

Modeling China's Economic Reforms Through an Organizational Approach

The Case of the M-Form Hypothesis

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These are hard times for China watchers. Some of the most widely accepted beliefs about the country's political system are being put to the test. For instance, sinologists have long told us that the key to China's future was whether or not Deng Xiaoping would manage to outlive his conservative rival, Chen Yun. In April [1995], Chen died at age 89. So Deng wins. But with the 90-year-old Deng himself on his deathbed, outlasting Chen doesn't seem to matter that much anymore. (Einhorn, 1995, p. 19)

During the past two decades, the ups and downs of China's economic reforms have continued to command a great deal of interest from politicians, academics, and business practitioners (Beamish & Spiess, 1991; Conable & Lampton, 1992/1993; Lardy, 1994; Perkins, 1988; Reynolds, 1988; Shenkar & Von Glinow, 1994; Shirk, 1993; Tung, 1982). The reforms, aiming at transforming the world's most populous country from

a stagnant, centralized planned economy into one which features entrepreneurship, initiative, and growth, are certainly a process of organizational restructuring on the largest scale (Hammer & Champy, 1993; Huber & Glick, 1993).

Given China's growing weight in the global economy (Lardy, 1994; Overholt, 1993),¹ improved understanding of the nature and process of the economic reforms that have multidimensional and wide-ranging implications becomes increasingly important. Specifically, how have the reforms progressed through their various stages? Why is there so much progress at one time and so many setbacks at other times? Further, what is the future of the reforms? Informed answers to these critical questions will not only help Western politicians adopt appropriate policies toward China to encourage further reforms and growth but will also help Western managers to carry out better strategies when dealing with China, as well as contributing to

AUTHOR'S NOTE: This paper was first written when I was supported by a grant from the Center for International Business Education and Research at the University of Washington. An earlier version of the paper was presented at the Second World IFSAM Conference on Management held in Dallas, Texas, in August 1994, and a two-page summary was published in the proceedings entitled *The Best in Management Worldwide*. I thank the early critique by Charles Hill, the extensive comments by two reviewers, and Anne Huff, section editor. Appreciation is also due to John Butler, Eric Harwit, Timothy Meade, Mauru Qiu, Borje Saxberg, Oded Shenkar, and Joshua Tseng for their valuable comments on various drafts of the paper.

JOURNAL OF MANAGEMENT INQUIRY, Vol. 5 No. 1, March 1996 45-58
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our scholarly understanding of such large-scale organizational transitions in history.

To date, the debate by China scholars on the course of reforms has mostly centered on how coalitions with different interests vie for dominance; specifically, whether the "hardliners" or the "reformers" take an upper hand in China's political leadership (e.g., Bachman, 1985; Lieberthal, 1995; Lieberthal & Lampton, 1992; Shambaugh, 1994). Such an approach hinges on the analysis of individual leaders, such as Deng Xiaoping; in other words, it matters whether Deng is proreform or antireform and whether he dies or lives.²

Moreover, this approach is based on a dubious assumption that today's leaders, such as Deng, still have the charismatic influence that their predecessors had (see Bachman, 1992; Chen, 1995, for critiques). As a result, relying on the individual leader-based analysis to explain and predict the course of China's economic reforms has become a speculative endeavor, which, according to a reviewer (Einhorn, 1995, p. 19), is similar to "reading China's fortune cookie." Such an approach inevitably invites criticism for the field of China studies' lack of strong theoretical underpinning (Goldstein, 1990; Harding, 1984; Pye, 1992).

Although the field of China studies is in need of more theory-driven research, the substantial volume of research on organizational transitions (Gersick, 1991; Hammer & Champy, 1993; Huber & Glick, 1993; Peng, 1994; Tushman & Romanelli, 1985) suggests a complementary perspective. It seems that an organizational approach, bypassing the individual leader-based analysis, may represent a better way to model the course of the economic reforms in China. In this paper, I argue that the post-Mao reforms since 1978 feature a decentralized structure in which leaders have become increasingly unable to force their way through, and thus organizational and institutional forces have taken their own course (Bachman, 1992; DiMaggio & Powell, 1983; Harwit, 1995; Lieberthal & Oksenberg, 1988). Such an organizational approach to the study of China's reform process is also consistent with the recent interest in political science to increase integration with organizational theory (March & Olsen, 1984; Moe, 1991). Although there are many contributions in the organizational literature that may have such potential (Moe, 1991), this article focuses on the classic M-form hypothesis advanced by Chandler (1962) and Williamson (1975, 1985). Specifically, following the M-form hypothesis, the economic reforms in China since 1978 are conceptualized as a process

similar to the organizational transitions changing from a functional structure (U-form) into a multidivisional (M-form) structure, and details of such transitions are explored with two illustrative examples.

Traditionally, organizational research has focused on the firm; state-level transitions such as China's reform process have rarely commanded much attention. The purpose in pursuing this multidisciplinary, nontraditional line of research at the intersection of China studies and organizational studies is twofold. First, the organizational literature, as suggested by Moe (1991), may be able to more accurately model China's economic reforms, thus enriching the field of China studies by bringing in a new theoretical perspective. If so, this effort also has the secondary benefits of pushing the boundaries of organizational theory by demonstrating that some firm-based models, such as the M-form hypothesis, can be fruitfully brought into the analysis of broader issues, such as the economic reforms in China.

In the remainder of the article, the M-form hypothesis is first reviewed. Next, I discuss whether organizational concepts, developed to portray firm-level behavior in the West, can "travel" to the realm of Chinese political economy. Then, the prereform China is conceptualized as a gigantic, centrally planned U-form organization. In the next three sections, the M-form hypothesis is applied to interpret the reform process in China with two illustrative examples. A different organizational model that may go beyond the M-form is then discussed. Finally, implications from such an organization-based perspective are presented.

THE M-FORM HYPOTHESIS

The Hypothesis

A well-grounded perspective in the organizational literature is that structure follows strategy and that in particular the multidivisional (M-form) structure follows the strategy of diversification. Chandler (1962) first explored what occurred when some of the largest U.S. firms began to pursue a strategy of diversification in the 1920s. At that time, these firms were organized on a functional basis (the unitary or U-form) in which different functional departments, such as marketing and production, report to the top management (see Figure 1). As firms began to diversify, functional de-

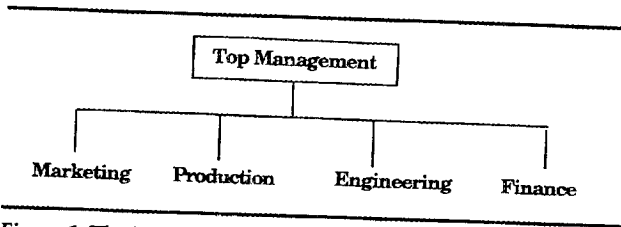


Figure 1: The Functional Structure (the U-Form)

partments within the firm found themselves having to deal with several distinct businesses. This led to non-trivial problems of coordination, both within and across functional hierarchies, that required extensive top management involvement in operational decisions. As a result, top management had to deal with a large number of operational decisions without paying adequate attention to strategic decisions, such as the optimal allocation of the firm's resources. Moreover, because firms were organized around functions, not businesses, it was impossible for top managers to identify the profit contribution of each business, thus accountability problems resulted. Overall, the corporate headquarters experienced a great deal of "control loss" problems because the U-form structure was unable to efficiently process the increased amount of information once a new strategy of diversification was adopted. The solution called for a transition from the functional structure to a multidivisional structure shown in Figure 2 (Chandler, 1962; Williamson, 1975, 1985).

Williamson (1985, p. 284) defined the M-form as "one that combines the divisionalization concept with an internal control and strategic decision-making capability." The transition from the U-form to the M-form helps alleviate information overload problems. Characterized by a two-tier structure, the M-form organization has a corporate head office and a number of self-contained divisions. Each division deals with a conceptually distinct business and is self-contained with its own functional hierarchy. The divisions are given the responsibility for routine operational decisions, and the corporate headquarters is responsible for determining long-term strategic directions and for exercising overall financial control of the divisions. Thus operational and strategic decision-making responsibilities are separated.

Essentially operating an internal capital market, the corporate office polices the divisions and channels resources toward them according to their performance. In contrast to the U-form, which experiences many information overload problems, the M-form structure enables top management to have better ac-

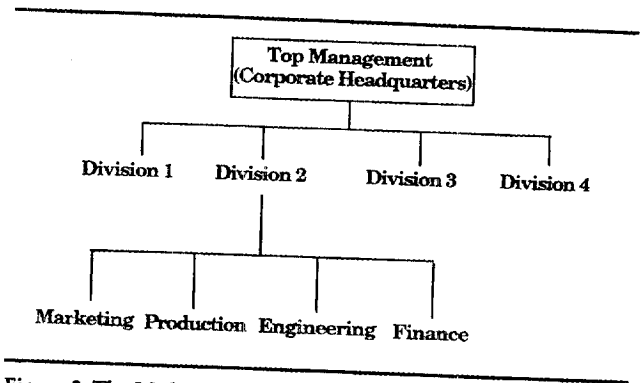


Figure 2: The Multidivisional Structure (the M-Form)

cess to information from the divisions because accountability at the divisional level is achieved. This partially mitigates bounded rationality and information asymmetry problems and helps reduce opportunism and uncertainties (Hoskisson, Hill, & Kim, 1993). In short, "the organization and operation of the large enterprise along the lines of the M-form favors goal pursuit and least-cost behavior more than does the U-form organizational alternative" (Williamson, 1975, p. 150). This is the well-known Chandler-Williamson M-form hypothesis, which posits that the transition from the U-form to the M-form would lead to enhanced organizational performance.

Originated as an organizational innovation in the United States during the 1920s, the M-form structure diffused not only throughout American industries but also worldwide. By the late 1960s, the M-form structure had become a dominant organizational arrangement among large diversified firms in every developed country (Hoskisson et al., 1993).

Empirical Research on the M-Form Hypothesis

A large stream of empirical research has been inspired by Chandler and Williamson's pioneering work. On balance, the empirical evidence offers qualified support for the hypothesis, in that adoption of the M-form is generally associated with superior firm performance (Armour & Teece, 1978; Burton & Obel, 1988; Teece, 1981; Thompson, 1981).

On the other hand, not all of the empirical research supports the M-form hypothesis. Rather, a contingency relationship between the adoption of the M-form and the improvement of performance has been reported by a number of studies (Fligstein, 1985, 1987; Hill, 1988; Hill, Hitt, & Hoskisson, 1992; Hoskisson, 1987; Mahoney, 1992; Palmer, Jennings, & Zhou, 1993).

Specifically, the benefits of the M-form may dissipate if the M-form structure is corrupted. Williamson (1975, 1985) specified three interrelated conditions for optimal M-form results to occur. The top management should (a) identify separate activities within the firm and accord quasi-autonomous standing (usually of a profit center nature) to each division; (b) monitor the efficiency of the divisions and allocate resources to efficient ones; and (c) concentrate on corporate-level strategic planning. The implication is that deviation from any of these features means that the M-form is corrupted in some way. The M-form is thoroughly corrupted when the top management involves itself extensively and continually in operational decisions, because this blurs the boundaries between strategic and operating issues and undermines divisional accountability.

A Contingency Model for Organizational Change

Taken together, the M-form hypothesis and the related empirical research suggest the following contingency model for organizational change: (a) When facing information asymmetry problems, the transition from the U-form to the M-form may improve the managerial efficiency of the organization and may lead toward performance improvement; and (b) inadequate adoption of the M-form structure may result in a corrupted M-form, which tends to dissipate the benefits available from the M-form.

Although Williamson's definitive title indicates that the domain of the M-form hypothesis is mainly the "economic institutions of capitalism," he maintains that this theory applies to other modes of organizing as well (1985, p. 265).³ For example, it has been used by Ouchi (1984) to propose a reconstruction of the U.S. society and by Sacks (1983) to explore corporate behavior in former Yugoslavia. Whether it can be plausibly transplanted into a Chinese context remains to be seen.

CAN THE M-FORM HYPOTHESIS "TRAVEL" TO CHINA?

A persistent challenge for China scholars has been to extend mainstream, disciplinary-based theories to the Chinese case (Goldstein, 1990). "The fundamental problem," as noted by Pye (1992),

is that the concepts and theories favored in the disciplines were developed out of assumption about systems which operate quite differently from China, which is more a civilization pretending to be a nation-state. In fact the very concept of 'system,' that is, a set of interacting variables in which there is a close fit or matching of cause and effect, has to be greatly modified in the case of China. (p. 1162)

In this case, it is necessary to carefully consider whether the M-form hypothesis can travel to the reform process in China without a significant loss of its analytical and explanatory power (Shenkar & Von Glinow, 1994).

There is, in fact, a popular observation that China (or the former Soviet Union) is run like a big company. The Chinese economy, especially during the prereform stage (1949-1978), has been described as "China, Inc." (Macleod, 1988). In contrast to market economies, planned economies, such as the one found in prereform China, feature the comprehensive use of economic planning. The state economic plan coordinates the economic activity of state enterprises of different sectors of the economy, takes care of the distribution of producer and consumer goods, and concerns itself with equilibrium in the macro- and microsphere. At a glance, such a description seems to fit neatly with the workings of the typical large Western corporation in which a corporate strategic plan coordinates and controls the operations of subordinate units (Halal, 1994; Katsenelinboigen & Levine, 1977). It follows, then, that the reform process can be conceptualized as organizational restructuring aimed at improving performance (Gersick, 1991; Hammer & Champy, 1993; Huber & Glick, 1993; Tushman & Romanelli, 1985). As such, applying the M-form hypothesis to the reform process in China would seem highly plausible.

However, when developing and extending organizational concepts, particular care must be given to "minimize the problem of concept stretching (broadening the meaning beyond reason) while maximizing the potential for concept traveling (fitting precisely a variety of applications)" (Osigweh, 1989, p. 579). With regard to the applicability of organizational theories and concepts developed in the West to China, Shenkar and Von Glinow (1994) called for caution. Therefore, careful justification must be given when applying the concepts developed from the organizational- and firm-level behavior to the realm of state-level behavior in a dramatically different setting. Three principal

justifications for this particular approach are discussed below.

Justification 1. The Multilevel Nature of the M-Form Hypothesis

The level of theory describes the target (e.g., individual, group, organization) that researchers aim to depict and explain. It is "the level to which generalizations are made" (Rousseau, 1985, p. 4). Clearly, when levels of theory and analysis are not identical, the obtained results may be invalid. Only "multilevel" models that "specify patterns of relationships replicated across levels of analysis" will allow for meaningful extension from one level to another (Rousseau, 1985, p. 22; Klein, Dansereau, & Hall, 1994).

I contend that the M-form hypothesis belongs to the class of multilevel models. It depicts a specific multilevel phenomenon, in which both individual-level issues (e.g., the accountability of divisional managers) and firm-level issues (e.g., the enhancement of the firm's resource allocation) are covered. China's economic reforms represent a similar multilevel setting in which individual players interact with organizational entities in search of a better solution for the country's economic, political, and social problems. Therefore, the M-form hypothesis would seem to be applicable to China's reform process.

Justification 2. The "State as a Firm" Theory

Without invoking the argument above that the M-form hypothesis is a multilevel model, the state as a firm theory proposed by Auster and Silver (1979) also justifies the use of an organizational approach. These authors maintain that

[S]tates are simply firms, although admittedly ones that produce primarily public goods. "Firm" is the economist's word for the micro-decision unit for production. It is the institution by means of which the various factors of production, labor, capital are combined to produce the levels and qualities of outputs that "society decides" to produce. From the perspective on society that all exchanges are subject to the same underlying laws, states are simply service firms. They make decisions regarding certain services used by society. . . . While it is true that states typically are larger than other firms, the large firms of some societies are larger than the states of some small societies. Firms come in many sizes. (pp. 1-2)

If one adopts this line of thinking, it follows that organizational concepts developed to depict and explain firm-level behavior can become highly insightful when extended to the study of state-level behavior. Therefore, it is not surprising that MacLeod (1988) termed China's highly centralized prereform economy as China, Inc.

However, even if this perspective is accepted, a further challenge remains for the particular approach taken here. That is, given the vast differences between the goals of a Western firm and a planned economy state, such as China, how comparable are these two cases across levels when the M-form hypothesis is applied? The M-form hypothesis was developed in response to the experience of the profit-maximizing firm in the West. Can it be extended to a setting in which profit maximizing is not the primary goal?

Justification 3. The Performance-Driven Nature of China's Economic Reforms

Whereas the goals of a Western firm and its managers may range from maximizing managers' utility to "satisficing" various stakeholders' demands, profit maximization remains one of the central missions, if not the only one, for a firm operating in a competitive market economy (Cyert & March, 1963; Freeman, 1984; March & Simon, 1958; Marris, 1964). In other words, improving efficiency and performance lies at the heart of the operations of a typical Western firm. Although profit maximization and performance enhancement might be the primary goal of a firm, a nation crafting out economic institutions must achieve diverse goals related to social harmony, equality, and justice, as well as attaining economic efficiency. As such, there appears to be a great deal of incongruence between the domain of the M-form hypothesis and the Chinese realities.

I maintain that although China pursued a set of politically motivated goals that were radically different from economic efficiency enhancement during the prereform period (1949-1978), the primary aim of the economic reforms since 1978 has been to improve the performance of its economy. Therefore, the application of the M-form hypothesis, which posits performance improvement effects of organizational changes, is highly useful in this case. This assertion does not conflict with the fact that China, during the reform period, is also pursuing other political and

social goals. In fact, the same argument holds for the stylized Western firm. Decades of organizational research have told us that even though profit maximization is a central goal, it is not the only goal the firm pursues, and firm behavior cannot be solely explained by an efficiency-driven rationale. Rather, organizational members pursue a set of diverse goals, some of which are not driven by efficiency considerations (Cyert & March, 1963; DiMaggio & Powell, 1983; March & Simon, 1958; Perrow, 1986). The existence of such nonperformance-driven behavior in almost every Western firm certainly has not deterred the M-form hypothesis from being developed in the organizational literature. Therefore, the presence of other goals during China's reforms does not automatically disqualify it from being an area in which the M-form hypothesis can be extended.

Summary

The proposed application of the M-form hypothesis to China's reform process represents a new endeavor to enrich our understanding of the reform process. Given the cross-level and cross-disciplinary nature of such an application, careful justification is warranted. The multilevel nature of the M-form hypothesis, the state as a firm theory, and the performance-driven nature of China's economic reforms combine to make such an application plausible. In essence, I propose to use an "image" (Morgan, 1986) of the organizational transition toward an M-form structure to conceptualize China's reform process. The following sections explore this image further.

THE PREREFORM CHINA: A U-FORM ORGANIZATION

During the prereform stage (1949-1978), China can be easily described in terms of a functional (U-form) structure, headed by the State Council. The State Planning Commission, a staff unit, had the responsibility of formulating national economic plans, which were intended to be implemented by various local units. The local units included functional ministries, such as the Ministries of Aerospace Industry, Light Industry, Foreign Trade, and so forth, as well as state enterprises under their jurisdiction. Provincial and local governments and enterprises attached to them consisted of

another group of local units. Local units had to remit the majority of their revenues to the central government, which redistributed resources (Lee, 1991; Perkins, 1988). In theory, such a centralized, functionally departmentalized structure (U-form) would permit both economies of scale and efficient division of labor, provided that control over the various local units was realized (Williamson, 1975).

Such a U-form structure is expected to work well when the organizational size is small to medium (Chandler, 1962). However, when the organizational size became as large as the Chinese economy was in the late 1970s, such over-concentration of top-down bureaucratic controls proved to be ineffective. Specifically, the center was increasingly unable to control the activities of local units. Because the central planners had highly imperfect information about the capabilities of the local units, a plan had to be negotiated between the center and local units (Naughton, 1990; O'Brien, 1992). To protect their local interests, ministries and provinces tended to ask for more investment funds than they could effectively utilize, presenting an "investment hunger" typically found in planned economies (Kornai, 1980). To make things worse, the central government was unable to commit itself to its own plans and constantly made changes and exceptions. The net result was a lack of accountability at the ministerial and provincial level. Lower level managers would not be punished for lackluster performance, which could always be attributed to the superior's often changing policy (O'Brien, 1992; Walder, 1989). As such, there was little incentive for lower level units to perform well because the state, as the residual owner, would always write off any losses. Therefore, substantial agency problems, such as shirking, were found (Boisot & Child, 1988; Lee, 1991).

In short, the functional U-form structure suffered from control loss problems. Inadequate information-processing capacity at the center and continuous game-playing by the local units resulted in grossly unsatisfactory performance. For instance, Cheung, Archibald, and Faig (1993) reported that the central planning regime was responsible for a 21% decline in total factor productivity in the Chinese cotton-yarn industry during the 50-year period that they examined (1936-1986). Moreover, they found that because of incentive and accountability problems, labor productivity was lower in 1986 than it had been 50 years earlier

in 1936. Consequently, reforms seemed to be inevitable (Shirk, 1993).

REFORMING THE U-FORM: TOWARD AN M-FORM?

Having suggested that the prereform Chinese economy operated like a gigantic and increasingly inefficient U-form organization, it follows that the reforms can be viewed as organizational restructuring aimed at increased performance (Hammer & Champy, 1993; Huber & Glick, 1993). The organizational literature indicates that restructuring is primarily directed at addressing governance deficiencies in corporate hierarchies (Hoskisson & Turk, 1990). Thus the intent of economic reforms in China can similarly be interpreted as aligning governance structures with the country's changed strategy for economic development.

Beginning in December 1978, China's developmental strategy has changed substantially. Switching from a self-sufficiency model, the Chinese adopted a new strategy focused on modernization through an "open door" policy. Such a fundamental change in national strategy, similar to a change in corporate strategy, required changes in organizational structure similar to those described by Chandler (1962) in major U.S. corporations. It also echoes the early writings of Oscar Lange and Friedrich Hayek during the heydays of the "socialist debate" half a century ago. Lange (1936/1937) first argued that the control loss problems in planned economies would make reforms inevitable. Hayek (1945, p. 524) wrote that "the economic problem of society is mainly one of rapid adaptation in the particular circumstances of time and place." He further stated that the market system, in contrast to central planning, is an extraordinary efficient mechanism to achieve adaptation between economic institutions and societal needs.

The reforms initiated in China since 1978 seem to have changed the economy from a U-form structure to an M-form structure, in which the market is playing an increasingly stronger role. Through decentralization, the central government has attempted to maintain a distance from local operations so that it can occupy itself with truly strategic issues significant to national economic development (Perkins, 1988; Reynolds, 1988). More decision-making power is be-

ing gradually shifted to the provinces, which have been awarded quasi-autonomous divisional status as typically found in M-form firms in the West.

A key feature of the M-form hypothesis is that divisionalization minimizes information overload problems at the center. By gradually making each local unit an autonomous profit center, the central government no longer has to oversee detailed operations at the local level (Oksenberg & Tong, 1991; Perkins, 1988; Wong, 1991). Local units no longer have to submit all their revenues to the center; rather, provincial authorities and the center share the revenue according to a predetermined formula, and the rest goes to the provinces. Moreover, the central government now attempts to redistribute resources according to the performance of the provinces.

The most notable beneficiary of the new M-form structure is China's "star" province, Guangdong in the south. As a result of the reforms, Guangdong has changed from a largely rural, underdeveloped area into China's wealthiest province, surpassing such old metropolitan areas as Shanghai. In addition to the three Special Economic Zones in the province and its geographic proximity to Hong Kong, the most important cause behind the rise of Guangdong has been the autonomy the central government has granted to the province (Brudvig, 1993; Vogel, 1989). Albeit still under central guidance, Guangdong now has more autonomy, when compared with other provinces, in setting its own development agenda. The province, long considered the engine of China's economic reforms, now strives to meet a more ambitious goal: to become Asia's "fifth dragon" in exporting behind Hong Kong, Taiwan, Singapore, and Korea by the year 2010 (Brudvig, 1993).

In sum, the M-form structure seems to align properly the interests of the center with those of the local units, and to minimize the information overload problems of the center. Thus it results in a better fit between strategy and structure. As predicted by the M-form hypothesis, organizational restructuring has greatly improved the performance of the Chinese economy during the post-Mao reform period (Overholt, 1993).

STUCK IN A CORRUPTED M-FORM?

Despite the enormously improved performance, it is not surprising that the restructuring of such a large-

size organization to an M-form structure is tenuous. Indeed, the economic reforms in China have encountered numerous problems. The most notable problem for the central government has been a persistent dilemma that "we relax control, and get chaos; we recentralize, and get inertia" (Wu & Reynolds, 1988, p. 462). From an organizational perspective, such a zigzag course of reforms vividly reflects the difficulty of the restructuring process (Hammer & Champy, 1993; Huber & Glick, 1993).

Organizational research suggests that managers typically construct organizations according to their own visions and goals, if they have any (Fligstein, 1985, 1987; Hambrick & Mason, 1984; Westley & Mintzberg, 1989). However, China scholars have found that "the most important characteristic [of China's leaders such as Deng Xiaoping] is simply the lack of an over-arching vision of the reform process or its goal" (Naughton, 1993, p. 510). Indeed, "there is remarkably little in Deng's *Selected Works* (1975-1982) on economic affairs" (Bachman, 1985, p. 156). Perhaps due to such a lack of overall vision, the actual transitions, without a well-articulated strategy to guide the reforms, appear to have drifted into a corrupted M-form. In this process, a number of political and economic factors outlined below prevent an ideal M-form from being established.

Such departures from an ideal M-form structure have been discussed in the organizational literature. Williamson (1975, 1985) argued that, first of all, in an optimal M-form structure, the divisions should be made quasi-autonomous and divisional managers should be held accountable for the performance of the divisions. In China, however, the long tradition of central administrative control makes it difficult to establish such a condition. When provinces are granted a high degree of autonomy, they tend to become unwilling to follow the center's political directives, thus fueling localism at the expense of central power (Chen, 1995; Li & Bachman, 1989; Nee, 1992). For instance, Guangdong often seems more responsive to Hong Kong than to Beijing (Vogel, 1989). In addition, the decentralized revenue-sharing scheme has resulted in less central revenue and greater prosperity for local economies (Oksenberg & Tong, 1991; Wong, 1991). Confronted with massive budget deficits and increased inflationary pressures, the central government has two choices. One is to issue more currency, which will only worsen inflation. The other choice is, by default, to retain the inherited policy instrument of

Table 1
Proportion of Key Resources Allocated by the State in China

	1978	1984	1988
Agricultural products	92.6%	a	35.0%
Manufactured products	97.0%	a	47.0%
Consumer products	83.0%	a	33.0%
Select factor products			
Steel	77.0%	66.0%	46.8%
Timber	85.0%	40.0%	25.9%
Coal	58.9%	50.0%	43.5%
Cement	35.7%	25.0%	13.6%

Sources: Nee (1992, p. 18) and World Bank (1990, p. 61).
a. Data are missing.

central administrative control. The center typically chooses the latter, thereby interfering with local autonomy and undermining the accountability of local units.

Williamson (1985) further maintained that in an optimal M-form, the central office should use its resource allocation power to reward the high-performing units and punish the low-performing ones. In China, however, efficient allocation of resources has always been difficult to exercise. Before the reforms, the government controlled the allocation of the vast majority of resources according to the guidelines in existing plans and imposed price limits on most items (see Table 1). During the reform period, a dual pricing system was implemented (Byrd, 1987). Under this system, price ceilings still govern planned items allocated by the state, but the price of commodities outside the plan can differ from plan prices. After fulfilling required plan quotas, enterprises are allowed to trade freely. Pervasive shortages, as found in all planned economies (Kornai, 1980), have led to an escalation of prices for commodities outside the plan. Thus a high-priced market sector has been existing along with the low-priced state sector, as shown in Table 1.

Given the state's reduced allocative power, producers would like to reduce the government plan quota as much as possible so that they can lucratively trade in the high-priced market (Peng, 1994, 1995b; Peng & Heath, in press). As a result, deciding how many resources that the state should allocate and control has become an unpredictable bargaining process between the center and the provinces and between the provinces and their enterprises. High-performing units do not have confidence that the state will reward them with low-cost resources, because low-performing units may well obtain the low-cost resources because of their better relations with superiors. The result is

that transaction costs are on the rise and opportunism is widespread (Boisot & Child, 1988; Peng & Heath, in press).

In short, the center's reluctance to completely distance itself from local operations and its decreased allocative power make it difficult to adopt an effective M-form structure. Instead, a corrupted M-form has resulted, which leads to blurred lines of accountability and continuous involvement with local affairs by the central authority. Instead of being a result of conscientious design, the current situation seems more like the product of a zigzag process by default.

THE CORRUPTED M-FORM: TWO ILLUSTRATIVE EXAMPLES

Reports on China's problems with the reforms have been abundant. To highlight the zigzagging course of changing the U-form into a somewhat corrupted M-form, two examples are provided here. The first one looks at the changing investment limits that the central government imposes on provincial authorities. The second one illustrates the center-province relationship with regard to who controls foreign investment in a particular industry. Of course, to argue that these two illustrative examples give proof to the extended M-form model advanced here would be farfetched. The purpose in using these examples is to showcase the symptoms of the corrupted M-form structure within the context of China's economic reforms.

Approval Limits of Project Investment: 1978-1992

Tight financial control is the hallmark of any centralized organization (Chandler, 1962; Williamson, 1975). As the organization decentralizes, decision-making power is gradually shifted from the top management to lower levels. Nowhere is such decentralized decision-making power more evident than the lower-level units' ability to undertake increasingly large investment projects by themselves.

Throughout China's three decades of centralized economic planning (1949-1978), Beijing always maintained tight control over the funding of investment projects (Naughton, 1990; Perkins, 1988). During the reforms, such tight central control was greatly loosened. As shown in Table 2, the investment approval limits that must be submitted to the State Planning

Table 2
Approval Limits for Investment in China

Date	State	
	Planning Commission	Provincial Authorities
(1) Before 1984	Over 10 million yuan	Below 10 million yuan
(2) 1984-03/1987	Over 30 million yuan	Below 30 million yuan
(3) 03/1987-01/1990	Over 50 million yuan	Below 50 million yuan
(4) 01/1990-03/1992	Over 30 million yuan	Below 30 million yuan
(5) 03/1992-present ^a	Over 50 million yuan	Below 50 million yuan

Sources: (1), (2), (3), and (4) from World Bank (1990, p. 61); (5) from *Shijie Ribao* (1993).

a. The article was written and revised in 1994-95.

Commission went up substantially from 1984 to 1990, thus giving provincial authorities more decision-making power with regard to project investment (World Bank, 1990). In other words, as the provinces were transformed toward self-contained divisions characteristic of an M-form organization, the center was distancing itself from decisions to invest in smaller projects and concentrating on larger projects.

However, the road for further decentralization in the reform process was blocked by the post-1989 austerity program. Following the crackdown on the prodemocracy movements, the government sensed that curbing inflation, then running at close to 30%, was of paramount importance to appease the general population. As a result, the center regained some control that had previously been delegated to the provinces. For instance, between 1987 and early 1990, provincial governments were granted the authority to approve investment projects of up to 50 million yuan. In January 1990, the State Planning Commission reasserted its control power and required that any project over 30 million yuan be submitted for central approval (see Table 2; World Bank, 1990). In other words, the newly gained autonomy over resource allocation at the provincial level was compromised by the center's politically motivated attempt to reassert control on investment limits to cool the "overheating" economy.

Starting in 1992, investment limits were again raised to 50 million yuan for provincial projects in an effort to boost local initiative. As noted earlier (Wu & Reynolds, 1988), local initiatives once again have brought strong growth since 1992. On the other hand, Beijing has warned about the new overheating and chaos and has attempted to tighten control, again (Chen, 1995). In sum, the center's reluctance to com-

pletely distance itself in local affairs, embodied in the control of investment project limits, illustrates a classical case of the corrupted M-form structure.

The Control of Foreign Investment in the Power-Supply Industry: The Early 1990s

The second example of the corrupted M-form involves the fight for control over foreign investment in the power-supply industry between the central government and provincial authorities. China's unmet demand for electricity is huge. Because of rapid industrial growth, the country must add up to 15,000 MW of capacity annually for the next decade, which is the equivalent of two new conventional nuclear plants a month ("Beijing's Brownout," 1994). Opportunities in China's power-supply industry have attracted a great deal of foreign investment since the beginning of the economic reforms (Peng, 1995a).

Since the early 1990s, a number of provincial governments in China have signed deals with foreign investors to build power plants to meet local power demand. Most foreign investors seek at least 18% return on these investments, given the inherent risk of investing in China. In comparison, U.S. power plant financing, considered very low risk compared with China, obtains an average 10% return. Despite the country's needs for power, Beijing has stepped in since the early 1990s in an effort to reassert central control over this important industry. Specifically, central planners distrust provincial officials who have signed many of the deals with foreign investors, and they want to intervene in some arrangements that are considered to be too generous to foreigners. Believing the 18% return that provincial authorities granted to foreigners to be too high, Beijing considers 12%-15% to be adequate. As a result, central planners want to rearrange some of the deals that provincial authorities previously signed. Such political tug-of-war between the center and provincial authorities over who controls the power-supply industry has put dozens of important power projects on hold and made foreign investors hesitant to commit to further projects ("Beijing's Brownout," 1994).

Again, such conflict between the central government and provincial authorities testifies to the difficulties of China's plight with a corrupted M-form organization, in which the lines between the center and subordinate units are blurred. The result is that foreign capital once earmarked for China may go to

some other places, and the country's energy needs remain unmet.

BEYOND THE M-FORM

Based on the M-form hypothesis, a key proposition in organizational theory, the economic reforms in China have been conceptualized as an organizational restructuring process changing from a U-form to an M-form structure. Moreover, it is argued that given the various political and economic constraints, the current reform process has led to a corrupted M-form, in which the full benefits of an ideal M-form will not be realized.

For China's reformers, the important issue is how to break out of the straitjacket of the corrupted M-form and move beyond the M-form. The organizational literature suggests that only exceptional managers will succeed at implementing strategic changes (Westley & Mintzberg, 1989). It follows, then, that only an exceptionally capable central government can make successful transitions on such a large scale. Such a government would need to have excellent access to operational information at lower levels and dispose of abundant material resources to guide the newly emerging markets. It is unclear, however, why a government so well endowed would need to make the transition in the first place (Naughton, 1990).

Chinese planners, in contrast, have neither sufficient information nor enough resources. Since the reforms have given various local units a taste of autonomy, the amount of opportunistic behavior at the expense of the state is sharply on the rise, thus creating further information asymmetry problems for the center (Boisot & Child, 1988; O'Brien, 1992; Oksenberg & Tong, 1991; Wong, 1991). Moreover, the shrinking state share in resource allocation leads to the state's growing inability to effectively steer the direction of the economy without the inherited policy instrument of crude administrative control, as shown in the two illustrative examples. As such, the prospects for an ideal M-form, which features an efficient internal market of resource allocation operated by the center, seem to be bleak. It is clear that en route to a market economy (presumably ideal M-form), China will go through a tenuous socialist market economy stage characterized by the corrupted M-form structure (Chen, 1995; Lieberthal, 1995).

Although China's prospects of attaining an ideal M-form may not be very promising, more recent de-

bate in the organizational literature suggests that the M-form, even in its ideal condition, may not be the optimal design for an organization (Bartlett & Ghoshal, 1993; Hill et al., 1992; Hoskisson et al., 1993). The principal criticism against the M-form has been its tendency to force organizational members to engage in short-run profit maximization at the expense of long-run efficiency. Bettis (1991) has gone one step further, arguing that the M-form structure may have become increasingly irrelevant in a world of matrix organizations, dense networks, and "virtual corporations." Several alternative organizational models have been advanced, the most promising one being the network model. Compared with large bureaucratic hierarchies, networks are more flexible and responsive to environmental changes (Powell, 1990).

In the case of China, would network-based organizations, such as ones found in the "Wenzhou model," be a better organizational alternative than the M-form model? Nearly two decades of the reforms suggest that no matter how reformed China's state sector has become, its efficiency and competitiveness are still lagging behind those of the collective, private, and foreign-investment sectors (Peng, 1995b; Xiao, 1991). The Wenzhou model, on the other hand, emphasizes dense networks, private entrepreneurship, and local initiative but little central intervention (Liu, 1992; Nee, 1992; Parris, 1993). As such, the M-form model, which represents an organizational innovation originated in the 1920s emphasizing centralized coordination, may need to give way to more enlightened organizational models featuring further decentralization (Bartlett & Ghoshal, 1993). To achieve that in China, however, requires the removal of political barriers, such as the emphasis of state sector, which will take a long time (Bachman, 1992; Shirk, 1993).

CONCLUSION

This article has demonstrated that the organizational literature, when properly applied, can greatly contribute toward our understanding of such a broad and complex process. Bypassing the individual leader-based analysis, which has not yielded sufficient explanation and prediction, the M-form hypothesis provides us with a powerful analytic lens to model the reform process in China. Instead of viewing the reforms as a power struggle among leading elites, the organizational approach enables us to view the reform process from a structural perspective, thus yielding a

set of compelling and consistent explanation and prediction on the course of the economic reforms in China.

Specifically, this analysis shows the current "weak state" nature of China's central authority, which is inherently stuck in a bargaining system characterized by a corrupted M-form. In such a system, the center repeatedly bargains with various local units over the allocation and distribution of resources (Chen, 1995). Given the fall of the center's bargaining power and the rise of export-oriented coastal economies, such as Guangdong, many China scholars believe that the center will not be able to do much to the economy in the future (Bachman, 1992; Chen, 1995; Naughton, 1990; Wong, 1991). In other words, whether Deng dies or not, the corrupted M-form structure evolved over the past two decades will continue to take on a life of its own, resulting in further decentralization at one time and more intervention from the center at other times. As such, the center's repeated efforts to reassert itself over the control of resources will meet increasing resistance from local units.

The implications for Western politicians and executives are profound. When dealing with the Chinese, they not only need to cultivate relationships with bureaucrats in Beijing but also need to recognize the growing power at the provincial level and below (Harwitt, 1995; Peng, 1995a). Moreover, deals signed with provincial authorities, even large-scale projects, should not be considered as final, because "the bigger the project, the bigger the target for various people [in the central government] in China who can kill a deal" ("Beijing's Brownout," 1994, p. 44).

For organizational scholars, this paper suggests that the rich organizational literature, originally developed to portray firm behavior in the West, can be brought into the analysis of broader issues, such as the state-level transitions in a different setting. Moreover, by extending itself to a new arena, organizational theory contributes to the field of China studies by providing a strong set of theoretical underpinning, thus partially answering the criticism for the field's lack of theory-driven research (Goldstein, 1990; Harding, 1984; Pye, 1992).

There are numerous opportunities for further interdisciplinary research in this area. In the case of the M-form hypothesis, future work can help identify whether the M-form organization into which the Chinese economy is evolving is a cooperative or competitive one (Hill et al., 1992; Hoskisson et al., 1993). In addition to focusing on the center-local relationship,

future research should also identify the dynamics within a given province or region and explore the reactions and strategies that different regional players have in their dealings with the center and with each other (Nee, 1992). Potential exists for other concepts and models developed in the organizational literature to be used to analyze the reform process in China as well (Moe, 1991). In line with recent advances in research on network forms and virtual organizations (Powell, 1990), more application of network theory seems to be a promising direction, because formerly planned economies such as China are well known for their extensive use of networks in stabilizing economic transactions (Peng, 1994, 1995b; Peng & Heath, in press).

Moreover, as Halal (1994, p. 69) noted, "many of the world's business corporations are going through their own form of perestroika," much like the nation-states of formerly planned economies such as China. Therefore, the Chinese experience of attempting the largest scale organizational transitions can also help shed light on the corporate restructuring movement in the business world. The primary lesson seems to be to avoid the emergence of a corrupted M-form in the restructuring process. Instead of constantly intervening with operational decisions, top executives should create an organizational infrastructure that rewards value-creating behavior, and foster autonomy of lower level units that operate within the enlightened infrastructure.

Although the organizational approach is appealing, it is important to caution that organizational theory should be used to supplement, not to replace, the traditional approaches employed by China scholars with political science and economics backgrounds. Individual leaders clearly play an important role in shaping organizational strategy and structure (Fligstein, 1985, 1987; Hambrick & Mason, 1984; Westley & Mintzberg, 1989). What this paper has argued is that focusing only on the power struggles between leading elites in China will not carry us very far in analyzing the reform process; organizational factors and structural imperatives should also enter the picture. Perhaps only through such a unified effort by social scientists from multiple disciplines can we gain a proper understanding of such complex issues as the economic reforms in China.

NOTES

1. China now has the world's third largest economy behind the United States and Japan. If China's impressive

economic growth continues, averaging 9% since 1979, it might overtake the United States and become the world's largest economic power within a generation, according to such influential popular sources as "China" (1993) and "Cracking the China Market" (1993). For scholarly analysis, consult Conable and Lampton (1992/1993), Kennedy (1987), Lardy (1994), and Overholt (1993).

2. For example, *China Quarterly*, the premier journal in the field of China studies, devoted an entire issue (September, 1993) to "Deng Xiaoping: An Assessment." Indeed, if media reports are to be believed, Deng has already been pronounced dead over 300 times (Wang, 1994).

3. See Williamson (1991, pp. 176-183) for his critique on socialist economic organization.

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