of organizational structure, powers and collective beliefs of actors, and contexts of the environment. An organization acts as an agent in its environment to determine its course of development. Yet, it is also referred to as an arena of decision-making into which the participants enter with their own interests.

2.1.1 March and Simon's Bounded Rationality Model

Simon(1976) refers to 'managing' as 'decision-making'. He argues that the executive acts as a decision maker. A manager makes decisions with authority on the one hand, and holds accountability for the performance of the organization on the other hand, because of his/her responsibility. According to Simon's view, the individual acts rationally both intentionally and adaptively. The individual 'satisfies' rather than 'maximizes' in decision-making because he or she possesses imperfect information and limited capabilities. This perspective was further developed by James March and Herbert Simon in their book '*Organizations*' (March and Simon, 1958). Their typology of routinized, discretionary, and developmental programmes is particularly important to management theory, and is basic to understanding how organizations function in their environments. The concept of bounded rationality, as an alternative to the traditional rational model, was advanced. As March summarizes later (March, 1981:211):

"The argument, due originally to Simon, is that informational and computational limits on decision-making in human institutions require a theory of organizational choice to be a theory of limited rationality. There are limits on the number of alternatives that will be considered, and limits on the amount and accuracy of information that will be used."

Simon(1977) further distinguished two types of decisions: programmed and non-programmed. A programme is a sequence of activities and is evoked by some stimulus. If the stimulus is one that keeps recurring, a routine is developed to handle the situation efficiently whenever it occurs. Organization behaviour is directed and controlled by these programmes. Furthermore, decision-making processes and results can be made predictable by programming the premises of decision-making. A non-programmed decision is

characterized as "one-shot", "ill structured and novel", which need judgement, intuition and creativity. Simon(1977:48) believed that non-programmed decisions could be handled by means of modern problem-solving techniques. So that organizational design must make structure available for occurrence of non-programmed activities.

Simon's work was primarily rooted in a psychological approach, which views the individual as an information processing system. The bounded rationality and satisficing decision model was to exert a significant influence upon later studies, such as Williamson's transactional cost perspective(Williamson, 1975, 1985).

However, when the term " organizational decision" is used, it can not be reduced to the individual level. Decision-making within an organization is a joint and collective process, in which the locus of authority and power within structures, group interests, and political preferences, all exhibit their effects on decision processes and outcomes. Decision-making, in this sense, is the organization's activities. As Hall(1982) argues, decisions in organization, particularly these important ones about future organizational directions and policies, are strongly influenced by organizational factors, such as power, position of decision makers, tradition and precedent, and the relationship between the organization and its environment.

"These organizational based considerations have an impact on how individuals within the organizational hierarchy make decisions on behalf of the organization"(Hall, 1982:38)

2.1.2 Cyert and March's Behavioural Theory of the Firm

Cyert and March(1963) conceptualized a firm as a collection of coalitions. They modify the individual learning model into a coalition model of decision-making. This recognizes decision-making is a political process. Conflicts of interest, based on sub-goal differentiation, are regarded as 'normal' parts of organizational life. As the authors noted(Cyert and March, 1963:27):

"Let us view the organization as a coalition. It is a coalition of individuals, some of them organized into subcoalitions."

Cyert and March(1963:102) further argued that there were three basic principles in decision-making:

"1. **Avoid uncertainty.** Rather than looking for ways of dealing with uncertainty through certainty equivalents, the firm looks for procedures that minimize the need for predicting uncertainty future events. One method uses short-run feedback as a trigger to action, another accepts (and enforces) standardized decision rules.

"2. **Maintain the rules.** Once it has determined a feasible set of decision procedures, the organization abandons them only under duress.....

"3. **Use simple rules.** The firms rely on individual 'judgement' to provide flexibility around simple rules." (emphasis original)

Through the analysis, four major relational concepts were developed: (1) quasi resolution of conflict, (2) uncertainty avoidance, (3) problemistic search, and (4) organizational learning(Cyert and March, 1963:116-117). These four concepts form the basic structure of organizational decision-making processes.

The theory developed in Cyert and March's work introduces the concept of "slack", which means an excess of resources (money, time, personnel, equipment, ideas) over those immediately required. When the organization has a lot of slack, or the environment is "benign" posing few threats to the organization, it can pursue different goals, even some conflicting goals. But generally, the maximizing of one goal will be at the expense of another.

2.1.3 The Garbage Can Model

With an attempt to feature organizational decision-making process as 'the partial uncoupling of problems and choices'(Cohen et al, 1972:16). Cohen and his colleagues proposed the garbage can model. It has been called 'organized anarchies' where decision-making reaches such as pitch that what is wanted, how it is to be done, and who is involved, are confused

and unconnected. Organized anarchies are organizations characterized by problematic preferences, unclear technology, and fluid participation. Given the many interests that are implicated, an organization is seen as 'a collection of choices looking for problems'(Cohen et al. 1972:2).

"Elements of organizational structure influence outcomes of a garbage can decision process (a) by affecting the time pattern of the arrival of problems choices, solutions, or decision makers, (b) by determining the allocation of energy by potential participants in the decision, and (c) by establishing linkages among the various streams"(Cohen et al., 1972:4)

Cohen et al(1972) argued that decision-making is not so simple as a problem solving. It is dependent upon the "context of choice, but choices are made only when the shifting combinations of problems, solutions, and decision makers happen to make action possible"(Cohen et al., 1972:16)

Garbage can theory recognizes that problems in organization were often not well-defined, but ambiguous. The limitation of attention given by participants(actors) was imposed by scarcities of time and energy. Attention is focused on current problems, and the search for solutions to solve current problems. Decision processes involve a set of actors who "come and go", through entrances and exists, generating various kind of problems and solutions, then bringing new problems and solutions. The theory considered four basic variables, each of them related to a process in time:

- (1) A stream of choice: an entry time; and a decision structure, a list of participants eligible to participate in making that choice
- (2) A stream of problems: an entry time; an energy requirement; and an access structure of seeking choices
- (3) A rate of flow of solutions: solutions are flowing into the system
- (4) A stream of energy from participants: each of participants provides some specified amount of potential energy to the organization in each time period

Garbage can theory, as Perrow(1986) noted, draws fully on bounded rationality, using incomplete information, lack of knowledge or cause-and-effect relationships, and shifting goals and priorities, and also goes far beyond bounded rationality by conceptualizing

dynamic group processes and emphasizing the need to rationalize, to construct something stable out of fluidity.

2.1.4 Mintzberg and his Colleagues' Study

Mintzberg and his colleagues examined 25 cases of "unstructured" decision processes (Mintzberg et al, 1976). The term "unstructured" is used to refer to "decision processes that have not been encountered in quite the same form and for which no predetermined and explicit set for ordered responses exists in the organization". (Mintzberg et al, 1976:246). A general model of the decision process, in Mintzberg and his colleagues' study, was based on the identification of seven paths or stages: simple impasse, political design, basic search, modified search, basic design, blocked design, and dynamic design, each of which is dependent upon "a consequence of events, consisting of the routines, interrupts, branches and cycles" (Mintzberg et al., 1976:268). It is noted that organizational decisions are circuitous, repeating themselves over and over again as they wander their ways towards their conclusions.

In his later study of strategic management as one aspect of decision-making theory, Mintzberg further argued that the strategy process is more than plans, as the normative school described. "Strategy-making is a fascinating process, involving more than the simple set of prescription called 'planning' with which it is usually associated" (Mintzberg, 1988a: 25). And he also argued:

"Strategies can form as well as be formulated. A realized strategy can emerge in response to an evolving situation, or it can be brought about deliberately, through a process of formulation followed by implementation. But when these planned intentions do not produce the desired actions, organizations are left with unrealized strategies" (Mintzberg, 1988a: 30)

The characteristics of strategic decision processes displayed in Mintzberg and his colleagues work (Mintzberg et al., 1976) were immensely complex and dynamic. They argued that previous researchers paid too much attention to the selection routines in decision processes,

but almost none to diagnosis. They noted that there was a gap in theory to describe the relationship between decision process and structure(Mintzberg, et al.:1976:274).

2.1.5 The Bradford Study: Dual Explanations

Another approach to decision-making processes was developed by the Bradford Study, through its analysis of 150 cases histories of top management decision-making in 30 organizations. This study developed a model of dual rationality(Hickson et al, 1986). Their central thesis is that all decisions can be analyzed as a combination of problems(creating a need for judgement) and interests (creating a need for compromise) which provides a process for reaching a choice. They argued that decision-making is never a matter solely of calculation; and that there is no type of process that can be explained only by reason of problem-solving or political interests along. The argument goes so far to draw together the combination of complexity (problem solving capacity) and politicality. This model is termed "Dual explanations". Three main processes were identified - sporadic, fluid and constricted - which can be linked with three kinds of subject matter - vortex, tractable and familiar - to form three "ideal type" modes of decision-making:

- (1) Vortex-sporadic: high on both complexity and politicality. A weighty, controversial matter that sucks every one into swirls of activity likely to be protracted, running into disrupting delays and impediments. The process is uneven and widespread, and decisions are likely to be taken at the highest level.
- (2) Tractable-fluid: less complex and least political. Unusual, but non-controversial. Impediments and delays are less likely, for though a wide range of interests may still be affected, and the consequences widely felt, fewer people are involved. Fluid processes are triggered by tractable matters, and these may be precursive in that they set precedents for later decisions.
- (3) Familiar-constricted: least complex and less political. Normal and recurrent. Well known and unevenly influenced by internal interests only. There could be considerable discontinuity, and therefore, like vortex-sporadic processes, can be subject to delays. But as the issue is more straightforward, involving a smaller number of managers, the process is more restrained and narrowly channelled. This outcome is always a strong possibility where there is a good base of information to start with.

The Bradford Study, therefore, was much concerned with the matters on which decisions were made. It is argued that

'[E]very matter that arises for decision must **both** raise problems and implicate interests. Because the problems raised and the interests implicated by one matter are not the same as those encountered by the previous one, nor will they be the same as those in the next, the process of arriving at each decision will differ.'(Hickson, 1987: 185, emphasis is original).

In decision processes, the Bradford Study focused upon six elements: scrutiny of information, negotiation, discontinuity, centralization, duration and outcomes. Hickson and his colleagues concluded that "the matter for decision matters most". The content of decision determines what to do. The organization provides participants with rules of the game, in terms of who is doing and how to do. As Hickson said: "A framework of power prescribes what an organization is for and who in the last resort determines what it is for".(Hickson, 1987:186)

The decision-making in the Bradford study is referred to a football game in a garbage can, "a team game of continually redefined problems and recalculated tactics which swings to and fro in bursts of action between pauses".(Hickson et al, 1986:252). The game ends with the result that one team or coalition of teams held the ball to where it said the end was. The mode of play changes from game to game.

2.1.6 Pettigrew's Study of Organizational Decision-making: Political Process

Pettigrew(1973) approached decision studies through the route of qualitative investigation. He criticized March and Simon's(1958) theories which treated an organization like an individual decision maker. He argued, rather, that organization should be viewed as a political system. He accepted the theory developed by Cyert and March(1963), and emphasized further the phenomenon of power mobilization in decision-making process. It is argued in his analysis that:

"Decision-making in organizations is not merely a thought process that balances goals and means, or a choice process in which the environment is discriminated as a limit to choice only through the mind of the decision-maker. Rather, it may be understood as a political process that balances various power vectors.....Decisional outcomes evolve out of the processes of power mobilization attempted by each party in support of its demand."(Pettigrew, 1973:265)

Pettigrew further noted that the organizational structure located individuals differentially regarding access to resources. For example, the position of technical gatekeeper gave him advantages in seeking support for his demands, through his control over information sources which permitted his personal distortion of information for the purpose of mobilizing power.(Pettigrew 1972, 1973). Therefore, actors "who accurately understand how a structure operates are in a much better position to make it work to their advantage than those who do not"(Pettigrew, 1973:274)

The above theories may be summarized as in Table 2.1.

Table 2.1 inserted here

There have been several other models, such as disjointed incrementalism(Braybrooke and Lindblom, 1963) and logical incrementalism (Quinn, 1980). These perspectives see decision-making as problem solving, search, and incremental trial and error. Organizational action is seen to be improved in the ability to make marginal improvements by monitoring problems and searching for solutions. Generally, decisions studied are described as strategic decision, which is the task of upper-level management involving the identification and structuring of the most important problems threatening the organization's ability to survive and adapt in the future. Strategic decisions are said to be concerned not with the everyday, routine problems but with problems and issues that are unique, important and frequently ambiguous. They impact the firm's ability to survive and prosper(Cowan, 1986; Lyles and Mitroff, 1980; Thompson, 1967).

2.2 Power in Organizational Decision-making

Weber's work on "power" and "authority" focused on the legitimacy of organizational authority. The concept of power has been widely discussed in organizational theory. As stated in the previous section 2.1, some theories see organization as a collection of political interests (c.f, Cyert and March, 1963; Pettigrew, 1973). Viewing organizations in terms of the metaphor of political systems entails utilization of the concept of power. It is assumed, in these theories, that actors(individuals and groups) enter an organization with preferences and resources; each actor uses personal or group resources to pursue personal or group gains. In organization, there exist various interest actors and these actors make various demands. Decisions within the system on the allocation of resources(i.e., in response to demands) are made by coalitions of interest actors and each potential coalition has a certain potential control over the system. The emphasis is put upon mechanisms for obtaining and exercising power, negotiating bilateral exchanges, and arranging coalitions. Power is defined most often in terms of the capacity of the particular social actor to overcome opposition(Blau, 1964; Dahl, 1957; Salancik and Pfeffer, 1977).

Decision-making authority is related to a legitimate location within organizational hierarchies. The locus of this authority represents the level of decision-making and relationship of power-sharing between the top and bottom levels. The source of power is typically argued to be the ability of the social actor to provide some performance or resource to the organization that is valued and important and the inability of others to obtain such performance or resource from alternative sources. For example, French and Raven(1959) identified five categories of power sources, in terms of reward, coercive, legitimate, referent and expert. Crozier(1964) argued that the power of maintenance workers in a French factory was derived from their control over the outstanding organizational contingency, the breakdown of machines. Hickson et al.(1971) also argued that power accrued to those units which could successfully cope with the most central, pervasive, and critical uncertainties.

Organizations are regarded as bargaining and influence systems with intra-organizational power and influence(Abell, 1975)

With the relationship between an organization and its external environment, Pfeffer and Salancik(1978) conceptualized the organizational dependence on resources as power. Here, an organization has to satisfy the demands of a respective group which controls over the organization's dependent resources. The importance of the resource, the extent to which the external interest group has discretion over the resource and the availability of alternatives are factors to determine the degree of resource dependency(Pfeffer and Salancik, 1978:45-46).

Thus, organizational action is seen to result from struggles between different actors, internal and external, each with a different power basis. "Consequently, the interests of actors in organizations and the decisions that they make are necessarily contingent on various forms of organization calculations" (Clegg, 1989a: 105).

The normative school of power analysis has focused on the obedience and compliance which exist in the relationship between two actors. But Clegg(1989b) argued that relationship of power should be a dynamic framework, rather than simply as a single direction of obedience. Clegg(1989b) argued for an extension of the analysis of power beyond a concentration on its causality to a consideration of its use in the light of strategy, necessity and the organizational framework within which the parties are located. This leads him to a representation of the "circuits of power" in which what he terms as "agencies" are the source of rules and obligatory procedures for social relations. The rules and procedures establish rights of access to resources and to their disposition. These agencies are potentially in tension with the operational units which they are endeavouring to control, upon which they, at the same time, depend. Through developing their own rationales of production and discipline, the operational units deploy what Clegg calls "facilitative" power, which itself empowers and modifies the social relations upon which agencies are

constituted. Clegg's analysis thus depicts mutual dependencies and dynamic processes of action within recursive circuits of power. Within these circuits, there are "obligatory passage points" at which the parties concerned attempt to fix expectations and rights in stable representations of necessity and normality.

At the same time, Clegg(1989b:201) found a dilemma inherent in the central paradox of power:

"[T]he power of an agency is increased in principle by that agency delegating authority; the delegation of authority can only proceed by rules; rules necessarily entail discretion and discretion potentially empowers delegates. From this arises the tacit and taken-for-granted basis of organizationally negotiated order, and on occasion, its fragility and instability,...."

The implication of this discussion of power directs attention to concepts of rules and discipline. Power will always be inscribed within contextual "rules of game" which both enable and constrain actions (Clegg, 1987). Rules are made to legislate a certain power to some actors, who are able to exert their authority in actions. Rules are not simply a property of actors exercising power, but are constitutive of relations between these actors.

In decision-making, because decisions are the result of bargaining and compromise, the resultant choice does not perfectly represent the preferences of any single decision actor. It is power that determines whose interests are to prevail more in the conditions of conflict. Decision-making within organization could be seen as a dynamic process with power mobilization and sharing(Heller, 1971; Pettigrew, 1973). For example, Heller(1971) found that the degree of power-sharing in a decision depended on importance of the decision. High levels of power-sharing or a consultative style were expected in the cases of decisions important to both subordinates and the company, or only important to subordinates, while a highly centralized decision-making style occurred when a decision was a matter of concern to the company, but not to the subordinates.

2.3 The Content of Decisions

The study of management decision-making has ranged over many decision topics, from normal economic activities, such as pricing policy-making, or the purchase of inputs, to technological innovation, such as investment in new technology or product. These decisions have been usually grouped into two types: routine operations, and strategic ones. The former are assumed to occur at lower or middle organizational levels dealing with day-to-day activities, while the latter were regarded as problems and matters which are unique, important and frequently ambiguous (Chandler, 1963; Cyert and March, 1963; March et al, 1988; McCaskey, 1982; Mintzberg et al., 1976; Pennings et al., 1985; Pettigrew, 1973, 1985; Quinn et al., 1988). These issues are handled by top executives.

An early study of a management decision, concerned with involvements of executives, was Cyert, Simon and Trow (1956). The case they observed was a decision of using electronic data-processing equipment in a medium sized corporation. Cyert and March (1963) looked at 4 decisions: innovation of equipment, new working quarters for a department, selecting a consulting firm to assist in the installation of an electronic system, and choosing a data-processing system. Pettigrew (1973, 1985) used qualitative methods to study two cases: innovation, and organizational change.

Mintzberg and his colleagues (1976:250) investigated 25 cases. The contents of these decisions were categorized in various ways, from purchasing of seats to making a retirement age policy. But a large portion of the decisions involved some kind of new equipment or facility, or a venture into a new market, product, or service.

The Bradford Study (Hickson et al., 1986), focussed on the following areas (Table 2.2)

Table 2.2 inserted here

Among those 150 decisions, the most frequent topics were matters of technology. The next most frequent concerned internal organizational change. Economic transactional activities were another major decision category, including the development of new services, new products and purchasing of inputs.

In other studies, the topics were still very diverted. For example, the Aston Programme listed 37 decision activities which were grouped into 15 types: marketing, purchasing, production and work allocation, quality control, work study, maintenance, R & D, investment and accounting, staffing, discipline, training, welfare, organization structure, office system, representation of management(Pugh and Hickson, 1976). Laaksonen (1988:281-289) grouped 16 decisions into three different types: working conditions, policy decisions and strategic decisions. But most of his studies concentrated on personal issues. Heller and his colleagues(1988) rated decisions according to their time durations, as short-term, medium and long-term. The first two were labelled as operational decisions, while the latter as strategic ones.

But there is a debate as to whether a decision should be called "strategic" only according to its inevitable importance. Mintzberg(1988b) pointed out that a "tactic" decision today might become a strategic one for future action. The importance of a decision is very largely dependent upon where and when the decision-making is located. A strategy was defined as a position:

"By this definition, strategy becomes the mediating force ... between organization and environment, that is between the internal and external context"(Mintzberg, 1988b:17)

In other words, it is artificial to determine the importance of decision issues(matters), only according to their time length.

These various topics may possibly be narrowed down to a few areas, according to the nature of their activities related to their stimuli:

- (1) Decisions about economic exchange of transactions. Decisions in this category are concerned with matters of normal economic activity which pursue maximum economic performance. Such decisions usually have a clear-cut objective in economic measurement with criteria of cost, sales, profit or other economical returns. Topics falling into this group include: pricing policy-making, purchasing of inputs, labour recruitment, budget/planning. These activities are stimulated or directed very much by transactional considerations from markets or non-market systems(such as infra-firms or between divisions in organization). These decisions are often operationalized or routinized, because of their high frequency of re-occurrence.
- (2) Decisions about organizational arrangement. This category focuses upon issues related to organizational design and change. Decisions were made for the purpose of adapting the organization's own systems to the external environment. Topics in this group usually include: personnel issues, organizational change, incentive policies, long-term planning, training programme, welfare policy.
- (3) Technological innovations. Technology and innovation could be purchased from markets or developed within organizations through investment. Technology, as a contingency, is very significant to stimulate decisions, and change organizational structure. The decision topics concerned with technological innovation are usually: R & D activities, purchase of equipment, process innovation.
- (4) Decisions about development or growth. Expansion of organization and economic development are achieved through such decisions: acquisitions, purchasing of land, investment. These decisions often have a long-term effect on organizational development. The economic return of development decisions is not seen immediately or in close future. Furthermore, these decisions are more influenced by environment. The stimulus is often opportunistic and unstructured.
- (5) Other issues linked to emergent or unpredictable events. These types of decisions are raised by some unforeseen events or crises.

In general, normal economic and non-economic decisions in a firm can be summarized in a table, which covers transactional activities through markets or no-market institutions, organizational arrangements, innovation, development and growth and others(Table 2.3)

2.4 Elements of the Decision-making process

Mintzberg et al.(1976:246) defined a decision process as "a set of actions and dynamic factors that begins with the identification of a stimulus for action and ends with the specific commitment to action". In decision studies, dimensions of decision processes have referred to considerations of timing, decision phases and decision levels.

2.4.1 Timing: Duration, Interruption and Delay(or Acceleration)

The duration of a decision-making process is how long it takes to arrive at the conclusive choice, or commitment to future action. A decision can be unexpectedly quick. Or it could be very long, with several abrupt events interrupting the progress, or with time consuming delay.

The difficulty of determining the length of a decision-making process stems from the fact that the definition of duration forces a periodicity onto organizational histories. The time boundaries of a decision are often unclear. One decision might result from previous decisions, or an idea formulated a long time ago. To conduct research is unavoidable to distort by selection and perception.

Recognizing these problems, some research has attempted to mark periods from "start" to the "finish" of a decision. For example, the Bradford Study defined the start as "the first recalled deliberate action which begins movement towards a decision (when, for example, the matter is discussed in a meeting, or a report is called for) to the approved choice (when the decision and its implementation are authorized)"(Hickson et al., 1986:100). The time span between the start point to the finish was referred to as a duration.

At the same time, the duration of decision-making indeed has some relation to decision outcomes. As an old Chinese proverb says "The longer the night, the more the dreams".

The longer the time a decision takes, the more possibly some unexpected events appear, so that the more ambiguous the decision outcomes. A decision could be interrupted by environmental forces, or a sudden event. It is also possible for it to be delayed or accelerated by the decision makers themselves. Mintzberg et al. (1976) identified three delays: scheduling delay, feedback delay and timing delay. Delays occur from time to time, because: (a) attention is a scarce resource for managers; (b) managers may purposely control the time progress of a decision to take advantage of special circumstances, particularly when an environment is difficult to predict. "Doing nothing" is used sometimes as the best tactic to control the decision process.

2.4.2 Decision Activities and Phases

Viewing decision-making as a problem-solving process, many writers suggest that a decision process can be identified in terms of stages or phases. This leads to the assumption that decision processes consist of a certain number of well-defined phases.

Four decision phases were identified in the Simon's model (1977:40-41):

- (1) Intelligence activity - searching for conditions calling for decision
- (2) Design activity - inventing, developing and analyzing possible courses of action
- (3) Choice activity - selecting a particular course of action from those available
- (4) Review activity - assessing past choices.

Cyert and March(1963:87) recognized nine steps in the process: forecasting competitors behaviour, forecasting demand, estimating cost, specifying objectives, evaluating alternatives, re-examining cost, re-examining demand, re-examining goals and deciding output.

In the study of Mintzberg and his colleagues, a decision process was split into three phases, each of them contains several routines:(Mintzberg et al., 1976)

- (1) **The identification phase:** (a) **Decision recognition routine** - opportunities, problems, and crises are recognized and evoke decisional activity; and (b) **diagnosis routine** - management seeks to comprehend the evoking stimuli and determine cause-effect relationships for the decision situation(Mintzberg et al., 1976:252-254)
- (2) **The development phase:** (a) Search routine - to find solutions; and (b) Design routine: develop solution(Mintzberg et al., 1976: 255)
- (3) **The selection phase:** (a) Screen routine - to generate more alternatives than can be intensively evaluated; (b) Evaluation-choice routine - a ratification of the solution; and (c) Authorization routine - when the individual making the choice does not have the authority to commit the organization to a course of action(Mintzberg et al., 1976: 256).

There were three supporting routines: (a) Decision control routines; (b) Decision communication routines; and (c) Political routines. Interruption and delay were also studied as factors which influence the process.

There are other definitions of decision phases. For example, Heller suggested four phases in organizational decision-making, in terms of start, development, approval, and implementation(Heller, 1971; Heller et al., 1988).

It is admitted that in reality one phase or the other might be omitted(c.f. Brim, et al., 1962). The advantages of this scheme, which identifies basic phases in the decision process, is that it permits comparison between all types of decisions, at least to the extent of identifying their similar properties. The actual existence of phases and their sequence was therefore postulated as a valid normative prescription.

2.4.3 Decision Levels

Given the hierarchical structure of organizations, each participant in decision-making is located in a position. The levels of decision are referred to hierarchical sites of the decision actors, representing tasks of subunits, groups and individuals. In particular, the level of final approval indicates the degree of authority, in terms of centralization vs decentralization.

The Aston programme of organizational studies tried to link organizational structure with managerial authority by reference two dimensions: structuring of activities and concentration of authority, each of them having a number of constituent items(Pugh and Hickson, 1976). They defined centralization as concerning "the locus of authority to make decisions affecting the organization" (Pugh and Hickson, 1976:32). Two types of authority were distinguished as 'formal or institutional authority' and 'real or personal authority'. The former refers to ownership, while the latter to knowledge and experience.

Pugh and Hickson(1976) also noted the factors influencing the degree of centralization. These factors, in their argument, are fourfold: authority structure, rules for decisions, the frequency of review procedures and the availability of relevant information(Pugh and Hickson, 1976: 32-33). To configurate the structure with centralization, the level of authority was coded according to organizational hierarchies and 37 activities were summed up as major decisions.

The work done by Pugh and Hickson(1976) found no strong relationships between centralization and formalization. Child(1972a), however, reported that 'when organizations rely less on standard procedures for regulating and recording behaviour, so(other things being equal) they tend to centralize the locus of decision-making'(Child, 1972a:174). In other words, negative relationships between centralization and structuring are perceived to exist because the two are alternative modes of control.

2.5 Actor Involvement, Influence and Conflict

A distinct feature of organizational decision-making from individual and group decision processes is its multiple involvements of actors. Organization is a whole complex of a collection of individuals, groups, subunits, each of them pursues its own interests and benefits. Conflicts arise. March (1981:215) noted:

"Not everyone can have everything desired. The level of conflict depends of course on the level of resources available to the organization, on the aspirations of participants, and on the complementarity of their demands. Scarce resources, high aspirations, and low complementarity make conflict more obvious; plentiful resources, low aspirations, and high complementarity reduce conflicts"

Generally, the more actors or parties involved in the process of making a decision, the more complex the problems are for those who are drawn in on behalf of each actor or party.

Actors or decision participants are often classified into two major groups: internal and external(Hickson et al., 1986). Internal actors, such as individuals, departments or work groups, or informal groups, seek to use the organization for such ends as the protection of group interests and expansion of group power, control of working conditions - including degree of effort, safety, interpersonal interactions, and job security - and satisfaction of personal goals. The influence of internal actors rest upon their location of organizational structures, which represent their legitimate authority and power bases(Cyert and March, 1963; Pettigrew, 1973; Hickson et al., 1986). Conflicts arise because of their differences in task requirements, subunit goals and coordination mechanism.

The external actors refer to government agencies, transaction partners, and other public organs(Hickson et al., 1986). The external actors or parties seek to use the organization and its power to affect public policy and values, to appropriate the organization's surplus, to support other organizations or groups, to sell it goods and services, to control its impact on the environment. The interaction between an organization and external actors is presenting on interorganizational resource exchange, interlocking networks of information communication, and obligation required from public interests(Hickson et al., 1986; Pfeffer and Salancik, 1978)

2.6 Information and Decision-making

Most decision-making studies refer to concepts of information processing. The model of March and Simon(1958) suggested the bounded rationality, because of limited capacity of human being in information processing.

The notion of information in organization theory usually considers (1) the values, goals, or preferences of the actors, and (2) the information available to the organization about the environment and alternative choices(March and Simon, 1958; Cyert and March, 1963).

Attention was drawn to the contents, communication and use of information in organization. For example, Simon(1978) referred to information as a scarce resource.

Mintzberg(1973:149) noted some distinct characteristics of information for managers: current information, which was transferred to managers rapidly, rather than right; trigger information, which focus on specific events, ideas, and problems, and is able to stimulate actions; and verbal information; which relies largely on verbal media and brings managers the current, trigger information. These characteristics of information put the manager in a direct conflict with most formal information systems, which give out internal, historical information, rather than external, current and trigger information. The latter is perceived to promote further actions in decision-making. Thus, the formal system excludes much of the intelligence information, such as triggers, speculative, current information, that top managers need for their unprogrammed decisions:

"As a result the manager must often ignore the formal information system. Instead he designs his own system, which provides him with the information that he believes he needs. He develops external contacts, subscribes to periodicals, jobs trade organizations, and encourages subordinates to circumvent the established lines of communication to bring him information"(Mintzberg, 1973:149)

An individual manager can be seen as an information processor in decision-making process, apart from formal information channels and sources:

" The strategy-making process appears to be integrated only in the sense that the manager, by virtue of his great store of information and loose plans he develops in his head, can interrelate the decision he makes."(Mintzberg, 1973:153)

Cyert et al.(1956:246) noted that an "information-transmitting function was crucial to organizational decision-making, for it almost always involves acts of selection or 'filtering' by the information source". This influence was partly controlled by checking processes. In other words, controls over information and processing information are closely linked to decision levels. Decentralization is required if the central headquarters are not able to deal with information efficiently and effectively, as when the amount of information from lower levels increases(Galbraith, 1977; Mintzberg, 1979). Other studies(Aldrich and Herker, 1977) found that information sources for boundary spanners are usually their subordinates and business associates. These researches also found that the acquisition of information is dependent upon the individual decision actor's position in his network, and the extent to which the individual reciprocates information needed by others in that network. These "gatekeepers" carefully control the flow of information between sets of independent decision actors. Information can be used as a resource for mobilizing power as selective reporting to higher levels of the organization(Pettigrew, 1973). Robbins (1990:108) argues:

"Information must be gathered. This input establishes the parameters of what can be done. The information gathered goes a long way toward controlling what should and will be done... the fact that top-level managers rely on information fed to them from individuals lower in the vertical hierarchy gives those subordinates the opportunity to communicate the information they want to. Once the information is gathered, it must be interpreted. The interpretations are then transmitted as advice to the decision maker as to what should be done"

Once the information has been communicated to the decision actors, its use is still problematic. Claude Shannon and Warren Weaver, in their classic paper on the mathematical theory of communication, identify three types of problem that must be overcome if effective communication is to take place at all(Boisot, 1987): the technical problem, which is noise in the channel and information loss, then causes faulty transmission; the semantic problem, which requires the information sender and receiver possessing necessary coding skills to decode the information in communication; and the effective problem, which requires knowledge of the destination and depends on the receiver's behaviour.

Some studies indicated two factors may influence the use of information, in terms of (1) individual bias and (2) organizational bias (Chestnut and Jacoby, 1982; Kunreuther and Schoemaker, 1982). There are several factors affecting the weight an individual assigns to a piece of information in making a decision (Tversky and Kahneman, 1973; Einhorn and Hogarth, 1981):

- (1) Individuals have differential access to information from their environment
- (2) Information must be stored in the individual's memory and reaccessed when needed for decision-making
- (3) Information that is stored is affected by its (a) emotional relevance, (b) specificity, and (c) temporal ordering
- (4) After storage, information is further enhanced by the ability of the decision maker to generate associative networks and rehearse or muse over it

Organizational bias comes from the power and politics. March and Sevon (1984) noted that much of information that organization seeks and receives is often gossip, that is, information without decision relevance. These effects of information in the principal-agency relationship as a role of monitoring agency's behaviour have been a particular concern of Agency Theory (Eisenhardt, 1989a). An asymmetric information system would lead to asymmetric power bases. One party with more effective information would take advantage in the exchange of others who possess less information.

2.7 Discussion and Summary

As one discipline in management studies, decision-making theory endeavours to understand managerial behaviour by means of the systematic observation of decision content, participation and processes. Although there are a broad range of decision models, conceptions of choice and conflict among participants are still two major themes for many theoretical perspectives. The theory of rational choice views decision-making as a process of problem-solving from identifying a decision problem in the beginning, to selecting the final alternative as the outcome. This mode has been modified by several assumptions, such

as bounded rationality, or incrementalism. The theory of conflict regards decision-making, particularly organizational decision-making, as a collective action, in which conflict between participants or subunit who hold different interests and power, direct the processes and outcomes of decisions.

Empirical studies in decision-making draw attention to decision contents(topics and matters) and processes(timing, phases, participants and levels). Hickson and his colleagues(Hickson et al., 1986:257) noted that

"What a decision is about can be redefined and re-labeled. For instance, what begins as an idea for a new complete product line can be scaled down so that the topic under consideration becomes just a modification to existing product lines. Thus its consequences will be less serious and more susceptible to confident forecasts...Being less strange and risky, the idea will become less contentious. So a vortex matter is replaced by one that is familiar and can be moved along in a less bothersome constricted way."

Rowe(1989:40) argued that the process can operate in reverse: matters that initially appear straightforward can explode into complex and contentious issues, so a 'flow' occurs:

"[A] 'flow' occurs in the process: that this can take different forms; that the particular form it takes is affected by the level of management involved, and the stage at which they become involved;.."

Pennings noted that studies in decision-making were concerned for process as opposed to content or outcome. In most cases, the discussion of decision contents only served to clarify processes. "It almost seems as if processes are content-neutral"(Pennings, 1985:469). But few empirical researches have looked at how organizations make single decisions, and at the interrelationship among such decisions over time in the same organizations. Furthermore, there is a lack of studies to observe how different organizations are dealing with the same topic or a recurring matter in the same decision context.

Discussions on power and conflict direct attention to the involvement of actors and their influence, through their legitimate position by rule-setting or power bases. Their powers rest upon the dependence of the organization upon resources, information communication and inter-exchange among organizations(which is related more to context and will be

discussed further in next chapter). An information asymmetry could exist within organizational structure, for the purpose of control over decisions, and between organizations. A circuit of power, as Clegg(1989b) proposed, displays the dynamic of power in structure.

Rowe(1989) noted that the study of decision-making has remained highly fragmented, containing a wide range of approaches from individual psychological perspectives to political power aspects. Researchers on the management decision-making process have stressed the need to examine how decisions arise, are perceived, and are formulated by management. Lyle and Thomas(1988) reviewed decision-making studies, then put them into five categories: the rational, avoidance, adaptive, political and decisive, then pointed out:

‘What we do not know is to what extent these strategic decision-making models accurately describe the strategic problem formulating process and under what conditions’.(Lyle and Thomas, 1988:139; emphasis is original)

Although the contingency theory of organization structure has received wide attention , contingency theory is "not as common in the study of organizational decision-making process"(Grandori, 1984:192). As discussed in section 2.3, many studies were labelled as "strategic" ones, although the term "strategic decision" is still in question. It is assumed that contents of decision, or matters of decision, are perhaps contingent. This will be discussed more in next chapter, reviewing theoretical perspectives of decision context.

But, at the same time, there are still some unsatisfactory points left in decisions studies, and organizational theory as well. There is a lack of systematic observation of relationship between decision contents and decision processes. Whether the same decision contents or matters will be dealt with through the same or similar processes in decision-making in different organizations, or whether different decision contents invoke different processes in the same organizations, or they are neutral, remains largely unaddressed. This question has been partially answered in the Bradford Study (Hickson et al., 1986), which noted that

matter for decision appears more significant than organizations. There is still a need for further investigation.

Furthermore, with the work on information in organizations, most studies have focused upon communication patterns, and design of support systems for decision-making, but few have explored information sources and their importance in organizational actions. Certainly, the identification of information sources is vital. Information coming from the higher level is likely to be perceived in a different light to that from the lower levels. Different information sources convey different messages. The meanings and interpretation of messages transferred through information must vary, according to social norms which make the use of information highly symbolic (Feldman and March, 1981). And these sources are located in internal organizational structure or external institutions, which exert their influence on the decision outcomes. Particularly, attention must be given to how the organization - as a collection of actors - uses filters and responses to information, according to information sources.

This research refers to the above perspectives, viewing an organization as a whole complex of actors, each with its own interests. Decision processes contain, as discussed above, some basic elements, such as *timing, phases, levels and identification of actor involvement*. It takes account of interactions among different actors, and so considers dynamic relationships between them. The utilization and source of information is considered, too, indicating how decision actors use information as a source of power to influence decision outcome. Based on perspectives reviewed in this chapter, a framework of organizational decision-making can be depicted as in Figure 2.1.

Figure 2.1 inserted here

Pettigrew(1985, 1987) argued that three main dimensions, in terms of decision content, decision processes and decision contexts, are basic for the understanding of decision-making. The content of decisions indicates "what" decision is made, while the process answers the question of "how" the decision is made, and context indicates "why" the decision should be made in the way it is. His arguments have provided a framework of decision analysis, which is used in the present research.

At last, when managerial behaviour is to be explained through the study of decision-making, the context of decisions has to be considered. This will be discussed in the next chapter.

Table 2.1 Summary of Decision-making Perspectives

Decision Models	Analytical level	Nature of Decision-making	Main Concepts
1. March and Simon (1958)	Individual	Programmed & Non-programmed decisions	Bounded rationality in information and computation
2. Cyert and March (1963)	Organization	Problem solving with different interests of sub-units	Coalitions Conflict
3. Cohen et al. (1972)	Organization	Uncoupling of problem and choice Organized anarchy	Stream of choices Stream of problems A rate of flow of solutions Stream of energy from participants
4. Mintzberg et al (1976)	Organization	Unstructured decision processes	Seven patterns
5. The Bradford studies (Hickson et al. 1986)	Organization	Dual explanation	Problem Complexity Political interests Process
6. Pettigrew (1973)	Organization	Political system	Mobilizing power in organization

Table 2.2 Decision Topics in the Bradford Study

Topics	Number of cases	Contents
1 Technologies	23	Equipment and or premises
2 Reorganizations	22	Internal restructurings
3 Controls	19	Planning, budgeting, and requisite data processing
4 Domains	18	Marketing and distribution
5 Services	16	New, expanded, or reduced services
6 Products	12	New products
7 Personnels	12	Job assessment, training, unions
8 Boundaries	11	Purchases of, and mergings with other organizations
9 Inputs	9	Finance and other supplies
10 Locations.	8	Site and sites dispersal
Total	150	

Source: Adapted from Hickson et al (1986:30, Table 2.1)

Table 2.3 Decision Categories

Category	Decision contents
1. Transactional decisions	Purchasing, selling, pricing, recruiting, exchange of commodities and resources
2. Organizational decisions	Design of organizational systems, organizational change, human resource management
3. Innovation decisions	R & D activities, product development, technology transfer
4. Growth and development	Investment in land, assets, increase of size, acquisition
5. Emergent or crisis decisions	Unexpected events and crises

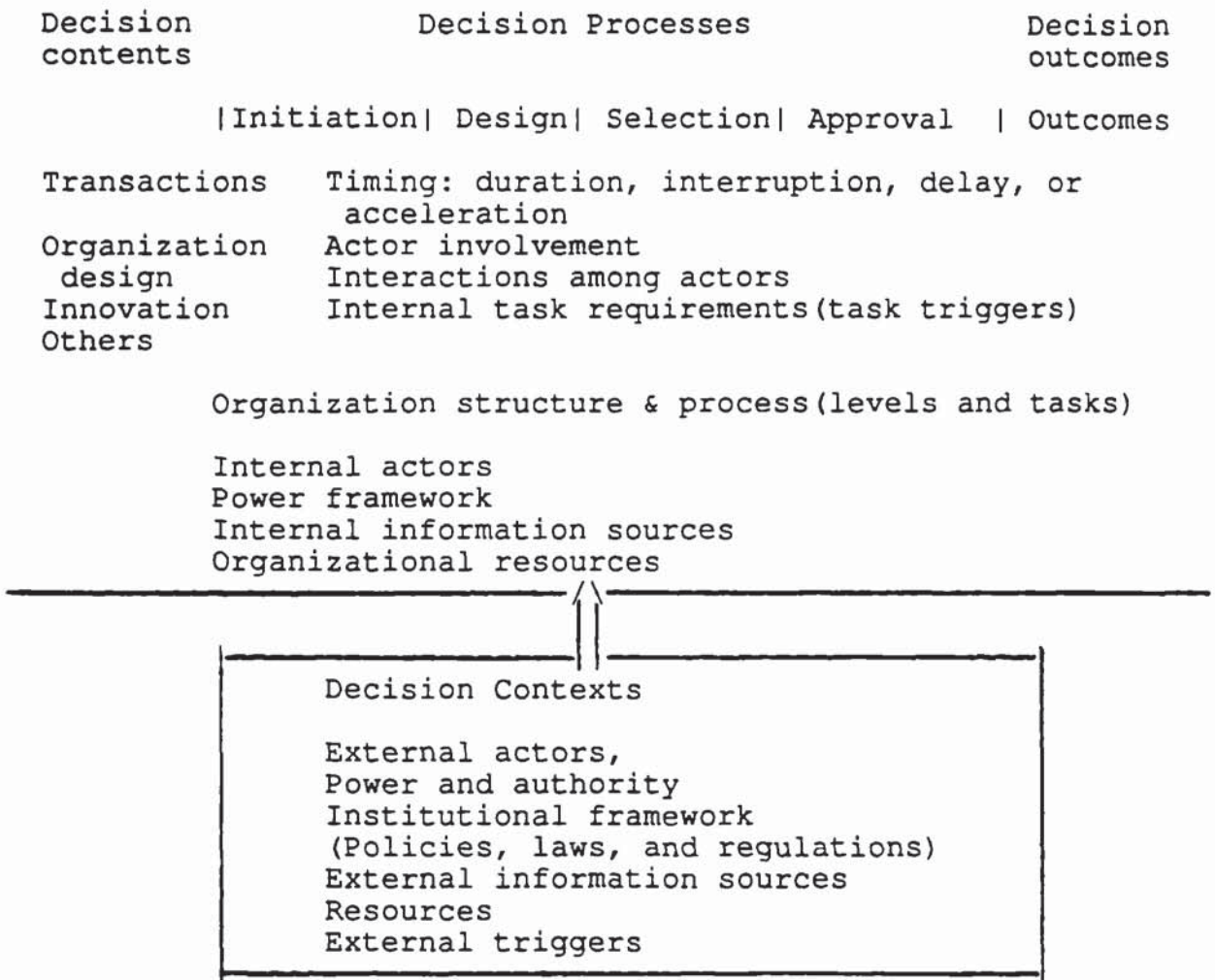


Figure 2.1 Decision contents, processes and context

CHAPTER 3: DECISION CONTEXT: INDUSTRIALIZATION, CULTURE, AND POLITICAL IDEOLOGY

As March (1981:208) noted: "The idea that environmental constraints determine all significant characteristics of actions taken within that environment is fundamental premise of much of social science". In fact, theories of organizational decision-making are theories of organizational response to environmental constraints and to information about events in the environment.

Parsons(1960) argued that there were three levels in organizations: (a) the technical level, where the technology of the organization was used to produce some product or service; (b) the administrative level, which coordinated and supervised the technical level; and (c) the institutional level, which was concerned with organization's legitimacy and with organization-environment relations. Parsons(1960:35) used the term of "compatibility" to refer to the organization's integration with the society.

"It is hence in one aspect a question of the generalizability of the patterns of procedure adopted in the particular organization and hence of the their permissibility from a wider social point of view"(Parsons, 1960: 36)

The social institutionalization played a role as "the primary reference point for the linkage of values through legitimation with the structure of the social system"(Parsons, 1960: 177).

The pressures from environment as external sources for organization, such as the state, through a pattern of action and formal structures, "often have effect of directing attention away from task performances"(Zucker, 1987:443).

Theories of organizational performance in an environment, have been highlighted in three perspectives, in terms of contingency, political-economic system and culture(Child, 1981; Child and Tayeb, 1983). The contingency perspective identifies as points of reference for decision features of the context in which an organization carries out its activities.

Contingencies have been seen as "technology", or relevant conditions or constraints bearing upon the "task"(Pugh and Hickson, 1976; Donaldson, 1985). Although a number of

contingent factors have been defined and explored, the premise of these assumptions is that organizations often place themselves strategically, through their decisions, by choosing certain niches in the environment over others, thereby "enacting" or choosing a domain(Weick, 1969).

The consideration of economic development is regarded here as a prime contingency for the specific context of China. Discussions related to this dimension will concentrate upon the levels of industrialization and qualifications of management(Chandler, 1962, 1977; Galbraith, 1972; Harbison and Myers, 1959; Kerr, 1983; Kerr et al. 1960).

Two other contextual perspectives - these from culture and political system - will be discussed through the specific Chinese aspects of the traditional values of a national culture and state socialism.

3.1 Industrialization

The term "industry" is frequently used to denote the secondary sector of economic production. The primary sector includes agriculture and extractive industries; the secondary sector, the manufacturing industries; and the tertiary sector, the production of services. However, the term "industry" is used to refer to a wide range of activities.

"Industrialization", then, will include more than an expansion of the secondary sector of an economy. It is more convenient to widen its meaning to include mechanization and the rational organization of productive activity in any or all the sectors of the economy.

According to Moore, "Industrialization means the extensive use of inanimate sources of power for economic production, and all that entails by way of organization, transportation, communication, and so on"(Moore, 1963:91). Industrialization has "five essential components: machine technology, the marketing of men's labour, the concentration of workers so engaged in single enterprises, the existence of a specific social type(the entrepreneur), and lastly, the special condition of rapidly expanding markets"(Burns, 1969).

3.1.1 The logic of industrialization and professional management in industrialized society

Aron(1967:15) noted that the basic features of culture and society are to be explained in terms of the unfolding of tendencies inherent in the determining industrial technology.

Technology is based upon the growth and application of scientific knowledge, and modern society expresses the rational, scientific organization of production:

"Modern societies are defined first and foremost by their organization of labour, that is, by their relationship to the external world, their use of machinery, the application of scientific methods, and the social and economic consequences of the rationalization of production"

Theoretical arguments on industrialization noted that there were some common and "universal" characteristics in this process among different countries(Kerr et al., 1960). The 'logic' of industrialism posits that the nature of industrial society follows from the development of technology. (Kerr et al. 1960:42-43).

It is also argued that the same 'logic' of industrialization leads to the development of specialized labour force. Galbraith(1972:34) noted that this requirement particularly bears upon the "ability to organize and employ information, or capacity to react intuitively to relevant experience".

This specialized labour force in industrial society consists of administrative manpower, technical professionals and industrial workers. The human resource in administrative management has been considered as a key element in industrialization. Kerr et al.(1960) asserted that it was management which held the 'seed of the future'. Management is seen a resource, in addition to capital, for promoting and accelerate the speed of industrial growth(Harbison and Myers, 1959).

It is noted that the character of management required for the completion of industrialism is different from management in traditional or non-industrial society. Max Weber(1964) distinguished three types of authority, in terms of charismatic, traditional and rational, each of which was expressed in a particular administrative organization. Weber believed that rational bureaucracy was the most efficient form:

"The primary source of the superiority of bureaucratic administration lies in the role of technical knowledge which, through the development of modern technology and business methods in the production of goods, had become completely indispensable"(Weber, 1964:337)

In fact there is evidence that the two other authority types coexist in a modern society: (1) charismatic authority, especially is the case of small, new entrepreneurial firms and some degree in large firms; and (2) traditional authority in long(and some times large)-established family firms. But Weber's notion could be interpreted as claiming that with the progress of industrialization there is a trend towards rational-legal authority, both in firms, and even more important, in the regulation of the economy and markets.

Kerr et al.(1960) used the term of "professional management" to describe modern administration in industrial societies, which differs from the other two types of management: patrimonial and political. Patrimonial management refers to management in which ownership, major policy making positions, and a significant proportion of other top jobs in hierarchy are held by members of an extended family:

"The effective decision-making authority is concerned in the family, and the goals of the enterprise are oriented towards the interests and aspiration of the family"(Kerr et al., 1960:150)

Political management, according to Kerr et al.(1960), exists where ownership, major policy-making positions and key administrative posts are held by persons on the basis of political affiliation and loyalties. In such cases, access to the decision-making authority is "dominated by political considerations, and orientation and interests of management are coloured throughout by political goals"(Kerr et al., 1960:152)

However, professional management refers to "enterprise management in which major policy-making positions and nearly all other positions in hierarchy are held by persons on the basis of claimed or demonstrated technical qualifications. In professional management, "technical ability, experience, education, knowledge of the organization, and ability to impress people who make decisions are more important than relationships to a family or a political regime"(Kerr et al., 1960:154). Galbraith(1972) call such an elite in decision-making the "technostructure".

Kerr et al.(1960) concluded that both patrimonial and political management were no longer able to complete industrialization. Only professional management has the capacity to deal with modern technology, complex production and dynamic environment effectively and efficiently.

The transformation of the patrimonial management to professional management was accomplished with the diversification of ownership from traditional entrepreneurs to the public. As a result, the power to make decision is transferred to administrative managers (Chandler, 1977; Galbraith, 1972).

In his book "*The Visible Hand*" Chandler(1977) described the vital role of managers in American economic development. He argued that the growth of technological innovation and expansion of market transactions, for the first time, created a need for administrative coordination. A new subspecies of economic man - the salaried managers - were produced to carry out this task. (Chandler, 1977:484). The real decision-making power lies in the hands of professional managers, who decide on the allocation of resources and determine long-term strategy for the organization. Chandler called the above phenomenon the managerial revolution.

Bell(1957) argued that the rise of the managers is the result of a long process. Kerr et al.(1960) also noted that the industrialization process establishes trends which do more or less violence to traditional pre-industrial society. Harbison and Myers(1959:19) argued that managerial resources must be "accumulated and efficiently employed or invested in productive activity". Some arguments (Millikan and Rostow, 1957:61; Staley, 1954: 241) pointed out that the lack of management was seen as the main block to the economic growth in underdeveloped countries. Lewis(1955) held the same opinion and argued that deficient administration was more serious than the shortage of capital in economic development.

Beyond the birth and growth of a modern professional managerial elite in industrial society, changes in social institutions were also seen to result from industrialization.

First, in the institutional sphere, industrialization is characterized by the development of a variety of economic organizations in secondary(industrial and commercial) and tertiary(service-industries) activities. This development was based on a high level of technology, and more precisely on the specialization of economic activities and of these units carrying out these activities, such as production innovation, marketing and distribution. These are a result of the growth of business scope and complexity of the market framework, both in the variety of transaction exchanges and geographical regions.(Eisenstadt, 1966; Moore, 1961). This institutional framework was particularly necessary for the development of markets. Clearly, the transactions of inputs, outputs, labour and technology are completed within certain institutional frameworks, either markets or non-market systems. Market refers to a set of institutions, as Hodgson noted(1988:4):

"We shall have defined the market as a set of social institutions in which a large number of commodity exchanges of a specific type regularly take place, and to some extent are facilitated and structured by those institutions. Exchanges, as defined above, involves contractual agreement and the exchange of property rights, and the market consists in part of mechanisms to structure, organize and legitimate these activities. Markets, in short, are organized and institutionalized exchange. Stress is placed on those market institutions which help to both regulated and establish a consensus over prices and, more generally, to communicate information regarding products, prices, qualities, potential buyers and potential sellers."

These transactions could happen in non-market systems, such as in planning systems or transactions within infra-firm organization. But, the properties of markets are hemmed in by non-market institutions which inherited other coordinative mechanisms relying upon administrative rules(Hodgson, 1988; Williamson, 1975, 1985). Markets are characterized by their own structured properties in transforming information and forming and modeling individual preferences, expectations, and actions(Hodgson, 1988:178).

Second, with the accelerating specialization in social institutions, some organizations are developed to achieve both vertical and horizontal coordination of the activities of enterprises. Eisenstadt called this phenomenon "conjunctions", which refers to ways and mechanisms to integrate the processes of structural differentiation, in order to deal with continually new and changing problems, and with the complex problems of coordination and regulation. These regulative mechanisms are of two basic kinds. One is the establishment of certain relatively efficient institutional frameworks, as well as organization capable of regulating them and providing adequate administrative services and injunctions for regulating the growing conflicts between various groups. The other is the development of values and symbols acceptable to large parts of the population and upholding the various regulations and injunctions developed within these institutional frameworks(Eisenstadt, 1966:38). Further more, the development of markets in industrialization needs some new "functional" organizations, such as business associations and public services, which implement a specialized type of economic activities in society. (Hannah et al., 1976; Harbison and Myers, 1959; Warnecke and Suleiman, 1975).

Finally, the government played an important role in regulating economic activities through its policy making(i.e. industrial policies) and intervention in markets. Even in early industrialized countries, for instances the US and UK, the government interventions, through the implementation of its policies, are observed(Grant, 1989). These intervention arise from the government's role as a regulator and promoter, intending to produce a co-ordination mechanism which is perceived to correct market failures. As the regulator, the government

publishes policies and regulations, which are accelerative(for example, the development and diffusion of new technologies), decelerative(for example, attempting to manage the rundown of a declining industry or firm in difficulty), or redistributive(for example, regional policy). As the promoter, the government encourages technological innovation by means of provision of funds, protection of local industrials, reorganization of industries, and promotion of employment services and trainings(Grove, 1962).

From experiences in early industrialized society, as Weber(1968) noted, codification and routinization are two necessary conditions for the exercise of autonomy by economic units. The rules of the game as applied to relations between enterprises and external parties, especially government, have to be codified with respect to matters of law and financial obligation. Second, government must apply the rules in a routine manner, in other words, consistently and predictably - so that managers of economic units can use their autonomy to plan ahead.

3.1.2 Industrial development in developing countries: Other patterns

The industrialization of developing countries after the World War II showed different patterns from the experiences of early industrialized society in Europe and America(Cody et al., 1980; Kitching, 1982; Rosvosky et al., 1966). This was because cultural, political and social characteristics in developing countries were usually very different from those developed countries. Berlinger(1966) distinguished two types of development, inner directed and other directed. In the former, "the rate and pattern of development are determined by the interaction of large numbers of producers and consumers each with his own product and time preferences; there is no particular social goal in view. In the latter, development is consciously directed toward the goal of imitating the attainments of other countries that are regarded as more advanced"(Berlinger, 1966:159-160). This "other directed" phenomenon was popular in developing countries' industrialization processes. A common feature of these developing countries was that the local government played a role of promoting, directing and controlling the industrial development through imitating

development paths of industrialized countries. The behaviour of government came to be important in policy-making and intervention in economic management (Hughes, 1980), particularly in aspects of centralizing economic activities by an increasing body of legislation to limit the monopolies and nationalizing industries(Alford, 1976), or, as in some developing countries such as India, by implementation of central economic planning(Myers, 1959).

Generally, there were two big groups: one employed the market-oriented economic system, while the other preferred the central planning system in economic management. The former could be labelled the capitalist group. The latter was often called socialist developing countries.

Social problems were seen in the processes of transition from traditional agrarian cultures to a situation more nearly approximating industrial society, in aspects of adapting the family to industrialized society and in social stratification(Hunt, 1966). A common difficulty for these countries was the lack of qualified human resources, particularly entrepreneurs and professional management(Hunt, 1966:137-139)

The problem of lack of qualified managers was knitted with the strong intervention of local government over enterprises. Even in those countries which adopted a market economy, it was found that government intervention in state-owned enterprises was felt to be necessary(Lal, 1980). The problems in the management and government control of these state-owned enterprises arose from the ascription to them of social functions without clear-cut financial objectives. A lack of skills and experience in the dynamics of market competition and in risk-taking, plus the absence of an incentive for management to pursue profit-maximizing goals, made state-owned sector managers "be subject to pressures from their 'owners', the departments and ministries who often controlled their policies"(Lal, 1980:231-232). The management of state-owned enterprises, particularly in developing countries, was assumed to be very different from professional management in industrialized

society, described by Chandler(1977) and Galbraith (1972), where ownership was spread/diluted among a large number of shareholders who failed to impose any effective control over managerial elites.

3.2 National Culture as Context

Discussions viewing an organization as a metaphor of cultural phenomenon have been widely explored in organizational studies(Morgan, 1986). The concepts of culture are greatly diffused in different writings. Smircich(1983) has reviewed the literature of organization studies on cultural aspects and classified five current research themes:"comparative management", "corporate culture", "organizational cognition", "organizational symbolism" and "unconscious process and organization" (Smircich, 1983:342). Research on culture has been highly dependent upon the research purposes and definition of culture referred to by the researchers.

Tylor(1924) defined the term "culture" in anthropology as a "complex whole which includes knowledge, belief, art, morals, law, custom and any capabilities and habits acquired by man as a member of society"(Tylor, 1924:1). Kluckhohn(1951) gave a definition of culture as :
"Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievement of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values(Kluckhohn, 1951:86). Friedl(1976) considered culture, in anthropological terms, as "the shared way of life, common to a group of people and acquired as member of society. This way of life is learned through interaction with other people, and includes both material aspects and intangible knowledge(beliefs, attitudes, values, rules of behaviour, etc."(Friedl, 1976:136).

Hunter and Whitten(1976) argued that "culture consists of the patterned behaviour (both mental and physical) that individuals learn and are taught as members of groups. It therefore includes subsistence activities, technology, beliefs, knowledge, values, standards, customs, traditions, language, and all other learned patterns of behaviour that are passed on from generation to generation among group members"(Hunter and Whitten, 1976:34).

Kroeber and Kluckhohn(1952) encompassed 164 definitions of concepts of culture and summarized them as a whole range of components: knowledge, values, preferences, habits and customs; traditional practices and behaviour, implements and artefacts.

The interpretations of culture offered by the discussions cited, identify values and traditions as important aspects of culture. The content and pattern of values, ideas and other social symbolic meaningful system are expected to be transmitted and created by a culture in the shaping of human's behaviour(Kroeber and Parsons, 1958:582). A behavioural pattern in the environment is seen as a concrete result of a cultural system(Parsons, 1973).

In this thesis, a culture is defined, at the national level, as "a social value system which consists of a set of beliefs, norms, customs, and traditions. This system is held and shared by the majority of members of society".

Here it is useful to distinguish values of an ideological kind which express a political preference for a particular set of social-political arrangements. This can be called official ideology, is contest to those of a cultural kind which derive from tradition(Boisot and Child, 1988). A discussion of official ideology is postponed to a later section of this chapter.

The influence of culture is linked to organizational structure and the behaviour patterns of actors in organizations. In organizational design, it is argued that some cultures prefer a more centralized structure than other cultures. For example, Kluckhohn and

Strodbeck(1961) proposed the K-S model, measuring by reference to three culture value dimensions (man-nature relations, man-man relations, and time orientation):

(1) Time: Future (F), Present (Pr), and Past (Pa)

(2) Relations: Individualism (I), Collaterality (C), Lineality(L)

(3) Man-nature: Master-over-nature(M), Harmony-with-nature(H), Subjugation-to-nature(S)

They argue that organizational process and outputs are seen to be linked with these three dimensions. When the value is oriented by past sense in time, lineality in relations, and subject to nature in man-nature relations, the organizational economic output is expected to be low, and socialization intends to be informal.

A similar model was proposed by Hofstede(1980, 1983), in a four-index value system was used to measure national values, in terms of power distance, risk avoidance, collectivity and tendency of masculinity. Hofstede (1983) argued that when power distance is high, accomplished with high uncertainty avoidance, low individualism and low masculinity, the organizational structure was tended to adopt centralized form.

Referring to pattern of human behaviour pattern, Child(1981) argued that organizational forms and technologies in different cultural contexts might now be converging, but that the behaviour of people within these organizations maintains its own cultural specificity. A culture has close relations to process, or the means adopted to reach organizational goals, and it provides the criteria for organizational performance. Schneider(1989) argued that impact of national culture is important in the process of strategy formulation. Some cultures prefers qualitative information, while others may rely on qualitative analysis.

3.3 The Political System As Context

The political system here refers to two aspects: political ideology and political institutions. Political ideology means a set of political preferences for a particular set of social-political

arrangements held by a dominant coalition(Boisot and Child, 1988). The ideology may denote any interlocked set of important generalizations about social organization(Lindblom, 1980:38). There are two major social systems in the world, state socialism and modern capitalism, distinguished by differences inherent in their ideological as well as their structural bases(Bate and Child, 1987:20-25).

3.3.1 The Ideological Principles of State Socialism

Capitalist ideology appeals to the notion of economic betterment through individual initiative. The entrepreneur is regarded as the dynamic agent for the system who brings together the necessary factors of production on the basis of market-place contracts. These contracts are mutually calculative and involve no commitment beyond their legal terms. It is argued, therefore, that various forms of contracts, either through transactions in the market or hierarchically co-ordinated internal exchange, provide capitalist enterprises with instruments to pursue maximum economic gains - profit maximization(Berger, 1986; Littler, 1982).

By contrast, socialist ideology emphasizes collective ownership and identity. The state or political party claims to represent the interests of the working class as a general collective and, therefore, to possess a legitimate role in the hierarchical control of organization. Instead of the profit incentive of capitalism, the motivation of workers under socialism should be secured less on the basis of appeal to individual economic self-interest than to a moral commitment (backed by social pressures) to render an adequate contribution to the collective effort. Collective identity is underwritten by the right to employment that is a concomitant of social ownership(Bate and Child, 1987).

Differences in the "basis and dynamics", in aspects of ownership, dominant values and role of social classes, are reflected in the character of their constituent organization, especially those concerned with economic activity. The following discussion will concentrate upon the

perspectives of state socialism, taking into account the research context, China, which is officially committed to be socialism.

Kornai(1985) has noted the four ethical principles of a socialist economy as:

- (1) wage-setting, in which everyone should be rewarded according to his work;
- (2) solidarity, in which the weak are assisted rather than penalized for their weakness;
- (3) security, including the guarantee of employment; and
- (4) the priority of the general interest over the partial or private interest.

The classical socialist practice started in the Soviet Union. Its economic system, the Soviet Model, has the following characteristics:

- (1) interlocking political-economic leadership of the state and the economy under a hierarchically structured Communist Party;
- (2) a single state-owned complex integrating large economic sectors;
- (3) a high degree of centralization in planning and control; and
- (4) ideological motivation and political incentive in management(Spulber, 1979; Wilczynski, 1972)

Given the above criteria and characteristics, it is regarded, as appropriate that the contexts for organization and management in socialist countries are subject to ideological claims.

3.3.2 Institutional Structure in State Socialism

Ideology tends to be institutionalized in organizational structures. The concrete forms of state socialist ideology in economic management and social institutional structure are manifested by a central planning hierarchy, political systems, and the qualifications of enterprise management.

First, the transactional arena for economic activities is no longer the market, but the central planning hierarchy. State ownership is represented by a central planning regime and government agencies (state administrators). This gives rise to a bureaucracy of central planning, which is a kind of up-down decision-making authority. According to Galbraith's (1977) analysis of organizations as information-processing entities, the centralized hierarchical mode of planning and upward referral has less capacity than a decentralized mode of direct inter-unit relations to cope with the increases in information load which accompany more rapid technological and other change. Centralized bureaucratic planning is remote from immediate operational contingencies and works according to inflexible rules and procedures. It therefore fails to anticipate and adjust to uncertainties, so generating shortages of materials and labour in the socialist economy. As Montias (1988) points out, centrally planned economies that have evolved from the original Stalinist model are all characterized by bargaining between system levels. The result of this central planning bureaucracy is a kind of exception management or special case management. In other words, unless an exception or emergent case occurs, a top planner pays less attention to the performance at the bottom level.

Furthermore, as Campbell (1966:188-193) argued, the socialist central planning system intended to achieve "perfection" in resource allocation. The term "perfection" refers to the condition in which the authority in decision pursued to impose detailed specification of the value of all the choice variables, which were represented by machines and individuals. When the economic administrative system is dealing with these details, it means to eliminate management at organizational levels. In other words, organizational decision-making for enterprise management amounts to nothing but the operational tasks of following instructions and commands issued by the central hierarchies. For an individual organization, an external reinforcement from central planners is the major influence which keeps it running along a certain track. An enterprise within the socialist economic institutional structure acts as a component in a big machine, designated to carry out production and distribution. The role of management is likely to focus the reconciliation of

conflicts between the central planning authorities, the political system, the workforce, and other external units, such as buyers and sellers. This is a contrast to a market-oriented economy, where a large number of decisions are left to organizations through market transactions.

Second, the political party is entitled to be a dominant coalition in decision-making. Parallel with administrative systems, the party system coexists in organization to monitor managerial behaviour, communicate information and decide issues concerned with organizational activities. Most managers or executives are the members of the party. Political loyalty is the most important criterion in the promotion of personnel. In other words, management in socialism is seen likely to pursue "political management" style described by Kerr et al.(1960)

Third, as discussed above, organizational structure and process in socialism is perceived to be more complicated than that in capitalism. The bureaucracy of administration in the capitalist system is likely, as Weber(1968) described, to proceed on the basis of technical knowledge and hierarchical authority. In a socialist country, beyond this bureaucracy of administration, there are another two bureaucratic forms, the central planning system and the political system(Bate and Child, 1987; Kerr, 1983; Spulber, 1979)

Finally, the market, in such a context, is regulated and distorted artificially by the intervention of the state or central planning regime(Berger, 1986). The market is not able to provide managers with sufficient and necessary information in decision-making(or that information is distorted). Synoptical processes in policy formulation replace a strategic decision-making style, in Lee's (1987) terms.

3.3.3 Economic Reform in the socialist countries

With the rigidity of bureaucracies in planning, political and administration, the supreme significance of political management and the failure of coordination through bureaucratic administrative control beyond markets, the dysfunctional consequences of state socialism were explicit in the continuous growth of a vast and cumbersome bureaucracy, the marked deterioration in the quality of inputs and outputs, persistent lags in technology, the distortion of incentives, and increasing discrepancies between goals and performance (Spulber, 1979:6). These crises stimulated the schemes of reform in socialist countries. From the 1950s to 1980s, different models have been adapted, depending upon the country's degree of industrial development, diversity in economic strategic planning and specific historical settings (Davis and Scase, 1985:109-110; Glinski, 1987; Kornai, 1986; Tidrick, 1987).

These modified models are:

- (1) centralized planning management system (the Soviet Union)
- (2) combining planning and market, labelled as "market socialism", to revitalize enterprises (Hungary); and
- (3) labour self-management (Yugoslavia)

The root intention of all these reform schemes was to readjust the relationship between the central planning regime and enterprises with regard to decision-making. The concept of market was introduced, in varying degrees to coordinate economic activities, in order to improve the economic performance of organization.

Although economic reform is underway in a number of socialist states, the failure of the marriage of central planning and markets has been obvious (Kornai, 1986; Montias, 1988). The phenomena in socialist reform programmes indicated that there are some inherent sources of resistance in its systems. First, a socialist firm is now tied to two relational tracks: the vertical one with its superior authorities, and the horizontal one with markets. As Kornai (1986) noted that vertical relationships between enterprises and their superior

authorities - central planning organs are still significant in the governance of organization activities. The constraints imposed by the planning authorities, or government, are still the major concern for managers, in terms of resource allocation and personnel promotion. At the same time, enterprise management depends on the central system for the good things of life (funds, loans, promotions, security and fringe benefits), and is in a favourable position to exploit the system's "soft budgetary constraints" (Kornai, 1980).

Second, an enterprise is encouraged, in the reform programme, to make its own decisions by choosing its market niche. This raises the question whether the market can exist and develop under a centrally planned economy. As Lindblom (1977) noted, the distinction between the market oriented economy and centrally planned economy stemmed from their differences in ideological perspectives. Furthermore, the market encouraged a kind of "strategic" decision-making, while the central planning system pursues a type of "synoptical" process in decision-making. It was not so simple, as imagined by some naive reformers, to combine these two approaches. It is logical to assume that they have little compatibility. This assumption is based on the conflict between these two decision processes. For example, when an instruction or command from the central planning regime is different from market signals, managers face a dilemma: either to follow the command of central planners and lose its market share, or to make decisions according to market needs, but frustrate central authorities by so doing. With a dominance of "vertical" dependent relations, managers would still act on the instructions of the planning authority, rather than according to a market orientation. A mixed system therefore leads to failures of both bureaucratic coordination and market coordination.

Third, the market in socialism has been, and is still, artificially distorted and underdeveloped (Berger, 1986). The effort to build a market in a socialist country means to establish an integrative transactional system, which includes market and legal institutions. This process, establishing the market and reducing central planning, is seen as a socialization of reinstitutionalization in society. This is accomplished by both the entropy of

old systems(the central planning hierarchies), and the creation of new institutions(markets) and other economical legitimations (Zucker et al, 1988). Moreover, the concept of the market mechanism will challenge the basic ideological principles of state socialism(Bate and Child, 1987; Lindblom, 1977). The introduction of market, perceived as a set of institutions(Hodgson, 1988), would result broad changes in social and political systems, as well as in economic administration, such as loss of the Party's power of/through political control. The resistance to market development will therefore come from not only the prevailing institutional structure of central planning, but also from other systems.

Finally, the process of all these reform schemes were characterized by its top-down policy-making and implementation . The major instrument to realize and carry out reform programmes relied upon an administrative mechanism, by means of state intervention through imposing regulations, policies and laws, on markets, enterprises and other agencies. The logic of this socialization process gave rise to an increase of the government power. At the same time, it increased the possibility of uncertainty which was caused by the changes in government policies. When economic disorder or anarchy occurred, it is very possible that government would attempt to exercise its power to re-centralize economic administration and expel market coordination, with its legitimate authority in law, policy making and formal structural properties. The uncertain and unroutine behaviour of government placed managers in a very difficult position to predict further economic policies and to plan ahead; it, therefore in practical terms, jeopardized their nearly granted decision autonomy.

3.4 Discussion and Summary

Industrialization, culture, and political ideology form an integrative framework of organizational context. These three contextual factors coexist in a society with some degree of conflict and harmony to each other and are themselves represented in the institutional framework(Figure 3.1)

Figure 3.1 inserted here

The earlier cases of industrialization were linked to development of capitalism. As Scott(1985:15-20) has argued, the theme of industrialism refers to the transformation of human labour through the application of inanimate sources of energy to productive activity, and the associated physical proximity of workers and machines in the system of factory production. This process was conjunctive with the theme of capitalist , which refers to the organization of production in terms of a search for the realization of profit for privately owned capital and the broader system of market exchange for which commodities are produced.

The theory of industrialization embodies a coherent and, to many, convincing interpretation of the position of the business enterprise in modern industrial capitalism. The growth in the scale of production which is required by the development of technology results in a separation of ownership and control and, therefore, a "managerial revolution"- gives rise to power of a new managerial class.

As discussed in section 3.1.2, the patterns of development in developing countries have been different from the early industrialized society. The industrialization of developing countries was often directed by the government, which consciously intended to achieve high economic growth through its policy-making and intervention in economic administration. The government acts as a regulator, imposing control and restrictions over industrial enterprises, and promoter, providing development opportunities. Although the government's intervention, through regulations and policies, is observed in every country, they are distinguished by two main categories: market-oriented(the capitalist) mode and central planning(the socialist) mode. In the former group, economic units operate and are directed through market coordination, with some degree of coordination within

organizational hierarchies. In the latter group, the principal mechanism in economic administration is achieved through bureaucratic coordination in non-market systems. The differences of these two systems are inherent in their basic ideological principles and their institutional structures.

Certainly, an institutional structure must be seen as a concrete product of socialization, in terms of industrialization, culture and political ideology. These three properties imposed their themes into society through rules and beliefs. When an environment is viewed by institutional frameworks, rules and belief systems are two principal networks which shape the social context:

"We suggest that in modern societies an important category of the rules and belief systems that arise sets of 'rational myths'. The beliefs are rational in the sense that they identify specific social purposes and they specify in a rule-like manner what activities are to be carried to (or what types of actors must be employed) to achieve them. However, these beliefs are myths in the sense that they depend for their efficiency, for their reality, on the fact that they are widely shared, or are promulgated by individuals or groups that have been granted the right to determine such matters. We argue that the elaboration of these rules provides a normative climate within which formal organizations are expected to flourish. Similarly, modern social systems are likely to give rise to elaborate relational networks that stretch from the centre to the periphery of the society. Linked to both nation - building and state- formation processes, these networks provide 'nooks and crannies' as well as lattices and supports for a rich collection of organizations"(Scott, 1983:14)

Institutional context would legislate what organization can and must do and who will do that. The tasks and goals of organization are contingent upon institutional settings, through respective regulations, rules, and policies. The environment of the organization is conceptualized by "the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy"(Scott and Meyer, 1983:149). Organizations conform to certain forms not because of any intrinsic instrumental efficiency *per se*, but because they are obliged to or are thus rewarded for doing so, in terms of acquiring greater legitimacy, resources and survival capacities than might other wise have been the case(Scott, 1987; Meyer and Rowan, 1977). The outcome of decision-making is perceived to be the organization's response to the institutional constraints(cf. Oliver, 1991).

Forty years of economic development experience in developing countries were demonstrated the failure of the socialist development model, which emphasized public ownership and central planning . The necessary condition for industrial development, such as technological innovation, the spirit of entrepreneurship, qualification of professional management and market development, were either dissipated or misshaped under state socialism with its strong monopolistic intervention and political control. Berger(1987), for example, proposes that there are "intrinsic linkages" between socialism and bureaucratization of the economy, authoritarian governance and economic inefficiency. He points out that political and economic hierarchies have merged in state socialist societies so that, for example, party officials exercise considerable influence over enterprise management and career advancement depends on political as well as (or even rather than) economic performance.

On the other hand, the role of national culture was quite controversial in economic development. Behaviour patterns derived from traditional culture could be maintained although organizational structure tended to be more and more convergent(Child, 1981). The experience in some Asian countries, which possessed unique cultures and different traditions from those early industrialized countries, evidenced some changes of their cultures. But it did not necessarily result in the loss of their cultures(Clegg, 1990; Redding, 1990; Vente and Chen, et al., 1980). But a culture could have negative effect as a source of resistance against industrialization. This may happen when industrialization is directed by "imitating" paths of early industrialized countries(which are usually Western countries), so that the process of industrialization would bring not only new technology and innovation, but also new values and norms from West. A culture would in this case defend its traditions.

If this argument is reasonable, a logical assumption is, therefore, embedded upon the role of social-political systems. When the social-political institutions are favourable towards industrialization, the resistance of a traditional culture would be reduced to a minimum. But

when a given social-political system has to an important extent been moulded by a traditional culture, then industrialization will meet a double source of resistance.

The recent reform programmes in socialist countries indicated that it was not easy to fit markets into a central planning system. These reform programmes were seen as an entropy of prevailing institution(central planning hierarchies) and creation of new institutions(markets). However, as DiMaggio(1988:14) noted:

"Creating new institutions is expensive and requires high level of both interest and resources. New institutions arise when organized actors with sufficient resources(**institutional entrepreneurs**) see in them an opportunity to realize interests that they value highly. The creation of new legitimate organizational forms requires an **institutionalization project**"

This insight points precisely to the limitation of the "naive" reform standpoints, which assumes that the development of markets will rise spontaneously from the dismantling of the command planning system without a need to construct new institutions to support the new system. Their view also implies, incorrectly, that the transition to markets can be accomplished rapidly. Furthermore, the ideological roots of socialist systems, together with their debt to the exemplar of the Stalinist Soviet Union, suggest an institutional explanation for the persistence of conditions leading to vertical dependencies. Institutional theory recognizes that many organizational arrangements and processes come to be taken for granted and are modelled on precedents established by higher authorities, occupationally-relevant associations, and so forth(cf. Zucker, 1988). The structure of central planning hierarchies and administrative control have been solidly laid down, or "sedimented", in Clegg and Dunkerley's terms(1980).

The institutional project also requires time for existing institutions to be dismantled, both their ideological and structural features. This can also take time and be painful, if not chaotic for a while. Any attempts to re-institutionalize the system may give rise to disorder. As Zucker(1988:26) argued

"If basic processes of social transmission are incomplete, then many partially institutionalized processes directly lead to social entropy, a tendency toward disorganization in the social system."

An enterprise in such a context would face a dynamic and complex situation. As Kornai(1980, 1986) noted, vertical dependences on hierarchies coexist with market horizontal relationships. The central planning system prefers a kind of "synoptical" process, while the market encourages "strategic" decision processes in which managers seek and find their "niches", not based on instructions or commands from central plans, but from customers(Lindblom, 1977). Managerial behaviour under such context is distorted by these conflicts.

Asserting the importance of institutional context, through the foregoing discussion of industrialization, culture and political systems, implies that organizations engage in constant and important transactions with other organizations. On the one hand, an organization must follow rules legislated by the environment. Managers to be effective must take account of the institutional environment(Pfeffer, 1976). On the other hand, managers are "produced" by a certain kind of environment, with cultural, and ideological norms. The concept of "strategic choice"(Child, 1972b) proposed that organizational performance is contingent to environment, but also to the choices made by executives, who are influenced by their own values. Other studies, discussed in Chapter 2.4, noted how the content of decisions depended upon the context. Whether a decision is strategic in the sense of bearing importantly on an organization's survival or not is largely a consequence of the environment in which organization operates. In economy of shortage, as Kornai(1981) described, operational decisions such as purchasing of inputs are as important as its long-term development decisions, such as investment.

Furthermore, the external context exerts an influences through institutional frameworks. Mintzberg(1979:289) noted that external influence on organization often comes from two ways: precise standards and personnel control over executives. In a socialist country, these influences must be different from a country preferring market oriented economy. The

vertical constraints are embedded in the relations between an enterprise and the state government. This situation dominates managers' attention even more than that in a public owned enterprise in developing society. Managerial decision is certainly guided by these external interventions. As Katz and Kahn(1966) argued, organizations may pursue two complementary paths to effectiveness. The first is to be as efficient as possible, and thereby obtain a competitive advantage with respect to other firms. Under this strategy, the firm succeeds because it operates so efficiently that it achieves a competitive advantages in the market. The second strategy, termed "political", involves the establishment of favourable exchange relationships based on considerations that do not relate strictly to price, quality, service, or efficiency. The organization survives, because the rationale of organizational performance depends on environment. This gives rise to a phenomenon labelled as "permanently failing" (Meyer and Zucker, 1989). As stated in section 3.1, public owned enterprises may face unclear financial goals. The survival of such organization is dependent upon expectations and requirements of the environment for its social functions, rather than economic performance.

Finally, as discussed in Chapter 2, the information source is located within a certain institutional framework, either internal or external of organization. When markets are seen as a set of institutions(Hodgson, 1987, see section 3.1), this means that the information sources and communication channels are characterized by properties of markets. Logically, they are distinct from those in non-market institutions, such as planning hierarchies. The discussion in section 2.7, (c.f. Feldman and March, 1981) argued that use of information is a result of social norms. The implication of this argument indicates that communication and use of information must be institutionalized.

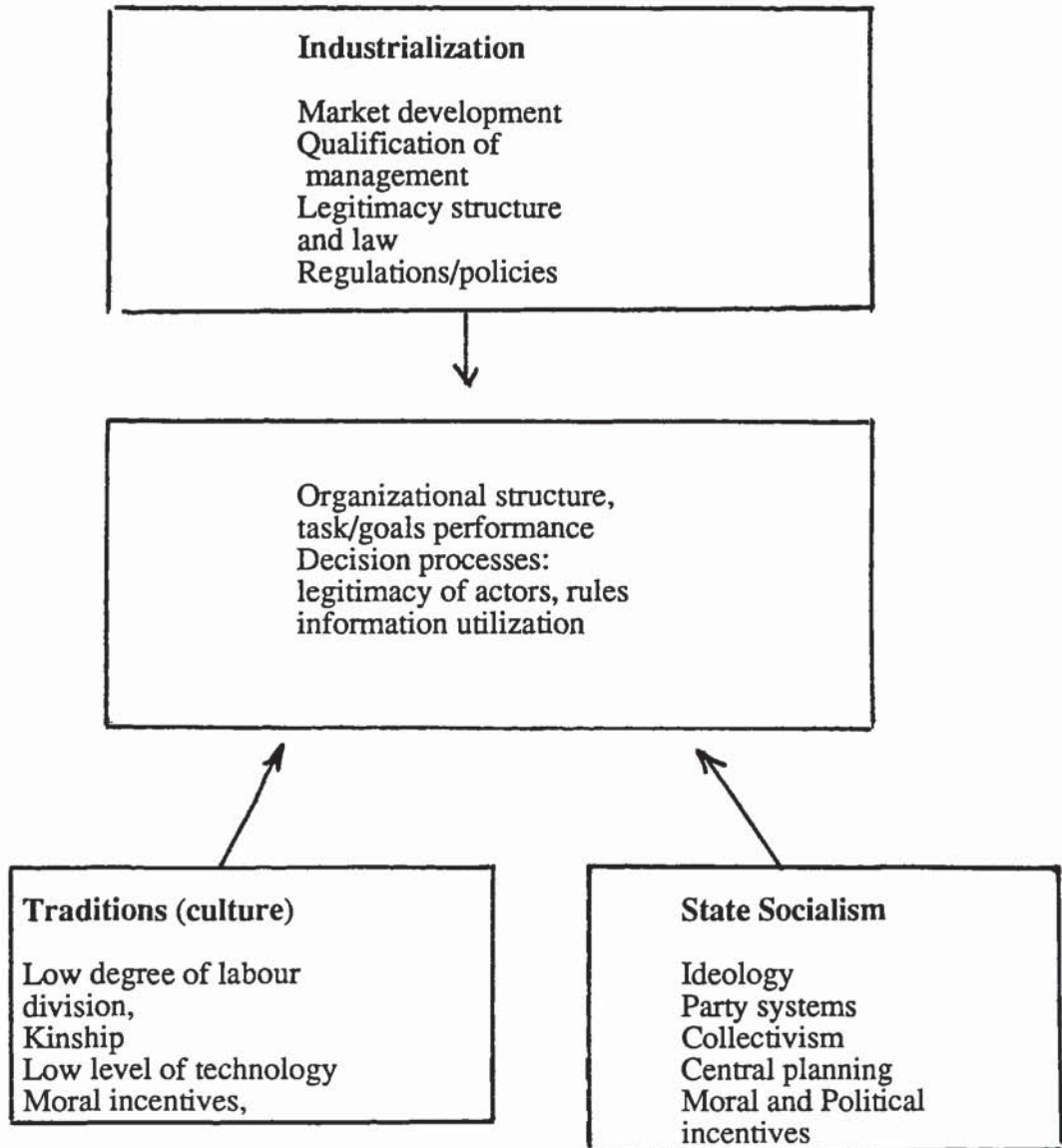


Figure 3.1: Triangle of Industrialization, Traditional Culture, and state socialism

CHAPTER 4: DECISION-MAKING CONTEXT IN CHINA: BACKGROUND OF MODERNIZATION, TRADITIONAL CULTURE AND STATE SOCIALISM

The preceding chapters reviewed some models of organizational decision-making and three perspectives on the context of decision-making were discussed, in terms of the level of industrialization, traditional culture and state socialism. This chapter will focus upon China's contextual environment, based on the framework developed in the last chapter.

4.1 Industrialization and Modernization in China

It is generally argued that China's traditional economy was agrarian (Riskin, 1987). The traditional bureaucracy, guided by Confucianism, performed the essential tasks of coordination, supervision and control of the productive labour of tens of thousands of isolated peasant farms and villages. Through this bureaucratic administration, the Empire integrated its central authority. The production and distribution of goods were sharply limited (Balaze, 1964). Although China created the world's earliest mechanized industry, there was little change in the level of agriculture production and craft-based manufacturing. The early entrepreneurs in China were inculcated in the values of the scholar-bureaucrats class (Andors, 1977), whose economic activities were closely linked to the politics and administration of the Imperial state. Industrialization did not occur until the last quarter of the nineteenth century, combined with foreign incursion and internal political upheaval.

4.1.1 The First Phase of Industrialization in the 1860s

The first attempt to industrialize China occurred in the 1860s, under the pressure of "Self-strengthening" its military defence, because China had been defeated in two wars with foreign imperialism, Britain (Opium War of 1840-2) and France (in 1858-1860). At the same time, the Chinese government (Qing) suffered from internal rebellions. Several industrial projects, such as manufacturing factories, were introduced from western countries. Later in 1881, a telegraph line was completed to connect Beijing, Tianjin and Shanghai. In 1896, an

imperial postal system for all China was established. Schools started to teach scientific knowledge brought in from the West(Beckmann, 1965; Brugger, 1976).

This first phase of industrialization barely changed traditional social institutions. "And a great majority of the Chinese people - the illiterate peasant masses - life was very little different from what it had always been"(Biggerstaff, 1976:160). The failure of this effort was attributed to several reasons.

First, industrialization was actually initiated and directed by the government, for military and political reasons. The logic of industrialization rested upon this clear political goal. This determined the strong intervention of the state in the industrial development processes. All the important promoters of industrial projects were government officials. The government also controlled the financial resources and personnel in industrial enterprises. The formula of "Official-supervision, and merchant-management"(*guan du shang ban*) indicated that industrial management was subject to the central authorities (Brugger, 1976:37-38; Xu, Dixin, 1982). This monopoly of imperial government control, which was inherited from a long history of traditional administrative bureaucracy in economic activities, has been regarded as the China's distinctive feature(Eckstein, 1977; Yu, Yingshi, 1983). The spirit of entrepreneurship, which Weber(1964) described as the most important factor in the capitalist development, was constrained by this governmental intervention(Myers, 1982; Zheng, Xuemeng et al, 1984).

Second, the traditional family kinship played a role retarding the progress of transforming China from a traditional agricultural society to an industrial one. Weber(1978:315-317) argued that family kinship in China was resistant to the establishment of legal systems which were necessary for the development of capitalism. The family was the basic social unit in China. Levy(1955) argued, when he compared early industrialization experiences in China and Japan, that the family orientation or family loyalty, particularly in China, was an important constraint on accumulation of necessary and sufficient financial capital for

economic development, because all the sons shared the family's property equally. Furthermore, this context was not able to create necessary conditions for a "widely diversified range of individual performance in society" as in the western society (Biggerstaff, 1976:154).

Third, Chinese traditional values were seen as another factor restraining industrialization. Beckmann(1965:153) noted:

"Except for projects that would serve a limited and specific purpose, Chinese traditionalists resisted industrialization. Economic development along Western lines would, they surmised, bring in its train the whole transformation of political, economic, and social life which the West had undergone. Unwilling to see the traditional Confucian society undermined, the promoter of limited industrialization continued to regard agriculture as the only possible basis of people's livelihood and of state finance, and much of their reforming zeal went into the restoration of devastated land to cultivation and the opening of new lands"

This cultural attitude of looking backwards to China's golden ages, which were admired by Confucianists, was inherent among Chinese. The nineteenth-century China was a country with along experience of literacy, artisan production and manufacture, commerce, and banking. Its forced entry into the changes associated with industrialization was due to the intervention of the West(Riskin 1987:12) . The culture emphasized the primacy of personal behaviour and individual morality, but discouraged the pursuit of economic rewards which were necessary for commercial transactions(Andors, 1977).

4.1.2 Industrialization after 1949 and Industrial Management up to the Economic Reform in 1978

The subsequent progress of industrialization in China was periodically interrupted , due to the series of wars among war-lords, the Japanese invasion, and civil wars between the Communist party and Guomindang government. After 1949, when the Communist regime took power, another phase of industrialization commenced. In the 1950s China started building up her own industrial systems and infrastructures with the aids from the Soviet Union. Subsequently, in the late 1950s and 1960s, China explored her own patterns of economic development, through a strategy of self-reliance and emphasis upon local

development in rural areas. This strategy was seen as an alternative to the Soviet system(Andors, 1977).

The typical feature of industrialization in early 1950s was presented in a slogan "learning from the Soviet Union". This ideology advocated copying and transplanting social, economic and political systems from the Soviet Union to China. For example, *People's Daily*(Remin Ribao)(14 February, 1953), the most important official propaganda newspaper, called on:

"To industrialize our country, the primary issue before us is to learn from the Soviet Union.... We must set going a tidal wave of learning from the Soviet Union on a nation wide scale, in order to build up our country, 'Follow the path of Russia'"

By the late 1950s, conflicts between China and the Soviet Union started to affect the path of industrialization. The mode of industrial management in China began to deviate from the Soviet model(Andors, 1977). Modern industrial management in China, since the 1950s, was characterized by an organic integration of ownership and management monopolized by the government, highly centralized planning bureaucracy and institutional structure, fragmented local government authority, and the supreme dominance of political management(Andors, 1977; Donnithorne, 1967; Dong, Fureng, 1987; Laaksonen, 1987, 1988; Shirk, 1985; Riskin, 1987).

First, most important industrial enterprises were owned by the state. In the 1950s, the state started to transfer private business in industry and commerce into the nationalized ownership. This process was accelerated in the 1960s, especially during the Culture Revolution(Andors, 1977; Xue, Moqiao, 1989). By the middle of 1960s, all large-sized and middle sized industrial enterprises were monopolized by the government. At the same time, the management of these enterprises was controlled by government agencies of central industrial ministries and local authorities.

A problem of shortage of qualified managers appeared when the state government started to monopolize industries. The major human resource of managers came from four sources: (a) former enterprise owners or salaried managers, but they were strictly controlled by the communist party; (b) demobilized army officers; (c) promotion of ordinary factory workers into managerial posts; and (d) young graduates from universities or other educational institutions, but most of them received training in science and technology, rather than management (Donnithorne, 1967). The promotion of managerial personnel largely depended upon the individual's political loyalty, rather than expert knowledge and competence in administration.

Second, a central planning institution was built up, based on the Soviet model. At the top of the hierarchy was the State Council, then several state commissions. In economic management, the most important commissions were the State Planning Commission (SPC) and the State Economic Commission (SEC). The former was a decision authority for long-term (5 years and more) plans, while the latter dealt with annual operational plans and medium-term (less than 5 years) plans. The next level below the commissions was a number of ministries. Central industrial ministries were categorized according to industrial sectors, such as chemicals, transport, and machine manufacturing. Each ministry headed up several industrial bureaux¹, which were authorized to manage further detailed industrial activities. For example, the Machine Tool Bureau, Automobile Bureau, and the Electric Industrial Bureau were located within the Ministry of Machine Manufacturing. An industrial ministry usually had authority over several enterprises, especially the large-sized enterprises. The ministry's responsibility extended to budgeting, financial management, managerial personnel, distribution of inputs and outputs, investment funds and technology innovation. In other words, most economic plans were drawn at the ministerial level. An enterprise was an operational unit carrying out commands and instructions from the ministry.

Thirdly, and contrasting with the Soviet model, local government in China enjoyed a great deal of autonomy in industrial management. Local government control over industrial enterprises extended to on the following aspects:

- (a) holding management authority on behalf of the state. This means that a large proportion of state-owned industrial enterprises were placed under the supervision of the local government². Each local government, similar to the central government, had its own planning and economic commissions, industrial bureaux and other economic entities, which carried out local plans in the economic sphere, including purchasing, sales, distribution, personnel and labour management, financial budgets, and investment projects;
- (b) allocating resources of labour, lands, some raw materials and products for local enterprises;
- (c) controlling the party system. Except for a few very large enterprises, the management of the party was under the leadership and supervision of the local party committees.
- (d) constructing and maintaining local infrastructure, regulating local distribution networks in commerce, and directing other economic activities according to the local plans.

Finally, the political party - the Communist Party - was a dominant coalition in all organizations. The role of the Communist Party and its functioning continued to penetrate every walk of life after the victory of 1949. In the late 1950s, the party successfully overhauled the position of professional managers in decision-making and became the significant leadership role in organization. This result deviated from the Soviet model, in which one-man management (management based on expertise) was favoured as the leadership principal. "Politics in command" became the pattern of management in China from the late 1950s onward (Andors, 1977).

These basic characteristics persisted in China's industrial management. Some of these trends were even strengthened later on, through political campaigns and mass movements. Industrial management was directed in accordance with ideological guidance, particularly Maoism.

The strategy of Maoist economic policy concentrated upon two major instruments to develop the economy, moral incentives and balancing central authority and local power (Wu,

Jinglian, 1989). Attempts were made to implement this strategy, in term of decentralizing management authority to local government in the late 1950s and early 1970s. Both programmes failed. Each terminated in re-centralization , due to the occurrence of economic anarchy following decentralization(Wu, Jinglian, 1989; Xu, Muqiao, 1989). The phenomenon of a recurring cycle was described as "centralization leads to rigidity, rigidity leads to complaints, complaints lead to decentralization, decentralization leads to disorder, and disorder leads back to centralization"(yizhua jiusi; yisi jiujiao; yijiao jiufang; yefang jiulan; yiluan jiuzhua)(Henley and Nyaw, 1986).

The first decentralization in Chinese industry occurred in 1958, with a number of regulations which formed an outline of the programme. Lee(1986) summarized the four sets of policies to enterprises under this programme. One focused on the definition of business scope. The second encouraged the establishment of a profit retention system for enterprises. The third concerned the financial management area, in which the power to allocate working capital for firms was transferred from financial bureaux to banks. The last set concentrated on the responsibility system for capital investment(Lee, 1986:46-47). Up to the end of 1958, control over more than 8,000 state-owned enterprises was decentralized to the localities, while the central industrial ministries only retained control over about 1,000 large enterprises. The categories of materials subject to allocation via planned quota in material allocation were reduced to about 130(Zhu, Jiaming and Lu, Zheng, 1984). The implementation of this policy caused economic anarchy. Each locality established its own isolated barriers and segmented the market. Over-investment on repetitive projects, considerable wastes and inefficient production led to chaos in economic coordination.

In 1963, the central government decided to take back its decision-making authority. The number of enterprises retained by central industrial ministries increased to more than 10,000. The categories of resource controlled through central plan quota were raised again to more than 500. Furthermore, the central commissions and ministries now retained powers over the following decisions: investment projects, raw material allocation and

distribution, total expenditure of wages and salaries in state-owned enterprises, the number of employees in enterprises, pricing, budgeting of working capital and fixed assets.(Zhu Jiaming and Lu Zheng, 1984: 205-206).

The second decentralization started in the late 1960s. The administrative power over small sized enterprises was delegated to local governments. In 1967, the depreciation funds of the local enterprises were retained by local authorities. In 1970, the central government decided to give local authorities more power to manage enterprises. More than 2,000 industrial enterprises, including some large corporations, such as Daqing oil field, Chang Chun Automobile Manufacturer, were redefined as local enterprises. All these efforts, however, appeared to fail, just as in 1958. In 1975, the central government called for "making an adjustment on enterprises"(kai zhan qiye zhengdun). This slogan was interpreted as a call for centralization(Wu, Jinglian, 1989; Zhu, Jiaming and Lu, Zheng, 1984:206-207).

Critics of these two decentralizations in China draw attention to the following points(Zhu, Jiaming and Lu, Zheng, 1984; Wu, Jinglian, 1989; The Department of the Economic System Reform and Law & Regulation in the State Planning Commission, 1989). First, they argue that these programmes should have been defined as delegation of decision making authority from the central government to local government, rather than to enterprises. In these attempts of decentralization, the enterprises received new superordinate authorities, which were local authorities replacing the central industrial ministries. The vertical relations which held authorities over enterprises remained. The state-owned enterprises were still subject to the government agencies without their own autonomy in economic activities.

Second, an enterprises still came under the planning bodies. The firm operated according to orders of the administrative hierarchies, central industrial ministries or local industrial bureaux. Nowhere did the market play any role in stimulating management decisions. In other words, an enterprise was still an operational unit for the production of planned quotas, rather than an economic unit which adapted its outputs according to the market or

customers' requirement. Furthermore, the legitimation of the environment was not in favour of market economy. Important economic institutions for market transactions, such as banks, the taxation system and price system, were subordinated to the planning system. Their functions were replaced by the administrative bureaucracy through hierarchical commands.

Finally, there was little preparation, either in theoretical analysis or in plans, for these two decentralization programmes. The theoretical perspective as a guideline for decentralization, came from Mao's concepts of mobilizing the motivations of localities and of self-reliance. Any attempt to legitimate an enterprise as an economic unit in market terms was criticized as revisionism and an attempt to change "the nature of socialism"(Wu, Jinglian, 1989).

Following the death of Mao in 1976 and subsequent political power struggles, the new leadership set the stage for China's modernization first under Hua Guofeng, then under Deng Xiaoping. The First Session of the Fifth National People's Congress, held in Beijing beginning in late February 1978, outlined China's new economic policies. The Four Modernizations Programme was a blueprint for the rapid development of the national economy³. This programme was later labelled the Economic Reform. The core of the reform this time was to delegate decision-making power to enterprise management, and reduce the intervention of central planning system and government. The reform will be reviewed in section 4.4 of this chapter.

For the industrial work force, the proportion of agriculture population was still significant in China, as high as 74.3% by 1975. The utilization of plant and equipment in large and medium-sized industrial enterprises was very low, Manual labour workers in production processes constituted 38.8 % of total workers, in manufacturing industry; 41.5% in heavy industry; and 56.3% in mining industry. These figures indicate that the industrialization in China is still at a low level(Cheng, Tianxi, 1988:14-15).

A limited number of studies draw attention to the qualification of management in China. A common problem for China, when the economic reform started, was the lack of managerial resources which were needed in a market economy(Chastain, 1982; Warner, 1986a). As a report noted:

"[T]he next two decades of economic development in China will require the input of substantial managerial resources at a high level of quality. Yet at present, the country faces two critical problems. The first is that there is a critical shortage of suitably trained managers. The second is that, faced with an unprecedented challenge to modernize in a very short time, the country has, as yet, no clear idea of how this managerial resource might best be used. In other words it lacks a model to follow"(EEC-China Management Training Project, 1983:1)

A Chinese high-rank official, Mr Zhu Rongji(1986) said:

"There is a gap between in technology with the developed countries but the gap in management is even larger. So in some ways the training of managers is more important than acquiring technology from abroad"

Wu and his colleagues(Wu, Jinglian et al., 1986) attributed the shortage of qualified managers, or entrepreneurs⁴, in China to the problems inherited from the prevailing institutional context. They pointed out that there were few personnel who were qualified as "entrepreneurs", particularly in state-owned enterprises. In such a context, neither ideological concepts(encouragement of political loyalty) nor traditional values(emphasis in careers on the scholar-official status in government) favoured the birth of a social class of professional managers and entrepreneurs in China. Even quasi-professional managers, such as in Eastern Europe and the Soviet Union, face difficulty in such a context. Others argued that Chinese managers behaved more like administrative officials in bureaucracies than businessmen in economic units(Su, Chenting, and Jian, Xin, 1989; Yuan, Baohua, 1989). In fact, even the technicians and graduates of colleges and technical institutes were in very short supply(Helburn and Shearer, 1984). Before the economic reform, there were few managerial training courses. The definition of management was narrowed down to two types: (1) aspects of applied economics, finance and accounting, (2) knowledge of manufacturing production. Knowledge of marketing, financial strategy, human resource management, was categorized as a field of transfer from the West to China(Battat, 1986; Olve, 1986).

Warner(1986b) also observed that both ideological knowledge and professional skills were sought when promoting to managerial position in Chinese enterprises. Liu, Shibai(1987) criticized the fact that some enterprise executives had no knowledge of profit and markets. They were scared of competition and relied upon subsidies from government grants. A report in the *People's Daily*(20th June, 1988) said that the problem of low quality in enterprise management was worse than that of poor technical facilities. Industrialization in China did not produce the professional managerial elite or technostucture, as Chandler(1977) and Galbraith(1972) described for industrialized society in general.

4. 2 Chinese Traditional Culture

China enjoys the oldest unbroken civilization in the world. China has formed her distinctive cultural heritage, in aspects of her own philosophy, science and technology, social institutions, and also of experience of traditional administrative bureaucracy. China's culture has been diffused widely to other countries and regions around the world. The studies of Japan's economic success have attribute it to Chinese schools of philosophy, particularly Confucianism as a major factor to maintain the stability of the social system and to motivate employee in organizational performance(Lee and Schwendiman, 1982; Pegels, 1984). Recent studies of economic development in four Asian areas, known as four Pacific Dragons, South Korea, Taiwan, Singapore, and Hong Kong, appreciated the effect of Chinese traditional culture in those nations, and again, regard Confucianism as an important value core(*Management Today*, 1985).

Laaksonen(1988) noted the influence of traditional culture in modern China:

"...values concerning authority, responsibility, and subordination were largely shaped by Confucianism and the family system. Business and industrial enterprises typically functioned in old China as an extension of the family system. Subordinates were generally expected to be unquestioningly loyal, obedient, and subservient in executing the orders and instructions issued by their superiors"(Laaksonen, 1988:95)

The concepts of Chinese traditional culture have been widely discussed(Laaksonen, 1988; Lockett, 1989; Pye, 1985). The main points are summarized in the following:

- (1) Generally, it is argued that the Chinese respect hierarchy and authority. This stemmed from the Confucians concept of *li*(rite, propriety) which played an important role in human relations to maintain a person's hierarchical position in the society. As Ronan and Needham(1978:306) have argued, the old concept of *li* proved more suitable than any other for Chinese society in her traditional bureaucratic system. This tradition, holding obedience to authority, would prefer centralized organizational structure and decision-making processes(He, Xizhang, 1988; Lu, 1988; Pye, 1985; Wei, 1988).
- (2) Another characteristic of Chinese tradition is that the family is usually perceived as a basic social unit, so that the Chinese show a strong tendency of collective and group orientation (Lockett, 1989; Wei, Zhongtong, 1988). A boundary of a family or clan was seen as the centre of the social activity, within which its members kept harmonious relationship. The family or clan's moral judgement was referred to as the formal behavioural standard and incentive. It is argued that the rational legal system, as Weber(1964) described for modern capitalism, was particularly difficult to accept in this kind of society, because the ethical principle varied from on family to another.

As Fei Xiaotong(1967:37) noted of traditional Chinese family:

"In this society(China), a universal standard did not work. (An actor) must ask clearly who was the subject and what kind of relationship he enjoys with the subject; he then decides what kind of standards to apply (for his judgement)"

- (3) The concept of "face" is seen as a unique feature in Chinese culture(Hu, 1944, Goffman, 1955). Hu noted that the concepts of face were related to 'a reputation achieved through getting on the life, through success and ostentation'(Hu, 1944:45) and 'the confidence of society in the integrity of ego's moral character'. K.K. Hwang(1983) noted that in a static society where the major social resources are controlled by a few allocators, who may distribute resources in accordance with their personnel preferences, the game of face-work would be played by Chinese to strengthen their personal relationship between them. Furthermore, face-work in Chinese society is mainly a kind of instrument to enhance harmony within a collective group or family, in which the great achievement is expressed to outsiders while any conflict inside the family should not be brought to the public.
- (4) The last unique concept in Chinese culture has been seen as the importance of personal relationship(*guanxi*). Owing to the relation-oriented character of Chinese people, when a petitioner asks a resource allocator to distribute a certain kind of social resource under his control, the resource allocator will first consider the relationship(*guanxi*) between them and adopt appropriate rules of social exchange to interact with the petitioner. According to Hwang's model(Hwang, 1983), *guanxi*, as a specific cultural phenomenon in China, refers to a kind of interpersonal relationship outside an individual's immediate family. Persons who are said to have *guanxi* usually share one or more important characteristics, such as common birth-place, lineage, or surname, or involve shared experience, such as attending the same school, working together, or belonging to the same organization(Jacobs, 1979). *Guanxi* constitutes an interpersonal network or reticulum, in order to share or reciprocate social exchanges between them(Yang, 1957).

These concepts of Chinese culture are still significant . A recent survey among 324 cities in China on people's attitude found that "honesty", "patriotism" and "respect for parents" were the three most highly rated categories among moral concepts. The concepts of "diligent", "thrifty", "practical", "conservative" and "obedient" were seen as the five most important characteristics of the Chinese(*Beijing Review*, No. 5, 1988). Shenkar and Ronan(1987) found that Chinese managers from mainland held a deep conception of collectivism in organizations. These managers viewed challenge as a collective endeavour rather than in terms of their individual goals; they viewed work as important more than leisure and as contributing to family welfare instead of competing with it; and they thought in terms of the viewed collectivity as opposite to individualism.

Other studies on enterprise management point in the same direction. Ma Quanshan(1989) summarized the current management in mainland China as "more humanity less materialism" (*zhongren qingwu*) and "more ethical less profitable" (*zhongyi qingli*). These are seen as resilient properties of Chinese traditional values, particularly Confucianism. He argued that this kind of corporation culture is less favorable for modernization, which emphasizes economical efficiency. Moreover, he found that managers and directors in mainland Chinese enterprises behaved as official-bureaucrats rather than business men. He argued that the political structure has a significant place within the structure of organization and that professionals held a lower status than political staff.

Yang and Zheng(1989) came out an empirical survey among Chinese managers in Taiwan and found that Chinese traditional culture persisted in modern enterprises. The value system contains five basic concepts, in terms of family orientation, modification, concept of face, harmonization, and working hard, which are integrative rather than separate to each other. Redding and Ng(1982) found that the concept of 'face' indeed played a role in social relationships and organizational behaviour.

Viewing these arguments, it is assumed that in the Chinese context, a large power distance(Hofstede, 1980) exists in the relationship between boss and subordinates(Bond and Hwang, 1986; Lang, Shida, 1985). The concentration of authority is perceived to be high in hierarchy, with a strong personal influence from top management. The decision-making is likely to be centralized. Sun(1987) further commented that the features of Chinese culture, through the dimensions in the K-S theory suggested by Kickhohn and Strodtbeck(1975), presented tendencies of past over present in time, man as subject to the nature, and collective orientation over individualism. Organizational structure and processes in such context, according to the K-S theory, enjoys informal management in a human network and a small social unit based on interpersonal relations, rather than a specialized functional units. The communication of information tends to be vertical and unidirectional than horizontal. Economic performance seems to be unimportant(Lu, Yuan, 1988).

Some scholars argue that Chinese traditional culture has positive effects for modern society. They pointed out that Confucianism took on optimistic attitude toward life and advocated that man should follow the law of nature and be its master. Furthermore, the ancient Chinese dialectical method of thinking has contributed to present thinking. But generally, the concepts of Chinese traditional culture have been viewed by many scholars as a negative factor which resists to the efforts of modernization in China(Beckmann, 1965; Biggerstaff, 1976; Ji, Yunfei, 1989; Myers, 1982; Zi, Zhongyun, 1987). For example, Yao Shuping(1988:117) argued:

"Facing such a basic fact, that after the effort of modernization over a century China is not yet ranked as an advanced country, makes us realize that traditional culture has more negative than positive effects towards modernization. Or, it exhibits more resistance than assistance, and this must be a basic analysis."

Some scholars hold the same opinion. The views of the negative side of the Chinese culture in industrialization focused on its main stream of traditional thinking based on absolute authority, blood ties and kinship, and moral by-oriented incentives, which are said to be conflict with the values in modern society which stress individual creativity, system of knowledge, and rule by law(Zi, Zhongyun, 1987). Shao, Peng(1989) pointed that

urbanization after 1949 brought Chinese traditional culture from the countryside to cities, particularly to enterprises. An enterprise, replacing a village, became a community unit for people. A consequence of Chinese industrialization was to create the "modern big village", in which all functions of social community, plus industrial production, are integrated together.

Furthermore, it was noted that some concepts of Chinese culture distorted the doctrine of Marxism(Jiang, Jianqiang, 1988). The interpretation of Marxism was based on the modes of traditional values, through which Marxist principles became ritualized, authoritarian and dogmatic.

4.3 The Ideology of State Socialism in China

Modern China, since 1949, was committed to be a socialist country, according to the central themes of Marxism, Leninism and Maoism. This ideological perspective was emphasized as the principal thread in industrial management in modern China(See the above discussion in this chapter, 4.1.2). Reviewing China's forty years experience of socialism, from 1949 to 1989, her unique feature in policy making has been the strong ideological dominance(Carver and Li, 1989; Lee, 1986). There were certain basic ideological principles rhetorically dominating economic policy. These principles represent a culmination of top leaders' thinking regarding the direction in which a socialist China should aim. With different interpretation of "socialism", the main ideological concepts varied according to the decision-making coalition's preferences. A phenomenon observed in China is that during one period, a special ideology was developed by one dominant coalition at the top. This ideological concept was replaced, when top leaders and power were transformed or succeeded by others. Generally, the China's socialist practice divided into two major episodes: Mao time and Post-Mao time.

4.3.1 Concepts of Maoism before the Reform(1978)

The main ideological concepts in Maoism were referred to as "self-reliance" and "egalitarianism"(Riskin, 1987). As a principle in economic policy-making, self-reliance encouraged each locality or organization to rely so far as possible on its own resources. It suggests that the main resources for development should be found within the unit concerned. External exchanges in resource allocation were not ruled out, but limited to a subsidiary role(Oksenberg and Goldstein, 1974). The principal characteristics of self-reliance are presented as:(1) full utilization of domestic resources, including labour and skills; (2) rejection of indiscriminate imitation of foreign methods in favour of accomplishing indigenous experience suited to Chinese conditions; (3) reliance upon domestic saving to finance capital accumulation; and (4) establishment of a comprehensive industrial system in China(Riskin, 1987:205)

The practice of this inward-looking policy was to urge organizations, at all levels of society, locality and individual unit, to establish their own "independent and comprehensive industrial system", as well as to rely on their own resources, capital, and experiences. When this principle was applied to the resource allocation, the result was to stimulate the initiative of localities in undertaking development projects by providing economic incentives (in the forms of retained profits), and to give rise to the enterprise undertaking all functions that made for itself a large part of the materials and intermediate goods needed to turn out its main production line. From the economic view, self-reliance discouraged the division of labour and reduced the degree of specialization. The inefficiency was an unavoidable accompaniment of this policy.(Riskin, 1987: 218).

The concept of egalitarianism rested on the basis of "selflessness", which called for moral and political incentives (Schram, 1981:427). This concept was later criticized, in post-Mao time, as "everyone eating from the same big pot". Egalitarianism was most seriously applied to relationships that had - or potentially had - a class or status character. In income

distribution, there were remarkably small differences between the wages of top administrative or technical personnel and those of ordinary workers. The major incentive was to come from political promotion and moral example. Any differences in income distribution, such as wages, salaries and bonus, should be reduced as much as possible. And every person should be given security through life-time employment systems. Furthermore, any trend perceived to give use to superior social status, such as salaries, managerial authority, and labour specialization, was criticized and abolished(Liu, Guoguang, 1987; Ma, Hong, 1979).

A major instrument to carry out ideological principles in organization was the Communist Party. The party system in China is independent from the administrative systems, and is organized on strictly hierarchical lines in the shape of a pyramid of central government, regional and local authorities, and primary organizations, each of which has its own subgroups. In an enterprise in China, the highest and the most important party unit is often the party committee, depending on the official size of the organization. The next level is a branch in workshops. The lowest-level unit is the party group, consisting of three to four party members, in work groups(Laaksonen, 1988). The task of the party organization within enterprises was to carry out instructions and commands according to the directives and guidelines of the superior party authority, to supervise the behaviour and performance of all party members even ordinary people, to report and communicate information to the superior party committee, and to carry out ideological education and training(Laaksonen, 1988).

Laaksonen(1988:166-169) noted that the power of the party dominated during the periods of favorable economic performance of the national economic and enterprises. During times of economic crisis, the party normally made way for management to save the situation.

The party exercises control in five ways:

- (1) All national-policies were made by the Central Committee of the Party.

- (2) The party strictly held the power in personnel management. Selection and promotion in personnel should be determined by the party committee or branch. Loyalty and commitment to the party and Socialism was always the most important criteria to select right persons for leadership. Most enterprise managers were non-party members.
- (3) A political system was established, officially parallel to formal administrative systems. That was the party system. It is separate from administration, but attached to administrative hierarchies, in order to guarantee the leadership of the party in organization. The party system has its own communication channels, information network, rules, authority and personnel management. The party secretary is often a full-time official post, with a support system of a number of full-time political staff. The trade union and the Youth League were two direct subordinate organizations controlled by the party system.
- (4) Political training and ideological education were used to train members, and all employees as well. Moral incentive by means of setting examples and disciplinary control were employed to supervise and monitor members of the party and normal mass, in order to enforce them to keep the pace with the party.

With the death of Mao in 1976 and rise of Deng Xiaoping, the slogan "Four Modernizations" became a new ideological theme, later replaced by the concept of "economic reform".

4.3.2 The New Ideology: Reformism in Post-Mao Time(after 1978)

As Mao's successor, Deng raised the programme to modernize China's industry, agriculture, science & technology, and military defence. This programme was initiated by Mao in 1957(without military defence), then detailed by Zhou Enlai in 1965⁵. What Deng suggested was seen as a continuity of this ambition.

But Deng applied different socialization processes to realize this target. These changes were summarized by Deng himself in his speech:

"We have done mainly two things: we have set wrong things right, and we have launched comprehensive reform. For many years, we suffered badly from one major error: we still take class struggle as the key link. And we neglected the development the productive forces"(Deng, Xiaoping, 1985)

This effort of "setting wrong things right" was nothing but bringing a new dominant ideology to take over the old ones. The paradox of the new ideology was represented by Four Basic Principles, in terms of adherence to (1) the socialist road; (2) people's

democratic dictatorship; (3) leadership by the Chinese Communist Party; and (4) Maxism-Leninism and Maoism), although definitions of all these principles were still ambiguous.

The implementation of the new ideology in the economic reform has had some effects on institutional structures in economic and political aspects. The main changes in economic management are summarized in Table 4.1.(Lee, Hong Yung 1986; Liu, Guoguang, 1988; Maxwell and McFarlane et al.,1984; *Red Flag*(Hong Qi),No.14, 1987; The State Commission of Economic System Reform [eds], 1988).

Table 4.1 inserted here

The representation of the new ideological principles in economic management was expressed by the notion that "The State regulates the market, and the market directs enterprises"(guojia zhidao shichang, shichang yindao qiye), which was officially proposed at the 13th National Congress of the Chinese Communist Party. "A planned commercial economy" was referred to as an essential economic model designed for state socialism with Chinese characteristics(The State Commission of Economic System Reform, 1988). The concept of market economy started to be introduced in to economic theories.

These concepts, derived from the new ideology, caused crisis(Lee, Hong Yung, 1986). Economic development became the top priority(Schram 1984). The dilemma for the regime was that in order to achieve rapid economic development, it was necessary to introduce some market mechanisms generally associated with capitalism. These economic reforms have produced what the regime called "unhealthy practices" - a euphemism for corruption and what the regime saw as bourgeois ideology.

Institutionally, the changes in ideological perspectives also restricted the power of the party. Since 1986, the leadership of the party has made away for the director responsibility system.

The task of the party was limited to assisting, monitoring and supervising the director's performance. The managerial elite started to become the core of the industrial decision-making system.

4.4 A Chronicle of Economic Reform in China's industrial Enterprises, 1978-1988

The current economic reform started in 1978, firstly in agriculture, then in urban industries. Officially, the programme was called "Realization of Socialist Four Modernizations in Agriculture, Industry, Defence Military, Science and Technology". The core of the reform was seen to expand autonomy for enterprises.

The experience of the economic reform in China's industrial enterprises has been generally regarded to have three stages, according to the progress of decentralization. The first stage was from 1978 to 1984. The second was during a period 1984 and the end of 1986. From 1987 to 1988 was referred to as the third stage.

From December 1987 to October 1984, the reform in enterprises focused on experimental bases, starting in Sichuan province. The main theme of the reform programme in this stage drew attention to expanding managerial autonomy in a small number of state-owned enterprises. In April 1979, the State Economic Commission (SEC) organized a conference on enterprise reform, in which the policy of reform in enterprises proposed to delegate managerial authority to enterprise managers in regard to production planning, financial management, raw material purchasing, foreign trade, labour recruitment, incentive and punishment in human resource management and organizational design. On 25th May, the State Economic Commission, the Ministry of Finance, the Ministry of Foreign Trade, the China People's Bank, the State Material Bureau and the State Labour Bureau published a circular. This circular was seen as the first formal document to assert that the contents of the reform in enterprises ought to follow the points reached in the SEC's conference. Eight

enterprises in Beijing, Tianjin and Shanghai were selected to carry out the "experiment in expansion of enterprise autonomy".

Later, in 13th July 1979 the State Council firstly published a set of official policies to draw outline of the reform in state-owned enterprises. One of the five documents was particularly concerned with scheme of "expansion of enterprise managerial autonomy" (**kuoda qiye jingying guanli zizhu quan**). The contents of autonomy decentralized to enterprises included the following aspects:

- (1) Sales of products in excess of state planning quotas.
- (2) Implementation of a profit retention system, which allowed the enterprise to retain the portion of profit realized above the planning quota.
- (3) Payment of fixed-asset fees and interests of bank loans, replacing free government grants in capital allocation
- (4) Encouragement of new product development
- (5) Recruitment of labour force.
- (6) Authority in organization design and change of organization structure.
- (7) Reduction of non-economic burdens.

By the end of June 1980, there were more than 6,600 enterprises on a national basis which had commenced different types of experiment in expanding enterprise autonomy. On the 2nd September 1980, the State Council approved a report of the State Economic Commission, further confirmed the programme of the reform scheme in enterprises. On 20th May 1981, the State Economic Commission with other nine ministries, banks and government agencies published a very important regulation, which included sixty articles on the realization of managerial autonomy in enterprises. Then, during 1982 and 1983, the exercise of managerial autonomy was spread over the country.

The second stage started in 1984 when the State Council published "**Temporary Regulation on Further Expansion of Autonomy of State-owne Industrial Enterprises**".

This regulation was seen as one of the most important policies on enterprise management,

which outlined the basic principles of other policies and regulation in later time. The authority held by enterprise managers was fixed, in this regulation, in ten fields, in terms of production planning, sales of products, pricing, purchasing materials, use of self-funds, handling of assets, labour and personnel management, allocation of bonus and salaries(wages), organization design, and formation of interunit cooperation. In February 1985, the State Council approved another regulation on promotion of technology progress in enterprises, clarifying that enterprises were allowed to make their own technological development plans and promote their own technological innovation.

In September 1985, the State Council approved another regulation based on the State Economic Commission and the State Planning Commission, guaranteeing the implementation of managerial autonomy. Aimed at the fact that local industrial bureaux held up decentralization of authority to enterprises, the State Council in December 1986 further published a regulation which clearly defined the authorities held by enterprise managers and ordering the abolition of bodies of bureaucratically administration above enterprises.

From 1987 to 1988, the reform programme in enterprise management moved to a phrase in which different contractual responsibility systems were formulated between government and enterprises. These forms were authorized by the State Council in March 1988. Later, April 1988, the National People's Congress approved the enterprise law, which was recognized as the first legal document to legitimate the position of enterprises and directors.

With the progress of the reform, the criteria of personnel promotion in management have been gradually changed from the emphasis upon political loyalty to professional knowledge. The new four standards for a "socialist director" were described as the four "measures"⁷:

- (1) Revolution: Directors must persist with socialist principles
- (2) Professionalism: Directors must possess professional competence in management

- (3) Knowledge: Directors must be educated or trained with certain education certificates and knowledges of technology and management
- (4) Age: Directors must be young and healthy.

These changes were accelerated in 1986 when the Director Responsibility System was implemented in state-owned enterprises. The party secretary gave way in decision-making to manager-directors. The task of the party was diverted to "supervising and guaranteeing" the director's activities, and providing advice for directors. But this change was only partially implemented. The relationship of the party secretary and the director was largely dependent upon their personal ties. Some directors complained that the problem for directors was not whether they would over-use their authority in decision-making, but they did not have sufficient power, because of constraints from both the party and trade unions(*People's Daily*, 18th December, 1987). On the other hand, it was found that Chinese managers were keen to establish regulations and organization structure design, or pursuing ritual forms, rather than pay attention to solving problems, compared with foreign managers in joint-ventures(Yang, Qing, 1988).

Another constraint came from the vertical hierarchy. In fact, the managers faced a two-tier system under the reform. One was from the original administrative tie to their superior authorities. The other came from the market. Institutionally, the vertical constraints were little changed, even different contractual responsibility systems were implemented(Byrd, 1988). Regulation through administrative channels appeared to remain a major consideration in managers decisions. For example, Li, Yongfeng(1988) found that the seventy percent of directors in state-owned enterprises preferred to follow prevailing regulations and ask for instructions from their superior authorities before they made their decisions. Furthermore, the delegation of authority was impeded by the government hierarchy. As the general manager in a company said:

"According to decentralization, the state government has delegated what should be done, such as personnel, organization design, but I didn't receive this delegation. Or rather, I haven't received it completely. I find difficult to say who or which agency stopped the decentralization. What I can say is that the central government is too high in the hierarchy, but we are at the bottom So that authority delegated from the state has not reached enterprises"(*Economic Daily*, 10th February, 1989)

It was noted that the reform challenged the prevailing systems: economical, political and societal. The reform was seen to conflict with both traditional culture and the prevailing doctrine of state socialism. Culturally, the reform policies possessed some conflicts with Chinese traditions. Barnowe(1987) noted several paradox as embedded in the contradictory aspects of China's current management and economic reform. The former situation was characterized by a power-coercive planned change strategy, collectivism, administrative control and intrinsic moral incentive. The reform encouraged a market-rational strategy, individual initiative, managerial decision making and extrinsic economic reward.

The reform introduced new values which were conflict or incompatible with the old ideology(Liu, Yaojin, 1989). But the shadow of socialist ideology was still significant in policy making. Battat(1986:70) noted that the word in "management" became a cultural and ideological stigma in China under the interpretation of the state socialism:

"To convince others and provide themselves with the necessary ideological security and legitimacy, management advocates called upon Marx, Lenin and Mao, selectively quoting them at length to prove their support for the use of modern management in developing a socialist economy. In these advocates' views, as long as it fits China's situation and socialism, modern management should be used, whether developed in China or imported from abroad and adapted to the national needs:

In fact, the arguments concerning socialism and capitalism have never ceased during the ten years' reform period. The political campaigns of 1985 and 1987 refreshed people's memory of the historical settings to China's political struggles. In academic areas, as Wu and his colleagues(Wu Jinglian, et al., 1988) noted, it was still noticeable in China that some theories were labelled as "conservative" or "negative to the reform", while others as "reformist" or "socialist", according to personal preferences, rather than theoretical perspectives. Theories, phenomena and policies were often interpreted through ideological concepts in the discussion of management systems in China. For example, the contract responsibility system was appreciated as a "milestone in China's reform progress", or as a "management system with Chinese characteristics", or "the great creation of the Chinese workers", in official affirmations and propaganda⁸. Lee (1987:181) noted that policy

making in China's reform exhibited logic of incrementalism. The concept of enterprise autonomy was rooted in Mao's ideas of balancing the interests of the state, enterprises and individual producers. This concept was closely linked to Maoist ideological perspectives which draw attention to the principle of "full play to the activism" of basic units and individual producers.

This controversy was also evident in organizational arrangements. Official ideology still claimed that the party was the core of leadership in official ideology, although the task of the political system has been changed to "monitoring, supervising and helping directors, and training staff and employees". The legislation of director's position was challenged by the principles of the state socialism, which insisted on a unified political authority. Although the Enterprise Law of 1988 stated clearly that the director, rather than the party secretary, was in charge of administration, it was vague about the relationship of the party and management. For example, Lian, He(1988) noted that the Enterprise Law intended consciously to avoid a clear definition of the party's positions in management, because any attempt to regulate the director authority ran the risk of conflicting with the Constitution of the Party. The relationship between director and the party secretary largely depended upon their personal relationship, rather than formal legislation(Zhang, Zhenghuan, 1987).

Some reform policies were distorted and misinterpreted, due to existence of the old systems and low qualification of cadres(Dong, Fureng, 1989). For example, material incentives, such as bonus, did not play a role to motive workers. Instead, workers shared the opportunity to gain bonus without reference to their productivity. Another example was that administrative authorities were still significant in controlling enterprise management in the allocation of raw material, financial control and pricing monopoly. In 1988, a serious inflation occurred on a national scale. In October, the Third Plenum of 13th Party's National Congress decided to consolidate the economic environment(Li, Peng, 1988). This was interpreted as a signal to re-centralize. Many scholars believed that the reform in China was in crisis(Chen, Yizi et al., 1989; *Economic Daily*, 17th October, 1987; Li, Honglin,

1988; Su, Shaozhi and Wang, Yizhou, 1988; Zou, Dongtao and Lin, Ju, 1989). The traditional administrative system was employed back to solve economical problems. In a survey done in Liaoning in 1989, more than 49 % of directors thought that the reform was in fact stopped, 5 % believed that the reform was retrenched(Gao, Xuejing et al., 1989)

Up to 1988, ten years after the reform started, the market mechanism was still depressed by central planning pressures. Ownership was largely monopolized by the state. In particular, prices were not signalled by the market, but derived from an administrative apparatus controlled by the planning elite. Furthermore, the legal system was in a far from satisfactory condition(Wang, Yizhou, 1989). The reform in China was actually halted in 1988-89.

4.5 Discussion and Summary

The decision context in China has been reviewed, from three theoretical perspectives, in terms of China's industrialization experience, her traditional culture, and the development patterns of the state socialism. All these three factors contributed to the Chinese industrial management integrately and comprehensively. Although the successful economic development in some Asian countries, such as Japan, Taiwan, Singapore, Hong Kong, and South Korea, implied that some concepts of Chinese traditional culture might have positive effects for industrialization, it is noted that these achievements have been realized under non-socialist systems(Berger, 1986). However, a large number of Chinese traditional cultural concepts are coherent with the doctrine of socialist ideology. At the same time, both the culture and the ideology are opposite to the theme of industrialization. Table 4.2 attempts to compare main points of these three perspectives.

Table 4.2 inserted here

As discussed in Chapter 3.1 and 3.4, industrialization through central planning in socialist developing countries was different from market oriented patterns. This model of development distorted market systems and eliminated the role of organizational management in decision-making. Moreover, the socialist development model required a type of management oriented by political loyalty, which was not coherent with the professional management in industrialized society. In brief, state socialism was conflict with the theme of industrialization, in terms of market development, legitimacy of legal environment and qualification of management. This phenomenon was observed in China.

As a developing country, China followed the way of "other directed" which sought a strong monopolistic intervention by the state. In contrast to other other countries pursuing the "market oriented economy", China imitated the development pattern of state socialism and copied the Stalinist model in economic administration. A state monopoly of ownership and management and the central planning system fitted China's traditional administrative bureaucracy - which respected the vertical hierarchy, stable social status and unified decision making. Some other cultural properties were also evidenced in modern China, such as moral incentive, group orientation, concept of face, and preferences of personal relationship beyond the formal organizational structure.

But this should not be interpreted as attributing China's industrial management purely to her traditional culture. The influences of state socialist ideology were obvious, particularly in her political systems - the Party and its branches and members. As Walder(1986) noted, the Chinese features in labour relations and management were variants of generic communist patterns of authority, which were result of developments introduced by communist political and economic organizations. The authority of the party was grounded in formal organizational structures, personal control and decision making. This form cannot be interpreted as a result of Chinese culture.

Thus the role of Chinese culture is quite ambiguous. On the one hand, the experience of some Asian countries with high industrial development seems to point to the positive effects of Chinese culture in management success. On the other hand, as Lockett(1989)noted, under the central planning system, the problems of mainland China's management are reinforced by her cultural concepts, such as respect for age and hierarchy inhibiting technical and organizational innovation. In other words, the socialist political institutions exposed the negative effects of Chinese culture in management. It was argued, too, that modern Chinese politics display indigenous cultural traditions, with its "social-hierarchical code of ethical conduct", moralization of politics and acceptance of one authority(Chang, 1988:242). Other studies(Wang, Zheng xian, 1990) noted deep seated traditions in Chinese administration, such as the significance of administrative hierarchies, the lack of law and strong influence of leaders personal characteristics.

It is logical to assume that institutional framework of state socialism in China was a concrete form of combination of traditional culture with her interpretation of Marxist doctrine. The distinctive features of Chinese industrial management are likely to be studied through the political-cultural dimension. It was obvious that when the political context was changed from Maoist-orientation to Reform-orientation, the basic principles of state socialism were re-interpreted, according to the new ideology. At the same time, the concepts of traditional culture was perceived to fit better with the essence of the state socialism than with the theme of industrialization. Management in modern China is likely to be shaped by the traditional administrative bureaucracy plus the political practice of state socialism, into neo-traditional management (Walder,1986).

Furthermore, as a developing country, industrialization in China was initiated, promoted and directed by the state. This "directive development" strategy gives rise to the monopoly of the state. When the industrialization was implemented by a state-socialist government, the ideology of the state socialism provided this governmental intervention with theoretical support. The logic of development was claimed to be seated in the socialist model, in which

political systems, the Party, and the planning hierarchy formed the essential and basic institutional framework for this control. Building on the well developed tradition of Chinese bureaucracy over two thousand years, the high centralized vertical hierarchy expected to enjoy its authority and power in decision-making. Vertical bilateral relationships are logically assumed to be dominant in this kind of administration.

This vertical hierarchical institution was characterized with its distinctive features in resource allocation, such as Kornai(1980) noted, especially "soft budgetary constraints", and information processing patterns. As Oksenberg(1974) noted, China had unique communication networks that transmitted classified, confidential information and the distribution of knowledge. The unique character of the networks lay in the importance of their unpublicized channels within bureaucratic hierarchies and between leaders and targeted audiences. Child(1990) noted information transmission in Chinese enterprise management was highly restricted by vertical constraints deriving from administrative hierarchies.

"..[T]he Chinese enterprise operates within a restricted network with information that is neither highly codified nor widely diffused. We have noted, for example, that it depends for much of its environmental information upon the superior bureau and even this information tends to be focused upon the immediate city or provincial domain. Codified information on matters such as market structures, customer preferences and profiles, input prices or wage levels, is sparse. A wide trading domain sustained by a broad range of transactional links is inhibited by the lack of codified information and of legal codes to guarantee that terms of contracts entered into impersonally and at a distance."(Child, 1990a: 146-147)

This sedimented institutional framework challenged the growth of professional management. First, the legitimacy of enterprise would be oriented by multi-sided goals, from political requirements to economic performance(Walder, 1989). The complexity is stemmed from the role of political systems, as a institutionalized framework in organizational structure. A central question is who is a real decision authority. A few studies noted conflicts between directors and party staff, although directors were supposed, according to reform regulation to possess decision making authority(c.f., Chamberlain, 1987; Child and Xu, 1991). Managers have been, according to regulations,been granted

some decision authority. But this is perceived to conflict with the position of the political systems, and formal tasks of enterprises. Furthermore, personal promotion on the basis of political loyalty, particularly for executives in management, casts doubt on the qualifications of these "managers" .

Second, the policy making process in China's economic reform is top down. This process embeds a dilemma which described by Clegg's notion of the central paradox of power(Clegg, 1989:201)(see, Chapter 2.2). The decision authority of enterprise management was increased by rules (policies and regulations). But the rules are made by central authority and can also entail powers of enterprises. The delegated authority can be re-centralized again by the central authority whenever it wants to do so by means of other rules, regulations and policies. This is because what is called **decentralization** has in reality been no more than delegation. What the decentralization intended to do is to delegate **authority**, which would cause a loss of the central **authority**. It implies the uncertainty of decentralization. The matter of the process is important in policy-making.

If these characteristics are explained as the patterns of China's development, it could be argued that market as an institutional system in economic management was suppressed in such a context. Chinese traditional imperialism with its respect for state monopoly did not favour the development of markets and entrepreneurship. Nor did state socialism, which encouraged another kind of scholar-official, political-state-officials, favour the development of management. Management in China is therefore likely to be unique, with its own characteristics. First, although the dilemma of balancing centralization vs decentralization is a general problem in managerial control(McLaren, 1982), this problem in Chinese management is more complicated because of her tradition and socialist practice. The tendency in Chinese traditional culture is to respect authority, which gives rise to the appearance of a centralized organizational structure and a centralized decision-making process. The ideology of state socialism in China has also built up a centrally planned economy, which is operated by the planning system and the Party political organization.

This centralization is therefore compatible with both the traditional and prevailing institutional settings. But the experience of industrialization is characterized by its direction of market development, which leads to "strategic" decision-making (Lee, 1987) by professional management. Nevertheless, this "strategic" model in China meets resistance from the tradition and social-political structures. A question here is "whether Chinese managers are able to carry out decentralization?", because not only do they need to learn new values and skills, but also the decision context itself must be re-institutionalized in order to create an environment for the decentralization.

Secondly, the mode of rationality in Chinese enterprises has been shifted from a wide range of political, social and economic requirements to one of economic performance. In other words, the maximization of profit has become a priority in organizational operation. However, this concept seems to be problematic because Chinese culture prefers to regard an organization as a kinship-style community, with moral and social obligations. Moreover, the concepts of state socialism imposes political criteria, through the instrument of consensus building by the Party, therefore, the decision-making process in China involves multiple actors with multiple rationality. The shift of managerial authority from the Party to causes re-distribution of these social obligations and re-arrangement of social-political functions. The entropy of the old system leads to disorder and meet the resistance from these actors who received benefits from the old system, such as Party officials. However, the mode of multiple rationality, plus the mix of administrative and political controls, may still exist in enterprise management.

Thirdly, compared with other socialist societies, China has a fragmented power structure in which the local authority plays a key role in administration. Enterprise management in shcu a context is directed, not only by policies issued in the central government, but also is subject to direct intervention from the local authority. There is also overlapping between the central and local government in terms of their economic and administrative functions, which can lead to a lack of goal congruence. The market is segmented by local authorities, which

pursue decisions with sub-optimal outcomes The development of the market is therefore hindered. Management in local enterprises has to obey the instructions of the local authority, rather than policies or regulations from the central government. This creates a problem in the implementation of reform decentralization.

Table 4.1 Main Differences of Ideological Concepts Before and During the Reform.

Conceptual points	Before the Reform	During the Reform
1. Ownership	Monopoly of state ownership	State ownership coexists with other ownership forms
2. Driving forces to develop socialism	Class struggle	Productive forces
3. Processes of socialization	Political campaign Mass movements	Economic development
4. Role of the Party	Unified leadership in operation and administration	Monitor and supervise organizational performance, provide training and political education
5. Concepts of economic management	Overcentralized planning	State plans as a guidance to regulate markets and enterprises
6. Concept of market	Chaos, and anarchy Market was seen as a property of capitalism	Subject to state control, but as a major mechanism for guiding enterprise activities
7. Definition of economic units	An instrument of the class struggle	Entity to realize economic benefits(profits)
8. Enterprise task	Operation of central plans	Achievement of profits and carrying central plans
9. Relationship of the state and enterprises	State government agencies as regulate and directly administrater enterprises	Divorce of public ownership from management, decentralization to enterprises
10. Managerial decision-making authority	The Party Committee	The Director Responsibility System
11. Criteria for Personnel promotion	Political loyalty to the Party	Professional knowledge managerial competence, age, and health
12. Incentive systems	Moral and political motivation and incentives	Material incentives (bonus), plus moral
13. Personal benefits	Egalitarianism and life-time employment	Reward and wages (salaries) allocated according to contribution

Table 4.2 Main Concepts of Industrialization, Chinese Traditional Culture and State Socialist ideology in China

Industrialization	Chinese Culture	Ideology of State Socialism
1. Rational bureaucracy	Traditional authority (one authority)	One party leadership
2. Market economy	State monopoly/intervention in economy	Central planning system through the government
3. Entrepreneurship (individualism)	Family & collective orientation	Collectivism
4. Economic benefits as rewards	Moral incentive	Political promotion & moral incentive
5. Formalized legitimacy	Moral judgement within different social units	Political doctrine & paradox according to ideological concepts
6. Division of labour (specialization)	Unified role of kinship authority	Unified leadership of the political party
7. Divergent ownership (shareholders)	Dominate ownership of the imperial state and feudalism	The state monopoly in ownership represented by central and local government agencies
8. Separation of ownership from management	Unified control over management from the government	Unified control over management by the state and party
9. Professional managerial elites	Government officials as managerial elites	Political loyalty in management promotion

Notes:

- 1 The ministerial industrial bureaux here were different from local industrial bureaux. A ministerial industrial bureau was subject to the ministry, as one of departments in the ministry's organizational chart. A local industrial bureau was under the leadership of the local economic commission, and reported directly to local government. In this thesis, the terms "ministerial" or "local" are used to distinguish these two categories of bureaux. In the economic reform, the local industrial bureaux assured major industrial enterprises.
- 2 Although the state-owned enterprises were finally owned by the state, both local government and central industrial ministries represented the state. According to Zhu and Lu (1984), there were four categories of management style for the state-owned industrial enterprises, totally managed by the central government (i.e., ministries), principally managed by the central and shared by local government, principally managed by the local government but shared by the central government, and totally managed by the local government. In later discussion, it would be seen that decentralization of management authority from the central to local levels and recentralization from the local to the central levels was always the big issue in policy

making. For example, by 1980, only 3% of the state-owned enterprises, about 2,500, were managed by the central industrial ministries, while the remainder were controlled by the local government.

- 3 The concept of the Four Modernizations Programme had been introduced twice before by the late Premier Zhou Enlai, first at the Third national People's congress in December 1964 and later at the Fourth National People's congress in January 1975. But in neither case was it presented in more than a general outline, nor was it implemented, due to the political upheavals that followed.
- 4 In the Chinese language, the term **qiyejia** is translated usually as entrepreneurs. In fact, it has two meanings, both professional managers and entrepreneurs. In later discussions, it refers to modern professional managers, as reviewed in section 3.1, and entrepreneurs.
- 5 The concept of Four Modernizations was firstly seen in Zhou Enlai (1965) in his government report. But as early as in 1956, Liu Shaoqi, the Party general secretary, in his political report in the Eighth Party's National Congress, already included the target of industrialization. In 1987, Mao proposed the three modernizations (industrialization, modern agriculture, and modern science and technology) in a speech in a national propaganda conference.
- 6 The review of economic reform in industrial enterprises here is mainly concerned the period before 1989, in which year political events interrupted the progress of the reform.
- 7 The four "measures" here were referred to the interviews done by the author.
- 8 The debates on the contractual responsibility systems were summarized in a report: On summary of opinions on contractual responsibility systems (**guanyu chengbao jingying zerenshi wenting de guandian zongshu**), in *China Industry Research* (**zhongguo gongye yanjiu**), 1988, 3:77-81. Officially, Li Peng, the prime minister at the time, designated the contractual responsibility system as a management system with "Chinese characteristics". See report in Beijing Daily: Li Peng's speech in 1988's Spring Festival when he visited the Capital Steel & Iron Cor., *Beijing Daily*, 4th April, 1988, p3: *Creating a state-owned large enterprise with Chinese characteristics* (**suzao you zhongguo tese de quanmin da qiye**).

CHAPTER 5: RESEARCH DESIGN AND METHODOLOGY

Some basic stages which could be common to all research projects, regardless of the phenomena being studied (Bailey, 1982:2), are summarized as the following:

- (1) Choosing the research problem and stating the hypothesis
- (2) Formulating the research design
- (3) Gathering the data
- (4) Coding and analyzing the data
- (5) Interpreting the results so as to test the hypothesis.

For organizational studies, broad strategies in research methodology have been grouped as:

- (1) **Quantitative methods**: survey, statistical sampling, structured closed questionnaires, published statistics, and documentary evidence
- (2) **Qualitative methods**: case study, critical case selection, open-ended questionnaires, formal interviews, and participant observation (Knights, 1984:9).

In general, quantitative research seeks to produce generalizable statements about the object of study since it concentrates on a representative survey and calculates reliability and validity through standard statistical techniques. By contrast, the typical approach of the qualitative researcher is to search behind the publicly available facade of an institution, organization or activity to penetrate in depth how it is produced and reproduced. Each of these methods has some advantages and disadvantages. For example, since statistical random sampling is not appropriate to an exercise where intensive research is conducted in very few locations, the data are not generalizable except through the insight of the theory which it illuminates. Nevertheless, critical case selection may prevent arbitrariness in the absence of statistical sampling. Dezin (1978:77) suggested that observations must be relevant for theoretical questions, the sampling be qualified for generalization of theory; and data be accurate, reliable and valid in measurement. In other words, the choice of research methodology should be closely linked to the research questions addressed and research settings.

5.1 Methods in Organization Studies and Choice of Methods in Decision-making Studies

Theoretical perspectives in Chapter have reviewed the contributions of studies by Cyert and March(1963), Pettigrew (1973), Mintzberg and his colleagues(Mintzberg et al., 1976) and the Bradford Study(Hickson et al., 1986). Research strategy employed in these studies fell into three major groups: structured or semi-structured interviews with managers(Mintzberg et al., 1976; Hickson et al., 1986), detailed case studies(Cyert and March, 1963; Pettigrew, 1973) and documentary surveys. The characteristics of their research methods are summarized in Table 5.1

Table 5.1 inserted here

Other studies in decision-making possessed the similar dimensions in analysis. For example, Heller and his colleagues(1988) proposed four phases in decision processes, in terms of start-up, development, finalization and implementation. Attention was also given to the conflicts of actors, timing factors(duration, delays etc) and contextual variables. A structured interview and group feedback technique was employed in their studies (Heller, 1969).

Difficulties inherited in organizational analysis are perceived on the access to the subject studied. This is particularly obvious when "inside views" or "first person" accounts were used as a major methodology in research(Bryman et al., 1988). These difficulties concerned access to the research subject(entry into organizations), research contexts, ethical principles and the generalization of theory from case studies. For decision-making studies, a further problem is that decision processes seldom leave reliable traces in the files of the organization, therefore, the researcher is obliged to rely heavily on interviewing while direct observation becomes very difficult(Mintzberg et al., 1976).

5.2 Research Objectives and Research Settings

The literatures reviewed in Chapters 3 and 4 have shown that the enterprise management in China faces a very complex set of contingent factors from three aspects: the level of industrialization, the culture/value system reflecting a long tradition, and the political systems in the society. Each of these factors contributes its influence on the pattern of managerial behaviour. The experience of state socialism, as a mode of industrial development(Chapter 3.1 and 3.3) indicated that a whole complex of economic administrative systems and enterprise management behaviour has been distinguished from the market oriented economy, in aspects of the institutional structure, locus of decision-making authority and decision processes. The observation of experience in China (Chapter 4) provides evidence for the impact of culture on the path of development in the country. Further reviews of the economic reform in socialist countries(Chapter 3.3.3), including China(Chapter 4.4), indicated that these reform programmes were promoted and directed by the state government, through processes of re-institutionalization by legitimating policies, regulations and rules. A central question here is whether these instrumentalities were effective or not upon the nature of managerial behaviour under the prevailing institutional framework. Moreover, the core of the reform was to delegate decision-making authority to enterprise management, expecting to coordinate economic activities through a limited/partial market mechanism. It is logical to ask whether the prevailing economic system under state socialism, as well as its political and social systems, are compatible with market systems or not. Several questions need answering in this research.

- (1) Do changes in regulations under the economic reform give rise to a real change in the nature of the managerial process in Chinese state-owned enterprises?
- (2) Is there variance between enterprises or functions in the way the regulations are interpreted and implemented (as assessed by an examination of decision-making and organizational structure), and if so what factors appear to account for this variance?
- (3) Is Chinese management a peculiar phenomenon, compared with management in other nations? If so, what implication does this have for theory and future research?

Bearing these questions, this research is designed to explore in-depth processes of decision-making in some Beijing state-owned enterprises, during the period 1985 to 1989. The research objectives are intended to focus upon the following issues:

- (1) Whether the same or similar decision issue was accompanied by the same or similar decision-making processes within the same organizations at the beginning of the period(1985) and the end of the period(1988/89) of the reform;
- (2) Whether the different decision contents possessed different decision-making processes within the same organizations in the same reform period; and
- (3) Whether a same or similar decision content displayed a pattern of the same or similar decision-making processes in different organizations under the same context.

This systematic study draws attention to the processes and interactions in decision-making. The sample was limited to the six local enterprises, in which longitudinal observation was carried out and other data were available. It was possible to acquire a detailed and in-depth description of decision processes.

5.3 Research Model and Selection of Decision Topics

The theoretical perspectives of organizational analysis (Chapter 2, Figure 2.1) imply that decision-making study may be understood through three aspects: decision contents, or the issues for decision, decision processes, and contextual factors. The contents of decision studied in this research are selected, according to the conditions of the research setting in China. As discussed in Chapter 4.4, the reform programme in China relaxed decision autonomy in some areas, through changes in regulations and policies. The perceived changes in managerial behaviour are assumed to be in these decision areas in which enterprise managers were formally granted more decision autonomy than before. The selection of decision topics has been less concerned with their "strategic" importance, than that in other studies(Mintzberg et al., 1976; Hickson et al., 1986; Pettigrew, 1973, 1985), although some of decisions are indeed related to long term development plans, such as organizational change, innovation or investment. The criteria employed were the following:

- (1) The decisions should have been the subject of reform via new regulations. In other words, enterprise managers should have gained more autonomy legally in these decision-making areas through a set of regulations published by the government and central planning administration than before the reform.
- (2) Since the thrust of the reform is to have enterprises engage in more market transactions on their own initiative (as opposed to relying on central planning and bureaucratic coordination), the decisions studied should include major input and output transaction activities.
- (3) The range of decisions studied should include those in which the relevant reform regulations vary in their level of precision (formalization and codification), since it is hypothesized that decentralization is more readily achieved in the case of decision areas subject to precise formalization.
- (4) The frequency of decisions should not be too rare, so that there is an opportunity to compare how the processes may have changed over the years since the reform was generalized to Chinese state-owned enterprises.
- (5) There should be good access to data at the starting period of the study (1985-1986) and at the closing period (1988-1989).
- (6) The decisions should be sufficiently important that top executives are likely to be involved in the processes.

Five decision areas were chosen as topics for study :

- (1) Purchasing of inputs: how enterprises decided to purchase of raw materials or components.
- (2) Product Pricing: how enterprises determined their pricing policies.
- (3) Labour Recruitment. This decision refers to either contract or life-long employed workers
- (4) Organizational Change. This includes the change in organizational structure, including re-arrangement of departments and political systems, (the party organization in the enterprise).
- (5) Product Innovation and process innovation through investment. The topic in this decision category cover some major activities: new product development and adaptation or expansion of production facilities.

The principal decision contents, therefore, for an economic unit in China are depicted in Figure 5.1.

5.4 Selection of research samples

The research was carried out in six Beijing state-owned enterprises. These enterprises were included in the management education programme of CEMI(China-European community Management Institute), from 1985 to 1989. The reasons to choose these six enterprises stem from the author's personal links with them and availability of data . The author was an MBA student in CEMI, from 1985 to 1986, and conducted projects in one of the six enterprises(the Heavy Electrical). All the enterprises conformed to the following criteria:

- (1) The enterprises should be state-owned, because the primary purpose of the reform is to activated "state-owned" enterprises.
- (2) The size of project factories must fall into the official Chinese categories of large or medium size, because only large and medium size state-owned enterprises were targeted to received more decision-making powers.
- (3) Each enterprise must have been operating according to the Director Responsibility System since 1985. ¹
- (4) The geographical location of these enterprises should be in Beijing, where local regulations applied similarly to all enterprises. Beijing was chosen also for reasons of good research access and geographical propinquity.
- (5) Each enterprise should have been involved in the management programme run under China-European Community cooperation since 1985, in order to permit to a comparison of longitudinal changes in decision levels. One factory, the Machine Tool, interrupted its relations with the programme in 1987, but this link was resumed in 1988.

5.5 Research Strategy

As stated already, this research concentrates upon the processes of decision-making in six local enterprises. This objective requires an in-depth investigation with detailed studies of social processes, particularly the changes of behaviour patterns in enterprise decision-making. As Eisenhardt(1989b: 534) noted:

"The case study is a research strategy which focuses on understanding the dynamics present within single settings"

It was thought that the field study, especially the case study would be the satisfactory method(Scott, 1965). As Reed(1985:147-148) noted, case studies have been referred to "time and time again by various authors to provide theoretical inspiration and empirical

insight". Opportunities to develop theory from case studies are presented by the depth. And emergent theory can be tested with constructs and hypotheses against the rich "reality" of the case study. If it passes this test, the theory is likely to be empirically valid (Eisenhardt, 1989b). It is suggested, then, that researcher must get close to the ground of action. But this method "takes many months of careful interaction before informants will discuss a package of, often, self-interested motives that went with a set of behaviours originally justified as in the public interest" (Pettigrew, 1973:56). While the case study is rich detail, it lacks the simplicity of an overall perspective. Theories generated from cases might be narrow and idiosyncratic (Eisenhardt, 1989b).

The principal ways of studying social processes used in this study were the case study in the field over time through a degree of participant observation, and of historical investigation. The challenge was seen to be how to develop relationships of trust and maintain them (Argiris, 1962, 1965), especially "so when the researcher enters an environment where conflict is the dominant mode of interaction" (Pettigrew, 1973:56).

The requirements of case study research are summarized as:

- (1) a description of the changing material and social conditions in which the organizations operated;
- (2) an exposition of the transition from one mode of assembly to another in partial response to the pressures and demands generated by (1), as interpreted and mediated by powerful organizational groups;
- (3) an analysis of the range of mechanisms and resources which were relied upon by managerial practitioners to realize the transition in modes of assembly and to sustain the new mode of assembly in the face of novel pressures and demands with which it may have helped to generate;
- (4) an explanation of the overall impact of the change in the mode of assembly on the prevailing pattern of power relationships within the organization and its implications for the realization of conflicting sectional interests.
- (5) an assessment of the implications of these internal developments for the wider structure of institutional relations in which the organization is located and their possible effects on future organizational change and development

- (6) an evaluation of the unresolved problems and dilemmas that still remain and which will provide a focus for subsequent phases of organizational development. (Reed, 1985:147-148)

To provide an indication of changes over a longitudinal period, historical investigation was also used, parallel to the participant observation of the case studies. Each case was compared with a similar decision occurring in or around 1985, when the reform started in industrial enterprises.

As well as the case study, other sources were also employed as a complement. These included documentary surveys, data collection from the CEMI students' project reports and a replication of the Aston Programme on decision-making levels.

5. 6. Elements of Analysis in the Decision Process

The analysis of data will be conducted in terms of five dimensions: basic elements of decision processes, sources of information, conflicts with authorities and political elements, and codification of regulations.

5.6.1 Elements of the Process

The decision-making process in this research refers to a set of events or actions involving actors who exert their influence towards decision outcomes (Abell 1975). A decision starts with a trigger for action and ends with a specific commitment to further action which will be subsequently implemented in accordance with the commitment. The process is seen to consist of the following elements.

(1) Duration of decision-making

Decision processes are considered to have started in formal terms when a (or some) actor(s) formally raised the topic. The duration of initiation is defined as the time between formal

initiation and design. The duration of design is the time used for actors to detail the programme or plans of the initiated topic.

(2) Decision phases

Four stages are proposed as phases in the decision-making process: Initiation, design, selection and authorization.

- (1) **Initiation** is defined as a stage in which a decision actor(s) recognizes the issue requiring decision after (s)he is stimulated by a trigger.
- (2) **Design** here means that the decision actor(s) advances the issue or the topic, and make a plan for the outline of decision outcome. In this way, the result of decision is foreseen or anticipated by an actor (or a group of actors).
- (3) **Selection** means an evaluation of the design from proposals or outlines made by the design actor(s). The this stage, more units are likely to be involved with different interests.
- (4) **Authorization** is the last step before the decision is implemented. An organizational decision is characterized by final approval from a person or a group with legal power(authority). Without this authorization, a decision remains a proposal, which cannot be acted upon and implemented.

Authorization is not narrowly conceived to be the prerogative of only one person. A collective form of authorization is possible when a group of people participate in the final stage. If the outcome of a decision is perceived to link to a wide range of social actions, authorization could be outside an organizational boundary. This case frequently happens when a scope of decision may influence social stability or well-being, such as pricing, acquisition, and investment.

(3) Levels of Decision

All these four stages are linked to an organizational structure of hierarchical levels. Level indicates who is involved and appears to exert most influence at the various stages of the decision.

Linked to decision-making levels, the Aston Programme provided a measurement of locus of authority in decision-making(Pugh and Hinings et al., 1968:76-78). There were six levels, adjusted to the terminology used in Chinese enterprises(the coding employed is listed at left):

- 0 Operators
- 1 Group leaders or supervisors
- 2 Department head
- 3 Multi-department head or vice director
- 4 Factory director
- 5 The authorities above the director level

(4) Nature of Trigger

A trigger here refers to a (or a set of) event(s) which stimulates decision actors to raise the decision topic formally. For example, a manager may hold an idea to develop a product for sometime without any opportunity to realize his idea as a formal action. As soon as some special event(trigger) makes him realize that his idea can possibly be implemented (though he may not have sufficient authority to decide it), the idea then turns to become a decision topic which is formally expressed to other managers(or his subordinates) as an issue requiring further development, such as a search for information and design work. The final result of a decision is a formal commitment to future action.

Triggers will be assessed according to their intrinsic nature. Do they come from:

1. Instructions or commands transferred from vertical administrative authorities, such as central/local planning commissions, government agencies?
2. Market opportunities or pressures from external environment, such as customers, suppliers, or other market partners?
3. Internal tasks or task requirements?

(5) Involvement of Actors

In each individual case, a number of actors involved in each of the four phases were recorded, according to interviews. The actors were divided into three groups, internal, external and hierarchical. Internal actors included staff, managers, executives and the party(or trade union) professionals. The external actors referred to such partners who had contacts with the enterprise through markets, such as suppliers and customers, or other business links, such as membership of an industrial consortium/association. The relationship between the enterprise and these external partners is a horizontal one. A second category of parties were identified as vertical actors, located in the vertical administrative hierarchy, either as the direct superior authority(the local industrial bureau) of the enterprise or agencies in governments, such as functional bureaux(pricing, financial, tax, etc.), central ministries, local governments, planning commissions. The role and influence of each actor was also recorded.

Further emphasis was put on the initiators and sources of final decision approval authorization. The initiator of decision was defined as the first person(or an agency) to make a (or set of) formal proposal(s). It could be a staff or a managers, or a managers on behalf of his/her department. It would also be possible for the initiator to be a department in an industrial bureau or ministry. The authorizing authority was referred to "the last person whose assent must be obtained before legitimate action is taken - even if others have subsequently to confirm the decision"(Pugh et al., 1968:76; emphasis in original).

5.6.2 Information and Decision-making

Three types of information source have been identified :

1. Internal information sources, such as a firm's internal information centre, data banks, financial data, production task records, company circulars, and newsletters .
2. Market information sources, such as data from market survey, market suppliers, customers, or external information service

3. Central planning sources, such as central planning/economic institutions, government(both central and local) authorities, and branches of central planning systems.

it is difficult to classify some business organizations, such as foreign trade companies. On the one hand, they are doing business in the market as suppliers or customers. On the other hand, they are also branches of the central planning authority. In this research this kind of the organization, although they participated in the transaction, is logically located in the category of the central planning system. The reason is that such companies operate with the privileges granted by the government, rather than on an equal position with enterprises. These organizations could therefore hardly be considered as market partners.

The utilization of information from sources was found through interviewing. Managers were asked to describe how they used the information mentioned. Since the sample enterprises were participating in the management programme of CEMI, MBA student projects were carried out in these enterprises, such as marketing surveys, and investigations into organizational change. The subsequent information, particularly from market surveys, was referred to by some of enterprises in their decisions. For example, Pharmaceutical very favourably received a market survey done by a group of MBA students in 1985. This enterprise subsequently in 1987, invited another group of MBA students in CEMI to do a further survey. The results of two surveys were quoted in its proposal reports and feasibility studies prepared for its innovation decisions. It was, therefore, possible for the author to ask whether the information provided by the students was useful or not in decision-making, in order to understand managers' attitudes towards "professional information services"².

5.6.3 Conflicts of Actors Involved

In the case studies, the influence of each actor was recorded, according to interviewees' description. Attention was given to the relationships between enterprise management and its superior authorities(including other government agencies), external partners, and the political systems(the party and the trade union). The dimension of conflicts was included to

investigate (1) application of each actor's judgement to the decision outcome, and (2) the final consequence of the actor's influence on the decision outcome.

5.6.4 Codification of Regulations

Surveys of regulations/policies are used to identify the potential influence of rules on management behaviour. The precision of the regulations/policies which were linked with decisions and contextual variables is described as their codification. Four degrees of codification of regulations are identified:

1. General statement of a strategy or target, without specification of the actors and processes to attain the target.
2. Specification of actors or authorities involved in either carrying out the regulation/policy or who are supervised in the implementation of the regulation/policy
3. Pre-determined formula(e) intended to pattern the behaviour of actors, specification of standards to evaluate/incentive/punish a given behaviour.
4. Pre-determined and comprehensive complete standards containing precise specifications, such as the maximum ceiling prices, or specialized technological terms for specific products.

5.7 Data Collection

The principal research methods were noted in section(5.4), name the case study and historical investigation. The methods of data collection in this research were designed as a mix of semi-structured interviewing to construct cases, the replication of the Aston Programme to measure decision-making levels, and documentary survey incorporating a longitudinal comparison.

5.7.1. Interviewing Managers

The initial interviewing was carried in August 1988, with John Child as the supervisor, in all six enterprises. The questions asked in the interviews focused on the changes of decision-making autonomy and managers' opinions on any changes in autonomy over the period 1985 to 1988. At the same time, the managers interviewed were required to describe the changes in their routine tasks and responsibilities since 1985. This interviewing introduced the author to access to these project enterprises. One of them, the Heavy Electrical enterprise, was the author's project location when he was a MBA student in China-EC Management Programme, but the other five were new sites for him.

Subsequent interviews from September 1988 to July 1989 started with the enterprise directors (total number was six) and some senior executives (often deputy directors), in order to identify examples of decisions in above six areas. It took a long time to get access to directors, so interviewing middle level managers was combined with the process of gaining access to senior managers. By April 1989 the study of the six decision areas was almost completed. Sometimes, managers told the author about two or three decisions in the same area. Then later, the author compared and selected one among these accounts, according to the detail and quality of data available. Some managers, such as financial managers, the heads of the director's office, the heads of the management office and deputy directors, were interviewed several times, because of their involvement in several decisions. Personal contacts and private talks between the author and managers, staff, and directors, provided rich information.

The formal interviewing was carried out according to a check-list of questions which were translated from a questionnaire in English constructed by the author (Appendix I-1). The personal talks and informal contacts were often open and free-ranging. They were recorded by notes on interview forms, and index cards, which were later sorted and reviewed by the

author as soon as possible. Each decision was then written up from the descriptions contained in these records.

5.7.2. Replication of the Aston Programme

The Aston Programme has been replicated by a number of researchers(Pugh and Hinings et al., 1976). It has been used in comparative studies in different countries(Hickson and McMillan, 1981). In 1985 Child applied and extended this method to measuring the organization structures of six enterprises in Beijing, China(Child, 1987), in which 47 activities were covered in his assessment of centralization of authority.

This exercise was replicated in September 1988 when Professor Child and the author interviewed managers. The result of the replication has been published(Child and Lu, 1990a). A total of 47 decision activities were assessed from the check-list, which was adapted from the Aston Programme(Pugh and Hickson, 1976). Later, in the author's own interviewing , the level of decision-making in each case was measured again, now concentrating more precisely upon actors involved in each of decision phases , in order to distinguish the influence and intervention of vertical hierarchical authorities.

5.7.3. Documentary Survey

As stated in Chapter 3.3.3 and Chapter 4.4., regulations and policies of the government were the principal instruments employed to carry out the reform programmes in socialist countries.

Documentary analysis in this research focused upon three categories: reform policies/regulations, special documents, and internal documents.

- (1) The sources of reform policies and regulations come from government publications, newspapers, periodicals, etc. These policies and regulations displayed a general outline of the reform programme and indicators of legislating decentralization for enterprises, or re-centralizing control over enterprises. In each of five decision areas, there were related regulations. The concern with such public policies and regulations were (1) those interviewees mentioned as factors influencing decision-making; (2) significant ones, which marked the progress of reform schemes; and (3) important ones which were further used by local authorities to draw their own precise or special regulations.
- (2) The special documents included policies, regulations, files and memos within a vertical administrative hierarchy. This kind of document was not published. The content of such a document was especially concerned with an ad hoc phenomenon, or an exceptional case, or a special decision area. For example, when panic purchasing fuelled inflation in 1988, the local government draw up a special regulation to freeze any approval of price increases.
- (3) Company letters, memorandum, reports, summaries and internal circulars were also analyzed, when they were available, in order to outline cases. This was particularly important for the historical re-construction.

Another source of documents came from the students' project reports in the areas of marketing, purchase, investment, organizational behaviour, planning and financial analysis. These reports have been produced since 1985, under the guidance of the CEMI management faculty from Europe.

5.7.4 Problems and Difficulties in Data Collection

The single case study presents problems regarding theory generalizability and validation of data (Bryman, 1988; Dezin, 1978). These problems may be to some extent avoided and errors reduced by comparing cases among several enterprises. Insofar as the decision is the unit of analysis in this research, then the investigation extends to 60 cases. Furthermore, multiple interviews were used in the field study, in order to reduce random errors and lapses of memory (Mintzberg et al, 1976). There were other difficulties in this research, concerned with its unique political context and language translation which relate to a specific research context.

Interviewing managers in China was not an easy job. Culturally, as discussed in Chapter 4.2, the concept of "face" encouraged people to propagate their glorious stories, and to hide real problems and failures. Politically, reformism became a new ideology. Each step in the reform had to be attributed to the "correctness" of the reform programme. It was found that top executives, particularly the political staff, such as party secretaries, often sang the same tune as official propaganda. Managers and staff at lower levels of the organization were more open than their superordinates. At the same time, the author had to rely on note-taking, because most managers were reluctant to be tape-recorded. This increased the risk of information loss.

The level of political sensitivity was dramatically increased after June 4th 1989, when Tian'anmen event occurred. People became reluctant to describe details about internal management and decisions, especially topics concerned with government policies and the Party system. This was because official ideology was now expected to criticize the provisions of the reform, such as the Director Responsibility System, and to strengthen the power of the Party, through ideological training and political education. After June, managers and staff were ordered to devote their time to the study of political documents, official propaganda and other materials on doctrine. The author himself was also obliged to take part in this kind of study in his organization. So the most fruitful collection of data took place between August 1988 and May 1989.

A further difficulty arose with the interface between two different languages, English and Chinese. This problem has been identified by some researchers on China. For example, Bastid(1973:166) found ambiguity in the meanings of words in interviews:

"One major difficulty in interpreting this material is the exact meaning of the term **kuo-chia**(State). I have noted in conversations that the Chinese are now using it almost indifferently for any authority which is above their own level. In the mouth of a commune or factory leader, kuo-chia may refer to the county (**hsien**), as well as to the province or to the Centre in Peking; it can refer to administrative as well as government or Party institutions. Within the extent of their knowledge, cadres are willing to specify which agency they have in mind when they talk about 'planning by the State' or 'decided by the State' but, in many cases, especially in all the printed

material, the concrete meaning of **kuo-chia** is rather obscure. A similar imprecision surrounds another commonly used expression, **shang-chi**(upper level)"

All the interview questions had been designed in 1988, in Aston University, before the field work started. These questions were then translated into Chinese by the author himself. Data from interviewing with managers were recorded in Chinese, then translated back into English. The translation of the interview questions was perceived to pose few problems, because most of questions in the interviews were semi-structured or open(Appendix I). There were difficulties in the interpretation of interviewee's descriptions in translation of Chinese back to English. There were some common terms used by managers, when they referred to respective managerial phenomena. But these terms, or words, are very ambiguous in Chinese, compared with English. For example, the term "we"**(women)** was frequently used to indicate either the group, department, or factory which the interviewee belong to(no matter whether the interviewee was a group leader, department manager or executive), dependent upon the context of the event. Another frequent term used to describe government authorities was "related authority department"**(youguan zhuguan bumen)**. It generally referred to the superior authority of the local industrial bureau. But it could be used to indicate other bureaux, such as the pricing bureau in pricing policy, or the planning commission in material allocation processes. It could also be used to refer to a central industrial ministry, when the decision needed a "related authority" to approve the proposal. In the final translation of interviewing materials, an effort was made to arrive at clear and precise descriptions for each case study.

5.8. Hypotheses and Related Questions

As stated in Chapter 4.4, the reform in China, since 1985, proceeded through a series of regulations which were intended to activate the concept of the "responsibility systems". These responsibility systems imply a changed process of decision-making, decentralizing more decision authorities to the enterprises, concentrating decision power within the enterprise towards management and away from the party, and promoting delegating within enterprise management. Reform was implemented through a set of regulations, which

legislated the position of enterprise, and separated both administrative hierarchical intervention and political control from management. As the research objective was designed to penetrate into the in-depth processes of management, through studies of decision-making, and to identify the changes in managerial behaviour patterns, the following hypotheses were formulated, based on the theoretical perspectives reviewed in Chapter 2, and 3(Figure 5.2)

Figure 5.2

H1: The more decentralization, the more conflict between enterprise managers and their superior authorities.

This hypothesis is derived from perspectives on contextual factors, in which it is assumed that some sources of resistance, inherited from Chinese traditional culture and the institutional framework of planning bureaucracy in the state socialism, will stand in the way of decentralization. Although the Chinese central government has formulated a number of policies and regulations to legislate the decentralization of decision-making power to managers, the intervention and influence of the central planning bureaucracy, through government (central or local) agencies and other authorities, might restrict managerial discretion through informal process or new regulations which are oriented by considerations of centralizing state control, in order to direct processes of the reform. In other words, overlapping control pressures from the planning system and the market leads to the conflict between the authorities and enterprise management. This conflict is derived from the nature of the two controls. When planning commands are not compatible with market signals, managers either follow the planning instruction and take the risk of losing markets, or they make decisions according to the market demands, but resist the planning authority. Thus, conflicts arise.

H2. The more decentralization, the more conflict between enterprise managers and the political system

The hypothesis here refers to the central theme of the state socialism, to which China claims to be committed . The culture of authority in Chinese tradition followed the format of one superior "god" . The dilemma in the reform was to create an ambiguity in the positions of the party and management. The legislated position of managers as a new decision coalition started to challenge the power of the party, while the latter was still asserted its significance in official ideology of the state socialism(Child and Xu 1991). Referring to the historical experience in China in early 1950s, when the "One-Man Management System" was adopted by the leadership of the Party committee, this hypothesis proposed that conflict between the party and management is embedded in the reform scheme.

H3: The more centralized control over the information sources, the less decentralization it is likely to be achieved.

Decentralization requires the diffusion of information. An increase in information communication has accompanied the development of markets in the course of industrialisation. The channel of communication was also dependent upon availability of institutional structures in society. In state socialism the market is distorted by centralized mandatory plans. At the same time, the centralized planning system controlled the sources of information, by means of collecting data through vertical administrative hierarchies and diffusing information within these structures. When information was used to perceive decision outcomes in decision processes, the sources, quality and quantity of information was particularly significant for actors involved. Managers in such a context are supposed either to make their own decisions with insufficient information or to rely on the information sources controlled by the central planning regime. Managers in China will experience difficulty in carrying out decentralization, because the socialist "artificial market" cannot provide them with adequate information and/or because the central planning bureaucracy controls the channels of information communication.

H4: The more precise regulations are, the more likely it is that they facilitate decentralization of decision-making.

Decentralization in China has been regulated by the central government in different decision areas. These regulations have different degree of precision. The policy issued by the central government is more general and less codified than local regulations, which have produced their own regulations to control over enterprises. This hypothesis supposes that managerial activity is patterned by precise regulations, because managers are given specific decision rights, and/or because higher authorities feel more confident to decentralize specified decisions, and or because managers themselves felt it is less risky to make decisions when the regulations governing actions are clear.

H5: The more triggers stimulating the decision come from the task environment(both markets and operational task requirement), the more decentralization is likely to be achieved.

Reformers assure that decentralization encourages enterprises to seek opportunities in the market and to increase the quality and efficiency of their decisions. The triggers to decision-making would shift from coercive interventions by the central system, and also away from political control, if the enterprise is really becoming an independent entity in business as the reform anticipated. If the reform has a real effect of moving from hierarchical central planned bureaucracy to a market orientation in management, and towards a divorce of management from ownership(less intervention from planning authorities and political control), then decisions in enterprises will be triggered by the task environment (especially market signals) rather than by higher hierarchical authorities or political officials.

H6: The decision-making process is more matrix-like in China than in western enterprises. Decisions are a compromise of different alternatives from different coalitions of interests, rather than a result of the rational choice based on economic criteria(profit maximization)

It is assumed that traditional Chinese values have an effect on human behaviour and relations. The concepts of Chinese culture (Chapter 4.2) presented themselves in the balancing of the coalitions' interests, both external, internal and vertical. It is more

important for organization in China to attain multiple organizational goals, from social and political aspects, as well as economic. The intention of the reform, to direct task goals to a single clear-cut profit target, would then fail. Decision-making was seen as a bargaining process, through informal contacts, relational contracts, and personal influences, beyond formal institutional structures. The outcome of decisions is not merely a single choice, but a mix of preferences held by multiple power centres involved in the process, in order to avoid future risks and equalize different benefits.

Each of these hypotheses is related to a set of interviewing questions in the field study in China. Table 5.2 indicates relations between hypotheses and interviewing questions.

Table 5.2 inserted here

Interviewing questions listed in Appendix I-1 are main questions used to guide interviews. In practice, informal talks between the author and managers were also used to enrich in-depth investigations. These open and informal talks were particularly effective to find out details of informal behaviour in case studies.

Table 5.1 Summary of Research Methods in Decision-making Studies

	Cyert & March (1963)	Pettigrew (1973)	Mintzberg et al. (1976)	The Bradford Study (Hickson et al., 1986)
Major methods	Case study (participant observation) Documentary survey Direct observation	Case study (participant observation) Documentary survey Personal talks	Case study (structured interviews) Documentary survey Personal talks	Structured interviews with large samples
Elements of analysis	Duration (timing) Information utilization Steps Actors	Duration (timing) Information utilization Actors	Duration (timing) Phases	Duration (timing) Information utilization Actors Levels
Contents of analysis	Problems Solutions Interests & conflicts	Problems Solutions Interests & conflicts	Problems Solutions - -	Problems Solutions Interests & conflicts

Table 5.2 Research Hypotheses and Interviewing Questions

Hypotheses	Questions
H1 Conflicts between enterprises and their superior authority	Q4 - Triggers stimulating decision topics Q5 - Actors involved in decision processes Q6, Q7 and Q8: Actors actions in decision processes Q11 and Q12: Approval from respective authorities Q13 Sources of interrupts and delays Q14 and Q15: Comparison with the decisions in 1985 or before
H2. Conflicts between management and the political system (Party)	Q5, Q6, Q7 and Q8, actors and their actions and influences Q11 and Q12, Final approval authorities Q13 Sources of delays and interrupts Q14 and Q15: Comparison with the decisions in 1985 or before
H3: Information sources and uses	Q9 and Q10: Information sources and utilization Q14 and Q15: Comparison with the decisions in 1985 or before
H4: Codification of regulation and degree of decentralization	Q4: Triggers from regulations or not Q5, Q6, Q7 and Q8: Actors actions and influences Q14 and Q15: Comparison with the decisions in 1985 or before
H5: Trigger sources	Q4: Trigger sources Q5: Actor in the initiation phase Q14 and Q15: Comparison with the decisions in 1985 or before
H6: Matrix-like decision-making	Q4, Q5, Q6, Q7 and Q8: Actors involvements Q12: Criteria of judgement on decision consequences Q14 and Q15: Comparison with the decisions in 1985 or before

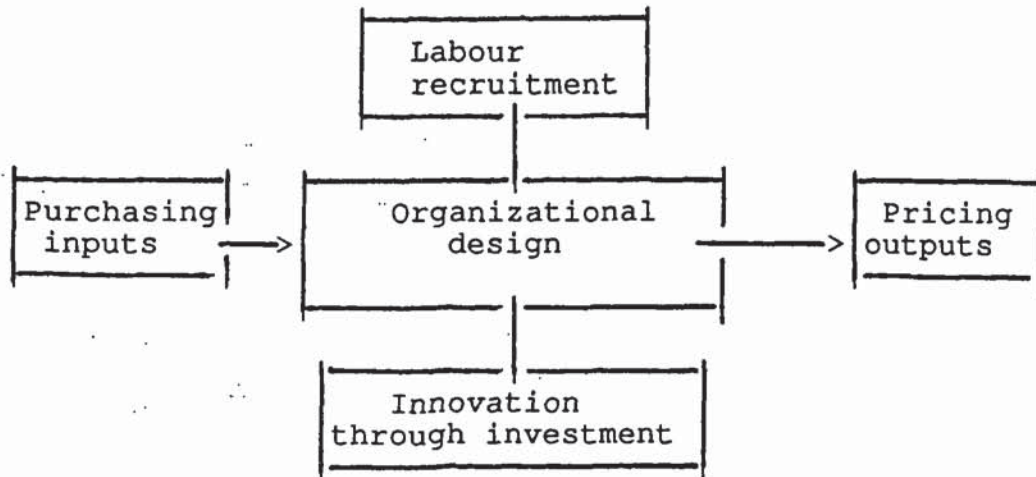


Figure 5.1 Model of Decisions in a Chinese Enterprise Employed in the Present Investigation

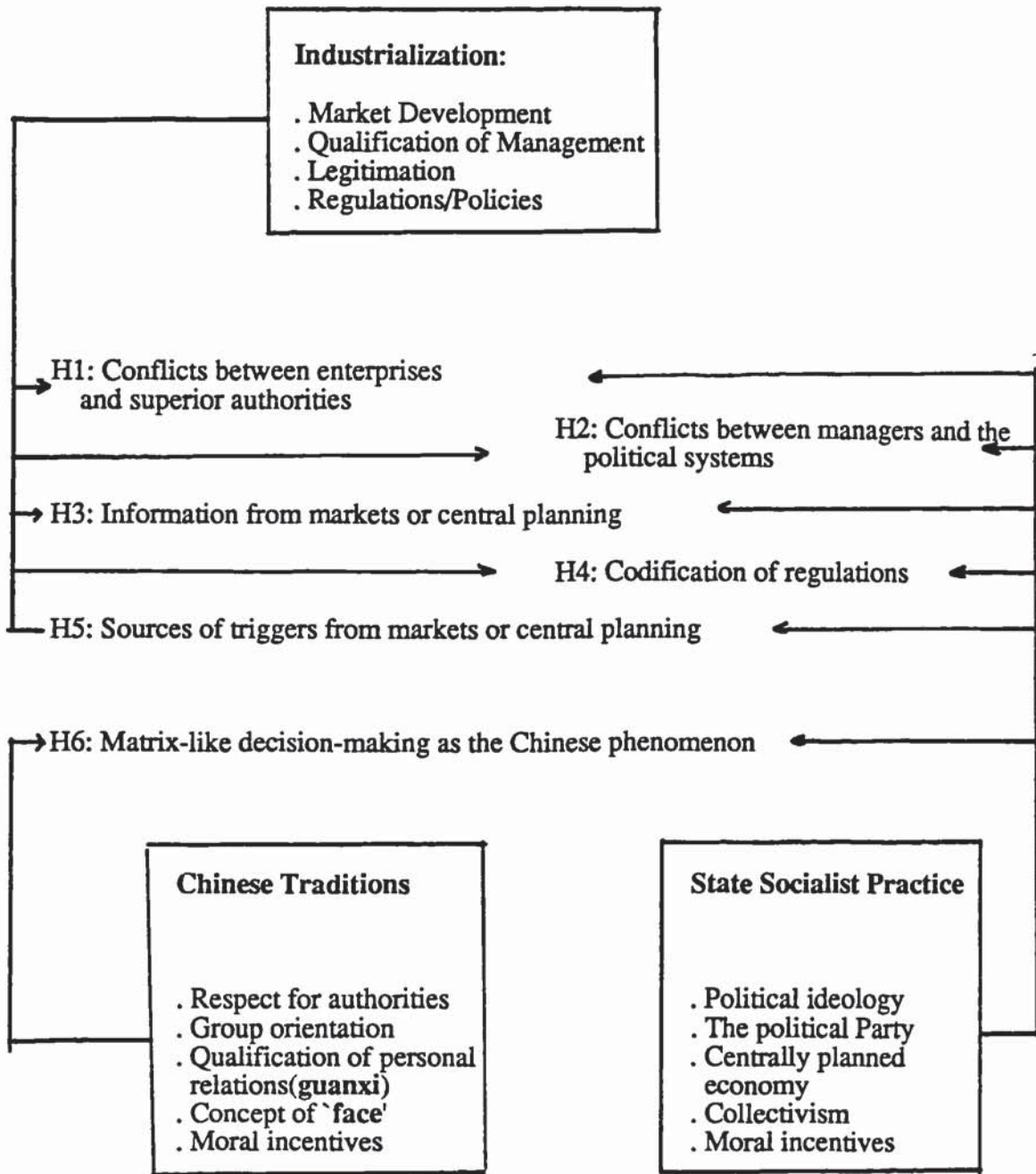


Figure 5.2¹ Theoretical Perspectives and Hypotheses as to Their Effects

Note: 1. This figure outlines the hypothesized linkage between factors identified in three main theoretical perspectives and aspects of the decision process.

Notes:

- 1 Automobile changed its status, in May 1988, to a joint venture, in which the management system became that of a General Director under the Board of Directors. This change was perceived to give manager more autonomy than the state-owned status. Further investigation showed that the change of ownership did not affect matters as much as managers perceived. The decision power of the company management was expanded in the areas of personnel management and foreign trade. In other areas, such as inputs, production, investment and pricing, autonomy was similar to the state-owned enterprises.
- 2 Up to 1988, there were few agencies in China able to conduct market survey or provide enterprises with market information.

PART II: FIELD STUDY, ANALYSIS OF
RESULTS AND DISCUSSIONS

CHAPTER 6: PROFILE OF THE SIX ENTERPRISES AND THEIR RELATIONS WITH HIGHER AUTHORITIES

The six enterprises in which the research took place are state state-owned industrial enterprises. Their product categories and foundation dates are listed in Table 6.1.

Table 6.1 inserted here

Three enterprises, Machine Tool, Heavy Electrical, and Audio were formed in the 1950s when the communist government monopolized the ownership of most industrial enterprises in the period of "socialist transformation". Private manufacturing or repair plants were taken over by the state government and designated as state-owned enterprises(**guoying qiye**). Audio-visual was established through investment by the industrial ministry, which intended to construct the basis for domestic consumer electronic production.

Automobile was originally a plant for motor car maintenance and repairs. In 1966 the Machine Manufacturing Ministry decided to build up an enterprise in Beijing for transport vehicle production. This enterprise was selected for this strategy, and developed by means of merging it with another small plant. Pharmaceutical used to be a subsidiary plant. In 1973, the municipal industrial bureau(the Municipal Pharmaceutical and Medical Products Bureau) made a decision to separate this plant from its parent company and to form an independent enterprise for production of health products.

Table 6.2 identifies, for both dates of study, the enterprises' industrial sector, size, financial profile, official size category and whether they produced primarily to a quota or a profit target.

Table 6.2 inserted here

During the three years between which they were studied, the two largest enterprises, Audio-visual and Automobile, had expanded considerably in sales and employment, and they had been officially "promoted" from the medium to the large size category of state enterprises. Three other enterprises had been advanced to medium size, giving four in this category altogether. In 1985, this official size classification still carried important implications for an enterprise's upward reporting relationships namely that those in the small category were subject to greater local economic control from the Beijing Municipality's Economic Commission than were those in the medium and large categories. This implication did not decline with the progress of economic reform. The large and medium sized enterprises were privileged to have more favoured attention from the planning system than those of small size. For example, both Audio-visual and Audio were under the supervision of the Municipal Electronic Industrial Office(which is referred to as a bureau). But the former enjoyed a direct link to the ministry and local economic commissions in aspects of material allocation, investment budgets and foreign trade, while the latter had to rely very much on the bureau's decision in material supply and other issues.

6.1 Vertical Institutional Structure of Management

The vertical hierarchies of Chinese industrial management have been described in chapter 4.2. Figure 6.1 depicts relationships between state owned enterprises and government agencies.

Figure 6.1 inserted here

At the top of the vertical administrative hierarchy there was the State Council, then a number of the state commissions. The two most important ones were the State Planning Commission (SPC) and the State Economic Commission (SEC). The former was responsible for long-term plans in economic and other areas, while the latter for short-term (one year) and medium-term (below 5 years) plans in economic management. The State Economic Commission was dissolved at the national level in 1988. The functions of its economic operational planning and coordination were merged into the State Planning Commission. Other functions such as enterprise management, quality inspection, regulation making and training, were taken over by the State Commission for Economic System Reform.

Below the commissions, there were a number of ministries, industrial and special functional ones. The central industrial ministries were grouped according to industrial sectors or product categories, such as machine manufacturing, electronic, chemicals, light industry, and coal industry.

The functional ministries specialized respectively in tax, treasure, audit, labour and personnel. All these central commissions and ministries formed a level of the state administration in economic management. They were usually referred to as the central government agencies.

Below this level there are local government administrations at the municipal and provincial level. Three cities were ranked as the same administrative status as provinces, Beijing, Shanghai, and Tianjin. Cities not enjoying provincial status have their own administrative bureaus of lesser rank. The institutional chart at this level is a copy of the central government. Each provincial or municipal government has its own planning and economic commissions and other commissions corresponding to the same commissions in the central government agencies. Similarly, a number of industrial and functional bureaus were designated under the leadership of the government. They were coordinated and guided by the local planning and economic commissions.

A matrix relationship was perceived between central government agencies and local ones. Each of local agencies in fact had two higher authorities, its local government and a central government agency with similar functions. Local government agencies held direct responsibility for local government. On behalf of the local government, these agencies collected revenues, coordinated economic activities, made local regulations and plans, and appointed personnel of enterprises. The local government allocated tasks and managed personnel of these agencies.

At the same time, each of the local government agencies received technical advice and task instructions from an agency in central government. This relationship is called a "corresponding" linkage. The term "corresponding" used here refers to a relationship between two agencies with the same functions but located at different administrative levels. Because of their shared task requirements, two agencies formed an independent channel. The lower one in the administrative hierarchy was accountable to the one at the higher level. The higher agency provided the lower one with instructions, advice, sometimes even commands and resources for their operational implementation. For example, the Municipal Electronic Industrial Office(the bureau) was directly accountable to the Ministry of Machine Manufacturing. The bureau received regulations/policies about machine industry development and technical assistance from the ministry. Sometime, it also received projects, such as investment, technology development, and new product development. The investment case in Audio-visual (See Chapter 10) was one promoted by the ministry.

Furthermore, authorities at the same level also held an accountability relationship. Functional authorities are divided into two types of bureaus: one regulatory and the other technical-cum-advisory. The local regulatory bureaus, known by the Chinese colloquially as "the Mothers-in-Law", have the right to impinge directly upon enterprises over matters within their specialized regulatory purview. They specialized respectively in tax, auditing, industrial and commercial issues(regulation of sales and distribution channels), pricing,

investment finance(through the local bank), personnel matters(personnel regulations and keeping cadres' files) and workers' employment. The technical-cum-advisory bureaus do not have the right to initiate direct interaction or negotiation with enterprises. They perform support functions concerning, *inter alia*, technology development(the research institutes) and system reform. When an issue arose which was specifically concerned with the domain of a functional bureau, that bureau was the final authority to approve the action proposed, rather than the industrial bureau.

This "corresponding" relationship coexisted with the formal administrative hierarchy in organizations as well as in government agencies. The corresponding relationship is a network of information communications and behaviour supervision. All these will be discussed later.

The enterprise was located at the bottom line of this vertical hierarchy. Except a few large enterprises, most since the beginning of the 1980s had been delegated to local government supervision. All six enterprises in the present investigation were controlled by Beijing municipal industrial bureaux.

The above discussion has focused on administrative structures. In addition, a political organization, the Party, paralleled administrative hierarchies as an independent system. The organization of the Party will be discussed in section 6.4

6.2 Relations between the Enterprises and their higher Authorities

The six enterprises were subordinate to four local industrial bureaux in Beijing. Table 6.3 displays the vertical relationship between these enterprises and their higher authorities.

Table 6.3 inserted here

The Municipal Electronic Office was formed at the end of 1987 by merging two industrial corporations, Municipal Broadcasting Equipment Corp and Municipal and Computer Corp. These two corporations were established in 1982 from the Municipal Meter and Automatic Equipment Bureaux.

The Municipal Automobile Industrial Association was established in 1982, after the decision of the State Council to create the China Automobile Industrial Corporation and to abolish the China Automobile Industrial General Bureau. The former Municipal Automobile Industrial Bureau was merged into this Association.

The Municipal Machine Building Bureau was reconstituted as the Machine Building Industrial Management Office in 1985. It was changed back to the bureau in 1987.

The Municipal Pharmaceutical & Health Products Corporation was re-named in 1984, from the Municipal Pharmaceutical Industrial Bureau.

The functions of local industrial bureaux were focused upon three principal areas: making policy and plans for industrial sectors; administering subordinate enterprises; and coordinating them with other organizations.

- (1) Each of local industrial bureaux was responsible for industrial development policy making, which was presented directly to the local government. And it was also in charge of one year operational plan-making, according to the economic plans made by the local planning and economic commissions. The scope of operational plans included budgets, industrial output targets, financial objectives and technology development plans.
- (2) A local industrial bureau headed a number of subordinate enterprises. The administration of these enterprises was a principal task, which included appointment of top executives, labour management (such as fixing total number of employees and wage expenditure), fixing operational targets (outputs, profits, costs), allocation of materials and coordination of outputs, development of new products, supervision of product quality, investment budgets, political tasks, and others (such as social obligations).
- (3) A local industrial bureau was often described as a filter, which meant that it coordinated with other bureaux on behalf of enterprises. Every application from a subordinate enterprise must be authorized first by the industrial bureaux, then, if necessary, transferred to other bureaux for further approval. Without the first authorization, functional bureaux normally refused to accept cases directly from enterprises. In this sense, the industrial bureaux behaved as a gatekeeper.

After 1985, the importance of local industrial bureau was reduced. The appointment of middle managers was delegated to enterprise directors. The allocation of inputs was mainly coordinated through transactions in markets or exchanges between organizations.

Recruitment of the labour force was opened up following the introduction of the contractual labour system. But the bureau remained significant as (a) a control over the personnel

management decisions of enterprise directors and Party secretaries; (b) as the first authority to approve some decisions, such as investment, foreign trade, budget allocation, and some important material supplies(which were often in short supply in markets and subject to planning control); and (c) as a coordinator with other bureaux.

Economic administration was only one facet of the functions undertaken by local industrial bureaux. The scope of the bureaux' management extended to social-political tasks. In political matters, the Party committee in a local industrial bureau directly supervised the performance of that bureau and also the Party organizations in subordinate enterprises, and its was responsible to the municipal Party committee. Trade union branches and the Youth League committees in enterprises were also subject to their general branches and committees in the bureaux. Social functions included family planning, social security, traffic safety, and military training. As an official in the Municipal Electronic Industrial Office said:

"Although every one wanted to abolish the industrial bureaux, it is very difficult in practice at present. Without the first approval of the industrial bureau, none of any other functional bureaux, such as pricing, labour & personnel, would accept applications from an enterprise. A bureau can only deal with another bureau which is at the same administrative level.. On the other, an industrial bureau is very important for transmitting and transferring information and policies from government to enterprise, or to report the situation of enterprises upwards to government."(EI 1)¹

The organizational structure of an industrial bureau was designed to carry out these functions. This organizational design directly matched the organizational structure of enterprises. Table 6.4 displays the structural relationship between the Beijing Municipal Electronic Industrial Office(Bureau) and Audio-visual enterprise.

Table 6.4 inserted here

Similarities are obvious in their departments and functions. As stated in section 6.1, corresponding management was observed in China between hierarchical levels in administration. This was the same in enterprise management. Each department manager within an enterprise in fact had two bosses. One was his/her direct supervisor, director or executive director. The other was from the same department in the bureau, The former relationship was presented in a formal organizational chart, which indicated the responsibilities of the post. The latter was a kind of accountability and communication relationship, through which the manager received instructions, advice and information. Furthermore, a manager in a functional department was also required to report his/her performance to the department in the bureau, as well as to the enterprise director.

This matrix system created administrative complexity. For example, in 1985 the local economic commission ordered all enterprises to establish a full-time TQC(Total Quality Control) office. The order also required the staff in the office to report directly to the quality office in the bureau, which in turn reported directly to the commission. Associated regulations, policies, examinations and quality censorship, were delivered from the commission to the bureaux, and then to the quality offices in enterprises.

After 1985, each of local industrial bureaux started to establish its own trading companies to engage directly in exchange transactions. It was reported that all above the four industrial bureaux owned some companies engaging in trading and commercial activities. The staff in these trading companies were previously officials in the purchasing or sales departments of the bureaux. These companies enjoyed privileges with their official status in the planning system. They also enjoyed a higher administrative authority over subordinate enterprises.

6.3 Management Systems in the Six Enterprises

The principal management system in the six enterprises since 1984 was the Director Responsibility System. This system was later amalgamated with the contractual responsibility system. The dates of adopting these systems are shown in Table 6.5.

Table 6.5 inserted here

Whether an enterprise adopted a particular kind of management systems, such as the Director Responsibility System and the contractual responsibility system, was decided by its higher industrial bureau. The bureau organized its subordinate enterprises to implement decentralization at different times. For example, both Heavy Electrical and Machine Tool enterprises were under the management of the Municipal Machine Building Management Bureau, but the schedules for them to adopt the contractual responsibility system were very different. Heavy Electrical company started it in 1986. Machine Tool introduced this system in 1987, one year later than Heavy Electrical. This was arranged by their bureau. The same phenomenon was found in the Municipal Electronic Industrial Office(Bureau), which ordered Audio-visual to start its Director Responsibility System in 1987, while the director in Audio enjoyed his autonomy from 1986. The reason for these arrangements was, according to the managers interviewed, because the former enterprise was important in the planning system with its planned quota of outputs, such as colour TVs, so that the bureau was reluctant to delegate decision making powers. Enterprises like Audio were free control by the planning system, and faced strong market competition. The bureau did not mind letting these enterprises operate according to market demands.

Under the Director Responsibility System, the director was formally granted the following decision-making authority:

- (1) Making operational plans, in aspects of production, purchase, sales, etc.
- (2) Appointment and dismissal of middle managers
- (3) Selection of vice directors and other top executives
- (4) Recruitment of labour and dismissal of workers.
- (5) Determination of bonus and reward policies
- (6) Design of organizational structure
- (7) Use of retained profits and other internal funds
- (8) Formation of an association with other enterprises

Since 1986, the Beijing municipal government decided to execute a contractual responsibility system, which was called "Two guarantees and One linkage"(liangbao yigua)². Two guarantees refer to a guarantee of attaining a contracted profit target, and a guarantee of the growth of assets through technology innovation. One linkage means that the total enterprise wage fund, plus bonus funds, are linked to the growth of annual profits. If an enterprise fails to fulfil its contract targets, the retained profit from the previous year would be used to fill in the gap between target profit and realized profit, and employee' bonuses would be abolished. Their wages and salaries would not be allowed to increase.

Implementation of the contractual responsibility system was very complicated. Firstly, the enterprise's financial accounts for profit and assets were checked jointly by the local industrial bureau, as the direct higher authority, and by other two functional bureaux: municipal treasury bureau and municipal personal & labour bureau. The former checked the historical performance of the enterprise in regard to the realization of profits and asset values, while the latter examined the total number of workers and wage expenditures. These data were collected. Secondly, the content of contractual targets such as profits and innovation projects were fixed by the industrial bureau, which balanced conditions of all subordinate enterprises and allocated targets to each of enterprises. Generally, an annual profit target was based on an average of the last four year's profit performance. The growth

of annual wages was calculated according to a formula provided by the local economic commission. At the third stage the bureau would negotiate with each of enterprises. There was often tough bargaining between the enterprise director and the bureau. The last stage was to sign the contract between the bureau and enterprise.

The contents of contracts in the six enterprises are shown in Table 6.6.

Table 6.6 inserted here

Except for Heavy Electrical, the enterprise director signed the contract on behalf of the enterprise. The contract between Heavy Electrical and its higher bureau, the Municipal Machine Building Bureau, was signed jointly by the enterprise director and the Party secretary.

The personal background of enterprise directors indicates that their experience was in production management and technology knowledge. Furthermore, their political status as Party members also played a significant role in their personal careers. Table 6.7 presents the personal backgrounds of the directors.

Table 6.7 inserted here

Every directors, except for the director in Machine Tool, were members of the Party and participated the enterprise Party committee.

Although the director was entitled to be the final authority in decisions within organization, there are some within the enterprise collective bodies carrying out "democratic management". The most important formal decision-making body within an enterprise was the "Directors' Executive Committee"(changwu hui). The member of the committee included all directors, the Party secretary, trade union chairman, and chief engineer, a total of 5 to 7 people. The committee usually had a fixed schedule of meetings and these are set far each enterprise in Table 6.8.

Table 6.8 inserted here

The significance of the executive meeting was seen to have declined after the implementation of the contractual responsibility system. The director's personal decision power now became the final authority, and the meeting came to provide the director with an opportunity to consult the opinions of other executives rather than to make decisions.

In addition to the Directors' Executive Committee, each of the six enterprises in 1988 formed a "Management Committee", according to the provisions of the Law of Enterprises Owned by Whole People(i.e. state-owned). Thirty percent of the managerial committee members must be elected from representatives of workers. But this form of democratic management seemed to have little effect on decision making. Interviews with managers indicated that this committee only existed in name without a significant role in the decision process.

6.4 The Political System - the Party - and the Democratic Management - the Workers Congress

The political system in Chinese enterprises refers principally to the Chinese Communist Party. The Party organization in Chinese enterprises was a formal system. The term

"formal system" used here refers to the condition that it was independent from the administrative hierarchy, with its own full-time staff and management functions, such as personnel management, communication channels, responsibility and regulations, and physical facilities (offices and instruments) in enterprises. The hierarchical structure of the Party was parallel to the administrative structure. The highest level of the Party within an enterprise was the Party committee³. Below the Party committee, there were a number of branches within workshops and department level. The smallest unit of the Party comprised the membership within work groups. Table 6.9 indicates the Party system in the six enterprises in 1988.

Table 6.9 inserted here

The appointment of the Party secretary to an enterprise was decided by the bureau's Party committee. The Party secretaries were changed in each of the enterprises during the period of implementing the Director Responsibility System, from 1986 to 1987. The original Party secretaries were either removed out of the organizations or retired. An exceptional case was in Audio, where the relationship between the Party secretary and the director was very close. Furthermore, some Party secretaries were undertaking managerial tasks and had acquired corresponding titles. The personal background of the Party secretaries is indicated in the Table 6.10. For other managerial posts, managers were said to be Party members; the proportion claimed in all the enterprises was eighty percent.

Table 6.10 inserted here

In addition to the director's administrative system and the Party organization, the workers congress constituted a third system. Usually, the workers congress met in full twice a year. The director was required to report the annual performance and propose further strategic plans to the congress. In principle, the workers' congress had power to dismiss the enterprise director or any other top executives. But such action was not reported in any of these six enterprises. The daily operational agency, on behalf of the congress, was the trade union. The trade union was also a formal organization with two to three full-time staffs.

It was found that the role of the trade union and the workers congress was a limited one and not important in decision making. Among the decisions studied, only issues related to the incentive systems and labour management passed to the congress for discussion and consultation. The final authority within enterprises in 1988 was still the director so far as these matters were concerned(see Chapter 9).

6.5 Discussion and Summary

The external authorities were institutionalized in administrative hierarchies and political systems, which bear upon the activities of enterprise management in China. These authorities were located at each of governmental levels, from the central to the local. The first administrative line for enterprises comes from the local industrial bureaux, which hold a reporting line to the industrial ministries. But their main line of accountability and responsibility is to the local government.

The second administrative line is a functional one, the agencies which possess the right to impinge directly upon enterprise over matters within their specialized regulatory purview or to provide enterprises with technological support. These functional authorities also hold a direct reporting line to their "corresponding" central government agencies, although their main responsibility is to local government.

The complex relationships between these authorities are described as a kind of "correspondence". This relationship coexists with the formal organizational structure. Corresponding behaviour was found, not only in government agencies, but in enterprise management as well. Through corresponding channels, the higher authority would communicate with its receiver at a lower level in respect of information, supervision technical or resource support. This matrix network gives rise to multiple power centres.

The internal power framework within enterprises is expressed in the authority of director, political organization and collective democratic decision bodies. The overall set of formal systems within Chinese state enterprises can be depicted graphically. Figure 6.2 shows the relations between the director's administrative system, the Party' political system and the democratic system represented by the worker's congress and trade union in Chinese enterprises.

Figure 6.2 inserted here

All three systems form a triangle. They share the same resources such, as staff, physical facilities, within enterprises. For example, most directors and top executives are the Party members. Within the Party system they must follow the instruction and commands from the Party committee. But they are also decision actors in the administrative system. At the same time, some Party secretaries are permitted to undertake some administrative posts, such as production directors. Of the three systems, the trade union seemed to be the weakest one, which was overwhelmed by the director's decision powers and the Party's political dominance. Each of the three systems has their own task assignments, received instructions. Each follows rules laid down by its own independent higher authority, such as the bureau's Party committee, planned quota from planning systems, and trade union's general branches in the bureaux. In 1988, with the implementation of the contractual responsibility system,

the director seemed to have been raised to the role of final decision authority. Nevertheless, with its political basis, the Party system was still effective as a shadow.

Table 6.1 Product categories and foundation dates of the six enterprises investigated

Enterprises	Product	Date of Foundation
1.Audio-visual	Consumer electronic production, such as TV sets	1973
2.Automobile	Transport vehicles such as Trucks	1966
3.Machine Tool	Electrical Switchgear	1955
4.Heavy Electrical	Electrical equipment such as transformers	1958
5.Pharmaceutical	Pharmaceutical & health products	1973
6.Audio	Consumer electronic products, such as cassette players, radio, Walkman etc.	1955

Table 6.2: Profiles of the Six Enterprises

Product	Total employees		Sales turnover (Y million)		Net Profit before tax (Y million)		Official size category		Quota or profit	
	1985	1988	1984	1988	1984	1988	1985	1988	1985	1988
Audio-visual	2,200	3,000	183.3	552.1	12.7	40.2	M	L	Q	P
Automobile	3,883	5,100	204.5	367.7	53.4	42.2	M	L	Q	Q*
Machine Tool	718	695	6.1	9.0	1.5	1.8	S	M	P	P
Heavy Electrical	1,869	1,798	23.4	45.0	4.8	7.6	M	M	Q	P
Pharmaceutical	957	912	27.1	60.9	4.0	10.1	S	M	P	P
Audio	848	890	24.0	32.0	4.7	0.5	S	M	P	P

* Note: Automobile became a joint-venture in 1988. Its profit target was therefore fixed by the board of directors.

Table 6.3. Enterprises and their Higher Authorities in 1988

<u>Enterprise</u>	<u>Local Industrial Bureau</u>	<u>Respective Ministry</u>
Audio visual	Municipal Electronic Industry Office(MEIO)	Ministry of Machine Building & Electronic Industry(MMBEI)
Automobile	Municipal Automobile Industry Association(MAIA)	China Automobile Industry Corporation(CAIC)
Machine Tool	Municipal Machine Building Bureau(MMBB)	MMBEI
Heavy Electrical	MMBB	MMBEI
Pharmaceutical	Municipal Pharmaceutical & Health Products Corp(NPHPC)	National Pharmaceutical & Health Products Corporation
Audio	MEIO	MMBEI

Table 6.4 Organizational Structure of Audio-visual and its Higher Bureau(the Municipal Electronic Industrial Office)

The Bureau	Audio-visual 1988
Director's office -----	Director's office
Party committee -----	Party committee
Party discipline committee--	Party discipline committee
Youth League committee-	Youth League committee
Trade Union -----	Trade Union
Programme dept -----	Planning dept.
Quality office -----	TQC office
System Reform office --	Management office
Technology dept. -----	Innovation dept.
Equipment dept. -----	Tech. equipment dept.
Financial dept.-----	Financial dept.
Audit dept.-----	Audit dept.
Labour dept -----	Labour & Personnel dept
Personnel dept-----	
Security dept. -----	Security dept.
Propaganda dept. -----	Enterprise culture centre
Legal affair dept.-----	Legal affair office
Foreign trade dept. ---	Foreign economic dept.
Administrative dept. --	Administrative dept.

Table 6.5 Implementation of the Director Responsibility System and the Contractual Responsibility System in the Six Enterprises

1984 Automobile and Heavy Electrical enterprises implemented the Director Responsibility System as an experiment in Beijing. All other enterprises were governed by the system of "Director Responsibility under the Leadership of the Party"

1985 Machine Tool, Pharmaceutical Audio enterprises started to implement the Director Responsibility System

1986 Audio-visual enterprise adopted the Director Responsibility System. Heavy Electrical company signed a profit contract with the municipal industrial bureau as an experimental application of the contractual responsibility system in Beijing.

1987 The other five enterprises started to carry out the contractual responsibility system.

1988 Automobile formed a joint-venture with a foreign company. Its contract was terminated automatically. The management system in this enterprise became one whereby the General Director is responsible to the board of directors

Table 6.6 Contents of the Profit Contracts in the Six Enterprises

Enterprise	Date of signing of contract	Duration of contract	Profit Target(000 Y)				Total
			1st	2nd	3rd	4th	
Audio-visual	1987	4 years	-	-	-	-	15,400
Automobile	none						
Machine Tool	1987	4 years	870	920	980	940	2,710
Heavy Electrical	1986	4 years	4,300	4,470	4,650	4,650	18,070
Pharmaceutical	1987	3 years	2,550	2,700	2,900	-	8,150
Audio	1987	4 years	600	600	600	600	2,400

Table 6.7 Personnel Background of Directors

Enterprise	Date of appointment	Previous Job	Political identity	Education qualification
Audio-visual	1986	Party secretary for 3 years	Party member	University
Automobile	1984	Chief of personnel department in the bureau	Party member	University
Machine Tool	1983	Technical director	Not Party member	University
Heavy Electrical	1984	Production director	Party member	University
Pharmaceutical	1982	Technical director in another enterprise	Party member	University
Audio	1983	Production director	Party member	University

Table 6.8 Schedules of Directors' Executive Meetings

Enterprise	Members	Schedules
Audio-visual	5 directors ¹ , Party secretary ² Chairman of the Trade union Chief engineer, Chief accountant Chief economist	Wednesday afternoon
Automobile	5 directors Chairman of the Trade union Chief engineer, Chief accountant	Thursday afternoon
Machine Tool	3 directors, Party secretary ³ Chairman of the Trade union Chief engineer	Thursday afternoon
Heavy Electrical	5 directors, Party secretary Head of director' office 2 Chief engineers, Chairman of the Trade union	Monday morning
Pharmaceutical	7 directors, Party secretary ⁴ Chairman of trade union	Thursday afternoon
Audio	4 directors Party secretary Head of director's office Chief engineer, Chairman of the Trade union	Tuesday afternoon

Note: ¹"Directors" include enterprise director and vice-directors
^{2, 3, 4} The Party secretaries in these enterprises were also entitled to be vice-directors in administration

Table 6.9. The Party in the Six Enterprises in 1988

Enterprise	Number of Party members	Number of branches	Full-time political staff	Departments of the Party
Audio-visual	430	28	5	Secretary Office; Discipline Education
Automobile	1200	46	None in 1988 *	
Machine Tool	104	10	5	Secretary Office; Education
Heavy Electrical	400	24	8	Party Executive; Reference office; Discipline; Propagation
Pharmaceutical	110	7	5	Secretary Office; Discipline
Audio	180	13	4	Party Reference; Office; Education

Note:* Automobile removed its political system in 1988 and early 1989, because the company changed its ownership as a joint-venture. The political activities for the Party members were organized by its Chinese partner. After mid 1989, it was reported that a new Party secretary had been appointed by the bureau's party committee.

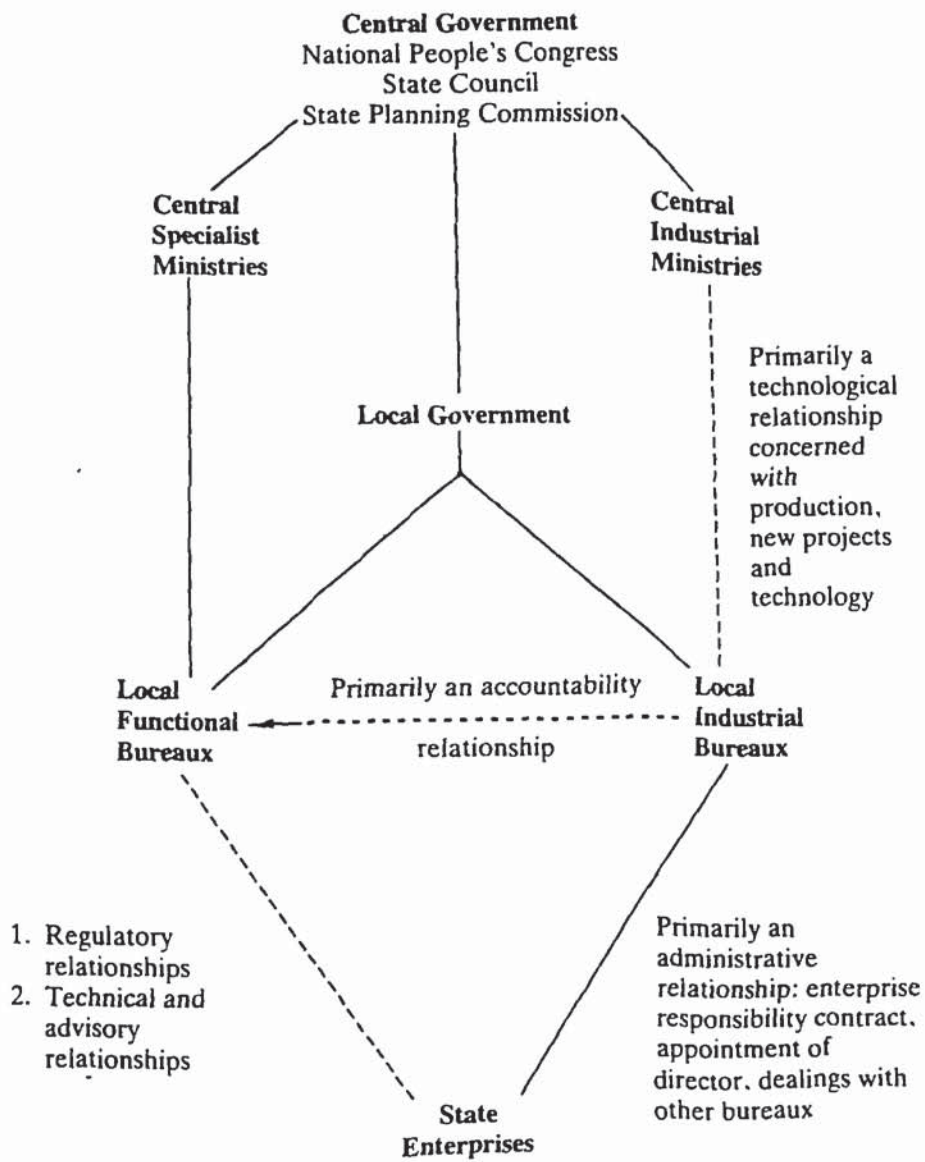


Figure 6.1 The administrative framework in the Chinese urban industrial sector

2 There were five major forms of the contractual responsibility systems in China(Byrd, 1988):

1. Two guarantees and One linkage(**lianbao yigua**). This system is described in the Chapter. This was a principal form of the contracting system in Beijing.
 2. Responsibility for annual increase in profit remittance(**dizen liren baogan**). The enterprise pays indirect taxes at stipulated rates, and then is responsible for handing over to the government profits equal to some fixed base amount plus an annual percentage increase.
 3. Remittance of a fixed base amount of profit, sharing of above-quota profits(**jishu bubian, chao'e fencheng**). The enterprise is required to give a certain fixed amount of profits to the government every year(which does not increase over time), and profits above this amount are shared between enterprise and government in a specified manner.
 4. Fixed profit remittance or loss targets, for low-profit or money-losing enterprises(**jishu liren baogan huo kuisun baogan**) For some non-profitable or subsidiary enterprises, a contract was fixed based on a quota of subsidiaries. If these enterprise were able to make profit, the profit would remain for enterprise own funds. The state would not increase subsidiary quota.
 5. Sector input-output responsibility system(**hangye tou ru chanchu baogan**). This system was used in some public services, such as transport, communication, where is great variation among them, but most involve some targets for flows of resources and funds between the ministry and the government, which the ministry then proceeds to divide among various enterprises under ministerial jurisdiction.
- 3 Among the six enterprises, only Machine Tool had a form of Party general branch, which was a lower level than the Party committee. But this will not be specifically referred in analysis, since this did not lead to any difference in the functions of the Party vis-a-vis management.

CHAPTER 7: DECISIONS IN TRANSACTIONS: PURCHASE OF INPUTS AND PRODUCT PRICING

7.1 Environmental background of decisions on purchasing and pricing

7.1.1 Transactional Activities in China: Purchasing of Inputs and Product Pricing

One basic characteristic of China's economy is her centrally planned administration of economic transactions(See Chapter 4). The major instrument for allocating resources under this central planning system comprises commands from the planning authorities. These commands take the form of planned quotas(**jihua zhibiao**), which fix production targets for enterprises. A number of special terms are officially used to describe this system of economic activities in China.

Officially, there were two categories of products in China, the planned products(**jihua nei chanpin**), and products outside the plan(**jihua wai chanpin**). "Planned quota"(**jihua zhibiao**) is normally a quantitative amount of a specific planned product. The annual output of a planned product in an enterprise was arranged according to its planned quota, which was issued by the planning authorities, including central or local planning commissions, central industrial ministries, and local industrial bureaux. These authorities also arranged transactional activities between enterprises. They ordered a certain amount of planned products from one enterprise, then allocated them to another enterprise. In this exchange, the enterprise concerned was a supplier of the planned product(output), others were the receivers of the product. Both the supplier and receiver followed the commands of the planning authorities without any choice. These exchanges were valued in monetary terms, but at a level artificially set by the planning authorities. A market pricing system, based on negotiation among buyers and sellers, did not exist in the planned economy.

For outputs outside the plan, enterprise managers have authority to determine production levels and sometimes prices and customer priority. This transaction becomes a bilateral exchange between the customer (the buyer) and the enterprise(the supplier). The level of

sales and prices depends upon the result of negotiation between two partners. This is called "self-determined sales"(zixiao). Usually this type of self-determined products was grocery products, or daily commodities. After 1985, the state owned enterprises were delegated some autonomy to sell part of any production which exceeded the planned target. These sales were also called "self-determined sales", but the product(which is called "over-plan product) was still subject to control by the planning authorities. Their prices, choice of customers and choice of distribution outlets were controlled government regulations.

The planned output quotas are matched by planned inputs allocated by the planning authorities. The products outside the plan are not supported in this way by allocated inputs. The inputs required for them, such as raw materials, rely principally upon market transactions, purchased directly from suppliers. The inputs subject to planning were often in short supply, such as steel and non-ferrous metals. It was extremely difficult to purchase a planned product without the benefit of a planned quota, because the suppliers are required to fulfil the state plan first and then, if possible, to sell customers any production which exceeds the planned level. Furthermore, purchasers have to pay a price for such supplies which is much higher than the prices for supplies in the plan. Enterprises without planned outputs are, therefore, constrained in their ability to purchase planned inputs. These relationships are depicted in Figure 7.1.

Figure 7.1 inserted here

There were three ways to translate a planned quota into inputs or outputs. One is through a trade fair usually organized by the planning authorities, such as the Ministry of Machine & Electronic Industries and the State Material Supply Bureau. Such trade fairs are usually organized twice a year. In a trade fair, an enterprise signs contracts with other enterprises, according to its planned quotas, to sell its products or buy inputs. A second way is that an

enterprise receives its planned inputs from state distributors, and sells its planned outputs (products) to these distributors. The third way involves direct transactions between enterprises. One (buyer) can order a specific planned product with its planned quota directly from another enterprise (supplier) who produces that output.

This is often some confusion about the nature of trade fairs in China. A trade fair is simply an event in which transactions between enterprises are organized. If a trade fair is organized by a planning authority, such as the State Material Bureau, the participants are supposed to be issued with their planned quota by the planning authorities. After 1985, enterprises began to organize their own trade fairs, which took on more of the nature of a free market. For example, Pharmaceutical organized its own trade fairs twice a year. At the same time, it participated in the similar trade fairs organized by other bee-product companies to purchase its inputs there.

In China the shortage of raw materials made purchasing decision into a critical issue. Enterprises had to retain high stock levels of some short-supply inputs, in order to reduce future uncertainty. But these high stocks in turn led to a shortage of working capital.

Official statistics indicated that the rate of inflation of material prices in 1988 had reached the highest level in the ten years since the economic reform began (Wang, Dayong 1989). In the first half year of 1988, the price index of production materials went up at the rate of 2 percent per month. In a survey conducted by the Bank of China in first quarter of 1988 among key national enterprises, 89.2 percent of directors thought the prices of raw material would keep increasing, and 95% of directors predicted that there would be a shortage of working capital in the near future. It argued:

"After implementation of the Contract Responsibility System, enterprise managers pay more attention to cost and profit than before. The increase of production material prices makes managers think there is a further inflation of raw material pricing. This common consideration of future inflation of raw material pricing pushes enterprises to stock as much raw material as possible, which leads to a shortage of working capital. That situation worsens when the managers got word

that there would be a shortage of working loans, which in turn stimulated enterprises to request more working capital and loan(from the bank)."(Wang, Dayong, 1989:16)

Another survey in Liaoning Province, one of the important industrial bases in China, showed that 89 percent of managers mostly concerned with shortage of capital, energy and raw material. Forty percent of them said that raw material prices were the most critical problem they faced.(Gao, Xuechen et al. 1989).

In September 1989 a conference, "Policy on Activating Large Backbone Enterprises", was held in Beijing bringing together representatives from the twenty eight largest enterprises. Shortage of capital, raw materials and energy was the most serious problem expressed by all the directors. The representatives also complained that in practice they received no guarantee of receiving even planned inputs. For example, the Luoyang No. 1 Tractor Factory only received 23 percent of its planned quota of steel. The Sichuan No. 1 Textile Mill's planned inputs actually delivered amounted to only about 50 percent of its planned quota. The remaining of inputs, although they were supposed to supplied by the central planning authorities, had to be purchased in the market at price 75 percent higher than these set by the state(China Enterprise Management Association, 1989).

Although official propaganda called for enterprises themselves to absorb higher costs through improved internal management, it was met with scepticism. In fact enterprises preferred to recover costs by increasing their product prices, which led to further serious inflation in economy.

In August and September 1988, after the Party Central Committee announced its programme of further reform in price & wages systems, panic buying arose in China. Every commodity was a target for people to buy. Factories, shops and department stores sold out all their stocks. "This panic buying gave the wrong signal to industrial producers, and caused a maladjustment of industrial structure and imbalance of supply and demand."(Economic System Reform Institute of China in ESRIC, 1989:26).

Most people attributed the inflation to the two-tier pricing system. This system split prices into two categories: the state-determined prices fixed by planning systems, and the enterprise-determined prices fixed according to market conditions. The two-tier system in the pricing of industrial products emerged as state mandatory planning gradually receded from production, supply, marketing, and other major operations of enterprises.

"Temporary Regulation on Further Expansion of Autonomy of State-owne Industrial Enterprises", which was instituted in 1984, was a key factor in greatly accelerating the implementation of the two-tier pricing system. It argued:

"Basically, the two-tier pricing system means the existence at the same time of two prices for commodities, one being the list price set by the state and the other being the fluctuating market price decided by market forces or agreed on by the parties engaged in a transaction. The part of output or input that changes hands under the state plan is allocated, purchased, sold, or distributed at state-set prices.....This means that market prices have assumed a decisive role in the incremental output and input decisions of the enterprise, and that through this marginal role they have become signals and levers that help to readjust short-term supply and demand."(Diao, Xinshen, 1987:36-37)

In fact, design of the two-tier pricing system, which it was assumed would motivate enterprises to increase their "**marginal outputs**" to markets without impact of planning quota, was demonstrated to be naive. An enterprise could increase its marginal profit without increasing its total outputs. It simply remove part of the planned output to the market without increasing its total production. The enterprise could make additional profit from the differential price margin between these two output categories. As a consequence of this behaviour by enterprises, the mandatory plan was not fulfilled. As Zhang, Pan and Zhang, Wenzhong(1989) noted in their investigation of four large enterprises:

"In serious inflation circumstances, the authority of state mandatory plans has been considerably weakened. Due to the fact that mandatory planned supplies could not be guaranteed and delivered in time and quantity, enterprises found it difficult to complete the state quota of mandatory outputs. In this situation, even those enterprises which have carried out state plans honestly and loyally had to transfer their planned quota of outputs to market sales, or to increase prices of outputs under 'agreements' with their buyers, in order to compensate for their own losses(caused by inflation of inputs)."(Zhang, Pan and Zhang, Wenzhong, 1989:11)

Inflation had been present in China since 1982, when the prices of daily commodities and part of planned industrial output were opened up to market forces. In 1983 the State Council regulated the marginal prices of quality products which allowed them to be sold at higher prices than standard products. In 1985, the State Council decided to cancel its limitation of a 20 percent price premium in the sale of production exceeding the plan quotas. By 1986, the outputs whose prices were set by the state mandatory plans has been reduced from 998 varieties to 758, with local pricing authorities being delegated to control the other 240 varieties.

From 1978 to 1986, the prices of raw materials and major production outputs increased at different rates. By 1986 the prices of 40 percent of national steel products had increased due to special pricing policies or regulations issued by the central or local authorities. The total amount of additional revenue resulting from price increases was 2.25 billion yuan, which was equivalent to an average 7.5 percent national price rise of steel. Total accumulated additional revenue from price increases for about 200 important primary products and raw materials was 24 billion yuan between 1979 and 1986.

Because the planned prices of production materials were rising, market prices increased considerably once the State Council cancelled its restrictions on them. In 1986, market prices of steel commanded a premium over state-determined prices which ranged between 50 percent to 280 percent on different product categories(Wen, Guifang 1989).

Tang, Baifei(1988) noted that most enterprises exaggerated the damage caused to them by the increase of input costs. In order to retain their profit margins, they increased the prices of their own outputs, rather than reducing costs by means of improving internal management. Instead, some enterprises benefitted from prices inflation(Tang, Baifei, 1988).

In order to stem the inflation, the central and local governments from time to time applied "administrative" rules and regulations to regulate both markets and enterprises. The principal means of the government intervention after 1985 were the following:

- (1) Official policies changed from emphasis on pricing reform to holding down any initiation of further price changes.
- (2) A number of regulations were published to control price increases and to tighten up the administrative instruments of planned quota supplies (Appendix II-1, Survey of Regulations). For production materials and basic consumer commodities (such as food, daily industrial products), monopolistic prices were again imposed by the planning system.
- (3) A tightening of control of enterprise behaviour patterns by means of imposing disciplinary standards in annual campaigns to examine performance in tax, pricing, and finance. (*shuishou, wujia he caiwu da jiancha*)¹.
- (4) Cancellation of a number of basic construction projects in order to reduce investment expenditure, and to re-centralize the approval of construction projects by the central planning agencies.
- (5) Centralization of the price formulation procedure and the imposition of strict control over price increases.

These instruments played a role in reducing inflation, at the same time created another problem. Because of strict control over the prices of raw materials, these outputs, such as steel, raw iron, declined by 5.8 percent and 10.5 percent in the first two months of 1989 (Economic Research Centre of State Planning Commission 1989:19). Distributors were reluctant to keep even normal stocks of steel, because these now incurred losses. Steel producers reduced their quota outputs, and instead produced non-planned outputs in order to sell them in the market (China Economic Information Newspaper, 19th May, 1989).

7.1.2 Inputs and Outputs in the Sic Enterprises

The main inputs and outputs of the six enterprises and the location of these inputs and outputs in relation to the planning systems are listed in Table 7.1.

Table 7.1 inserted here

Table 7.2 presents the percentage of planned outputs and inputs in 1985 and 1988.

Table 7.2 inserted here

Table 7.3 shows the channels of getting planned quotas, both in aspects of purchasing of inputs and selling outputs in three enterprises: Audio-visual, Automobile and Heavy Electrical.

Table 7.3 inserted here

The products of the non-plan producers, Machine Tool, Pharmaceutical and Audio, were sold through markets. Pharmaceutical secured almost all its supplies from markets, while the other two still relied upon, in some degree, allocations from the planning system.

7.2 Decisions on Purchasing of inputs and Product pricing

In each of the six enterprises, a purchasing decision and a pricing decision was investigated in 1988 and 1989.

7.2.1 Supplies of Inputs and Purchasing Decisions

The available sources of inputs, taking enterprises as a whole, are the following:

- (1) The central economic planning system, through the State Material Supply Bureau(SMSB). This source provided a guaranteed supply for the enterprises' export production(TV) and for other specified products. This source of supplies was realized through a trade fair organized by the SMSB twice a year(often in June and November). Buyers and sellers made transactions there in accordance with planned quota.
- (2) Supplies from the local authorities, such as the Municipl Planning Commission(MPC) and local industrial bureaux. For example, a foreign currency quota for imported purchase of Audio-visual components was allocated by the Municipal Planning Commission every February. These local authorities also had powers to order outputs from enterprises directly. Some of these outputs were used to exchange for supplies from other authorities outside Beijing.
- (3) Materials from other enterprises with which it enjoyed long-term relationships and which formed a mutual-help club for dealing with shortages as well as taking unwanted materials off each other's hands. Such exchanges are conducted under the supervision of the relevant industrial bureaux. One way was to participating regular exchange meetings organized by the enterprise's superior bureau regularly(often every week), called "Material Trade-off Exchange Meeting"(wuzi pingheng jiaoliu hui). This form was retained from the regular coordination meetings among a bureau's subordinate enterprises held before the reform. Another form was to establish long-term relations, by means of forming an industrial consortium, or shareholding, or merging small suppliers. This was strictly supervised by the bureau.
- (4) Suppliers regulated by central government for special materials, such as silver. For example, Machine Tool purchased silver from the bank with special permission
- (5) Imported raw materials when these were needed on a regular basis and in large quantities they were supplied by a central government foreign trade company, or via a local import/export company.
- (6) Open transactions in the market.

Each enterprise relied on one or some of these sources of inputs. The importance of reliance could be scaled according to the assessments of those interviewed, and this is shown in Table 7.4.

Table 7.4 inserted here

The major source of inputs for Audio-visual and Automobile was the planning system, either via the ministry or local authorities. Some of their outputs were also used for the exchange of shortage raw materials or components. For example, Audio-visual was reported to sell its colour TV sets to a TV tube factory in order to get its quota of tubes. And Automobile sold between 15 percent to 20 percent of its annual production, to local automobile distributors, for exchange for steel.

Heavy Electrical relied on supplies both from the ministry and local authorities. This enterprise was selected as one of 16 key electrical equipment production bases by the ministry(MMM). At the same time, it was the only large producer of its kind in the Beijing area.

In the case of Machine Tool and Audio , none of their outputs came into the planned product categories. So in principle, they were not privileged to receive planned supplies. But both enterprises shared in some planned quota of raw materials, such as steel and non-ferrous metal, through their relationships with some important companies, or the local industrial bureau. They paid market prices to buy directly from suppliers. Audio's business director said that 30 percent of their inputs in 1988 were purchased from the industrial bureau's supply company at market prices. The purchasing manager in Machine Tool said that its inputs of planned products(e.g. steel) relied on three ministry companies, which held some planned quotas.

Only Pharmaceutical made most of its deals through the market system. The major materials for the enterprise were farm products, such as herbs, bee products, sugar, and a few chemicals for pharmaceuticals. These were supplied by farm product companies and individual farm workers. The purchasing manager said that only about one percent of supplies came from planning arrangements coordinated by the bureau.

Audio-visual, Automobile and Heavy Electrical often faced uncertainty about their planned inputs in 1988 and 1989. This was different from the situation in 1985, when the planned inputs were guaranteed by industrial ministries and planning commissions. One problem was the weakness of planning techniques. Because the total of planned products were reduced(see section 7.1.1), the planned quota only issued a limited list of products in broad physical terms, without a precise indication of product categories. For example, a purchasing manager in Automobile said that he often found that the planned quota contained the wrong products. There was also a problem of availability even for supplies under the planning authority's control. These limited products were often in short-supply. Producers intended to sell these products at market prices, rather than to accept planned quota allocations at state-determined prices. He described his experience in a trade fair organized by the State Material Supply Bureau:

Sales managers(from steel-producing enterprises) received orders, then put them into their annual production plans for next year. As soon as they found that the orders from customers matched their annual production plans, they left from the trade fair immediately. I had to find other producers. If I couldn't place all my orders in this trade fair, I had to visit their factories personally, to see whether they got some stocks in their warehouses. In such a condition, my planned quota, the invoice with official seals, meant nothing. Finally, I bought some materials through non-plan sales of producers. Certainly I paid market prices, although I got planned quota with planned prices"(ATPI 2)

The same experience was shared by managers in Audio . Distributors or producers with a product in short supply were reluctant to participate in trade fairs.

"They were busy receiving customers in their offices, sitting there and selling every thing. Even in the trade fairs, they stayed in hotels and did not attend negotiation" (ADPI 2).

All six enterprises reported that they drew annual purchase plans. But at the same time, few purchase managers said they followed the plans. They said the plan was treated as an outline. The actions of implementation of these plans depended on situation. In other words, a purchase manager acted flexibly in accordance with availability of resources.

The purchasing decisions studied in this investigation are shown in Table 7.5.

Table 7.5 inserted here

7.2 2. The Process of Price Formulation

The procedure for formulating prices varied according to product categories. For planned products, prices were supposed to be fixed by the planning authorities, such as ministries, industrial bureaux and pricing bureaux, rather than by enterprises themselves. Enterprise management only had autonomy to set the prices of products falling outside the plan. Even then, if a product came into the same category as a planned product, its prices were also specified and regulated by the planning authorities. The normal way is to allow an enterprise to add a margin onto the price set by the state.

The process of price formulation therefore divides into two parts: internal and external. The latter arose when it was necessary to secure external approval from the planning authorities.

Enterprises were granted autonomy to fix prices of non-plan outputs from in 1985. Price control was not released for some products, such as colour TVs and trucks, until 1989.

There are three systems of price control:

- (1) Authorization of price changes(**tiaojia shenpi**),
- (2) Report of price changes(**tiaojia bei'an**) and
- (3) free price-fixing (**ziyou dingjia**).

The "authorization of price changes" means that any change of price must be authorized and approved by the respective authorities. Colour TV set came under this system. The prices of colour TV set were fixed by three ministries: the industrial ministry, commercial ministry and State Pricing Bureau. The trucks and switch gears were also controlled by the pricing

bureau, because their original prices had been fixed by industrial ministries in the early 1980s. In middle 1980s, the approval authority was delegated to the local pricing bureau. Any change in price of this kind of product, then, should be approved by the pricing bureau.

The second system required that a change in a product price should be reported to the authorities, but it did not necessarily need their approval unless the new price was strongly rejected by the pricing bureau. Products, such as black & white TV sets, electrical equipment, radios, health products, came into this category. the free price-fixing system only applied to new products, green groceries and other household goods.

The six products involved in the decisions studied here came under different pricing control systems.(Table 7.6)

Table 7.6 inserted here

In each of the six enterprises one decision on product pricing has been examined. A summary of these decisions is given in Table 7.7.

Table 7.7 inserted here

Although three cases, TV, trucks, and switch gears, came under the authorization system, the controls and procedures involved differed between them. With colour TVs, three ministries were involved in pricing policy making, the Ministry of Machine & Electronic Industries (MMEI) 2, the Ministry of Commerce and the State Pricing Bureau. Table 7.8 shows the result of the pricing decision in Audio-visual.

Table 7.8 inserted here

The case of pricing trucks was different to that of colour TVs. The standard prices of vehicles were laid down by the Ministry of Machine Manufacturing(MMM) in 1981. From 1983, the ministry fixed a "the state guided price" and a "own-sales price", each of which was based on the standard price with an added margin. Later, in 1985, the authority to regulate truck prices was delegated to the local bureaux. In 1988 two bureaux were responsible for the pricing policy of vehicles, the Beijing Automobile Industry Association(BAIA) and Beijing Pricing Bureau(BPB). According to available documents, on 23 September 1988 the Beijing Pricing Bureau published prices for the vehicles produced by Automobile. There were three prices, together with function marginal prices for additional functions. Two were controlled by local bureaux, while one was fixed by the company itself. Table 7.9 presents the results of the pricing decision in Automobile.

Table 7.9 inserted here

The case in Machine Tool was similar to that in Automobile. The price of LX2, a type of switch gear, was fixed by the ministry in the 1960s. This was called a standard price and served as a reference for further price changes. In the early 1980s the authority to control prices was delegated to local pricing bureau. At the same time the enterprise was allowed to increase its prices by 20 percent. "For other products, which were introduced later, they haven't got reference prices. So we could determine prices according to cost"(MTPO 2).

7.3 The Decision Processes

The analysis of decision processes is based on the dimensions of time frame, phases, actors and levels, which have been discussed in Chapter 5.

7.3.1 Timing, Including Interruption and Delay

The duration, interruption and delay of purchasing and pricing decisions reached in 1988 and 1989 are shown in Table 7.10.

Table 7.10 inserted here

Purchasing decisions normally took no more than one month, because managers had no time to think or detail their decisions, either because of little choice was offered by suppliers or because of the pressure from the production schedule. In Pharmaceutical, the stock of raw honey was only sufficient for one week production. When a purchasing manager received an offer from a bee product company, he had little but to accept it:

"The offer was not very good. I mean the price was not cheap, about 5000 yuan a ton. But I knew that our stock for production was almost used up; we would be out of stock by next Wednesday. The decision, buy or not, had to be made quickly. Otherwise, I would be responsible for interrupting production. Furthermore, I was not sure whether I could get another offer before next Wednesday. So I decided to buy, and then reported this to director. It needed her authorization, because we had a limited budget to pay suppliers."(PHPI 2)

In Automobile, the decision was made in a trade fair organized by the State Material Supply Bureau. A team of three managers was instructed to participate the fair, in order to use up the company's planned quotas of inputs. The managers had to complete their tasks within one week. The purchasing decision in Machine Tool occurred during a business trip in which the enterprise purchasing manager went to visit some steel producers. This trip was

in fact organized by a ministry company according to planned quotas. In this case the manager was delegated to assess the situation and to take up any opportunities which presented themselves.

The Audio-visual and Heavy Electrical cases showed some similarities. Both purchasing decisions fell outside normal purchasing plans. The motive for these purchases was not to meet enterprise production schedules, but to increase stocks of raw materials before their prices went up. These decisions took longer than the other cases. Most time was given over to seeking information on the supply environment.

In general, pricing decisions took longer than purchasing decisions. A lengthening of their time-frame usually occurred when bodies' external to the enterprise were involved in their authorization.

External authorization was required in three enterprises, Audio-visual, Automobile and Machine Tool, the first two reported delays because of this caused by the ministries and local bureaux. Several weeks were spent dealing with external authorities when the decisions came to the phase of final approval.

In the case of Machine Tool personal relations were used to accelerate the process of external authorization. The vice-director had a very good relationship with the head of a department in the local pricing bureau. He invited him to visit his enterprise. He described it later:

"We made him understand our situation. Generally approval takes about four weeks. In our case, because of our relationship, it took less than three weeks to reach the final approval."(MTPO 2)

The pricing decision in Heavy Electrical took quite a long time(two and a half months), even though it did not require external authorization. Interviews with the managers indicated that enterprise executives waited for the feedback of information. They wanted to

determine the attitude of the pricing authorities(local industrial bureau and pricing bureau) to their new pricing scheme, which has been initiated by a conference held among heavy electrical equipment producers. The head of the director's office visited these bureaux in person for this purpose.

The shortest pricing decision process was the Audio case. This case took place before the panic buying of summer 1988. Management was concerned at the high stock of finished products. The distributors only accepted a low price. At the same time, the enterprise needed to collect cash quickly. So it decided to lower the price of its radios.

7.3.2 Phases, Actors Involvement and Levels of the Decisions

Initiation

Actors initiating the decisions and their levels in the organization structure are listed in Table 7.11.

Table 7.11 inserted here

In purchasing decisions, the industrial ministries and local industrial bureaux were important external initiators. For example, in Audio the vice-director proposed the purchase, because an offer from the bureau was sent to him, rather than the purchasing manager. In other cases, the purchasing managers were identified as internal actors who raised the issue. In Pharmaceutical, the production manager was reported to have urged the purchasing manager to seek more inputs, because the stock of the material would soon be exhausted.

In some pricing decisions, financial managers were the principal actors in suggesting the new prices. Sales managers were reported to have been active initiators in the Machine Tool and Audio decisions, in which they played the role of transferring market information to enterprise executives first, after which the decisions were formally proposed by the vice directors in charge of sales.

The event or message immediately leading to the actuation of a decision may be called a "trigger". Three types of triggers were identified in this research, internal task requirements, central authorities and market events. Table 7.12 shows the triggers for the decisions investigated.

Table 7.12 inserted here

In the purchasing decisions, the central planning system was the most common source of important triggers, such as decisions of an industrial ministry(Audio-visual), a message from the local industrial bureau(Audio), information on future policies concerning imports(Heavy Electrical), or an opportunity to share an input quota with a ministry company(Machine Tool). Instructions or messages from agencies of the planning system seemed to be vital. In the case of the Audio-visual's purchase, the first signal was an announcement by the ministry of a policy to encourage the purchase of domestic plastics. Subsequent events(managers' personal visits to the ministry and the collection of information on market prices) led managers to decide to purchase imported materials, contrary to the ministry's intention. In Heavy Electrical, the first trigger came from the market, when it was discovered that another factory was willing to pay high prices for raw copper. Then, the managers visited the ministry foreign trade company to collect information about its future policies. They were aware that the prices imported non-ferrous metals would be going up. This stimulated them to decide to buy a stock of coppers. Both the Audio-visual and Heavy

Electrical purchases were outside the enterprises' annual purchasing plans. Signals obtained from markets or through inter-organizational networks were also important, and indicated the trend of market supplies.

Audio-visual: The first idea came from a trade fair organized by the ministry (the Ministry of Machine Building and Electronic Industry). The staff said that the ministry would not import the plastic, because a firm in Shanghai had started to produce this material. We wanted to buy imported plastics, because of their high quality. After the trade fair, we found that the price of the plastic was going up, although not sharply. But it did rise. That's another reason we decided to buy. (AVPI 3)

Automobile: We were told to participate in the trade fair using our planned quotas (authorized by the ministry) (ATPI 2)

Machine Tool: There was an opportunity. My friend in a national company (a ministry company) asked me to make a trip with him. The purpose of the trip was to sign contracts with some ferrous producers. He had planned quotas. (MTPI 3)

Heavy Electrical: It was started by a message from a factory, (which was) processing our raw copper. A manager there asked me to sell some copper to them. It was normal among enterprises to help each other. What amazed me was that he was willing to pay a high price. I wondered why he did so. Therefore, I asked our staff to find the reason from the ministry. Later, they visited the ministry company and talked with staff there. We found that the prices of all metal products were going to be increased. (HEPI 2)

Pharmaceutical: That [the decision] was caused by one of my friends in a company asking me whether I could buy some raw honey. He got some stock there. He knew it was what I wanted, although the price was very high. We only had one week's stock of honey for production (PHPI 2).

Audio: I got a message from the bureau. They had a stock of steel tapes for audio equipment. (ADPI 1)

In the case of Pharmaceutical, the trigger for the decision came directly from its internal operational needs. The enterprise had only one week's stock for production. In the case of the other enterprises, purchasing decisions were aimed at increasing stocks, in order to reduce the future risks of short-supply in the market.

The motive for pricing decisions, particularly in the case of price increases, stemmed from profit targets. Enterprise managers had to maintain a certain profit margin on their sales. Another stimulus came from market trends, which pointed to the behaviour of other producers. Few managers mentioned that triggers were located in the actions of central planning agencies.

Audio-visual: We developed a new colour TV function. So we could increase prices(AVPO 3). Other TV producers already developed this function, and started to make profit from it.(AVPO 4)

Automobile: An increase in input costs raised this matter for the decision. There was a regular meeting between planning and finance managers. The proposal to increase prices was based on their analysis.(ATPO 1)

Machine Tool: A sales manager asked me to consider whether we should increase the prices of our products, because all other producers had done so. But the most important factor, I think, was the increase in the cost of purchases(MTPO 2).

Heavy Electrical: This decision was promoted in a conference in Harbin. All the participants complained about inflation which led to an increase in input costs, particularly material costs. We decided to take some action to protect ourselves. One action was to set up a protective pricing system.(HEPO 1) The decision of the conference was important. But the real reason was that in July, we found that the more equipment we sold, the more we made a loss, because input costs had increased very quickly. This caused the director to decide to increase prices.(HEPO 3)

Pharmaceutical: When we found the price of packaging paper increased, we calculated its effect on future profits. Then we proposed an increase in our selling prices to the director.(PHPO 4)

Audio: We found that distributors and retailers didn't like to accept our prices. They said they could only sell our products, if we gave them a low price(ADPO 1) We found the stock of this product was too high. We had to sell it, even at an unfavourable price(ADPO 2)

Design

Departmental managers were primarily those involved in the design phase. Design here refers to activities of drawing an outline or a plan of next action in decision-making.(Table 7.13)

Table 7.13 inserted here

A design phase was reported for purchasing decisions only in Audio-visual and Heavy Electrical. Here, managers planned what action to take. In Automobile, managers attending the trade fair did not "design" their actions, but relied instead on the availability of supply

sources. In other purchasing decisions, managers said that there was no time for them to design their decision. They stored all the necessary information in their heads, so that they did not need to undertake any design activity before they took action.

Machine Tool: I have many years experience in this job. Market prices, our stock and consumption levels: all this information is stored in my mind. I just decide whether or not to buy, according to this information.(MTPI 3)

A design phase was apparent in all of the pricing decisions. Managers used a cost-plus formula to calculate new prices.

Audio-visual: We got all the data on costs from the technical experiment. The future price was based on cost of trial production, with a profit margin added(AVPO 2). It was not difficult to calculate future marginal income from production cost data.(AVPO 3)

Automobile: We had a profit margin of 25 to 30 percent. That provided the basic formula for our prices(ATPO 3)

Machine Tool: We always calculated the profit margin, before determining the final price.(MTPO 3)

Heavy Electrical: We predicted the future profit, according to costs incurring. The basic formula is to take the cost of raw material, plus labour cost, and then add a 25 percent profit margin.(HEPO 3)

Pharmaceutical: We estimated profits what our future profit would be if we adopted this new price. It should be at a reasonable level. If it were too low, we would not be able to realize the contractual profit target. But, if it were too high, we might lose our competitive advantage in the market. Even if there was not problem, the profit should not be too high, because next year's profit must be increased by 10 percent. So we limited the price rise.(PHPO 3)

Audio: The new price was based on our cost estimates, such as inventory costs. And I had to think about our working capital.(ADPO 2)

Sometimes, managers referred to the opinion of external organizations, particularly their relevant higher authorities, in order to make sure whether to carry out through decision. For example, managers in Heavy Electrical visited the bureaux:

"What we worried about was the attitude of the bureaux, both industrial bureau and pricing bureau. Although our product was not on the list of those whose prices were controlled, it must be accepted by respective departments(in the bureaux)"(HEPO 2)

Selections

Selection in decisions making refers to activities of choosing alternatives designed or proposed in the design phase. Vice directors, or executive directors, were usually the key actors in the selection phase, before the decision was handed for approval actors. There was no involvement from outside the enterprise in either purchasing or pricing decisions. Table 7.14 indicates actors involved in the selection phase and their level.

Table 7.14 inserted here

Managers could select when there were choices.

Audio-visual: We ordered our materials from the Chemical Imports & Exports Co.. We selected this company because it was our main supplier for some years and the price was cheaper than other companies.(AVPI 2)

Machine Tool: I choose according to price. If they are not high, I will buy. In this case, although I thought the price was good, I had to consult to the director because the purchase payment was above my maximum budget.(MTPI 3) I thought it was not easy to find such supplies, so I agreed.(MTPI 1)

Heavy Electrical: What we could do was to place some orders with the ministry foreign trade company, because we had some planned quota of inputs. This gave us the benefit of planned prices, which were much lower than market prices. The matter was discussed with the financial manager, to see whether we had sufficient funds for payment.(HEPI 2)

Audio: The deal was OK. The(input) price was a market price. But I didn't mind, (ADPI 1) Before the director authorized the purchase, he asked my opinion. We were short of working capital. Any expenses over 300 yuan had be agreed by the director himself. In this case, I agreed to buy(ADPI 3)

But this was not always the situation. In some purchasing decisions, managers had no choice. They could only decide whether to purchase one option, without the overall of alternatives.

Automobile: I couldn't make a choice, even though prices were higher than planned prices. This was because there were few suppliers there (in the trade fair). Some suppliers did not sell what I wanted to buy. Therefore, as soon as I found a source of supply, I had to buy some. This was a trade fair, where I could conveniently meet some important suppliers. Otherwise, I had to travel to each of them personally. (ATPI 2)

Pharmaceutical: The offer was not very good; I mean the price was not cheap, about 5000 yuan a ton. But I knew that our stock for production was almost used up, for next Wednesday. The decision, buy or no, had to be made quickly. (PHPI 2)

Selection was a very important phase in pricing decisions at which senior managers endeavoured to find an ideal solution. When it occurred, the involvement of external authorities was particularly vital for the decision outcome. Having selected its preferred option, management had to convince these authorities to accept the new price. In general, the directors or vice-directors took part in the selection of price changes.

Audio-visual: The Chief Accountant decided on the final price-rise application report, before the director signed. The new price should not be too high, or too low. If it were too high, the ministry would return it to us, or reduce it. If it was too low, we would make little profit from this application. Usually, the accepted profit margin was between 10 to 20 percent of the selling price. (AVPI 3)

Automobile: We knew that a profit margin above 30 percent would not be authorized. The new prices in our application report must be lower than that. (ATPO 1). The general director examined the application report. (ATPO 2)

Machine Tool: I considered the market competition... What I chose was a level between our old prices and market prices. (MTPO 2)

Heavy Electrical: We chose a 25 percent of profit margin. That was our normal profit margin. (HEPO, No 3)

Pharmaceutical: The new price reduced the future risk of loss due to inflation in input prices, and it could meet our profit target. It also should not be too high, because we have a 10 percent of an annual profit growth rate there (in our contract). So the price should provide a reasonable margin. (PHPO 2)

The pricing decision in Audio showed that the commercial director had authority to make pricing policy. But he consulted the enterprise director before he took action.

Audio: In this case, economic considerations were not very important. I just wanted to be sure that there was no loss from the sales. I knew that the enterprise got a high return from the sales of other products. A small loss would reduce our realized profit. But if we could still reach the contract profit, it was alright. (ADPO 1)

Authorization

The actors involved in the authorization phase are shown in Table 7.15.

Table 7.15 inserted here

Authorization of a purchase was required by the director when enterprises were short of working capital. The directors were asked to approve the decision. In general, purchasing managers were able to decide the priority and amount of supplies. In the case of Automobile's purchase, the enterprise had the right to participate in the ministry trade fair. Its purchasing team was granted delegated budgetary authority. So the vice-director was able to authorize the purchase.

Audio-visual: This case was authorized by the director himself. Because it needed some foreign currency from our bank saving to pay the purchase, the director discussed the case with the chief accountant. Since this was important for our product quality (to use imported plastic), the director quickly approved our application in about 10 days. (AVPI 2)

Automobile: Before we started our trip to the trade fair, we were delegated some decision powers. Within a maxim level of payment, we could decide on a purchase immediately. (ATPI 2) I had some autonomy to decide the purchase. Certainly, I contacted the general director several times, whenever I was not sure about the value of a purchase. But this was only in a very few cases. (ATPI 3)

Machine Tool: In this case, I telephoned the director, because the payment level exceeded my authority. But I thought that the purchase was worth. (MTPI 3) This purchase was very good. I didn't ask him (the purchasing manager) to buy them (about two hundred tons of steel sheets). But he did it. It seems now it was a very good deal. We got about one year stock, and did not suffer from subsequent price increases in steel products. (MTPI 1)

Heavy Electrical: I couldn't determine to buy or not. The purchase was not in our plan. It was an exceptional case. So it must be decided by the director. (HEPI 2)

Pharmaceutical: But I knew that our stock for production was almost used up, for next Wednesday. The decision, buy or no, had to be made quickly. Otherwise, I would undertake responsibility of interrupting production. (PHPI 2)

Audio: I approved the decision. It was important. We had a problem of quality with steel tapes. This deal was very good concerning quality. I consulted with the financial manager, in order to check our financial position.(ADPI 1)

External authorities were involved in the final approval of three pricing decisions. In this case, the enterprise director only authorized the application report at the selection phase and approval from the enterprise's industrial bureau was necessary before the case was passed by the pricing bureau.

Audio-visual: The final approval was in the financial department of the ministry. They determined the issue and informed us the result. But we must report it first to the bureau . After the bureau agreed it ,the report was sent to the ministry. That was required by regulations.(AVPO 3)

Automobile: The local pricing bureau controlled automobile prices in the Beijing area. We should report to them, then be authorized to sell products with new prices. The application must be signed by the industrial bureau. This was the first stage of approval.(ATPO 2) Our publication department kept contacts with the pricing bureau and accelerated the process of authorization(ATPO 1)

Machine Tool: The price of this product was fixed by the ministry in 1983. Before 1985 any change in prices had to be agreed by the ministry. But then it became the local pricing bureau(MTPO 3). The industrial bureau agreed with our proposal.(MTPO 2)]

In three other cases, the enterprises could grant final approval for price changes:

Heavy Electrical:The decision was finally approved in the executive meeting. The last person to sign the proposal report was the director himself.(MTPO 2)

Pharmaceutical: It was firstly discussed among executives. They agreed, then the director approved the decision.(PHPO 3)

Audio:I decided the case. It was in my power to determine selling prices. But I discussed it with director personally. Because it was a proposal to reduce prices, which might cause some loss. He didn't object to the idea.(ADPO 1)

7.3.3 Comparison of Decisions in 1985

A purchasing decision and a pricing decision which occurred in 1985 were studied in each of the six enterprises, in order to compare with the decision processes studied in the later date . The topics of the 1985 decisions are shown in the Table 7.16

Table 7.16 inserted here

In purchasing, compared with decisions in 1988 and 1989, Audio-visual and Automobile in 1985 were guaranteed supplies mostly through the planning system, by the ministries or local authorities. For Heavy Electrical, Machine Tool and Audio, their superior authorities, particularly the industrial bureaux, were important allocators of resources. These three enterprises received their materials, such as steel, copper, aluminum, plastics, from bureaux, according to plans. Both the pricing and distribution of these products were monopolized by the planning authorities. Priority of supply for these materials was given to enterprises with planned outputs. Enterprises without planned outputs still could possibly gain some supplies from the planning system. For example, in the case studied, Machine Tool applied for 470 tons of steel from its bureau. Thirty eight percent, 180 tons, were granted by the bureau. The remaining supplies were purchased by the enterprise itself directly from suppliers at market prices.

In 1985 there was a relaxation of price control, with an experiment to move towards market prices. This scheme was called "Restoration of the Right Pricing System". The Ministry of Machine Manufacturing published a policy which granted enterprises in machine building industry autonomy to increase prices of products outside the plan by 10 percent. This autonomy was delegated with two conditions. The first was that the enterprise's product should be acknowledged as top quality - as "Credible Product" (*xindeguo chanpin*) - by the ministry's quality inspection bureau. The other was that input costs should have been increased by the price inflation of raw materials.

Market demand for colour TV sets was high in 1985 as well as in 1988. Prices were supervised and set by the ministries. Three ministries controlled colour TV prices, the Ministry of Machine & Electronics Industry (which was just the Ministry of Electronics

Industry in 1985) for production, the Ministry of Commerce for distribution, and the State Pricing Bureau for price supervision. This system was same in both 1985 and 1988. The local electronics industrial bureau checked the costs of products first and then approved the new prices. The local pricing bureau supervised the selling prices of colour TV sets. Black & white TV sets, prices were relaxed in 1986 from an authorizing system to a reported system.

Automobile enjoyed a seller's market in 1985 for its trucks. This situation had changed by 1988, when a number of new automobile companies had entered the market. These companies were supported by heavy subsidies from their local governments, such as Nanjing, Tianjin, to engage in price competition. The top executives in the Automobile company realized that there was a risk of losing customers. It changed its strategy in 1987 towards an emphasis on market competition. But this strategy could not be adequately implemented, because of the significant planned outputs fixed by the local industrial bureau. Up to 1989, planned outputs were still amounted to about 70 percent of total production.

Heavy Electrical and Machine Tool enjoyed high demand in 1985. The products of these two enterprises were well-known for their high quality. By 1988, their markets had become more competitive. For example, the number of heavy electrical producers increased from one hundred and twenty five in 1985 to more than four hundred in 1988. In the machine tool industry, there were about three hundred producers in 1988, compared with only two before 1984. In 1985, the ministry decided to cancel its mandatory plans for annual outputs of these two products. Producers were asked to sign sales contracts in the ministry's trade fairs at standard prices fixed by the ministry.

Pharmaceutical was the only enterprise of the six to engage in market transactions in 1985. Its major products were health products, which had been included in a catalogue of such products offered to the market since 1983. The enterprise produced other medical and pharmaceutical products, some of which were controlled by the planning system. The

strategy reached by its directors was to reduce planned outputs and develop its market outlets. One reason was that the enterprise was one of only two producers having foreign trade licenses for overseas sales. Another reason was that its main product, the Beijing Royal Jelly, had won several high quality awards since 1982 . It spent a great deal on product promotion, including advertising and other publicity. Since 1987, however, the market had become increasingly competitive.

7.3.4 Processes of Decisions in the 1985 Decisions

Timing: Duration, interruption and delay in 1985

Table 7.17 shows the time-frame of duration, interruption and delay in decision processes in the 1985 decisions.

Table 7.17 inserted here

Trade fairs organized by the ministry were as important means for Audio-visual and Automobile to obtain supplies. The duration of the process was constrained by timing of the trade fairs. For Pharmaceutical, the purchasing of primary bee products was made with a bee product company. It was said that the procedure had not changed much, compared 1985 with 1988. The only difference, noted by the purchase manager(PHPI 2), was that in 1985 the enterprise did not suffer from the problem of working capital shortage. So the purchasing managers were give considerable freedom to determine suppliers and how to use their budgets.

Actor involvement, their Levels and Decision Phases.

The actors involved in the decision phases of initiation, design, selection and authorization are shown in the Table 7.18

Table 7.18 inserted here

The parts played by internal departments were not much different in 1985 and 1988. External actors were more significant in the initiation and authorization phases. Table 7.19 indicates the sources of decision triggers in the 1985 decisions.

Table 7.19 inserted here

In 1985, the planning authorities were major resource allocators for enterprises. Even those enterprises without a planned quota of outputs, such as Machine Tool and Audio, has some still inputs allocated by their bureaux. Triggers from the authorities were therefore identified as the most important ones for purchasing decisions.

The regulations of ministries and the State Council on price differentiation in accordance with quality, or cost of raw materials, were important in triggering price increases. In the case of Automobile, the product was recognized by the ministry as "Top Quality". With this title, the price was later increased, by the instruction of the ministry itself. The same happened with Heavy Electrical and Machine Tool: their main products were acknowledged as "Credible Products" by the ministry in 1981 and 1983. For Pharmaceutical , the triggers

were the increasing market sales of royal jelly, resulting from its strong marketing promotion campaigns.

The pricing cases in Audio-visual and Audio were similar. When a new product was launched to the market, the price was fixed according to its cost. Prices of Audio in 1985 were still authorized by the system. This control was relaxed in 1986(as prices of Black & white TV sets).

Pharmaceutical relied on farm products, which had been available from the open market since 1984. The purchasing manager said he did not find a much difference in purchasing in 1985 and 1988. The only difficulty which had not appeared in 1985 was the shortage of working capitals, which later led to more centralized control by the director, rather than by the bureau.

Compared with decisions in 1985, all purchasing managers in the six enterprises said they undertook a more active search for opportunities, both from central planning system and from markets in 1988. The internal purchase plans now were less precise than in 1985. Except for Audio-visual and Automobile, the enterprises had abandoned monthly purchasing plans in favour of quarterly plans . But in 1985, all six enterprises drew up their monthly plans and even weekly plans.

There were few changes in the functions of internal departments, such as financial, purchasing, planning and sales. Technical departments were involved in design phases in Audio-visual and Audio, because of their contribution to the new product development and experimental costs for the pricing decisions.

The changes of decision levels occurred in the authorization phase. This has been investigated by Child and Lu(1990a). They noted that the enterprise managers gained more autonomy to fix prices in 1988 compared with 1985:

"[A] further relaxing in external controls over product pricing was evident both through a move away from fixed-price plan/quota production and through a reduction or abolition of controls over non-plan product prices where it had existed in 1985"(Child and Lu, 1990a:334)

7.4 Interactions with Authorities

Chapter 6 described the subordination of a state-owned enterprise in China to the government. The agencies acting on behalf of the government are central industrial ministries and local industrial bureaux. The former are responsible only for the centrally-controlled large enterprises. The latter administrator most industrial enterprises located in local areas. All six enterprises in this study are managed by local industrial bureaux.

A local industrial bureau is the direct superior administrative authority of an enterprise. There were however, several other functional bureaux in charge of supervising enterprise behaviour. For example, the following agencies were active in the pricing process:

- (1) Pricing bureau: inspecting/checking up on prices, authorizing price increase and arbitrating prices
- (2) Industrial & Commercial bureau: inspecting/checking scope of business and other activities undertaken by enterprises , authorizing new business activities, in terms of procedures, locations.
- (3) Tax bureau: supervising tax payments.
- (4) Financial & Treasury bureau: checking budgets, costs, expenses
- (5) Audit bureau: inspecting financial performance
- (6) Bank: approval of working capital, loans, credit, debts
- (7) Local pricing supervisory commission: checking/inspecting illegal pricing behaviour and reporting to the pricing bureau.

These authorities imposed their powers on enterprises. The pricing bureau was particularly significant in the determination of pricing decisions.

7.4.1 Significance of Authorities in Decisions in 1988-89

By this later time period, an industrial bureau now played a double role in economic transactions. On the one hand, it still carried out its functions as a planning authority in resource allocation through its legitimate position in the planning hierarchy. A channel to industrial bureaux was still significant for enterprises to get their supplies with planned quotas.

On the other hand, an industrial bureau had now established their own trading networks through their own companies. These companies were staffed by former bureaucratic officials in supply and sales departments. For example, there were two companies in the Municipal Electronic Industrial Office(Bureau): the Municipal Electronic Material Supply Company, and Municipal Electronic Sales Company. They sold some products to subordinate enterprises, and purchased their products. These companies took advantages from their natural relationship with the bureau. They could transfer planned products into markets. And they could refer to the bureau's status to order planned products from subordinate enterprises.

At the same time, the bureau became more flexible in allocating its resources to enterprises. The bureau organized its own internal exchange activities among enterprises. The normal way was material trade-off fairs(wuzi pingheng hui) within a bureau. In this kind of trade fair, transactions were completed between the bureau's companies and enterprises or among enterprises themselves. A typical example was found in the case of Machine Tool. The purchase manager said after he had successfully purchased raw materials from his business trip, he noticed in a trade fair that the bureau sold steel sheets to enterprises at market prices which were double those he had paid.(MTPI 3)

Other examples illustrate the complexity of the relationship between an industrial bureau and its subordinate enterprises.

Example 1: Audio-visual was ordered to hand over about 10 percent of its outputs(colour TVs) to the bureau's sales company, at planned prices . The enterprise also got some planned inputs from the company.

Example 2: Automobile found that the bureau's company ordered its outputs(transport vehicles) at planned prices, then sold them in markets at a price higher than plan price by lower than the market price. But these products were supposed to be allocated within planning distribution networks. Thus, result was that Automobile itself any was not able to sell its own discretionary sales, because customer could purchase its products from the bureau's company.

Example 3: Machine Tool shared its office building with a bureau's trading company. In return, the company allocated some planned inputs to it, and let its purchasing manager borrow from the company's capital for payment.

Industrial bureaux also played the role of gatekeepers in approving decisions. Three pricing decisions, which needed external authorization in the case of Audio-visual, Automobile and Machine Tool were reported to have gone through their industrial bureaux first, before their applications were handled by the ministries or pricing bureau. An official in the Electrical Industrial Office described how the bureau dealt with pricing cases.

"In pricing, we should check up cost details and give our own opinion. Yes, we understand high inflation caused enterprises to suffer from cost increase. Because profit contracts were signed between the industrial bureau and enterprises, it means we are responsible for the profit performance of our subordinate enterprises. On the other hand, we can't say yes whenever an enterprise asks to increase prices. For unimportant items, such as industrial products, the decision is easy. For colour TVs, the price is very sensitive. The general public may complain about the high prices of colour TV to the central government. In such cases, we are very careful. We compare with prices in other cities, or factories out of Beijing. If our price is higher than their prices, there is certainly no further discussion. If ours is lower, we may forward the proposed increase to other authorities."(EI 1)

As a gatekeeper, an industrial bureau possessed power to permit or hold up its subordinate enterprise's actions. For example, an enterprise could possibly increase its prices of a product if the product was rewarded as top quality or "Credible Product" (**xindeguo chanpin**) by the planning authorities(either ministries or local government). But this quality evaluation had to be accepted by the enterprise's own bureau. Another example was that before a new product was launched on to the market, it needed a technical appraisal. This appraisal must be organized by the bureau. The bureau could simply cancel the production quality evaluation or delay the procedure for new product appraisal, which would affect the enterprises performance.

Functional authorities, such as the pricing bureau, only had an accountability relationship with industrial bureaux. These functional authorities were authorized to regulate some economic activities. The outcome of a decision from a functional bureau might be different from that of an industrial bureau.

"We had such an experience in pricing authorization. The bureau (industrial) said yes, and that it did not need the involvement of the pricing bureau. Later, the pricing bureau said (that) this was illegal. It must be authorized by the pricing authority....We were asked to apply for approval again" (MTPO 3)

In Automobile's case, the local pricing bureau finally cut down the price rise from 20 percent to 10 percent, although this margin had been agreed by the industrial bureau.

Functional bureaux had regulatory power, which was derived from their specific responsibility in economic administration. Some regulations were distributed only to functional bureaux, through the "corresponding" channel of central government agencies. This will be discussed later in section 7.6 on Regulations. Regulations, issued either from central authorities or local authorities, provided an effective administrative instrument to control enterprise behaviour.

The conflicts between an authority and an enterprise, stemmed from their differences in decision criteria. An enterprise considered economic performance and future uncertainty, while the authorities put their social responsibility high on the list. This was seen in Audio-visual's case of pricing colour TV sets.

Colour TVs were regarded as a luxury commodity in China. Their prices were considered to be linked with the stability of the market and economy. As the cost manager in Audio-visual put it:

"The officials in the ministry got nervous when they heard people complaining that it was too expensive to buy colour TV sets. Whenever I went to the division of the ministry the chief always told me to 'reduce cost, rather than thinking increasing prices'. He thought high prices would disturb markets. I don't think they have made any calculations relevant to fixing prices of colour TVs. According a ministry's

regulation, our 14" colour TV was allowed to have 80 yuan extra price, because this product received the golden quality award. This means that a top quality product is valued only at 80 yuan extra. I asked him why 80 yuan, not 180? He said that a high price would not be paid by the common people."(AVPO 3)

In Audio's case of decreasing prices of a standard radio, the business director complained that bureaux did not take responsibility for their wrong decisions. He said that the enterprise had to reduce prices in that case, because the product was out of date. But it had been very fashionable in 1985. As early as in 1983, Audio decided to take a technology transfer of this product from a Japanese company. When they started the negotiation, the bureau interrupted the process and ordered Audio to drop the project, because the bureau decided to entrust another enterprise to do it. One and half years later, in 1985, the bureau asked Audio to resume the project because the other enterprise had not been able to develop the product. The project was completed in 1987, and a new product was launched. "If we had got the contract in 1983, it would have been a profitable project. The bureau wasted our time....Now we have to assure the burden of making a loss from this product."(ADPO 1)

Even for those decisions which did not need external authorization, the industrial bureaux were recognized to be important for enterprise managers. In Heavy Electrical pricing decision, the deputy director said that the internal delay of actions to increase prices was because managers felt unclear about the attitude of the bureaux towards their new pricing. Personal visits were arranged to engender understanding of policies and to gain support from bureaux. Managers in other enterprises shared the same experience.

"Before we applied for a prices increase, we must study the relevant regulations, to see whether the application was logical and reasonable. If it was felt to be difficult, we often abandoned the attempt"(AVPO 1)

The complexity of involvement by higher authority in decision authorization caused managers to avoid interferences from such authorities if at all possible. In the Audio-visual's purchasing decision, the director decided to use its own foreign currency reserve, because this would not necessarily need external authorization.

The difficulties caused by authorities did not mean that managers had no way to influence bureaux. The advantages possessed by managers lay in the details of technology and costs. This knowledge of production and operations made it impossible for an authority to assess the foundation for an application. In three cases of pricing authorization (Audio-visual, Automobile and Machine Tool), managers said they did not believe that staff in the authorities concerned understood the details of enterprise production costs. Enterprises could "make up" cost details. The final reports were redesigned before they were handed over for application. The deputy director in Machine Tool said:

"How could they understand my cost items?"(MTPO 2).

Moreover, enterprise managers attempted to get as many benefits from one application when an external authorization was imposed on them. The uncertainty of government policies directed managers attention to short-term oriented behaviour. In Machine Tool's pricing decision the highest price margin was selected. The director said:

"Because the 20 percent was the largest marginal price in the market, we should apply for that, in case of any reduction by the bureaux. And while we could sell products with lower prices in the market, the reverse is not the case. It was not true in reverse condition. We can't sell a product at a price higher than the authorized one. So when we applied for it, we should apply for the largest one."(MTPO 1)

The informal interactions between enterprises and authorities were effective, beyond the rigidity presented in formal relationships. Personal relations were normally used to accelerate the formal procedures in decision processes. Managers reported that they kept a close and friendly contact with personnel in bureau departments. The deputy director in Machine Tool invited the chief of a department in the pricing bureau to visit his enterprise, in order to get approval quickly. It was similar in Audio-visual and Automobile.

"I visited the (financial) department of the ministry, or telephoned the chief to urge them to consider our case. However, because people know each other very well, it's easy to persuade them to agree with us"(AVPO 3)

"Our public relation department was active in dealing with the pricing bureau. They (staff in the bureau) visited our company. And we contacted with the Municipal Economic Commission, for their support and help"(ATPO 1)

But other conditions were also considered. For example, when capital became short, the ability to pay assumed particular significance:

"We have very good relations with the bureau. This made them think about our purchasing needs when they got some planned supplies there. Another reason was that we could pay for the purchase quickly."(ADPI 3)

7.4.2 Comparison with Decisions in 1985

Relationships between enterprises and their superior authorities in 1985 were perceived to have been much simpler than in 1988, in spite of the fact that decision making was then more centralized. As a deputy director in Machine Tool said:

"Although we needed authorization in 1985, but increasing prices was considered to be part of returning to the market and restoring prices which have been suppressed for a long time. Increasing price was the right action to establish market system at that time. If we had a legitimate reason, such as inflation of raw materials, the bureau approved our case. Now, increasing prices is considered to disturb the market, no matter how good our reasons."(MTPO 2).

In Pharmaceutical most of its products were open to market since 1984. A sales manager described the pricing decision in 1985:

"It was simply a real case of increasing prices for more profit, without any justification in terms of input inflation. Certainly, we reduced the prices of some products in order to expand market share at that time. Increasing the prices of Royal Jelly in 1985 was different matter from this time(in 1988). This time we had good reason. At that time, if we wanted to increase prices, we did it."(PHPO 3)

The role of bureaux in purchasing was perceived as that of supervisor, rather than trade partner, because the bureau allocated resources without charge, and it did not sell resources to its own subordinate enterprises. As the purchasing manager in Heavy Electrical said:

"At that time(1985) we still relied on the bureau's protection. And the bureau thought we were subordinates... The bureau did not seek its own benefits, such as profits when it was dealing with subordinate factories. But now it charged us a 2-5 percent of service fee, or sells us materials at market prices."(HEPI 2)

Purchasing managers in Audio and Machine Tool said they found situation had become more complex in 1988 than that in 1985. In 1985, a purchase for enterprises was simply to receive a delivery arranged by the bureau. Most inputs from the bureaux were guaranteed.

Personal relationship was regarded to be more effective and more important in 1988 than in 1985, in interactions with authorities and suppliers. The cost manager in Audio-visual implied that the enterprise sent coupons⁴ for purchasing colour TV to the ministries and bureaux to maintain good relations with them. This way of doing favour for the authorities was not popular and not necessary in 1985.

Moreover, in 1985 none of these six enterprises was in the contractual responsibility system. In 1985 the bureaux inspected eight performance indices: output values, quality, labour productivity, total profit, profit remittance to the state, current assets/output values, acid test(working capitals), and rate of contract fulfillment. Among these, the bureaux paid more attention to output values than to other indices. Since 1987, the contractual responsibility system was implemented in state-owned enterprises. An enterprise signed a profit contract with its superior bureau. The total wages and bonus depended on profit performance. The managers complained that bureaux only signed a contract to guarantee profits, but did not sign a contract to guarantee supplies.

It was reported that the functional bureaux in 1985 were less powerful than in 1988. Managers said they dealt only with one God in 1985, their industrial bureau. This was called "line management", which meant that an bureau and its subordinate enterprises were located in the same administrative hierarchical line. By 1988, managers had to face several Gods, in addition to their own line authority. This was particularly the case with pricing decisions.

7.5. Information and Decision-making

It was reported, according to the interviews with managers, that there was an information centre within each of the six enterprises, for the collection, transmission and processing of data. Audio-visual had installed a computer-based system to store, process and circulate data between departments.

These systems were used for managerial tasks, such as restoring data of employee's salary rating, payment schemes, financial data(costs, profits, sales). Some data, such as customer records, sales orders, were often maintained in the sales or planning departments. Each of these enterprises also published its own newsletter, which conducted to circulate and transfer information within the organization.

Markets or other public medias were other information sources. These sources were the following:

1. The after-sales-service centres, sales outlets and repair shops
2. Newspapers, periodical/magazines and other publications
3. Customers letters, or visits
4. Special market surveys, such as marketing investigation
5. Personal contacts in business or other economic/social activities
6. The producer associations, or industrial associations.

Managers were interested in the product quality and market prices. Pharmaceutical was the only one which organized market surveys, through a help from MBA students in the China-EC Management Institute. The other enterprises expressed little interests to such a systematical way to understand the market.

The most important information came from the planning system, which consisted of the ministries, industrial bureaux and other agencies. The communication channels related to the central sources include:

1. Regular coordinate meetings organized by the ministry and bureau coordinating material supplies(Material Trade-off Exchange Meeting), in which enterprises and authorities exchanged their information.

2. Conferences or meetings organized by ministries or local authorities, such as trade fairs, technology conference, directors' conferences.
3. Personal contacts with the planning authorities, or their companies by means of visits, talks, business trips.
4. Regulations/policies distributed and circulated by the authorities.

The significance of the central sources comes from its statistical data about national and local economical activities, such as annual productions, average cost level, a total number of employees in industrial sectors and technological development. Another importance was that it made enterprise managers predict future policies or regulations. Understanding of these future policies enabled managers to plan their actions ahead.

7.5.1 Role of Information in the 1988 and 1989 Decisions

Information from the central planning system and market was important for enterprise managers to seek opportunities of supplies and to stimulate a purchasing decision. In the case of the Audio-visual's purchase, the first message came from a trade fair organized by the ministry, which declared to reduce imported materials in the near future. At later time, the managers noticed that the market price was going up. In Heavy Electrical, the purchasing manager found that a factory was willing to pay a high price to buy raw copper. This message stimulated him to detect the reason. Then he understood the future shortage of copper and other non-ferrous metal through the personal visits to a ministry company. The information sources identified in the purchasing decisions are illustrated in Table 7.20

Table 7.20 inserted here

The identification of information sources in Table 7.20 roughly illustrates the role of information in the 1988/89 purchasing decisions. In practice, managers made aware of the market through daily operations. The purchasing manager in Machine Tool noted:

"I read newspapers to know the market. For example, I noticed that the government criticized economic overheating caused by over-investment in capital constructions. I interpreted this assertion as a signal of future short supply of steel in the market. Later, we received a regulation from the bureau. The regulation was about price control in steel sales. It was that I had already predicted."(MTPI 3).

The purchasing managers also acted as an independent information processor when they made decision individually.

"Market prices, our stock and consumption levels: all this is stored in my mind. I just decide whether or not to buy, according to this information."(MTPI 3)

The planning authorities possessed more information from their advantages and status in the administrative hierarchy. This information asymmetry made enterprises rely upon the central sources of information.

"They(the ministry's foreign trade company) know the international markets, but we don't."(HEPI 2)

Even Pharmaceutical, whose most materials came from the market, had to maintain close contacts with its bureau. The purchase manager noted:

"The bureau understands more than we do. We only touch small number of companies, factories, individual farm workers. But the bureau is in a different situation. One reason is because it used to be a distributor before the reform. So the bureau collected all orders from subordinate enterprises. It knew details of enterprise inputs, such as quantity and quality of each item. Second, it has contacts with other bureaux and ministries. It can know some in other places and national scale. Last it also has a better idea of trends: what is going to come into short supply, where controls will be relaxed and so forth."(PHPI 2)

Table 7.21 indicates the role of information in the pricing decisions.

Table 7.21 inserted here

The cost plus formula determined managers to rely largely upon the internal data, such as costs, profits, sales revenues. The financial managers were responsible for calculating future profit according to these data.

The enterprise managers understand their competitors' behaviour through the market information sources. For example, the sales manager in Pharmaceutical said that the prices of his products were at an average level in the market. It was therefore that he did not worry too much about the new selling prices.

Managers said that they were more interested in information collected by their salesmen. Except for Pharmaceutical, the other five enterprises were suspicious about the market surveys⁵. They trusted information collected through personal networks. The deputy director in Audio said:

"If a piece of information comes from one of my customers, I would like to pay attention, because this may bring some sales. But what does it mean a market survey? It is too general. I can not make decisions based on a market survey. What I am concerned about is whether a customer wants to buy more." (ADPO 1)

At the same time, information coming from an authority was also important in the pricing decisions. In particular, managers were eager to know what policies were going to be issued by the planning authorities. These new regulations or policies could change environments in which enterprises operated. The head of the director's office in Heavy Electrical explained the purpose of his visit to the bureaux in the price decision:

"Now it is the time we should understand what a new policy is going to be, because it will change the environment in a minute. When the state or any of the bureaux changes its policy or issues a new regulation, we have to change our plans. Something we could do today might be prohibited to do tomorrow." (HEPO 2)

For example, in February 1989 the Municipal Government decided to centralize pricing approvals. Even products within the report control category were regulated to be authorized by the pricing bureau. This will be discussed in details in regulation section.

Personal networks and contacts were effective in information communication. This was seen in the cases of Audio-visual, Machine Tool, Heavy Electrical, Pharmaceutical and Audio.

"Now the information is very important. I asked my staff to collect information. For example, if they know somebody who want to sell something, or so on, they must report to me." (HEPI 2)

Another personal network was based on personal relations(**guanxi**). For example, the Heavy Electrical's purchasing staff visited the ministry foreign trade company. This company was the enterprise's main supplier of imported metal. They knew each other very well. The Pharmaceutical's purchasing was stimulated by an offer from a bee-product company. The sales manager in that company was a friend of the purchasing manager in Pharmaceutical.

The information diffusion started from the closed personal relations. The purchasing manager in Pharmaceutical said that he must answer the offer from his friend quickly. If his decision was no, the message would be transferred to other people. The quality of personal relations determined the priority of supply. The division manager in Audio said:

"The products, such as steel tapes, are often in short supply. It's no problem to find buyers. So that the seller would select buyers according to quality of their relations(**guanxi**)."(ADPI 2)

7.5.2 Comparison with Decisions in 1985

Information sources identified in the decisions in 1985 are summarized in the Table 7.22

Table 7.22 inserted here

The ministries and industrial bureaux were a major source of information in these decisions. In most cases, these authorities arranged deliveries of supplies for enterprises.

"At that time, we did not contact suppliers directly. What we did was to draw up our purchasing plan, reported to the bureau, then waited for the delivery. Only when our plan was not met by the bureau, we sought supplies by ourselves"(MTPI 3)

The planning authorities became a key information source. The ministry(or bureau)'s trade fairs, working conferences and personal visits to authorities were used to distribute information such as pricing policies, economic conditions.

Audio-visual: Our purchase was done according to the annual production plan approved by the bureau and ministry (in 1985). Our task was to detail the plan and draw quarterly and monthly plan, then reported to the bureau, which transferred our request to the planning authorities. The municipal planning commission and the ministry would arrange supplies of inputs for us. Every half year, we attended to trade fairs, where we understood other producers, suppliers, buyers and something we were interested.(AVPI 2) The policies, regulation, newsletters from the ministry or bureau told us something about conditions of economy and what the government was going to do in the near future. Sometimes, we knew status of other producers, such as their costs, productivity, in working conferences, personal talks.(AVPI 3)

Automobile: (In 1985)[w]hen our planned inputs were not satisfied through the trade fairs, we collected information from our purchase staff or old suppliers, in order to know who had something to sell.(ATPI 3) We knew prices of other producers through distributors, customers and ministry(in 1985)(ATPI 2).

Heavy Electrical: The information came from our old suppliers, bureau and ministry(MTPI 2) We knew something from customers' visits and our salesmen(MTPI 3)

Enterprise managers referred to the ministry's standard price category.

"The price had actually been fixed by the ministry"(AVPO 3)

"Because the product(transformer) was designed by the ministry research institute, thus, the price was fixed by the ministry too"(HEPO 3)

However, in 1985 the market information started to play a part in decision making. Both Pharmaceutical and Audio set their prices based on the market prices.

Pharmaceutical: (In 1985) we knew that our prices were lower than other producers(PHPO 3).

Audio: Although we predicted the prices according to the cost plus formula, the market price was also important. (In the 1985's decision) Our price should not be higher than the market price level. Our salesmen often checked up the market prices in shops or from retailers(ADPO 1)

In 1985, although these enterprises did not have an internal information centre for communicating and processing data, the internal data were still significant in pricing decisions. These data, as the same in 1988, included the product cost, sales records, inventory stock and production schedules.

7.6 Codification of Regulations

An important instrument of administrative justice was its regulations and policies.

Regulations are rules to follow in operations.

7.6.1 Regulations and Decisions in 1988 and 1989

A total of 28 regulations were studied(Appendix II-1), which were related to the decision contents on purchasing of inputs and product pricing. These include published policies issued by the central or local government and some unpublished regulations concerning a specific product. The category of their codification is indicated in Table 7.23.

Table 7.23 inserted here

In general, the policies of the central government, for instance the State Council and CCCPC, were lowly codified. These policies only outlined the scopes and processes of future activities. Regulations from a specific government agency, such as a ministry, was highly codified. Those regulations focused on a specific product, or administrative area or matters concerned by the agency. For example, in 1988 and 1989, colour TV sets were controlled strictly by ministry regulations. No. 10 regulation in Appendix II-1 was published in 31 May 1988, issued by three ministries, the State Pricing Bureau, the Ministry of Commerce(for distribution and sales), and Ministry of Electronics Industry(for production and enterprise administration). This regulation fixed factory and retailing prices and marginal prices of functions added to the products.

The policies and regulations issued by the central government in 1988 and 1989 presented a trend of re-centralization in price controls and the state intervention in economic activities.

Several policies had been published since the beginning of the year, 1988, calling for centralized price controls(No. 1, No. 2, No.7, No.8). In August 19th, a proposal for further pricing and wages reform was issued. This regulation sketched the future price reform, which aimed at relaxation of most commodity prices to the market. This document was interpreted by the mass as a signal of a price increase. A panic buying occurred at the middle of the year enforced the central government to postpone its advance of price reform. In August 30th, the State Council held its executive meeting. The meeting also announced that there was no further price reform programme in the remainder of 1988. The central government asked all local government and pricing authorities to curb inflation, through economic and administrative instruments.

Enterprise managers referred to some regulations, which were specifically concerned with raw materials and metal products. These regulations are listed in the Appendix II-1, as No.3, No.4, No.5, No. 6, No.14, No. 22, No. 26, No. 28. These regulations emphasized the importance of the state plans and price controls of important materials. Managers were aware of these regulations through public media, which gave them a brief introduction of regulation contents. The detailed points were transferred through the administrative system, from the bureau to enterprises.

There are three ways to get aware of authority policies.

- (1) Managers received a regulation from its own administrative system, i.e. from its own boss, the industrial bureau. This hierarchical channel is called internal transmission(**neibu chuanda**).
- (2) Understanding special regulations through documents or periodicals published by functional authorities was another way.
- (3) Official publications, such as newspapers, periodicals in public medium, provide people with official policies in general sense. But this transmission often has a time lag over the internal system.

"I received a copy of this regulation(No.28) from the bureau" (MTPI 3)

"We heard about the policy(No. 6) before, but only read it in bureau recently. Then we made a photocopy of it.(HEPI 3)

Whether these regulations were effective is doubtful.

"I visited the trading places of steel products. For example, according the regulations, there are two places around Beijing. But nothing was sold there. I could not find any product there, whether at planned or market prices(MTPI 3)

"Even when we were prepared to pay market prices, it was still difficult to find these supplies.(ADPI 2)

"It's only possible to get these products with fixed prices (according to regulations) from the trade fairs organized by the ministry. But it's still dependent on producers, whether they have produced them or whether they have stocks available there."(ATPI 3)

"What a regulation gives us is a general outline of the situation. For example, we could check planned prices with market prices, and see the differences. So that we could plan ahead to purchase something which would get into short supply." (HEPI 3)

When an enterprise was in a position to buy, the highly codified regulations narrowed its choices. The buyer's behaviour was programmed by the standards. For example, regulation No 28 cancelled the autonomy of steel producers to sell directly on the market. But this regulation encouraged buyers to invest in the steel industry. The purchasing managers in Automobile and Heavy Electrical said that their directors planned to buy some shares of steel companies, in order to share part of the productions.

Pricing decisions were influenced a great deal by regulations. Some regulations were in fact a result of external approval of the decisions studied. The prices of colour TVs and trucks presented in Table 7.8 and 7.9 came from two regulations(Appendix II-1, No.10[for colour TVs] and No.15[for transport vehicles]). Enterprises sold their products to their distributors and retailers according to these regulations.

Furthermore, pricing regulations and policies were specified by functional authorities. For example, the regulation of colour TV prices was issued by three authorities, the State Pricing Bureau, the Commerce Ministry and the Industrial Ministry. Each of them was

represented a specific administrative system. This regulation was distributed to distributors and retailers as well as the enterprise, because commercial activities came under the control of the State Commerce Ministry. The local pricing bureau received this regulation, too, from the State Pricing Bureau, which supervised both retailing and factory prices in the market.

Outside the above regulations, managers had to follow another kind of regulations, which draw attention to a specific campaign, the annual examination of finance, tax and prices. This campaign was organized by the Ministry of Finance, the State Taxation Bureau, and the State Pricing Bureau. In September 26th, the Beijing Pricing Bureau published its policy "Policy on Campaign of Examination of Tax, Finance and Pricing in 1988"(No. 16 in Appendix II-1), which was made according to "Circular of Policy to Clarify Boundary of Illegal Behaviour in Pricing Cases" issued by the Ministry of Finance, the State Taxation Bureau and the State Pricing Bureau. This regulation draw up a line of "legal" or "illegal" pricing behaviour. Because this regulation was specified to the functional authorities, a pricing bureau was able to change an industrial bureau's decision. The head of the director's office in Heavy Electrical said the purpose of his visit to the municipal pricing bureau was because managers wanted to know whether their case was "legal" or not in future examination campaign.

The financial manager in Machine Tool said that he had to maintain a close contact with several functional bureaux, such as finance, tax, audit and pricing, and read their official publications, in order to understand their policies.

7.6.2 Comparison with Decisions in 1985

A total of nine regulations/policies in 1985 have been studied. Table 7.24 displays the codification categories of these regulations.

Table 7.24 inserted here

The year 1985 was the time when decentralization was promoted by the central government. Compared with those in 1988, policies and regulations published in 1985 were seen to be around the core of decentralization and as a continuity of the scheme of "activating state owned enterprises" which was initiated and expressed in the regulation "**Temporary Regulation on Further Expansion of Autonomy of State-owne Industrial Enterprises**" in 1984. This consistency and continuity was presented in another important policy published in 1985 "**Temporary Regulation on Further Activating Large and Medium-sized State-owned Enterprises**". This regulation delegated more decision making powers to enterprise management in aspects of economic transactions, labour management and organizational design. State-owned enterprises were allowed to sell their part of outputs exceeding planned quotas, and fix the price. This regulation also gave enterprise managers autonomy to increase a 20 percent of prices.

In 24th January 1985, the State Pricing Bureau and State Material Supply Bureau issued "A Circular of Prices of Over-Planned Quota and Own sales of Industrial Production Materials". This regulation aimed to give enterprise more decision power in product prices, and to fix the highest prices in market transactions as well.

These regulations played two roles for enterprises. According to the MBA students' project reports during a period during 1985 and 1986, the six enterprises started to have a problem in purchases, due to the price increase of raw materials and short supply of raw materials. The prices of some metals, such as raw aluminium, raw copper, started to increase in 1985. This caused a cost increase. But the situation was not so bad as that in 1988 and early 1989.

"The markets in 1985 were not so mess as that in 1988. We could get some supplies from the ministries, bureaux. The suppliers and distributors were still disciplined by regulations"(MTPI 3)

On the other side, the enterprises, particularly those whose products were open to markets, had the benefit from their autonomy in price relaxation. An enterprise made a profit from a price increase.

In 1985, the planning authorities, such as industrial ministries, were important in regulation-making, rather than the functional authorities, such as the pricing bureau. Audio-visual, Automobile, Machine Tool, and Heavy Electrical, had the ministry standard price categories. It was easier for enterprises to get new prices than in 1988. For example, the Automobile's main product, trucks, were acknowledged as "Top Quality" by the ministry. This award led the enterprise to increase the product price by a 20 percent, according to a regulation made by the ministry in 1983. The decisions in Machine Tool and Heavy Electrical were similar. Both enterprises had some products labelled as "Credible Products" by the ministry. The quality prices were fixed according to the respective regulations.

The decision in Pharmaceutical was different. The enterprise followed market prices.

"(In 1985)We increased prices, because our price was low in markets(Question: Was there any reason to push price up, such as inflation of raw material purchasing prices?) No. That was a decision to increase prices for profits. No any increase of input costs, or such kind of reason as we got in 1988."(PHPO 3)

The pricing decision in Audio was to fix a price of a new product(Walkman), according to a regulation of new product pricing formula. This regulation was re-confirmed in 1988(See Appendix II-1, No. 20). Managers said that they had enjoyed this policy, which allowed enterprises themselves to fix the new product price in the first two year's sales.

In 1985, the annual campaign of examination was in a primary stage. Enterprise managers did not concern too much about the functional authorities, such as the pricing bureau. Managers thought that the most interference or control came from the industrial bureau, or industrial ministries. The head of the director's office in Heavy Electrical said:

"When industrial bureau said yes, often other bureaux did not often object to the decision."(HEPO 2)

7.7 Discussion and Summary

Both purchasing of inputs and product pricing, as two basic important decisions of enterprise management, were directly concerned with the shift towards market transacting under the economic reform. In purchase, the planning authorities still played a dominant role in allocation of resources and provision of information. More complexity in 1988 than in 1985 was embedded on authority's double role. Particularly the industrial bureaux turned to be involved in market transactions, in which it possessed different positions (in distribution, information, and prices) from its subordinate factories. Although managers indeed gained more autonomy in purchase decisions, they were constrained by this artificial market, in which central planning authorities controlled over information sources and resources.

In the aspect of the relations between the enterprises and their higher authorities, comparing with decisions in 1985, conflicts were increased in the later decisions. This was because relationships between enterprises and superior authorities were becoming increasingly complex. The role of local industrial bureaux had changed from the planning authorities to a double role.

In pricing decisions, an industrial bureau controlled enterprise behaviour and moderated the social impact of enterprise decisions. The conflicts embedded between enterprises and their superior authorities (the ministries and local bureaux) arise from differences in the criteria which are used to judge decision outcomes. The power of authorities comes from their administrative legitimation in regulations and procedures.

Between 1985 and 1988, official ideology changed from "restoring the price system" to "stabilizing the market and guaranteeing the planning system". The pricing authorities interpreted cases of pricing in accordance with official policies. The authorities established criteria for decisions in line with social policy. By contrast, enterprise management was

motivated by an economic rationale in pursuit of the profit targets set by responsibility contracts.

The lack of integration between different authorities caused a problem for enterprise managers who faced a number of "gods", each of which represented in a specialized function. This meant that enterprise management was caught in a web of multiple pressures. This was a more complicated and complex context in which to operate than in 1985.

Three categories of information sources, central, markets and internal, were identified. Dependence of enterprises upon the central sources is obvious through comparison of decisions in 1985 and 1988-89. In purchasing decisions, enterprise managers had to rely on the planning authorities which understood more about supplies than enterprises. Its weight remained significant in 1988(46 percent), compared with 56 percent in 1985. Economic transactions through market system increased, but planned quotas still applied to some short supply products. This gave rise to resource constraints. Enterprise managers had to seek opportunities, from both the planning systems and market.

In pricing, the weight of the central sources declined, from 50 percent in 1985 to 33 percent in 1988. The internal data were the basis of price formulation. But, information from the authorities was important for enterprise managers to plan ahead of their future operations.

Compared with decisions in 1985 and the 1988(and 1989), the information from the market was getting more and more significant. This was accompanied by the relaxation of external controls over prices. The market became an important institution for economic transactions. These changes directed managers attention to markets, where data and information were collected, in order to plan their future actions. Identified sources of information from the markets in the purchasing decision increased from 1(11 percent) to 4(36 percent), in the pricing from 1(10 percent) to 4 (31 percent).

But the role of internal data in both 1985 and 1988 seemed to be similar. Contents of internal information remained the same, focusing on operational data, such as a material inventor, a product cost or production schedules.

In the aspect of information communication, the administrative structure and personal networks or contacts were important. The former systems diffused information from a planning authority to an enterprise. This is an asymmetric information structure. The planning authorities took advantage from their dominant position in information. In the market, professional information services were still undeveloped. It is, therefore, for managers to rely on their prevailing personal networks existing between buyers and suppliers.

A comparison of regulations and policies in 1985 and 1988 and 1989 shows that the change in the reform programme in China. The year 1985 was seen as a time to introduce and penetrate decentralization by means of opening the market. Economic transactions in the market were encouraged. The planning authorities relaxed the domination of the resource allocation, for example some raw materials and most commodities, but still controlled scarce operational resources. The regulations concerned focused on the reduction of the planning quotas and relaxation of the price control. But in 1988, the central point of regulations was to re-introduce the administrative intervention again to discipline both the market and enterprises, because of the high inflation.

Furthermore, regulations are regarded as administrative instruments used by authorities to control procedures, agenda, actors involvements and formulae used in decision-making. In this point, decision-making is likely to be a rule-following process. Enterprise managers were constrained to make decisions, according to a certain process set by respective regulations. On the other hand, regulations promoted managers to act, for instances the quality price regulations, when a decision authority was delegated to enterprise

management. Both the specification and codification were important for enterprise decision-making.

The processes of decisions on purchasing and pricing seem to be different. The purchasing decisions encountered a simple process, because of an individual manager or a small group of managers involved, short process timing, few interruptions and delays, and high expertise knowledge. In some decisions, such as the purchasing of inputs in Automobile, Machine Tool, the design was missing(See Tables 7.13 and 7.18). The individual managers acted as a comprehensive decision-making. These decisions were more likely to be individual decision-making, in particularly, when the manager were delegated sufficient authority(such as budget).

The product pricing decisions had different process. Its process time could be long or short, The flow of decision activities, such as design and selection, moved smoothly. Comparison between the pricing decisions in 1985 and 1988(and 1989) indicate that the changes in the process occurred in the initiation and authorization phases. The later decisions were more oriented by the task requirement, in accordance with the profit targets, then the earlier ones. Prodcut prices without the planned control started to be directed by the market, for instance the case in Audio in 1989. The decision process was more likely to be a planning activity.

Table 7.1 Main Inputs and Outputs of the Six Enterprises

Enterprise	Main Inputs	Category of Planning(P) Non-plan(N)		Main Outputs	Category of Planning(P) Non-plan(N)	
		1985	1988		1985	1988
Audio-visual	Colour TV Tubes	P	P	Colour TV	P	P
	Integrated circuits	P	P	B & W TV	P	N
	Plastics	P	P			
	Non-ferrous products	P	P			
Automobile	Steel products	P	P	Trucks	P	p
	Rubbery products	P	P			
	Non-ferrous products	P	P			
	Diesel engines	P	P			
Machine Tools	Ferrous products	P	P	Switch gears	P	N
	Non-ferrous metals	P	P			
Heavy Electrical	Ferrous products	P	P	Electricity transforming equipment		
	Oil	P	P	standard transformers	P	P
	Silicon sheets	P	P		P	N
Pharmaceutical	Herbs	P	N	Healthy products	N	N
	Bee products	N	N	Medicines	N	N
	Sugar	P	P			
Audio	Electronic components	P	N	Radio sets	N	N
	Steel sheets	P	P	Cassette player	N	N

Table 7.2 Percentage of Planned Quota of Outputs in the Six Enterprises in 1985 and 1988.

Enterprise	Outputs		Inputs	
	1985	1988	1985	1988
Audio-visual	87%	82%	80%	60%
Automobile	84%	70%	75%	64%
Machine Tool	<20%	none	none	none
Heavy Electrical	45%	40%	40%	40%
Pharmaceutical	none	none	none	none
Audio	none	none	none	none

Table 7.3 Channels of distributing Planned Quotas(Outputs/inputs) in Audio-visual, Automobile and Heavy Electrical

Enterprise	Outputs	Inputs
Audio-visual	Orders from: 1.The Industrial Ministry 2.Local Planning Commission(LPC) 3.Beijing Electronic Industrial Bureau(BEIB)	1. Ministry trade fairs 2. Contracts of LPC 3. Contracts of BEIB
Automobile	1.Contracts with State Material Supply Bureau (SMSB) 2.Contracts with Beijing Auto-industrial Association(BAIA)	1. Trade fairs organized by SMSB 2. Contracts with BAIA
Heavy Electrical	1.Ministry's trade fairs 2.Contracts with Beijing Electricity Supply Bureau (BESB)	1. Purchase contracts with the ministry 2. Purchase contracts with Beijing Machine Manufacturing Bureau

Table 7.4 Importance of Input Sources for the Six Enterprises (sources are listed on page 159)

Enterprises	Sources					
	(1)	(2)	(3)	(4)	(5)	(6)
Audio-visual	5	4	3	2	2	1
Automobile	5	4	4	2	1	1
Machine Tool	3	1	3	3	2	2
Heavy Electrical	4	4	3	2	3	1
Pharmaceutical	1	2	3	2	2	5
Audio	1	4	4	3	2	2

Note: 5=a great deal and most important, 4= a lot and important, 3=some and normal a little and no important, 1=few 2=

Table 7.5 Decisions on Purchasing of inputs in 1988 and 1989

Enterprises	Date	Description of Decision Topics	Input Category Planned(P) Non-plan(N)
Audio-visual	Dec.87- Jan. 88	Purchasing Imported Plastic	P
Automobile	June 88	Purchasing raw materials(steel)	P
Machine Tool	April 88	Purchasing steel sheets	P
Heavy Electrical	March- April 88	Purchasing raw copper	P
Pharmaceutical	March 89	Purchasing raw honey	N
Audio	April 89	Purchasing rolling steels	P

Table 7.6: Categories of Product Price Control

Products in Case Studies	Control Systems	Approving Authority
1. Colour TV	Authorization	Ministries
2. Light trucks	Authorization	Local pricing bureau
3. Switch gear	Authorization	Local pricing bureau
4. Standard transformers	Reported	Director
5. Royal Jelly	Reported	Director
6. Radio-cassette	Reported	Director

Table 7.7. Decisions of Product pricing in 1988

Enterprises	Date	Description of Decision Topics
Audio-visual	Feb.- June,88	Pricing of a new function added to colour TV
Automobile	July- Sept.88	Increasing the price of a truck
Machine Tool	June- Augu.88	Increasing the price of a switch gear
Heavy Electrical	June- Sept.88	Increasing the price of standard electrical equipment
Pharmaceutical	Feb.- March 88	Increasing the price of Beijing Royal Jelly (a health product)
Audio	April 88	Decreasing the price of a radio

Table 7.8 Prices of Colour TV in Audio-visual (Y=yuan)

Products	Basic Price (before the decision)	Basic Prices (after the decision)	Functional marginal price ¹	Retail price
18"	1415	1750	85	1835
20"	1560	1950	60	2010
22"	1775	2150	75	2225

Note: 1. Functional marginal price means when a new function was added to colour TV sets, generally the price would increase by an additional margin. The price indicated here is an average level.

Table 7.9. Prices of Trucks in Automobile (Unit: Y=yuan)

Name of products	Basic prices (standard prices)	Floating margin ¹	Own-sales prices by the enterprise	Marginal price for each additional function ²
BJ130	16800	10%	23000	600
BJ130 A	18500	10%	25000	600

Source: Document survey (Appendix II-1, No.15)

Note: 1. Floating margin means the enterprise had autonomy to float prices by 10 percent up or down without approval of the local pricing authority. This was called "the State Guided Pricing".

2 The marginal price indicated here is an average level.

Table 7.10 Durations of Purchasing and Pricing Decisions in 1988 and 1989

Purchasing Decisions in 1988 and 1989

Enterprises	Duration of Decisions	Interruption/Delay(or Acceleration ¹) Reported
Audio-visual	One and a half month	None reported.
Automobile	A half month	None reported
Machine Tool	One and half week	None reported
Heavy Electrical	One months	About three weeks caused by the need to collect information from the ministry
Pharmaceutical	One week	Accelerated by an approach from a bee-product company
Audio	A half month	None reported

Pricing Decisions in 1988

Audio-visual	Four months	Eight weeks for the final approval industrial bureau and three ministries
Automobile	Four months	Ten weeks for the approval from the industrial and pricing bureaux
Machine Tool	Two months	1. Two weeks for the feedback of customers' response. 2. Two weeks waiting for the approval of the local pricing bureau(this was less time than usual)
Heavy Electrical	Two and a half months	1. Managers hesitating to avoid risks 2. Three weeks for determining the authorities' attitude
Pharmaceutical	One month	None reported
Audio	Three weeks	None reported

Note: 1: Acceleration compared to normal time expectation

Table 7.11 Actors and Their Levels in the Initiation Phase

Purchasing Decisions in 1988 and 1989

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External:							
Ministries	5	Yes	Yes	Yes	-	-	-
Industrial Bureau	5	-	-	-	-	-	Yes
Other enterprise	-	-	-	-	Yes	Yes	-
Internal:							
Vice-director	3	-	-	-	-	-	Yes
Purchasing dept	2	Yes	Yes	Yes	Yes	Yes	-
Production dept	2	-	-	-	-	Yes	-

Pricing decisions in 1988

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External:							
Other producers	-				Yes		
Internal:							
Vice-director (including the Chief Accountant)	3	-	-	Yes	-	-	Yes
Financial dept	2	Yes	Yes	-	Yes	Yes	-
Technical dept	2	Yes	-	-	-	-	-
Planning dept	2	-	Yes	-	-	-	-
Salesmen	0	-	-	Yes	-	-	Yes

Note: The levels of actors refer to the measures in the Aston studies:

- 5 = Above the enterprise director
- 4 = Enterprise director
- 3 = Vice-director or head of multi-departments
- 2 = Department manager
- 1 = Group leader(first-line supervisor)
- 0 = Operator

Table 7.12 Triggers for the 1988(and 1989) Decisions

Enterprises Category	Description of Triggers	Trigger
Purchasing Decisions in 1988 and 1989		
Audio-visual	Ministry's decision to reduce imported plastics, and price increase in market	Central & Market
Automobile	Trade fair organized by the State Material Bureau	Central
Machine Tool	Business Trip with a ministry's company's manager	Central
Heavy Electrical	Message from another firm in the early stage. The information from the ministry company.	Market & Central
Pharmaceutical	An offer from a bee product company & lack of production stocks	Market & Tasks
Audio	An offer from the bureau's company	Central
Total:		9
	Central planning system	5(56%)
	Markets	3(33%)
	Internal tasks	1(11%)
Pricing Decisions in 1988		
Audio-visual	Development of a new function of TV and prices in the markets	Task & market
Automobile	Cost increase of raw materials	Task
Machine Tool	Cost increase Imitating other producers behaviour	Task Markets
Heavy Electrical	A decision by a conference of producers Increase of input costs	Markets Task
Pharmaceutical	Cost increase of packaging material	Task
Audio	Decline of sales in markets High stocks of outputs caused shortage of working capital	Markets Task
Total:		10
	Central planning system	0(0%)
	Markets	4(40%)
	Internal task requirements	6(60%)

Table 7.13 Involvement of Actors and their Levels in the Design Phase

Purchasing Decisions in 1988 and 1989

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal: Purchasing dept	2	Yes	-	-	Yes	-	-

Pricing decisions in 1988

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal: Vice-director	3	-	-	-	-	-	Yes
Financial dept	2	Yes	Yes	Yes	Yes	Yes	-
Planning dept	2	-	Yes	-	-	-	-

Table 7.14 Involvement of Actors and their Levels in the Selection Phase

Purchasing Decisions in 1988 and 1989

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal: Director	4	Yes	-	Yes	-	Yes	Yes
Vice-director	3	-	-	-	Yes	-	-
Financial dept	2	Yes	-	Yes	Yes	Yes	Yes
Purchasing dept.	2	-	Yes	-	-	-	-

Pricing decisions in 1988

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal: Director	4	Yes	Yes	Yes	-	Yes	Yes
Vice-director	3	Yes	Yes	Yes	Yes	Yes	Yes
Sales dept	2	-	-	Yes	-	-	-
Financial dept	2	-	-	-	-	-	Yes
Purchasing dept	2	-	Yes	-	-	-	-

Table 7.15 Involvement of Actors and their levels in the Authorization Phase

Purchasing Decisions in 1988 and 1989

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal: Director	4	Yes	-	Yes	Yes	Yes	Yes-
Vice-director	3		Yes				

Pricing decisions in 1988

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External: Ministries	5	Yes	-	-	-	-	-
Industrial Bureau	5	Yes	Yes	Yes	-	-	-
Pricing Bureau	5	-	Yes	Yes	-	-	-
Internal: Director	4	-	-	-	Yes	Yes	-
Vice-director	3	-	-	-	-	-	Yes

Table 7.16 Purchasing and Pricing Decisions in 1985

Enterprise	Date	Topic	Product category Planned(P) Non-planned(N)
Purchasing Decisions			
Audio-visual	Nov., 85	Purchasing of several items in a trade fair	P
Automobile	Nov., 85	Purchasing of steel material in a trade fair	P
Machine Tool	June,85	Purchasing steel from the bureau	P
Heavy Electrical	April,85	Purchasing raw copper from the bureau	P
Pharmaceutical	May, 85	Purchasing raw royal jelly from a farm product trading company	N
Audio	July, 85	Purchasing rolled steels from the industrial bureau	P
Pricing Decisions			
Audio-visual	Jan.-April 85	Setting Prices of a colour TV	P
Automobile	May - July 83	Price increase of a truck	P
Machine Tool	June-July 85	Price increase of switch gear	P
Heavy Electrical	April-June 85	Setting Prices of an electrical equipment(standard transformer)	N
Pharmaceutical	Jan. 85	Price increase of Beijing Royal Jelly(a health product)	N
Audio	May-June 85	Setting prices of an audio product	P

Table 7.17 Timing: Duration, Interruption and Delay of the 1985 Decisions

Purchasing Enterprises	Duration of Decisions	Interruptions and Delays Reported
Audio-visual	One week	None reported
Automobile	Ten days	None reported
Machine Tool	Half month	None reported
Heavy Electrical	Half month	None reported
Pharmaceutical	Less than one week	None reported
Audio	One week	None reported
Pricing		
Audio-visual	About three months	Two months securing the approval of the bureaux and ministries
Automobile	Two and half months	Four weeks waiting for the approval of the ministry; and another two weeks for registration with the local pricing bureau.
Machine Tool	One and half months	One month for the approval of the industrial ministry
Heavy Electrical	Two months	Four weeks for the approval of the industrial ministry
Pharmaceutical	Half month	None reported
Audio	One and half months	One month securing the approval of the industrial bureau

Table 7.18 Involvement of Actor and their Levels

Purchasing Decisions in 1985

Initiation

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External: Ministries	5	Yes	Yes	-	-	-	-
Industrial Bureau	5	-	-	Yes	Yes	-	Yes
Internal: Purchasing dept	2	-	-	-	Yes	Yes	

Design

Internal: Purchasing dept	2	-	-	Yes	Yes	-	Yes
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Selection:

Internal: Director	4	-	-	-	-	-	-
Vice-director	3	-	-	Yes	Yes	-	Yes
Purchasing dept	2	Yes	Yes	Yes	Yes	Yes	Yes

Authorization:

Internal: Director	4	-	-	-	-	Yes	-
vice-director	3	Yes	Yes	Yes	Yes	-	Yes

Pricing decisions in 1985

Initiation

External:								
Ministries	5	Yes	Yes	Yes	Yes	-	-	
Industrial bureau	5	-	-	-	-	-	-	
Internal:								
Technical dept	2	Yes			Yes			Yes
Financial dept	2	Yes	Yes	Yes	Yes	Yes		Yes

Design

Internal:								
Vice-dra	3	Yes	-	-	Yes	-		Yes
Financial dept	2	Yes	Yes	Yes	Yes	Yes		Yes
Production dept.	2	Yes	-	-	-	-		-

Selection:

Internal:								
Director	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vice-director	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Financial dept	2	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Authorization

External:								
Ministries	5	Yes	Yes	-	-	-	-	-
Industrial bureau	5	Yes	Yes	Yes	Yes	-	-	Yes
Pricing bureau	5	-	-	-	-	-	-	Yes
Internal:								
Director	4	-	-	-	-	-	Yes	-

Table 7.19 Triggers for the 1985 Decisions

Purchasing	Description of Triggers	Trigger Category
Audio-visual	Ministry's trade fair with authorized planned quotas	Central
Automobile	Ministry's invoice giving purchasing rights in a trade fair	Central
Machine Tool	An offer from the supply department in a bureau	Central
Heavy Electrical	An offer of non-ferrous products from the bureau's supply department	Central
Pharmaceutical	Sales from the suppliers Production schedule	Market Tasks
Audio	A delivery from the industrial bureau	Central
Total		7
	Central Planning System	5(76%)
	Markets	1(14%)
	Internal Task Requirements	1(14%)
Pricing Decisions		
Audio-visual	New product development according to the Ministry's decision and standards on prices	Central
Automobile	The Ministry's regulation on Quality Price	Central
Machine Tool	Ministry's regulation on prices of some products and and cost increase of raw materials.	Central Task
Heavy Electrical	Ministry's regulation of floating prices New product development	Central Task
Pharmaceutical	Good market sales and following behaviour of other producers	Market
Audio	Launching a new model and with reference to market demand	Market
Total		8
	Central Planning System	4(50%)
	Markets	2(25%)
	Internal Task Requirements	2(25%)

Table 7.20 Information Sources in Purchasing Decisions in 1988 and 1989

Enterprise	Description of information Utilization	Category of source
Audio-visual	Information collected in the ministry's trade fair Managers noticed the price increase in the market	Central Markets
Automobile	Planned quota issued by the ministry Purchasing according to annual purchase plan	Central Internal
Machine Tool	Understanding short supply of ferrous metals in the market through a business trip with a ministry company The Purchasing manager's visit to material markets	Central Markets
Heavy Electrical	A message from other factory Staff's visits to the ministry foreign company	Markets Central
Pharmaceutical	Data of inventory stock of raw materials A message from a bee-product company to offer a supply	Internal Markets
Audio	A message from the bureau to offer a supply	Central
Total		11
	Central Planning System	5 (46%)
	Markets	4 (36%)
	Internal Data Sources	2 (18%)

Table 7.21 Information Sources in Pricing Decisions in 1988

Enterprises	Description of Information Utilization	Category of source
Audio-visual	Standard prices fixed by the ministry Product costs	Central Internal
Automobile	Profit margin regulated by the pricing bureau and Product costs	Central Internal
Machine Tool	Reports of the market prices Product cost and profits	Market Internal
Heavy Electrical	Agreed prices among producers in a conference Profit situation and input costs Attitude of the bureaux	Markets Internal Central
Pharmaceutical	Costs of package materials Prices of other products in markets	Internal Markets
Audio	Prices suggested by distributors Cost of output stocks	Markets Internal
Total		13
	Central Planning System	3(23%)
	Markets	4(31%)
	Internal Data Source	6(46%)

Table 7.22 Information Sources in Decisions in 1985

Enterprises	Description of Information Utilization	Category of source
Purchasing Decisions		
Audio-visual	Collection of information in the trade fair Annual production plan and purchasing plan	Central Internal
Automobile	Collection of information in the trade fair Annual purchasing plan	Central Internal
Machine Tool	Details of a delivery from the bureau	Central
Heavy Electrical	Details of a delivery from the bureau	Central
Pharmaceutical	Suppliers personal visits Production plan	Markets Internal
Audio	Message of supply from the bureau	Central
Total		9
	Central Planning System	5(56%)
	Markets	1(11%)
	Internal Data Source	3(33%)
Pricing Decisions		
Audio-visual	Standard pricing category of the ministry Product cost	Central Internal
Automobile	Quality prices issued by the ministry	Central
Machine Tool	The ministry's pricing category Product cost and input cost	Central Internal
Heavy Electrical	The ministry's pricing category Product cost	Central Internal
Pharmaceutical	Prices in markets	Market
Audio	Product costs Ministry's regulation on pricing formula	Internal Central
Total		10
	Central Planning System	5(50%)
	Markets	1(10%)
	Internal Data Source	4(40%)

Table 7.23 Codification of Regulations on Pricing and Purchasing From 1st January 1988 to 23rd March 1989

Name of Authority (publisher)	Number of Regulations	Codification			
		1	2	3	4
CCCPC	2	2	-	-	-
State Council(SC)	12	5	4	3	-
Ministries	9	-	2	3	4
Beijing government	2	-	-	2	-
Beijing Pricing Bureau	1	-	-	-	4

Source: Appendix II-1

Note: Degree of codification

1=general statements of policy or target setting, 2=specification of actors or authorities

3=pre-determining formula or implementing standards, 4=pre-determining precise and comprehensive standards, such as the maxim ceiling prices

Table 7.24 Codifications of Regulations Related to Purchasing and Pricing in 1985.

Name of Authority (publisher)	Number of Regulations	Codification			
		1	2	3	4
State Council(SC)	2	-	1	1	-
Ministries	7	-	-	4	3
Beijing government	-	-	-	-	-
Beijing Pricing Bureau	-	-	-	-	-

Note: More details see Appendix II-2.

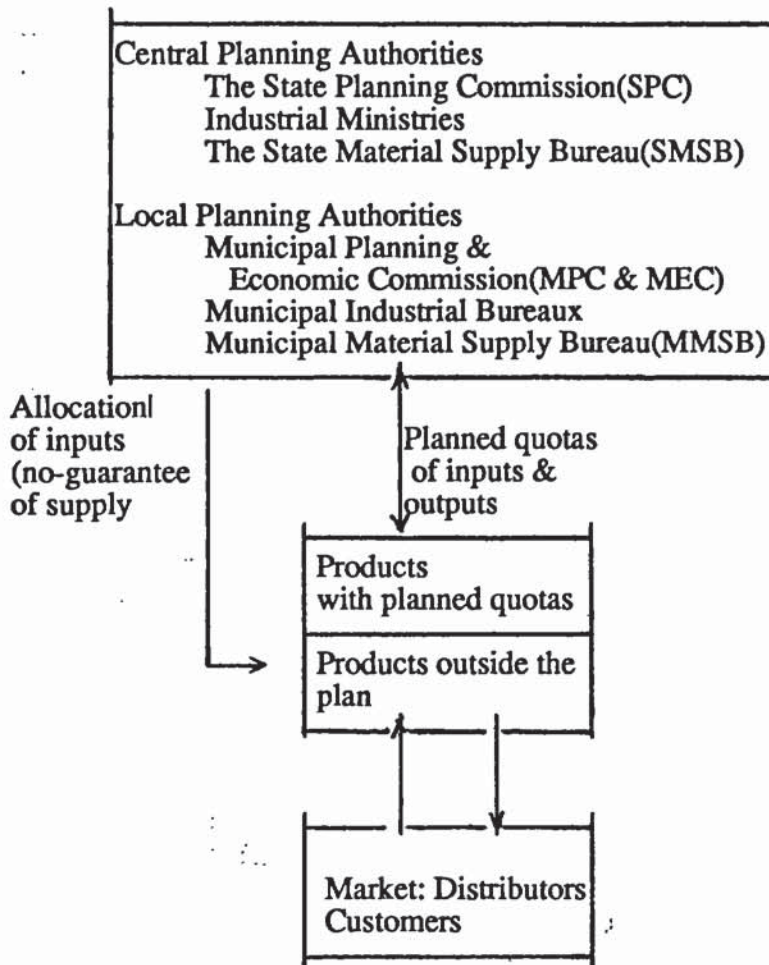


Figure 7.1 Relationships between planned products, planned quotas and products outside the plan

Notes

- 1 Every year in September or October, the State Council would send a circular of the annual examination on financial, pricing, tax (nianzhong caiwu, wujia, shuishou da jiancha). In this campaign, three ministries organized scheme, the Financial Treasury Ministry, the State Pricing Bureau and the State Tax Bureau, each of which designed its own policy and regulations. For an enterprise, there were three steps, the self-examination (zicha) within the organization itself, mutual examination (hucha) between enterprises within a same bureau, and sample examination (choucha) by a work team from functional bureaux. The purpose of the campaign was to find out illegal cases happened in the year, in areas of pricing, financial budgets and tax performance. In 1988 the target of the campaign was to punish self-increasing prices.
- 2 The Ministry of Machine & Electronic Industry (MMEI) was formed in 1987 from two ministries, the Ministry of Machine Manufacturing (MMM) and the Ministry of Electronic (ME). This merge happened during the research period. It is easy to cause confusion for readers. For Audio-visual and Audio factories, the ministry was changed from ME to MMEI in 1987. For the Electric-equipment and Machine Tool Factories

the ministry authority was changed from Ministry of Machine Manufacturing(MMM) to MMEI

- 3 In one case(the price change in Automobile), a suitable decision had only been made at an earlier date, summer 1983.
- 4 Audio-visual managed a number of coupons in its self-sales, because shortage of colour TV was in market . With a coupon, a buyer could buy a set of colour TV from the enterprise directly with planned prices. This way was used as an instrument to do favour for authorities, suppliers in social action by the enterprise managers.
- 5 In 1985 and 1987, MBA students in the China-EEC Management Institute did market surveys, as their projects of the courses, for all six enterprises.

CHAPTER 8 RECRUITMENT OF LABOUR FORCE

8.1 Environmental Conditions

In Chinese state-owned enterprises, most labour consists of permanent - life-long - employees. There are two employment systems. Workers are in the "labour employment" system. The clerical and managerial staff are staff employees, whose appointment, salaries and promotions are determined by the "personnel system". The labour employment system has been reformed since the middle of the 1980s. Some new forms of employment have been developed, such as the contractual system. But there has been little change in the personnel system.

8.1.1 Labour Employment System

In the early 1950s, the government applied the "fixed" employment system (**guding gong zhidu**) to state-owned enterprises. The term "fixed" refers to a condition in which an enterprise received a fixed quota of labour allocated from labour bureau, and a worker (or an employee) was permanently attached to the organization (employer). The World Bank (1985:131) reported:

"China's system of labor allocation allows individual employers and employees uniquely little freedom of choice - far less even than in the Soviet Union and Eastern Europe. Until recently, all young people were administratively assigned to particular jobs - college graduates by the central government, secondary school graduates by local labour bureaux - with little attention to their preferences or the preferences of employers. The assignment was typically for life: with few exceptions (generally dictated from above rather than a result of individual or employer preferences). Workers could not move from one enterprise to another. Enterprises, moreover, were not permitted to discharge workers, even if they had more employees than they needed, and even if particular employees were habitually absent, lazy, or negligent."

As early as the 1950s the central government expected to adapt a flexible employment system. In 1956 a delegation visited the Soviet Union to learn about the labour management there. Based on this visit, a proposal for a "contractual labour system" (**hetong gong zhidu**) was put forward. But this initiative was interrupted by the Great Leap Forward.

In the early 1960s Liu Shaoqi proposed "Two Labour Systems" (coexistence of fixed and temporary labour systems) and a principle of "More Temporary Labours, Less Fixed Labours" (**duoyong linshigong, shaoyong gudinggong**). This experiment was terminated by the Culture Revolution.

In 1980 the CPC organized a conference and discussed the reform in labour employment. The State Council published "Decisions of Open Ways Activating Economics and Resolving Employment Problem in Cities & Towns" (**guanyu guangkai menlu gaohuo jingji jiejie chengzhen jiuje wenti de jueding**). The children of employees in enterprises were allowed to replace their parents(son succeeding the father's job), or to work in labour service companies organized by the enterprises.

These programmes had little effect on improvement of labour mobilization and productivity. The wage budget became a heavy burden for the government. Low labour productivity and waste of human resources coexisted with a short supply of qualified skilled labour. An enterprise was responsible for the whole life of its employees, not only including salaries and wages, but accommodation and housing, social welfare and medicine as well, even their children's education. In other words, an enterprise in China is seen as a small community or a village. Production is only one task, among a wide range of social and political obligations. Huang and Yan noted(1988:148):

"China's social security system is actually not a 'social' system. There is no national system covering retirement pensions or medical care. Instead, China's social security system is largely realized by means of employment. Anyone will have welfare benefits and security so long as he or she gets a job....The most serious problem in the area of welfare and insurance today is that enterprises have overspent on workers' retirement pensions and medical care fees"

The reform of the employment system has to cope with these serious and comprehensive problems which contributed to imbalance in the whole social structure . Compared with other reform schemes, progress in the employment systems was slow and unsatisfactory. The World Bank noted(1985: 131):

"These and other reforms, though beneficial, have not basically changed the system. The unified assignment scheme is still used for virtually all those with any post-secondary training and for some skilled manual workers. Enterprises can seldom hire badly needed skilled workers from other enterprises where their skills may be less valuable; they are still obliged by the labor bureaux to accept "packages" containing both wanted and unwanted recruits; they cannot discharge redundant workers; and they have been allowed to dismiss unsatisfactory workers only in a few instances, involving extreme absenteeism or malfeasance. It appears imperative to consider further, more radical changes"

Even after the Director Responsibility System was introduced during 1985 and 1987, this condition was little changed, although enterprise directors were delegated powers to manage workers and staff, such as dismissal and recruitment according to production requirements rather than the commands from the labour authorities. A difficulty was that any decision on hiring or firing a worker or staff had to be authorized by respective authorities, such as the local labour bureau. Directors carefully avoided firing a worker, in order to maintain harmony in human relations.

In 1986 the State Council published a set of four regulations. These regulations delegated the following decision authorities to the enterprise managers:

1. The regulations encouraged the "open" recruitment of new employees. At the same time, the tradition of "son succeeding to his father's job" was stopped.
2. The new recruitment was based on the contractual system (**hetong zhi**), rather than the permanent system. An employer and an employee signed a contract. The labour authorities were not responsible for allocating workers anymore. Labour mobilization was to be realized according to choices of the employer and employees.
3. The regulations encouraged training of employees before they took up the posts, in order to improve qualification of labour skills.
4. Enterprise directors were accorded more power in labour management, particularly in the hiring and dismissal of workers.

In order to prevent any discrimination, the regulations contained detailed articles stating clearly that the welfare, medicine fees and other fringe benefits of contractual labour should be the same as for fixed labour.

The total number of people in the contractual system was not high. By the end of 1987, about 7.76 million contractual workers were registered in China (Distribution System

Department of the State Commission of Economic System Reform, 1989: 545). In the Beijing area, the number of contractual workers was 42,000 by September 1988, compared with 1.96 million permanent workers(Gong, Shuji, 1988: 36-39).

The Beijing local government drew attention to the labour system reform after 1987 when the contractual system was introduced. A major problem in human resource management in enterprises, according to a local economic commission's survey, was low productivity, which was perceived to be a result of overmanning(Beijing Municipal Economic Commission[BMEC], 1988: 21). This phenomenon was described by the local government as "five people were doing the jobs of three". The purpose of the further reform, provoked by the ideological policy, was to create a context in which "three people were doing the job of five"(Chen,Xitong, 1988).

Overmanning and low productivity were not new problems. In 1987, the Beijing government attempted to increase the efficiency of productivity, as part of the Contractual Responsibility Programme. The contractual responsibility system in Beijing was called "Two Guarantees and One Linkage"**(liangbao yigua)**(See Chapters 4 and 6). The contract linked the increase of the employees' wages and bonuses to the profit growth rate.

Under the contractual system, the local financial and labour bureaux, on behalf of the local government, checked up the total salaries budget in an enterprise, according to its current labour force. Then, these two bureaux, together with the industrial bureau, fixed the total wage budget as the premium of a contract. This budget should not be changed during a contractual term(often four years). During the term, the enterprise was allowed to recruit new employees if it needed to. But there was no any increase in the wage budget. If the total number of employees was reduced, the bureaux did not reduce the wage budget. This method was called "Increasing labour without increasing wages, decreasing labour without decreasing wages"**(zenren buzen gongzi, jianren bujian gongzi)**.

The intention of these mechanisms was to encourage directors to use labour more efficiently and more economically than before, and to reduce the total employment in industrial enterprises, in order to increase labour productivity. But the expansion of autonomy in labour management did not achieve the expected results. According to a survey done by BMEC(the Beijing Municipal Economic Commission), productive working hours in most enterprises were less than 50% of total labour hours. Even in some joint venture companies, such as the Beijing Jeep Company, average productive time was only 5.5 hour per person per day(Beijing Municipal Economic Commission, 1988). Productive time in state owned enterprises was, however, lower still - for example in Automobile, the average level was 1.7 hours a day. In other words, a worker stayed in the enterprise for 8 hours a day, but 6.3 hours were wasted, and he or she only did 1.7 hours of productive work, while the enterprise paid the worker for 8 hours.

There were further problems in the clerical/staff system. This system belongs to the personal management(**renshi guanli**) as distinct from labour management(**laodong guanli**).

8.1.2 Personnel Employment System

In China, cadres(**gan bu**) refer to staff in offices. This title includes secretaries, managers, trade union staff, technicians/engineers and other clerical employees. Cadres are recruited from university graduates(including colleges and institutes), and resigned military officials. Cadres were supposed to do management jobs, or clerical jobs, while workers do physical tasks.

According to regulations, a worker should not undertake a clerical post, such as a managerial or technical job, unless the person was recognized in terms of an outstanding contribution and knowledge. The appointment of a worker to a personnel post needs a formal authorization from the personnel bureau . But in reality, it was common in

enterprises to use workers to do some official tasks, such as planning and statistics, when there was a shortage of qualified managerial staff.

A problem in the implementation of the contractual system was that more and more workers were working in offices or supportive posts, such as transportation, service, maintenance and office work, while the number of direct production workers declined. There was no incentive for workers in workshops, because of poor working conditions and low payment there.

There was another factor which caused the expansion of administrative staff. It was due to the phenomenon of "corresponding management", which has been described in Chapter 6. In all six enterprises, it was reported that some departments or offices were established, not according to tasks or function of business, but to commands from the enterprises' superior authorities. For example, in 1985, the Municipal Economic Commission ordered enterprises to set up a Total Quality Control Office (TQC office), in order to improve product quality. The directors were instructed to assume direct leadership of that office. A failure to implement this instruction would be condemned as poor quality management.

All six enterprises established their TQC offices. This structural arrangement was especially convenient for the industrial bureaux and the economic commission to supervise enterprise quality management. When some persons from the bureau's TQC office visited an enterprise, they could receive a reception from the enterprise TQC office. Furthermore, the instructions regarding quality control were transmitted directly from the quality department of the bureau or economic commission to the corresponding department within an enterprise. The department had to report its work on quality control directly to *the* same departments in the higher authorities. It was not surprising that the staff in enterprise departments increased under this system.

8.2 Decisions on Labour Recruitment

8.2.1 Labour Management in the Six Enterprises

Investigation in the six enterprises indicates that from 1987 new workers recruited by enterprises were placed in the contractual system. After the implementation of the contractual system in 1987, a total wage budget was fixed by local authorities in these six enterprises. This was done by three bureaux (Table 8. 1.)

Table 8.1 inserted here

Without the further authorization by the labour and financial bureaux, an enterprise could not change its total wage budget. In other words, the local authorities controlled the wage budget, while enterprise management determined the utilization of the labour force and allocated the fixed budget within the organization.

To fix the total wage budget did not mean there was no possibility of increasing personal income. There are three ways for enterprise managers to increase their employees' income in such conditions. One is to reduce the size of the labour force without increasing the budget. Average personal income would better be increased. Another way was to increase profits, so that the wage budget next year could go up by 0.7% when the profits were going up by 1%. The third way is more complicated. The enterprise could employ university graduates or former military personnel, whose salaries are allocated from the local personnel bureau.

By the end of 1988, the labour management system in the six enterprises was characterized by a complex of different employment systems. Table 8.2 summarizes these.

Table 8.2 inserted here

On signing contracts with three bureaux all enterprises were reported to have stopped increasing the size of their labour forces. The directors encouraged workers to leave, particularly those who had low technical qualifications, or ordinary and auxiliary workers. Labour recruitment occurred only when there was a need to fill vacancies when some employees left the organization. In fact, managers faced a dilemma. They welcomed the policy on labour reform from the government and the opportunity to get rid of redundant labour. At the same time, they faced shortages of qualified or high skilled employees. The labour manager in Audio said:

"Senior workers have retired, while young people were not good enough to have the necessary technical skills, such as die-making or electrical engineering. This problem has existed for a number of years. Although the bureau asked enterprises to select workers from the redundant surplus after the Optimizing campaign, these people have either been away for too long or are too old to retrain. It is a headache that skilled and young workers don't like to work in state-owned enterprises. The wages are too low, welfare is not good, and there is not enough accommodation (housing) for them. But we can't let them go. We encourage useless people to leave, not skilled ones" (ADRL 3)

Moreover, the managers were unwilling to jeopardize the quality of human relations in enterprises. Sacking a worker did not only mean cutting off his or her economic income, but the person's social life and other welfare as well. For example, the personnel manager in Audio said that some workers could not be allowed to leave even if they wished, because they occupied the accommodation flats owned by the enterprise. Unless they returned these flats, they must stay in the organization. What the mobilization resulted in was a shift of their jobs from one workshop to another. This problem was common in other enterprises as well. A manager in Machine Tool said that he was not prepared to leave, because he got a two-room flat from the enterprise. And he was not interested in increasing his performance. What he expected to do was to keep his post in the department as before.(MTRL 4).

8.2.2 Decisions in Labour Recruitment in 1988 and 1989

Six decisions concerned with Labour Recruitment in the six enterprise were studied (Table 8.3)

Table 8.3 inserted here

8.3 The Decision Processes

8.3.1 Timing: Duration, Delays and Interruption (or Acceleration)

The timing of the decisions in the labour recruitment during 1988 and 1989 are presented in Table 8.4.

Table 8.4 inserted here

It was reported that the enterprise directors in Audio-visual and Heavy Electrical ordered a halt to the hiring of new employees, unless there were vacancies caused by job quitting. The reason for this command was because the directors intended to save the wage budgets. The labour managers in these enterprises said that their tasks had changed from drawing up an annual labour recruitment plan which was then submitted to the industrial bureau to detecting job-filling and seeking suitable persons for production posts.

In the cases of Automobile, Machine Tool, Pharmaceutical and Audio, the recruitment of the labour force was still a routine task as part of the annual operational plans. Plans of this kind were drawn up each year during October to December. In January or February, the

labour development plan was reported to the industrial bureau, which collected all plans from its subordinate enterprises, then setting its own labour plan to the local labour bureau. Later an enterprise would receive a distribution memo from the industrial bureau which gave the enterprise further details of university graduate allocation. Although managers signed contracts and the wage budget was fixed, directors in these enterprises put the priority of developing a highly qualified labour team before that of saving money to increase employees' income. They preferred to employ graduates from colleges or technical school. Decisions within enterprises on labour recruitment were the responsibility of labour managers and the personnel director. The plan was based on labour mobilization for the current year and the technological development plan from the technical manager.

Some events were reported to interrupt or delay the decision processes. Although the managers in principle possessed the authority to decide labour recruitment, the bureaux actively participated in the processes too. In the case of Automobile¹, the personnel department in the bureau waited the enterprise to accept an extra graduate. The manager in Machine Tool had to persuade the bureau to allocate some graduates from a technical school, which was owned by the bureau. In Audio, experience was different. The bureau allocated graduates from the enterprise training school, because of short supply of qualified personnel. Some bargaining and negotiation took place between enterprises and their bureaux. This will be discussed in section 8.4.

The case in Heavy Electrical was quite different. The labour manager spent some time to seek a suitable person for the transport department, not in labour market, but through the enterprise's networks.

8.3.2 Phases, Actor Involvements and Levels(1988 and 1989)

Initiation and Triggers.

Actors involved in the initiation phase are summarized in the Table 8.5.

Table 8.5 inserted here

In Audio-visual, Machine Tool and Heavy Electrical, the initiators were workshop managers, who applied for the permission to fill vacancies caused by job-leaving. In these decisions, workshop managers sent their application reports to labour managers through formal procedures. In Automobile and Audio, labour managers made plans according to their long-term plans or strategies. The situation in Pharmaceutical was slightly different. The labour manager said that the recruitment was done under the instruction of the director herself. This command was reported to be based on a plan from a research institute. Both technical manager and director were identified as the actors here.

The triggers raising issues are depicted in the Table 8.6

Table 8.6 inserted here

Although the task requirements were recognized as triggers, managers said that there were other events which forced them to consider recruitment of labour. For example, the director in Pharmaceutical preferred to recruit university graduates, because the personnel bureau agreed to increase the wage budget for this category of employee. In the case of Heavy

Electrical, an important even to trigger the decision was that a candidate was recommended through personal relations. In general, however, the filling of vacancies in relation to operational tasks were the principal triggers for recruitment decisions.

Design

The actors in the design phase are presented in Table 8.7

Table 8.7 inserted here

The design task was to outline number of employees to be hired and their future posts. This task was done normally by the labour or personnel managers. In some enterprises such as Automobile and Pharmaceutical, technical managers participated and proposed a plan. Workshop managers were involved in the decisions in Machine Tool and Audio. They only expressed their proposal through work meetings with the personnel managers.

In the design phase, labour managers acted quite independently. As the labour manager in Machine Tool said:

"Our principle is to satisfy production needs, but at the same time to control the total size of the labour force. In general, workshop managers like to have more workers than they actually need. So we did not listen to workshop managers. We have our own rules"(MTLR 3)

Selection

Selection of possible alternatives in the recruitment plan took place between the labour manager and respective director. In some cases, the bureau influenced indirectly the selection result. Table 8.8 presents the actors involved in the selection phase.

Table 8.8 inserted here

The involvement of the industrial bureaux was found in the cases of Automobile, Machine Tool, Pharmaceutical and Audio. The first three of these cases showed that the bureaux collected enterprise proposals, then feedback information and comments. In other words, communication between the enterprises and their bureaux took place in the selection phase. The bureaux gave the enterprises data about university/college graduates and other information. Labour managers possibly changed their plans at this point. The case in Audio was quite different. The bureau wanted that and other enterprise to take some graduates from the technical school, and so entered into discussion on their allocation between the firms.

Authorization

Final approval often came from respective managers, or directors, depending on the size of recruitment. Table 8.9 indicates the actors in the authorization phase.

Table 8.9 inserted here

In some cases, such as Audio-visual, the labour manager approved the decision, "because it's a normal labour management task, not involving any increase in the total size of labour force"(ATRL 2). The decisions in Machine Tool and Heavy Electrical were authorized by the vice directors. Managers explained that these decisions were delegated to the labour department. But after the campaign of Optimizing Labour Organization in 1988, the

directors intended to tighten control over labour recruitment. They seemed to prefer handing the cases over to the vice directors.

The decisions in Automobile, Pharmaceutical and Audio increased total size of labour force in these enterprises. Directors personally controlled the authorization. But in no case was the need to have authorization from superior bureaux reported.

8.3.3 Decisions in 1985

Six decisions in labour recruitment in 1985 were studied. The contents of these decisions are summarized in the Table 8.10.

Table 8.10 inserted here

The context of these decisions in 1985 was very different from that in 1988 and 1989. The year 1985 was the time when the director responsibility system was implemented. Managers started to have some authority in labour management, but the recruitment of labour was an issue managed by government agencies. The total size of employment was determined by the respective bureaux, rather than by enterprise directors. In other words, any labour mobilization, dismissal or recruitment, was strictly controlled by the planning authorities. The labour and personnel bureau were in charge of labour management. Even job-quitting had to be authorized by the authorities.

8.3.4 Processes in the 1985 Decisions

Timing: Duration, Interruption and Delays

The timing of these decisions in 1985 are depicted in the Table 8.11.

Table 8.11 inserted here

Since the recruitment of labour was treated as a routine job, these decisions were seen as plans, which were drawn by enterprises, then sent to the bureaux, and waited for the final results. The final approval often took between one and two months.

Actors Involvements and Decision Phases

Table 8.12 summarizes actors involved in the 1985 decisions and decision levels.

Table 8.12 inserted here

After the final approval from the bureaux, enterprises received a planned quota. This planned quota was used in Labour Recruitment.

The triggers stimulating decisions in 1985 are presented in the Table 8.13.

Table 8.13 inserted here

Compared with decisions in 1988 and 1989, more triggers came from central planning authorities in 1984 and 1986. This was linked to the planning authorities' control over human resources. The labour manager in Pharmaceutical said:

"In October every year (before 1985), the bureau sent a form to enterprises, asking us to report how many university graduates we planned to hire. The allocation of university graduates was done by the municipal labour bureau. The industrial bureau collected data from each of subordinate enterprises, then summarized and reported to the labour bureau. In February, we were informed about the details of allocation, such as how many graduates we would receive, their subjects, and so on. We did not have any choice in their selection. We only received them. Everything was arranged by the bureaux" (PHRL 1)

8.4 Interactions with Authorities

8.4.1 Significance of Authorities in the Decisions (1988 and 1989)

The involvement of bureaux in labour recruitment decisions has been discussed in the previous section. Although the decisions did not need authorization from the bureaux, the influences of the authorities were still obvious in the process.

In Automobile the personnel manager said the original recruitment plan was to apply for 20 university graduates when they sent it to the industrial bureau. The final result was employment of 21, an extra one introduced by the personnel manager in the bureau, because few enterprises were willing to hire university graduates who had little industrial special knowledge. Although the extra one had little industrial background, the enterprise decided to accept him, in order to maintain a good relationship with the bureau:

"We had a very close relationship. Sometimes, we may need their help. Although we did not need the bureau's approval in labour recruitment, there are still a lot of issues which ought to be dealt with by the bureau's help." (ATRL No 1)

For Audio, the problem was derived from the regulations made by the local labour bureau, which prohibited enterprises hiring young graduates from outside the district areas. Audio recruited young trainees every year in the local district for its own technical school. The graduates were booked in advance by other enterprises and the industrial bureau. The advantage for the enterprise was that it was able to select the best among these graduates and to request some financial sponsorship from the bureau. In other words, the enterprise developed its own independent human resource, which provided qualified young skilled persons.

In the case of Machine Tool, the bureau controlled over the allocation of a technical school's graduates. There was a shortage of young technical labour for all enterprises. The labour manager in the enterprise was told to wait until the next year. With her personal relationship to the school director, she succeeded in bypassing the bureau's control.

"The head of the school promised me to allocate at least two graduates for my enterprise. It was better than nothing, although we planned to recruit five."(MTRL 2)

In Audio-visual and Heavy Electrical, the labour managers enjoyed autonomy in filling job vacancies, which bypassed the control of both the industrial bureau and local labour bureau in 1988. In both cases, final approval was delegated to enterprise managers.

8.4.2 Comparison with Decisions in 1985

In the recruitment of labour, managers in 1988 enjoyed more autonomy than in 1985.

Audio-visual: In 1985, we did not have autonomy to select candidates. And the filling of job vacancies needed the authorization of the bureau. Now we could manage labour hiring by ourselves. The bureau often does nothing to take care of you. But we still get regulations or policies on work protection, security, welfare, or similar issues.(AVRL 2)

Automobile:The difference was that in 1985 we were not satisfied with the people allocated to us by the bureau, sometimes, in terms of quality or quantity... Now the bureau encourages us to hire more. If we don't need them, we could say no.(ATRL 1) In design and plan, the changes were few, the same procedure, the same process, but the final approval was within the enterprise now. Still, we can't contact the labour bureau

without the permission of the industrial bureau. A bureau only talks to another bureau, not to an enterprise.(ATRL 2)

Machine Tool: In the procedure, I say, within the enterprise, it was almost the same as before. A plan was made at the end of each year, then reported to the bureau. Later, we got feedback, and we selected graduates. The bureau did not say how many we should receive. The bureau did not actually allocate any people to the enterprises. Unless there was a shortage of technically trained people. Now directors have more power than in 1985(MTRL 2) When I decided to accept some young trainees, I didn't consider the bureau. What I was concerned about was whether we needed them, whether they needed accommodation or other social welfare requests.... In 1985, no matter whether you wanted or not, you had to accept the persons allocated to you from the bureau(MTRL 1)

Heavy Electrical: Since 1987 we have stopped hiring young workers. One reason is the constraints from local labour bureau, which often provided more than we needed. If we didn't agree, they would curtail our recruitment. Another reason was that the enterprise had to satisfy social welfare, such as housing, to fixed employees. In this case, we told the candidate that we were not able to provide him with accommodation. He agreed not to leave within seven years, and not to request accommodation... If we employed young people from the local district, there were a lot of problems.(HERL 1) Compared with conditions in 1985, enterprises have gained more autonomy in labour management. We could let people leave and come in. It's more flexible than in 1985(HERL 2)

Pharmaceutical: For employment of university graduates, the process was quite similar to 1985. But we have more choices. Sometimes, some students came here to introduce themselves to us. It is often no problem, if we could hire whom we wanted, through interviewing. That was impossible in 1985.(PHRL 1)

Audio: Now it is a contractual system. The bureau said nothing about our employment or labour system. That is totally the director's decision to decide whether we need more workers or not, because our wage budget is there. But we have to follow the labour bureau's request. Still, we got more autonomy than in 1985(ADRL 1) I think the bureau leaves all difficulties of labour management to the enterprises, while they have control over the general conditions. (ADRL 2)

These words indicate that conflicts between enterprises and authorities have been turned to local functional bureaux, such as the local labour bureau, while the administrative interventions of the industrial bureaux were reduced.

8.5 Information and Decision-making

8.5.1 The Role of Information in Decisions in 1988 and 1989

For decisions on labour recruitment, the major information source for enterprises was internal data, such as the number of production posts needed, human resource development plans and task profiles. These data provided the labour managers with a basic outline for

human resource management. A more complicated situation was the recruitment of university graduates. Personnel managers were given the personal data and availability of university graduates. In other words, the high reliance on internal data was because the enterprise knew little about the labour supplies (university graduates) from the central planning system.

Audio-visual: Because every removal or change in a job must be registered, we fully understand the job profiles. Our understanding of posts was helped by the Optimizing Labour Combination which required workshops and departments to keep track of their personnel data. These data gave us a clear picture of the labour force in post, and where they were needed. That is the basis of our decisions.(AVRL 2)

Automobile: We make a human development plan every year, according to the business strategy. In this case, the recruitment of the graduates was a cooperative programme started in 1985. We supported the university financially and they provided us with graduates. This recruitment is a general plan. These graduates must be working within workshops and departments for one year, then we could allocate them to each post.(ATRL 1)

Machine Tool: These five posts were vacancies fixed in the Optimizing Labour Combination. Before the campaign, we knew there was a need for machine operators in the workshop. This was a problem for some time.(MTRL 2).

Heavy Electrical: This vacancy was caused by a lorry driver leaving our enterprise, The production director and personnel director decided that this job should be filled, because of heavy transportation tasks. We searched for a suitable candidate.... A director of another enterprise introduced this person, so we decided to have a look.(HERL 2)

Pharmaceutical: This was based on the director's idea. One day she said we needed more technical university graduates....Later the Chief Engineer drew a plan. This kind of recruitment plan we did every year.(PHRL 1)

Audio: We need some young workers in the die making workshop and electrical maintenance jobs. These kind of workers are in short supply as we knew it was difficult to find a skilled worker.... In fact we only needed half of these 40 trainees. The other half were booked by other factories.(ADRL 2)

For job vacancies, the labour managers seemed to be aware of information through personal communication rather than the labour market. The direct personal contact between the candidates and the labour managers encouraged the mutual understanding of each other.

Labour managers and personnel managers formed their own network to exchange information on labour supplies, as in the case of Audio. The bureaux also established a network of communication. For example, the Municipal Machine Manufacturing Bureau

(BMMMM) asked all subordinate enterprises to report data of redundant labour. Then in May 1989, the bureau distributed a form with details of specialization and availability of labour in each subordinate enterprise and encouraged the mobilization of workers among subordinate enterprises.

These points are summarized and classified in Table 8. 14 for identification of information sources.

Table 8.14 inserted here

Labour supply information was partly obtained through the market network. The personal network among labour managers from different enterprises provided an important communication channel. Here, quality of personal relations was regarded as an important indicator in information communication. Recommendation of a candidate through personal relations(**guanxi**) was recognized to be more reliable than information from the labour market². The manager in Heavy Electrical said:

"We seldom contacted the local labour market. As a labour manager I know that highly qualified people, such as skilled workers, do not go there to find jobs. These people are tied strongly by the organization not allowing them to leave. If they could leave, it needs strong personal influence. In this case(labour recruitment), the reason for the driver wanting to take our post was because he wanted to find an organization close to his family. Through the introduction of a factory director(Beijing Chain Manufacturing Mills), we understood that his performance was very good. Another reason was the director had a long term relationship with us. We trust each other. So that we believed what he told us."(HERL 2)

The labour manager in Audio-visual said that the role of personal relationship in labour introduction contributed to the understanding of the candidate. It was particularly important for future management. She said:

"If a person is introduced by your acquaintance, a friend or other relatives who you trust or know well, it would be better for future management. The introducer would later play a role to help you to supervise the person's behaviour. And often the

person will be doing well, because he/she thinks about your relations with his/her introducer."(AVRL 2)

In the decisions on recruiting school graduates, the bureau, particularly the local labour bureau, understood more than the enterprise managers. Sometimes, individual university graduates came to the enterprises seeking job vacancies. In general, labour managers did not meet these candidates until the last minute. Only the case in Audio was different, because the technical school was located in the enterprise's local district. The enterprise had priority in choosing the best students.

8.5.2 Comparison with the 1985 Decisions

Information sources for the decisions in 1984 and 1986 are summarized in Table 8.15.

Table 8.15 inserted here

Internal data, such as the technical qualification of workers, number of employees, and production facilities, were significant in drawing up a recruitment plan. Although managers indicated that they received an instruction from the bureau for the allocation of university graduates, details of their subjects and availability were little known. Sometimes, managers were aware of the supply of human resources through their own network and feedback by the bureau.

"What we knew(in 1985) was a message from the bureau, saying we could apply for recruitment of university graduates . We drew up a plan according to our demand. Whether we could get what we needed or who was allocated to us was not known till February next year when the bureau fed back the result."(MTRL 2)

"The most important information came from our internal data. We were concerned with what we required. The bureau often gave us persons who were not suitable for our enterprises. But we had to accept them . What we could do was to give them training at a later time."(PHRL 2)

The managers in Audio said that enterprises sometimes communicated with each other in exchange of information, such as what kind of persons were needed. This network provided the manager with an important basis for drawing up a recruiting plan. But none of labour managers in the interviews mentioned that they sought information in the market. In fact, there was no labour market in 1985.

"The reason why we recruited trainees in lathe operating (in 1984) was the short supply of this kind of labour. We felt that it was urgent to train our own qualified workers. Other enterprises thought the same way. We often exchanged our ideas in working meetings, conferences, or personal talks, or over the telephone"(ADRL 2)

8.6. Codification of Regulations

8.6.1 Regulations and Decisions in 1988 and 1989

The most important general policy on labour management reform published by the State Council was the four regulations in July 1986 (Appendix III-1, No. 1). These regulations contained:

1. Temporary Regulation on Implementation of Contractual Labour System in State-owned Enterprises.
2. Temporary Regulation on Deployment of Workers in State-owned Enterprises
3. Temporary Regulation on Dismissal of Workers Violating Discipline in State-owned Enterprises
4. Temporary Regulation on Security for Employees Waiting for Jobs in State - owned Enterprises.

Although these regulations stated clearly that they were valid since 1st October 1986, managers in the six enterprises said there was a time lag for local enterprises to implement the system. They intended to act according to a respective regulation circulated by the municipal government, rather than a general policy from the central government.

"We did not carry out the contractual labour system till January 1987. This was determined by the municipal government(ADRL 1)

By 1988, Beijing Municipal Labour Bureau (BMLB) distributed a standard form, "Authorization Form for Employing Labour Contractual Workers", which contained three items:

1. Proposal of the employer
2. Proposal of the District Labour Department or Training unit
3. Opinion of Local Labour Bureau

This unified form provided enterprises with a formal procedure of hiring contractual workers. The recruitment of contractual labour became a routine job.

According to interviews, the most influential regulation for the mobilization of the labour force was made by the Municipal government(Appendix III-1, No. 4). This regulation was highly codified with details such who was the final authority is deciding labour recruitment. For example, the regulation classified three conditions in which a worker was not allowed to leave his/her post. These conditions included the production posts which were fixed by the labour bureau and were perceived to be important for social security and life, or in short-supply; the key posts fixed by the industrial bureaux or district labour bureaux; rules for the moving of people from suburbs to city centre.

These highly codified regulations were transferred to enterprise labour departments through the industrial bureaux. These regulations became operation standards for enterprise managers on matters of labour deployment and mobilization. Few managers mentioned that they referred to the policy of the State Council, which was seen as a guideline for local policy making.

The labour managers interviewed said that the decentralization of authority in labour recruitment had relaxed the restraint imposed by regulations. Most decisions on labour recruitment were carried out with little interference from the regulations; although managers

were careful to avoid transgressing the relevant regulations too blatantly. For example, a manager described one example:

"Regulations from the municipal labour bureau stated that enterprises are not to hire labour outside their local areas. We have to recruit our trainees from the local district. According to our experience, we preferred hiring contractual labour from other areas, because these were often paid low wages and they held strong loyalty to the organization. We had some young trainees from outside Beijing. They are from our co-operative enterprises and here to learn some skills."(ADRL 1)

8.6.2 Comparison with Decisions in 1985

Regulations published in 1985 were consulted. The most important regulation published by the State Council was the "Temporary Regulation on Further Expansion of Autonomy for State-owned Industrial Enterprises" (**guanye jinyibu kuoda quoying goingye qiye zizhu quan de zhanxing guiding** Appendix III-2, No.1) This regulation was not highly codified in the sense of providing enterprises with pre-determined formulae or details of management autonomy. But it focused on ten management areas:

(1) production plan, (2) marketing products, (3) pricing outputs, (4) purchasing, (5) self-fund use, (6) assets disposal, (7) establishment of subordinate departments, (8) personnel and labour management, (9) wage incentives and (10) enterprise affiliation. Among them, points (7), (8), (9) were related to personnel decisions. The other regulations listed in Appendix III-2 were published by the State Council at a later time. These regulations aimed to avoid the administrative intervention imposed by some authorities, and to delegate decision powers directly to enterprises.

The decisions on labour recruitment in 1984 and 1986 took place at the early phase of decentralization. Managers said that their decisions did not to the above reform policies. The internal documents and regulations circulated by the municipal government had more effect in directing decisions.

"At that time(in 1984), everything must be reported to the bureau and we waited for the decision there, no matter whether it was a worker leaving or recruiting a new worker. There was a procedure there. We just made a plan, then handed over to the bureau. The labour bureau had very detailed regulations on who did what and how to do it."(AVRL 3)

"There was no specific regulation to delegate decision power to enterprises(in 1985). We followed the old regulations. They were drawn up by the labour authorities, such as the Ministry of Labour & Personnel, the municipal labour bureau. These documents were guidelines for our actions. We sorted different cases into different categories, then checked with regulations, then made our own decision. In this case(the decision studied), it was clear that we had no power to determine the recruitment, according to regulations"(PHRL 2)

"In labour management, its important to follow regulations, particularly those drawn up by the labour bureau. This does not change. The difference (between decisions in 1985 and 1988)is that we were allowed to do something without authorization from the bureau. In 1985, every thing must be reported to the bureau and we waited for the instruction and decisions from the above."(MTRL 2)

These old regulations, according to managers' descriptions, were more complicated and detailed than those in 1988. Labour management followed these rules set by authorities.

8.7 Discussion and Summary

There were some similarities between enterprises in the decision processes on labour recruitment. Changes over the period between 1985 and 1988 in the process were evident in the levels of initiation and authorization. The pattern of decision-making followed a fluid path from its start to the end. The decision processes were highly programmed.

Decentralization lowered the authorization levels and gave enterprises more autonomy. This finding corresponded to the observation by Child and Lu(1990a:334), which identified human resource management as one of the areas in which the director's autonomy was increased. On the other hand, the recruitment decision was still repeated annually according to a plan. This practice was inherited from the earlier period when the industrial bureau required its enterprises to produce annual recruitment plans, and it appeared to smooth the decision process by routinizing its progression both through different stages and organizational levels.

Labour recruitment decisions in 1988 and 1989 indicated that managers had more autonomy in labour management than before. The role of the bureaux, both industrial and labour, changed from the source of final approval to an agent providing enterprises with services.

Official policies in labour management shifted from maintaining life-time employment to the promotion of labour efficiency . Enterprises started to pursue economic rationale in their labour management, rather than to act as social communities.

However, the bureaux still attempted to impose their influence on enterprises. The significance of the bureaux was seen in their intention to control human resources, particularly those in short supply, such as qualified technical labour or university graduates. The cases in Automobile and Audio indicate that enterprises were still subject to the bureau's instruction. Industrial bureaux expected their subordinate enterprises to cooperate with them, which was seen as an important condition for obtain favours in return from the bureau in future.

The power of the labour bureau derived from its regulatory authority. Enterprise managers had to act within these rules. These circumstances had not changed, compared with 1985.

At the same time, the decision processes, which have been analyzed in section 8.3, indicated that recruitment of labour was seen as a routine task. The change of the bureaux' position in these decisions took place in their final authorization, and even more in their initiation. Delegation of decision authority from the bureaux to enterprises did not greatly affect the process. The interaction between an enterprise and its superior authority was perceived to be likely a negotiation or bargaining, rather than simply relationship of obedience.

But, the change of decision levels did not correspondingly lead to other changes in decision processes. As a routine job, other processes, such as information utilization and actors involvement in the design phase, seemed to be little changed. Managerial actions were still constrained by the prevailing institutional framework, which controlled information communication and regulated the management.

These decisions were largely triggered by internal task requirements. Instructions from the bureau were more important in 1985 than in 1988. In 1988, the bureaux were recognized of influential, where in previously they had imposed formal commands on enterprises.

In decisions on labour recruitment, internal data were regarded as the principal source of information. The significance of internal data, such as employee profiles, production facilities, and technical qualification, was identified as prior information for the decision.(60% of cases in 1985, 46% in 1988)

But information on the supply of labour was mainly controlled by the higher authorities, although enterprise managers also exchanged information through their own networks. The importance of the central information source declined with the increase of information diffusion through markets and networks among enterprises. But data collected outside the central system seemed to be fragmented. Enterprise managers still relied upon the systems held by authorities such as labour bureaux. When they turned to markets, information diffusion was dependent upon personal relations and networks between enterprises. The quality of personal acquaintances biased the quality of information transferred. This characteristic was likely to be little changed with the development of labour markets. Seeking reliable information could take a long time, such as the case in Heavy Electrical. This phenomenon was less visible in the decisions in 1985, because labour mobilization was constrained, so that there was little information from the markets. But information communication through an enterprise's own network was observed, such as the case in Audio. It indicated that managers personal contacts as information channels were significant in both 1985 and 1988. Managers got used to information communication through diffusion in their own system rather than public sources.

Managers in 1985 were more constrained by regulations than they were in 1988. Recruitment of labour in the early decisions seemed to be highly specific and codified by regulatory authorities, such as the labour bureaux. In 1988, this decision power was

delegated to the enterprise managers. The change in the decision levels was realized by respective regulations. In other words, managers gained more autonomy than before, because the regulations promoted decentralization. This regulatory promotion also changed the decision procedure. Managers, according to new regulations, did not need to obtain higher authorization for labour recruitment. But they still referred to the wishes of the authorities, for example, that they reported their cases to them.

These findings direct attention to the dynamics of delegating decision authority to enterprises in a formally centralized command system of industrial governance. Regulations were issued whereby labour recruitment was to be decided by the enterprise. But the framework of structuring these decisions, by administrative means, was still in existence and effective. Administrative authorities still intended to influence the actions of enterprises and could do so because they held the power of enabling the new regulations to be applied or not.

Table 8.1. Functions of Three Bureaux on Fixing the Wage Total Budget

Bureaux	Functions
Industrial Bureau	Accountability for other bureaux, Checking out the level of total employment Checking profit targets according to enterprise historical data.
Labour Bureau	Fixing the size of employment, Fixing the wage budget based on the enterprise's previous year's budget
Financial Bureau	Checking total wage budget, Approving the fixed budget

Table 8.2. Labour Management Systems in the Six Enterprises

Employment System	Sources of labour
1. Fixed Labour Employment Wages set by the state (8 wage grades) Permanent employment Medicine & Social Welfare set by the state Hiring or Firing authorized by labour bureau	Current Fixed Employees College graduates Retired soldiers Personal movement from other organizations with fixed employment quota
2. Contractual Employment Wages set by enterprise (8 wage grades) Contract-term employment Medicine & Social Welfare covered by enterprise - Hiring or Firing by enterprise	Recruitment of young school graduates since 1987 Other contractual labour
3. Temporary Workers Wages set by enterprise (grades regulated by the state) Contract-term employment Medicine & Social Welfare covered by the enterprise Hiring or Firing by enterprise but registered in labour bureau	Retired Workers Workers from agriculture fields
4. Personnel System(cadres, technicians, engineers) Salary set by the state (14 grades) Permanent employment Medicine & Welfare covered by the state Managed by personnel bureau	University/college graduates Resigned army officials Current Cadres

Table 8.3 Decisions in Labour Recruitment in 1988 and 1989

Enterprises	Date	Decision Contents
Audio-visual	Feb.- March 89	Recruiting a maintenance worker manager
Automobile.	Oct.88- Jan. 89	Recruiting 21 university graduates
Machine Tool	Jan.- March 89	Hiring 5 machine operators from a technical school
Heavy Electrical	Feb-April 89	Recruiting a lorry driver
Pharmaceutical	Oct-Dec.88	Recruiting 12 university graduates
Audio	Nov.88 - Jan 89	Recruiting 10 trainees from the enterprise technical school

Table 8.4 Duration, Interruption and Delay(or Acceleration) in Decisions in 1988 and 1989

Enterprises	Duration	Interruption and Delays(Speed-up) Reported
Audio-visual	1 and half month	No interruption and delays reported
Automobile	2 and half months	Interrupted by the industrial bureau's request which asked the enterprise to accept an extra graduate
Machine	About 2 months	Labour manager discussed with the bureau the allocation of some graduates from its technical school. This took over one month. Later, the manager accelerated the decision process through her personal relations with the school head.
Heavy Electrical	2 and half months	A long time to seek a suitable person. It took about 6 weeks.
Pharmaceutical	2 and half months	No special events reported to interrupt the process. About 8 weeks waiting for feedback from the bureau on availability of the graduates
Audio	2 and half months	The bureau intended to participate in the process of allocating graduates. Managers did not take actions till the last minute of the graduation. It took about 7 weeks

Table 8.5 Actors and Levels in the Initiation phase

Labour Recruitment Decisions in 1988 and 1989

Actors	Level	Audio-	Auto-	Machine	Heavy	Pharm-	Audio
Internal:							
Director	4	-	-	-	-	Yes	-
Vice-director	3	-	-	-	-	-	-
Labour dept	2	-	Yes	-	-	-	Yes
Workshop manager	2	Yes	-	Yes	Yes	-	-
Technical dept.	2	-	Yes	-	-	Yes	-
Group leaders	1	Yes	-	-	-	-	-

Table 8.6 Triggers in the Decisions in Labour Recruitment in 1988 and 1989

Enterprise	Description of Triggers	Category of trigger Task
Audio-visual	A vacancy for a technical maintenance worker	Task
Automobile	A strategy of development of technical staff in research and product development	Task
Machine Tool	Vacancies for five machine operators	Task
Heavy Electrical	A vacancy for a transport driver	Task
Pharmaceutical	Development of technical staff in research team	Task
Audio	Routine work of allocating graduates of the enterprise technical school	Task
	A plan to develop technical human resource	Task
Total		7
	Central commands	0(0%)
	Markets	0(0%)
	Internal task requirements	7(100%)

Table 8.7 Actors and Levels in the Design phase

Actors	Level	Audio-	Auto-	Machine	Heavy	Pharm-	Audio
Labour dept.	2	Yes	Yes	Yes	Yes	Yes	Yes
Workshop manager	2	-	-	Yes	-	-	Yes
Technical dept.	2	-	Yes	-	-	Yes	-

Table 8.8 Actors and Levels in the Selection Phase

Actors	Level	Audio-	Auto-	Machine	Heavy	Pharm-	Audio
External: Industrial Bureau	5	-	Yes	Yes	-	Yes	Yes
Internal Vice-director	3	-	Yes	Yes	-	-	-
Labour dept	2	Yes	Yes	Yes	Yes	Yes	Yes

Table 8.9 Actors and Levels in the Authorization Phase

Purchasing Decisions in 1988 and 1989

Actors	Level	Audio-	Auto-	Machine	Heavy	Pharm-	Audio
Director	4	-	Yes	-	-	Yes	Yes
Vice-director	3	-	-	Yes	Yes	-	-
Labour dept	2	Yes	-	-	-	-	-

Table 8.10 Decisions on Labour Recruitment in 1985

Enterprises	Date	Decision Topics
Audio-visual	Nov.84 - Feb. 85	Recruiting 65 young trainees
Automobile	Oct.-Dec.85	Hiring 30 college graduates
Machine Tool	Dec. 84 - Feb. 85	Hiring a university graduate
Heavy Electrical	Oct. 84 - Jan.85	Hiring 12 trainees
Pharmaceutical	Jan.- March 85	Recruiting 3 university graduates
Audio	Nov.84- Jan.85	Hiring 40 trainees

Table 8.11 Timing: Duration, Interruption and Delay in Decisions in 1985

Enterprise	Duration	Interruptions or Delay(or Acceleration)
Audio-visual	3 months	No interruption reported. Feedback of the authorization from the bureau needed about 2 months
Automobile	2 months	No interruption reported. Feedback of the approval of the bureau was 2 weeks
Machine Tool	2 months	No interruption and delay reported
Heavy Electrical	Nearly 3 months	No interruption reported. About 2 months in the final authorization
Pharmaceutical	2 months	No interruption reported. One month waiting for the approval of the bureaux
Audio	2 and half months	No interruption reported. Six weeks waiting for the authorization of the bureau.

Table 8.12 Actor Involvement and Levels in the Decisions in 1985

Actors	Level	Audio-	Auto-	Machine	Heavy	Pharm-	Audio
Initiation							
External: Industrial Bureau	5	-	Yes	Yes	-	Yes	-
Internal: vice director	3	-	-	Yes	-	-	-
Labour dept.	2	-	-	-	-	-	Yes
Workshop manager	2	Yes	-	-	Yes	-	-
Technical dept	2	-	Yes	-	-	Yes	-
Design							
Labour dept	2	Yes	Yes	Yes	Yes	Yes	Yes
workshop managers	2	Yes	-	-	Yes	-	-
technical dept	2	-	Yes	-	-	Yes	-
Selection							
Director	4	Yes	Yes	Yes	Yes	Yes	Yes
Vice director	3	Yes	Yes	Yes	Yes	Yes	Yes
Labour dept	2	Yes	Yes	Yes	Yes	Yes	Yes
Authorization							
Industrial bureau	5	Yes	Yes	Yes	Yes	Yes	Yes
Labour bureau	5	Yes	Yes	Yes	Yes	Yes	-

Table 8.13 Triggers in the Decisions in 1985

Enterprise	Description of Trigger	Category
Audio-visual	New assembly lines needed more workers	Task
Automobile	Introduction of a training programme with a university to develop technical staff Allocation of university graduates from the bureaux	Task Central
Machine Tool	Need of salesmen with technical knowledge Command from the bureau to allocate university graduates	Task Central
Heavy Electrical	Production workshop demanded more labour	Task
Pharmaceutical	Development of a research team Command from the bureau to allocate university graduates	Task Central
Audio	Recruitment of trainees for the enterprise technical school	Task
Total		9
	Central	3(33%)
	Markets	0(0%)
	Internal Task Requirement	6(67%)

Table 8.14 Information Sources in the Decisions during 1988 and 1989

Enterprise	Description of information	Status of sources
Audio-visual	Job vacancy in a workshop Candidate's personal data	Internal Market
Automobile	Employee profile and R&D plan Data of the university graduates	Internal Central
Machine Tool	Job vacancies in workshops Data of the technical school's graduates.	Internal Central
Heavy Electrical	Job vacancy in transportation dept Introduction of an acquaintance	Internal Markets
Pharmaceutical	Human resource data of the enterprise Graduates profiles	Internal Central
Audio	Shortage of technical workers in workshops. Shortage of technical workers in the bureau's allocation Demand of technical workers in other enterprises	Internal Central Markets
Total		13
	Central Planning System	4 (31%)
	Markets	3 (23%)
	Internal Data Sources	6 (46%)

Table 8.15 Information Sources of Decisions during 1984 to 1986

Enterprise	Description of information	Status of sources
Audio-visual	Layout of assembly lines The allocation of trainees from the bureau	Internal Central
Automobile	Data of human resources in the enterprise	Internal
Machine Tool	Data of salesmen Data of University graduate supplies	Internal Central
Heavy Electrical	Data of human resource and production posts	Internal
Pharmaceutical	Shortage of technicians University graduate supplies	Internal Central
Audio	Demand for lathe operators in the workshops Shortage of lathe operators in enterprises	Internal Markets
Total		10
	Central Planning System	3 (30%)
	Markets	1 (10%)
	Internal Data Sources	6 (60%)

- ¹ Although Automobile became a joint-venture company in May 1988, this change in ownership gave management more autonomy of fixing wages and bonuses. The procedure of labour recruitment did not change too much.
- ² The term "Labour market" here refers to agencies dealing with labour services such as job exchange and information supply. These agencies include job agencies, labour mobilization service centres and labour exchange market organized by the municipal labour bureau.

CHAPTER 9 DECISIONS ON ORGANIZATIONAL CHANGE

9.1 Environmental Context

Chapter 6 described how the matrix structure of industrial organization in China was based on a principle of correspondence. An enterprise must structure itself, not only according to its task requirements, but according to the structure of its higher authority as well. Thus each of its departments is subject to two administrators. One is the executive within the enterprise, and the other corresponds to the executives leading the department in the higher authority. A network connects the enterprise and its principal through corresponding channels providing a flow of reports, communications, advice and instructions. This matrix system provided the planning authorities with the advantage of controlling, monitoring and supervising the behaviour of subordinate organizations.

Furthermore, the complexity of organization design in China stems from its political infrastructure, the Party, which coexists parallel to administrative hierarchies. According to the Enterprise Law, the Party will "guarantee and supervise the implementation of the principles and policies adopted by the Party and state in enterprises". The Party, although it will not exercise "monist" leadership as before the reform, is still regarded as a major influence on personnel management. For example, the majority of managers, particularly executives, are members of the Party (see Chapter 6). The Party organization penetrates to the level of workgroups.

Therefore, there are two formal organizational structures, the administrative one and the political one. Both are interlocked with each other. Before the reform, the Party committee used to be dominant in decision-making. Since the beginning of the 1980s there has been an attempt to separate the Party's influence from management through a number of regulations. The management system has been changed from the unified leadership of the Party committee to the director responsibility system under the leadership of the Party committee,

then to the director responsibility system. But this effort has only partially succeeded(Child and Xu, 1991; Chamberlain, 1987).

The implementation of the contractual system further separated the Party from management. As the enterprise director signed the contract, the responsibility was shouldered by the director himself as a legal entity, rather than the Party Secretary or any other persons.

It was found in the six enterprises that the number of full-time political staff working for the Party declined during the reform (Child and Xu, 1991). Chapter 6 has established that most Party secretaries in the six enterprises were appointed when the director responsibility system was implemented during 1984 and 1986. Some of them have taken over administrative posts, such as the administrative deputy director(in Audio-visual), or production directors(in Machine Tool and Pharmaceutical).

The corresponding management and legitimacy of the Party caused a rigidity in organizational design. Enterprise managers were constrained in changing organizational structure.

When the reform started in its pilot stage in Sichuan province, it was hoped that the rigidity of organizational design would be lessened through the decentralization programme. On 13th July 1979, the State Council published a regulation "**Regulation on Expansion of State-owned Industrial Enterprise Management Autonomy**". Decision-making power in organizational design, organizational change and appointment of middle managers was thereby delegated to selected enterprises.

Later in 1984, another regulation "**Temporary Regulation on the Expansion of Autonomy of State-Owned Industrial Enterprises**" re-confirmed that the responsibility of organization design, development and personnel management(except top executives) ought to be taken by enterprise directors, without any interference from administrative authorities.

On the other hand, enterprise managers continued to complain of administrative intervention. Chapter 6 gave an example of how the local economic commission forced enterprises to establish a quality control office.

9.2 The Optimizing Labour Organization Scheme and Organizational Change Decisions

9.2.1 The Optimizing Labour Organization Scheme in Beijing

In the middle of 1988, the Beijing Municipal Government initiated an official campaign in labour management, after the implementation of the contractual system. The official policy intended to increase productivity in enterprises by means of reducing the employment establishment of enterprises. The local authorities criticized the disadvantage of the current labour system as "three iron pieces" (**san kuaitie**): Iron Rice-bowl (**tiefanwan**), meaning life-long employment; Iron Chair (**tiejiaoyi**), meaning clerical staff stayed in offices; and Iron Wages (**tiegongzi**), meaning that the wages always increased without any risk of decrease). From June to December 1988, the municipal government pursued a widescale campaign to promote the reform programme in Beijing. It was called "Optimizing Labour Organization" (**youhua laodong zube**). The official propaganda labelled this campaign as "a breakthrough of deepening enterprise reform" (**shenhua qiye gaige de tupuo kou**), which it deemed to be an ideological point.

The policy was implemented through a top-down process. The municipal mayor, municipal Party Secretary and most senior officials were all involved. According to a report in Beijing Economic Information (1988:1), the target of labour system reform in Beijing determined by the Beijing Municipal Government in 1988 was to improve the contractual labour system and to encourage development of a local labour market. A number of local enterprises were engaged in a pilot programme of the contractual labour system, under the instructions of the municipal labour bureau. These experiments were

supervised by the National Labour & Personnel Ministry, as part of national experiment in China.

From the end of 1987 to the spring of 1988, the Beijing Municipal Economic Commission(BMEC) spent three months investigating a number of enterprises. Then, it reported its findings to the municipal government. BMEC considered that low productivity was a result of the prevailing employment system. The commission suggested launching a new reform scheme to change life-term employment. This idea was accepted by the Municipal government. The scheme later became known as "Optimizing Labour Organization".

In May 1988, the Municipal Government held a mass meeting, in which about two thousand directors and labour/personnel managers from local enterprises were asked to participate. The aim was to brief enterprises about the labour reform. The chief of the Municipal Economic Commission required all enterprises to increase productivity and "break down the three iron pieces". In June 1988, the executive meeting of the Municipal Party Committee listened to the reports of the pilot programme in three experimental enterprises, then decided to broaden this programme to include other enterprises.

From July 15 to 17, the municipal government organized a three day conference: the "Municipal Industrial Work Conference" (**shi gongye gongzuo huiyi**). All senior officials, such as the mayor and the deputy mayors of the government, attended the conference. The "Optimizing Labour Organization" scheme was promoted again by the municipal government as "a breakthrough in the deepening of enterprise reform in Beijing". According to a plan drawn up by the municipal economic commission, by the end of 1988, the total labour force should be reduced by at least 10 percent. By the end of 1990, the labour force was to be reduced by 30 percent, and all workers, no matter whether originally permanent employees or new contractual workers in enterprises, should be instated on the contractual system. In August 1988, the Municipal government published a regulation to

protect director's personal safety (Appendix IV-1, No.10), because managers were afraid that any attempt to break the current employment system would anger workers.

Furthermore, in October 1988, ten bureaux introduced a regulation for the Optimizing Labour Organization scheme, as a unified step to integrate actions of different authorities (Appendix IV-1, No. 12). This regulation relaxed the control on opening service businesses as a method of dealing with workers "sacked" from production posts. On the other hand, the municipal government instructed managers not to fire workers, except those who were extremely negligent or violating work rules. Any dismissal of an employee needed the authorization of the municipal labour authority.

According to an official report of the municipal labour bureau, 44 enterprises had introduced the scheme by July, 1988. After the conference, the scheme was rapidly extended. The number of enterprises involved increased sharply to 770, with a total of 366,000 employees. Moreover, another 1738 enterprises with 780,000 employees were asked to set in motion of the scheme before 1989. Another 1542 enterprises were expected to finish the process by early 1989, with 169,000 workers. These phases of implementation were led and supervised by the municipal economic commission and industrial bureaux.

The scheme comprised two traditional approaches which were used to force enterprises to accept the authorities' decision. One was to impose administrative intervention by the top-down process, from municipal government to municipal economic commission, then local industrial bureaux, and finally to enterprises. The meeting in May transmitted a clear message to enterprise managers; each bureau organized its own schemes, through director meetings and training programmes. Subordinate enterprises were grouped according to the bureau's arrangement. Moreover, bureau's executives were assigned a responsibility for implementation of the programme in enterprises, by means of personal supervision and instructions. These tasks included targets, process and time schedule. The Municipal

Economic Commission later sent out monitoring forms and other documents to industrial bureaux to check on progress.

The other way was to coordinate functional authorities, particularly those with regulatory powers. For example, the municipal government decided to reduce total employment by 10 percent. But these redundant people were required to stay within the enterprise, because there was no social security in Beijing. The official policy encouraged these people to open a new business, for example services, as a supplement to the enterprise' activities. To open a new business needed authorization by the municipal industrial & commercial administration bureau for issuing a business license, and the municipal tax bureau for the taxation status. Moreover, these new business units should be legally audited by the municipal audit bureau, and their financial statements should be formatted according to the municipal financial bureau's official form.

The intention was also to reform the prevailing staff system. Managers and clerical staff were required to compete to take posts based on their competence and knowledge. Workers were encouraged to apply for clerical vacancies if they were qualified to do the jobs.

This scheme's proposals would have amounted to an enormous upheaval, if carried out thoroughly. At the end of 1988, a report of the municipal labour bureau listed a number of problems. The director of Beijing Municipal Labour Bureau(BMLB), Mr Gong, Shuji, noted that enterprise directors were unwilling to implement the new system(the contractual labour system), because they were afraid of jeopardizing the harmony of their industrial relations(Gong, Shuji, 1988).

The second problem arose when enterprise managers completed the scheme in a slapdash manner, rather than as originally directed.

The third problem concerned the reduction in the prosperity of the labour force. The majority of workers removed from production were retired and temporary workers chosen for the purpose of fulfilling the 10 percent reduction target set by the bureaux. Some of those workers in reality remained in production jobs, and they quite possibly returned to workshops after the scheme.

These problems were caused in particular by the lack of a social security system in China. An employee was tied to his/her organization, not only because of personal economic dependence, but for social welfare, medical, personnel (i.e. political) reward and children's education. This phenomenon is described as "organized dependency" by Walder(1986). An enterprise was, in fact, not able to dismiss or fire any of its employees under such conditions.

Ideological concepts before the economic reform were seen as another reason for the problems of the prevailing labour management. Life-long labour employment, used to be interpreted as one of the advantages of state socialism. As an article(Department of Enterprise System in the State Commission for Economic System Reform, 1989) noted:

Traditional concepts of socialism "included that unemployment is a product of capitalism, while there should be no unemployment in a socialist system, so that dismissing a worker conflicts with the principles of socialism; that workers are the master class in enterprises, and they have the right and responsibility to work there, so that removing redundant workers from production posts is seen to harm workers' rights, and to violate the socialist constitution and that labour is not a commercial product, so it should not be purchased and mobilized in markets. These concepts encouraged some redundant workers to rebel and complain after they were dismissed from production posts; they also made some directors afraid of making political mistakes, so that managers did not implement this programme, but held back and waited for future alternative policies"

9.2.2 Decisions on Organizational Change

This scheme led to decisions on organizational change in the six enterprises. These decisions occurred around the time when the official scheme of Optimizing Labour Organization was carried out in Beijing area. Table 9.1 presents the decision topics.

Table 9. 1 inserted

Organizational change in Automobile took place in 1987. Later its experience was used by the municipal government as one of the three models in the scheme of Optimizing Labour Organization. But the personnel manager of the company said that they did not actually realize what was officially claimed. Their organizational change was prepared for the formation of a joint venture in 1988, rather than for the official instrument of "Deepening reform"(ATOC 3).

The other five enterprises implemented changes in organizational structure and reduction in their labour force when the scheme "Optimizing Labour Organization" took place.

9.3 Decision Processes

9.3.1 Timing of the Decision Process: Duration, Interruption and Delay

Durations of decisions on organizational change are shown in Table 9.2.

Table 9.2 inserted

The timing of the enterprises' decisions relating to organizational change was fixed in accordance with the time schedule set by the municipal authorities (government, economic commission and industrial bureaux). Table 9.3 lists the progress of organizational changes in the enterprises and activities of local authorities in the scheme.

Table 9. 3 inserted

From this table, it is obvious that enterprises delayed the implementation of the scheme. First, managers were reluctant to accept the official scheme(or campaign), particularly when the intended change was personnel redeployment. In Audio-visual, Heavy Electrical, and Machine Tool, directors postponed change. They worried about was destroying motivation and disturbing their employees' performance. Directors' anxiety focused on the dictated target of a 10 percent reduction in the total labour force. The propaganda of "breaking down three pieces of iron" caused a wide spread fear of losing employment among employees. Initiations of the decision, originating from the commands of the industrial bureaux, took a long time before shifted to the design phase. In other enterprises, Automobile , Pharmaceutical, and Audio, the directors welcomed the change and used the opportunity to improve internal management. Directors retained centralized power to control the process. In all these three enterprises, directors forced employees to accept change.

Second, the decision-making process took a long time in emulating model enterprises and building a consensus through ideological training. In general, the programmes were discussed several times among middle managers, members of the management team(steering group) and other parties, even with the bureaux(such as the case in Audio-visual). The processes were more likely to be a cycle wandering towards its final results by trial and error.

Thirdly, authorization came from the top level of organization, either the Workers' Congress (Audio-visual, Automobile, and Heavy Electrical) or the director himself(herself)(Machine Tool, Pharmaceutical and Audio). Even when the decision was personally centralized, directors spent some time consulting with top executives. Directors carefully maintained a harmony of human relations within enterprises.

Finally, a delay occurred when an organization undertook the first step as a pilot before carrying out a large scale action. In Audio-visual, Heavy Electrical, Pharmaceutical and Audio, delays were caused by pilot projects, which were similar to the feedback delays described by Mintzberg and his colleagues(Mintzberg et al. 1976:265). The directors were willing to test the feasibility and practicality of new organization structures before taking further action. Another reason for the feedback delay was that most managers wanted to wait and see whether the government would issue a new policy to solve the "unemployment" problem.

9.3.2 Decision Phases, Actor Involvement and Levels of Decision.

Initiation

The major initiator was the municipal government, except in the case of Automobile. The initiators are indicated in Table 9.4.

Table 9. 4 inserted

Except Automobile, all other five enterprises were reported to carry out *organizational changes* in accordance with the instructions from the industrial bureaux and municipal government. The triggers of the decisions are listed in Table 9.5

Table 9. 5 inserted

Although the bureaux were identified as the triggering mechanism in these decisions, some managers and directors said that they were already considering change in their organizations and improving the qualification of managers. Commands from the bureaux and municipal government prompted them to take actions. This will be discussed further in the next section 9.4: Interactions with Authorities.

Design and Selection

The task of designing organizational structure and the employment system was usually undertaken by the management or personnel department, under the supervision of a deputy director. Next a draft, such as the organizational chart, job descriptions and enterprise regulations, would be discussed at executive meetings. In general, directors gave a very "loose" opinion, and organized further discussion among middle managers. In all enterprises, middle managers were required to participate in the discussion. According to the feedback, the draft was adapted. Thus, there were several cycles to and fro the design and selection phases. In some enterprises, directors became involved in the final selection before the draft was handed over to the workers congress. Table 9.6. illustrates the actors in the design and selection phases.

Table 9. 6 inserted

The industrial bureau intervened in the design in the case of Audio-visual and instructed the enterprise managers to re-design their organizational structure and establish an internal labour market.

The Party secretaries in all six enterprises were involved in the design and selection phases. In Audio-visual and Pharmaceutical, the Party secretaries undertook posts in management as

deputy directors. They led a team assembled to design new organizational structures. The Party secretary in Audio-visual also established his own department, the "Enterprise Culture Department".

In other enterprises, the Party secretaries were also active. In Audio, the director and the secretary had a very good relationship. This harmonious relationship helped the director to overcome some resistances. In Machine Tool and Heavy Electrical, the Party secretaries participated in selecting new systems.

When asked how new organizational structures were arrived at, managers in all six enterprises said that they learnt from model enterprises through personal visits and reading materials distributed by the bureaux. Industrial bureaux and the municipal economic commission organized some training programmes for enterprise managers.

Authorization

Three enterprises received the approval of the workers' congress, while in the other three enterprises the respective directors continued to hold absolute authority. Actors in the authorization phase are listed in table 9.7.

Table 9. 7 inserted

The directors in the three enterprises without the workers congresses' approval said that this was unnecessary.

"Whether or not the programme must be authorized by the workers' congress was determined by the enterprise director. It was not necessary to submit the case to the workers congress, because the change came under the commands of the bureau. Another reason was that our enterprise is middle sized. We do not have a huge

number of employees. Thus, we had less problems than larger enterprises"(MTOC 1)

"The bureau allocated detailed targets. For example, 10 percent of workers should be removed from production posts. No matter whether the workers congress agreed or not, the final outcome would be the same. And the director has power to determine organizational change. It does not need the agreement of the workers congress"(PHOC 3)

"All the middle managers have discussed the programme. After political education, most staff agreed with the programme. It was not necessary to have the consent of the workers congress." ADOC 1)

But in the other three enterprises, the reasons sounded different:

" According to regulations, all important issues must be approved by the workers congress. Organizational change is an important issue. Particularly change related to workers' benefits and wages.(AVOC 2)

"Because the change influenced a lot of people, particularly workers, there was a risk of them losing their jobs. This important decision must be decided by the workers congress."(ATOC 1)

"The change touched several areas, such as the allocation of wages and the bonuses system. All these have an influence on workers' benefits. Thus, it ought to be approved by the workers' congress"(HEOC 1)

In these three cases, the proposals for organizational change were adapted, *after* the workers' congresses studied them. For example, in Heavy Electrical, the congress representatives proposed ten points to change the programme. All these proposals were linked to the workers' welfare and benefits.

The outcome of the decision-making was often a compromise. For example, in Audio-visual, Heavy Electrical, Pharmaceutical and Audio, the change started with a pilot project in some departments, before the whole organization was changed step by step.

9.3.3 Comparison with the earlier Decisions

Six decisions relating to organizational change occurring from 1984 to 1986 were studied. Table 9.8 shows the decision topics and dates.

Table 9. 8 inserted

These decisions occurred around the time when the director responsibility system was implemented. The organizational change in Audio was completed before the director started the contractual responsibility system.

Compared with decisions in 1988, the organizational changes in 1984 and 1986 above were limited in the extent of the re-arrangement of some departments in organizational structures. Only the case in Automobile was reported as attempting to form a new wage system, under the guidance and instruction of the municipal labour bureau.

9.3.4 Timing, Actor Involvement and Levels in the earlier Decision Process

Durations of decisions on organizational change in 1984 and 1986 are shown in table 9.9.

Table 9. 9 inserted

The political training and education took place, in order to convince employees that change was necessary. Design and selection also took some time. But no case was reported to have a pilot project. As soon as the director issued the decision, the change was implemented.

The actors involved in the decisions are displayed in table 9.10.

Table 9. 10 inserted

The triggers of decisions are shown in table 9.11

Table 9. 11 inserted

Commands from bureaux were major triggers. In fact, implementation of the Director Responsibility System was under instructions and commands from the industrial bureaux. Automobile was selected by the municipal labour bureau to test a new wage system.

The expansion of the market share and improvement of internal coordination also initiated organizational change. Such a trigger was reported in Heavy Electrical, Pharmaceutical and Audio. Directors in these enterprises tended to appoint new managerial staff, in order to increase sales and profits.

Design tasks were undertaken by either management or personnel/labour departments. In Audio-visual and Automobile, industrial bureaux provided instructions for the design of organizational structure. The Municipal Personnel & Labour Bureau helped Automobile to design a wage system. Other enterprises were reported to keep in close liaison with their higher bureaux, for instance reporting on their progress and receiving instructions.

Implementation of the Director Responsibility System was accompanied by changes in the Party secretaries. But it was still the dominant influence on design and selection, particularly on aspects of personnel appointment.

Final approval of the changes in 1984 and 1986 was in fact collectively arrived at. Bureaux made the final decision, to approve a new organizational system in the Audio-visual and Automobile's cases. In other enterprises, the Party committee made a provisional agreement before the directors had given their final approval.

9.4 Interactions with Higher Authorities

9.4.1 Decisions in 1988

Decisions on organizational change in 1988 followed an agenda set by municipal government agencies. Table 9.12 indicates the agendas set by the authorities.

Table 9. 11 inserted

The scheme was politicized by official ideology. For example, it was labelled as a "breakthrough in growing enterprise reforms". This ideological propaganda was repeated in the speeches and documents published by the municipal government. Delays or resistance to the scheme were criticized as "an attitude of holding further reform back" (Chen, Xitong, 1988). The head of the Director's Office in Machine Tool said:

"Although it was stated by the bureau that each enterprise could implemented the programme based on its own conditions, the bureau did not act accordingly. In fact, we had no choice, because of the target set. The bureau checked how many employees we had cut from production posts. And the bureau laid down a certain procedure, such as cadres first, workers later, and so on. In fact, our enterprise did not have much choice."(MTOC 4).

The interviews below illustrate the enterprise managers' views on organizational change:

Audio-visual: Optimizing Labour Organization is indeed important. In fact, I had planned to do the same for a long time anyway. But I think it should be done by managers themselves as a routine and dynamic process, rather than a scheme forced upon us by the bureau as a political scheme. In particular, the bureau does nothing to help enterprises to make arrangements for redundant people. On the one hand, authorities asked us to reduce the total labour force. On the other hand, the labour force that we cut from production posts was obliged, by regulations, to remain within the enterprise. The enterprise itself had to resolve this dilemma. That is a problem.(AVOC 1)

Automobile: Without the reform in organization, the joint-venture would be precarious with respect to say profit and competitive ability. Although there was no social security system and social welfare, we established our own labour market.(ATOC 1) In our case, we didn't meet with any intervention from the bureau. In fact, the bureau didn't like our idea initially. But when we gained a good reputation for implementing the reform (Optimizing Labour Organization), the bureau's attitude became cooperative.(ATOC 2)

Machine Tool: Although the scheme is important, it's risky to disturb employees' motivation. It is right to encourage labour mobilization, and it is correct that our middle managers need training. But all this should be done in the context of a perfectly developed social welfare system. It is beyond the director's responsibility to manage society.(MTOC 1) I wonder whether the authority was aware of the result of the scheme. I guess at least 60% of enterprises did something on the surface, rather than made a substantial change. The bureau attributed the problems encountered to enterprise directors.(MTOC 2). On the one hand, the bureau asked us to make a cut of 10 percent in the total labour force. On the other hand, we had to report how these 10 percent found their new employment. Although the bureau distributed some information on what model enterprises had done, our geographical location is not so good for a service business. No one (in the bureau) considered this(MTOC 4)

Heavy Electrical: I think a positive effect of the scheme was to force enterprises to carry out labour management. I agree that our labour productivity is low. But there are so many social constraints on solving the problem. I should prefer the government doing something to improve the social environment for instance creating labour market, reducing the social obligations of enterprises, rather than to set up the ideological campaign. This scheme is the same as previous political initiatives(HEOC 1).

Pharmaceutical: The government's decision helped us to solve labour problems. That's good. The quality of our middle managers was unsatisfactory. What I need is (that) they should develop our market share and increase sales. But they are used to following instructions from me rather than develop their own idea. The Optimizing Labour Organization was formed just in time, when I wanted to solve this problem(PHOC No.1). The appraisal, filling in forms reporting results, all bothered us.(PHOC 3). I think the director's autonomy was constrained by these schemes (now). The authorities didn't trust directors. So they initiated the campaign.(PHOC 4)

Audio: I have wanted to introduce Japanese management into our enterprise for some time, which I learnt in Japan. I saw the opportunity offered by the scheme to implement my idea. This was to establish regulations and to formalize management behaviour. This change in organization serves as preparation for my next plan, to adopt a new wage system, according to one's performance, not according to age or other things. What we did was to combine the command of the bureau with our own ideas of good management practice(in 1986)...I think the bureau shouldn't fix targets, for example 10

percent labour cut and time schedules. The director's autonomy means to manage ourselves, not be dictated to from above.(ADOC 1)

In reference to the case in Audio-visual, a lack of coordination between departments had been recognized for a long time anyway. But the director did not take any positive action, though he agreed it was necessary to improve coordination. Some middle managers said it was the scheme itself which forced the director to change his policies.

Officials in the industrial bureau and municipal economic commission indicated that administrative instruments were necessary to encourage enterprises to improve their internal management. They considered this administrative intervention to be justified. The head of the Enterprise Management Department in the Municipal Electronic Industry Office(bureau) said:

"Our function, as an industrial bureau, is to transfer policies from the higher level (authorities) to enterprises, and not to create our own policies, in order to reduce administrative intervention as much as possible. Policies from above have included the implementation of the contractual system, the ranking of enterprise management and the scheme of Optimizing Labour Organization. For the Municipal Economic Commission the major instrument for implementing its proposal, or ideas is that of organizing meetings to allocate targets, then devising monitoring mechanisms to check on the progress of the projects. In the case of Optimizing Labour Organization, the commission organized a meeting of all industrial bureau chiefs, to assign duties, how much of the labour force to cut, and when to finish this task. Then we transferred the targets to our own enterprises. Any one who failed to reach the targets set would be criticized.....Yes, we understand the difficulties of enterprises. The Municipal Economic Commission does not have authority over functional bureaux, such as the labour bureau; coordination by municipal government is therefore required. What they (the commission)could do is to realize enterprises to carry out the scheme under the direction of industrial bureaux. That would be the administrative intervention.But without administrative intervention, we could do nothing to direct enterprise management"(EI 1)

The reviews of the economic commission were represented by the chief of the Enterprise Management Department as:

"We made a policy, say policy 551, in the scheme of the Optimizing Labour Organization. 551 means 50 percent of enterprises, 50 percent of the total employees must be involved in the reform, and 10 percent of total labour force should be cut. Our administrative subordinates were industrial bureaux. We hoped the scheme would help improve enterprise management. We were concerned that directors ignored internal management after they signed contracts. For enterprises, the easiest way to fulfil profit targets is to increase prices and to take on other businesses with their autonomy. It is necessary to put some pressure on them to improve their management quality. If we do that, the only means available is through direct administrative intervention."(ECOC 1)

"Corresponding" phenomenon was observed after the scheme. Table 9. 13 presents the organizational chart of Audio-visual and corresponding system in its higher bureau.

Table 9. 13 inserted

Some highly specialist departments, such as financial and audit, were semi-independent from the control of directors. Financial managers had a responsibility for financial performance and for reporting on financial conditions to both financial managers in the industrial bureaux and the local financial bureau. This was particularly important for the planning authorities to assess enterprises' internal data.

In spite of direct control from the industrial and functional bureaux, enterprises had to serve other social authorities which were able to regulate their activities. An enterprise would be seen then as a small community undertaking a wide range of social obligations, from social welfare to personal job-security and extending to employees family concerns. For example, the director of Heavy Electrical said that he had to send a team of employees to maintain traffic control on the road front of the enterprise, at the command of the Municipal Traffic Security Committee, which belonged to the Transport Department. Moreover, as a director, he had to take responsibility for the training of his drivers in traffic safety. He was also supposed to take a responsibility for any traffic accident caused by the enterprise drivers.

Social obligations were imposed on all six enterprises. When the municipal government tightened its control over pricing, it asked enterprise to form "price committees" , consisting of middle managers and some workers. This was because the price bureau required it. Such requests included family planning, traffic security, community policing, landscape planning, and street cleaning.

Social authorities also had other means of access to the resources of enterprises. In 1986 when Heavy Electrical completed its new living quarters for employees, the local school asked the enterprise to pay 500 yuan entrance fee for each of its employee's children. According to the regulation issued by the Education Commission, children had to attend school in their local residential areas. The director, therefore, had no choice but to allocate money for his employee's children's education.

9.4.2 Interactions with Higher Authorities in the earlier Decisions

Decisions on organizational change in 1984 and 1986 took place when the Director Responsibility System was implemented. Directors attitudes were reported to be positive towards organizational design, although administrative intervention was necessary to initiate action. The directors' motivation came from their intention to establish a new administrative system in the enterprises over which they had more control.

Audio-visual: In 1986, changes followed commands from the bureau. The purpose of the change was to establish the director's own authority. The director selected middle managers. The bureau supervised the whole process.(AVOC 3) In 1986 there were no standards or targets imposed on us, but the bureau approved our programme of change.(AVOC 5)

Automobile: In 1984 the change was an experiment supervised and organized by the labour bureau and industrial bureau. As a trial run, the Director Responsibility System was adopted.(ATOC 2) The change in 1984 was part of the implementation of the Director Responsibility System.(ATOC 3)

Machine Tool: It was the first step in forming the director's system(in 1986). The bureau ordered every enterprise to do so. (MTOC 1). The change in 1986 did not affect the labour system, so there was no conflict between the director and workers. That was an easier task.(MTOC 2)

Heavy Electrical: We needed the change in 1984. One reason was due to the implementation of the Director Responsibility System. Another reason was that we shifted from a production orientation to a sales orientation. It was necessary to form a new system, better suited to exploring the market. This time, it was an order from above.(HEOC 1). The process applied by the government is the same in any context, for instance building consensus, political education, the Party's support, checking up on the progress, and then presenting results.(HEOC 3)

Pharmaceutical: It is an ideological shift in understanding management(in 1985). But it helped the director to establish her authority.(PHOC 2) In spite of the change in 1985 under the supervision of the bureau, we recognized that we needed an independent department to deal with sales.(PHOC 3).

Audio: The change in 1986 originated from a request to achieve profit targets. We found a lack of coordination among departments and workshops. So we established three product divisions. This time the change was enforced by the bureau. We didn't need this, because we had just become familiar with the previous change. It needed time to understand the new system.(ADOC 3)

Organizational changes in 1984 and 1986 had little effect on employment. Changes were limited to re-allocating the functions of the Party and director, and to re-designing the organizational structure. Administrative intervention was used to legitimate the new status of the director.

The phenomenon of "corresponding" management was observed. Each department carried out instructions from a corresponding department in the bureau. A manager in Heavy Electrical said:

"The change in fact was to re-arrange the position of departments within an organizational hierarchy. Though it was said that the director had definite authority to determine organization design, it was difficult in practice. For example, we removed the technology department from enterprise headquarters, and allocated all technicians to workshops, in order to maintain better coordination between technical design and production. Later, the technical manager in the bureau persuaded us to restore the technical department, because they (the bureau's technical department) couldn't find a department to deal with their requests and instructions within our enterprise"(HEOC 4)

This external intervention restricted the changes the director could make. The scope of organizational change was limited to the replacement of departmental heads and re-arrangement of the relationships between departments. Some enterprises were said to establish a coordinative unit to deal with "the corresponding" phenomenon. Audio set up a managerial office with several titles, including the Total Quality Control office. In fact, there were only two people working there.

"We are what they want us to be."(ADOC 4), the head of the office said. When the quality inspector came, they became product quality staff. When the management department in the bureau examined managerial process, they responded as the management department. They acted as a reception unit to deal with different request from the authorities. But directors in other enterprise tended to design their organizational structure in accordance with those in

the higher bureaux. Information from a department in the bureau was then transferred to the corresponding department in the enterprise.

9.5 Interactions with the Political System

9.5.1. The Decisions in 1988

The Party system in the enterprises was ordered to support the management to bring about organizational change.

First, the municipal government instructed the Party to bring the political ideology to bear on the matter. In the agenda set by the municipal authorities, the role of the political system, such as the Party committee and its assistant organizations, the Trade Union and the Youth League, was assigned to help directors in the scheme.

Secondly, the scheme had an influence on workers' benefits. The Party was used to control processes, such as supervising the decisions and mediating conflicts between management and employees. As described in the section 9.2, an ideological propaganda campaign labelled the scheme as a necessary reform programme. In order to build up ideological consensus, the Party therefore exercised its power through the doctrinal training and political education.

Thirdly, since the implementation of the contractual system, the Party's status in the enterprises had been eroded by the new managerial system. Political staff started to look for administrative posts. In the six enterprises investigated, several Party secretaries were able to become part of the managerial system. They became vice, or deputy-directors following the organizational change. This process could be argued as re-legitimation of the Party in terms of its utility in the management process.

The Party, the Trade Union and the Youth League promoted ideological doctrine in an attempt to form a supportive consensus among employees (**tongyi sixiang**). By means of political education among Party members, managers and workers, the Party created a context for the director to introduce the scheme set by the municipal government.

Interviews with the Party secretaries indicated that their attitudes were positive in their support of the directors:

Audio-visual: What I did was to establish a department, the Enterprise Culture Department, to replace the political education office. This intends to integrate political task into management. The next task was to create our own enterprise culture, to motivate workers and employees.(AVOC 2)

Machine Tool: In this scheme, the Party did not do a lot, only organized some training programmes and propaganda literatures. One reason was that production was very busy at the end of the year. Another reason was that the role of the Party was to support directors. What we did was to make workers realize that the purpose of the scheme was not to conflict with workers' interests, but to create new interests. Anyway, it was a task allocated from the bureau.(MTOC 3)

Heavy Electrical.: The role of the Party turned out to be a supportive system for the director. We make him aware of employees' opinions, complaints and potential problems in the scheme, in order to create the basis for a better decision. As a Party secretary, I asked all Party members to hold an active and supportive attitude toward the scheme. It was a reform programme. And the Party organized employees to study the documents and to build up a consensus. Without these preparations, it was difficult to make employees understand the significance of the reform.(HEOC 2)

Pharm: Every Party member was asked to support the reform. As the Party secretary, I wanted to learn how to apply management knowledge in political work, because the political task is nothing more than managing people. The Party must adapt to the new situation.(PHOC 2)

Audio: We helped directors a lot in the Optimizing Labour Organization scheme. The Party committee ordered all Party members to adopt a positive attitude towards the reform. The Youth League and the Trade Union also organized different programmes to make people understand the reform, such as training, education, and propaganda. (ADOC 2)

The six enterprises had political education and ideological training which was provided first the Party members and managers, and then for the remaining employees. The aim of this education was to persuade employees to accept the scheme. Table 9.14 shows the time schedule of political education in these enterprises.

Table 9. 14 inserted

The Trade Union and the Youth League coordinated the Party's task. Directors gained benefits from these education programmes which reduced the resistance of middle managers and workers to the change. For example, the director in Audio participated in the education organized by the Party system. The director explained the significance of the scheme, from the view of management, while the Party secretary led sessions on related ideological doctrine.

Compared with Party secretaries, the enterprise directors had greater expertise in administration and longer experience working in enterprises. Some of them, such as the directors in Audio-visual and Automobile, used to be departmental managers in the industrial bureaux. When the director responsibility system started to be implemented in 1984 and 1986, all these enterprise directors were authorized to establish their own personnel staff by means of appointment of middle managers and workshop managers. Although the bureaux had approved the appointment of the Party secretary, the director's opinion was respected by the bureau when choosing a suitable candidate. These Party secretaries were either promoted from lower level staff within enterprises or appointed from other organizations. The previous Party Secretaries were either removed out of the organization or retired, except in Audio where the relationship between the Party Secretary and the director was very close.

Furthermore, most directors in the six enterprises used to undertake the political duties in the Party committee. The director in Audio-visual had been vice-secretary before he was appointed as the director. In Automobile, the director took up the duty of the Party Secretary before he was moved to the director's position.

Some of the Party Secretaries changed their status. In Audio-visual, Machine Tool and Pharmaceutical, the Party secretaries used the opportunity of organization change to carry out managerial roles. In other words, they wore two caps, one as a head of the political system, the other as an administrator.

But, this caused another problem: ambiguity in the relations between the director and Party secretary. Legally, the director was the sole source of executive authority within the enterprise. The director was defined as the head of all managerial staff, including the Party secretary, if he/she was entitled to be a vice-director. At the same time, the director normally belongs to the Party, with his/her identification as a Party member. The secretary was the formal leader of the Party. In such circumstances, interaction between the director and the Party secretary was largely dependent upon their personal relationship. The Party secretary in Audio-visual said:

"I am not interested in the argument(which debated whether the director is the centre or the Party secretary is the centre). I think that the harmony between the director and the Party secretary relies on a consistent relationship between the two people. If one insists on the other obeying him, it becomes a power struggle . In fact it is the same for either the director or the Party secretary to make the final decision, if one was competent to do so. Certainly,the regulations state that directors should make decisions, because the main task of the enterprises is to realize a profit contract, rather than to perform political tasks."(AVOC 2)

The head of the Director's Office in Audio had the same opinion. He stated that the regulations helped to establish the formal status of the directors in decision making. This was further promoted by the implementation of the Contractual system. The power of the Party secretary was constrained by regulations issued in 1986 and 1987, since the implementation of the Director Responsibility System transferred authority to directors. The activities of the Party were limited to political education and support for the directors, in addition to its supervisory role over Party members' discipline. He implied that because the contract responsibility system linked personal income to profit performance, employees were willing to accept the authority of the director who was responsible for profits(ADOC 3).

9.5.2 Comparison with the decisions in 1984 and 1986

Table 9.15 compares the Party systems in the six enterprises in 1985 and 1988.

Table 9. 15 inserted

It was obvious that the weight of the Party in 1985 was much greater than in 1988.

It is worth mentioning the situation in Machine Tool. The director was not a Party member. Before the change in 1986, he was dominated by the Party secretary who used to be the director until 1983. Before the change, the Party secretary dominated every issue. The middle managers reported to the secretary directly rather than to the director. The resolution of this conflict came through the implementation of the Director Responsibility System in 1986. The director was ordered by the bureau to set up the administrative system by himself, while the Party system was required to help the director. The Party secretary retained a strong informal influence until 1987, when he retired. The new Party secretary was promoted from a Party branch secretary at the workshop level and held little influence over the managers.

A similar story was found in Heavy Electrical. Before the current director was appointed by the bureau in early 1984, there was a serious conflict between the former director and former Party secretary. The result was that the bureau sent a team to the enterprise to look into the problem. Following a survey among employees and middle managers, both the former director and the former Party secretary were removed from the enterprise. Then the bureau appointed a new director. This director selected his subordinates, deputy directors and middle managers.

In 1985 the Party still took part in personnel appointments. The criteria followed by Party committees in the selection of middle managers emphasized political loyalty. For example, the selection of executives in Heavy Electrical was determined by four criteria: **political standard, knowledge of management, experience of administration, and age**(young and healthy). The Party system was concerned with candidates' political standards, while the director took account of their knowledge and administrative experience.

The following comments point to the transfer of managerial power to the enterprise directors:

Audio-visual: At that time I respected the director and his opinion on organizational change.(AVOC 2)

Automobile: Even in 1984 the director himself was powerful, because he came from the bureau. In particular, he was the first director who was an expert in the automobile industry...(ATOC 4). At that time (1984), we had the collective leadership of the Party committee. It was the same as the executive committee. The director was a vice Party secretary. He was important.(ATOC 5)

Machine Tool.: The power of the Party secretary had to be transferred to the director, according to a regulation issued by the bureau.(MTOC 3). The director got solid power in 1986, when the Director Responsibility System was carried out.(MTOC 3)

Heavy Electrical.: The Party secretary had no power since he entered the enterprise(in 1984). We adopted the system,(the Director Responsibility System) according to the bureau's instruction, in early 1984, earlier than other enterprises.(HEOC 4) Middle managers were selected by the director himself certainly with reference to the opinion of the Party secretary. But the secretary did not have much knowledge about personnel here..(HEOC 5). The director had very good relations with managers.(HEOC 6)

Pharmaceutical: The change in 1984 was following the strategy of expanding our business, that should be determined by the director herself(PHOC 2). Our director was excellent in in business. Thus, people were very keen to accept her decisions, even the Party secretary respected the director.(PHOC 4)

Audio: The director had a good relationship with the Party secretary.(ADOC 3). At that time(1986), it was collective leadership, but the director often dominated decision making, because these decisions were linked to the business.(ADOC 4)

The decisions on organizational change made around 1985 and 1986 transferred managerial authority from the Party secretary to the director, although the decline of the secretary's

power was not immediately evident. But these changes reshaped the legitimacy of the director's authority.

9.6 The Role of Information and Decision-making

Three information sources were identified in Chapter 7, central, markets and internal. In organizational change, each of the three sources played a different role.

9.6.1 Information and Decisions in 1988

Table 9.16 summarized information used in the decisions.

Table 9. 16 inserted

Official documents and experience of the model enterprises were an important source of information for organizational design. These data provided managers with the methods and procedures of organizational design and change. At the same time, internal data, such as the personnel profiles, helped managers to adapt their organizational structures.

Audio-visual: We visited several model enterprises to learn their methods, and we did a survey among employees in May, and found that more than 80 percent of employees supported the reform.(AVOC 3). Our structure was learned from a model enterprise, establishing coordinated systems(AVOC 4) It was clear from the documents to tell us what we had to do.(AVOC 5) Before the scheme, we had a performance evaluation system, so we knew the condition of each department and workshop.(AVOC 6)

Automobile: We visited some enterprises which were experimental bases for the National Labour & Personnel Ministry. We also visited Otis in Tianjin, in order to understand the labour management in joint venture companies. The management department in a university helped us to design the organizational structure.(ATOC 2). We did a three-month survey on work study in order to fix production posts. (ATOC 3).

Machine Tool: We mainly referred to the bureau's comments. But the idea of merging two departments together was initiated very early, because time to time they had conflicts.(MTOC 1) To design the system, we visited some model enterprises,

including Automobile.(MTOC 2) I got the idea from the documents distributed by the bureau with details of system design.(MTOC 4)

Heavy Electrical: We attended a training programme organized by the bureau. The main outline of the change was formed during and after the programme.(HEOC 3) I collected the introduction of model enterprises' experience and methods, then discussed them with the personnel director. That was the basis of the design. (HEOC 4). Most managers they relied on their own experience when they designed the job descriptions. (HEOC 5)

Pharmaceutical: I thought a lot about strategic development. It's necessary to split the workshop into three....Some ideas were provided by the MBA students' projects(PHOC 1) We learnt some ideas from model enterprises, and the comments of the documents.(PHOC 2) The number of production posts were simply fixed according to output quantities.(PHOC 4)

Audio: The worst unit was our warehouse, so we decided to make the first change there.(ADOC 2) The difficulty of the change in design was some middle managers really knew nothing about their tasks. They had no information at all. So we had to judge from our own estimate.(ADOC 3)

It was also reported that information communication took place within the vertical "corresponding" structure. Usually, the personnel department or management department was responsible organizational design(Section 9.3.2). Documents and model enterprise briefing materials were also circulated from the bureau's management department to the enterprise's corresponding department. The management department in the enterprise was also responsible for reporting the progress of the scheme to the same department in the bureau.

At the same time, the content of external information for enterprise managers was likely to be qualitative rather than quantitative. Managers wanted to learn how to design an organization and what kind of organizational structure was suitable. They learned from reference materials distributed by the bureaux and the Municipal Economic Commission. Personal visits to some model enterprises were organized by their bureaux. Some bureaux, such as the Municipal Machine Building Bureau, launched training programmes for enterprise managers.

Compared with external sources, internal data were quantitative. Personnel or labour managers calculated the total wage budget. In some enterprises, such as Heavy Electrical,

labour managers even conducted work study in workshops, in order to understand the productivity enhancement. Because the target was set to reduce the total employees by 10 percent, and the Municipal Economic Commission examined the fulfillment of the scheme, the enterprises had to present detailed internal data about the scale of their employment and the size of their wage budget.

9.6.2 Comparison with the early decisions in 1984 and 1986

The main sources of information used in the early decisions in 1984 and 1986 are presented in table 9.17.

Table 9. 17 inserted

At the earlier time, managers described the information sources relevant to organizational change as the following.

Audio-visual: The director selected the middle managers according to their personal impressions and records. Certainly, he referred to employee's opinion. The bureau also introduced methods, such as criteria of personnel appointment.(AVOC 3)

Automobile: The design of the system was helped by expertise from the labour bureau. We did surveys in some workshops, to understand the conditions there.(ATOC 2)

Machine Tool: That was totally based on the bureau's instruction.(MTOC 1). The director selected managers based on personnel profiles and their historical records.(MTOC 3)

Heavy Electrical: (In 1984)because the market was just open to enterprises, our sales increased sharply. But the internal coordination between the three workshops was not perfect. According to their performance, we decided to establish sub-profit centres.(HEOC 1) The profit margin of each product was similar. This helped to set up profit centres.(HEOC 3) Other enterprises did so, signing sub-profit contracts with each production workshop(HEOC 4)

Pharmaceutical: The sales increased in 1984. It needed an independent department to deal with customers.(PHOC 1). We learnt that (organizational change) from another pharmaceutical enterprise, which set up a marketing department.(PHOC 3).

Audio: The sales were not good (in 1986). What I considered was that our products were quite diversified. All the salesmen gathered in one department was not good.....Other enterprises tried sub-profit centres, which gave me an idea.(ADOC 1) The human resource was available to split salesmen into three groups for each profit centre.(ADOC 3)

Information content for organizational change was highly qualitative. The selection of middle managers was largely based on subjective judgement, jointly by the Party secretary and director.

Compared with the decisions in 1988, the significance of each information source was very similar. The weight of the central source was 43 percent in the later decisions, compared with 36 percent in the earlier period, while the market source was 14 percent to 21 percent previously.

9.7 Regulations and Decisions

9.7.1 Regulations and Decisions in 1988

A total of 17 regulations were reviewed. All of them were closely related to the decisions in organizational change in 1988, which were initiated by an official scheme, Optimizing Labour Organization. Their degree of codification is presented in table 9.18; the categories used are the same as in the previous chapters.

Table 9. 18 inserted

The basic content of these regulations was shaped by official ideology, as in the propaganda which created an external environment for the scheme. From June to August 1988, *Beijing Daily*, the official mouthpiece of the Municipal government, intensively published a number of articles and reports on Optimizing Labour Organization, including speeches of the mayor

and other government officials, the key points of the decisions made by the economic commission, and several model enterprises' experiences. The tone of this moral propaganda raised an ideological point which linked the scheme to the reform. An article in *Beijing Daily* (14th August, 1988: 1) stated that "Optimizing Labour Organization solves the key difficulty of the labour reform, as well as solving the difficulty in the enterprise reform".

Although the direct regulation in the scheme linked to the decisions was the one introduced by the ten municipal bureaux (Appendix IV-1, No. 11), there were several other regulations and official speeches which initiated the scheme (No. 1, No.3, No.4, No.5 and No.9). The purpose of this regulation was to focus on the arrangement of redundant people who were removed out of production posts but stayed within the enterprises.

The municipal authorities gave commands to enterprises directly through hierarchies. This administrative instrument includes: internal documents, working conferences, and official examinations checking performance of the scheme.

In May and August 1988, the municipal economic commission organized two conferences to introduce the scheme and the pilot projects in model enterprises to other enterprises.

Apart from these working conferences, the commission organized several "Bureau executive meetings" to assign tasks. The decisions in these meetings were summarized as policies and regulations distributed to enterprises (Appendix VI-1 No. 8, No.10, No. 12, No.13, No. 14, No.15, No.16, No.17). These documents were called internal documents.

These regulations, or internal documents set targets, time schedules, procedures and the programmes of the scheme. For example, Heavy Electrical and Machine Tool were subordinates of the Municipal Machine Building Bureau (MMBB). Both enterprises were ordered to complete the scheme by November 1988, according to the bureau's arrangement. Both Audio-visual and Audio were under the Municipal Electronic Industrial

Office(bureau). But Audio-visual was assigned to start the scheme in May, while Audio in July, because the bureau grouped enterprises into different time schedules.

Audio-visual: There were several regulations from the bureau and the Municipal Economic Commission, setting out the procedure, such as managers first, workers later. We just followed every step set according to these regulations.(AVOC 3)

Machine Tool: It was necessary to have regulations, for example, the government regulation to protect the rights of director.(Appendix IV-1 No.9)(MTOC 1)

Heavy Electrical: The procedure was(that) the municipal government drew up a general outline, then the bureau detailed the policy. This scheme was raised by the municipal government. We studied the mayor's speech(Appendix, No 8). But policies were issued by the municipal labour bureau and Economic Commission. Our bureau had its own policy(Appendix, No.11). Different industrial bureaux have different regulations.(HEOC 3)

The high degree of codification of these regulations imposed standards on enterprises. For example, the Municipal Economic Commission issued a regulation governing the organizational change(Appendix IV-1, No.16). This was a detailed form which had to be filled in by the enterprise managers. The commission used this way to check the result of the scheme. The director in Machine Tool said:

"Although the above authorities said (that) enterprises have autonomy to design their own systems, according to demands of production, in fact there was not possible. They checked our progress, the number of people removed from the production posts. The administrative interference was the same as before"(MTOC 1)

The labour manager in Heavy Electrical said that the bureau asked the enterprise to fill in a number of forms including data about the number of redundant workers, the number of services established by the enterprise, and the increase in productivity.

9.7.2 Comparison with Decisions in 1984 and 1986

A documentary survey of regulations in 1984 and 1986 was also carried out. But access to the original sources was limited, so that the survey relied heavily upon the managers' memory.

The director in Heavy Electrical said that the direct regulation he had referred to in the decision of 1984 was circulated by the bureau. This regulation was seen as a result of the general policy(Appendix IV-2, No 1) published by the State Council in May 1985. The municipal government later published its own regulation on decentralization, which contained twenty articles, detailing the policy's ten points. The municipal Machine Manufacturing Bureau further adapted the municipal government's regulation into thirty points and distributed into its subordinate enterprises as an administrative rule.

"The bureau added a sentence to every point, saying: 'This decision should be authorized by the respective authority'. But every one understood that the term 'respective authority' meant the bureau itself"(HEOC 5)

These regulations defined the status of the Party secretary and director.

Audio-visual: Everything must be authorized(in 1986), such as the appointment of the vice directors. The authorization was formatted as an official document from the bureau(AVOC 4)

Automobile: The change was complicated. Because it was linked to the payment system, everything must be supported by the bureaux. They authorized these issues with regulations related to our case.(ATOC 2)

Pharmaceutical: It was difficult to compare regulations in 1985 and 1988. Perhaps we received more regulations in 1988. In 1985, most regulations came from our bureau. But now, we received documents from several bureaux.(PHOC 3)

The director also referred to regulations related to the decentralization programme for obtaining managerial authority.

"We did that, because design of organization was under the director's power. It was the first time for the director to change the organizational structure, because the decentralization gave him the power to do so"(HEOC 3)

"The change in 1986 was an internal affair. It was decided by the director. It was not an issue for the bureau, so we did not consult the regulations. But certainly, it was clearly defined in decentralization policy that the director had authority to determine the organizational structure(ADOC 2)

These descriptions indicate that regulations legitimized the director's authority in decision making. Although some decisions were a direct result of regulations, the effect of these regulations on decentralization provided managers with a point of reference.

9.8 Discussion and Summary

Analyses and discussion in the previous sections direct attention to characteristics of decision making in organizational change. The decision processes were very complicated, because of long durations, some interruptions or delays, and the number of actors involved. The flow of the decision activities wandered and recycled its way between design and selection phases. Feedback and adaptation occurred frequently. The process in 1985 was less complicated than that in 1988, and of generally shorter durations.

Enterprise managers in 1988 enjoyed more autonomy in their organizational design, with less instructive commands from the bureau and less influence from the Party secretaries than in 1984 and 1986. In the six enterprises, no case was reported to have been authorized by the industrial bureau. Although managers possessed more managerial authority to design the organization in the later compared with the early decisions, this delegation did not simplify the decision process. Both processes have some similarities, such as the necessity of the Party's support in consensus building with political training and ideological education. The processes between the enterprises showed some similarities.

However, the higher authorities still imposed themselves on enterprises. The authorities, such as the industrial bureaux and municipal government, were significant in structuring action, either in initiating decisions or controlling the process. The corresponding matrix structure is seen as the framework for this intervention. The authorities were important triggers in 1988. In 1984 and 1986, administrative intervention was used by the authorities to promote the implementation of the director responsibility system. Directors then appeared to welcome this intervention. But in 1988, when the authority imposed an official scheme on enterprises, some directors were reluctant to follow their commands. Conflicts between the authorities and enterprise managers increased. The interactions between the authorities and enterprise managers were more dynamic. The more power managers were

delegated, the more difficult it was for the authorities to control the behavior of the enterprises, and more likely that they resorted to administrative intervention.

In these decisions, both management and the Party at enterprise level were regulated by the authorities. Compared with enterprise directors, the Party secretaries in the six enterprises had a weaker power base. Except for the Party secretary in Audio, all were appointed between 1984 to 1986, when the director responsibility system started to be introduced to industrial enterprises. The enterprise directors had more experience and knowledge than the Party secretaries. The contractual system also strengthened the director's position in decision-making.

Both directors and the Party secretary's legitimacy was defined by the authorities. The ambiguity of the Party's position in enterprises became problematic in 1988, when the Party was said to be "supportive". In the later decisions, the power of the Party secretary declined. The relations between managers and the Party secretary at this moment were largely dependent upon their personal relations. Some enterprises attempted to solve the problem by giving the Party secretary certain managerial duties.

The shift of managerial authority within enterprises from the Party secretary to the director did not mean a decline in the Party's power. As the decision processes during this period indicate, the support of the Party for the management was necessary to mediate conflicts between managers and workers. Both the Party and administrative system are actually integrated with each other. Most managers had a political identity. Political management and administrative management are two sides of the same coin in China. Thus, the harmony between the Party secretary and director was largely dependent upon their personal relationship.

The content of information relevant to decisions on organization change were very qualitative, especially these from external sources, such as instructions from the planning

authorities. The diffusion of information relied upon (a) the administrative documentary system, which transferred messages, such as commands, instructions, advices and requests, within administrative hierarchies, from authorities to enterprises; (b) personal visits to model enterprises, whose experiences were recognized by authorities, (c) training and education, which were designed to teach managers future actions and (d) an internal data system within enterprises. In the decisions concerned, the central source was significant in promoting information communication. With highly qualitative information, diffusion of information was restricted to relying on documents, personal visits, and training, which were organized within administrative hierarchies, through the corresponding structure. But internal data were more quantitative. These characteristics did not change over time.

Information concerned with the decisions came mainly from the central and internal sources. There was no significant change in the information sources for the decision processes in 1984 and 1986 and the later period.

Finally, the regulations were regarded as both a source and a constraint of actions. The documentary survey of respective regulations depicts that the decisions in organizational change were ruled by respective regulations set by the authorities. These regulations formulated targets, procedures, and the status of decision actors. Referring to regulations, decision actors recognized their legitimate positions. In other words, they were regulated to take actions within a framework outlined by regulations.

There has been little change in this situation. Both managers and the Party secretary were subject to regulations. For example, in the decisions for 1988, managers had to follow the official scheme set by the authorities, in accordance with the regulations, without any choice, despite the fact that they were supposed to have the decision-making power in organizational design and organizational change.

A regulation was a concrete form of a political ideology. A political ideology predominated in the regulations. While the Party conveyed ideological concepts from the authorities to the organizations through political education, it was regulations that determined the scope for managerial action in administrative systems. A coherence existed between the political ideology and administrative decision-making.

Table 9.1 Decisions of Organizational Change in the Six Enterprises in 1988

Enterprises	Date	Decision Topic
Audio-visual	March-Nov. 88	Design of a New Organization Chart and merging education department with corporate culture department
Automobile.	March-Dec.87	Departmental Form and labour contractual forms
Machine Tool	July- Dec.88	Abolishing 3 departments and deployment of labour and managers
Heavy Electrical	March-Oct.88	Changing the education center and design of the contractual labour system
Pharmaceutical	May- Oct.88	Adopting departmental system and creating two new workshops and labour deployment
Audio	May-Sep.88	Abolishing 7 Departments and implementing labour deployment

Table 9.2 Timing: Duration, Interruption and Delay

Enterprises	Durations	Interruptions, delays(or accelerations) Reported
Audio-visual	8 months	1. Interrupt from the bureau requiring to re-design its organizational structure and reduce more workers from workshops 2. One month delay caused by feedback of the pilot project in the education department
Automobile	About 10 months	Three times of adapting the draft of the programme report to the workers' congress, a total of two and a half month in this discussion
Machine Tool	About 6 months	1. The director did not follow the time schedule fixed by the bureau and delayed about three months to start the programme. 2. The director intended to accelerate the process in the rest of time(one month)
Heavy Electrical	About 7 months	1. The director instructed to wait and caused a delay about one month than the bureau's time schedule. 2. Another month delay caused by waiting for the feedback of the change in the education center.
Pharmaceutical	5 months	One month waiting for the feedback from a pilot in a production workshop.
Audio	4 months	One month delay caused by a pilot project in a department and a warehouse

Table 9.3 Actions of Authorities and Enterprise Decision Progress.

Date	Government Actions	Enterprise Decision Progresses
January-March, 88	The Beijing Municipal Economic Commission(BMEC) did a survey on labour productivity and made a summary. The scheme was called "Optimizing Labour Organization" by the Municipal Government(MG)	Automobile started implementation of the change. Heavy Electrical attended a conference of the bureau about the model enterprises' experience in labour reform. Audio-visual and Heavy Electrical were told to start the change .
April - May	MG organized a meeting for enterprise managers to introduce the scheme of "Deepening Enterprise Reform". Industrial bureaux started to organize implementation of the scheme in subordinate enterprises.BMEC fixed details of targets, time schedule and process.	Audio-visual, and Heavy Electrical started to prepare the scheme. Pharmaceutical and Audio were told by their bureaux to start the change Audio-visual, Heavy Electrical and Pharmaceutical attended the meeting organized by the municipal government. Audio-visual's first draft was rejected by the bureau.

June - July	Industrial bureaux training and conferences, distributed documents. Enterprises were groups according to the bureau's schedule. BMEC began to check up the progress. The bureau's chiefs supervised several enterprises.	Enterprises formed steering groups started political training to build up consensus. Heavy Electrical, Pharmaceutical and Audio started to design their programmes. Machine Tool introduced the scheme. Pharmaceutical did first change as research institute as a pilot project design.
August	MG published a regulation "Protection of Director/manager's Personal Safety". Industrial bureaux began to collect opinion and urged to accelerate the progress.	The Audio-visual's second draft of its design was in group discussion. Heavy Electrical's second design of programme was group discussion. Pharmaceutical finished its draft of organization design. Audio finished design, first change in a department and a warehouse.
September	Authorities summarized the experience and called on further implementation.	Audio-visual's proposal draft was discussed by Workers' Congress and a big debate raised. Heavy Electrical discussed the draft in the Workers' Congress. The director decided to start a pilot project. Pharmaceutical's executives agreed the design. Audio's managers agreed the design. Machine Tool visited to model enterprises, and designed its chart.
October	Ten bureaux published a regulation for Optimizing Labour Organization, allowing enterprises to open service or do other business for those redundant workers.	Audio-visual's Worker Congress approved the design and start a small change in its education centers. Heavy Electrical start a pilot programme in education department. Machine Tool discussed the design. Pharmaceutical started the change.
November-December	BMEC did assessment of progress and urged to finish the scheme by the end of the year. The Labour Bureau did a summary of the scheme.	Audio-visual and Heavy Electrical finished and started to decisions carry out changes. Machine Tool finished organization design. The director approved the programme.
January-March, 89	BMEC distributed documents for further reform in labour system, and formalizing standards.	Audio-visual, Heavy Electrical, Pharmaceutical and Audio were in decisions. Machine Tool implementation of the started to change its structure.

Table 9.4 Actors and Levels in the Initiation Phase

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External: Industrial Bureau	5	Yes	-	Yes	Yes	Yes	Yes
Internal: Director	4	-	Yes	-	-	-	-

Table 9.5 Triggers of Decisions on Organizational Changes

Enterprise	Description of a trigger	Category of trigger
Audio-visual	Command of the Bureau	Central
Automobile	Formulation of the joint-venture,	Task
Machine Tool	Command of the bureau	Central
Heavy Electrical	Command of the bureau	Central
Pharmaceutical	Command of the bureau, and	Central
Audio Total	Commands of the bureau	Central 6
	Central commands	5 (83%)
	Markets	0 (0%)
	Internal task requirements	1 (17%)

Table 9.6 Actors and Levels in the Design and Selection Phases

Design and Selection Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External: Industrial Bureau	5	D	-	-	-	-	-
Internal: Director	4	S	D&S	S	D&S	D&S	D&S
Vice-director	3	S	D&S	D&S	D&S	S	S
Party secretary	3	D&S	-	S	S	D&S	D&S
Management Dept Personnel/Labour Dept	2	D	D	D	S	D	D
Other departments	2	S	D&S	D	D	S	S
	2	S	S	S	S	S	S

Note: D =Design
S =Selection

Table 9.7 Actors and Levels in the Authorization Phase

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Internal:							
Workers congress	5	Yes	Yes	-	Yes	-	-
Director	4	Yes	Yes	Yes	Yes	Yes	Yes

Table 9.8 Decisions on Organizational Change in 1984 and 1986

Enterprises	Data	Decision Topics
Audio-visual	March-August 86	Establishing a director system through appointment of managers
Automobile	June-Oct.84	Change of labour arrangement & experiment of a new wage system
Machine Tool	May-July 86	Redeployment of middle managers
Heavy Electrical	Oct 85-Jan. 86	Establishment of Product Divisions and sub-profit centers
Pharmaceutical	Oct-Dec. 85	Setting up Sales & Operation department
Audio	Oct.86-Jan. 87	Establishment of Product Divisions and sub-profit centers

Table 9.9 Timing: Duration, Interruption and Delay in Decisions in 1984 and 1986

Enterprises	Durations	Interruptions and Delays(Accelerations) Reported
Audio-visual	5 and a half months	The first two months were in education and political study. A couple of weeks for design and selection, with instructions of the bureau, and collective discussion in the Party committee
Automobile A	4 and a half months	A couple of weeks in education and study. The bureau invited a university to assist the design of wage system. long time was reported in design and selection with the bureaux. The workers congress proposed some changes in the programme.
Machine Tool	About 3 months	Some time spent to form a consensus of opinion between the director and the Party secretary
Heavy Electrical	3 months	It took some time to design a responsibility system for production workshops
Pharmaceutical	2 and a half months	Discussion of the design programme cost about one month. The design changed twice.
Audio	3 months	Discussions among middle managers took time.

Table 9.10 Actors and Levels of Decisions

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
Initiation							
External:							
Industrial Bureau	5	Yes	Yes	Yes	-	-	-
Other bureaux	5	-	Yes	-	-	-	-
Internal:							
Director	4	Yes	-	Yes	Yes	Yes	Yes
Design and Selection							
External:							
Industrial Bureau	5	S	D&S	-	-	-	-
Other bureaux	5	-	D&S	-	-	-	-
Internal:							
Director	4	S	S	S	S	S	S
Vice-director	3	D&S	D&S	D&S	D&S	D&S	D&S
Party Secretary	3	S	D&S	S	S	D&S	D&S
Personnel/Labour Departments	2	D	D	D	D	D	D
Management Dept	2	D	D	D	D	D	D
Other departments	2	S	S	-	-	S	-
Authorization							
External:							
Industrial Bureau	5	Yes	Yes	-	-	-	-
Other bureaux	5	-	Yes	-	-	-	-
Internal:							
Workers Congress	5	-	Yes	-	-	-	-
Director	4	Yes	-	Yes	Yes	Yes	Yes
Party Secretary	3	Yes	-	Yes	-	Yes	Yes

Note: D = Design; S = Selection

Table 9.11 Triggers of Decisions on Organizational Change in 1984 and 1986

Enterprises	Description of a special event stimulating the decision as a trigger	Category of trigger
Audio-visual	Implementation of the Director Responsibility System and command of the bureau	Central
Automobile	Experiment of a new wage system under the instruction of the municipal labour bureau	Central
Machine Tool	Implementation of the Director Responsibility System and the command of the bureau	Central
Heavy Electrical	Improvement of internal coordination and Expansion of market share	Task & markets
Pharmaceutical	Increase of sales and Implementation of the director responsibility system	tasks & central
Audio	Implementation of Director Responsibility System and Promotion of sales	Central & task
Total		9
	Central commands	5 (56%)
	Markets	1 (11%)
	Internal task requirement	3 (33%)

Table 9.12 Agenda of Organizational Change

Agenda	Six enterprise	Bureau	Municipal Government
Targets	Reducing 10 percent total employees by November 88	Reducing 10% total bureau's labour size by November 88	Reducing 10% total municipal labour by the end of 1988, 10 by 1990. Finishing Co Labour System in 1992
Actors	Directors Party committees, Trade Unions	Chief of the bureau The Party committee	Chairman of the commission Municipal Party comm
Process	<ol style="list-style-type: none"> 1. Establishing a Steering group 2. Consensus, political education 3. Design & discussion 4. Implementation the programme: clericals first, workers later, Office first, workshop later. 5. Establishing internal labour market 	<ol style="list-style-type: none"> 1. Establishing a Steering group 2. Each of chiefs responsible for several enterprises 3. Supervision of the progress of each enterprise: state-owned enterprise first, collective owned; later; experiment enterprises first, others later 4. Establishing bureau labour market 	<ol style="list-style-type: none"> 1. Executive meeting 2. Making regulations and policies 3. Supervision of the progress of each bureau: important enterprises first, others later; experimental enterprises first, others later 4. Coordination among bureaux

Table 9.13 organizational structure of Audio-visual and its higher bureau(the Municipal Electronic Industrial Office)

The Bureau	Audio-visual Before the scheme	After the scheme
Director's office -----	Director's office	Director's office
Party committee -----	Party committee	Party committee
Party discipline com.--	Party discipline com.	Party discipline com.
Youth League committee-	Youth League committee	Youth League committee
Trade Union -----	Trade Union	Trade Union
Programme dept -----	Planning dept.	Planning dept.
Quality office -----	TQC office	TQC office
System Reform office --	Management office	Management office
Technology dept. -----	Technology dept.	Innovation dept.
Equipment dept. -----	Equipment dept.	Tech. equipment dept.
Financial dept.-----	Financial dept.	Financial dept.
Audit dept.-----	Audit dept.	Audit dept.
Labour dept -----	Labour dept	Labour & Personnel dept
Personnel dept-----	Personnel dept.	
Security dept. -----	Security dept.	Security dept.
Propaganda dept. -----	Education dept.	Enterprise culture centre
Legal affair dept.-----	(none)	Legal affair office
Foreign trade dept. ---	Foreign trade dept.	Foreign economic dept.
Administrative dept. --	Administrative dept.	Administrative dept.

Table 9.14. Political education programmes in six enterprises during organizational change.

Enterprises	Political Education and Consensus	Date
Audio-visual	Education programme for all managers every Thursday afternoon, then for workers	June to July, 88
Automobile	Education for all managers and workers	September October,87
Machine tool	Training for middle managers	January 89
Heavy Electrical	Training programme for managers, then workers	July to August,88
Pharmaceutical	Training programme for managers, then for workers	July to August,88
Audio	Training programme for managers, then workers	July to August,88

Table 9.15. The Party system in 1985 and 1988

Enterprise	1985		1988	
	Departments	Staff	Department	Staff
Audio-visual	Secretary Office Party Discipline Party Personnel Propagation	10	Secretary Office Education	5
Automobile	Secretary Office Discipline Party Personnel Political Propagation Political Education	22	-	-
Machine Tool	Secretary Office Discipline Party Personnel Political Propagation	9	Secretary Office Education	5
Heavy Electrical	Secretary Office Discipline Party Personnel Political Propagation	15	Party Executive office Discipline	8
Pharmaceutical	Secretary Office Discipline Party Personnel Propagation	8	Secretary Office	5
Audio	Secretary Discipline Party Personnel Propagation	8	Party Reference office	4

Table 9.16 Information Sources and Decisions in Organizational Change in 1988

Enterprises	Description of information	Category
Audio-visual	Managers referred to documents distributed by the bureau, and visits to model enterprises to learn organization design.	Central
	Employee profile and tasks measurement	Internal
Automobile	Trip to model enterprises to learn organization design in joint-venture.	Markets
	Documents distributed by the personnel bureau	Central
	Work studies and employee profiles	Internal
Machine Tool	Documentary guidance and model experiences	Central
	Task measurement and employee profile	Internal
Heavy Electrical	Document guidance and model experiences	Central
	Employee profile and task measurement	internal
Pharmaceutical	Document guidance and model experiences	Central
	Process of production flows	internal
	MBA students' proposal	Markets
Audio	Document guidance and model experience	Central
	Employee profile and task measurement	internal
Total		14
	Central Planning System	6 (43%)
	Markets	2 (14%)
	Internal Date Sources	6 (43%)

Table 9.17 Information and Organizational Change in the Earlier Period

Enterprises	Description of information	Category
Audio-visual	Bureau's programme and documents about the director's responsibility system	Central
	Personnel profiles of middle managers	Internal
Automobile	The labour bureau's documents and help of design the wage system	Central
	Employee's profiles	Internal
Machine Tool	Bureau's programme and documents	Central
	Personnel profiles of managers	Internal
Heavy Electrical	Learn design from other enterprises	Markets
	Training programme provided by the bureau	central
	Internal data, such as production layout	Internal
Pharmaceutical	Production expansion	Internal
	Other producers' behaviour in organization design and performance.	Markets
Audio	Data of employment, salaries, bonus, profits Observation of other enterprises	Internal & Markets
Total		14
	Central Planning System	5 (36%)
	Markets	3 (21%)
	Internal Date Sources	6 (43%)

Table 9.18 Degree of Codification of Regulations in the Scheme of Optimizing Labour Organization

Publisher	Degree of Codification			
	1	2	3	4
State Council	-	-	1	-
Functional Ministries (Personnel&Labour, Treasury)	-	3	-	3
Municipal government	-	1	2	-
Municipal government agencies (Economic commission, Personnel&Labour Bureau, etc)	-	1	4	3
Industrial bureaux	-	-	1	1
Total		5	8	4

CHAPTER 10: DECISIONS ON INNOVATION INVESTMENT

10.1 Environment Background

In the "Provisional Regulation on Expansion of Enterprise Business Autonomy", the first regulation on the expansion of enterprise autonomy published by the State Council in 13th July 1979, four of the ten points related to technology innovation and capital usage: increasing the depreciation rate of fixed assets, autonomy of dealing with deposit assets, credit of current capital, and product innovation.

In 1984, after a few years experimentation in several locations, these developments were confirmed in another fundamental policy initiative, "Temporary Regulations on Further Expansion of Autonomy". These regulations confirmed in law the practice of state-owned enterprises using their own funds from profit retention, for investment in production and other forms of development.

The amount of retained profit was miniscule. In 1985, a total of 69,800 state owned industrial enterprises realized 133.4 billion yuan of profit. Their retained profit was 17.5 percent, a total of 23.3 billion yuan. From this retained profit, enterprises had to pay energy and transport tax (**nengyuan jiaotong shui**) which was about 5 percent, and construction tax and bonus tax (if the bonus exceeded the sum of four month's salary). The average portion of own funds retained within an enterprise was about 11 percent of the total profit realized. As Yong noted :

"[T]herefore the profit retained by an enterprise enables it only to support its expenditure on bonus and medicine bills, and there is no way to reform itself (in terms of innovation). In addition to a low rate of depreciation, some enterprises are having difficulty in maintaining levels of re-production (capacity)"(Yang, Shouzheng, 1987:34)

Yang claimed that the state central planning authority paid too much attention to expansion of basic construction, rather than to renewing existing enterprises. In the Sixth-Five Year plan, the fund for technology renovation was only 28.8 percent of total investment on fixed

assets. In 1985, it declined to 26.7 percent, while the funding level for basic construction projects was as high as 62.2 percent. In 1986, total investment on fixed assets from the central planning authority was 195.9 billion yuan. 116.0 billion (about 59.2 percent) were allocated to basic construction, while the funds for technology and facility renovation were 60.0 billion, about 36.6 percent. In 1987, the total investment reached 195.0 billion, while the former was 114.0 billion, about 58.4 percent, and the latter was still 60.0 billion, about 30.8 percent. (Yang, Shouzheng 1987: 34)

Another funding resource for production development is from the depreciation. The depreciation rate in state-owned industrial enterprises was increased from 4.3 percent in 1983 to 5.1 percent in 1986 (Ministry of Treasury, 1988:500)

In Beijing, the main management system, since 1987, has been the "Contractual Responsibility System" (See Chapter 6). This system was called "Two Guarantees and One Linkage". One of the two guarantees was the "Guarantee of Technology Renovation". Enterprise managers were responsible for increasing asset values and technology development as well as profit performance. According to a summary report on the Contractual Responsibility System among eight pilot enterprises in Beijing, the self-generated funds from depreciation and production development were about 46 million yuan, between January and September 1987. The investment for these eight enterprises, based on the Seventh-Five Year Plan, was about 200 million yuan, comprising 97 million yuan of self-generated funds (On Problems of Enterprise Technology Renovation, 1988: 87).

Use of self-generated funds was assumed to increase the effect and efficiency of investment, according to the bank rules. The China People's Bank noted (China People's Bank, 1988:507):

"After realizing the scheme of tax replacing profit an enterprise must take 10 percent - 30 percent of production development funds as a supplement for current capital. For current capital of those new or expanded enterprises, the principle is that a party who authorized the investment project is responsible for arranging finance. Local authorities, departments and enterprises which collect funds by themselves for new

construction and expansion of enterprise production capacity, must put together 30 percent of current capital (for commercially trading enterprises, the portion is 10 percent). Then the bank will approve the loan"

The delegation of investment decisions was initiated, as one aspect of the reform in the planning system. Since 1984, the State Planning Commission increased the local authorized quota of investment funding from 10 million yuan to 50 million yuan in the fields of energy, transport, raw material and to 30 million yuan in other industrial sectors. Before 1984, the Commission checked out all project reports at each stage, including the feasibility study, potential design and construction report, in addition to the initiative proposal report and design report. Now it simplified the procedure, only examining the proposal report and design report. (State Planning Commission, 1988:488). In other words, local authorities gained more power over the authorization of investment projects.

At the same time, bank loans became a major source of investment funds with a fixed interest rate, rather than allocation of grants from the central planners.

The decentralization in investment led to an expansion of capital construction. Economic Daily reported that local authorities split large projects into several smaller components, each of which was below the maximum authorized quota of funding which local authorities could approve. Moreover, banks were prepared to provide loans for these projects, because they were formally approved by local authorities(Economic Daily, 14th November, 1988) As Zhang Shaojie and his colleagues noted (Zhang, Shaojie et al 1987: 109):

"At present, investment decision-making in China involves two distinct systems. On the one hand, the system under which investment decisions are made by administrative authorities at different levels, which was the norm before 1979, still plays an important role. On the other hand, the position of enterprises in making investment decisions has been considerably strengthened. When one investigates the concrete procedures for investment decision - making now prevailing, most investment activities in China's economy appear to emerge from a process in which enterprises, governments at various levels, and banks depend on and simultaneously interfere with one another. Consequently, it is very difficult empirically to establish who makes investments and for what purpose"

It was also noted by the World Bank that decentralization alone would not assure efficiency. Establishment of the conditions for decentralization in investment, such as competition and

the pricing system, was perceived to be more complicated than decentralization in the production process. (The World Bank, 1988:34)

Another problem that was recognized was the tendency for self-funding by enterprises from retained profits to be used to augment welfare provisions and bonus payments rather than for innovation and re-production. The portion of self-generated funding used for welfare projects and bonus was therefore strictly controlled by the central planning authorities. In October 1987, the Treasury circulated the "Temporary Regulation on Financial Points of the Contractual Responsibility System in Large and Middle Sized State Owned Enterprises", in which it laid down that 90 percent of retained profit must be applied to production purposes and only 10 percent to employee welfare .

The loss of control over investment and the expenditure of retained funds on bonuses and welfare raised the level of inflation and led to a shortage of capital (Tian, Yuan et al, 1989; Yu, Tianxin, 1988). Since 1986 government paid considerable attention to the control of inflation. The tendency was to revert to "administrative methods" for re-establishing central control. The intention was to reduce the scale of investment, in order to minimize the inflation rate (Beijing Review, No. 8, 1989). These methods included:

- (1) A campaign of re-evaluating all current construction projects;
- (2) Freezing a number of non-production projects
- (3) Reducing or withdrawing bank loans for some projects which were regarded as "unimportant" for the economy.
- (4) Cancelling some future projects, and
- (5) Issuing policies that recentralized the process of project authorization.

The State Council published a "Provisional Regulation on Building Construction" in 26th September 1988. Later, in 4th October 1988, the State Council published another policy, "Circular on Remediating Construction of Building Projects, Reducing the Scale and Adjusting the Structure of Investment". It was reported in the six enterprises that in 1989

the authorized quota of funding for investment held by the municipal government was decreased from 30 million Yuan to 10 million Yuan, while the quota for the industrial bureaux' authorization was down to 1 million Yuan.

The effect of these policies was very unclear. According to newspaper reports some projects were accelerated, to try and achieve completion before they were stopped by the implementation of the policies(Economic Daily, 14th November, 1988). The policies of the State Council ruled that all projects, except for those in the infrastructure of energy, coal and transportation, should be halted. But a report in Economic Daily said that 1,792 projects were still started up during January and July 1988. The half of those projects were non-production construction, which should be stopped according to the policies.(Economic Daily, 10th September, 1988). The State Council had to send working teams again to localities(Economic Daily, 20th December, 1988)

10.2 Decisions in Innovation Investment in the Six Enterprises

Investigation in the six enterprises found that all these enterprises had initiated some innovation investment projects since 1980. Table 10.1 depicts the major projects carried out by these enterprises from 1980 to 1989.

Table 10. 1 inserted here

After 1985 some of the enterprises, such as Machine Tool, Heavy Electrical and Audio, stopped technology transfer from foreign companies. Managers said that several factors discouraged cooperation with foreign partners. First, the domestic currency was devalued in 1984. It therefore became more expensive to purchase foreign facilities and technology. Second, the central government introduced controls over investment and construction. The process of authorization became too complex, costing much time and effort. And third,

banks tightened debt and loans available to enterprises, particularly with a view to controlling project funding. Managers said that it was impossible to start new projects, if a strong support was not forthcoming from the central or local government.

Managers said that they were obliged to allocate the retained profits to three categories: Funds for Production Development, Funds for New Product Development, and Funds for Welfare and Incentives. According to the regulations of the Treasury, the ratio of the three funds was to be 4:3:3. A chief engineer in Heavy Electrical said that engineers and technicians suffered from a lack of sufficient funds for new product development. The financing of innovation came primarily from the funds allocated by the central planners and bank loans.

Six decisions of innovation investment have been studied. These decisions occurred between 1984 and 1989 (See Table 10.2)

Table 10. 2 inserted here

The decisions concerned both process and product innovation. Generally, these two types of decisions were linked to each other. The decisions in Machine Tool, Heavy Electrical and Audio related primarily to product developments. The other three decisions related primarily to process innovation, which was associated with new product development in Automobile.

Table 10.3 indicates the sources of finance for these projects.

Table 10.3 inserted here

These were two specialized banks to grant bank loans for these enterprises, the China Investment Bank and the China Industrial & Commercial Bank. Interest rates ranged from 5 to 8 percent. A precondition for obtaining bank loans was authorization from the central or local planning authorities. Other funds put together by the enterprises themselves included capital from retained profits, debts from other banks and funding from investment companies. For example, Automobile borrowed 3 million Yuan debt from another bank, through its close relationship with the bank executives. Audio-visual obtained 1 million Y funds from the Municipal Science & Technology Development Foundation for its import of quality control technology.

10.3 Analysis of Decision Processes

10.3.1 Timing: Duration, Interruption and Delay

For a production investment decision, a duration could be as long as several years, while a product development project normally only lasted a few months. The duration and interruption are summarized in Table 10.4.

Table 10. 4 inserted here

The processes of investment decision making were very complicated. The long duration of the decision process did not necessarily mean that enterprises themselves spent a lot of time deciding the issues. In fact, managements often decided on investment projects quite

quickly. Most time was used up by interactions with higher authorities to secure necessary approval and support. Unexpected delays and interruptions often made it difficult for management to control the timing of investment decisions. For example, the director of Pharmaceutical said:

"When we discussed the idea(raised by the mayor after his visit), the process was quite simple. It only took us about two weeks to decide to carry out the mayor's proposal"(PHTR 1)

Managers in Audio-visual said that internal discussions took a short time. When an investment project was announced by the ministry, the most important point for an enterprise was to seize the opportunity. There was little time to think about it. A tactic used by management was to "Get in first, think about other things later".

The shortest duration among the six decisions was the case in Heavy Electrical. The enterprise was instructed to design a product sponsored by the Municipal Science & Technology Commission, as a part of a package programme to develop 30 energy saving products. The longest duration occurred in Audio. In this case the project was interrupted in 1985. Later, it was re-started, but the bureau then wanted to move the enterprise out of the project. The outcome of the decision was that the enterprise executives decided to carry out their own project, the development of a video-deck, by themselves, ignoring the objection of the bureau.

Investment projects in Audio-visual, Automobile and Pharmaceutical took a few years to reach their final points of decision. A major reason in these cases for the time duration was that external authorities controlled the processes at each of the phases of initiation, design, selection and authorization. These controls, plus the administrative interference of local authorities, were the major factor in prolonging the decision processes. Some interruptions were unexpected. For example, the bank refused to issue loans to Audio-visual, even after the Planning Commission authorized the investment. The reason was because the enterprise

had a poor debt repayment records. Enterprise managers had to employ their personal relations to persuade the bank, which delayed matters by two months.

The the project in Automobile was linked to the formation of a joint venture. The higher Authorities were concerned with every detail of the project. The total size of the investment was reduced several times, because of the shortage of capital. In Pharmaceutical, the project had to go through a number of bureaux to get approval. All these caused delays.

10.3.2 Processes, Actor Involvement and Decision Levels

The processes of decision on product innovation in Machine Tool and Heavy Electrical were clearly distinguishable in terms of four phases of initiation, design, selection and authorization.

The other investment decision processes were complicated, and it was not easy to distinguish clearly between different phases. Here, the process was characterized by two major cycles: a proposal cycle and a final authorization cycle. The first cycle involved industrial bureaux and ministries which initiated the decision topic. As soon as a proposal was accepted by central or local planners, the process started its second cycle, in which a number of other authorities participated in the evaluation of the project. In broad terms, the first cycle could be considered as initiation, and the second as design, selection and authorization.

Initiation and Triggers

Table 10.5 indicates which actors were involved in the initiation stage.

Table 10. 5 inserted here

The external initiators were industrial ministries, the municipal government, or industrial bureaux. The internal initiators were normally the enterprise directors. They pushed for the projects.

The role of higher authorities in stimulating investment decisions is evident from an examination of the specific triggers shown in Table 10.8.

Table 10. 6 inserted here

Five of the six decisions were primarily initiated by ministries, bureaux or another local government agency. Audio-visual, Automobile and Pharmaceutical were selected to implement projects when the authorities had played a decisive role in raising. In Heavy Electrical, managers were active in making a bid for a project to be supported. The project was sponsored by the Municipal Science & Technology Commission, as part of an energy-saving programme.

Audio-visual: This project was actually a decision of the ministry. The ministry planned to build up an export base of colour TV sets.(AVTR 2)

Automobile: In fact the expansion of our production was listed in the Seventh-Five Year Plan(by the State Council). That produced a general outline for future development. What we did was to implement this plan.(ATTR 1)

Heavy Electrical: This project was a part of a package programme organized by the Science & Technology Commission. The commission intended to develop about 30 energy saving products. We carried out one of them.(HETR 2)

Pharmaceutical: It was formally started after the visit of the mayor. He made future development a goal, and immediately asked other officials to put this project into a local plan.(PHTR 2)

Audio: We were involved in design of a video-deck since 1985, according to a plan of the bureau. The bureau planned to form an industrial consortium of video player producers. This time [1988], the bureau still asked us to cooperate with another enterprise to design the deck(ADTR 2)

Apart from the major triggers, several special events were found to contribute to the start of decisions, and to influence decision outcomes too. These events are regarded as sub-triggers which influenced details of decision outcomes. Table 10.7 depicts the sub-triggers in the formation of the joint-venture by Automobile.

Table 10. 7 inserted here

As a consequence of these influences, the final outcome of the decision was quite different from its original proposal. The total value of the investment was reduced. Even the joint-venture partner was changed.

In the decisions on product innovation in Machine Tool, Heavy Electrical, and Audio, the triggers from the planning authorities were also effective and significant. Even where there was a clear demand from the market, managers were still subordinated to instructions of the authorities. Accepting the triggers from the authorities meant a guarantee of funds and future markets.

Even though the project in Machine Tool was initiated by the enterprise itself, the influence of the ministry on new product development could be seen. Its technical manager said:

"Generally new product development is according to a plan, either a plan from the ministry, bureau, or ours, depending on the capital supported the project. This one was ours."(MTTR 1) The idea was from a request of customers....But it originated in 1983 when the ministry decided to introduce this product to an enterprise in Shanghai, but not to us.... We knew that the product was in demand, but the Shanghai product was expensive. So we decided to develop the same product by ourselves.(MTTR 2)

Heavy Electrical: It (the programme) was a package programme... The Commission (the Beijing Municipal Science & Technology Commission) supported the funds for new product development. Another organizer was the Beijing Energy Saving Office. The products on a short list were going to replace the old ones. So the customers were already there, identified by the office. In fact, this product development programme was part of a mandatory plan. (HETR 2)

On the other hand market triggers, such as customer demands and other market signals, could be considered, if there was no indication of support from the central planning authorities. This happened in Audio, which forecasted a large potential market for family video-players in China. The enterprise in 1988 did some business in family video-players, including the processing and assembling of components. Managers found that demand was strong. But entry to this business was under the authority of the bureau, which intended to organize a video production consortium. Later, when the bureau decided that the enterprise must leave this programme, a conflict was generated. Enterprise managers persisted in developing the product. The director said that a similar phenomenon had occurred in 1985, when the bureau ordered the enterprise to stop work on the product design.

"At that time if we continued to carry on the design, we would have been in this market now and captured a big market share." (ADTR 1)

This time they decided to ignore the instruction from the bureau, which left the project in a difficult position. As the technician manager said :

"It is possible for us to develop that product. But we need financing. We must know the standards of products selected by the ministry.... Thus our strategy is to produce a sample product as soon as possible. If our sample can be accepted by video-player producers, we could probably change their [bureau's] idea. We could then get formal support production." (ADTR 2)

This decision was taken in the face of substantial uncertainty and the risk of competing with producers who were backed by the authorities. A barrier against entering the market was therefore created by the monopoly of the central planning system.

Design and Selection

It is possible to distinguish the primary design stage. But there were several cycles between design and selection stages. An investment project often required re-design, then selection

again, in order to meet the demands made by different authorities. The actors involved in the design and selection phases are given in the 10.8.

Table 10. 8 inserted here

Actors at the primary design stage were often technicians within enterprises. Only in the case of Automobile were some professional consultants invited to conduct the feasibility study, following the ministry's instruction. In Pharmaceutical project, MBA students conducted a marketing survey to collect relevant information.

Although it was formally laid down by the central authorities that an investment project proposal must incorporate capital budgeting and financial analyses, only Audio-visual and Automobile reported that financial specialists involved. In Audio-visual, a cost manager participated in the work. In Automobile, some staff from the planning department were included in the project team. In the other four enterprises, there was no evidence to show that financial managers made any contribution to the project decision process.

Machine Tool: For a new product development plan, we (technicians in R & D departments) did a market survey. Every one has some idea about the market and products.... We reported our opinion to directors.... There was no participation of financial managers, not even a cost manager in this case. (MTTR 3)

Heavy Electrical: I thought the project was the responsibility of engineers. Although there were some financial calculations, the most important consideration was to select world-level advanced technology. (HETR 2)

Pharmaceutical: We did the proposal report, feasibility study.... That's no financial management in this case any more. That was a technical project (PHTR 2). The project was supervised by the chief engineer, because there are a lot of technical details.(PHTR 5). We are not responsible for the investment project, even the capital budgeting.... All the financial calculation was done by the technical staff. In fact, there were no financial or costing staff in the project team(PHTR 8)

Audio: We (technicians in R & D department) did a market survey. Certainly, the market survey was supported by salesmen.(ADTR 4) I was requested to tell managers whether our money was sufficient (for this project)... That's all. The technicians are responsible for the management of the funds, not financial staff.(ADTR 6)

It was obvious that enterprise managers focused on technological details.

A selection among projects was made, except for Machine Tool, by higher authorities.

Although enterprise directors or vice-directors took part in the selection stage, they often listened to the reports of the project teams and let technicians do the rest. They did not exert much influence in terms of changing the design.

The simplest case was in Machine Tool. Technicians got a "feel" about prospects from customers and the ministry and then reported their finding to the directors who made the selection.

Selection of investment proposals and design became very complicated. The proposal report and feasibility study of each project had to be examined by a number of authorities. The interviews showed that an enterprise had to change its design if any authority requested this. The design and selection processes involved interactions between enterprise managers(or members of a project team) and the respective authorities. These will be discussed further in the section 10. 4 "Interactions with Authorities".

On the other hand, as soon as a conflict arose between an enterprise and its authorities, particularly its immediately superior bureau, it became very difficult to convince the authority to accept the project. This was seen in the case of Audio. Although managers believed there was a big market for family video players, the bureau disagreed with the enterprise's own plan and persisted in prohibiting any support, because the enterprise had not been selected by the ministry and the bureau for the scheme of developing family video-players.

Authorization

Those involved in the final authorization of investment decisions could be central planners, such as the planning commission in Audio-visual and Automobile's cases, or the local government, such as in Pharmaceutical case. It also could be the owner of the funds, the Municipal Science and Technology Commission in Heavy Electrical, or enterprise executives themselves, which occurred in Machine Tool and Audio. The actors involved in the authorization stage are depicted in the Table 10.9.

Table 10. 9 inserted here

The most complicated authorization process was reported in the case of Automobile, whose strategic plan was closely supervised by local and central planning authorities. In this case, every detail of the product design had to be agreed by the bureau.

The process in Audio-Visual was similar to that of Automobile. A production base for exports was selected by the ministry. This meant that a "decisive commitment to investment" in the enterprise was made before the design and selection stage. But the final authorization came from the State Planning Commission.

The simplest process of authorization was found in the case of Machine Tool, in which the enterprise director was the highest level to approve the new product development plan. In Audio, the bureau failed to approve the project. This meant that the authority would not make any commitment to the further development of the product. Enterprise executives decided to allocate their own resources to support the project.

The process leading to authorization varied. In Machine Tool and Audio, the top executives held meetings and issued the plans verbally (with a formal record). Then the projects started. In other cases, the authorization was presented as a formal document with official seals. Bank loans and other resource allocations were realized with the manifestation of this document.

10.3.3 Decisions on Innovation Investment in 1985 or earlier

Six innovation decisions occurring in 1985 or earlier were studied as a comparison. Table 10.10 presents the topics of these decisions.

Table 10. 10 inserted here

These decisions occurred during a period when the policy encouraged enterprises to undertake technology transfers and innovation. Apart from Audio-visual, it was the first time for other enterprises to undertake technology from foreign companies.

The major of finance for these projects came both from grants allocated by the planning authorities and bank loans which became available with the establishment of a set of specialized banks in early 1980s. Table 10.11 summarizes the financial sources.

Table 10. 11 inserted here

10.3.4 Durations, Interruption and Delay

Table 10.12 present the durations, interruptions and delays in the decisions.

Table 10. 12 inserted here

Compared with the later decisions, the above projects were likely to be less interrupted and delayed. One reason was that there were fewer authorities involved in the process. Industrial ministries or bureaux held a strong control over the projects.

10.3.5 Analysis of Processes in Decisions in 1985 or earlier

The processes, in terms of initiation, design, selection and authorization, were quite similar to these of the later decisions. The actors involved in the decision phases and their levels are identified in Table 10.13.

Table 10. 13 inserted here

The pattern of actor involvement in these decisions was quite similar to that for the subsequent investment projects, except that the latter occasioned greater involvement by functional authorities. Most of these projects were included in the plans drawn by a relevant authority.

Table 10. 14 inserted here

The projects in Audio-visual, Automobile, Machine Tool, Heavy Electrical and Audio, were based on the long term plans made by the industrial ministries or the local planning commission. For example, the State Economic Commission and the Ministry of Machine Building published their long-term plan (1981- 1985) of new product development, in which the authorities outlined a time schedule. Machine Tool and Heavy Electrical applied their projects according to a short list in this plan. These plans also proposed a time schedule for replacement of out-dated products by new ones. The customers, who were guided by mandatory plans as well, were ordered to purchase new products under the supervision of ministries.

On the other hand, managers also sought opportunities through their personal networks. In the case of Audio, a direct trigger to search for foreign partners came from a personal message exchanged by a director's acquaintance. The message transmitted a proposal and potential intention of a foreign company for further cooperation. Then managers drew the ministry's attention to this foreign product. Later, the ministry's research institute joint the project in technological design and appraisal work.

The difference, compared to the later decisions , is that local industrial bureaux also encouraged its subordinate enterprises to look for opportunities for technology transfer. The long-term plan of an industrial ministry in turn actively shaped the bureau's decision. A local industrial bureau was mindful of future market competition and the need to protect or support its subordinate enterprises. For example, the project in Heavy Electrical was accelerated by the bureau, because another local industrial bureau had introduced two production lines of the same technology. In the case of Machine Tool, the bureau was

reported to have helped the enterprise to obtain the project, because a similar project, approved by the ministry, was starting up in Shanghai.

These six enterprises were labelled as "key and important" producers in each of their industrial sectors. Market demand for their products, with the implementation of the open market, was growing in the early 1980s. The increase of sales encouraged managers and authorities themselves decide to invest more in these profitable industries. In some market segments, such as colour TV sets, the size of market increased so quickly that the market share of the Beijing enterprise declined dramatically from 1982 to 1983. Both the local government and the enterprise itself were worried about this decline of market share. They acted logically together to expand the enterprise's production capacity. The initiation of the authority's plan coincided with the "investment hunger" of enterprise managements.

Design and selection pursued with the involvement of both internal and external actors. The technical planning departments had major roles in design. The ministry's research institutes were also active in the design and selection of technology. It was reported in all six enterprises that the selection process was simpler than that in the later decisions, because fewer functional authorities, such as the municipal construction programme bureau, were involved. The criteria for evaluating a project were also much simpler than the later ones. The level of technology was then the major consideration for both enterprises and higher authorities.

Nor was the authorization process so complex as that in the later decisions. The local authorities were said to be keen to develop local industrial bases in consumer electronics, automobile production and machine processing, which were profitable industries due to the strong growth of the market demand.

"The markets in 1984 were much prosperous than these in 1988. For example, our production line was the only one on a national scale in this product area at that time"(HETR 2)

Furthermore, the authorities granting final approvals were often the ones which had initiated the project. Most projects were based on long-term plans drawn by a respective authority, such as an industrial ministry or municipal industrial bureau. The authorization of a project was regarded as one step towards implementation of these plans. Another reason was that the supply of capital was less of a constraint than that in the later cases.

10.4 Interactions with Authorities

As the above analysis indicates, any investment decision was a complicated process, in which many authorities were involved. These authorities could be classified into three categories, apart from the fiscal institutions, such as banks, which were quasi-independent.

The relationship between an enterprise and its authorities has been outlined in Chapter 6, in which two type of authorities have been categorized as line and functional. In decisions on innovation investment, the line authority was that having direct responsibility for the performance of the investment. These authorities were also the superior governors of enterprises. Authorities falling in this category included the industrial ministries and industrial bureaux. This type of authority can be called the "hierarchical authority" over the investment.

Another type of authority played a gatekeeper role. They were supposed to verify the feasibility of the project. Such authorities do not have a responsibility for and commitment to the future financial return from the investment, but rather they evaluated the project based on their own criteria from the standpoint of social effect, economic forecasting, environmental protection, consistency with the local construction programme and so forth. Some of them controlled accesses to resources such as energy supply, foreign currency quotas, land property and labour recruitment. The authority in this category was usually a kind of functional authority. In order to identify its functions clearly in the investment decision process, it will be called the feasibility assessing authority.

The third category of higher level actor consisted of central planning agencies, which coordinated different authorities and issued a final authorization as the official commitment to future action. These authorities were planning commissions and economic commissions. With this final approval, the project was recognized as one incorporated into the plan. The associated transactions of inputs/outputs and foreign trade would be coordinated by central plans.

Apart from the above non-financial institutions, banks could be considered as the most important ones having a control over financial resources for investment. The bank loan credited to a project depended on the result of final authorization from the above non-financial authorities, plus the bank's own evaluation.

The relationship among these authorities was complicated. First, each authority was an independent institution which acted according to its own interpretation of strategy and relevant regulations. Although the final authority, such as the planning commission, nominally possessed administrative power to order other authorities to follow its instructions, this power was potentially open to challenge. For example, the local planning commission could order the energy bureau to increase the supply of energy. But the energy supply bureau was able to refuse this order and demand an increased allocation of fuel or coal to generate the extra energy.

Second, the power of each actor varied in the different phases of the decision process. Direct hierarchical authorities were often the first to propose a project. Their agreement was essential for matters to proceed further. Then the feasibility assessing authorities participated in the selection or evaluation. Central planning agencies were normally the last to determine the issue.

Third, any of these actors possessed a "veto" power to stop, interrupt or delay the process, if it had any doubt or disagreement, in spite of other authorities opinions. The process would continue until this doubt was resolved. The success of an investment project required a positive response from all these actors.

Finally, whether or not an authority participated in a process depended on the scale of investment. The investment in Audio-visual was not reported to have involved the land property bureau, because it was a renovation in an enterprise workshop without the requirement of further land. But the land property bureau was one of the functional authorities active in Automobile and Pharmaceutical cases, where the enterprises wished to expand production by means of building up new branch factories around Beijing.

10.4.1 Interactions with the Authorities in Decisions in 1984 and 1989

The authorities possessed different power bases from which to make their agendas. Table 10.15 presents the agenda presented by each category of authority.

Table 10. 15 inserted here

The agenda made by enterprises contained details of technology design and product design, with their knowledge of production processes. Table 10.16 shows the agenda of enterprises in the innovation investment projects.

Table 10. 16 inserted here

Comparing the agendas held by authorities and enterprises, the power framework was substantially asymmetric. The authorities took a position in strategy formulation and governance of decision conditions, while the enterprise's role was concentrated on operational and routine procedures.

However, it was possible for an enterprise to exert influence on the basis of the managers' superior knowledge of technology & production. As the chief engineer of Pharmaceutical said:

"I don't believe that they (officials in the bureaux) read our proposal report carefully.....And they may find it difficult to understanding the details." (PHTR 2)

The enterprise managers were closely concerned with the authorities' attitudes. They described how an enterprise had to change points in a report, whenever an authority raised a different request, no matter whether this request was practical or not. For example, the chief engineer in Pharmaceutical said:

"We changed the details of our report each time when we met an authority....When our calculation of electricity was questioned by the electricity bureau, we reduced our use for electricity" (PHTR 2)

These phenomena were particularly observed when an enterprise was dealing with the feasibility assessing authorities.

"Every one (of bureaux) said that his bureau was important. If our report did not reflect their status, no matter how perfect our calculation, prediction, market survey, or whatever, our project would be stopped by the bureau, because they said we disregarded their point of view." (PHTR 2)

This project was selected as one of 15 important planned-projects by the local government. The annual output target for the enterprise was fixed by the mayor as 500 million units, when he visited the enterprise. But the enterprise managers gave more credit to a survey done by a group of MBA students, which predicted an appreciate annual output of 300 million units, from their assessment of market competition and total market size. But none of any managers was willing to amend the mayor's target, although few of them agreed with

it. What they did was to make all calculations of financial return on the figure of 500 million units a year.

Close analysis of the investment in Automobile, which was selected as one of three automobile production bases by the State Council, shows that hierarchical authorities could use their power to avoid these obstacles. According to a memo, the project was supported by major authorities of the municipal government and some ministries, such as the National Automobile Industrial United Company and the Foreign Economy & Trade Commission. An interesting phenomenon was that the company started its feasibility study before its proposal report was authorized. According to the formal procedure, the feasibility study should be carried out after the approval of the proposal report. This arrangement was encouraged by the municipal government and ministries, which intended to accelerate the process of authorization.

The agreement of an authority was normally signified in its formal documents. These documents, with official seals, were used as legitimation for further authorization. For example, Automobile collated 13 documents in its feasibility study draft. These documents were the result of authorities' comments on all details concerning matters such as foreign trade implications, environment control, labour recruitment, source of capital, and previous studies of capital budgeting.

Due to the limited co-ordination among different authorities, particularly between the hierarchical and feasibility authorities, it was difficult to proceed according to a schedule. For example, the date of the final authorization by the State Planning Commission of Audio-visual's investment was October 1986. Yet, according to the time schedule of the ministry's agenda, 1986 was the year for the construction to be completed. Although the capital budgeting plan had forecasts that the project would start to pay back in 1988, there was no contribution from the project at that time. The fact was that the completion of the project construction was only completed in late 1987, one year behind the time schedule.

A similar phenomenon was observed in Automobile. Its project was on a short list of the Seventh Five Year Plan, from 1986 to 1990. The content of the project was changed several times. The total capital was reduced from the originally proposed total of 2.2 billion Yuan in 1984 to 0.25 billion Yuan in 1986 before it was finally authorized. Officially, the construction started in late 1987. When the joint-venture company started in May 1988, the project was about one and half years behind the time schedule. Then, the inflation of inputs and economic recession caused a decline in profits. In early 1990, the company incurred a loss in its income statement. It was the first time, since its foundation, that the company had recorded a loss.

Furthermore, personal relations, especially between enterprise top-executives and decision makers in authorities, were very significant for a project to proceed. When an investment was normally initiated by a decision of a hierarchical authority, the most successful strategy for an enterprise to pursue was to struggle to be the candidate for the project. Despite the formal existence of economic selection criteria, the mutual relationship between an enterprise and the authority carried more weight than other factors. In the case of Audio-visual, the ministry determined four criteria: "outputs, product quality, exports and R & D facilities". Among three potential candidates, in Beijing, Shanghai and Tianjin, the Beijing enterprise was not the best. But it did a good job of influencing the ministry's decision. Eventually the ministry decided to invest in this enterprise. An underlying reason was that the director himself had worked in the bureau for a long time, before he moved to the enterprise. This background provided him with a strong personal link to key persons in both the bureau and the ministry. Another reason was the location of the enterprise, which was the closest one to the ministry.

The establishment of a joint-venture in Automobile illustrates a similar phenomenon. The current director had worked in the bureau before he was appointed to the enterprise. The wide network of his personnel relations spread around the ministry, bureau and local

government. A deputy director of the investment company, one of the two joint-venture partners, was his university colleague. The effectiveness of his personal network was not only able to sustain support from these authorities, but also to secure funds from banks.

In Pharmaceutical, a senior person, the chief engineer, was selected to be in charge of the project process, because he possessed a rich experience in technology and a wide network of personal relations with local authorities. He was allocated a company car, not only for his convenience in travelling among different bureaux, but as a perk to offer the officials in these bureaux for their personal use.

By contrast, if an enterprise did not maintain its harmony with the authorities, particularly the ministry and industrial bureau, it incurred a serious risk. Without a support of the superior authorities, an enterprise would be limited to innovating only on a small scale. The Audio case was an example. The managers planned to develop a video-deck, but failed to be short-listed by the ministry and bureau. The ministry indicated that an enterprise not on the short list could still go ahead if it was able to find funds and market. But the bureau insisted that Audio should only be a partner of the programme with other enterprises rather than do the job by itself. Its managers found that the enterprise faced difficulties in obtaining help from the bank or support from other authorities, because the agreement of its superior bureau was required before these authorities would consider the case.

When asked why support of the bureau was so vital, a technical manager said that recognition by the bureau or the ministry meant three things:

- (1) a source of finance;
- (2) strong support for coordination with other authorities; for example, the enterprise needed a new business license if it produced the video desk. The authorization of a new license depended on the provisional agreement of its direct industrial bureau. Then the industrial & commercial bureau would consider the application;
- (3) access to the market for the product.

He said that even though his enterprise could find funds and the licence, but it was still difficult to sell the product if it was not on a list of standard products published by the ministry. This was vital for a product, such as video-player, in a market which needed compatibility with other standardized products, such as colour TV sets. The managers did not give up their efforts and also used their personal relationship to persuade officials in the bureau to accept their plan.

Enterprise managers said that it was their responsibility to secure a future financial return on the funds, loans and capital used in projects, not that of any of the authorities. An inferior financial record would lead to a conflict with the bank. For example, Audio-visual was refused a loan, because of its poor records of acid-test ratios. Few managers, however, seemed to be worried about future financial responsibility. A deputy director in Heavy Electrical said:

"If a project fails, it is very difficult to clarify whose responsibility this is, because there are so many influencing factors. State policies, market competition, intervention of authorities, delays of timing, shortage of inputs, all these affect implementation of the project. And a lot of these factors are beyond the control of enterprise directors. Without clear responsibility, who can be reprimanded?"(HETR 3)

10. 4. 2 Comparison with Decisions before 1985

An important difference in the decisions occurring before 1985 were that while there were some conflicts between an enterprise and its own hierarchical authorities, there were few conflicts with the feasibility assessing authorities. There are several reasons for this difference.

First, the number of authorities involved in the decision process were less than with decisions occurring later. Managers said that in 1985 or before, the most important authorities were the 'four gods': the planning commission, the economic commission, the construction programme bureau and the bank. With agreement from these four authorities, a

project would be strongly placed to get overall approval. Generally the feasibility assessing authorities kept in line with the planning commission.

Second, hierarchical authorities then possessed more power to allocate resources, such as funds and input supplies, than they did later. The major form of funding was grants from central planners, although bank loans were increasingly used. The bank often credited an enterprise with a loan, once the project was approved by the planning commission or a ministry. An enterprise was able to get some share of funding from the hierarchical authorities as well. For example, Machine Tool received 170 thousand Yuan from the ministry to develop a new product, and raised the rest (440 thousand Yuan) with a bank loan, plus its self-generated funds.

Third, the policy in 1985 or before was to encourage technology transfer. As the director in Heavy Electrical said:

"In 1984 the bureau called for 'learning from advanced countries'. If a director did not propose a project with a foreign partner, he would be described as 'conservative' and 'not liberal enough'."(HETR 1)

One of the chief engineers in this enterprise recalled that the bureau organized a conference in February 1984, and encouraged all directors to make proposals for technology transfer from abroad. After that conference, the top executives decided to make another plan for introducing technologies.

Managers also said that the authorities were more concerned with technological than financial measures. An important reason was that the market was not so chaotic as it later became. Hierarchical authorities had strong powers to control their market transactions and technology development, with mandatory plans and administrative intervention. Before 1986, enterprises, bureaux and ministries themselves were confident about future sales. All six enterprises were under pressure to increase outputs, because their sales increased quickly.

Because the criteria of approval focused on the level of technology, the enterprise manager's on-site knowledge of technology and production processes was complementary to the agenda made by authorities. This phenomenon was likely to be less observed in decisions afterwards, due to the fact that the involvement of feasibility-assessing authorities and independence of fiscal institutions both increased the complexity of the decision processes.

The decisions also showed that managers maintained a close relationship with their hierarchical ministry and bureau. All six enterprises were categorized as "key and important" producers for their sectors by their ministries. This designating meant that these "important" enterprises were privileged with some favorable conditions for technology development, market monopoly and investment. For example, Machine Tool was one of the two such key producers in switch gear production. The other producer was in Shanghai. The Beijing enterprise monopolized the market in North China. Heavy Electrical was the only producer in the Beijing area at that time. Because of their monopolistic positions, they were strongly supported by the municipal bureaux as well as by the ministry.

Supervision of product standardization was regarded as being under the jurisdiction of an industrial ministry. This power was stronger in the earlier period than later on. For example, in 1984, the State Economic Commission, the Ministry of Machine Manufacturing and the Ministry of Water Energy & Electric Power published a list of out-dated products, requiring producers to stop producing the products and ordered customers to purchase newer ones.

10.5 Information and Decision-making

All six decisions were reported to be based on market surveys with "sufficient information and financial analysis". The projects were described in memoranda or reports to authorities as "significant for developing our own industry" and to be backed by precise analyses.

10.5.1 Information and Decisions in 1984 and 1989

The sources of information are presented in Table 10.17.

Table 10. 17 inserted here

Information related to the innovation projects falls into two categories, technology information and the market information.

Different categories of data were collected by different institutions. These included the following major actors.

- (1) The ministry's technology research institutes were responsible for technology innovation policy making, standard product design, and collection of other technical information.
- (2) The industrial producer associations took over a part of the ministry's administrative functions and provided management consultation, exchanging information, monitoring pricing behaviour of enterprises. The executives of these associations were former officials of the authorities. Their activities were under the administration of the authorities. The data were transmitted to the industrial ministry.
- (3) Departments of the ministries or bureaux were responsible for gathering data from local bureaux, research institutes and the producer associations.

The above institutions also prepared forecasting and conducted market surveys. These were particularly linked to feasibility studies or to the financial budgeting for projects at the design stage.

Managers said that they relied on the ministry's research institutes for technology information and the ministry or bureaux for a general understanding of the industry. In big innovation projects, such as Automobile's investment, the ministry appointed a specific institute for technology studies, and a consultant company for the feasibility study. These two organizations were regarded as accessories to the administrative authorities.

All six enterprises were reported as having set up information centres, which were supposed to undertake the task of information collection. Normally a staff in the marketing or sales department was responsible for the collection of customers' opinions and messages from trade fairs. These enterprises also published their own newsletters, which transmitted some market information. But these newsletters focused on motivation, moral incentive, and other propaganda. Few managers mentioned that they had used these information sources.

Audio-visual: We collected technology information and an understanding of new products through periodicals and conferences organized by the ministry's research institute.... In new product design or technology transfer, we visited customers and the research institute. For new product development, it was not complicated, because there are a lot of sample products in international market.(AVTR 6) Most data were from customers' letters or from personal visits. The ministry organized a survey to ascertain market size. I think it was more accurate than others forecasts, because the ministry was aware of domestic sales and production data.(AVTR 5)

Automobile: We did a survey to understand the market. In 1983, a small team was organized by the ministry to local areas, visiting distributors and bureaux there. The ministry had a clear picture of the domestic data.(ATTR 2) Although we established an information centre, equipped with computers, most work done there was to deal with salaries and some financial calculation. We did not do a market survey.(ATTR 4)

Machine Tool: Beyond the ministry's research institute, we also attended exhibitions, particularly international equipment exhibitions, and collected product catalogues there. For market information, an understanding was gained through personal contacts or visits to customers.(MTTR 3)

Heavy Electrical: Each salesman has his own notebook with a lot of information from the customers. But we seldom exchange information. The ministry and electricity bureau(one of regular buyers) are important. For example, the electricity bureau supplies equipment to its subordinate power transformation stations. We understand their demand through the contract and personal contacts.(HETR 2)

Pharmaceutical: I believe our salesmen, rather than a market survey, because a piece of news from our customer could provide me with a solid contract. The market survey only says something about a general picture. It might be useful to convince the bureau of a big market for our investment. (PHTR 3) For an investment, it is a risk-bearing decision. Who knows what happens in next step, such as the state policy, inflation? I think it's reliable to know the policy and bureau's decision(PHTR 5)

Audio: We just estimate the market size by straight observation. A lot of shops now are selling family video players at high prices. We did that last year. It was a good market.(ADTR 2) We also visited customers. For the market of family video players, we knew the ministry's decision. The ministry planned to set up 9 key factories. They had their own estimation of the market. But we believe the market must be bigger than their forecast(ADTR 3) We did not use our information centre. That is to collect customers' complaints, and for after-sales service. Not for decisions like this.(ADTR 4)

Only Pharmaceutical used a group of MBA students to carry out a market survey for its project. All the other enterprises showed less interest in this service, although it was available to them¹. Managers said that they believed their salesmen and customer views, rather than people outside the business. A planning staff in Automobile said:

"Is it useful to have a market forecast? Yes. But a market survey is not able to tell us, when the government will change its policy. That was our situation in 1984 when the central government decided to promote an energy saving scheme in trucks, which affected us, because buyers were not allowed to buy more vehicles"(ATTR 5).

A deputy director in Heavy Electrical said more directly:

"If we couldn't demonstrate a big market there, how would they(authorities) agree to invest in this product"(HETR 3)

A similar case happened in Pharmaceutical, when the market forecast was different from the goal made by the mayor. This has been discussed in the previous section. A sales manager said:

"Since 1987 our sales increased slowly and the market became more and more competitive. From middle 1988, it seemed that the market had matured, and we had to make a great amount of effort to promote sales. The annual product output was only 250 million units, half the target fixed by the mayor. I don't know how to realize sales of 500 million units a year."(PHTR 9)

The managers had to "fit" market to the "goal" of authorities, rather than to base their goal on market surveys.

When the information came from the market, but the decision was initiated by the authorities, such as the case in Pharmaceutical, there was a conflict. When the mayor made the "One, Two, Five" Strategy(One product with top quality, Two markets- domestic and international, and Five hundred million units of outputs), the annual outputs were fixed as 500 million units. But the managers believed that a reasonable output was 300 million units. They worked out this goal through their personal sense of the market and a survey done by a group of MBA students. The managers preferred to accept their own target, rather than that laid down by the mayor. But they could not change that. All feasibility studies and capital budgeting were based on 500 million units a year.

A technical manager in Machine Tool said that information about general markets might lead to a wrong decision in practice. He gave an example:

"Sometimes the ministry's instruction was wrong. In 1983 we developed a digital switch gear according to a plan of the ministry. In this plan, it was said that the ministry decided to replace all old switch gear by this new one. The ministry also outlined the market size by calculating a total of machine tools installed in domestic industry. According to this plan, output was far less than the demand. But when we finished production in 1985, few customers wanted to buy it, because the state readjusted the industrial structure. Producers faced problems of shortage of working capital and market decline. These were outside the plan of the ministry."(MTTR 3)

At the same time, a personal network of information communication linked enterprises. This informal channel played a role in clarifying the authorities future policy, potential markets and competitor's behaviour. This channel was particularly active when information was closed off by the central system. This happened with Audio, which persisted in developing a video-deck, when the bureau and ministry had selected other enterprises to do so. The ministry kept its decision very confidential. Audio got the message from other enterprises. The business deputy director said:

"It seemed to be very confidential, even the address(of the conference) was not revealed. But eventually, we learned about the conference. We got the information from producers in the south."(ADTR 2)

The head of Audio's technical department described another difficulty, concerning technical information:

"We have studied several samples of video-players. I think we understand the technical structure. But a problem was we didn't know what products were selected by the ministry as the standard ones. If we got a wrong mode of products, there would be few customers to buy your products.... What we could do is to keep an eye on other producers, particularly those who were key enterprises in video player and colour TV production."(ADTR 4)

It was also found that the presentation of information supporting a request for a decision differed. A formal presentation would be necessary for communication with external authorities, whereas only an informal presentation was made to an internal director. In the cases of Machine Tool and Audio, the directors were the final decision authorities. There

was a frequent word-of-mouth communication between managers to exchange personal opinions on market and technology. As a manager in Audio said:

"We didn't write a formal report on market surveys. I reported our findings to executives in a meeting....They were aware of the market and sales."(ADTR 4)

In Machine Tool, technicians, through word-of-mouth, communicated with top managers.

"I was in close contact with my subordinates. They told me their findings and opinions of the new product. I also talked a lot to a deputy director....But there was no written report. We only proposed a plan with a general introduction of the product."(MTTR 2) It was much more formal than our new product development plan in past when we reported to the ministry. Now it was a rough guideline. That was only for the director. With a general guideline, we could be flexible to change some details.(MTTR 3)

10.5.2 Comparison with Decisions Before 1985

The innovations before 1985, as the analysis in the previous two sections showed, were part of a long-term plan made by a ministry or bureau. This kind of plan depicted a clear target concerned with technological levels which superceded any other goals. This was expressed by statements like "By the end of the Six-Five Years Plan, the product must catch up the international level of technology in the late 70's" etc. The details of technology were outlined by the ministry's research institutes, which undertook a task of collecting and processing information in the relevant industrial sectors and aspects of technology. The standardization of products and technological processes was another task undertaken by these institutions.

Audio-visual: At that time(before 1985), the ministry's research institute was the only source from which we could get product design and technology information. Our technicians kept a close contact with them.... Now we have got our own research department and set up a network with universities and other institutions.(AVTR 6)

Automobile: Although we have our own research department, any important design should be under a guidance of the No. 9 ministry design institute(a specialized institute for automobile industry). They also published a periodical to transfer information. It was a major way to understand technology in other countries and product modes in the world. Later, we were able to collect information through attending exhibitions.(ATTR 2) At that time(before 1985), the ministry decided what kind of trucks to develop and who should do that. The ministry made a plan to renew automobile mode. Our new product development plan must fit with the ministry's plan.(ATTR 4)

Machine Tool: What we did(in 1983) was to read the ministry's plan then decided what kind of products we were able to produce. Then, we reported to the ministry and the ministry's research institute....We were told to co-operate with the Shanghai producer. The real organizer was the research institute, which provided us information and reference materials in design, technical processes and other data.(MTTR 2)

Heavy Electrical: There were two kinds of new product development schemes, the standard and customer tailored. The former was a task of the ministry research institute. They provided producers copies of standard blueprints. We carried out the second, but based on the standards of components and other technical conditions made by the institute....For understanding international technology, the institute published a professional periodical. But normally, we didn't do any market forecast(at that time).(HETR 2)

Pharmaceutical: Before 1986 our sales of Royal Jelly increased sharply. Distributors, individual retailers and customers wanted our product. We understood the market through contacts with them.... Foreign trade data were provided by an import & export company. We were not allowed to do direct trade with foreign companies. We didn't know that market. Even we knew something through our survey in Hong Kong, what we could do was to persuade the foreign trade company to buy more of our products.(PHTR 3)

Audio: After we got samples of that product, we reported to the bureau and the ministry. Later, the ministry trusted the ministry research institute to organize a conference to evaluate that product model. The conclusion was that it was a high quality product and in line with new product development plan of the ministry. We obtained preliminary agreement to introduce this product.(ADTR 2) For market, the information came from our salesmen. There was no producer's association before 1985, we had to know the whole market through the bureau and ministry. Because every enterprise had responsibility to report to the bureau, then the ministry, they knew every thing in details.(ADTR 4)

What enterprise managers and authorities considered was the level of technology. Grants were allocated from the planners without any interest charge. Managers had no any knowledge of financial returns and capital budgeting analysis at that time. For example, when Heavy Electrical decided to introduce a production line from abroad, it was the first time that managers learned the methods of capital budgeting.

The information sources for the decisions take in 1985 or earlier are shown in the Table 10.18.

Table 10. 18 inserted here

The market system in 1985 and beforehand was still under the control of central planning system. Big customers and regular buyers were often other bureaux or distributors owned by authorities. For example, there were no individual customers in Automobile market. Every sales must be authorized by the supply authorities(central and local distributors) according to planned quotas. Even Pharmaceutical, which started market surveys much earlier than other enterprises in 1983, was not allowed to sell products directly to individual retailers, although the product was highly sought after. Heavy Electrical estimated its Beijing market through another bureau, the Municipal Electricity Supply Bureau, the biggest regular buyer. This bureau's ministry was the Ministry of Water Energy & Electric Power, one of the three authorities to publish a short list for renewing out-dated electric products in 1984. The bureau started purchasing the newer products, according to mandatory plans of the ministries. In Automobile, a small team, consisting of technicians, a deputy director, and engineers from a ministry's research institute, went out to visit some local bureaux and distributors to collect market information.

10.6 Regulations and Decisions

In 30th March 1987, the State Council introduced an influential regulation, "Circular on Relaxing the Approving Power of Capital Assets Investment and Simplifying the Approval Procedures"(guanyu fankuna guding zichan touzi shenpi quanxian he jianhua shenpi shouxu de tongzhi), which was recognized as the start of decentralization in investment. The aim of this regulation was to promote the delegation of investment in technology innovation and renovation projects from the State Planning Commission to local authorities. The maximum approved quota of funds held by local authorities was increased from 10 million Yuan to 30 million Yuan in industrial sectors and to 50 million Yuan in infrastructure projects, such as raw materials, energy and transportation. It was also decreed that any project above 20 million Yuan but below the local authorized quota must be reported to the State Planning Commission. This regulation formalized the procedure of the authorization role of the central planners and other

authorities. The main thrust of the regulation was to delegate more decision making power to local authorities and ministries.

The investigation of the regulations in this research indicates that although these public policies influenced the context of the decisions studied, the more effective regulations came from within the internal documentary system.

10.6.1 Regulations and Decisions in 1984 and 1989

Policies from the central government regulated the size of investment for local authorities. Of the six decisions, two exceeded the local approved quota of funds, the project in Audio-visual with 13.1 million Yuan, and Automobile's joint-venture with 250 million Yuan. In 1986 Audio-visual project was authorized at a time when the local approved quota was limited to 10 million Yuan. The other four cases were below the local approved quotas.

Other regulations on new product development and technology innovation were of two types. One was published by the State Council in 8th February 1986, Provisional Regulation on Policies of Promoting Technology Development in State Owned Enterprises (**guanyu tuijin guoying qiye jishu jinbu ruogan zhengce de zhangxing guiding**). The other was a regulation made by the State Pricing Bureau, in which an enterprise was privileged to fix prices of a new product during its first one to three years sales. The latter was particularly interesting for managers. In both Machine Tool and Heavy Electrical, managers said that they referred to this regulation which allowed a high profit margin for a new product, because the product would be free from tax on its first year sales.

The focus of policies and regulations were related to the concepts of ideology held by the government elite. This phenomenon was particularly seen in policies after 1988, when the central government intended to recentralize control over the authorization of investment. In

the early 1988, the State Council tightened the control. The panic buying of August 1988 caused another retrenchment in economic policy. Top leaders and economists attributed the high inflation and market chaos to excessive social demands and over investment in capital assets. In September 1988, the Central Party Committee held a five-day session to discuss the economic situation. Zhao Ziyang announced that 20 billion Yuan of investment would be cut from the following year's budget(Zhao, Ziyang, 1988).

Following the decision of the central committee, the State Council made a set of regulations to control investment. On the 4th October 1988, the State Council circulated a requirement to all local authorities and ministries to check up capital assets. This circular also ordered each local government to establish a steering team, under the direct leadership of the mayor or top executives, to implement the decision and report the result to a special office in the State Council(Economic Daily, 5th October 1988). Then ten groups consisting of officials from the central government departed to local areas to monitor the procedures(Economic Daily, 26th October, 1988). But all these efforts seemed to fail to control the expansion of investment. The Economic Daily reported that the State Council decided to send working groups again to local areas, because the progress of the campaign intending to reduce investment projects was not acceptable(Economic Daily, 20th December, 1988).

The effect of these instruments was to reduce the authorization power held by the local authorities. Among the six decisions studied here, the Pharmaceutical's project was affected. This project aimed to expand production capacity and was not regarded as a "protected" infrastructural one, according to the retrenchment policies. But it was not stopped. An important reason was that it was on a short list of 15 local export-base constructions, which were considered as cash-cows for local income. With a total of 7 million Yuan investment, the project did not need authorization from the central planners. The local planning commission put the project into a category of "profitable industry for foreign currency".

For an individual enterprise the more direct effect came from another category of documents, the internal documents. These focused specifically on projects applied for by an enterprise.

As the previous analyses has indicated, the process of authorization was complicated. It was characterized by the multi-power dynamics of different authorities. In general, an investment or technology transfer was a comprehensive package coping with the several aspects of purchasing facilities, land property requirements, or foreign currency quota. Each of these needed the agreement or approval of a relevant authority

Table 10.19 lists some of these documents in two cases, the projects in Audio-visual and Automobile.

Table 10. 19 inserted here

10.6. 2 Comparison with Decisions before 1985

General policies and regulations in the early 1980s intended to relax the central control over investment. In 18th January 1982, the State Council decided to implement technology renovation in state owned enterprises. In 25th June 1983, the State Council authorized a report of the People's Bank of China which suggested the replacement of grants from the Central Treasury by repayable and interest-bearing bank loans. In 1983 several specialized banks were established to deal with investment, working capital and assets. In 28th December 1983, the China Industrial & Commercial Bank was set up, which played a role vis-avis- industrial enterprises.

On 4th October 1984, the State Council approved a proposal of the State Planning Commission, "Provisional Regulations on Reform of the Planning System"(guanyu gaijin jihua tizhi de ruogan guiding). In this regulation, the central planning system reduced the scope of mandatory plans for inputs, outputs and investment.

Before 1985, there were two regulations which tended to maintain the centralization of investment authorization. In 3rd March 1981, the State Council ordered that control over construction be maintained and that the scales of investment be subject to central plans. Later, in 24th December 1982, the State Council published another regulation, in which it was ruled that any project exceeding a planned quota of capital investment must be charged 30 percent extra infrastructural fees.

The effects of these central policies on individual enterprises were not clear. The authorization of innovation investment projects was governed by internal documents, rather than general policies. Table 10.20 lists some of the internal documents involved in the authorization of Audio-visual's project from 1983 to 1985

Table 10. 20 inserted here

With regard to new product development, the managers in Machine Tool said that they referred to a regulation of the local pricing bureau and the ministry's plan. A product approved by the ministry would receive favorable treatment for pricing and tax. This regulation stemmed from a general policy made by the State Economic Commission to encourage product innovation.

10.7 Discussion and Summary

Within the period studied, 1984 to 1989, bank loans replaced government grants. The decision to grant loans was based on the evaluation of multiple authorities. The reform expected to increase efficiency of investment by means of introducing the market mechanism. But this effort failed. The measures designed by the reformers were based on a general economic assumption that "poor investment that results in low returns or losses will weaken the enterprise's ability to stay competitive in the future. For the competitive enterprise, the question is not simply greater or lesser profit but survival itself"(The World Bank Report, 1988:43). But the existence of the prevailing institutional structure countermanded with the market mechanism.

A result of decentralization in investment authorization was that an enterprise found that it was in a distorted position. The precondition of proceeding with a project was determined by authorities, which controlled resources or accesses to resources. On the one hand, a decision must be fitted with a "plan" . On the other hand, a change in fiscal institutions and implementation of repayable and interest-bearing bank loans forced managements to take account of the market as a prior parameter. The analysis in this chapter reveals the essence of the change in innovation decisions under the reform as it progressed.

As a result of the reform, an enterprise could fund investment itself from its retained profit and depreciation. This self-generated resource was completely insufficient for major technological development. The major financing resource therefore remained with the planning authorities.

A change in financial institutions led to a change in the power structure. The criteria for funding allocation were turned from technological requirements to a more comprehensive set of financial measures. The former was linked to on-site technological knowledge, while the latter to the future stream of profits which depended upon markets and internal

managements. This change gave rise to information collection, which was recognized as a base of market understanding. All these instruments aimed to increase the efficiency of investment. But this effort failed. Bank loans were still only quasi-independent and subject to the central planners. This quasi-independence forced an enterprise to rely on authorities rather than on market criteria.

The official criteria for investment approval were more comprehensive than before, from on-site of technology concerns to financial requirements. This change gave rise to a risk-bearing financial returns which were dependent upon profit performance. But it was found in this study that market triggers were less significant to motivate a decision than an instruction or plan put out by the central system. Moreover, market-based financial forecasting could be "shaped" or "invented", not by reality or managers' perspectives, but by the "subjective view" or goals of authorities. This pushed managers to build on their information sources of central planning systems and their personal connection within the system, in order to get the project approved.

Comparison of the decisions occurring before 1985 and in the later period indicates that the interactions between the enterprises and their superior authorities, in terms of the hierarchical, feasibility assessing and final, became more and more dynamic and complex.

After the implementation of decentralization, the bureaux gave less protection to its subordinate enterprises against other competitors. The attention of the authorities towards innovation projects turned from the technological aspects to a comprehensive requirement for profit performance and financial returns.

Bank loans became a major source of funding for projects. This decreased the power of the hierarchical authorities, but increased the power of the feasibility assessing authorities and fiscal institutions.

Conflict between enterprises and authorities considerably increased, not only with their own hierarchical authorities, but with the feasibility authorities as well. The latter have little responsibility for enterprise performance, but both authorities sustained powers to raise issues in strategic areas. Another reason for greater conflicts was the growing pressures of competition and contractual target fulfillment on enterprise managers which encouraged them to take a more strongly focused profitability view of investment.

A conflict also appeared between the hierarchical authorities and feasibility-assessing authorities, with a change of the power structure. With the decline of the hierarchical authority's power, the importance of long-term plans drawn up by central planning systems also declined with the lack of coherence and agreement between different authorities.

The authorities' policies were also directed by ideological concepts. If a similar decision was interpreted with different ideological concepts, the outcome would be different. This uncertainty caused a discontinuity in the authorities' behaviour, when they authorized a decision. It made it very difficult for enterprise managers to plan ahead.

The basic pattern of enterprise managerial behaviour changed little. Managers struggled to secure the opportunity for investment initiated by authorities, with an attitude of "doing a favour for the authorities". The power base of management was to employ its knowledge of technology and production processes. Enterprise managers were not normally in a position to execute the decision themselves.

Compared with decisions before 1985, information sources used after this point changed slightly from a focus on central planning systems to markets. But the authorities were still the most important information sources, not only in fields of the technology data, but the market as well. Several points can be summarized.

The major communication channel was parallel to the vertical administrative hierarchy, from a ministry to local industrial bureaux, then to enterprises. This communication system relayed information on technology, production and financial data. With these data both the central planners and enterprises themselves interpreted the market. After 1985 a producer's association played a partial role in information communication as an accessory to the central information source.

The central information source was still significant for decision making, although managers were able to approach other sources through market diffusion.

A change of financial sources from grants allocated by the central planners to repayable and interest-bearing bank loans led to a change in emphasis in information collected from technological aspects to market forecasts. Market information was a base for the estimation of future profit returns, playing a significant role in convincing authorities of the 'necessity' of the project concerned. On the other hand, fictitious markets were invented subjectively, according to the requirements of authorities.

Managers interpreted the market according to their personal contacts and internal/historical data, rather than professional opinions. Although markets developed since the reform and a change in funding resources required repayment from profits, managers did little to gather and analyze market information on a systematic basis. The traditional way of understanding the market by means of face-to-face and personal contacts was still a major channel for collecting market information.

The decision making power over innovation investment was delegated administratively to local authorities, but not to enterprises. This realization of delegation was implemented through a set of regulations. Central regulations were subject to political points and altered when the political ideology changed. The regulations and policies issued by the central government were discontinued. For enterprises, the internal documents of authorities were

the major parameters to influence decision results. The power framework which conveyed regulations from the central to local was sustained.

The more effective regulations were internal documents issued by specialized authorities. These documents interpreted general policies in target-setting, formulating procedures and funding ceilings. These internal documents, as highly codified local regulations, mediated between general policies and the specific actions of enterprises.

Local authorities, with administrative powers, were vital factor in directing enterprise behaviour. The Pharmaceutical's case shows that action depended upon local interpretation rather than that of the central government. In this sense, a greater codification of central policies would be effective only in setting upper and lower "authorized quota" limits on local authorities. The implementation of a central policy was still dependent on a local authority's interpretation of its interests.

The involvements of authorities in project authorization increased a complexity of the decision process. Conflicts between enterprises and authorities increased. Furthermore poor co-ordination between different authorities weakened the importance of long-term plans. All these authorities, line and feasibility-assessing, dominated the strategic positions of agenda-making and vetoing. An enterprise played an operational role in decision process. The power structure was asymmetric. The only advantage of managers was their on-site of technology knowledge which the higher authorities lacked.

Table 10.1 Important Projects of Technology Transfer and Investment in Six Enterprises From 1980 to 1989

Enterprises	Projects form 1980 to 1988	Date
Audio-visual	1. Import of an assembly line from a foreign company	1980-81
	2. Import of an assembly line from a foreign company	1981-83
	3* An production line with import of equipment and facilities from abroad	1983-85
	4* A construction of export production base with imports of technology from abroad	1984-86
	5. Import of a process line from a foreign company	1988-
Automobile	1* Development of a new truck based on a foreign product	1981-84
	2* Formation of a joint-venture with a Hong Kong company, including:	1984-88
	- Product know-how from Japan	1984-86
	- Land purchase for production expansion	1984-86
	- Import of production facilities	1985-87
Machine Tool	1 Participation of a new product programme organized by the ministry	1982
	2* Import of know-how from a foreign company	1983
	3* A new product development scheme	1988
Heavy Electrical	1* Import of a production line for silicon component production from a foreign company	1983-85
	2. Import of a process line for transformer production from a foreign company	1984-87
	3. Import of a production line for transformer production from abroad	1984-87
	4* Other new product development schemes	1988
Pharmaceutical	1. Expansion of production capacity by construction of a new workshop	1981-83
	2*. Import of facilities to expand production capacity	1985-86
	3* Expansion of production capacity with imports of equipment and facilities	1987-89
Audio	1. New technology licensed from a foreign company	1981
	2* Import of product Know-how from abroad	1983-84
	3* Joining a programme to develop family video-player, organized by the bureau	1985-88

Note: The projects marked * are included in the present investigation.

Table 10.2 Decisions on Innovation from 1984 to 1989

Enterprise	Date	Description of the Decisions
Audio-visual	May 1984- - Oct. 1986	Investment in Production Capacity for Export of Consumer Electronic Products
Automobile	Jan. 1984- May 1988	Development of New Model of Product and Production Expansion Investment
Machine Tool	Oct. 1987- May 1988	Development of a New Product
Heavy Electrical	Jan. - May 1988	New Product Development Project
Pharmaceutical	May 1987 - April 1989	Expansion of Production Capacity of Royal Jelly
Audio	May 1985 - Feb. 1989	Product Development of a video-deck

Table 10.3 Financial Resources for Innovation

Enterprise	Projects	Total Size(Yuan)	Sources
Audio-visual	1310 Project	13.10 million	90% Bank loan 10% Internal source
Automobile	Joint-Venture	250 million	60% Bank loans 25% Partners investment 15% Internal source*
Machine Tool	Development of new product	15,000	Internal source
Heavy Electrical	Development of electric equipment	20,000	Grants from the Municipal Science & Technology Commission
Pharmaceutical	Expansion of a health product production line	70 million	90% Bank loans 10% Internal source
Audio	Development of video	35,000	Internal source **

Note: * The proportion of financing here is not the same as the share of ownership of the joint-venture. The 250 million Yuan here was the total capital from bank loans, joint-venture partners and the company's internal funding.

** The amount of funding here was estimated according to interviews. The enterprise started its own design for the product, but failed to get support from the bureau. The funding for the project came from the enterprise's own retained profit.

Table 10.4 Timing: Duration, Interruption and Delay(or Acceleration)

Enterprises	Durations	Interruptions and Delays(Speed-ups) Reported
Audio-visual	Thirty months	<ol style="list-style-type: none"> 1. Delay of 10 months by the State Planning Commission in granting final authorization 2. Delay of 3 months before bank agreed to grant loan
Automobile	Fifty months	<ol style="list-style-type: none"> 1. Delay by the municipal government in approving joint-venture ownership 2. Interruption by the ministry in changing joint-venture partner 3. Delay by the State Planning Commission insisting on reduction of capital. 4. Internal conflict over proposal to change plant location
Machine Tool	Eight months	None reported
Heavy Electrical	Five months	None reported
Pharmaceutical	Twenty four months	<ol style="list-style-type: none"> 1. Delay of 9 months by the municipal government included this project in its development scheme 2. Delay of 2 months while the energy supply bureau agreed to the project proposal 3. Delays from the local construction programme bureau and the land property bureau, both requesting the formal approval of the local government.
Audio:	Forty eight months	<ol style="list-style-type: none"> 1. The municipal industrial bureau ordered the project to be stopped in 1985 2. Disagreement among project partners over product development specifications. 3. Further intervention by the municipal industrial bureau instructing the enterprise to quit the project

Table 10.5 Actors in Initiation Stage

Investment Decisions							
Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External: Ministries	5	Yes	Yes	-	-	-	-
Municipal government	5	-	-	-	-	Yes	-
Municipal commissions	5	-	-	-	Yes	-	-
Industrial Bureau	5	-	-	-	-	-	Yes
Internal: Director	4	Yes	Yes	-	Yes	Yes	Yes
R & D dept	2	-	-	Yes	-	-	-

Table 10.6 Triggers of Innovation Investment

Enterprise	Description of a trigger	Category of triggers
Audio-visual	The Ministry's Plan to establish an export base	Central
Automobile	The Seventh-Five Year Plan of Automobile Industry Development Made by Ministry and the State Council	Central
Machine Tool	Customer demands	Market
Heavy Electrical	A package programme of energy saving organized The Municipal Science & Technology Commission	Central
Pharmaceutical	Instruction from the mayor who visited the enterprise	Central
Audio	A cooperative programme of video-player production in Beijing organized by the bureau The experience of trading in video-players	Central Market
Total	Central Commands Markets Task Requirements	7 5(71%) 2(29%) 0(0%)

Table 10.7 Sub-triggers of Investment in Automobile 's joint-venture formation

Special events described as sub-triggers	Date
1. The Ministry instructed Automobile to receive technology transfer from a foreign company	1984
2. Local government's proposal to form a branch factory on the outskirts of Beijing to increase output. This branch plant later became the site for the joint-venture's process plant.	1984
3. Proposal of a national investment company to form a joint-venture and to be a partner	1984
4. Instruction from the ministry to suggest a foreign company as a partner of the joint-venture	1985
5. Proposal of the investment company to introduce another foreign company as a partner	1986
6. Suggestion of the State Planning Commission to reduce the capital size of investment	1986

Table 10.8 Actors and their Levels in the design and selection phases

Investment Decisions

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External:							
Central government agencies	5	S	S	-	-	-	-
Ministries	5	S	S	-	-	-	-
Municipal government agencies							
Industrial Bureau	5	S	S	-	S	S	-
Other bureaux	5	S	S	-	S	S	-
Other units		-	D	-	-	D	-
Internal:							
Director	4	S	S	S	-	S	S
Vice-director	3	D&S	D&S	D&S	D&S	D&S	D&S
Technical dept	2	D	D	D	D	D	D
Financial dept	2	D	D	-	-	-	-
Planning Dept	2	D	D	D	-	-	-
Production Dept	2	D	D	-	-	-	D

Note: D = Design; S = Selection

Table 10.9 Actors in the Authorization

Innovation Decisions							
Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External:							
State Council	5	-	Yes	-	-	-	-
State Planning Commission							
Ministries	5	Yes	Yes	-	-	-	-
Municipal planning Commission	5	Yes	Yes	-	-	-	-
Municipal Science & Technology Commission	5	Yes	Yes	-	-	Yes	-
Industrial Bureau	5	-	-	-	Yes	-	-
Industrial Bureau	5	-	Yes	-	-	Yes-	Yes
Internal:							
Director	4	-	-	Yes	-	-	Yes

Note: * The industrial bureau rejected the enterprise application. The final authorization came from the enterprise director.

Table 10.10 Decisions on Innovation in 1985 or earlier

Enterprise	Date	Description of Decisions
Audio-visual	Jan.84-July 85	Investment in a production line
Automobile	Oct.80-June 81	Development of a model of truck
Machine Tool	Jan.-Dec.83	Development of a switch gear
Heavy Electrical	Oct. 85 Jan.83-	Technology transfer from a foreign company
Pharmaceutical	Feb.85- June 86	Expansion of production capacity of a health product
Audio	March 82-Oct.84	Development of a new recorder Deck

Table 10.11 Financial Sources of the Innovation Projects in 1985 or earlier

Enterprise	Total Funds (Yuan)	Sources
Audio-visual	20.8 million	60% Bank loans; 40% Ministry's funds and internal source
Automobile	9.9 million	25% Grants from the ministry and the planning commission 25% Bank loans and 50% Internal source
Machine Tool	1.38 million	40% Ministry grants; 60% Bank loans and internal source
Heavy Electrical	1.6 million	75% Bank loans 25% Ministry's grants and internal source
Pharmaceutical	3.7 million	90% Bank loans; 10% Internal source
Audio	2.46 million	61% Grants from the planning commission 39% Bank loans

Table 10.12 Timing: Duration, Interruption and Delay(or Acceleration) in Decisions in 1985 or earlier

Enterprise	Duration	Interruptions,Delays(Speed-ups) Reported
Audio-visual	Eighteen months	Project supported by the ministry. No interruptions reported
Automobile	Eighteen months	Intervention from the ministry to change product design
Machine Tool	Twelve months	Delay because project partner withdrew
Heavy Electrical	Twenty months	Delay in the State Economic Commission approval of foreign currency budget
Pharmaceutical	Twenty four months	Although the project supported by the bureau, authorization given by the municipal planning commission was protracted
Audio	Thirty one months	Research institute involved in the feasibility study delayed final approval

Table 10.13 Actors Involved in the Decision Phases and their Levels

Initiation

Actors	Level	Audio-	Autom-	Machine	Heavy	Pharm-	Audio
External:							
Ministries	5	Yes	Yes	Yes	Yes	-	-
Industrial Bureau	5	-	-	-	-	Yes	Yes
Internal:							
Director	4	-	-	-	-	Yes	Yes

Design and Selection

External:							
Central government agencies	5	S	-	-	S	-	-
Ministry	5	S	-	S	-	-	-
Ministry's research institute	5	-	D&S	D&S	-	-	D&S
Industrial Bureau	5	S	S	S	S	S	S
Other Bureaux	5	-	-	-	S	-	-
Internal:							
Directors	4	S	S	S	S	S	S
Vice-director	3	D&S	D&S	D&S	D&S	D&S	D&S
Technical Dept	2	D	D	D	D	D	D
Planning Dept	2	D	D	D	D	D	-
Financial Dept	2	D	D	-	-	-	-
Production Dept	2	D	-	D	D	-	-

Authorization:

External:							
Central government agencies	5	Yes	Yes	-	-	-	-
Ministries	5	Yes	Yes	Yes	Yes	-	-
Municipal government agencies	5	-	-	-	Yes	Yes	-
Industrial bureau	5	Yes	Yes	Yes	Yes	Yes	Yes

Note: D = Design; S = Selection

Table 10.14 Triggers of Decisions before 1985.

Enterprises	Description of a trigger	Category of trigger
Audio-visual	Decision of the local planning commission to build up a colour TV production basis	Central
	The Sixth-Five Year Plan of the Ministry The increased market demand of colour TV	Central Market
Automobile	The Sixth-Five Year Plan of Innovation in the Automobile Industry made by the State Council	Central
	The Introduction of a new product development Scheme by the Ministry	Central
Machine Tool	The Sixth-Five Year Plan of New Product Development made by the Ministry	Central
	Decision of the bureau to accept technology transfer from a foreign company	Central
Heavy Electrical	The Six-Five Year Plan of New Product Development made by the Ministry	Central
	An instruction of the ministry on an offer of a foreign company to do technology transfer	Central
	Selection of the bureau Two projects of technology transfer taken by another local industrial bureau	Central Central Central
Pharmaceutical	An increase in sales of the product	Market
	An instruction of the bureau on purchase of production facility	Central
Audio	The Plan of New Product Development drawn by the bureau	Central
	A contact with a Hong Kong company which sent some sample products	Market
Total		15
	Central Commands	12(80%)
	Markets	3(20%)
	Task Requirements	0(0%)

Table 10.15 Agenda Made by Each Category of Authority

Hierarchical Authorities:

1. Setting targets for a project
2. Determining criteria of financing
3. Selecting a candidate enterprise
4. Making details of the project scheme, such as design and construction
5. Providing information
6. Standardizing technology and products
7. Coordinating other authorities to provide support, such as outputs, inputs, and market channels

Feasibility Assessing Authorities:

1. Evaluating the project with their criteria, from the standpoint of society, economic, environment, foreign trade, etc.
2. Providing the access to resources or resource supplies.
3. Power of veto to stop the project

Final Authorities:

1. Listing a project in a central or local plan with planned quotas of supplies, funding and other provisions.
 2. Coordinating different authorities
 3. Issuing instructions and mandatory quotas for resource allocation
-

Table 10.16 Agenda of Enterprises in Projects

Agenda

1. Detailing technology design and product processes
 2. Operational tasks of project preparation, such as writing up proposal reports, organizing feasibility study missions.
 3. Providing the authority for facilities in project development such as trips for market research, organizing conferences
 4. Purchasing facilities, technology and labour, under the instruction of authorities.
-

Table 10.17 Sources of Information used to Make Decisions

Enterprises	Description of Information used in the decisions	Sources
Audio-visual	Market size (including domestic and foreign trade data) from the ministry	Central
	Production data and financial data from enterprise records	Internal
Automobile	Market size, domestic and foreign trade, from the ministry	Central
	Financial data and analysis from a professional consultancy company	Central
	Internal data and environment data from different bureaux and the company	Central
		Internal
Machine Tool	Customers' requirements on prices and supply collected staff	Market
	Standardization of the product	Central
Heavy Electrical	Technology data from a research institute	Market
	Standards of the product made by the municipal agency for energy saving plans	Central
	The Municipal Science & Technology Commission's forecast and data of the market	Central
Pharmaceutical	Domestic market size from MBA students	Market
	Foreign trade data(exports) from the bureau	Central
	Other data, such as environment and land from different bureau	Central
	Financial and sales data of the enterprise	internal
Audio	Market data (such as prices and demand) collected by technicians and salesmen	Market
	Standardization of the product fixed by the ministry	Central
Total		16
	Central Planning System	10(52%)
	Markets	3(24%)
	Internal Data Source	3(24%)

Table 10.18 Information Sources for Innovation Investment Decisions before 1985

Enterprise	Description of information used in the decisions	Source
Audio-visual	Market size and export data from Ministry Sales data of the enterprise	Central Internal
Automobile	A national survey done by an expert team Technology data collected by technicians Sales and financial data of the enterprise	Central & Mark Market Internal
Machine Tool	Market size estimated by a division of the ministry Technology data from a ministry's research institute Sales and technology data of the enterprise	Central Central Internal
Heavy Electrical	Market size estimated by the ministry Technology data from a ministry's research institute Internal data of sales and technology	Central Central Internal
Pharmaceutical	A local market survey done by a group of MBA students Hong Kong market survey done by a H.K. company Export data from a foreign company Internal data	Market Market Central Internal
Audio	Technology data from a conference organized the ministry, ministry's research institute Market size estimated by the bureau Internal data of the enterprise	Central Central Internal
Total	Central Planning System Markets Internal Data Source	19 9(47%) 4(20%) 6(33%)

Table 10.19 Document List in Audio-visual's Project and Automobile's Joint-venture Formation

(1). Project in Audio-visual from 1984 to 1986

Line Authorities	Contents of Documents
1.Beijing Economic Commission(BEC)	Approval of purchasing facilities from abroad
2.Beijing Planning Commission (BPC)	Approval of purchasing manufacturing machines from abroad
3. BEC	Approval of purchasing manufacturing machines from abroad(with BPC)
4. BPC	Approval of project proposal report
5.Beijing Foreign Trade and Relationship Commission	Approval of export proposal report
6.Ministry	Approval of project proposal report
7.The State Planning Commission(SPC)	Approval of project proposal report

(2) Formation of a Joint-venture in Automobile

1.Beijing Urban Construction Programme Bureau(BUCPB)	Approval of land property
2.Beijing Automobile Industry Corporation(BAIC)	Seventh-Five Years Plan of local automobile industry development
3.China International Trust & Investment Corporation	Investment proposal report of a joint-venture
4.Beijing Municipal Government(BMG) and China Automobile Industry Cor.(CAIC)	Report of investment on the joint-venture to the SPC
5. BPC	Report of the joint venture proposal to the SPC
6.CAIC, BMG & Aerospace Ministry	Report of the joint-venture proposal to the SPC
7. BEC	Approval of importing facilities from abroad
8. BUCPB	Approval of assembly lines construction
9. China Automobile Imports & Export Co.	Approval of technology transfer from a foreign company

Table 10.20 Documents of Authorization in Audio-visual's Project From 1983 to 1985

Authorities	Contents
1. Beijing Economic Relations & Trade Commission	Approval of product exports
2. BPC	Approval of foreign currency quota
3. Economic and Technology Imports Office of the State Economic Commission	Approval of technology purchase from abroad
4. Beijing Economic & Technology Office	Approval of importing facilities from abroad
5. BEC	Approval of purchasing facilities from abroad and foreign currency quota
6. BPC	Approval of the project with foreign currency quota

¹ All these six enterprises were in a management cooperative programme with the China-EC Management Institute, in which MBA students did projects for enterprise management consultancy.

PART III: SUMMARY AND CONCLUSIONS

CHAPTER 11: SUMMARY OF FINDINGS

In the preceding chapters, five decision topics have been studied, namely purchasing inputs, pricing outputs, labour recruitment, organizational change, and innovation investment (Appendix V). This chapter summarizes the findings of the empirical investigation on decision processes, and the relations between decision contents, processes and context.

11.1 Decision Processes

11.1.1 Decision Timing: Duration, Interruption and Delay(or Acceleration)

The duration of the five decision categories varied from each other as Table 11.1 indicates.

Table 11.1 inserted here

The longest time frames were found in the cases of formulating a joint-venture in Automobile and product development in Audio in 1989, while the shortest durations were normally in purchasing. In general, market transaction decisions, such as purchasing inputs, pricing outputs and labour recruitment were of shorter duration than that those of organizational change and investment. Compared with the decisions in 1985 or earlier, the decisions in 1988/89 took longer, with the exception of recruitment.

One important factor, which caused a decision process to last longer, is the occurrence of delays or interruptions. Compared with the decisions in 1985, there were more delays and interruptions in decision-making processes in 1988 and 1989. These delays and interruptions came from three sources: planning authorities, the market, and internal sources. The decision context in 1988 and 1989 became more complex than that in 1985. In 1985, enterprises were controlled by the planning authorities. But in 1988 and 1989, they

faced overlapping controlling mechanisms from both the planning authorities and market factors. Thus, the amount of delays and interruptions increased. Table 11.2 summarizes the sources of delays and interruptions (or accelerations) in the decisions studied.

Table 11.2 inserted here

Purchasing decisions appeared to have less delays or interruptions than the other decisions. The longer duration of some decision processes, such as purchasing in Audio-visual or Heavy Electrical was due primarily to the additional information required before completion.

But pricing decisions took longer. Every instance of delay was due to the need to await external governmental approval of prices decided within the enterprise which tended to take at least one month in the earlier period and about two weeks later on.

The delays or interruptions in the recruitment decisions came mostly from the authorities. In the earlier period, delays were usually due to the need to await labour bureau approval of the enterprise's intentions. In the later period they were due to a variety of factors including waiting for information from the labour bureau on available graduates and the search for suitable recruits now that management enjoyed some discretion over whom it hired.

The decisions on organizational change experienced some internal delays, which were due to managers' cautions and hesitations. In the early period, decisions were accelerated by the active involvement of the party secretaries who provided ideological support and political education programmes aimed at convincing employees that the changes were necessary. This support helped to avoid the need for pilot projects which were set up during three of the later decision processes. The 1988 decision processes were reported to have more delays,

because some managers were reluctant to accept it and certainly did not wish to push the change too fast for fear of creating internal de-motivation and disturbance, even though the party still promoted political education.

The decisions on innovation investment usually took years, but two decisions on product development in 1988 were of much shorter duration. Other investment decisions in the later period were likely to be longer than those in early period (before 1985), due to the control exercised by external authorities at all stages of the investment decision process.

Interruptions and delays caused by authorities were the major reason for extension to the decision process. The earlier investment decisions were generally speedier. One reason for this was that China was at the time enjoying an officially approved investment boom, focussed particularly on the import of foreign technology which was later more tightly controlled and discouraged.

Most decisions took somewhat longer to reach in 1988 than in the earlier period, with the main exception being recruitment. Delays were occasioned primarily by the intervention of higher authorities and/or the need to secure their approval or support. The nature of this intervention had become more complex with the development of a wider range of functional bureaux, substituting multiple "Gods" or "Mother-in-laws" for the previously single "God" of the industrial bureau. This intervention did not bear equally on the five decision areas- it is most evident with decisions on investment, organizational change and, to a lesser extent, pricing.

11.1.2 Actor Involvement

The actors in the decisions are distinguished as multiple and single actors. The number of actors involved in each of decision phases is indicated in Table 11.3

Table 11.3 inserted here

In general, the purchasing decision process was characterized by individual or small group action. The involvement of actors in the labour recruitment decisions became much more limited due to the decentralization of labour management to enterprises. Decision processes in pricing, organizational change and innovation investment had multiple actors. In particular, more external agencies were involved in the decisions on innovation investment taken in 1988.

Identification of actor levels has been measured by the methods developed in the Aston Programme. The linkage of the decision levels and decision phases is shown in Table 11.4.

Table 11.4 inserted here

Over the 1985-88 time period, the initiation of decisions shifted down enterprise hierarchies in the case of purchasing, pricing and labour recruitment. But the decisions on organizational change and innovation were still initiated at a high level, which indicates the significance of triggers coming from higher authorities.

Enterprise managers usually undertook design tasks. Decisions on purchasing, pricing and labour recruitment had design activity pursued at departmental levels. But senior managers were involved in the design of organizational change and investment.

Purchasing and labour recruitment decisions in 1988 involved actors at a higher level in selection compared with those in early period. There was now more centralized control by

directors in purchasing decisions when the environmental context had become dynamic and complex. Managers tightened their control over budgets for inputs, when working capital became scarce.

Levels of authorization are loci of power (Pugh and Hickson, 1976) granting final approval to a decision, in the form of a commitment to future action(implementation). Changes in authorization levels are an indicator of how far the intention of the economic reform to decentralize decision making powers had actually progressed.

Table 11.4 indicates that the most significant delegation took place in labour recruitment. Pricing could be considered as other areas with more delegation. Purchasing decisions had a complicated situation. The final authorization level in some cases increased to the director, which indicated the shortage of financial budget leading to more centralized control within enterprises. But as the initiation levels were lowered down to enterprises, enterprises had gained more autonomy than before. It was therefore that purchasing decisions can be categorized as an area in which more autonomy was delegated to enterprise management. The authorization of organizational change decisions were decentralized from the higher authority to enterprises. In three cases, approval came from the workers' congress. The most centralized decisions were still those on innovation investment. But two cases of product development with internal-funding in Machine Tool and Audio were authorized by directors themselves. These moves towards decentralization were also noted in another survey conducted in the same six enterprises by Child and Lu(1990a)

11.1.3 Decision Phases

Some decisions have activities which can be grouped according to the four decision phases which we distinguished for analytical and comparative purposes. Examples are pricing and recruitment. Managers predicted the decision consequence and evaluated the alternatives according to task requirements or environmental expectations. A decision process passed

through the four phases from its initiation, then design and selection, to authorization. By contract, purchasing decision processes were very simple without a clear distinction of activities such as design.

In the other decisions, there were many activities. In organizational change and innovation investment, design and selection activities were woven together. Activities of re-design and re-selection of decision alternatives occurred, when multiple actors were involved. The decision process here took the form of cycles among different phases.

11.1.4 Interactions between Enterprises and Authorities

It was noted in Part II how conflicts between the enterprises and their authorities increased. This is accounted for by two developments: the emergence of multiple power centres, and declining power of the line authorities.

The first phenomenon is evidenced by the involvement of functional authorities. In 1985, the line authorities had primacy in the control of enterprises. Enterprise managers coped with one god. But in 1988, there were several other gods, such as the pricing bureau in the pricing decisions and the feasibility-assessing authorities in the investment decisions. Enterprise managers had to cope with each of these authorities which belonged to different administrative hierarchies. The consequence of this multiple authorities involvement was to make it more difficult for enterprise managers to plan ahead, because each of these authorities applied its own criteria and rules to the enterprise's decisions.

The other indicator was the decline of the line authority's power over enterprises. Before 1985, the line authorities, such as industrial ministries and industrial bureaux, held almost absolute powers over resource allocation and agenda making. Unified central plans effectively regulated operational activities at the enterprise level. In 1988, the role of line authorities in resource allocation was partly replaced by markets and exchanges between

enterprises. Furthermore, managers had to follow instructions and commands from functional authorities. Thus, the line authorities had to rely on purely administrative intervention to control their subordinate enterprises, such as regulations, performance assessment, personnel control, the granting of permission to enterprises to communicate with other authorities.

The new context of multiple authorities gave rise to a problem of inconsistency between the standards held by different authorities. The decline of the line authority's power implied that an enterprise lost some of the protection previously offered by its superior authority. Compared with situation in 1985, an enterprise were also loaded with more social obligations. This also led to more conflict between enterprises and authorities.

Furthermore, as soon as an authority perceived some difficulty in controlling enterprise activities, it tended to resort to administrative intervention, such as issuing commands, initiating official campaigns, or ignoring the decision autonomy formally delegated to enterprise management.

Higher authorities also used administrative regulations to maintain their control over enterprises. This will be discussed later in section, 11.1.7.

11.1.5 Interactions Between Management and the Party

The power and status of the Party were revised by reform policies and regulations(Chapter 4, 6 and 9). The party system appeared to have declined, with regard to staff size and role in decision making. But the decline of the party's power at the enterprise level only meant that the organizational rationale had shifted from on emphasis on political tasks to one on economic performance. The party remained a formal part of the administrative system. The involvement of the party was evidenced in the decisions in organizational change(Chapter 9).

Compared with the decisions in 1985, the role of the political system was still significant in the selection and design of organizational structure. The role of the party in the 1988 decisions took the form primarily of political training and ideological education, which was used to mediate potential conflicts between managers and employees. This ideological coordination was a traditional method used by the party in its socialization work, for instance in the earlier decisions on organizational change, when the Director Responsibility System was implemented. The political coercion backed by the party's discipline played an important role in this decision area.

In the six enterprises, conflict between managers and the party, had not obviously increased, although there were some unhappy stories associated with the 1985's decisions. In 1988, no such conflict was reported. Rather, the party now provides important support to directors in mediating potential conflicts between management and workers.

It is important to bear in mind that the party secretaries in these enterprises were replaced during the implementation of the Director Responsibility System. Power was transferred to the director and managers. Higher authorities also regulated the status of the party, in order to minimize potential conflict. The support of the party for organizational change was ordered by the authorities. They established the role of management and party in the reform. As indicated in Chapter 9, ambiguity in the definition of the legitimate position of the party within enterprises was perceived to be problematic. Most managers were party members, while some party secretaries were entitled to be managers. The boundaries of managerial and political authority in decision making were quite vague. The reform scheme attempted to avoid this problem by implementing the contractual system, in which the director signed a contract as a legal person. Thereafter managers were unbraced by the director's authority, rather than by political instruction. In other words, the prevailing harmony between the director and the party secretary was achieved by their personal adaptation to a new authority structure legislated by the reform. This harmonious

relationship was also achieved by the fact that enterprise directors enjoyed a stronger power base than their political partners. Five of the six directors were also party members. Some of them used to be Party secretary or vice secretary or Party committee members. All of them enjoyed a long working experience in enterprises. In particular, they had promoted middle managers in mid 1980s, when the director's responsibility system was carried out and these managers therefore used their loyalty to the directors. In addition, they were also experts in production or technology.

11.1.6 The Role of Information in Decision Processes

Table 11.5 summarizes the sources of information, used in the decisions studied.

Table 11.5 inserted here

The planning authorities remained the most frequent source of information for decisions which the enterprises took on purchasing and investment, and they became somewhat more important sources of information relevant to organizational change. This phenomenon is linked to the shortage of supplies and the power of administrative authorities over resource allocation for investment projects. In the case of purchasing, the planning authorities, both industrial ministries and bureaux, held valuable information about the sources of supply for scarce materials and other inputs; they also had advance knowledge of impending policy changes which would, for example, affect the availability of imported supplies. In the case of investment, key information available only from governmental sources included indications of a new government-inspired investment initiative, the likelihood of financial provision for investment from public sources, and official attitudes towards inward technology transfer. The planning authorities were important sources of information for

organizational change in 1988 because this was brought about and monitored as part of an officially-promoted rationalization campaign.

The planning authorities, particularly those giving final approval, also insisted on their inputs being taken into account by enterprise management. The feasibility studies by several of the investment decisions were influenced, or even directed, by information coming from the related authorities, because the planning authorities would only be convinced by decisions which had been taken such information or views into account.

On the other hand, there was a shift of emphasis towards the use of data secured directly from the market in the case of purchasing and pricing decisions. These decisions on input and output transactions did appear to have become more market-sensitive, though the dual pricing and supply system imposed a serious constraint on the extent to which it was economic to obtain some materials through the highly distorted "free" market.

At the same time, there was little systematic and professional information collection. Personal contacts and published information were major sources of market information. This accords with the importance attached to personal contacts in Chinese tradition; it also accords with the considerable scepticism expressed about market research in a context where sudden changes in government policy could render market research conclusions invalid, and with the unfamiliarity of Chinese managers with the technique.

In such conditions, managers either relied on their own internal historical data, which were inadequate, or on the central planning authorities. In some decisions which needed external authorization, the central source was dramatically important, because the respective authority would be convinced only by central information or information provided by central agencies. This was observed in the investment decisions, in which feasibility study was required and directed by subsidiaries of the authorities.

The analysis of information utilization in the previous chapters reveals the existence of "corresponding management" in China. The matrix structure connecting an enterprise to a specific unit in its superior authority restricted the diffusion of information within specific administrative hierarchies to a "targeted" audience.

Managers are limited in the communication of information by this institutional constraint. Some decision cases, for instance the purchasing and pricing in Heavy Electrical in 1988, showed how delays were caused by managers' efforts to collect data, because there was a lack of sufficient information from market sources. Managers also stressed the qualitative aspect of information sources. A piece of information coming from an authority was perceived to be more effective than one from public media or markets.

11.1.7 Regulations

Two categories of regulations were distinguished: public and internal. Public regulations were announced by central or local governments, central planning systems and ministries through public media. These policies and regulations expressed the legitimacy of social institutions, as having a general concern with both economic *and* political issues.

The internal regulations and documents were different. First, each central administration made more precise versions of its own regulations than the general policies. Second, the focus of an internal document drew specific attention to one application, such as an administrative topic or industrial product. Third, these internal documents were only diffused within a specific vertical hierarchy. Only the policy makers (ministries or bureaux) and their targeted subordinates (audiences) were covered and directed by these policies. Fourth, these regulations contained a wide range of information, from debits of the decisions *the made by the policy makers to approval of specific items*, such as investment proposal reports.

Our empirical analysis shows that central government organs, such as the State Council, often issued a general policy or regulation having a low degree of codification, while the local government and ministry issued a specific policy and regulation with a high degree of codification. The regulations from the central government were diffused through public media, while the local government or ministry's regulations were transferred within its respective administrative hierarchy.

In some cases, such as purchasing, the regulations set trading places and monopolized trading agencies. However, there were few regulations which directly affected the processes of purchasing decision making. In other words, the regulations set the context for an enterprise's operation. This phenomenon was also seen in the labour recruitment decisions. As soon as managers were formally granted autonomy in labour management, they seldom referred to a specific regulation when taking action.

The decisions on pricing outputs, organizational change and innovation with investment were, however, regarded quite differently. Regulations applied to a specific product or event in highly codified form. Managers referred to a specific regulation (or set of regulations) to guide their procedures and actions. Some regulations were a result of approval from a specific authority, when external authorization had to be obtained.

In the case of organizational decisions, regulations promoted actions. Chapter 9 has analyzed contents of those regulations, which were used to oblige enterprises to accept the official campaign. The regulations were sources of action. Furthermore, these regulations were highly codified, which set details of the campaign agenda, such as time schedules, roles of actors, targets and processes. The regulations even specified some assessment forms to examine the performance of the campaign.

Regulations provided both the opportunity for more autonomous managerial action and at the same time they constrained such action. The principle of decentralizing decision making

under the economic reform was typically announced through rather general public regulations. However, many of the more specific internal regulations then set limits to that decentralization.

The empirical study shows that ideology played an important role in determining the basic tune of regulations. When the ideological message was changed, for instance from decentralization to re-centralization, regulations firmed it up into a solid authorized framework, in order to direct future actions according to the ideological concept. Periodic changes in ideology created uncertainty in the environmental context. Managers therefore found it difficult to plan ahead for the long term.

11.1.8. Triggers and Stimuli for the Decisions

The triggers identified for the decisions are summarized in the Table 11.6.

Table 11.6 inserted here

Compared with decisions in 1985 or before, task requirements were becoming more important in pricing and labour recruitment decisions. The contribution of market triggers increased in purchasing and pricing, but declined in organizational change and innovation. The weight of triggers from higher authorities was little changed in purchasing, organizational change and innovation investment decisions, but decreased dramatically in pricing and labour recruitment.

Compared with 1985, purchasing managers said that they were by 1988 more active in searching for buying opportunities both from sources under administrative control and from the market. They no longer relied primarily on an allocation of inputs under the quota

system. Their initiative was encouraged by the acute shortages which had then developed. The planning authorities were still active in transactions, from both allocating planning quotas, and in the exchange of inputs/outputs. They continued to play an important role in starting off purchase decisions. A message from the planning authorities indicated an opportunity for an enterprise to obtain important inputs, which were either in short supply or not readily traded in markets.

In the case of pricing decisions, the situation changed significantly in the later period, since the planning authorities no longer played an important role in their initiation. The main factor now triggering a decision to increase prices was internal cost pressures, articulated by the enterprises' financial departments.

In organization change, a central trigger referred to a command of the authorities. The case studies show that an important reason for organization change in these enterprises both in 1985 and 1988 was the implementation of the official campaigns. Organizational change was treated as part of a broader socialization in to the reform, especially when this change was associated with the role of the Party.

For innovation investment decisions, the planning authorities were the main initiators. Initiatives from these authorities offered advantages to the enterprises chosen to implement them: a guarantee of funding and of market prospects. The market prospects stemmed from *the fact that the products linked to the investment would secure a place on the ministry's approval list*. When a project was formulated by an authority, the most important consideration for the enterprise was therefore to seize the opportunity and bid for it.

11.2 Summary of Decision Content, Decision Processes and Decision Context

11.2.1 Economic Activity I: Purchasing of Inputs

Purchasing materials is a basic necessity for an enterprise to produce physical outputs. This decision can be viewed as a routine and normal day-to-day operation, whether this be in a market-oriented or centrally planned economy. In the reform, this transactional activity has been partly transferred from the planning system to the market. The delegation of decision powers over purchasing from the central planning system to enterprise management gave rise to changes in (a) the selection of suppliers, (b) the selection of supply channels; and (c) the determination of input prices.

The characteristics of purchasing decisions, in 1985 and 1988, are illustrated by Table 11.7.

Table 11.7 inserted here

The reform did not create market institutions automatically, as some reformers expected. The model "the State regulates the market, the market directs enterprise" failed to materialize, because: (a) central planning systems retained direct powers of resource allocation, (b) the system also controlled sources of and transmission channels for information, (c) the system had authority to determine the rules of transactions, and (d) agencies of the system became involved in transactions for their own interests.

An enterprise had to rely upon the planning system from time to time, particularly on the allocation of resources according to planned quotas. Triggers from purchasing key materials and imports mostly came from the higher authorities. The personal ties and relations among suppliers (and authorities as well) and buyers remained a major network for exchanges of

commodities and information, parallel to the formal provision of the planning system. These relations were inherited from tradition of personnel trust and from past experience of arrangement, such as doing personal favours for suppliers and bureaux and transactions through trade fairs under the planning system. All these traditions remained active.

By the way of illustration, Figures 11.1 and 11.2 depict purchasing decisions in Automobile in 1985 and 1989. The decision processes look very similar. Both were simple and quick decisions made by small groups of actors. There were few activities involved and authorization was by given below the level of enterprise director. Figures 11.3 and 11.4 depict the 1985 and 1988 purchasing decisions in Pharmaceutical. A difference is seen in the selection phase in the later decision. The involvement of the director in selection was because the enterprise suffered from a shortage of capital. The purchasing decision was pre-judged by the director herself before the stage of final approval. But in general, the decision activities, trigger sources, actor involvement and decision levels were relatively similar. All four cases involved simple processes with few actors.

Figures 11.1, 11.2, 11.3 and 11.4 inserted here

11.2.2 Economic Activity II: Pricing of Outputs

The price mechanism is seen as one of the most important tools for directing enterprise decisions in a market economy. A pricing policy derives from an economic calculus based on the profit maximizing assumption. The pricing mechanism was constrained in the planning system, because the organizational performance was measured in terms of planning quotas. The characteristics of pricing decisions in the six enterprises are shown in Table 11.8.

Table 11.8 inserted here

The case studies show that enterprise managers enjoyed more autonomy to price some products. By 1988, pricing control was more relaxed compared to 1985. Furthermore, the central government employed political campaigns (annual financial examinations) to check up on fraudulent behaviour.

Market information was becoming more and more important in the pricing decisions. Managers were particularly concerned with pricing policies of other producers. Market signals were used by managers to support their negotiating positions when they applied for a new price. The power of managers to determine the price proposal rested on their knowledge of cost details in applying the official-approved formula. Their hand in negotiations was strengthened when contractual profit targets were formally legitimated under the contract responsibility system.

To illustrate, Figures 11.5 and 11.6 present the pricing decisions in Audio-visual in 1985 and 1988. These two exhibit very similar processes, except that the ministry was involved in initiation in 1985, but not in 1988 when initiation was largely triggered by information on changes in market prices. Figures 11.7 and 11.8 illustrate the pricing decision processes in Heavy Electrical in 1985 and 1988. Differences are seen in the initiation and authorization phases. The decentralization programme lowered both the trigger level and approval level. Enterprise management had gained autonomy in this decision area. But, similarities remained in the flow of decision activities, actors most involved in the decisions and the sources of information used. Decision-making on pricing is likely to be a plan-making process. The decision activities can be distinguished into four phases, in terms of initiation, design, selection and authorization, according to the managerial functions conducted by

managers. Furthermore, pricing decisions in these two different enterprises also demonstrated some similarities in the pattern of activities.

Figures 11.5, 11.6, 11.7 and 11.8 inserted here

11.2.3 Economic Activity III: Labour Recruitment

Table 11.9 summarizes the decisions on labour recruitment and their context

Table 11.9 inserted here

There was no labour market to guide managers in their labour recruitment policies. The creation of labour markets was not realized by decentralization alone. Traditional norms played a more important role than the market mechanism, in terms of personal trust and relationships. The concentration on personal networks held up the diffusion of market information and resisted market signals. Labour mobilization through diffused and codified market information was constrained by the use of impacted and uncoded information through interpersonal processes(cf. Boisot, 1986).

On the other hand, an employee was still tied to his/her organization. A lack of social security and the high dependence of employees on their organizations constrained labour mobilization and prevented from establishment of a labour market.

In general, the decision process of labour recruitment was quite routine. Significant changes had take place in the process with regard to initiation and authorization. Managers gained

the power to determine the issue according to task requirements. But the planning authorities still influenced the supply of information and the final decision outcome.

As illustrations, Figures 11.9 and 11.10 show the processes of labour recruitment decisions in Automobile in 1985 and 1989. Figures 11.11 and 11.12 illustrate the recruitment processes in Machine Tool in 1985 and 1988. The effect of decentralization is obvious from these graphs particularly in the initiation and authorization phases. The task triggers became a major source stimulating decision topics, and enterprise managers approved the issue. The decision processes in this category are also similar. Decision-making process was likely to have a plan-making nature. The flow of the decision activities in these processes is likely to move smoothly from the beginning to the final outcome, although there were some interactions between actors.

Figures 11.9, 11.10, 11.11, and 11.12 inserted here

11. 2. 4 Internal Decision: Organizational Change

The decisions on organizational change and their context summarized displayed in Table 11.10.

Table 11.10 inserted here

This kind of decision is characterized by its unforeseeable consequences. A long duration, particularly the long delay before anyone takes a definite step towards deciding issues, was common to all six enterprises.

Furthermore, any change in organizational structure, particularly those which would challenge the status of the Party, could be seen as a threat to the whole societal and political system. A political rationale was inherent to this issue. And the support from the political party was a necessary condition for the decision agenda to succeed. All these factors increased the complexity of the process.

The planning authorities were actively involved in the decision process, although managers were now formally permitted to design organization structure and carry out labour management by themselves, under the reform provisions on decentralization. Party officials also supported the change, under the instructions of the authorities and employed ideological training and political education for building up a consensus.

This decision process can be shown graphically. Figures 11. 13 and 11.14 show how Audio-visual completed two organizational change decisions in 1986 and 1988. The processes of organizational change in Heavy Electrical in 1984 and 1988 are portrayed in Figures 11.15 and 11.16. All these processes were complex and dynamic. The collective body of approval was the workers' congress, and the support of the Party was given in political education. The flow of activities in decisions for 1985 appeared to be less complicated than decisions in 1988.

Figures 11.13, 11.14, 11.15 and 11.16 inserted here

11.2.5 Innovation Investment Decisions

Table 11.11 summarizes the decisions on innovation investment and their context

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Research and Development(R&D) is considered as one of the most important activities for an enterprise operating under market competition (Kanter, 1983). In a hierarchical planning system, the stimuli of innovation came from the commands of the planning authorities, rather than from market signals.

Furthermore, information sources and communication relied upon the vertical hierarchies. Data from the higher authorities (central sources) were perceived to be more important than from markets. The information for decision making was artificially distorted in order to fit into planned targets.

Compared with 1985, more authorities were by 1988 involved in the investment decision process. The involvement of functional authorities complicated the process so that multiple authorities exerted multiple rationalities in assessing proposals for decision. The authorities also imposed detailed regulations to exercise control at all stages of the decision process, and this caused delays and interruptions. Each of investment decisions was an *ad hoc negotiation and bargaining process* between authorities and enterprise's management. Reliance upon external resources and asymmetrical framework of information communication characterized this type of decision, and gave the higher authorities considerable powers to influence their outcome.

At the same time, enterprise management enjoyed operational power embedded in its knowledge of technical details, and production processes; this knowledge was essential for the successful implementation of investment decisions. This strengthened the enterprise's

bargaining power. Informal and personal influences were often used by managers to deal with the authorities concerned.

Illustrative investment decision processes are depicted in Figures 11.17 to 11.20. Figures 11.17 and 11.18 indicate the processes of investment in Audio-visual in 1984 and 1986. The other two figures, 11.19 and 11.20, illustrate the investment processes in Pharmaceutical in 1985 and 1987-89. All decisions were involved by multiple internal actors (project team and executives) and higher authorities. They encountered a number of interactions in design and selection phases before the final approval arrived.

Figures 11.17, 11.18, 11.19, and 11.20 inserted here

11.3 Comparisons over the Reform Period: Decisions in 1985 and 1988/89

The achievement of industrial decentralization in China, according to the empirical findings in this investigation, varied in different decision areas. The most decentralized decisions were in recruitment, then respectively purchasing and pricing, and organizational change. The most centralized decisions were investment.

The summary of decision context and process in section 11.2 indicates that there were some changes in managerial behaviour. Managers started to take the initiative in some aspects of decision-making, such as seeking information and opportunities in both the planning systems and market. But these changes were only marginal.

First, the nature of authority's control over enterprise management had not changed. This administrative control was shifted from the line authority to a number of functional authorities. The enterprises faced more authorities than before the reform. This was

described as a change from one god to several gods or mothers in law. Enterprises still relied upon the higher authorities for the allocation of scarce resources and information supply. The legitimacy of enterprise management was dependent upon the administrative regulations.

Second, the process of decision-making changed marginally rather than dramatically. Changes in actor involvement and levels were limited to operational decisions, normally purchasing and labour recruitment. These changes were evident in regard to initiation and authorization, where task requirements became more important as stimuli and where approval was decentralized to enterprises, accompanied by their acquisition of more market information. But the overall pattern of the decision process, the decision activities and path from initiation to outcome, remained much the same. For example, purchasing decisions were characterized by a simple process in which individual managers often acted independently, while the recruitment decision encompassed all its decision phases into a routine plan. In most pricing cases, the cost-plus formula fixed by the authorities was still used as the basis of arriving at the decision.

Other decision processes of more strategic nature, such as organizational change and innovation investment, were little changed. At both points in time there were similarities in regard to actor involvement, levels of actor, decision activities, intervention of the higher authorities and information sources. The decision process was complex. Multiple actors brought different rationalities to the decision process, such as employment criterion, environmental impact, strain in power resources, and so on. Approval of the higher authorities and reliance on resource allocation from the planning authorities, both material and information resources, were still important for enterprise management to carry out investment.

Third, although authority within the enterprise shifted from the party to management, the reform created a management with political expertise rather than the professional

management brought forth by industrialization in the developed societies (Chandler, 1962, 1977; Galbraith, 1972; Kerr et al, 1960). The personal background of the directors in the six enterprises revealed their strong political identity. Their technical knowledge was limited to production and engineering. These characteristics differ considerably from professional management in industrial society(see Chapter 3 and 4). Political criteria for organizational performance and personnel promotion were retained by governmental authorities despite the economic criterion contained in responsibility contracts.

Even though the reform emphasized the importance of knowledge and managerial experience, financial knowledge did not become an important consideration in decision making. This was evident in innovation investment decisions. In most cases, technical managers designed the details of projects and did not seriously involved financial managers(Chapter 10). The rationale of organizational performance was derived from technological advantages.

Furthermore, most managers seemed to be suspicious of markets. The innovation investment decisions revealed that only one of the six enterprises preferred market surveys as a method to collect information. Although this behaviour was possibly due to institutional constraints from the authorities, it indicates that there was a lack of market knowledge and of market experience.

11. 4. Comparison between Enterprises

The study indicates that the location of the enterprise within the system of industrial governance affect decision processes. Of the six enterprises, Audio-visual and Automobile were the two receiving more direct intervention from the planning authorities, particularly ministries, than the other enterprises. Their products were considered to be "important" as state controlled outputs. These two enterprises were also the two largest ones. They also had a heavy need for high technology-electronic and machine automation-in their

production processes. These characteristics had a double effect. Both enterprises received planning quotas of outputs and came under direct control of the authorities as regards pricing policies and choice of customers. Managers in these two enterprises had to rely upon resource allocation from the planning authorities for investment, because their internal resources were insufficient to undertake technology innovation projects. Because of their large size, internal issues were more sensitive to pressure from both employees and authorities. This created complexities in the case of organizational change, in which the workers' congress became the final body of approval. And changes in the management system, such as the implementation of the Director Responsibility System and contractual system, or the formation of the Automobile joint-venture, were strictly controlled according to the authorities' agenda.

At the same time, these two enterprises derived advantages from the planning system. Their inputs were guaranteed partly by the ministry's planning quotas. They also exchanged their outputs for inputs with other enterprises. Their markets were protected by the authorities. Audio-visual also gained foreign currency from its exports, which provided management with the right to purchase imported materials.

On the other hand, Machine Tool, Pharmaceutical and Audio enjoyed more autonomy. Because their products were not dictated by planning requirements, the higher authorities appeared to pay less attention to their production and activities, and their transactions were directed mostly by the market rather than by planning quotas. These three enterprises were in the medium-size category. Their technology requirements for production were lower than in Audio-visual and Automobile. They faced considerable market competition. Their directors appeared to have more authority to determine internal issues, such as organizational change. Nevertheless, except for Pharmaceutical, they still had to turn to their industrial bureaux or other planning authorities for allocation of the scarce resources. Pharmaceutical's investment was incorporated into the municipal plan, due to its excellent performance and the authority's instruction. The other two were in a difficult position

regarding technological development. With products considered to be of lesser importance, they found it difficult to get their technology development plans listed in the bureau or ministry's programme. Their limited internal funding was only adequate for product development.

Heavy Electrical can be seen as falling between central control and a market orientation. This enterprise derived some advantages from its close relationship with the planning authorities and its monopoly in the local market. This helped the enterprise to purchase scarce inputs and it was able to undertake product development with the aid of grants in the plan. With nearly two thousand employees, the director's authority was, however, constrained by the workers' congress.

The comparison between enterprises indicates that each one is located in a different position of the institutional framework. The institutional intervention imposed by the planning system upon enterprises varies according to the importance of their product, size, strategic position in industrial sectors and technological advances. This institutional intervention has some effect on decision-making, which will be discussed further in Chapter 12.

11.5 Comparison between Decisions

The summary of decision content, processes and context in section 11.2 indicates that decision processes are likely to have some similarities when the matter for decision is similar, even when the decision topic occurs in different organizations. In other words, when a decision matter is the same or similar in different organizations, the decision process tends to present a similar pattern. Differences in organizational properties, such as size, structure and operational process appear to be less influential for the decision-making process than are the matters which are being decided.

According to the nature of decision processes which emerged in this research, the five decision topics can be categorized into three types: operational, routine planning, non-routine.

The first category is where the decision matter is an operational one. This includes purchasing decisions. This type of decisions occurs with frequent repetition and has a clear economic rationale related to the continuing operation of the organization. Because of its high repetitive occurrence, the matter is familiar to the organization and decision actors. The decision outcome has an immediate effect on short-term organizational performance. The solution is normally to hand, so that the issue can be simply and quickly tackled.

Because of its operational nature and clear economic rationality, the decision-making process becomes simple and quick. Only, individuals or a small group of actors needed to take part, applying skills to the issue, and the timing is short with few delays or interruptions. When managers have sufficient autonomy, such as with a budget allocation, the level of authorization is delegated. The major concern of decision actors was with internal task requirements and few political interests involved. Interactions between the organization and environment came mainly in the initiation stage, because triggers from external resources provided managers with an opportunity to take action. As a result, fresh, current and verbal information(Mintzberg, 1973) is significant for managers to stimulate the decision topic, and internal and historical data are only used to predict the decision outcome. Individual judgement based on experience is an important instrument to reach the decision. This type of process may be called a "simple" process.

The second category of decision matters is characterized by routine tasks, but having less repetitive frequency than the first category. Although the decision issue is task-related, its effect on the organization's operation and performance is not as immediate as in the first category. Thus, the timing is not so urgent. Actors have sufficient time to deal with the issue. The decision is more like a plan, incorporating a certain degree of economic

rationale, so that the decision outcome can be calculated ahead. However, the outcome of the decision is not only related to organizational performance, but has some influence on the external context, such as society, as well. Decision topics in this category include product pricing, labour recruitment and product development.

The interactions between an organization and its environment in this decision-making category focus on the consequence of the decision. Actors interpret the decision outcome from different points of rationality. Concern with social or political interests influences the decision outcome. For example, a product pricing decision possibly contributes to inflation, or labour recruitment would affect employment in the community. Institutional expectations and requirements regarding organizational performance will direct the decision outcome.

With its characteristic of plan-making, the decision-making process is fluid, in terms of evident decision activities which are carried out according to functions conducted by actors, such as initiation, design, selection and authorization. Durations are not long, but delays or interruptions can occur when a number of different actors are involved and they apply different criteria to judge the decision outcome. Task requirements and performance can be a major concern of organization members, but they are not necessarily considered by other actors, particularly those external ones who take account of social or political interests. External information is useful for actors to understand environment, but internal data are important to form the basis of calculation. Institutional intervention imposes some regulation or external authorization to control behaviour in the organizational. This type of decision process may be called "fluid".

The third category of decision matter is the most complicated one with regard to its strategic nature. This type of decision is novel, one-shot and non-routine. Because of its rarity, it is difficult to predict its future consequence, and actors are not familiar with the issue. It is also difficult for actors to calculate the solution. The decision needs support from the

internal or external context or it requires resources which are located in environment. The decision outcome will have a long-term effect on the organization's operation and performance, and it may cause changes in the environment as well. The decisions falling into this category considered in this study are *organizational change and investment*.

Because the decision needs the support of different actors, as with organizational change, or substantial resources, as with investment, the process involves different interest groups or individuals, or management has to rely upon external resources outside its control. Because of these decisions difficult to predict and concerning issues which impinge on the interests of actors (groups or individuals), the process faces intervention and interference from the environment, particularly from institutions which impose standards and normative requirements on organizations.

The way to process this type of decision is also complicated. Multiple actors, internal and external, are involved, having multiple rationalities. Durations are long, with delays and interruptions which are caused by struggles between actors. Each step forward has to be achieved through bargaining and negotiation between different interest groups or individuals. The draft or proposal has to be shaped, changed and restructured at each stage of the decision process. There are ambiguous boundaries between decision activities, such as design and selection, because every actor intends to influence the course of decision-making, so that each result is in fact a collection of number of actors' interactions. The authorization comes last after a compromise is reached among actors. Information is filtered, based on actors different interpretations. Thus, information is controlled, modified and selected in order to favour a particular actor's preference. Internal data are not important. The quality of information is more important than the quantity. Control over information mobilization is in fact the resource control which gives advantage to the gatekeeper. This type of decision process may be called "recycling", because it proceeds in a non-linear, meandering fashion between different actors and different decision phases.

These three types of decision processes and related decision issues are summarized in Table 11.12.

Similar decision matters in different organizations were found to be processed in similar ways in different enterprises. For example, the product pricing decision process accorded with one pattern which was likely to be similar in all the enterprises studied, while organizational change presented another pattern which was also similar among the enterprises. There are some inter-enterprise differences, which are caused by decentralization and intervention by the planning authority, for example, the initiation levels in purchasing decisions were delegated in some cases down to enterprises. But the general patterns of decision processes, such as duration, actor involvement (particularly that of internal actors), flow of decision activities, are more similar for each decision matter than they are for each enterprise.

Secondly, different decision matters within the same organization exhibit the different processes. It is obvious, from the graphs in Figures 11.3, 11.4, 11.19 and 11.20, that purchasing decision processes in Pharmaceutical were very different from its investment processes. Pricing decision processes in Audio-visual significantly differed from its organizational change processes (Figures 11.5, 11.6, 11.13 and 11.14).

Thirdly, the similarity of the same or similar decision matters over the reform period during 1985 and 1988/89 seems to be more significant than their differences between enterprises. The most decentralized decision process was seen in the case of labour recruitment. The differences identified in the labour recruitment decision process over the period were changes in initiation and authorization levels, while the general pattern of decision activities still followed a plan-making mode with four phases and a smooth movement between actors and phases (Figures 11.9 to 11.12). With other decisions which were more decentralized, such as pricing and purchasing, the processes were either very similar (Figures 11.1 and 11.2, 11.5 and 11.6), or slightly changed in the levels of initiation and authorization (Figures

11.7 and 11.8), or in the actors involved because of budget constraints(Figures 11.3 and 11.4). Other less decentralized decisions, such as organizational change and investment, had patterns which were highly similar to each other, within the same organization(Figures 11.13 and 11.14, 11.15 and 11.16, 11.17 and 11.18, 11.19 and 11.20) or between different organizations(Figures 11.13 and 11.15, 11.14 and 11.16, 11.17 and 11.19, 11.18 and 11.29).

Consideration of the possible reasons for these similarities and differences will benefit from a comparison with other studies. This is pursued in the next Chapter.

Table 11.1. Durations of the Decision studied

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85 (month)	88	85 (month)	88	85 (month)	88	85 (month)	88	85 (month)	88
Audio-visual	0.25	1.5	3	4	3	1.5	5.5	8	18	30
Automobile	0.25	0.5	2.5	4	2	2.5	4.5	10	18	50
Machine Tool	0.5	0.5	1.5	2	2	2	3	6	12	8
Heavy Electrical	0.5	1	2	2.5	3	2.5	3	7	20	5
Pharmaceutical	0.25	0.25	0.5	1	2	2.5	2.5	5	24	24
Audio	0.25	0.5	1.5	1	2.5	2.5	3	4	30	48
Average	0.33	0.71	1.8	2.4	2.4	2.3	5.6	6.7	20.3	27.5

Table 11. 2 Sources of Delays, Interruptions and Accelerations

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85	88	85	88	85	88	85	88	85	88
Audio-visual	No	No	C	C	C	No	I	C&I	No	C&C
Automobile	No	No	C	C	C	C	C&I	I	C	C&C&C&I
Machine Tool	No	No	C	I&C	No		C	I	I	M No
Heavy Electrical	No	I	C	I&C	C	M	I	I&I	C	No
Pharmaceutical	No	I*	No	No	C	C	I	I	C	C&C&C
Audio	No	No	C	No	C	C	I	I	C	C&C&C
Total :										
Central	0	0	5	4	5	4	1	1	4	11
Markets	0	0	0	0	0	1	0	0	1	0
Internal	0	2	0	2	0	0	6	7	0	1

Note: C = Central sources, such as commands from ministries or industrial bureaux, M = Markets, I = Internal events

*: acceleration

Table 11.3 The Number of Actors Involved in the Decisions.

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85	88	85	88	85	88	85	88	85	88
Initiation:										
Audio-visual	1	2	3	2	1	2	2	1	1	2
Automobile	1	2	2	2	2	2	2	1	1	2
Machine Tool	1	2	3	2	1	1	2	1	1	1
H. Electrical	2	2	3	2	1	1	1	1	1	2
Pharmaceutical	1	3	1	1	1	2	1	1	2	2
Audio	1	2	2	2	1	1	1	1	2	2
Design:										
Audio-visual	-	1	3	1	2	1	3	2	5	5
Automobile	-	-	1	2	2	2	6	4	5	6
Machine Tool	1	-	1	1	1	2	3	3	5	3
H. Electrical	1	1	2	1	2	1	3	3	4	2
Pharmaceutical	-	-	1	1	2	2	4	3	3	2
Audio	1	-	2	1	1	2	4	3	3	3
Selection:										
Audio-visual	1	2	3	2	3	1	5	5	5	7**
Automobile	1	1	3	3	3	3	6	4	3	7**
Machine Tool	2	2	3	3	3	3	3	4	4	2
H. Electrical	2	2	3	1	3	1	3	5	5	3
Pharmaceutical	1	2	3	2	3	2	4	5	3	5**
Audio	2	2	3	3	3	2	3	5	4	3
Authorization:										
Audio-visual	1	1	2	2	2	1	3	2*	3	3
Automobile	1	1	2	2	2	1	3	2*	3	5**
Machine Tool	1	1	1	2	2	1	2	1	2	1
H. Electrical	1	1	1	1	2	1	1	2*	3**	1
Pharmaceutical	1	1	1	1	2	1	2	1	2**	2
Audio	1	1	2	1	1	1	2	1	1	1

Note: * Actors included the workers' congress

** Actors included a number of government agencies

Table 11.4 Organizational Levels of of Actors in the Decision Process

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85	88	85	88	85	88	85	88	85	88
Initiation:										
Audio-visual	5	5	5	2	2	2	5	5	5	5
Automobile	5	5	5	2	5	2	5	2	5	5
Machine Tool	5	5	5	3	5	2	5	5	5	2
H. Electrical	5	2	5	2	2	2	4	5	5	5
Pharmaceutical	2	2	2	2	2	4	4	5	5	5
Audio	5	3	2	3	2	2	4	5	5	5
Average	4.5	3.7	4	2.3	3	2.3	4.5	4.5	5	4.5
Design:										
Audio-visual	-	2	3	2	2	2	3	5	3	3
Automobile	-	-	2	2	5	2	5	4	3	3
Machine Tool	2	-	2	2	5	2	3	3	3	3
H. Electrical	2	2	3	2	2	2	3	4	3	3
Pharmaceutical	-	-	2	2	2	2	3	4	3	3
Audio	2	-	3	3	2	2	3	4	3	3
Average	2	2	2.5	2.2	3	2	3.3	4	3	3
Selection:										
Audio-visual	2	4	4	4	4	2	5	4	5	5
Automobile	2	2	4	4	4	5	5	4	5	5
Machine Tool	3	4	4	4	4	5	4	4	5	4
H. Electrical	3	3	4	3	4	2	4	4	5	5
Pharmaceutical	2	4	4	4	4	5	4	4	5	5
Audio	3	4	4	4	4	5	4	4	5	5
Average	2.5	3.5	4	3.8	4	4.2	4.3	4	5	4.8
Authorization:										
Audio-visual	3	4	5	5	5	2	5	5*	5	5
Automobile	3	3	5	5	5	4	5*	5*	5	5
Machine Tool	3	4	5	5	5	3	4	4	5	4
H. Electrical	3	4	5	4	5	3	4	5*	5	5
Pharmaceutical	4	4	4	4	5	4	4	4	5	5
Audio	3	4	5	3	5	4	4	4	5	4
Average	3	3.8	5	4.3	5	3.2	4.3	4.7	5	4.7

Note: Level of authority is scored according to the Aston Programme.

5 = The authority above directors, such as the Workers' Congress, local industrial bureaux, ministries. 4 = Enterprise director; 3 = Deputy director, or head of multiple-department; 2 = Head of a single department; 1 = Group leader or supervisor 0 = Individual operator; * here is the Workers' congress.

Table 11.5 Sources of Information

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85	88	85	88	85	88	85	88	85	88
Audio-visual	C&I	C&M	C&I	C&I	I&C	I&M	C&I	C&I	C&I	C&I
Automobile	C&I	C&I	C	C&I	I	I&C	C&I	M&C&I	C&M	C&C&C&I
Machine Tool	C	C&M	C&I	M&I	I&C	I&C	C&I	C&I	C&C&I	C&M
Heavy Electrical	C	M&C	C&I	M&I	I	I&M	M&C	C&I	C&C&I	M&C
Pharmaceutical	M&I	I&M	M	I&M	I&C	I&C	I&M	C&I&M	M&M	M&C&C&I
Audio	C	C	I&C	M&I	M&I	C&M	I&M	C&I	C&C&I	M&C
Total										
Central Sources	5	5	5	3	3	4	4	6	9	10
Markets	1	4	1	4	1	3	3	3	4	3
Internal Data	3	2	4	6	6	6	6	6	6	3

Table 11. 6 Sources of Triggers Stimulating the Decisions as Triggers

Enterprises	Purchasing inputs		Pricing outputs		Labour recruitment		Organization change		Innovation investment	
	85	88	85	88	85	88	85	88	85	88
Audio-visual	C	C&M	C	T&M	T	T	C	C	C&C&M	C
Automobile	C	C	C	T	T&C	T	C	T	C&C	C
Machine Tool	C	C	C&T	T&M	C&T	T	C	C	C&C	M
Heavy Electrical &C	C	C	M&C	C&T	T&M		T	T	T&M	C
Pharmaceutical	M&T		M&T	M	T	T&C	T	T&C	C&C	M&C
Audio &M	C	C	M	T&M	T	T&T	C&T		C	C&M
Total										
Central	5	5	4	0	3	0	5	5	10	5
Markets	1	3	2	4	0	0	1	0	3	2
Tasks	1	1	2	6	6	7	3	1	0	0

Note: C = Central planning system as information sources, M = Markets or other public sources, I = Internal data sources within enterprises

Table 11.7 Characteristics of Purchasing Decisions and Contexts

Dimensions	1985	1988
Context:		
Planning quota	Large and important for wide ranges of inputs	Selective, and important for shortage supplies
Markets	Small, partly effective and developing	Important for most inputs serious inflation and chaotic
Planning authorities	Very powerful	Not powerful, and started to engage in direct trading as partners
Ideology	Open market and reduce planning quotas	Tighten inflation and re-centralize supplies
Regulations	Give autonomy to enterprises in purchase	Re-monopolize trade places and prices of inputs
Decision Process:		
Timing	One or two weeks	Short, but longer than 1985
Delays (interrupts)	No	Some internal delay and accelerations
Actors	Authorities Individual or a small group of managers	Authorities, Individual or a small group of managers. Sometimes, several
departments		
Phases	Smoothly and directly from the beginning to the end	Smoothly and directly from the beginning to the end. Some had four phases
Level of Authorization	Department	Enterprise, higher than those in 1985
Trigger Information	Central and task plan Central and internal	Central, more markets, same task Central and internal

Table 11.8 Pricing Decisions and their Context

Dimensions	1985	1988
Context:		
State Set prices	Most products	Some products
Market price	Very few	Most products
Planning authorities	Set prices and supervise all procedures	Set some prices, supervise most procedures. Re-control price setting procedures
Ideology	Open markets and prices	Stabilize pricing and hold up inflation
Regulations	Relax most price control	Re-tighten price control.
Decision Process:		
Timing	Several weeks	Longer than those in 1985
Delays (interrupts)	Most from higher authorities	Most from higher authorities, some from markets and internal
Actors	Authorities and Department managers	Authorities in some cases Directors and department managers
Phases	Four phases	Four phases
Level of Authorization	Authorities	Authorities in some, more autonomy for enterprises
Trigger	Central and tasks	No central, most from task
Information	Central and internal	Central, markets & internal

Table 11.9 Labour Recruitment and their Context

Dimensions	1985	1988
Context:		
Planning quota	In all decisions	None of any decisions
Markets	Do not supply labour	Limited supply of labours
Planning authorities	Provide quota and authorize recruitment	Provide information and advice
Ideology	Reform labour system and start labour mobilization	Call on contractual labour system
Regulations	Set procedures in labour recruitment	Regulate autonomy for enterprises
Decision Process:		
Timing	Several weeks to months	Similar to those in 1985
Delays (interrupts)	Delays for feedback from authorities	Delays fro feedback from authorities
Actors	Authorities and Directors and department managers	Directors and department managers. Some times higher authorities
Phases	Sequentially go through four phases	Sequentially go through four phases
Level of Authorization	Authorities	Enterprises
Trigger	Central and tasks	Tasks
Information	Central and internal	Central, internal, and more markets

Table 11.10 Organizational Change and their Context

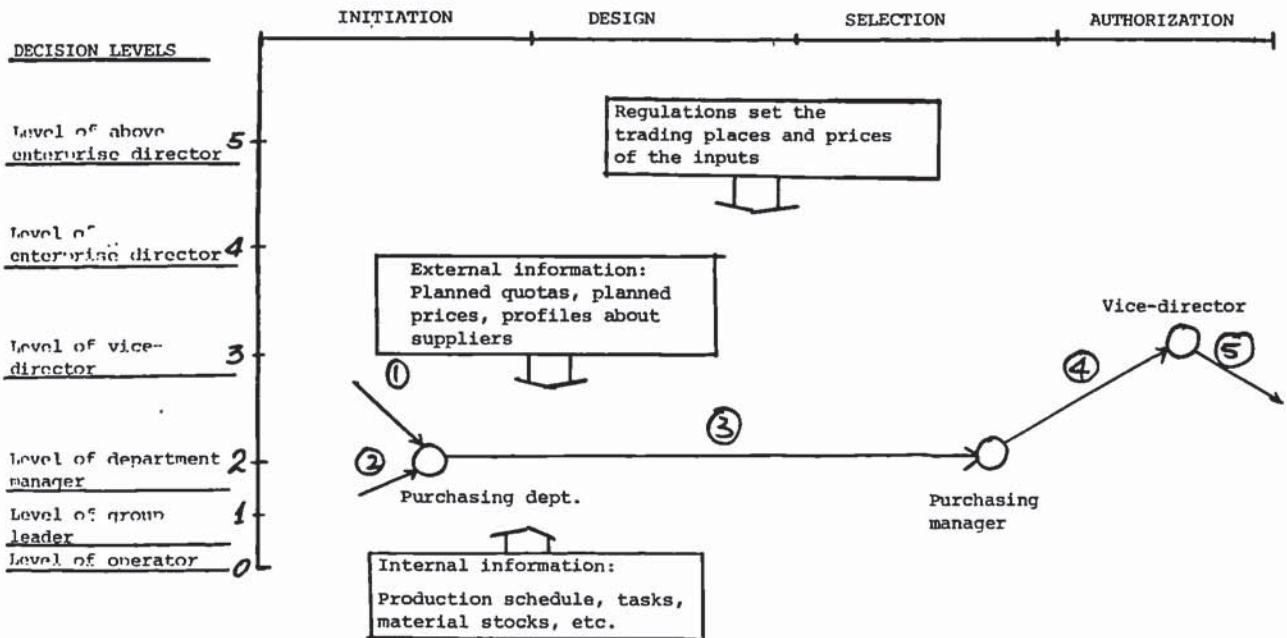
Dimensions	1985	1988
Context:		
Planning authorities	Order to implement the Director Responsibility System Appoint directors and replace the party secretaries	Order to implement the Optimizing Labour Organization Set targets, procedures, time schedules
Ideology	Separation of management from the political system	Deepening the reform and increase productivity
Regulations	Decentralize decision autonomy to directors	Set procedure and authority of directors and supervise the progress.
Decision Process:		
Timing	Several months	Several months, longer than those in 1985
Delays (interrupts)	Some from internal events	Some from internal actors, some from authorities
Actors secretary	Authorities, director, the Party secretary	Authorities, directors, the Party many department managers
Phases	Cycling in design and selection among internal actors, and external actors(sometimes)	Cycling in design and selection among internal Few with external actors
Level of Authorization	Authorities and directors	Directors
Trigger	Commands from authorities some from tasks	Commands from authorities, only one from tasks
Information	Central, markets and internal	Central, markets, and internal

Table 11.11 Innovation Investment Decisions and their Context

Dimensions	1985	1988
Context:		
Planning authorities	Monopolize all cases	Monopolize production investment and some product innovation decisions
Ideology	Delegate product innovation decisions to enterprises; Delegate technical investment to local authorities and enterprises	Re-centralize approval of investment projects; Call on tightening control over capital investment
Regulations	Relax authority of investment to local government. Promote technology innovation in enterprises	Supervise and re-centralize approval of investment to the central government; Cancel capital investment projects
Decision Process:		
Timing	Years	Years in investment decisions, months in product development
Delays (interruptions)	Most from central sources	Most from central, one from internal
Actors	Line authorities, directors, and department managers	More authorities(line and feasibility assessing), directors and department managers
Phases	Cycling in design, selection and authorization between the line authorities and enterprises	Cycling in design, selection and authorization between multiple-authorities and the enterprise
Level of Authorization	Authorities	Multiple-authority approvals
Trigger	Central plans	Most from central, some from markets
Information	Central	Central

Table 11. 12 Three Types of Decision Processes and Decision Issues

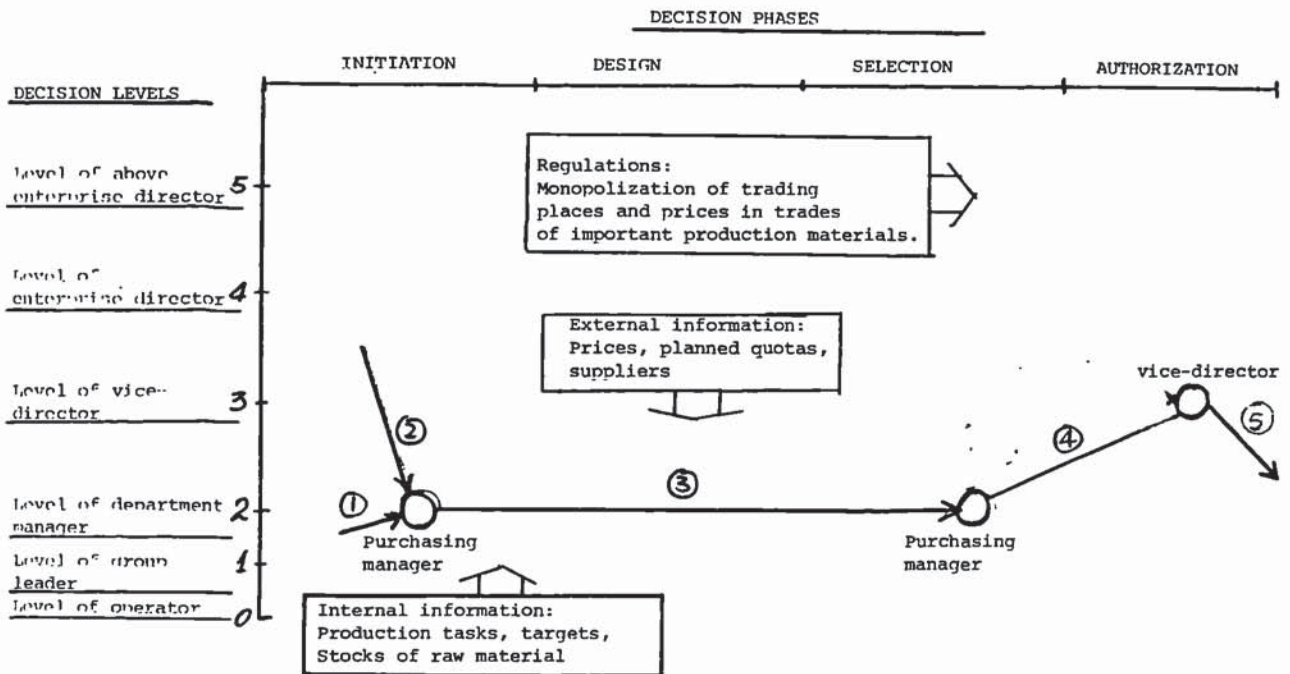
Category of Processes	Characteristics of Decision Process	Nature of Decision Contents
Simple	Processing time is short, less interruptions or delays Individual or a small group involved, Triggered by external opportunities or internal tasks Flow of decision activities is integrative, Internal data used for calculation External data could trigger the process	Highly repetitive tasks Operational nature Very familiar content Immediate effect on operation
Decision fitting to the category of the process: Purchasing		
Fluid	Processing time is not long Few delays and interruptions Several actors with expert knowledge involved Triggered mainly by tasks Flow of activities smoothly through four phases, Internal data are important, External data used as reference	Routine task, but not highly repetitive Plan nature Familiar content Medium term effect on organization
Decision fitting to the category of the process: Product pricing Labour Recruitment and Product development		
Recycling	Process time is long and difficult to schedule, Delays and interruptions, Many actors, internal and external Trigger mainly from resource controller or powerful group Flow of activity cycles through between actors and phases of design and selection without a clear distinction Information is filtered by decision actors according to their own interpretations	Non-routine, rare Strategic nature Decision needs political support and resources Content not familiar Long-term effect on organization
Decision fitting to the category of the process: Organizational Change and Investment		



Activities:

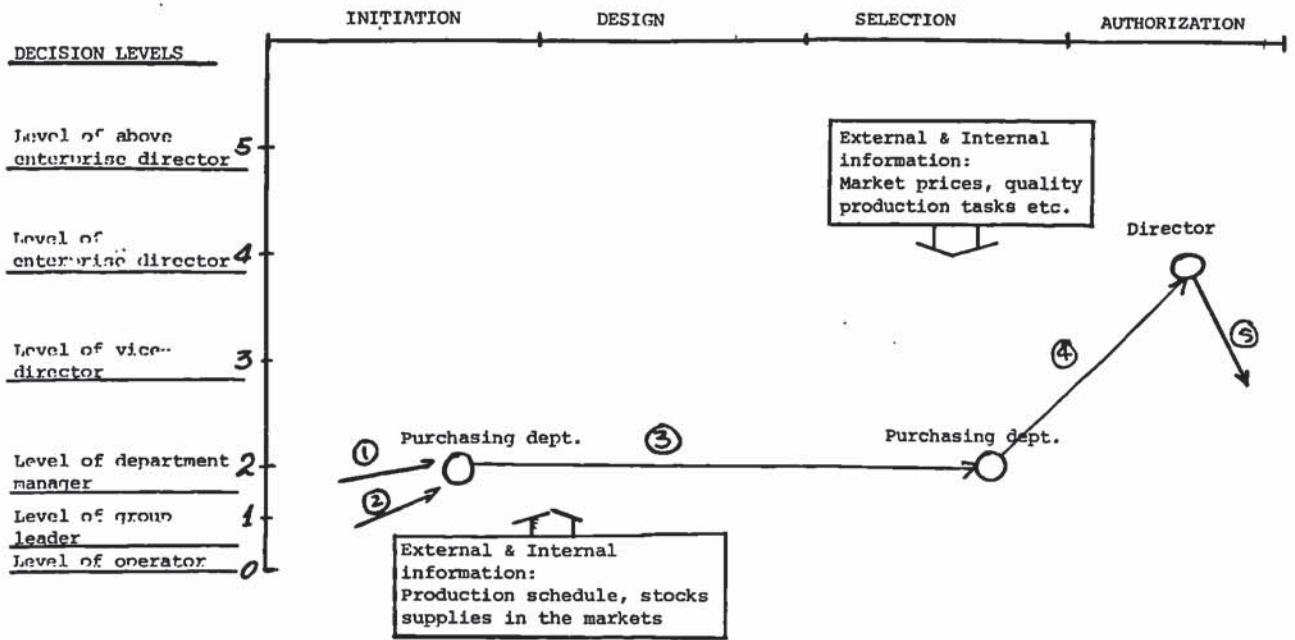
1. The arrangement of the ministry was made to send to the company for the trade faire(trigger)
2. Annual purchasing plan was referred as the guideline for the purchasing.
3. Negotiation was held between the purchasing manager and supplier.
4. The purchasing manager reported the result of the negotiation to the vice director
5. The vice director approved the purchasing and instructed the purchasing manager to sign the contract.

Figure 11.1 Purchasing of Raw Materials in Automobile in 1985



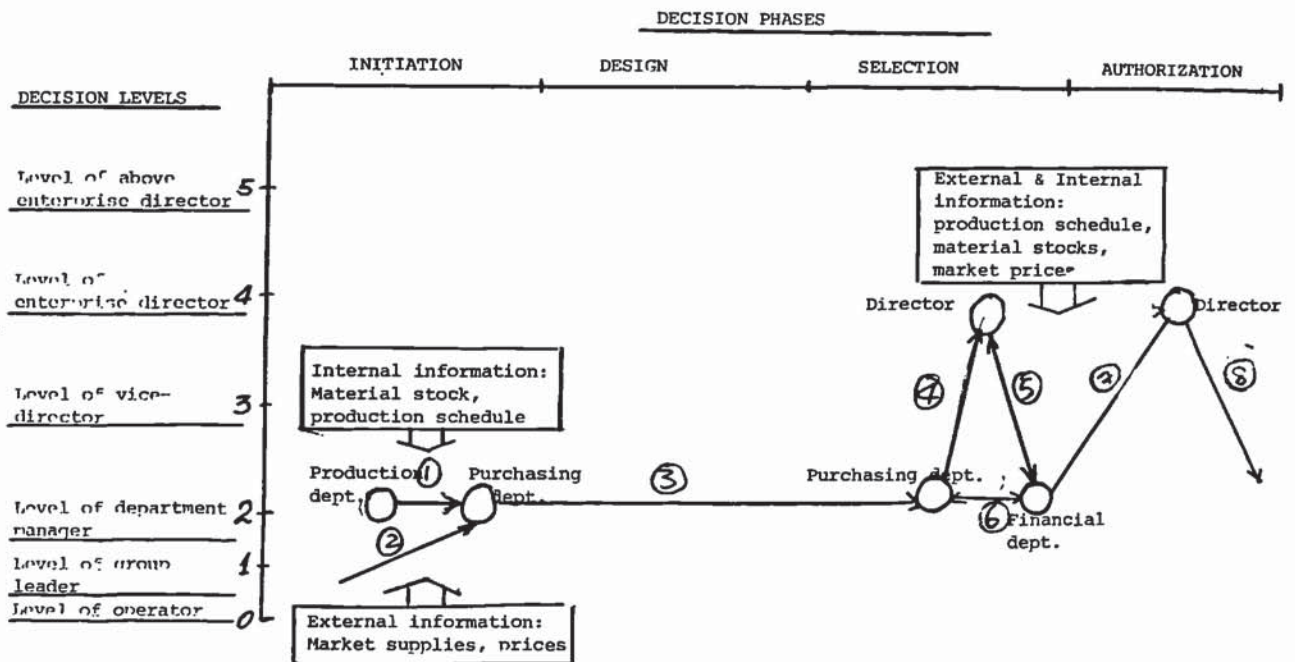
Activities:

1. Annual purchasing plan was used as a guidance for the purchasing.
2. The planned quotas were authorized by the ministries. The company participated the trade faire(trigger)
3. The purchasing was seeking a supplier and negotiating with the supplier.
4. The result of the negotiation was reported to the vice-director.
5. The vice-director approved to sign a contract.

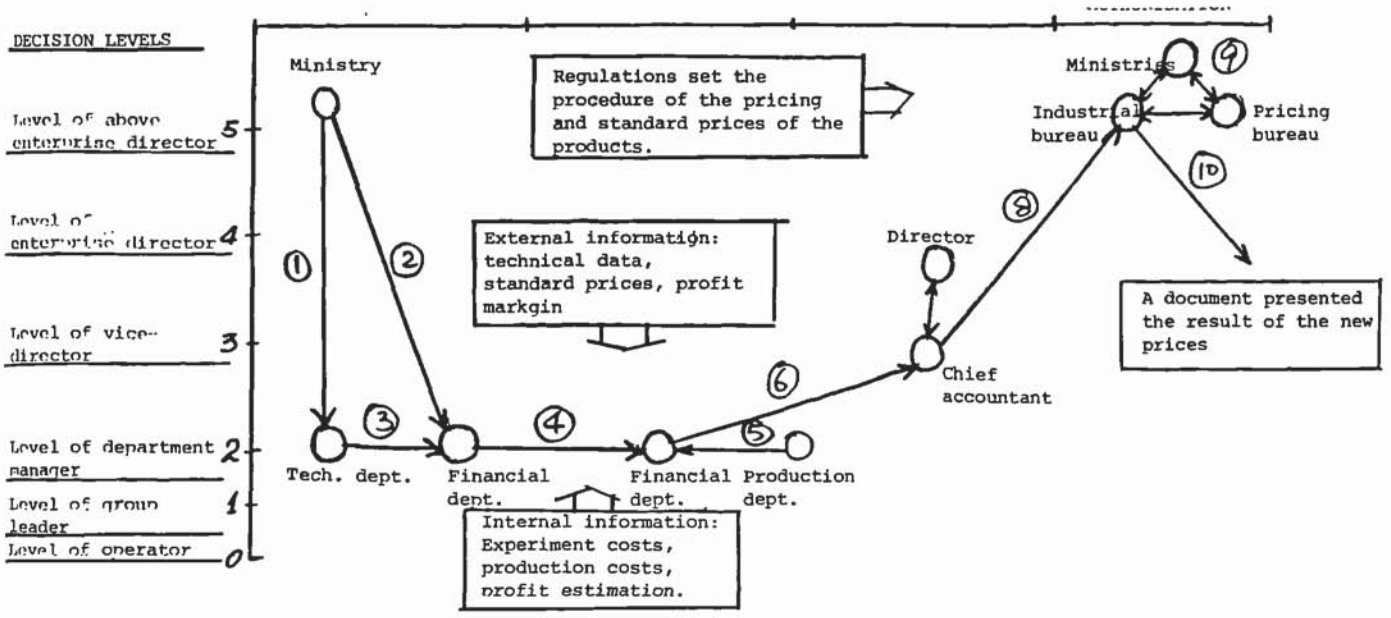


- Activities:
1. visit of the farm product salesman to sell bee products
 2. Production plans and purchasing plans.
 3. Selection of input quality and prices was carried by the purchasing department
 4. The purchasing manager reported the result to the director, who was supervising the purchase.
 5. The director's approval of the purchasing was informed to the purchasing department.

Figure 11.3 Purchasing Bee Product in Pharmaceutical in 1985



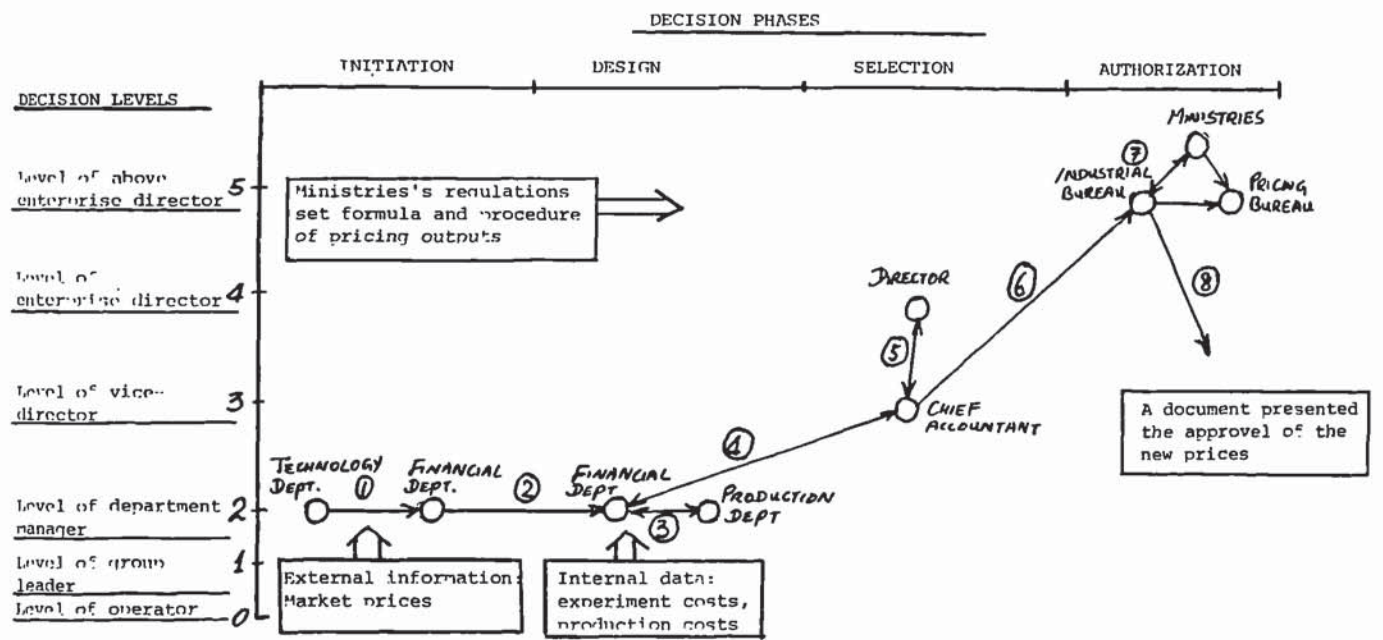
- Activities:
1. Production manager informed the purchasing department the situation of the material stocks(trigger)
 2. A message from a bee product company was sent to the purchasing manager(trigger)
 3. Purchasing manager contacted the company to detect the details of the supply
 4. The purchasing manager reported the case to the director.
 5. Checking financial situation was carried out.
 6. Discussion was held between managers.
 7. The situation was reported to the director.
 8. The director decided to purchase the input, but cancel all other purchases.



Activities:

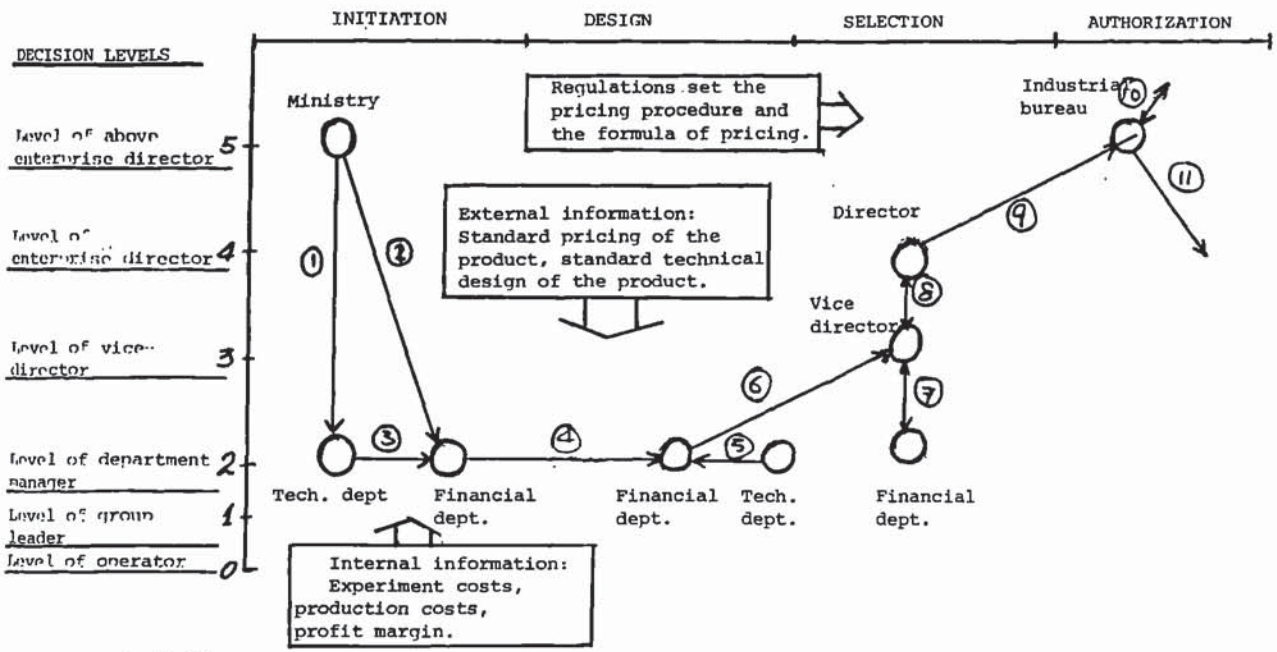
1. Ministry's standard design of the product was referred by the technical department.
2. Ministry's standard pricing category was referred by the financial department.(trigger)
3. The technical department produced the experiment cost report, then, forwarded the report to the financial department.
4. The financial manager started to design the cost report.
5. The production cost was referred.
6. The financial manager discussed the cost report with the Chief Accountant
7. The Chief Accountant approved the cost report, then, reported to the director.
8. The director authorized the report. The Chief Accountant sent the report to the industrial bureau.
9. The bureau approved the report, then, sent it to ministries and pricing bureau.
10. The result of the authorization from the ministries was informed, through the transmission of the bureau, to the enterprise.

Figure 11.5 Pricing Decision in Audio-visual in 1985



Activities:

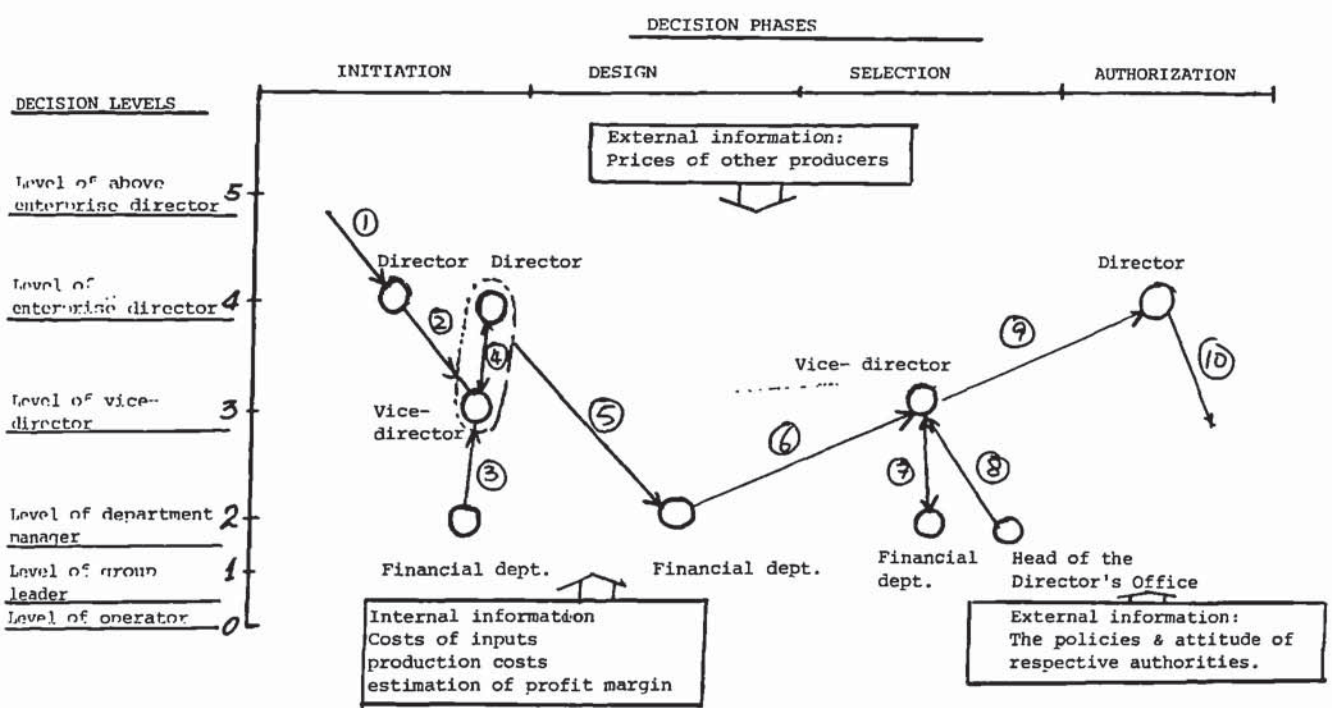
1. Report of the new product development was set to the financial department with experiment costs (trigger)
2. Financial manager started to design the new price scheme
3. Communication between the financial department and production manager to estimate production costs
4. Communication between the financial manager and the Chief Accountant to design a proper cost report
5. The approved cost report was sent to the director, then returned to the Chief Accountant with his signature.
6. The application report for new prices was sent to the industrial bureau for authorization
7. Authorization was processed among ministries and bureaus.
8. The approval of the new pricing scheme was returned to the enterprise.



Activities:

1. The ministry organized the design of the product. The product standards were sent to the enterprise.
2. The ministry's standard pricing category: floating prices according to the quality(trigger)
3. The technical department sent technical costs to the financial department(trigger)
4. The financial manager started to design product price.
5. The financial manager checked the technical costs with the technology department
6. The cost report was sent to the vice director
7. Exchange of opinions was held between the financial manager and the vice-director.
8. The cost report was sent to the director
9. The adapted cost report with the application of the new pricing scheme was sent to the industrial bureau.
10. The industrial bureau reported the pricing scheme to the ministry.
11. The industrial bureau informed the enterprise the result of the authorization of the pricing scheme.

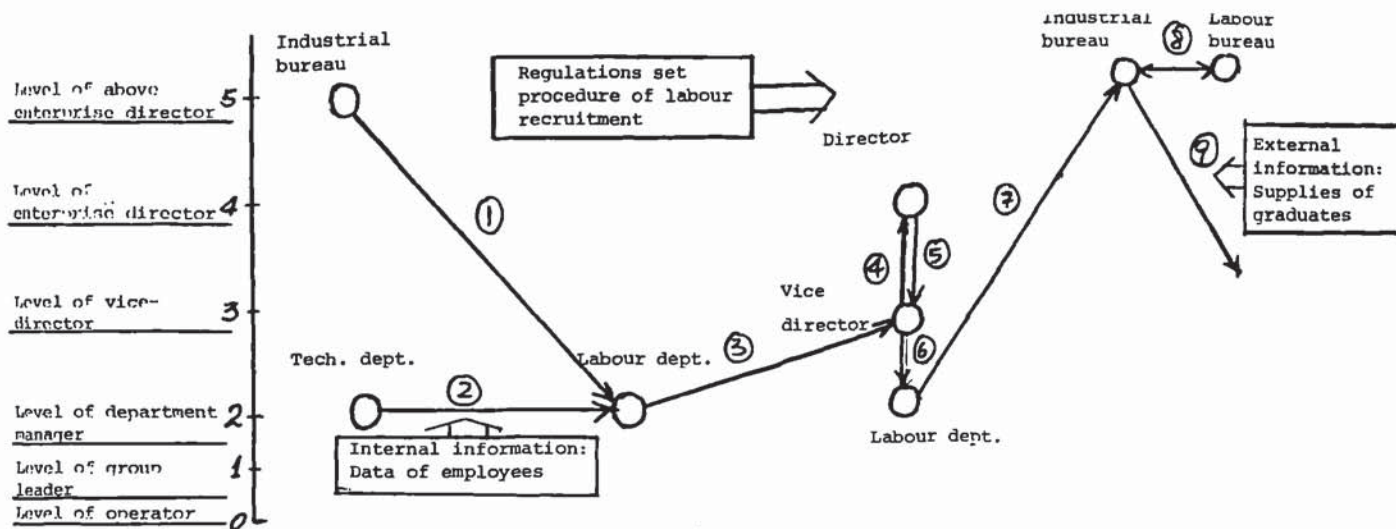
Figure 11.7 Pricing A Standard Electrical Equipment in Heavy Electrical in 1981



Activities:

1. Decision was made in the conference to fix a standard pricing policy(trigger)
2. The director forwarded the conference decision to executives
3. The proposal of a new pricing scheme was sent from the financial manager to executives.
4. Discussion was held among executives
5. The decision was made to allocate a task of pricing design to financial department.
6. The cost report and new price predication were reported to the vice-director
7. The vice director exchanged ideas with the financial manager
8. The head of the Director's office visited respective authorities to understand policies and attitude
9. The vice-director reported the result to the director.
10. The director decided to implement a new pricing scheme. This decision was transferred to the sales department and the financial department

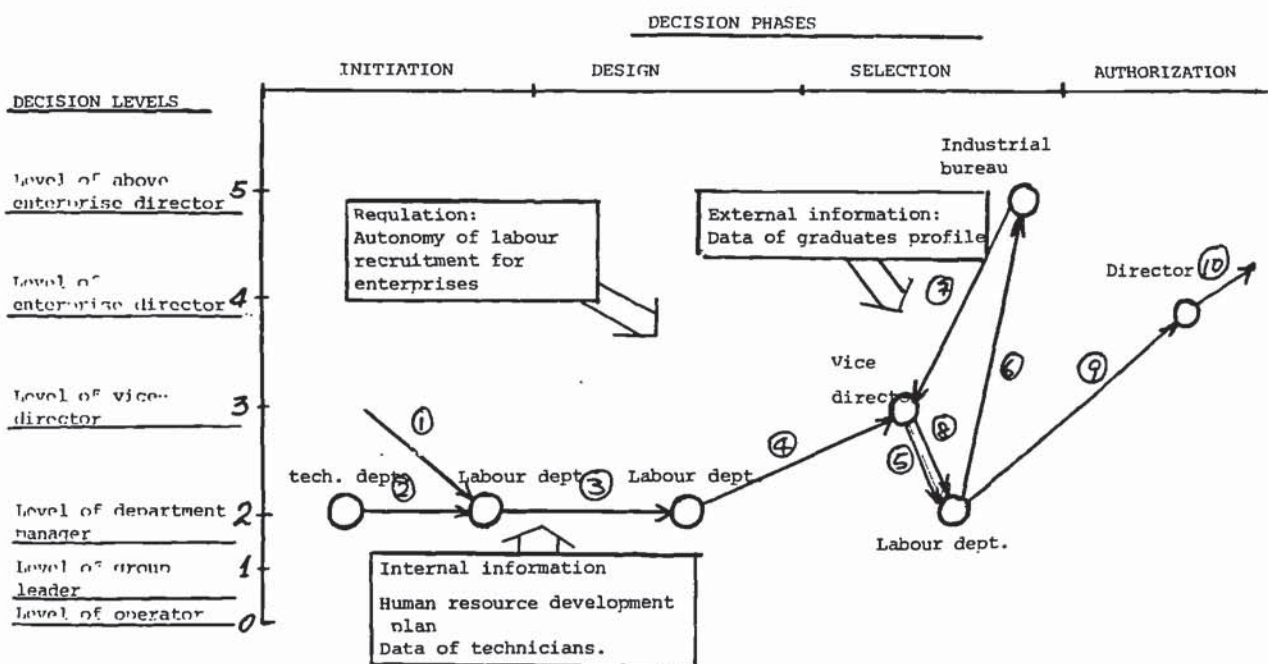
Figure 11.8 Pricing Increase in Heavy Electrical in 1988 408 (d)



Activities:

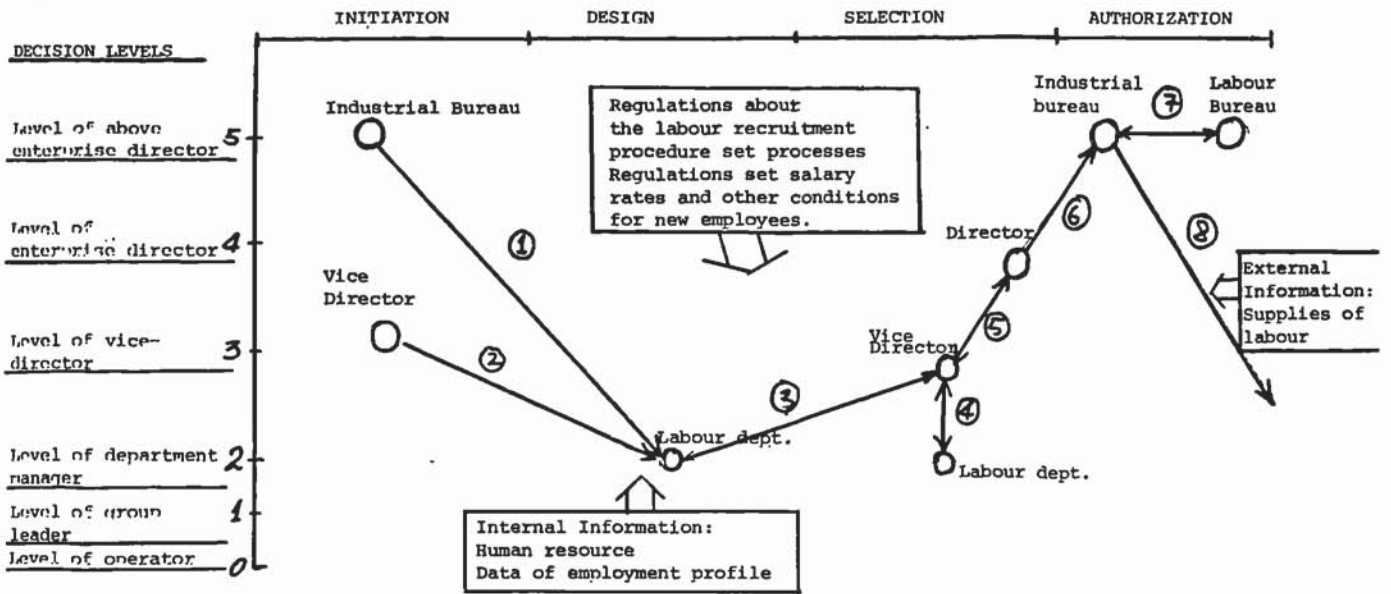
1. The industrial bureau instructed the company to prepare a plan for recruitment of new graduates(trigger)
2. The technical department drew a plan to receive graduates as technical trainees(trigger)
3. The Labour department designed a recruitment plan, then, reported the plan to the vice-director.
4. Communication between the vice-director and director.
5. Insyructions were from the director.
6. The vice-director instructed to finish the plan, according to the director's idea.
7. The plan was sent to the industrial bureau.
8. The labour bureau collected the recruitment plans from industrial bureaus. Later, the labour bureau returned the plan to each of the inststrial bureaus.
9. The result of the juman resource allocation to the company.

Figure 11.9 Recruitment of University Graduates in Automobile in 1985



Activities:

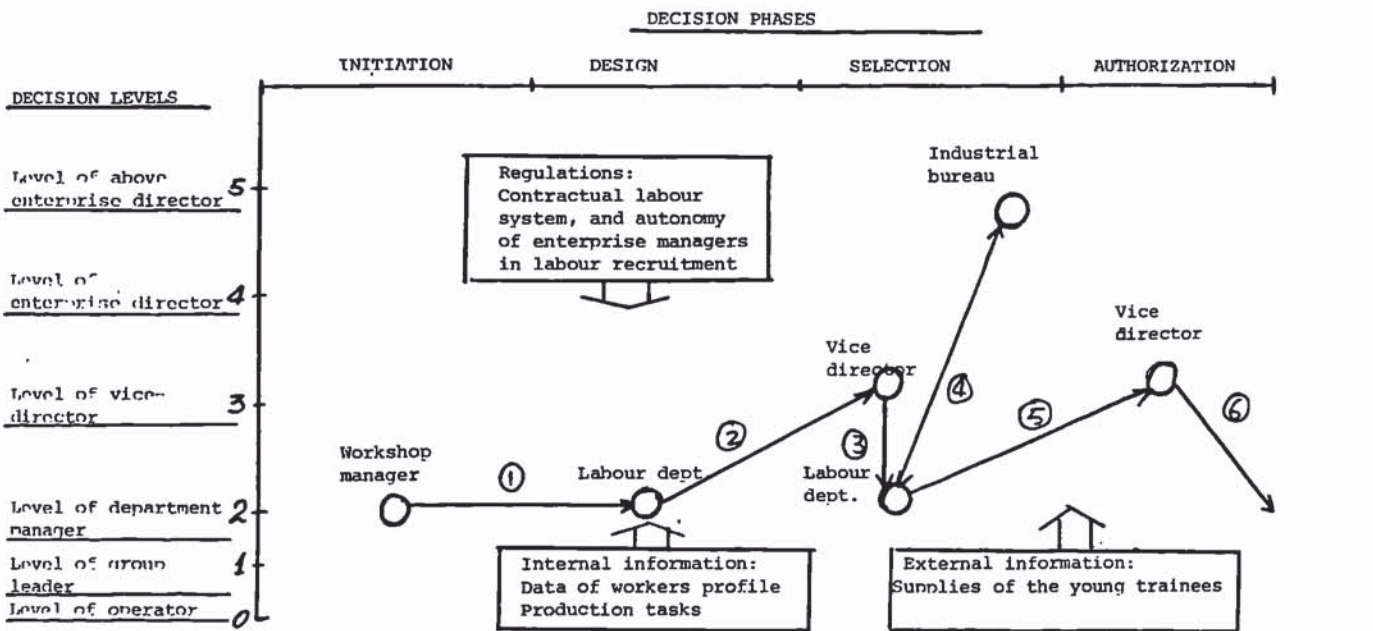
1. The company's long-term strategy of human resource development(trigger)
2. A plan was drawn by the Technology department for future development of technicians
3. Labour department started to design the recruitment plan.
4. The recruitment plan was sent to the vice director
5. The selected recruitment plan was returned to the labour department
6. The plan was reported to the bureau
7. The bureau requested to add an extra graudate to the plan.
8. The vice director agreed, then, informed the Labour department to change the plan.
9. The plan was reported to the director.
10. The final approved plan was sent to the bureau.



Activities:

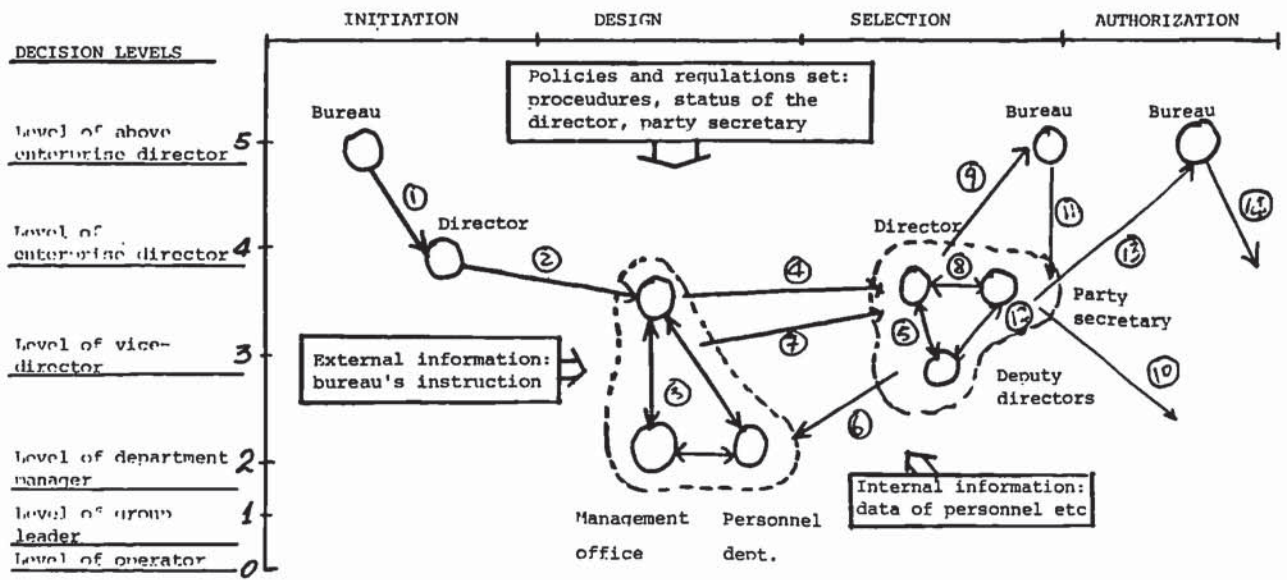
1. The industrial bureau instructed to plan ahead of receiving university graduates (trigger)
2. The vice-director instructed to make a human resource development plan. (trigger)
3. A plan was drawn by the Labour department, then, sent to the vice director.
4. Communication and adaptation of the plan between the vice-director and the labour manager
5. The adapted plan was sent to the director, some communication occurred to check information
6. The approved plan was sent to the industrial bureau for final authorization.
7. The Labour bureau collected all plans from different industrial bureaus. Later, feedback was sent to each of industrial bureaus.
8. The final result of the labour allocation was informed to the enterprise.

Figure 11.11. Recruiting graduates in Machine Tool in 1985



Activities:

1. Workshop manager applied for recruiting of machine operators(trigger)
2. A plan was drawn by the Labour department, then sent to the vice director.
3. An approval of the vice director to seek human resource.
4. Communication between the labour manager and the labour department in the bureau, requesting some young trainees from a technical training school.
5. The changed plan was sent to the vice-director. Only two trainees were available.
6. The vice director authorized the new plan. Then, he instructed the labour manager to start recruitment



group of actors, such as Steering teams or project teams.
 Collective Actors(groups or team)

Activities are presented in a separate sheet.

Figure 11.13 Organizational Change in Audio-visual in 1986

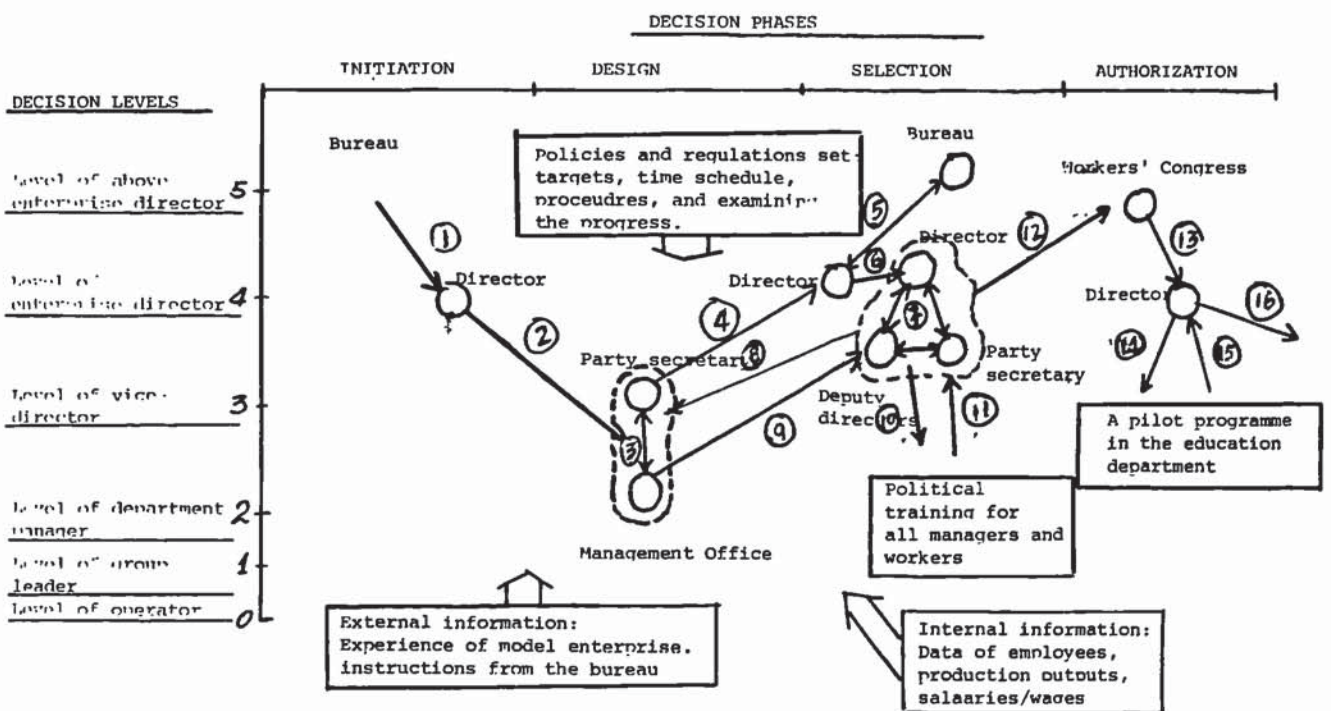


Figure 11.13(continued)

1. Bureau organized the implementation of the Director Responsibility System(trigger)
2. The director organized a project team consisting of the vice-director and two departments: the management office and personnel department for design the personnel system.
3. The project team assessed the performance of middle managers and staff, then proposed the suitable candidates
4. The design programme was reported to the director, party secretary and other top executives.
- 5., 8, 12, Discussions were held among directors and party secretary.
6. Feedback of the executives' opinion was sent to the project team.
7. The adapted draft was reported to the director and Party secretary again.
9. The executives held a meeting and approved the design. The draft was reported to the bureau.
10. The Party organized the political training and ideological education.
11. The bureau returned the draft with some opinions.
13. The final version of the organizational change was reported to the bureau.
14. The bureau approved the decision. Then the enterprise started to implement the change.

Figure 11.14(continued)

1. The bureau organized the Optimizing Labour Organization scheme and fixed a time schedule for each of its subordinate enterprises(trigger)
2. The director instructed to design a new organization system
3. The Party secretary and management office exchanged ideas and carried out the design work
4. The first draft of the organizational chart was reported tot he director and other executives
5. The draft was reported to the bureau and the bureau instructed some changes.
6. The director organized a steering group leading the change.
7. The steering group members discussed the draft.
8. The group decided to re-design the system
9. The second draft was completed by the management office.
10. The Party organized a political training programme for all Party members and staff, while the Trade Union and Youth League organized political education for workers
11. The opinion of the managers and workers was collected after the training programme.
12. The design was adapted by the steering group. The second draft was discussed by the representatives of the workers congress.
13. The representatives of the workers congress proposed the further changed to the director.
14. The director instructed to start a pilot project before the change in the whole organization.
15. The data of the pilot study were collected and reported to the director.
16. The implementation of the organizational change started.

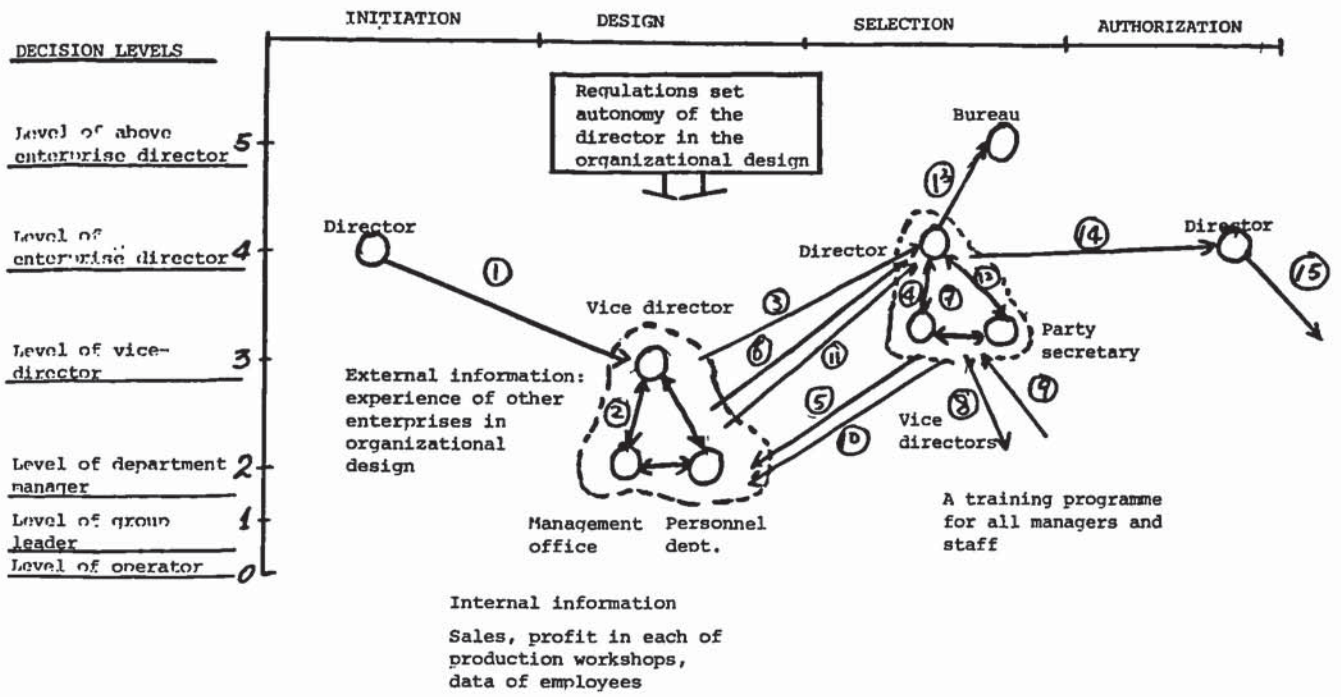
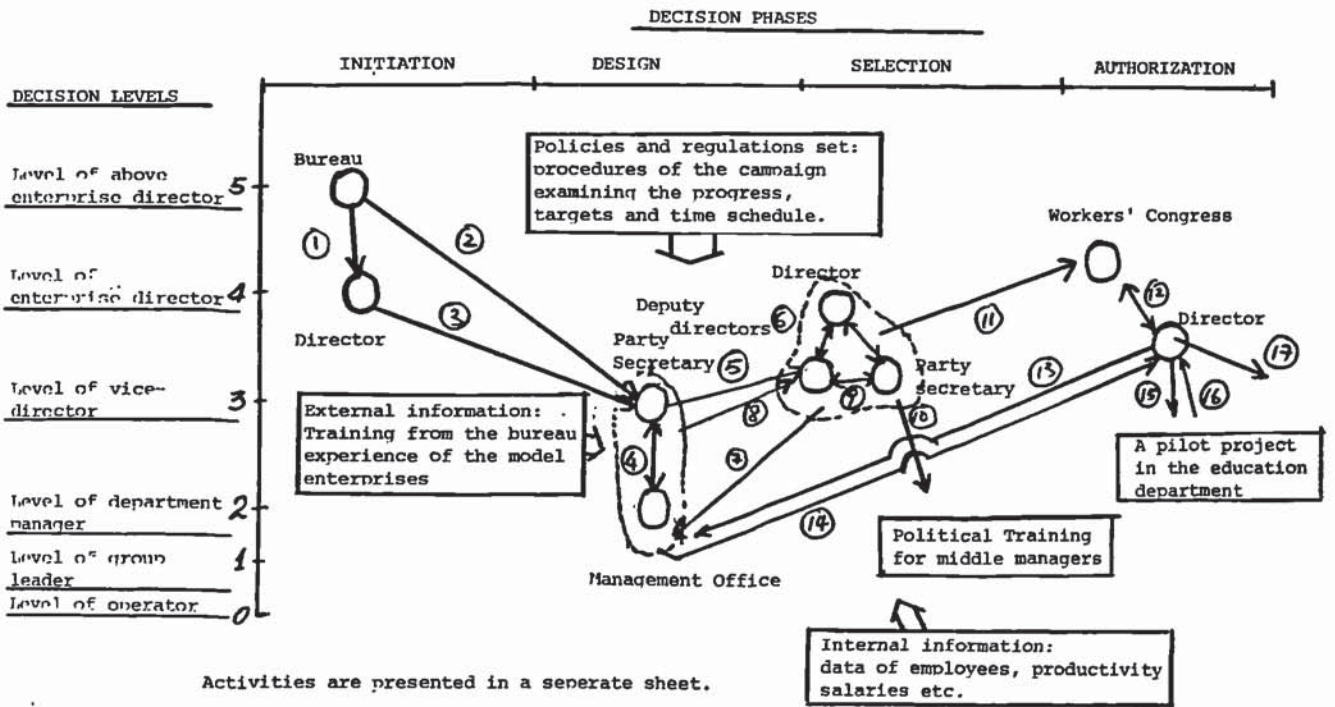


Figure 11.15 Organizational Change in Heavy Electrical in 1986



Activities are presented in a separate sheet.

Figure 11.15(continued)

1. The director proposed to split the workshops into three sub-profit centres.
2. The vice-director, management office and personnel department started to design the system
3. The first draft was reported to the director and Party secretary.
- 4., 7, and 12, The executives discussed the draft.
5. The executives' opinion was reported to the design group.
6. The adapted programme was reported to the executives.
8. A training programme for managers and staff was organized by the Party committee.
9. The comments from managers were collected, then reported to the director.
10. The design group changed the draft according to the comments feedback from managers and instructions from the director.
11. The draft of the new system was reported to the executives.
- 13, The director reported the progress of the organizational change to the bureau
14. The decision waited for final approval.
15. The director instructed to implement the new system

Figure 11.16(continued)

1. and 2. The bureau instructed to start the Optimizing Labour Organization scheme(triggers)
3. The director instructed to learn experience from the model enterprises.
4. The vice director and labour managers formed a design team, according to the director's instruction.
5. The first draft was finished, then sent to the steering group headed by the director.
6. and 9. The steering group had discussions on the draft.
7. The comments were returned to the steering group.
8. The adapted draft was reported to the group again.
10. The Party, Trade Union and Youth League organized political education programme.
11. The draft was discussed in the workers congress, after the steering group agreed.
12. The representatives of the congress discussed the draft and put forward comments to the director. They suggested ten points.
13. The comments from the congress were returned to the design group.
14. Based on the congress' comments, the design group changed the draft.
15. The director decided to start the change in the education centre as a pilot project.
16. The director received the feedback from the pilot project.
17. The director decided to carry out the change in other departments.

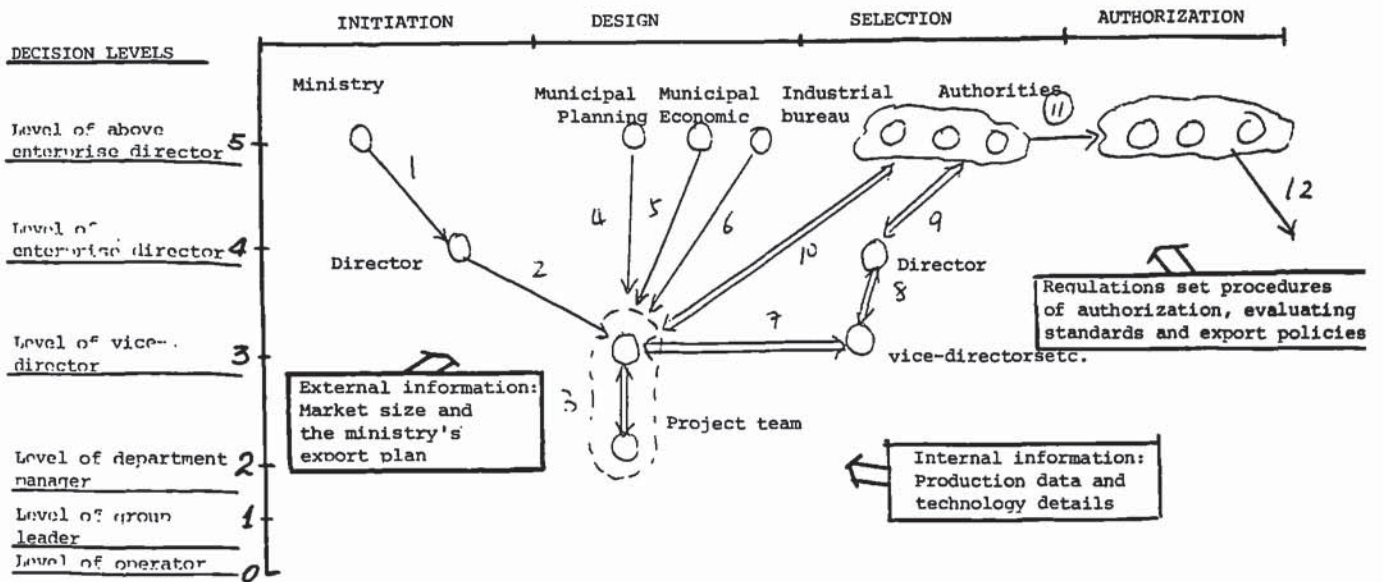
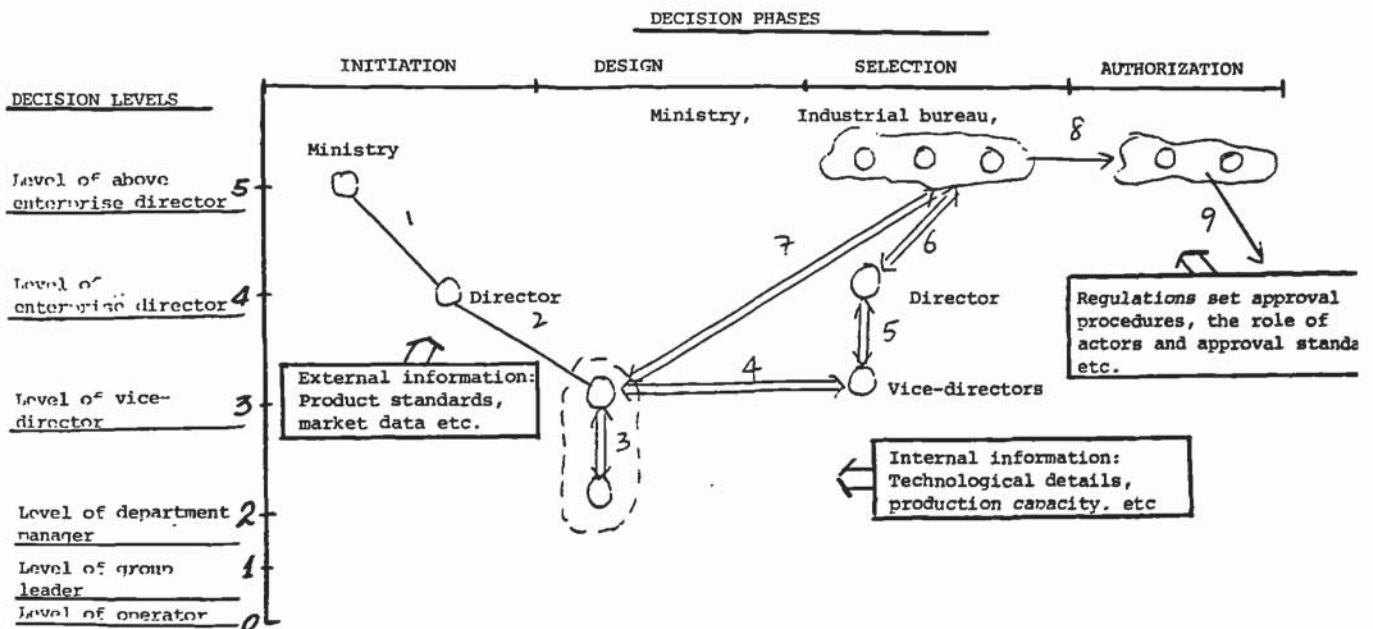


Figure 11.17 Investment project in Audio-visual in 1986



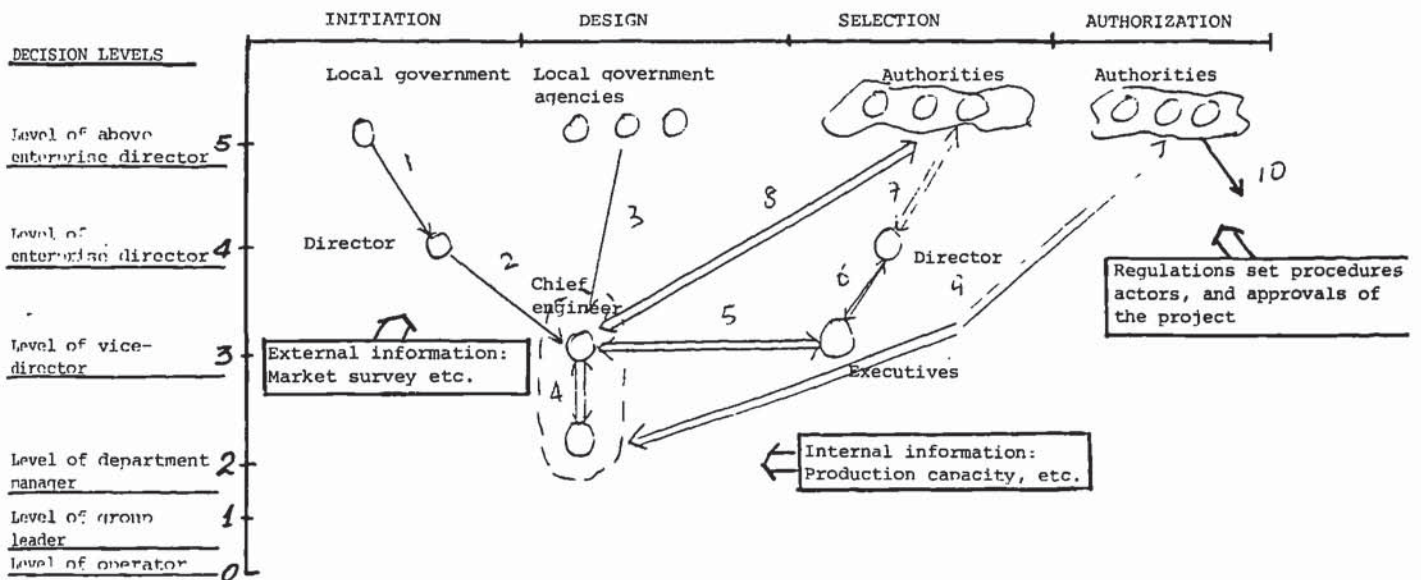
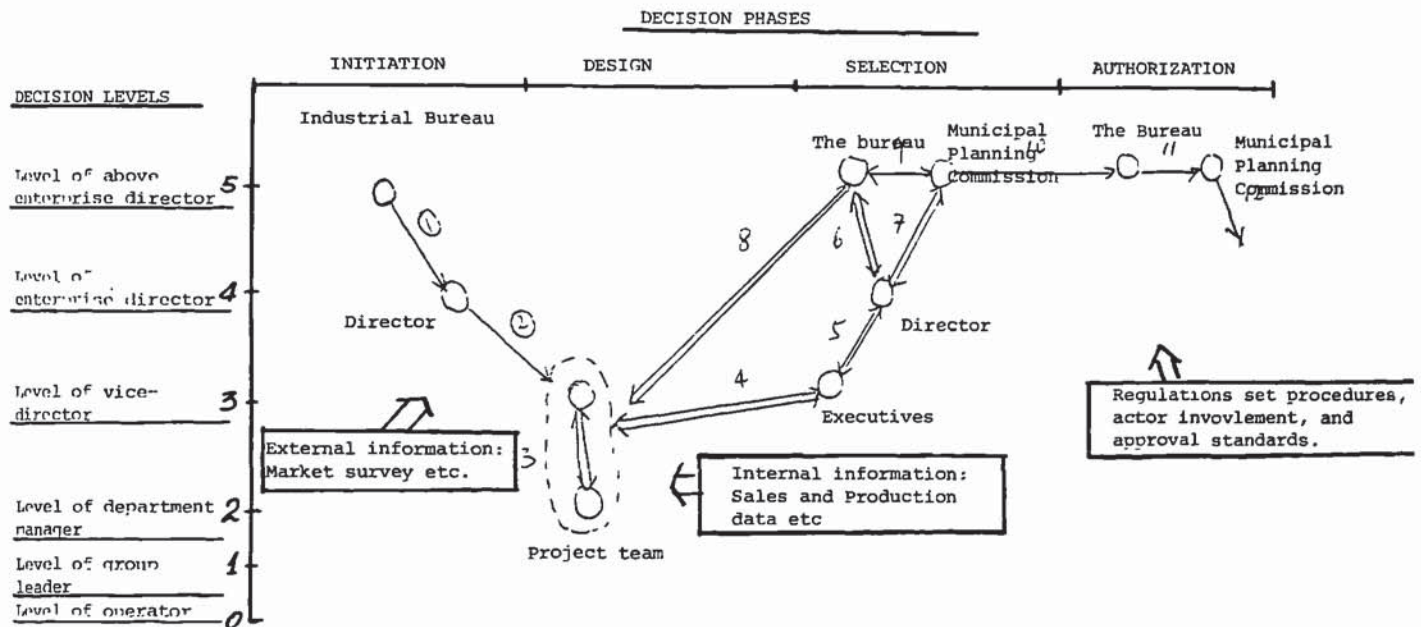


Figure 11. 19 Investment Project in Pharmaceutical in 1987 and 1989



CHAPTER 12: MODELING DECISION-MAKING PROCESSES AND TESTING HYPOTHESES

The preceding chapters have highlighted the findings of the investigation. This chapter intends to link these findings to some concerns in management theory and the analysis of management decision-making.

12.1 Conceptualization of the Findings

It has been stated at the beginning of the thesis that the study of decision-making in this research is used as an indicator to identify managerial behaviour and process in Chinese enterprises. It has been assumed, in the research design (see Chapter 5), that the six enterprises were situated in the same or similar context. This assumption had to be somewhat qualified by the differences among enterprises in regard to industrial sector, technology, size and relationship with the higher authorities, which have been summarized in Chapter 11. Nevertheless, the findings can still contribute to a conceptualization of the nature of management processes in Chinese industrial decision-making.

12.1.1 Comparison with Other Decision-making Studies

Comparisons between different decision at two points in time suggest three types of decision processes:(1) the simple, (2) fluid and (3) recycling(See Chapter 11.5). These findings indicate that the decision processes differ consistently as to decision contents. Each of the three types is contingent to a certain type of decision content.

Chapter 2 reviewed the literature of decision-making theories, in which several models were proposed. It is now appropriate to compare the empirical findings in this research with those of previous decision-making studies.

Three of the five decision categories in this research bear some similarities with the decisions studied by Hickson and his colleagues (Hickson et al., 1986). The purchasing decision here is close to their inputs decisions. Organizational change is like their re-organization decisions. The content of the innovation decisions had in fact two topics, product development, which is labelled as product decisions in the Bradford Study; while innovation investment is very similar to their technology decisions which focus on equipment or premises, e.g. whether to invest in new machinery and buildings. Pricing and recruitment decisions were not included in the Bradford Study.

The Bradford Study found that input decisions have processes which move easily (Hickson et al., 1986: 154-155). These decisions present no real difficulties. In particular, the purchasing of physical inputs exhibited a process which was conceptualized as constricted.

"On average, they of all topics show the least impediments and delays, least toing and froing and discussion, least time taken to reach a conclusion..." (Hickson et al., 1986:154)

This description is very similar to what this research found in the purchasing process.

But the product decision process does not run smoothly (Hickson et al., 1986: 137-145). It is usually both complex and political, and falls into the sporadic category of process. Most new products are strategic for organizations. Activity is excited among actors with formally interactions. It takes a long time and has delays and delays. The scope of negotiation is wider than usual. There will be some tendency for the process to require authorization by the highest executives. Their observation is quite different from the findings in this research, which identifies the product decision has a smooth process.

But both the re-organization (Hickson et al, 1986: 148-151) and technology decisions (Hickson et al., 1986: 155-156) have a similar process of the organizational change and investment decisions in this research. Organizational change decisions are often considerable hesitancy about beginning the process at all. "The majority are preceded by a gestation period which usually extends into years before anyone takes a definite step

towards deciding what, if anything, to do.... No wonder managers are cautious or, if not cautious, do not know what view to take and so do nothing towards a decision"(Hickson et al, 1986: 148). The technology decisions "tend to draw in numerous interests, internal and external, and so be subjected to influences from all directions..., and they too can take up to several years."(Hickson et al., 1986: 155). Both decision topics have the sporadic type process.

Although the personnel recruitment decisions are not included in the Bradford Study, there are some similar decision natures: controls decisions, which include the business plans that set sales, production and profit targets on annual or rolling basis(Hickson et al., 1986:157-159). The nature of the issue is alike to the labour recruitment as a plan making. The process is either fluid or constricted. It moves smoothly with formal interactions and makes merely marginal changes.

But the Bradford Study makes no assumptions about stages of the decision process. Rather, the process as a whole was characterized by variables without regard to a prescribed set or ordering of stages. The findings in this research can not be compared with the Bradford Study in decision activities.

Mintzberg and his colleagues(Mintzberg et al., 1976) derived seven types of decision process. They specialized stages, the passage of the decision through which enabled a categorization of processes. All four of their decisions on the purchase of equipment were characterized by a modified search process, which entailed extensive cycling in development, between design and selection steps. The four decisions were on new facilities: a new plant, new college building, new university laboratory and bank headquarters building. They exhibited dynamic design processes and had overall the most complex history of all the decisions studied, encountering "multiple interrupts with the result that the flow of activities became very complicated"(Mintzberg et al, 1976:272).

But the decisions falling in the Mintzberg et al. simple process category were changes of personal policy and the acquisition of a distribution agency. The contents were far different from the simple processes identified in this research, namely purchasing. Mintzberg and his colleagues' study focused on strategic decisions. But the decision contents in this research are mixed with some routine decisions. Moreover, there are no descriptions of process elements, such as actor involvement and information utilization in Mintzberg's study.

Pettigrew's studies in organizational decision-making portrayed complex processes(Pettigrew, 1973, 1985). Information was used as a resource for mobilizing power when the gatekeeper selected reporting to the higher levels of the organization. The strategic decision-making is generally a dynamic process, involved many actors with different interests. The decision timing could be very long, for instance the organizational change in a large company(Pettigrew, 1985). These characteristics have some similarities with those of innovation investment and organizational change decisions in this investigation. But our methodology has not focused on the detailed case descriptions as Pettigrew's study. Decisions were treated here more as individual events than a result of historical continuity.

Only a limited comparison with these other studies is possible, because of different research methods and data collection. But some similarities between them simulate further reflection.

Of the three types of processes conceptualized in the previous chapter(Table 11.12), the simple process has similarities to the constricted process developed in the Bradford Study, with respect to lower levels of authorization and the application of highly specialized knowledge. The decision issue is highly repetitive and routine. The decision is made by a single person or a small group of actors, who possess expert knowledge of the matter. Without exception, the authorization is carried out quite low down the organizational hierarchy. The issue could become urgent; through otherwise it was part of normal

operations. This brings us back nearly to Simon's programmed decision processes. It implies that rationality, albeit bounded, may apply in this case.

The fluid process that we found is quite close to the Bradford Study's fluid category of decisions. The decision contents are also similar. The decision process is of a problem-solving nature with clear cause-and-effect relationships. The outcome of the decision can be calculated according to a certain formula or operational rule. The flow of activities to completion is relatively smooth, in spite of some difficulties and delays.

The recycling process seems to be like the sporadic process in the Bradford Study and dynamic design process in the Mintzberg and et al. study. The decision issues are complicated. Completion of the decision requires support from multiple actors and resources. Delays and opposition generally require reconciliation of disparate data. There is a marginal progression in each of decision activities, before completion is reached. The outcome meanders toward its conclusion, because the decision outcome is assessed and evaluated by different decision actors with different rationales. This decision is likely to be of a non-programmed type (Simon, 1977), with characteristics of the garbage can process (Cohen et al., 1972).

But there are some differences. Product development decision-making in this research appears to be fluid, but the similar topic in the Bradford Study is sporadic. This type of decision in the Bradford Study is of a strategic nature, but in our research was regarded as an implementation of the ministry plan.

It is important to bear in mind that previous decision-making studies, such as the Bradford Study, Pettigrew's research and Mintzberg and his colleagues findings, were conducted in a context which is very different from that of this research. The former is a highly industrialized market-based economy, while China is still a partly-centrally planned economy with a strong political commitment to state socialism. It is therefore interesting to

find similarities in decision processes between this research and other studies, such as the Bradford Study, in cases where the decision matters seem to be similar. How might these similarities be explained?. Furthermore, because these similarities have been identified between researches in different context, it is also important to highlight the contribution of the decision context.

12.1.2 Towards A Contingency Theory of Decision-Making?

The similarities between the processes identified in this research and other studies, particularly the Bradford Study, support their argument that "the matter for decision matters most"(Hickson et al., 1986:247). This argument directs attention to the notion of contingency in decision-making. In other words, the decision process is contingent to the decision matter, more than to the characteristic of organizations. The characteristics of the decision process is determined by the nature of the issue decided, rather than by the organizational properties, such as structure, size and ownership. The decision process also appeared to be more contingent upon the nature of the issue than upon cultural or social-political differences between Britain(Bradford) and China(Beijing).

The Bradford Study categorizes two dimensions to conceptualize modes of decision-making: the complexity of the problem and the political nature of interests. When a decision topic is normal and recurrent, being the least complex in regard to problem-solving demands and less political in regard to interests, the process is likely to be constricted. Input decisions are an example. When the decision matter occurs less regularly, but non-controversial, being somewhat more complex but still not political, the process seems to be fluid. When a decision topic tends to be both highly complex and highly political, the processes are likely to be in a way which is sporadic. Decisions on new products and re-organization are two instances in the Bradford Study.

These three modes of decision-making(Hickson et al., 1986:172-186) are also valid for conceptualizing the decision processes in this research. As compared in section 12.1.1, the purchasing decisions are similar to the inputs decisions in the Bradford Study, with high recurrence, least problem complexity and less politicality. But both organizational change and investment are high in problem complexity and politicality. The pricing decisions and labour recruitment decisions in this research can be regarded as the less presenting an intermediate level of problem complexity and low politicality, the processes are likely to be fluid.

The notion conceptualizing decision-making in terms of a contingency perspective recognizes the importance of the environment and influences from the decision context. The the comparisons also made in this research over time and between organizations indicate that these dimensions were also associated with some differences in the decision processes studied, but that such differences were less significant as influences on the decision processes than were the matters being decided upon. The decision context had some effect on decision process.

12.2 Decision Context and Decision-making

The attention drawn to the decision context focuses on (1) the resource dependency and (2) institutional intervention.

The perspective of resource dependence theory emphasizes that organizational choice is limited by variety of external pressures(Pfeffer and Salancik, 1978). Organizations must acquire resources necessary for organizational survival. Most organizations confront numerous and frequently incompatible demands from a variety of external actors. Organizations find it necessary to adapt to environmental uncertainty, coping with problematic interdependencies, and actively managing or controlling resource flows. In addition, information is a resource for decision making as well as material and financial

resources. The matrix structure, which established a corresponding relationship between a department in an enterprise and that in its higher authority, was a significant channel in information communication. The restriction of information to that channel illustrates the enterprise's vertical dependence.

Thus, organizational decision-making takes place within a context and is in many instances a response to the environment(Oliver, 1991). In this research, the constraints from the institutional structure were evident, particularly in the decisions subject to scarce resource allocation. When the resources are available, such as most commodities and human resources, the respective decisions can be managed by managers. The authorization of such decisions can be delegated to lower levels. The decrease of an organization's dependence upon such resources would increase the organizational autonomy in the related decision-making. This change was seen in recruitment and purchasing decisions over time.

However, when the resource is located within the scope of institutional control, such as the centrally controlled funding and scarce resources, the decision process would be complex. Necessary approvals of the resource controller caused the involvement of the external actors. And the higher level of authorization is required.

Even though the organization's decision does not require external resource, but is perceived to alter or challenge the prevailing institutional structures, the process can also become very complex. This was observed in organizational change decisions, because the change in the organizational structure or employment system would influence the Party system at enterprise levels and the corresponding management embedded in the matrix-like structure. The process was involved by multiple actors. The support of the Party and the authorities was necessary condition for such a change.

Information was filtered by both managers and authorities in the investment decisions. Managers did so, because the authorities with final approval were only convinced by the

data collected from central sources rather than from the market. It was obvious that the decision rationale was embedded in an institutional bias.

Information filtering has been discussed with regard to decision processes (Alexis and Wilson, 1967). But this discussion focussed on the process of perception, for instance individual recognitions and perception of organizational goals. The concept of bounded rationality pointed to limitations in information processing capability and computability. The example shown in the Pharmaceutical case appeared to be different. Managers were aware that the production goal set by the authority was difficult to achieve. They also believed that the market survey conclusions was more realistic for the enterprise. But they still used the "wrong" data, in spite of their awareness. This phenomenon must be explained through the environmental setting, the power dependence, within which they had to work.

Furthermore, the extent to which an enterprise was still located within the scope of the central planning system affected the likelihood of intervention by the higher authorities. As was compared in Chapter 11 Section 4, larger enterprises with more strategic status in the industrial sector and more important products are likely to be more subject to the planning control than these smaller or "unimportant" ones. This location can cause small differences in decision processes, even though the decision matter is similar. For example, both Audio-visual and Automobile were more centrally controlled by municipal authorities and *industrial ministries than the other four enterprises, particularly those where products were consumer commodities*. Therefore, pricing decisions in these two enterprises had to be *authorized by higher authorities, while other enterprises enjoyed more freedom from the relaxation of pricing controls under the reform*. Their investment projects were also of close concern to both municipal and central government authorities.

Thus contextual factors could influence the decision process. The external influence did not only occur when the external resource was needed and support from external actors was necessary for completion of the decision. For institutional intervention was applied to

legitimate the positions of actors and to set rules for decision-making. This argument is also useful to explain why there are some similarities between the findings of this research and of the Bradford Study. The nature of the issue decided is likely to present some common "core" for organizational operation, though the context can be different. For example, the purchasing decision has intrinsic similarities both under a system of hierarchical exchange within a planning regime, such as in China, and under a system of market transactions, such as UK. The difference is seen in the location of key resources. The resource could be allocated from a planning authority, if the context is a centrally planned economy. It probably comes from the market, when the major economic mode is market-based. But the nature of the issue, such as highly repetitive occurrence and operational importance, is similar. As a result, the process related to this intrinsic nature of the decision issue tends to be simple and quick in both system contexts.

The effect of contextual factors is also important in altering the mode of decision-making and change the process, particularly through the intervention of social-political expectations and rule setting. For example, product development was more likely to be a task issue for a Chinese enterprise with a fluid process, because the decision was actually made at the ministry or local commission levels. Thus, the issue became one of *implementation* for the enterprise, rather than strategic decision *made* by the *enterprise* managers. But the same issue in a UK company is of a strategic nature, because decision outcome will affect the company's market niche and future development. The matter for the decision can have different implications when enterprises are located in different context.

12.3 Test of Hypotheses and the Progress of the Decentralization under the Economic Reform

This research has, however, compared the changes in the decision process over a period of change in the Chinese context. Its findings suggest that there was a marginal change in the

decision process and in managerial behaviour. This leads to a further question: what has been the degree of real managerial adjustment to the reform? Answering this question needs to test hypotheses developed in Chapter 5. These hypotheses were formulated based on the theoretical perspectives reviewed in Chapter 2 and Chapter 3 (Figure 5.2). The result of testing hypotheses will be used as an indicator of the reform progress in decentralization.

12.3.1 Conflicts between Enterprises and Their Authorities

Statement of Hypothesis 1:

The more decentralization, the more conflict between enterprise managers and their higher authorities.

In Chapter 6, the term "higher authority" has been defined as government agencies holding legitimate power to regulate enterprise behaviour through their administrative intervention and commands over enterprise management. Authorities superior to enterprises are grouped into two principal categories: line and functional. The former refers to industrial ministries, industrial bureaux and other agencies, which take a direct responsibility for the performance of enterprises. The latter group can be further classified into regulatory and advice.

The findings on interactions between an enterprise and its higher authorities, both the line and functional, have been summarized in the previous section 11.1.4. The conflicts between the enterprises and authorities indeed increased, in the all case of decisions studied. In the most decentralized areas the labour recruitment and purchasing, the conflicts arose from the authorities' control over information and resource allocation. Enterprises had to rely upon the authorities' decisions on allocation of resources (as in purchasing) and information supply (as in labour supply). It was difficult to reject a request from the authority, although managers had been formally allocated, by regulations, powers to determine the issue, such as the case of Automobile's labour recruitment in 1988.

Conflict also increased in other decision areas. Even the most centralized decisions, for instance innovation investment decisions, exhibited more conflict between enterprises and authorities than before. As stated in section 11.1.4, the sources of conflicts came from both the line authority's control and multiple power centres with the functional authorities.

The conclusion is that the hypothesis is partly supported by the empirical findings, because it did not predict the appearance of powers from the functional authorities. This indicates that the partial reform in China did not relax the authority's control over enterprises. Rather, the strategy of the reform shifted this control from one authority to other authorities. In other words, some functions of the line authority's intervention has been diversified to the functional authorities. An enterprise faced more control than before.

It was undoubtedly the case that the reform scheme did not change this authority relationship between an enterprise and higher authorities, although decentralization was emphasized as the core of the reform. A state-owned enterprise is still subject to its authorities.

12.3.2 Conflicts between Management and the Party

Statement of Hypothesis 2:

The more decentralization, the more conflict between enterprise managers and the political system

Both managerial and political systems occupy legitimate positions in organization: the Party is formally located in the enterprise hierarchy. As China is committed to state socialism, political criteria are added to these of organizational performance. Political rationality is therefore always treated as part of managerial rationality. Since the 1950s, it has been debated that whether the enterprise director or the Party secretary should be the final authority in decision making (Andors, 1977). The key point of such argument is rooted in China's political commitment to the socialism(Chapter 4).

The findings of the present investigation did not point to greater conflict between management and the Party in the 1988's decisions when compared with the earlier ones, although relevant evidence was only available for the organizational change decisions. The hypothesis is therefore not supported by the empirical findings.

Power shifted from the party to management in the early stages of decentralization. Conflicts between management and the Party which emerged in 1985-86 were resolved by the authorities, through appointing new party secretaries and regulating the director's authority. These conflicts remained even in the implementation of the Director Responsibility System. Furthermore, the Party was required to support management by the command of the authorities; for instance providing political education in the campaign of Optimizing Labour Organization in 1988. Moreover, most directors were also members of the Party and used to undertake some Party responsibilities. Some Party secretaries also held managerial positions. *Both management and the Party were instrument of the authorities.*

Although the hypothesis is not supported by the findings, it helps to understand that the nature of management in Chinese enterprises, in which competence has to be more political compared with the technical professionalism of management of developed industrial societies (see Chapter 3). Decentralization did shift the power centre from a political leader to one who combined political with expert competence. Administrative management and political governance are regarded as two sides of the same coin.

12.3.3 The Role of Information in Decision-making

Statement of Hypothesis 3:

The more centralized control over the sources of information, the less likely decentralization to be achieved.

This hypothesis states that managers in China will experience difficulty in carrying out decentralization, because the socialist "artificial market" cannot provide them with adequate information and/or because the planning bureaucracy controls the channels of information communication. For a Chinese enterprise, there are generally two sources of information, additional to its own internal data; the planning system and external markets. The necessity of this distinction arises because an enterprise itself is subject to the governance of the planning authorities, as a subordinate unit in the administrative hierarchy. But this governance does not mean that the enterprise is able to have access to information without cost. Information systems embedded within the planning system were significantly different from market areas, where information was more diffused. Information within the administrative system is diffused through its specific channels to a "targeted" audience.

The investigation in the six enterprises found that information constraints or "limited information sources" did prevent managers from improving decision efficiency and the planning authorities indeed controlled information diffusion. For instance, they circulated internal documents within the administrative hierarchies through top-down processes and assigned a planning agency to collect information relevant to innovation projects. In decentralized decision areas labour recruitment and purchasing, managers still relied upon information from the authorities, although the market information started to play a role. Moreover, the information from the central sources was perceived by management to be of greater significance for decision-making than information from the market or other sources when the decision was initiated by the planning authorities, such as the innovation investment in Pharmaceutical in 1988. This system posed a major constraint on the pursuit of "rational" professional management and this demonstrated what may be described as "institutional bias". The decision outcome was directed not according to the information content, but to the source of information which represented the critical resource dependency.

The positive support for the hypothesis means that the prevailing institutional structure is negative towards decentralization. And it also suggests that a bounded rationality is imposed by the limits of the institutional framework within which an organization seeks legitimacies and support.

12.3.4 Codification of Regulations and Decentralization

Statement of hypothesis 4:

The more precise regulations are, the more likely it is that they facilitate decentralization of decision making

The role of regulations or rules in decision making is to fix procedures, the legitimate status of actors and standards for assessing decision outcomes. The hypothesis is premised on the organization that authorities will be more willing to decentralize authority when the behaviour of enterprise managers is more precisely defined by regulations.

The survey of relevant regulations suggests that they are both a source of action, and a constraint upon action(section 11.1.7). Comparison of organizational change in 1985 and 1988 indicates that the earlier decisions were actively accepted by managers, when regulations were issued to implement the Director Responsibility System. The 1988 decisions were also initiated by relevant regulations, but at this time they were not welcomed by most directors and managers.

The decentralization process under the economic reform started with a set of regulations(see Chapter 4), which clearly defined decision areas and decision actors. These regulations in fact promoted the progress of decentralization. But other regulations countermanded some of this decision-making autonomy.. For example, the official scheme in 1988 forced managers to change their organizational systems, even though organizational design and change came formally within the sphere of the director's autonomy, according to the reform

policies. Managerial autonomy in the matter of organizational change was constrained, because the scheme laid down details of targets, procedures and actors.

The point here seems to suggest that the hypothesis itself has not been strongly supported by the findings. This draws attention to the fact that codification itself was not sufficient to guarantee decentralization. The codification of regulations could have a two-sided consequence for decentralization. In other words, precise regulations must be congruent with the policy of decentralization in order to support it.

12.3.5 Triggers and Stimuli in the Decisions

Statement of Hypothesis 5:

The more that triggers stimulating the decision come from the task environment (both markets and operational task requirements), the more likely is decentralization to be achieved

A special event stimulating a decision has been defined as a trigger. The importance of this identification lies in an attempt to distinguish how the decision content was raised. Although a manager might hold an idea for sometime, this idea might possibly fade away or be ignored, or remained in his/her mind without becoming realized as an organizational action.

In the most decentralized decisions on labour recruitment, an increase in internal triggers was noticeable comparing 1988 the decisions with those in 1985. In other decision which became more decentralized, namely purchasing and pricing, the significance of market and internal task triggers also increased. In more centralized decisions, such as innovation investment, the central triggers remained more significant than other sources.

These findings support the hypothesis. The hypothesis itself indicates the relationship between control over management and the realization of decentralization. If a manager is granted decision authority, but the source of triggers remains with the higher authority, then

managerial authority is effectively constrained. This means that control over triggers would actually controls the initiation of decision.

12.3.6 Decision Consequences

Statement of Hypothesis 6:

Decision-making is more matrix-like in China than in Western enterprises. Decisions are a compromise between different alternatives from different coalitions of interests, rather than a result of rational choice based on economic criteria (profit maximization)

This hypothesis implies that the multiple involvement of actors and multiple dimensions of criteria lead to a matrix-like process. The consequence of a decision will be unlikely to depend on economic rationality alone, but also upon the result of negotiation among actors.

The investigation indicates that whether a decision process is matrix-like depends upon the decision contents. Some decisions, such as organizational change and investment, are indeed likely to present a matrix-like process, in which multiple-actors(internal and external) are involved. Every step in the decision process is a result of compromise between actors, for instance between a feasibility assessing authority and enterprise managers. Without such a compromise, the decision could not go forward to the next step. Because each actor embraced its own criteria and rules, the decision result became an outcome of bargaining and negotiation.

Some decisions, however, had simple processes, such as purchasing. The rationale for these decisions was clearly derived from economic criteria. Others, such as labour recruitment and some pricing decisions, did not exhibit a strong bargaining process. Only two pricing decisions in Audio-visual and Automobile involved some negotiations. These findings cause the hypothesis to be rejected.

This hypothesis attempts to locate the rationale of organizations in the Chinese context. It is correct to state that in general terms the rationale for organizational performance in China

derives from multiple criteria - criteria of economic achievement, social obligation and political task. But it also depends upon the decision content or decision issue. The rejection of this hypothesis stems from the increasing importance of profit as a criterion for enterprise managers after the introduction of the contractual system. Also some decisions, such as purchasing, pricing and labour recruitment, occurred repetitively. They were therefore both predictable and being operational in nature and could proceed according to largely economic criteria.

Although the hypothesis has to be rejected as a generation, the multiple involvement of actors in decision-making, in a matrix fashion, has been observed, with investment decisions. The operation theme of "corresponding management" reveals the nature of Chinese administration. The contrasts between single and multiple actor involvement in different types of decision are a subject worthy of further comparative investigation.

12.3.7. Test of Hypotheses

The test of hypotheses is summarized in Table 12.1.

Table 12.1 inserted here

Hypotheses 3 and 5 are supported in the case of all decisions, while hypothesis 1 and 6 are supported in the case of some, but not all decisions. Hypotheses 2, and 4 are not supported by the empirical findings.

The outcome of testing these hypotheses indicates that decentralization in China is a complicated process of partial adaptation in which change is accompanied by continuity. A

more sensitive and theoretically complex perspective than that offered by the hypotheses is required, and aspects of this perspective are now explored.

12.4 Theorizing the Process of Adjustment to Reform

Economic reform in China was implemented through the administrative system, with policies and regulations issued from central government to local governments and hence to enterprises. Enterprise reform focused on decentralization. Empirical findings in this research have indicated that decentralization is a complex issue and constrained by the prevailing institutional structures.

The significance of the findings from sixty case studies over the reform period during 1985 and 1988/89 implies that decisions with an operation or task nature were more easily decentralized to lower levels, while those decisions regarded to a strategic nature were more difficult to decentralize. Comparisons between two time points in the reform and among different enterprises present some differences in decision processes(See Chapter 11: 11.3 and 11.4). But these differences are not as significant as the decision matters in determining decision processes. Although the intention of the reform was to achieve decentralization in all these five categories, progress was variable, because the decision matters were different in their nature. Thus, changes in decision processes would only be achieved marginally in some decision topics, rather than uniformly across all areas. As a contingency approach to decision-making suggests, the decision process is probably dependent upon the nature of the issue decided. Some decisions would present very complex processes, even when they take place in a market context.

In spite of the contingency characteristics of decision-making, the constraints from the institutional environment are regarded as another important factor limiting the progress of the decentralization.

First, the structure of the planning and hierarchical administrative control have been solidly laid down, or "sedimented" in Clegg and Dunkerley' terms(1980), and are not easily removed. These structures constitute accretions of power over enterprise management with respect to both operational and personal resources. Operational resources include finance, information, access to markets through control over approved product lists, and assistance in the supply of materials, powers and local services. Personal resources include top managerial appointments and salaries. Although the reform itself has affected the prevailing structures, for instance the creation of the market for commodity transactions, the relations between enterprises and their higher authorities were sustained. Although the reform's intention was to reduce the incidence of direct administrative interventions from the line authority, the industrial ministry or bureau, this change was resulted in a shift of control functions to other functional authorities. This shift failed to reduce "administrative intervention". Rather, there were more than before, albeit that some were now indirect.

Second, the infrastructure context may not be sufficiently developed to support the decentralization of responsibility for economic performance(Solinger, 1989). Boisot and Child(1988) argued that the effective mobilization and organization of resources through appropriate transaction structures is the key to modernization. China's problem is that she has not invested enough in formalized support systems, such as the legal system and telecommunication systems, to achieve a high degree of information codification and diffusion, when attempts to shift her traditional economic mode(i.e.. the centrally planned economy) to markets. The feature of the prevailing institutional framework in China is still characterized by a lack of adequate facilities to advance diffusion of information.

Thirdly, the process of the reform is also problematic. The implementation of the decentralization has to rely considerably upon administrative regulations within the hierarchical structures. As the findings on regulation indicate, central policies and regulations were often less codified, while the implementation of these policies depended upon interpretation of the local authorities, such as the industrial bureaux and specific

government agencies, such as ministries. Because the decentralization delegated decision-making powers, it means that part of managerial or administrative authority would be removed from the government agencies to enterprises. The resistance by these agencies is a natural reaction which it is difficult to avoid. When local authorities gave to regulations, a high degree of codification and specification, the enterprise management had little room for manoeuvre to avoid following them, especially as the authorities exerted direct control and commanded resources. The intention of central policies was distorted or intersected by these local and specific authorities.

These factors stood in the way of decentralization. The authorities would be willing to delegate some decision-making power related to operations, such as purchasing and labour recruitment, and leave managers to choose the best course of action. But they retained authority over decisions of a more strategic nature, such as investment, organizational change and pricing policy. The authorities enjoyed their power in policy making and strategic management, with the enterprises remaining as the instruments to carry out the decisions or policies issued by the authorities.

This raises the further questions: what is an organization's boundary in the Chinese context? On the one hand, the authorities controlled ownership, resource allocation, executive personnel, and approval of organization decisions. Their instruments included administrative intervention and internal regulations within the administrative hierarchy. Information was communicated within this hierarchy, too. An enterprise in this sense is treated as *part* of an organization, rather than an organization, in spite of its independence, in terms of size, employment and location. An issue within an enterprise is regarded as an internal issue by the authorities, both the line and functional.

But their relations are unlike those of internal super-subordinates. As the investigation found, an authority sometimes could be a trading partner and an external resource allocator for the enterprise. When authorities exerted their powers of approval, as with product

pricing and investment, they appeared to be external actors. Their criteria were based on their social and political obligations, as well as on economic requirements. In this sense, an enterprise is an organization in its own right.

The reform intended to remove enterprises from part of the administrative system to the market where they were to act as independent decision-makers. This effort failed to recognize the complexity of the relations between the enterprises and their authorities. Although the contractual system and the 1988 Enterprise Law regarded an enterprise as a legal person, this recognition was easily violated by the administrative interventions from the authorities, even the contract itself had to be signed by the enterprise with the bureau. The boundary of the organization in this context remained obscure.

12.5 Chinese Management: A Peculiar Phenomenon?

The above discussion leads to the question: whether management in China is a peculiar phenomenon and what the implications of this research are for organization theory?

The similarities between economic and political systems in socialist countries are considered to have some common implications for organizational behaviour(Child and Bate, 1988). The central planning system is seen to control resource allocation, over and above market transactions. The interdependency relationship between an enterprise and its higher authorities gives rise to the phenomenon "soft budget constraints"(Kornai, 1980). Furthermore, although the Party was not significant in decision-making on business-related matters, the reform had only succeeded to create the political-expert management. Economic priority is, from time to time, replaced by political objectives.

Do decisions in China have their own characteristics as a peculiar phenomenon? Some comparative studies between China and other socialist societies have painted to similarities caused by the institutional structure. While this investigation has identified some

phenomena which are sometimes claimed to be a unique cultural property in China, such as personal relations(**guanxi**), this type of informal behaviour has also been observed in other countries, which possess a similar economical mode, such as Hungary. Child and Lu(1990b) found that the bureaucracies to which enterprises were attached were personalized in both China and Hungary. Markoczy(1990) examined some successful companies in Hungary and noted that these companies enjoy monopolistic positions on the internal market. They do not depend therefore on consumers for their critical resources, but rather on their suppliers and the state. Their leaders maintain close relations with the government administration to secure favourable regulations, influences, and advance information about policy changes. These findings are similar to those identified in this research. Bargaining and negotiation are a special product of the hierarchical economy(Montias, 1988). Institutionally, this segmentation of authority needs consensus building, which was secured by documents and ideological enforcement as integrative mechanisms. Personal ties and networks, co-existing with the formal organizational framework, constituted the single most important ingredient integrating the system and enabling it to function. Their relationship between an organization and its higher authority was governed by bargains and mutual exchange. The decision outcomes depended largely upon ad hoc negotiation, which occurred within the formal institutions. A comparison of joint-ventures in Hungary and China found that there were similarities in the behaviour of local managers in both countries, such as avoiding responsibility and a preference for informal interactions(Child and Markoczy, 1991). Czarniawska(1986) argued that the concept of organizational culture under the centrally planned economy has little meaning, because of its strong institutional control and ideological coherence.

However, there are some differences in China's management from that in other countries, even those with the similar political and economic systems. Walder(1989) describes four facts in the Chinese manager's life, which are that (1)the enterprise is a political coalition, (2) the enterprise is a community, (3) the managers have to negotiate vertical relationships, and (4) engage in non-market exchange relationships. Although the centrally planned

economy encouraged vertical negotiation in all socialist countries, there are few studies which identify the other three features in other socialist countries. The phenomenon of administrative intervention through the matrix structure was observed by Lieberthal and Oksenberg(1988), and has been defined in this research as "corresponding management". These investigators also found that the complex relationship between the state structure and organization is unique in China, which emphasized the function of bureaux in solving problems. Bureaucratic systems in China characterized by a segmentation of authorities. They observed the contradictory and confused process of energy policy making. Although top leaders attempted to control the decisions closely, local-level organizations possessed the power to implement missions. Centralized control was eroded by the division of labour, proliferation of agencies, the flattening of hierarchies and the bargaining system. But decentralization under the reform did not necessarily change the outcome of the policy decision process. Lieberthal and Oksenberg argued:

"[T]he reforms have further flattened hierarchies and thereby potentially made it more difficult to bring about a major redistribution of resources and power among those hierarchies. A very large number of units have essentially acquired an enhanced ability to use both policy (such as a stress on feasibility studies) and new resources (such as access to bank loans) to enhance their ability to resist demands from the Centre. The consequences, paradoxically, may be a more empirically based process of policy making (more discussion of technical issues, fuller vetting of questions, a more deliberate pace of decision making), but the policy outcomes (in efficiency, quality, redistribution of resources, etc.) may not accord with the aim of reform."(Lieberthal and Oksenberg,1988:413)

Laaksonen(1988) compared management in China, Europe and Japan. He concluded that a more centralized decision making style engages in Chinese enterprises than European and Japanese ones:

"Chinese top management holds nearly all the strings of decision-making in its hands, and allows very little power to lower levels"(Laaksonen, 1988:316)

In China the personalization of economic relations has persisted, in the form of "relational contracting", even when enterprises can enter freely into a wide range of market transactions(Solinger, 1989). Attention is sometimes drawn to the cultural roots of this behaviour(cf. Bond, 1986), but its appearance in connection with resource dependence in Hungary suggests that it is also a product of a system in which the lack of exposure to

economic performance criteria and personal connectivity within the cosy bureaucracy cocoon are encouraging factors. An institutional explanation, by reference to the nature of the contextual system must itself be treated in a relative light, since features such as relational contracting and an exchange of personnel between business and relevant government agencies can be found in capitalist economies as well. But a wider study of new technology in Hungary and five West European nations nevertheless indicates that the market system does encourage a more systematic application of economic and financial criteria to investment decision making(Child and Loveridge, 1990)

Compared with Hungary, local authorities in China are perceived to have more power to impose their control over enterprises (Child and Lu, 1990b). In areas or nations which are influenced by Chinese traditions, but with different economic systems, such as Hong Kong and some Asian countries, the significance of personal relations and collectivism is seen in behaviour patterns and enterprise management(Clegg et al, 1986; Redding, 1990).

Walder(1986) uses the term "communist neo-traditionalism" to describe that (a) employment in the planned economy is regarded by the authorities as a welfare role and (b) the political life is reflected in the organization of the workplace. These characteristics are formed in PRC Chinese management.

As discussed in Chapter 4, the comparison of socialist ideology and basic Chinese traditional concepts presents a significant similarities between these two. It might be argued that the appearance of the behaviour noted in the decision process by this research is a shared product of the culture and the institutional system based on a specific political ideology.

12.6 Discussion and Summary

The comparison of the process identified in this research with others points to both similarities and differences. The process seems to be contingent to the matters being

decided, and less dependent on organization. Comparisons with other studies in different contexts draw attention to the development of contingency theory in decision-making. Decisions are likely to have some common "nature" or "core" relating to organizational operation and tasks, even the decision-making occurs in different organizations and different contexts.

On the other hand, the context of resource dependency and institutional intervention has some influence over decision-making through resource control, legitimation actor involvement and rule setting. These influences may alter decision-making in some degree and change the process marginally with regard to actor involvement and decision levels. But in general, the decision matter matters most. The notion of contingency in decision-making deserves further comparative study especially in contrasting contexts.

The economic reform in China, as in other socialist countries in East Europe, was intended to improve the performance of production units(enterprises) by increasing the rationality of their decision making on the allocation of scarce resources and improvement of organizational performance. It sought to achieve this by introducing a greater exposure to market criteria while at the same time enhancing the autonomy of enterprise managers to make business decisions free from higher-level bureaucratic constraints. But in China mandatory planning was to be transformed into guide-lines operational through the market, while in other socialist countries, central planning was abolished altogether, e.g in Hungary(Kornai, 1986: Perkins, 1988).

This effort met with several obstacles. An enterprise in China is only partly an economic unit. It is seen as a complex social and political community as well. The rationale of organizational performance is dependent upon the requirement of its higher authority. Decentralization did mean an increase in the importance of economic performance, was not intended to remove other rationale. In the power structure, authorities were still significant

as regulators over resource allocation, personnel management and administrative intervention, although enterprise managers gained some autonomy in some areas.

Resource dependency in such an institutional context is vertical. The enterprise is not only dependent upon critical resources, when there is no alternative of obtaining them from other source, it is also dependent upon the provision of decision opportunities which became triggers for the decision process to convenience. Moreover, the appointment of enterprise chief executives depended heavily on the authority's approval. All these features resulted from institutional constraints, which could not be removed by decentralization alone.

This vertical resource dependency within an institutional structure calls attention to power dynamics. Inter-organizational relationships are perceived to be important for organizational success and survival. Informal and inter-organizational structures develop in order to achieve effective institutional management(Pfeffer, 1976). This power interdependence was clearly seen from the case studies. Managers had to rely on the vertical system, when they wanted to have access to resources which were beyond market transactions. At the same time, for stability of the society and its political control, the authorities relied upon the operation of enterprises, not only in economic terms, but in political and social aspects as well. Sometimes, the latter functions was more important than the former. This inter-dependency produced a circuit of power(Clegg, 1989). The authority possessed the power of resource allocation, while an agency (enterprises) took advantages of its knowledge in technological details and its contribution to the societal stability through for example providing employment or assisting a political campaign. These advantages enhanced the agency's capacity to bargain and negotiate. The constraints produced by the institutional structure could produce institutional bias in information filtering, and hence decision as a result of the enterprise's very bounded rationality.

The partial reform in China, focusing on decentralization, has emphasized profit-seeking and profit disposal rather too much, and has neglected the importance of creating

infrastructural systems and removing barriers to the operation of markets. The dynamic force in market economies is not profit-seeking in isolation but profit-seeking combined with competition(Hussain, 1990).

The decentralization of decision making, particularly the change from output quota targets to profit levels as criteria of achievement, was meant to create a new institutional system, in which the market plays a decisive role, while the prevailing planning system was dismantled. The Chinese experience suggests that the enactment of new rights for enterprises is not in itself sufficient to secure the intentions of economic reform if the institutions of the old system remain more or less intact. These formal provisions can easily be by-passed or amended by administrative authorities which retain their former powers to dispose of resources and rewards that are significant to managers - such as scarce inputs and investment resources. It is necessary, rather, to construct new institutions which enable enterprises to transact directly for inputs and outputs in markets where prices are allowed to reflect the true relative scarcity value of such goods. It is further necessary to create the conditions of performance accountability which will motivate managements to transact with a business orientation and in so doing take responsibility for their decisions rather than opting for the more comfortable protection of a bureaucratic umbrella under which there is no penalty for sub-optimum decisions so long as there are reached with deference to hierarchical authority and perceived mutual advantage. For this new institutional framework to be erected, much of the old will have to be destroyed. How to effect this transition without incurring chaos and unacceptable social costs is the biggest challenge faced by reforming socialist economies.

Furthermore, some close observers, such as Redding(1990), describe the Chinese overseas business organization as salient characteristics of small-scale family control and a paternal entrepreneurial style. Personalism, opportunism and flexibility are retained even when such organizations grow to a larger scale. These features which may appear as weakness to the western an "outsider" are in reality strengths in that context where the personal trust operates

effectively than a more impersonal and formalized approach. As Clegg(1990) noted, these diversities offered by organizational modernities are not explicable in terms of market-based explanations. The rationalities are called upon in the first instance derive from whatever seems to work best in a particular environment.

The arguments, conceptualized from the findings in this research, require a more comprehensive organization theory to embrace the notion of management in a *context*, such as China. The logic of organizational behaviour under the Chinese context derives from its multiple rationalities, which is embedded in her institutional framework consisting of economical and political properties and heuristic behaviour: culture. In such an environment, an organization is seen as part of the society. Whenever the resource is scarce or an efficiency of the organization means to threaten the stability of the society, for instance the unemployment, the organizational decision-making would be regarded as an issue related to the broader matter which must be dealt by the higher authority. The "rationale" of organizational decision-making is sacrificed by the effectiveness of the macro-institutions. In this sense, the issue within an organization becomes an internal issue of the society, which invites more actors to be involved. Organizational boundary becomes ambiguous. The process is contingent to the decision matter, while the context has also some effect on both the matter and process. The institution is not only a structure in which the power sources locate, but a property of action as well.

The research also raises some points for the methodology of decision-making research. The predescription of the decision activities have some advantages for visualizing likely patterns, but this method is too arbitrary for classifying decision activities. An individual decision could be a result of previous actions, with consistency and continuity in its historical context. Furthermore, the examples of organizational change decisions occurring in 1988 were not satisfactory since they were to some extent special cases initiated and supervised by the government scheme. This limited in the comparability with the previous decisions, particularly in terms of the identification of triggers. Decisions of more strategic

nature have a low frequency, which creates another difficulty for a longitudinal comparison. It is also difficult to find the same or similar decision issues in some areas, such as investment. Finally, the research questionnaire should include some indicators about culture. An indication of cultural effects was only obtained through open-ended informal conversations. Attention is called to improving the research methodology of decision-making studies. It is suggested here that the interview had better contain some questions relating to the manager's cognition, for instance how managers recognize the decision opportunities and what their interpretation of decision-making is. A description of the historical settings is also hoped to provide more precise indication of the decision context.

This research has focused on decision-making as an indicator of managerial behaviour. The decision making in Chinese enterprises can be taken as an example of a football game in a garbage can(Hickson et al., 1986). In Hickson's model, the game is joined by players with many balls surrounded by goals. "The decision making game is played by groups, or by individuals backed by groups. who act deliberately, even though what they do does not necessarily have the result they hoped for because so much else is happening at the same time"(Hickson, et al.1986:252)

But the game in Chinese context has some regulators(authorities). When a player with a ball arrives at the front of a regulator, he did not know what kind of regulations he must follow. With a specific regulation, the regulator has power to ask the player to continue the game, or order him leave the game. In possible, the player is allowed to keep going on, but he must pay some cost, such as fees, or personal favour to the regulator. It is, therefore, necessary for the player establish and keep good relations with the regulator.

Before the reform, there were only a few regulators who set procedures and assessment measures. When each player(or group) were given to seek their own opportunities to score goals, more and more regulators joined the game. Some of them set targets, some regulated the players behaviour, and some supervised the conduct of the game. When regulations

were fragmented and segmented according to functions of these regulators, it became more and more difficult for the players to reach their destination without considerable cost. Although some players were given authority to transfer the ball to a fixed destination, they had to rely on regulators who set procedures and criteria of performance assessment.

"It is a team game of continually redefined problems and recalculated tactics which swings to and fro in bursts of action between pauses"(Hickson et al., 1986:252)

Table 12.1 Hypotheses and Result of Test

Hypotheses	Findings in the investigation	Conclusion and comments
1. More decentralization, more conflicts with authorities	Conflict increased not only in decentralized decisions, but others as well	Multiple-authority involvement, Decline of the line authority's power
2. More decentralization, more conflicts between management and the Party	Not found in 1988 decisions, but to some extent in 1985 decisions	Power had shifted from the Party to management; the political-expert management replaced the political management
3. Central control over the information sources constrained decentralization	The hypothesis was supported taking the range of decisions as a whole	Managers had to rely on central information sources
4. More codified regulations, more decentralization	Not supported	Consistency between regulations was more important than codification
5. More decentralization, more triggers from tasks and environment	The hypothesis was supported taking the range of decisions as a whole	Managers responded to central triggers
6. Decision making in China is matrix like	Only supported by decisions organizational change and investment which required external approval and resources	Decision process is contingent to decision matters; but matrix-like structure existed

CHAPTER 13: CONCLUSIONS AND FURTHER PROPOSALS FOR REFORM POLICY

This research was concerned and conducted in a Chinese context. Viewing the theoretical perspectives which have been developed in Chapter 2, 3 and 4, it is argued that management in China is shaped by three contextual factors: its unique culture influence, the level of industrialization and the state socialist system. This research presents cases of decisions, which provide readers with detailed material to understand management in China, through the light it throws upon organizational structuring, managerial control processes and interactions among organizations and organization members.

Why does an organization decentralize? Mintzberg(1979) has argued the decentralization is encouraged if, simply, decisions cannot be understood by one brain:

"Sometimes the information can be transmitted to one centre, but a lack of cognitive capacity(brainfever) precludes it from being comprehended there"(Mintzberg, 1979:182)

This can happen particularly under the condition when an organization is growing up quickly and its operating sites became geographically dispersed.

A second reason is to allow the organization to respond quickly to its environment. In a complex and dynamic environment, there are pressures to delegate decision-making, because front-line managers are more aware of local circumstances than is a top leader distanced by multiple hierarchical layers.

Technology is another contingent factor. Child argues that organizations operating a more integrated type of production technology producing standardized products tend to be more centralized, while the more flexible, less integrated technology suitable for varied products tends to favour by more decentralization(Child, 1973).

Last, decentralization should stimulate the motivation of lower managers. A junior manager who is allocated to make decisions can find this an incentive to practise his/her judgement and ability to cope with uncertainty.

In general, the top-management group decentralizes some decisions but not others. If a decision is really significant, it is probably not decentralized; the decentralization of a decision generally means that it is regarded as less important. Choosing decision areas to decentralize is frequently seen as a problem of selecting the proper balance between centralization and decentralization. Koontz and O'Donnel(1968:375) wrote that such a balance is the key to effective decentralization.

There have been empirical investigations concerning which decisions are decentralized below the top-management group in business firms. Dale(1952:271-282) reported that production decisions are usually the first ones decentralized by the top executives as a firm expands. Sales decisions, are also often delegated early. Financial decisions are usually more centralized than any other decisions, evidently because the finance function is regarded as crucial for long-range planning and control. Centralization is often exerted through budgets for expenses and capital investments(Jennergren, 1981:46). Child and Kieser(1979) found that some important decisions, such as a new product or creating new sub-units within the organization, tended to be taken at board and/or chief executive levels. In contrast, operational decisions to do with the matters such as the methods of work to be used or when overtime was to be worked were considerably more decentralized to supervisory or superintendent level. Both centralization and decentralization are strategies for maintaining managerial control, and each has certain advantages which have to be traded-off in the light of the conditions an organization must cope with in its particular circumstances.

"The choice between centralized and delegated control must be made, first in respect of different types of decisions, which will vary in their strategic importance, and second, for the whole range of organizational decisions in the light of the contingencies and capabilities that apply to the organization and its context *in toto*"(Child, 1984:150).

In other words, the decentralization and centralization is always a dilemma in managerial control (McLaren, 1982). Organizations swing back and forth from a centralization of decision-making authority to decentralization. They are in a dilemma between coordination, consistency, and accountability on one side and efficiency, expertise, motivation and training on the other. Organizations try various combinations to solve the dilemma of where to locate decision-making authority. All combinations are sub-optimal in time because the two sets of ventures cannot be achieved by any one organizational design.

When socialist countries decentralized decision autonomy from planning authorities to enterprises, the process is different from delegation within an individual organization. The former engaged in a re-socialization process, which was related to a wide-ranging re-arrangement of social, political and economic institutions on a national or local scale. For instance, economic administration had to be adapted from planning commands to a market orientation. But delegation or decentralization in an individual company is confined within its organizational boundary to a limited scale. The reform schemes in China and other socialist countries are seen as an effort to re-institutionalize the prevailing planning system and create markets. Creating new institutions is expensive and requires a high level of both interest and resources. New institutions arise when organized actors have sufficient resources. The creation of new legitimate organizational forms requires an institutionalization project (DiMaggio, 1988:14). In the transformation stage, the processes of this re-institutionalization are only partially completed. Then, many particular institutionalized processes directly lead to social entropy, "a tendency toward disorganization in the social system" (Zucker, 1988:26).

The naive reformers in socialist countries believed that as soon as managers were granted more decision autonomy, organizational performance would be increased. They also believed the model that "the state regulates markets, and markets direct enterprises". They viewed markets as a simple place in which commodity exchange takes place. It therefore

followed in their view that markets would be automatically created as soon as the planning system eliminated or reduced its quotas and relaxed its price monopoly.

Likewise, they imagined that enterprise managers would immediately or automatically get rid of their traditions, which have been moulded by plans and commands, and adopt market mechanism. They supposed that there was little difference in an enterprise's internal operation under planning and market systems.

The empirical findings in this research and their theoretical implications, as discussed in Chapters 11 and 12, suggest that the decision process is contingent to the decision matter. Some operational decisions are more easily delegated to the lower levels than others regarded to a strategic nature. Thus, it is difficult for decentralization to achieve equal progress in all decision areas. However, naive reformers believed that as soon as a unified policy was issued to decentralize decision autonomy, enterprise managers would increase their efficiency in decision-making. The present research findings implies that the reform policy should be designed according to the nature of the issue decided. A package of policies promoting decentralization is needed, with each policy sensitive to the intrinsic nature of the decision area in question.

Furthermore, this research indicates that decentralization itself is constrained by the prevailing institutional structure. Markets must be considered as a set of institutions, which possesses its own properties in commodity exchange, information collection and legitimacy. Moreover, managerial behaviour does not change quickly or automatically as the result of decentralization alone. Managers may well seek to present the benign environment of paternalism from higher authorities, in order to avoid risks and uncertainty. There is a learning process involved in the adaptation of managerial behaviour (Argyris and Schon, 1978).

It is also important to bear in mind, as this research indicates, that a planned economy is difficult to reconcile with markets. A planning system is characterized by its own style of economic exchange activities, information collection and norms or regulations. These properties are not easily removed. All of them hindered the progress of decentralization.

This research, through its comparison of five decision areas in 1985 and 1988, has dealt with a wide range of disparate issues and suggests that a fundamental decentralization in enterprises requires reform in a number of areas. Its basic premise is that the behaviour and the organizational pattern of Chinese enterprises is intertwined with the organization of the economic system at large.

The economic reform stemmed from a recognition of bureaucratic failure in the central planning of economic activities, and of the catastrophic effects of preceptoral interludes during which policy was implemented through ill-defined mass action. It was conceived as a move from a synoptic to a strategic approach, in Lee's (1987) terms. The underlying rationale was one of efficiency: to promote the superior deployment, reproduction and accumulation of economic resources through a greater reliance on market transactions.

Blecher(1989) addressed two directions for further reform in China. One is the separation of the state administrative structures and activities from the economy, the other the re-orientation of such administration in ways more consistent with effective management of the economy.

The discussion and analysis in this research argues that a decentralization itself is nowhere a guarantee of improving efficiency. Decision processes are contingent to the matters which are concerned with a certain environment, in which organizations operate. The success of decentralization varied according to the area of decision. With high degree of resource dependency and institutional constraints, decision processes are likely to be matrix-like, featured with multiple-rationality and multiple-actor involvements.

Likewise, the recreation of a new decision context is regarded to be a slow socialization process. A lack of co-ordination through institutional arrangements and resistance of the prevailing institutional structure cause a failure of both bureaucratic and market co-ordination. The institution here presents a source of bounded rationality. The key relationship is that between enterprises and their higher administrative authorities. Mutual dependencies between the two levels give rise to negotiation under conditions of inherent uncertainty. The authorities suffer from bounded rationality because of their distance from specific economic and technical realities. The enterprises suffer from their continued dependence on higher approval for the attracting of scarce physical, financial and information resources, and from the absence of fully defined rights to behave as autonomous economic actors. The endeavour to attain greater economic rationality through the use of market mechanisms is bedevilled by the political dynamics generated by vertical structural inter-dependencies.

The experience of China's economic reform, through the scheme of decentralizing decision autonomy from administrative agencies to enterprises, indicates that institutional factors tend to be more negative in the sense of ensuring that administering agencies actually comply procedurally with policy changes which liberalize institutional restrictions. The problems of China's partial reform points out that the assumption that enterprises are the appropriate units for the formation of economic organizations needed for a socialist market economy is not always appropriate. Organizational rationale in China integrates formation of political and societal requirements with economic performance.

Kornai(1989) pointed out that "bureaucratic co-ordination" and "market co-ordination" are the real rival co-ordination mechanisms. Market co-ordination would be less vigorous when more active bureaucratic control is implemented. Because both mechanisms exert controls, their overlapping activity can lead to many disturbing effects. It is what the China's decentralization has experienced, as in Hungary.

The investigation in this research also directs attention to marginal change in managerial behaviour. A comparison of the decision process in 1985 and 1988 discloses that managers behaved within the iron cage of their past experience constrained by the institutional structures. On the one hand, they expected to get rid of controls from the higher authorities. The decentralization scheme aimed to expand their autonomy in decision-making, in order to improve decision efficiency. But, on the other hand, they sought benign protection and favours from the authorities and the political system, whenever risk appeared, such as a short supply of scarce resource or possible conflict with employees. Bureaucratic protection significantly reduced the risks of transacting in the market. And support from the party was effective in reducing tensions between management and workers. The qualification of management in China is still determined by a political rationale, which encouraged political-expert management. Changes in the reform policy failed to change the nature of managerial behaviour, which was sedimented in the past patterns and processes. The marginal change in management boxed in the progress of decentralization.

The resistance of the prevailing institutional frameworks and slow change in managerial behaviour leads to one of the most complex problems: the time schedule of the reform. It is certainly impossible to make all the changes in one giant step. No matter how plausible the *reform policies sound*, a successful reform programme depends upon a set of changes, and marginal progress is required. The difficulty is that interaction among different actors and systems is very dynamic and strong. Any serious change introduced into an unchanged political and economic environment will perhaps be unable to deliver all the expected results. Even those actors, such as enterprise managers, who welcome the changes, require time to re-shape their experiences. Their inherited behaviour patterns were moulded in the old systems and they need time to learn new areas. In other words, the reform must not only change the structure of institutions, but it has also to re-mould actors' behaviours. Resistance could be expected from both the "sedimented" structures to change and "sedimented" behaviour. The later may prove to be the more difficult area to change.

The experience in China's reform also points to another critical issue: how frequently should the policies and regulations be changed? Legislation in China is characterized by its unique administrative system, which disperses administrative justice rather than legal judgement. The legal system is weak in China. Therefore government policies and regulations become the rules which organizations have to follow. These regulations determine the organization's legitimacy, power framework and criteria of performance. Both the codification and the specification of regulations affect enterprise decision-making.

Furthermore, government regulations are in fact concrete forms of official ideological concepts held by the leading regime. The reform is a process of trial and error. The status quo is never perfect, and there always critics who are urging further amendments. Yet a collection of good rules alone is insufficient; people - officials, managers and decision-actors - must be able to adjust to these rules. But such adjustment means learning, and that takes time, as state above. The time lag between the change in policy and behaviour adjustment brings difficulty for the reform. The high frequency of the changes in policy and regulations indicates the political uncertainty, which then make it difficult for management to plan ahead.

Such issues may be central to the successful implementation of decentralization, however, and have received quite inadequate attention in the past. The implication is that the future of economic reforms does not depend as much on reforms which concern managerial autonomy as on reforms in other fields. The suggestion is that a proper institutional arrangement is required to support effective co-ordination of economic policies. The deregulation of state administrative intervention into enterprises and coherence of a large number of institutions in the creation of markets are two parallel tasks. Both bureaucratic and market development are necessary.

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APPENDICES

Appendix I-1 Interviewing Questions

- Q1: Here is a list of decision areas:(1) purchasing of inputs, (2) pricing outputs, (3) organizational change, (4) labour recruitment, (5) product innovation, (6) financial investment. Can you tell me the latest decision taken in these (or one/some of these) areas?
- Q2: (with reference to areas mentioned) Would you tell me a bit more about the decision?
- Q3: When did the matter first arise?(month/year)
- Q4: How did it start?(checklist: market signals, mandatory plan, regulations from local bureaux/government, task requirement)?
- Q5: Who was involved in the decision process?(check organizational chart for internal units, and external units). Who owned the problem? Who initiated the decision? Who designed the alternatives? Who selected/evaluated the alternatives? Who finally authorized the solution?
- Q6: What did each initially want in the decision?
- Q7: What did each do?
- Q8: How much influence did each have?
- Q9: What kind of information did internal units and external organization provide?
- Q10: How was the information used for the decision?
- Q11: When did the decision get to final approval? and How?
- Q12: How was the correctness of the decision judged?(Hard criteria: cost profit, output, sales, wages/bonus; soft criteria: reputation, competitive ability, attitude of superior authorities)
- Q13: During the decision process were there any interruptions, delays, or reconsiderations?
- Q14: Was the same decision made in 1985? (If no, go to Q16?)
- Q15: What is the difference between the way those decisions were made in 1985 and 1988/1989?(checklist: -units/organizations involved and influence)(Then go Q17)
- Q16: If there was no such a similar decision in 1985, when did you first make decisions like this one?(date: year) And what is the difference?
- Q17: What is your evaluation/opinion of the decision made?

Appendix I-2: Interviewing Questions in the field study in China

调查问卷.

厂名:

职务名称:

在本企业服务时间:

调查日期:

年龄:

性别:

担任本职务时间:

Q1: 决策题目: 1. 原材料采购/供应. 2. 产品价格制订.
3. 组织机构变革 4. 招收职工
5. 产品革新 6. 资金投资项目.

Q. 2: 决策题目的内容和实质描述.

Q. 3: 此项决策于何年/月开始

Q4: 是什么原因: 市场信息, 指令性计划, 有关规定, 任务要求.

Q5: 谁参与决策? 谁的问题? 谁提出决策?(内部, 外部)
谁设计选择? 谁最后批准? 最后结果.

Q6: 组织各部门希望从决策中得到什么?

Q7: 它们做些甚么?

Q8: 它们的影响?

Q9: 内部或外部组织提供什么信息?

Q10: 这些信息是怎么应用

Q11: 甚么时候决策得到最后批准, 怎样批准的:

Q12: 决策批准条件是怎样确定的?(成本, 利润, 销售, 声誉, 竞争能力)

Q13: 决策过程的中断, 拖延, 或重新考虑, 为甚么?

Q14: 类似的决策1985年出现过吗?

Q15: 有哪些不同: 参与者, 影响, 信息.

Q16: 如果1985年没有类似的决策, 甚么时候有过(年:)

Q17: 你对全部决策过程的想法?

Appendix II-1 Regulations Regarding to Purchasing and Pricing Decisions(1988-1989)

No.	Date (d/m/y)	Topic	Publisher	Code of codification
1.	1/1/88	Li Peng proposed to stabilize prices as one of the State Council's major tasks	State Council (SC)	1
2.	6/1/88	Five instruments of stabilizing prices in a period of Chinese New Year	State Pricing Bureau (SPB)	2
3.	19/1/88	Temporary Regulations on Pricing of Important Production Materials and Transportation Management and Temporary Regulations on National Unified Highest Prices of Out-planned Products of Production Materials	SC	3
4.	1/2/88	The first Catalogue of Highest Prices of Out-planned products of Important Production Materials & Transportation Prices	SPB	4
5.	19/3/88	Circular on Trading Places of Sales & Purchase of Out-planned Steel and Non-ferrous Metal Materials	SPB & State Material Bureau (SMB)	3
6.	5/4/88	Circular on Adjustment of Enterprise Pricing of Out-planned Raw Aluminum	SPB	4
7.	15/4/88	Li Peng in Government Report stressed management of pricing system	SC	1
8.	14/5/88	Regulation on Punishment of Illegal Pricing Behaviour	SPB	3
9.	15/5/88	Temporary Prices of Standard Products of National Key Enterprises	SPB	4
10.	18/6/88	SPB, Ministry of	Floating Prices of Domestic Commerce (MC) Ministry of Electronic Industry (MEI)	4
11	29/6/88	Temporary Regulations on PRC's State Owned Enterprises, one article was on pricing policy	SC	1
12	19/8/88	Primary Programme on Pricing and Wages Further Reform	CCCPC	1
13	30/8/88	Decision of Executive Meeting in the State Council on Pricing System	SC	1

14	1/9/88	Metallurgical Industrial Ministry(MIM)'s executive meeting on guarantee of state contracts and planned production	MIM	3
15	23/9/88	Circular On Adjustment of Enterprise Prices of BJ130	Beijing Pricing Bureau (BPB)	4
16	26/9/88	Policy on Campaign of Examination of Tax, Finance and Pricing in 1988	SPB	2
17	1/10/88	Decision of Holding Down Paces of the Pricing Reform in 1989	Central Committee of Communist Party in China (CCCPC)	1
18	2/10/88	Circular on Sending Central Observers of State Pricing Commission and SPC to Local Areas	SC	2
19	4/10/88	Circular of Campaign of Examination of Tax, Finance and Pricing in 1988	SC	
20	12/10/88	Regulations of Pricing of New Products	SPC	3
21	24/10/88	Decisions on Strengthening Pricing Management & Strictly Control over Increases of Prices	SC	1
22	13/11/88	Decisions on Strengthening Management of Steel Materials' Monopolistic Sales	SC	4
23	16/11/88	Circular on Sending Supervisors to Ten Biggest Steel & Iron Mills	MIM	2
24	1/12/88	Reconfirmation of Procedure of Pricing Application in local Pricing Bureau	Beijing Local Government	3
25	25/1/89	Circular on Monopolistic Sales of Colour TV	SC	3
26	28/2/89	Decision on Strengthening Management of Non-ferrous Metal Material	SC	2
27	28/2/89	Decision on Re-centralization of Applications for Increasing Prices in Procedure	BLG	3
28	23/3/89	Decisions on Strengthening Non-ferrous Metal's Sales	SC	2

Appendix II-2: Regulations Regarding Pricing Policies Published in 1985

No	Date	Topic	Publisher	Code c codification
1.	24/1/85	Circular on Opening Prices of Self-sales of Extra-Production of Production Materials	SPB & SMSB	4
2.	17/3/85	Circular on Strengthening Supervision & Examination of Prices to Local Pricing Authorities, government agencies	SC	2
3.	4/4/85	Circular on Prices of Colour TV	SPB	4
4.	5/4/85	Emergency Circular on Stopping Price Increase of Colour TV	MEI & SPB	3
5.	5/7/85	Supplementary Circular on Domestic Colour TV prices	SPB,MC & MEI	4
6.	31/8/85	Temporary Regulation on Economic Punishment Violating Price Discipline	SPB	3
7.	11/9/85	Temporary Regulations on Further Activating Large- & Medium-sized State-owned Enterprises	SC	3
8.	19/9/85	Temporary Regulation on Automobile Trade Places	State Industry & Commerce Ministry(SICM)	4
9.	21/9/85	Circular on Pricing Inspection as an Additional task to Annual Tax, Finance Examination	SPB	3

Appendix II-3 Informants in Purchasing and Pricing Decision Investigation

Audio-visual

AVPI 1, Mr Chen, J., Enterprise director
AVPI 2, Mrs Zhang, Purchasing manager
AVPI 3, Mr Yuan, M.J., Purchasing manager
AVPI 4, Mr Gao, Chief Accountant
AVPO 1, Mr Chen, J. Enterprise director
AVPO 2, Mr Gao, Chief Accountant
AVPO 3, Mrs Hu, Y.H., Cost and Price manager
AVPO 4, Mr Zheng, R & D manager

Automobile

ATPI 1, Mr Zhao, F.K., General managers
ATPI 2, Mr Wu, Purchasing manager
ATPI 3, Mr Jiang, Head of purchasing department
ATPO 1, Mr. Wang, W.G., Head of sales department
ATPO 2, Mr Feng, Head of management division
ATPO 3, Mr Zhao, Head of Financial department

Machine Tool

MTPI 1, Mr Meng, X.Y., Enterprise director
MTPI 2, Mr Zhu, T.Q. Deputy director
MTPI 3, Mr Swun, X.M., Head of purchasing department
MTPI 4, Mr Tian, Head of financial department
MTPO 1, Mr Meng, X.Y. Enterprise director
MTPO 2, Mr Zhu, T.Q. Deputy director
MTPO 3, Mr Tian, Head of financial department
MTPO 4. Mr Wang, Head of sales department

Heavy Electrical

HEPI 1, Mr Li, Z.X. Enterprise director
HEPI 2, Mr Qi, Y.L. Head of purchasing department
HEPI 3, Mr An, Q.S. Head of the director's office
HEPO 1, Mr Lin, Head of sales department
HEPO 2, Mr An, Q.S. Head of the director's office
HEPO 3, Mr Ma, Head of financial department
HEPO 4, Mrs Che, Z.T. Director's consultant

Pharmaceutical

PHPI 1, Mrs Zhang, G.H. Enterprise director
PHPI 2, Mr Gao, L. Head of purchasing department
PHPI 3, Mr Wang, Z. Financial manager
PHPO 1, Mrs Zhang, G.H. Enterprise director
PHPO 2, Mr Zhao, Deputy director
PHPO 3, Mr Yu, Sales manager
PHPO 4, Mr Wang, Y. Financial manager

Audio

ADPI 1, Mr Wu, Enterprise director
ADPI 2, Mr Zhou, Recorder Core Production Division manager
ADPI 3, Mr Hou, Head of financial department
ADPO 1, Mr Lu, J., Business director
ADPO 2, Mr Hou, Financial manager
ADPO 3, Mr Ju, L.G. Head of Management department

Municipal Electronic Industrial Office

EI 1 Mr. Du, H.W. Head of the Management Department

Appendix III-1 Regulations on Labour Management in 1986 and 1988

No.	Date	Regulation Topics	Publisher	Code of codification
1.	1/7/86	Four Regulations on Labour Reform	SC	2
2.	17/9/87	Fixed Employment System	Speeding up Activation of Personnel & Labour Ministry	2
3.	24/10/87	Labour Mobilization and Promoting Further Reform of Labour System	Proposals on Rationalizing BMLB	4
4.	1/1/88	Several Points on Mobilization of Workers in enterprises	Municipal Labour Bureau(BMLB)	4
5.	27/2/88	the Contractual System in State-owned Industrial Enterprise	Temporary Regulations on The State Council	3

Appendix III-2 Regulations on Labour Management during 1984 and 1985

No	Date	Topic	Publisher	co
1.	10/5/84	Further Expansion of Autonomy of State-owned Industrial Enterprises	Temporary Regulation on The State Council	3
2.	11/5/85	Strengthening Activation of Large and Medium sized State owned Enterprises	Temporary Regulation on State Economic Commission & State Commission of Economic System Reform	3
3.	11/9/85	Activation of Large and Medium State-owned Enterprises	On Decision of Strengthening SC	3
4.	5/12/86	Deepening Enterprise Reform & Strengthening Activation of Enterprises	Temporary Regulation on State Council	3

Appendix III-3 List of Informants

Audio-visual

AVRL 1, Zhang, L.X., Deputy director for personnel
AVRL 2. Gao, F. L., Personnel manager
AVRL 3. Wang, G.F., Labour manager

Automobile:

ATRL 1. Wang, X.L., Personnel manager
ATRL 2. Hu, D. A., Labour manager

Machine Tool:

MTRL 1. Zhu, T. Q., Deputy director for business and personnel
MTRL 2. An, F. Q., Labour & Personnel manager
MTRL 3. Yan, Z. Q., Chief of Management Department
MTRL 4, Li, Y. W., A manager in Planning Department.

Heavy Electrical:

HERL 1. Zhang, Z. J., Deputy director for personnel and labour
HERL 2. Ji, X. L., Labour manager
HERL 3. Ma, Y.D., Labour manager

Pharmaceutical:

PHRL 1. Wang, G. L., Personnel manager
PHRL 2. Li, D.R., Chief of Management Office

Audio:

ADRL 1. Liu, Deputy director for personnel and labour
ADRL 2. Zhou, H.J., Personnel manager

Appendix IV-1: Regulations on Organizational Change

No.	Date	Regulaitons	Publisher	Code of codification
1.	1/7/87	Temporary Regulations on diversification of business in state-owned enterprises	Municipal government(BMG)	3
2.	17/9/87	Speeding up Activation of the Permanent Employment System	Personnel & Labour Ministry	2
3.	16/10/87	Temporary Regulation on Employing Cadres in Beijing Non-profit Organization and Enterprises	Municipal Personnel Bureau (MPB)	3

4.	24/10/87	Proposals on Rationalizing Labour Mobilization and Promoting Further Reform of the Labour System	Municipal Labour Bureau (MLB)	4
5.	1/1/88	Several Points on Mobilization of Workers in Enterprises	MLB	4
6.	27/2/88	Temporary Regulations on the Contractual System in state-owned Industrial Enterprises	The State Council(SC)	3
7.	21/5/88	Some Opinions on Introducing Competitive Mechanism to Reform the Personnel System in state-owned Enterprises	Party Central Committee's Personnel Dept & State Personnel Ministry	2
8.	16-17/7/88	Chen, Xitong's speech	BMG	2
9.	1/8/88	Regulations for Protecting Enterprise Director & Managers to Carry out their Legal Power	BMG	3
10.	8/88	Opinions on Optimizing Labour Organization	Municipal Machine Building Bureau(MMBB)	4
11.	24/10/88	Temporary Regulations on Points of Optimizing Labour Organization	Ten Municipal Bureaux ¹	3
12.	12/88	Basic Condition of Optimizing Labour Organization in Beijing	MLB	3
13.	25/1/89	Issues of Optimizing Labour Organization in Municipal Enterprises and Further Opinions	MLB	2
14.	6/3/89	Circular on the Further Improving Total Wage Budget Linked to Economic Performance	Labour Ministry & Treasury	2
15.	14/3/89	Arrangement of Continuing Optimizing Labour Organization Scheme in 1989	MMB	3
16.	5/4/89	Standards of Formalizing Enterprise Labour Organization	Municipal Economic Commission(MEC)	4
17.	18/5/89	Circular on Promoting Optimizing Labour Organization in Industrial Enterprises	MEC	3

Appendix IV-2: Regulations On Organizational Change Between 1984 and 1985

No.	Date	Regulations	Publisher	Code of codificati
1.	10/5/84	Temporary Regulation on Further Expansion of Autonomy of State-owned Industrial Enterprises	SC	3
2	11/5/85	Temporary Regulation on Strengthening Activation of Large and Medium sized State-owned Enterprises	State Economic Commission & Commission for Economic Reconstruction System	3
3.	11.9.85	Decision on Strengthening Activation of Large and Medium sized State-owned Enterprises	SC	3
4.	15/9/86	Regulations on Tasks of Directors, the Party's Basic Organization, & Workers' Congress in State-owned Industrial Enterprises	Party Central Committee & SC	2
5	5/12/86	Temporary Regulation on Deepening Enterprise Reform & Strengthening Activation of Enterprises	SC	3

Appendix IV-3: List of Informants

Audio-visual

- AVOC 1. Chen, J., Director
- AVOC 2. Pei, Y.C. The Party Secretary and Deputy Director for Administration
- AVOC 3. Peng, Z.S. Chief of the Management Office
- AVOC 4. Wang, G.F. Labour Manager
- AVOC 5. Gao, F. L., Personnel Manager
- AVOC 6. Li, X.H. Chief of the Internal Labour Market

Automobile

- ATOC 1. Zhao, F. K. General Director
- ATOC 2. Feng, Y.J. Chief of the Management Office
- ATOC 3. Wang, X. L. Personnel Manager
- ATOC 4. Wang, W. G. Head of the General Director's Office
- ATOC 5. Liu, Manager in the Management Division
- ATOC 6. Wang, Y. D. Public Relation Manager

Machine Tool

- MTOC 1. Meng, X. Y. Director
- MTOC 2. Zhu, T. Q. Deputy director for the Business and Personnel
- MTOC 3. Wang, the Party Secretary and Deputy Director for Production
- MTOC 4. Yan, Z. Q. Chief of the Management Department
- MTOC 5. Hu, Z. X. Production Manager

Heavy Electrical

- HEOC 1. Li, Z. X. Director
HEOC 2. Wang, the Party Secretary
HEOC 3. Zhang, Z. J. Deputy Director of Personnel and Labour
HEOC 4. Ji, X. L. Labour Manager
HEOC 5. Ma, Y. D. Labour Manager
HEOC 6. Che, Z. T. Director's Consultancy
HEOC 7. An, Q. S. Head of the Director's Office
HEOC 8. Wang, Z. Q. Chief of the Management Office

Pharmaceutical

- PHOC 1. Zhang, G. H., Director
PHOC 2. Luo, Q. The Party Secretary and Deputy Director for Management
PHOC 3. Zhao, J. Z. Deputy Director for Business
PHOC 4. Li, D. R. Chief of the Management Office
PHOC 5. Zhu, Y. J. Staff in the Management Office
PHOC 6. Liu, Z. Chief Engineer

Audio

- ADOC 1. Wu, W. D. Director
ADOC 2. Chen, Z. X, the Party Secretary
ADOC 3. Huo, L. G. Head of the Director's Office
ADOC 4. Ju, L. G. Chief of the Management Office
ADOC 5. Zhao, X. Staff in the Management Office

Municipal Electronic Industrial Office:

EI 1, Mr Du, H. W. Head of the Management Department

Municipal Economic Commission

ECOC 1, Mr Sha, L.Y. Head of the Management Department

Appendix V-1: The Role of Authorities in Investment Decision

Name	Role in the Decisions	Involvement of Authorities in Six Decisions					
		A-V	Auto.	M.T.	H.E.	Pharm.	Audio
The State Council (SC)	Final Approval of Large Investment, according to Five-year Plan	-	*	-	-	-	-
State Planning Commission (SPC)	Approval of large investment project Approval of foreign currency	*	*	-	-	-	-
State Economic Commission (SEC)	Approval of capital for technology renovation	*	*	-	-	-	-
Ministries	Select enterprises for project, Approval of all applications, design of the ministry's own project	*	*	-	-	-	*
Municipal Planning Commission	Approving local projects Allocate capital	*	*	-	-	*	-

Municipal Economic Commission	Approving local projects	*	*		*		-
Municipal Industrial bureaux	Select enterprises for its own project, primary approval of all projects of ministry, local government	*	*		*	*	*
Feasibility-assessing Authorities							
Science & Technology Commission	Allocation of Funds for Technology Transfer	*	-	-	*	-	-
Bank	Authorizing special funds* for construction	*	-	-	*	*	-
Construction Programme Bureau	Approval the construction plan Allocate land for building	-	*	-	-	*	-
Environment Bureau	Approval of environmental protection scheme	*	*	-	-	*	-
Foreign Currency Management Bureau	Approval quota of foreign currency	*	*	-	-	-	-
Personnel & Labour Bureau	Approval labour plan	*	*	-	-	*	-
Rail Transport Bureau	Approval transport by rail	*	-	-	-	-	-
Electricity Supply Bureau	Approval the quota of electricity	*	*	-	*	*	-
Foreign Trade Commission	Approval foreign trade plans	*	*	-	-	*	-

Note: * Involvement of the authority

Appendix V-2: Policies and Regulations in Innovation with Investment from 1982 to 1988

No.	Date	Topic	Publisher	Degree of codification	
1.	24/12/82	Complementary regulation to control over size of investment	The State Council(SC)	3	
2.	10/5/84	Temporary Regulation on Expansion of Autonomy in State-owned Industrial Enterprises	The State Council	3	
3.	26/4/85	Temporary Regulation on Depreciation of Fixed Assets in the State Owned Enterprises	SC	4	
4.	8/2/86	Temporary Regulation on Promotion of Technology Progress in the State Owned Enterprises	The State Economic Commission(SEC) The Ministry of Finance(MF) The People's Bank(PB)		3
5.	9/7/86	Regulations on Control over Size Investment in Fixed Assets	SC	2	
6.	30/3/87	Circular on Relaxing the Approving Power of Capital Assets Investment Simplifying the Approval Procedures	SC	3	

Appendix V-3: List of Informants

Audio-visual

AVTR 1, Chen, J. Director
AVTR 2, Zhong, M.Y. The Chief Economist
AVTR 3, Zhou, P. G., The financial manager
AVTR 4, Peng, J. S. Head of Management Office
AVTR 5, Wang, Planning manager
AVTR 6, Zheng, G. Q., Head of Technical research department

Automobile

ATTR 1, Zhao, F. K. General Director
ATTR 2, Hong, J., The Chief Engineer and head of the Research Institute
ATTR 3, Zhao, C. J. The financial manager
ATTR 4, Feng, Y. J. The head of Managerial Division
ATTR 5, He, Q., Planning manager
ATTR 6, Wang, W.G. Manager in the general director's office
ATTR 7, Zhang, C. Head of Managerial department
ATTR 8, Wang, Y.D, Head of the general director's office

Machine Tool

MTTR 1, Meng, X. J., Director
MTTR 2, Zhu, T.Q. Vice-director in business
MTTR 3, Zhuo, C. X. Technical manager in Research department
MTTR 4, Han, X. Technical staff in the Research department

Heavy Electrical

HETR 1, Li, Z. X., Director
HETR 2, Lan, C. X. The Chief Engineer
HETR 3, Zhang, Z. J. Vice-director
HETR 4, An, Q.S. Head of the director's office
HETR 5, Qu, H. Y. Head of the Research department

Pharmaceutical

PHTR 1, Zhang, G. H. Director
PHTR 2, Liu, Z. The Chief Engineer
PHTR 3, Zhao, Z. Z. Vice director for business
PHTR 4, Luo, H. Party secretary and deputy director for management
PHTR 5, Li, D. R., Head of Managerial Office
PHTR 6, Tang, Y. Research staff
PHTR 7, Zhu, Y. J., Staff in managerial office
PHTR 8, Wang, Y. Financial manager
PHTR 9, Yu, L. Sales manager

Audio

ADTR 1, Wu, W. D., Director
ADTR 2, Lu, J. Vice director for business
ADTR 3, Huo, L. G. Head of the director's office
ADTR 4, Ma, Z. Y., Technical manager
ADTR 5, Ju, L. G., Head of managerial office.
ADTR 6, Hou, Financial manager

Appendix VI : Summary of Case Studies

Enterprises	Decision Topics 1985(or before)	1988-89 (or before)
Audio-visual	<ol style="list-style-type: none"> 1. Purchasing materials in a trade fair 2. Fixing a price of a colour TV 3. Hiring trainees 4. Implementing the director responsibility system 5. Expanding production capacity by investment 	<ol style="list-style-type: none"> 1. Purchasing materials from a trading agency 2. Fixing a functional price of colour TV 3. Hiring a maintenance worker 4. Implementation of the Optimizing Labour Organization 5. Establishing an export basis by investment
Automobile	<ol style="list-style-type: none"> 1. Purchasing materials in a trade fair 2. Increasing prices of a transport vehicle 3. Hiring university graduates 4. Changing organizational structure and wage system 5. Development of a new product 	<ol style="list-style-type: none"> 1. Purchasing steel in a trade fair 2. Increasing prices of a transport vehicle 3. Hiring university graduates 4. Deploying labour force and redesign of organization structure 5. Formulation of a joint-venture
Machine Tool	<ol style="list-style-type: none"> 1. Purchasing materials from the bureau 2. Increasing prices of a product 3. Hiring a university graduate 4. Implementing the director responsibility system 5. Technology transfer from a foreign company 	<ol style="list-style-type: none"> 1. Purchasing steel in a business trip 2. Increasing prices of a product 3. Hiring machine operators from a technical training school 4. Implementing the campaign of Optimizing Labour Organization 5. Development of a new product
Heavy Electrical	<ol style="list-style-type: none"> 1. Purchasing raw copper from a supplier 2. Fixing prices of a electrical product 3. Hiring trainees from a technical school 4. Establishment of sub-profit centres and redesign of organization 5. Technology transfer from a foreign company 	<ol style="list-style-type: none"> 1. Purchasing raw copper from a company 2. Increasing prices of electrical products 3. Hiring a lorry driver 4. Implementing the campaign of Optimizing Labour Organization 5. Development of a new product required by the local Science & Technology Commission

Pharmaceutical	<ol style="list-style-type: none"> 1. Purchasing materials from suppliers 2. Increasing prices of a health product 3. Hiring trainees from universities 4. Organizational change in structure 5. Expanding production capacity by investment 	<ol style="list-style-type: none"> 1. Purchasing raw honey from a supplier 2. Increasing prices of a health product 3. Hiring trainees from universities 4. Implementing the campaign of Optimizing Labour Organization 5. Expanding production capacity by investment
Audio	<ol style="list-style-type: none"> 1. Purchasing materials from the bureau 2. Fixing prices of a product(Walkman) 3. Hiring trainees from the enterprise technical school 4. Organizational change in structure 5. Technology transfer of a product(walkman) 	<ol style="list-style-type: none"> 1. Purchasing rolling steel from a bureau's company 2. Decreasing prices of a product(stereo radio) 3. Hiring trainees from the enterprise technical school 4. Implementing the campaign of Optimizing Labour Organization 5. Development of a new product (video-player)
