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PLANNING AND FINANCE
IN CHINA'S ECONOMIC REFORMS

Thomas P. Lyons
and
WANG Yan

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Preface

Extracting a coherent description of the economic reforms from the flood of materials now pouring out of China is in itself a difficult task. Significant but undramatic developments are easily lost in the noise surrounding bold experiments, many of which will undoubtedly fade away before effecting permanent changes. It is not surprising that few observers have ventured beyond description to systematic analysis and interpretation. In the papers brought together in this volume, we are concerned primarily with suggesting analytical approaches that may prove helpful in sorting through a massive body of evidence and in understanding the planning and financial reforms of 1984-87.

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Introduction

Studies of socialist economic reform generally take one or the other of two analytical approaches. In a typical study taking the first approach, corrective measures intended to address certain deficiencies of existing economic institutions precipitate a cycle of systemic changes. As the cycle unfolds, unanticipated consequences elicit new corrections, which may reverse, redirect, or reaffirm earlier measures. A collection of cycles may occur simultaneously in different parts of the economic system and in different spheres of economic activity. In some cases, the overall reform episode seems to evolve more or less as a random walk; in other cases, a general direction becomes evident (when, for example, the reform episode is deemed "market-oriented"). Discussions taking this approach do not appeal to a determinate target system, or "model", in interpreting the reform process.

In the second approach, socialist economic reforms are viewed as attempts to engineer transitions from existing systems to target systems that are conceptualized in some detail by the reformers themselves. The reform process is then a sort of map-making exercise. The reformers know roughly where they are and where they want to go; they attempt to understand the terrain in between, to chart a transition path, and to move along it -- perhaps with detours and course corrections enroute as the terrain becomes clearer to them and as their destination itself is identified more precisely.

Nearly all studies of reform in post-Mao China have taken the first approach -- and with good reason. Although some Chinese reformers called for clear conceptualization of a target system, the reform was undertaken long before any such target was officially endorsed. In the cities, many uncoordinated measures were implemented during 1979-83, and some yielded notable results; however, they did not initiate a dynamic comparable to the one that carried rural China back to family farming. Urban reform posed immediate threats not only to bureaucrats but also to managers and workers forced to

accept unfamiliar responsibilities and to face greater risks. Then too, the early ad hoc measures created some unintended obstacles to further reform. In any case, China's reformers soon became disillusioned with the scattershot approach and stepped up their efforts to specify both a target system and an overall reform program. These efforts yielded a "new economic model", the structure of which is examined in the first paper of this volume. If in fact the model is guiding urban reform, the latter may be viewed as an attempted transition from the inherited system to a new one (roughly identified in 1984 and subsequently elaborated in greater detail). Hence, an analytical approach of little relevance at the height of the rural reform may prove more useful in understanding the current transformation of urban economic institutions.

The new economic model is built upon a redefinition of the relationship between government departments and individual agents. This redefinition has been cast largely in terms of financial autonomy. Unsurprisingly, financial aspects of the target system have become increasingly important in the Chinese literature -- and numerous innovations in the financial sphere are now being implemented. The second paper in this volume identifies and summarizes these innovations, attempts to characterize the major strands of financial reform, and provides an interpretation of their significance in the transition to a more market-oriented system.

Mandatory Planning and Guidance in the New Economic Model

Thomas P. Lyons

The remarkable cycle of reforms that swept rural China during the late 1970's and early 1980's was initiated by rather modest corrective measures and proceeded without benefit of a master plan. To the extent that any clear conceptualization of the new rural institutional framework eventually emerged, it was more an extrapolation from events already unfolding than a factor in determining the course of those events. Over the past several years, the nature of the reform process in urban China appears to have diverged from that in the countryside. As noted in the Introduction, the scattershot, or "partial," approach of 1979-83 fell into disrepute. By 1984, China's reformers were referring to a "new economic model" and were beginning to view the overall reform effort as a purposeful transition from¹ the inherited system to one consistent with their new model.¹

Examination of China's new economic model -- if indeed one has emerged -- would clearly contribute to an understanding of the reform process. The Central Committee's landmark "Decision on Economic Reform" (October 1984) was widely described as a blueprint for urban reform. But the "Decision" provides, at best, only a broad characterization of the new model and a description in general terms of some key components (Zhonggong zhongyang 1984). The characterization in the "Decision" represents a compromise among competing visions of China's economic future; in particular, it renounces both the requirement that mandatory planning remain the primary means of coordination and control and the suggestion that free markets should replace planning (Zhonggong zhongyang 1984, I-5). While the "Decision" may reflect a firm central commitment to reform and an endorsement of an emerging model, it is not in itself a clear statement of that model. In fact, no subsequent central document has specified the contours of China's post-reform system with any degree of precision. Unsurprisingly, outside interpretations of China's urban reform effort typically proceed without substantive appeal to an underlying model; the urban reform -- like the rural -- is treated as a collection of more or less independent measures devoid of any

prescribed target or overall design.

This paper attempts to confirm the existence of a coherent model sufficiently well-defined -- and widely accepted -- to be relevant in designing and prosecuting urban reform and, therefore, in understanding the overall reform process. Sections I and II reconstruct in some detail that portion of the new model bearing directly upon economic planning, and also provide some indication of the areas in which general consensus has not been reached. Section III steps outside the confines of Chinese interpretations, inquiring as to whether or not the current compromise solution might sustain reasonably efficient resource allocations; in other words, Section III turns from the central question of existence to that of workability. The entire paper, then, focuses not upon the reform itself but upon its intended target.

As suggested earlier, the 1984 "Decision" committed the Central Committee only to a broad target zone and hence to a general direction of systemic change. The "Decision," however, was accompanied by a large body of popular and technical literature that tentatively identifies a much smaller neighborhood of specific target systems. Assembling components salvaged from a number of works by different writers is, of course, a risky business, because the resulting composite may yield an exaggerated sense of logic and coherence and of agreement on fundamentals. In this case, however, such a synthesis is clearly implied by publication of several collections explicitly presented as descriptions and analyses of the new model or as elaborations of the "socialism with Chinese characteristics" endorsed in the "Decision" itself.

I. Means of Coordination and Control

The cornerstone of China's new economic model is a separation of the functions and responsibilities of various government departments -- at the national, provincial, and local levels -- from those of individual agents. In a clear departure from their pre-reform status as "pawns on a chessboard" and as "appendages" of government, agents are now to take primary responsibility for planning their own activities (Zhonggong zhongyang 1984, I-7; Ruan 1984, 135; Sun Xiaoliang 1984, 31-37). The problems of coordination and control (that is, of making the operational plans for different agents mutually consistent and of orienting them toward the state's goals) must be addressed in ways that accommodate dispersion of authority and that recognize agents' differing motivations. This section identifies the key pieces of the new model, beginning with the notion of autonomy for individual agents and proceeding to the various means of coordination and control. The two following sections then

assemble these pieces, so as to permit interpretation of the entire planning system at the heart of the new model.

Enterprise autonomy. While the separation of government from operational decision-making affects all households and enterprises in China, the change is most significant for state-owned enterprises and large urban collectives. In the earlier period of urban reform (roughly 1979-82), enterprise "autonomy" was closely identified with profit retention and, more generally, with the financial relationship between enterprise and state (Lee 1986, 49). The 1984 "Decision" and the subsequent civil law reflect a rethinking of the notion of autonomy: the enterprise is to become an independent legal entity endowed with specific rights and responsibilities, able to enter into contracts and to seek redress, and entitled to a measure of protection against encroachment by government departments, (Zhonggong zhongyang 1984, I-4; Zhonghua renmin 1986a, 2). The delineation of enterprise rights is most clearcut in the spheres of production, procurement, and marketing (Yu 1985, 72-74; Zeng 1984, 95). The enterprise is to choose a bundle of outputs and current inputs; arrange supplies through contract negotiations and open purchases; market its products; make specific internal arrangements for deployment of its labor force and fixed assets in the production process; and, within limits, decide upon prices for its products and compensation for its employees. In certain other spheres,⁴ delineation of enterprise authority remains problematical.⁴ For example, the "Decision" provides that enterprises should be capable of transforming and developing themselves (Zhonggong zhongyang 1984, I-4). The intent of this provision is apparently to permit ample scope for maintenance of existing plant and exploitation of "latent capacity" through enterprise initiatives -- while precluding large new investments in fixed assets without governmental approval. But in practice, no clear line of demarcation has been identified to separate investment-related decisions of a routine nature from those of sufficient importance to be reserved to the state; the practical distinction between renovation and construction is very murky, and many projects are assigned to one category (or to both) more or less arbitrarily (Li Desui 1984, 32; Zeng 1984, 94).

With the delineation of specific rights, the financial relationship between enterprise and state is no longer the defining feature of autonomy; rather, it has become a means of prodding the enterprise into exercising its new operational authority. Individual renumeration, collective benefits, and the discretionary funds available to management are to be closely linked with enterprise performance (Zhuang 1984). Direct lateral relationships among enterprises -- a conspicuous sphere of experimentation during the earlier reform period-- also take on a new coherence and significance. Whereas profit

retention provides the motive for autonomous and enterprising behavior, freedom to initiate transactions and the existence of mechanisms by which to do so provide the opportunity. The state's material-supply monopoly does survive for certain items, but in most instances the new system is supposed to present agents with competing channels through which they can freely procure inputs and market outputs (Zhang and Li 1984, 122-23). The idea of "open circulation" carries over from commodity markets to other areas, including finance, employment, and information. The new model admits capital markets, to permit reallocation and pooling of the retained funds dispersed among enterprises (Wu 1984, 51; Zhao 1984, 190-96). It admits some degree of labor mobility, through open recruitment and through employment by contract rather than by state assignment with lifetime tenure (Guowu yuan 1986a; Guowu yuan 1986b). And it admits sale of informational services, such as market surveys and forecasts, technical research and development, and management consulting (Zeng 1984, 90; Yu 1984, 5).

Chinese analysts recognize that, in this new environment, agents use a wide variety of signals to identify the courses of action available to them and to evaluate expected payoffs. The current notion of autonomy does not preclude issuance of mandatory directives by government departments -- that is, the use of signals constraining the range of alternative courses of action that specific agents may legally consider. Indeed, some use of "administrative methods", including mandatory planning, remains "essential" (Gui 1984, 40). Recent elaborations of the new model, however, clearly indicate that mandatory directives are to be of secondary importance, with coordination and control effected primarily through signals influencing agents' perceptions of the various net payoffs associated with each course of action and the probabilities of particular payoffs being realized. Needless to say, within this general prescription, commentators do differ on the appropriate extent of government intervention and the specific mix of instruments to be used.

Mandatory planning. The "Decision" prescribes mandatory plans for "major economic activities that affect the overall situations and for those important products affecting the national economy and the people's livelihood that need to be allocated by the state" (Zhonggong zhongyang 1984, I-5). The need for allocation by the state follows in turn from, among other factors, the persistence of shortages and the inadmissibility of markets for certain goods (Zhongyang renmin 1985, 83-84).

Major activities subject to mandatory planning include those serving national defense, maintenance of strategic reserves, and the conduct of China's foreign economic policy,

as well as large investment projects (Zeng 1984, 100). The planning of major activities may require mandatory planning of some inputs, especially to the construction industry. Project approval carries a commitment to ensure supplies of important materials and equipment to contractors -- and perhaps of other goods and services that enter major activities only indirectly, through the demand of contractors' suppliers (Tao 1984, 203-204). In addition, mandatory planning is to cover certain fuels, raw and processed materials, and machines. Planning of consumer goods, although explicitly admitted in the "Decision," is reserved for essentials in persistent short supply. In a normal year, then, mandatory planning covers a small portion of urban economic activity and a small share of industrial output -- 20-30 percent of gross value, mostly in two or three dozen classes of producer goods (Klenner and Wiesegart 1985, 25; Balassa 1986, 14; Wang Guiwu 1984, 217).

From the point of view of the typical urban enterprise, the entire plan will imply at most a small number of mandatory directives. Most county-level plants will receive no directives at all (Tao 1984, 207) Only in an exceptional case -- a key enterprise engaged primarily in activities affecting the overall situation or in production of important commodities -- does the plan yield an array of directives narrowly circumscribing operational decisions. Even then, fulfillment of mandatory directives is not to account for all available capacity (Zhongyang renmin 1985, 84).

The deemphasis of administrative means is reflected in the content of individual directives as well as in the overall scope of mandatory planning. First, constraints should be imposed upon aggregates rather than their components; an enterprise might be given a steel target specifying its minimum total output (in tons) with no mandatory requirements as to product mix (Liu 1984, 15). Some writers prefer aggregate targets in value terms over those in physical units (Wang Zhuo 1984, 161-62). Second, mandatory planning will not generally involve designation of specific transactions. Agents with production or sales targets can be left to find their own customers; in particular, a state purchase order need not accompany a production target. Conversely, portions of the plan can be implemented partly through state purchases, without requiring issuance of directives to producers themselves (Wang Zhuo 1984, 180-81; Liao 1984, 46).

While most commentators accept that planners issuing mandatory directives must provide the "necessary conditions" for their fulfillment, the implications of this responsibility are no longer transparent (Jiang 1984, 132, 143). In the old system, enterprises could not fulfill output targets unless they were allocated inputs. In the new model, a typical enterprise may receive output targets that are not actually binding or that require only marginal changes in the output

bundle it would otherwise choose in pursuit of its own interests. Furthermore, the enterprise has opportunities to acquire inputs outside the state's material-supply system. In some cases, then, the planners' responsibility may be discharged simply by ensuring adequate total supplies of essential inputs, without arrangements for delivery to those enterprises receiving output targets. In other cases, enterprises receiving targets might be granted priority in purchasing inputs (Tao 1984, 207).

Free markets. While one portion of the economy remains subject to mandatory planning, another portion is explicitly reserved to "spontaneous regulation" -- that is, to coordination without mandatory planning or governmental guidance (via, e.g., price controls). Spontaneous regulation includes a variety of market structures ranging from bilateral monopoly to near-perfect competition, as well as any non-market means of allocation exercised outside the government's economic bureaucracy.

The bounds of spontaneous regulation are to be specified by the state, primarily by enumerating commodities that may be freely produced and exchanged. According to the "Decision," production and exchange completely regulated by the market occur mainly in some farm and sideline products, in small manufactured consumer goods, and in service and repair trades (Zhonggong zhongyang 1984, I-5). The list of specific commodities is likely to include those that are highly perishable, are traded in localized markets, are quickly and easily produced, or that have little bearing upon China's overall economic performance and development (Ma 1984, 212; Gui 1984, 41). Within industry, spontaneous regulation is intended to account for 20-30 percent of output, by gross value (Klenner and Wiesegart 1985, 25).

In general, any agent may engage in production and sale of items reserved to spontaneous regulation. Many enterprises, especially individual and cooperative businesses, will be engaged solely in such activities; others, such as state enterprises subject to mandatory planning, may occasionally allocate a portion of their capacity to production of profitable free-market items.

The "Decision" and the accompanying commentaries leave little doubt that spontaneous regulation is viewed as inferior to state guidance, especially for coordination of agents' plans beyond the very short term. Admittedly, freedom of entry and price flexibility would make production highly responsive to consumer demand; however, "anarchic" market conditions and unethical competitive practices are also anticipated, and spontaneous regulation is believed conducive to faulty investment decisions. In fact, some of these suspicions are well-founded, because competition in some markets will be

highly imperfect and because free-market prices will be distorted by price-fixing elsewhere in the economy

Some writers point out means of indirect control over spontaneous activities (You 1984, 173) Shortages of essential inputs (outside the state's material supply system) may serve to squelch some activities that are nominally beyond state guidance, and some attempts to enter the free-market sector may run up against controls over investments More generally, the state can influence the scope and vitality of the sector by manipulating the attractiveness of self-employment through welfare provisions and tax codesn

Guidance planning The largest portion of the urban economy (in terms of output) is to be subject to guidance planning, in which the state attempts to influence the expected financial payoffs perceived by agents and hence to guide their business decisions Guidance planning covers commodities and activities that are neither crucially important to the national economy nor sufficiently insignificant to merit the hands-off approach of spontaneous regulation In addition, for each commodity subject to mandatory planning, guidance planning covers that portion of total output to which no mandatory directives apply. In terms of agents, guidance planning affects virtually the entire economy, directly in most cases and indirectly, via spillover effects, in the cases of agents engaged solely in free-market activitie

The guidance plan itself (i.e., the array of signals purposefully generated by the state, exclusive of mandatory directives) has both indicative and manipulative dimensions. The indicative dimension includes non-mandatory targets, forecasts, and announcements of government priorities and strategies (Tao 1984, 206). The stated intent of these signals is to permit informed decision-making by agents, in the belief that plans inimical to the state's interests frequently result from lack of information rather than from genuine "contradictions" between individual agents and the state (Sun Xiaoliang 1984, 37) The manipulative dimension involves active control of "economic levers" ranging from blunt instruments of macro policy to instruments that can be targeted at specific agents or commodities (Zhonggong zhongyang 1984, I-5; Yu 1985, 152-84). Adequate control requires manipulating a coordinated set of levers, so as to create a "transmission belt" linking the overall development plan of the state with the operational plans of numerous agents (Sun Xiaoliang 1984, 37, 39).

Price controls are the most important levers in guidance planning (Zuo 1984, 61) The prices of all goods and services, except those on the free-market list, are subject to state control A few prices for some of the key fuels, materials, and types of equipment under mandatory planning and for some

services -- are to be pegged; the rest are to be bounded by floors or ceilings (or both) (Yu 1985, 159-68)n For an item having a fixed in-plan price, above-quota output may typically be sold at any price within a specified band (e.gn, between 80 and 120 percent of the fixed price)n

The other principal types of economic levers include tax schedules and the terms of credit. Some of these levers (e.gn, commodity taxes) are closely related to price controls, in that they directly affect the current prices actually received or paid by individual agents. Indeed, manipulation of the tax code is viewed as a means of compensating for irrationalities in the price structure (Kong 1984, 75; Zhongyang renmin 1985, 101). Tax and credit levers also serve other purposes--notably in the sphere of entry and exit decisions, through their effects upon fixed costs.

Most Chinese commentators interpret guidance as an integration of traditional planning and the market. The need for a system that integrates these two mechanisms -- as opposed to accommodating them side by side -- is deduced from the demonstrated strengths and weaknesses of each and the complementarities between them (Liao 1984, 41-46; Yu 1985, 140-44). Planning is thought to be superior in maintaining aggregate balance and in serving the interests of the entire society; the market is superior in resolving problems of detail, such as product variety and quality, and in promoting efficiency through competition and the test of direct judgment by consumers (Zhonggong zhongyang 1984, I-4 and I-7). In the new system, agents receive both information concerning governmental objectives and the overall state of the economy (through planning) and information concerning the demand and supply conditions of immediate importance to them (through participation in markets) (Wang Renzhi 1984, 22). Chinese interpretations of guidance planning also suggest a conscious trade-off between informational efficiency and precision. Administrative methods are desirable because they permit direct control of some target variables, but the high cost of administrative methods limits their scope. Economic levers are more potent in terms of the response to a given allocation of resources to regulatory effort, but the impact of regulation through economic levers cannot be accurately predicted (e.g.n because relevant elasticities are not known). Some combination of mandatory and guidance planning maximizes the return to investment in regulatory capacity.

On a more practical plane, the remarks of Chinese bureaucrats reveal widespread confusion concerning the nature of guidance planning. In some cases, "guidance planning" is thought of as local planning (distinct from planning by the central government), even though the local plans may be mandatory when sent down to agents. In other cases, "guidance planning" refers to mandatory output targets not accompanied by

input allocations or simply to various sorts of flexibility not permitted in the old system (Naughton 1986, 13-14)n

IIn The Planning Process

The basic mission of the state's economic bureaucracy remains unchangedn Constrained by the general goals and priorities of the leadership and by any specific conditions handed down to it, the bureaucracy is supposed to produce a development program extending over a number of years and to ensure, during each year, that the pattern of economic activity is consistent with this program. In the old system, the bureaucracy pursued this mission in a straightforward manner, building up the pattern of activity bit by bit through direct control over individual agents and transactionsn Ironically, this attention to detail is said to have precluded adequate consideration of the overall development programn so that the various components of state control were not integrated into a coherent whole serving the general goals of the leadership (Tao 1984, 199) In the new model, planners need not address matters that can be handled adequately by agents themselves and can therefore devote more attention to maintaining "overall balance,n to overseeing major projects -- andn in general, to matters beyond the horizons of individual agents (Liu 1980, 241, 246)

Procedures. Such features of China's new economic model as enterprise autonomy and guidance planning would seem likely to have significant implications for planning procedures -- that is, for the sequences of activities through which goals handed down by the political leadership are translated into an array of signals intended for delivery to agents. Surprisingly, Chinese discussions provide little information about procedures. This may reflect a presumption that fundamental procedural changes are not needed to accommodate other features of the new model or a belief that resolution of other issues (including those of bureaucratic structuresn discussed below) is prerequisite to elaboration of specific proceduresn In any case, commentators who explicitly consider procedural matters generally do not venture beyond brief descriptions of certain key stagese

In line with the "Decisionn" virtually all commentators agree that the bureaucracy should devote much of its effort to "strategic" planning -- to formulation of longn and medium-term development programs centered upon the growth and distribution of national income (Zhonggong zhongyang 1984, I-5; Wu 1984, 50). Goals handed down by the leadership constrain strategic planning by, for example, specifying minimum growth rates for certain components of national income or requiring a certain redistribution of income among regionsn One objective of this

stage is to detect potential bottlenecks and imbalances between demand and productive capacity, providing a basis for planners' efforts to direct the allocation of investment and to compile a list of key construction projects (Sun Xiaoliang 1984, 38; Liao 1984, 44; Zeng 1984, 96).

In the second stage, annual targets are extracted from strategic plans, and targets for the current year are incorporated into a set of preliminary balances. The most important targets pertain to the allocation of anticipated national income among components of consumption and investment and to the growth of capacity and output for regions' industries, and key commodity groups. In the old system, balances were struck primarily in terms of physical units rather than values, and they emphasized planned transfers rather than the total quantities produced and consumed nationwide. In the new system, transfer balances in physical units may remain important for a portion of the urban economy and especially for key fuels and materials; however, these are to be embedded in larger "social" balances struck mainly in value terms and pertaining to total supply and demand (Wu 1984n 45; Liu 1984, 13; Wang Zhuo 1984, 177-80). Such social balancing permits "using the law of value even in mandatory planning, so as to make mandatory directives as consistent as possible with the perceived economic interests of agents receiving them" (Zhonggong zhongyang 1984, I-5; Zhongyang renmin 1985, 54-55). Other important balances include those pertaining to budgetary revenues and expenditures, credit, and international payments (Zheng 1984b, 189; Wang Zhuo 1984n 167). "Scientific" balancing is to reflect careful attention to objective constraints, make use of econometric models and input-output tables (now in preparation) and acquire information in a more systematic and timely fashion (Liu 1984n 13; Yu 1985, 304; Naughton 1983, 16-17).

Also in the second stage, new key projects are assigned to specialized offices for planning and for contracting to construction companies (Sun Xiaoliang 1984, 38). The remainder of the investment program is written into guidelines and quotas for specialized commercial banks and their local branches, in order to control the flow of loanable funds.

The third stage entails design of "concrete policies and measures" intended to bring the pattern of activity during the current period into conformity with the relevant targets (Zhou 1982, 112). Some of the variables entering balances as targets -- such as expenditures related to key projects -- may be subject to direct control by government departments. Most macro targets, however, can be pursued only indirectly, through mandatory directives, adjustments to the free-market list, and various forms of guidance (Zeng 1984, 97). The central tasks of the third stage, then, are rational selection of concrete measures from among those available and the

coordination of measures selected by different planning offices¹⁰ (and by other government departments).

The routine for mandatory planning is likely to remain basically similar to that of the pre-reform system, with planners issuing preliminary targets to agents, receiving counterproposals from agents, and negotiating a set of legally binding directives at central and municipal planning conferences. A portion of the mandatory plan for any current year can be carried over with minor revisions from the previous year (Wu 1984, 48). A second portion pertains to new projects and to any newly operational plants producing major commodities. The remainder of the plan accommodates proposals initiated by agents (Wu 1984, 48; Naughton 1986, 12). An agent might request to be incorporated in mandatory plans in order to engage in an activity that is reserved to government decision-making or to secure fuels, materials, or transportation via direct allocations or priority in purchasing.

Guidance planning and revision of the free-market list are undertaken on a rolling basis and are only loosely tied to the fixed horizons of overall balancing. Finalization of a mandatory plan, however, is likely to require a round of adjustments to the price controls, tax rates, and other guidance measures then in effect. These adjustments may be needed to provide economic incentives for fulfillment of mandatory targets, to correct disequilibria (within existing price controls) caused by imposition of new quantity constraints, and to address any adverse effects upon government budgets. Each round of guidance planning proceeds according to an established routine analogous to that already developed for traditional mandatory planning (Tao 1984, 206-07). Government departments first produce and disseminate short-term forecasts of total demand for various commodities. After the functions to be served by each economic lever are decided upon, the responsible departments propose specific measures to the planning commissions for review and approval. Price controls and other forms of active guidance are then supposed to be implemented in an "orderly and timely" manner (Sun Xuewen 1984, 65). These, together with the forecasts already disseminated, constitute the bulk of the guidance plan. Agents then formulate their own operational plans and enter into contracts; state planners monitor price movements and inventory changes and update their social balances in preparation for a new round of adjustments to guidance measures (Liao 1984, 45).

Although administered prices play a crucial role in the new system, the rules governing their formation are not clear. Rational prices are not identified with general equilibrium (Ma 1984, 212-18). Theoretical values (derived from estimates of average costs) are supposed to provide the basis for price management with other factors such as state policies and market conditions, taken into consideration (Tian 1984, 70).

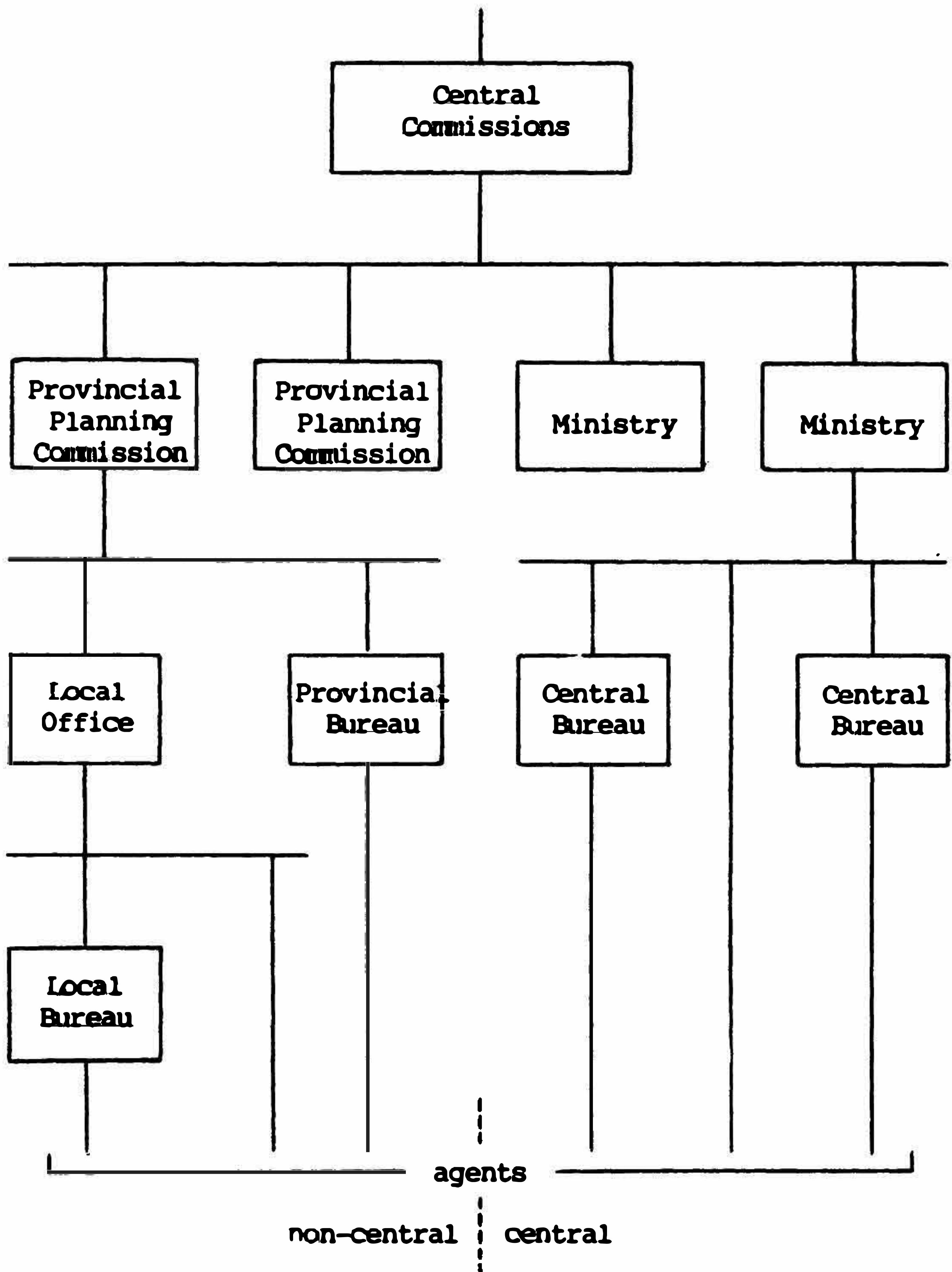
On the other hand, prices are supposed to respond fairly sensitively to changes in supply and demand (Zhonggong zhongyang 1984, I-6).

The last stages of planning work involve, first, enforcement of mandatory directives and price limits and; second, synthesis of agents' operational plans. Government departments charged with oversight, inspection, and auditing of enterprises; the remnants of the material supply system and especially, financial institutions all play important roles in enforcement. Potential sanctions range from prosecution under "economic law" to forced closure and other forms of direct intervention (Sun Xuewen 1984, 63-64 and 66). Synthesis of agents' operational plans is necessary because the state plan itself no longer describes the pattern of activity in any detail. The set of mandatory directives covers only a small portion of the overall pattern -- and, even within this portion, agents are largely responsible for coordinating with one another the details of their operational plans. Outside the sphere of mandatory planning, the state plan does not generally prescribe activities, and agents' decisions cannot be narrowly predicted. Hence, in the new model planners obtain the economy's "annual production plan" by aggregation "from the bottom up" rather than by prescription and disaggregation (Zhongyang renmin 1985, 88; Wu 1984, 46).

Organizational structure. The hierarchy at the core of the old planning system was extremely large, as measured by numbers of tiers, branches, and individual offices.¹¹ (See Figure 1.) Near the top of the hierarchy, four or five dozen ministries and provincial planning commissions were directly subordinate to the central commissions. And even at the local level, as many as three tiers of planning offices separated enterprises from municipal planning commissions (Zheng and Zeng 1984, 98-99). Over the years, this hierarchy accumulated an overlay of supervisory and consultative relationships cutting across branches and tiers, diffusing responsibility, and obscuring chains of command. Due to the size and complexity of the entire organization, the commissions at various levels could not properly oversee the activities of planning offices subordinate to them; furthermore, agents whose operational plans should have been closely coordinated were widely dispersed among planning offices (Zheng and Zeng 1984, 98). Unsurprisingly, many writers call for a streamlining of the planning organization or, in other words, for overall "simplification and consolidation" (Zheng 1984b, 191-93).

One of the few structural prescriptions in the "Decision" itself pertains to the distribution of responsibilities among tiers. Along with the center, the larger municipalities are to play key roles in planning, implying a reduction in the importance of other levels as compared to the pre-reform system (Zhonggong zhongyang 1984, I-7). Counties will be brought

Figure 1
Structure of Pre-Reform Planning

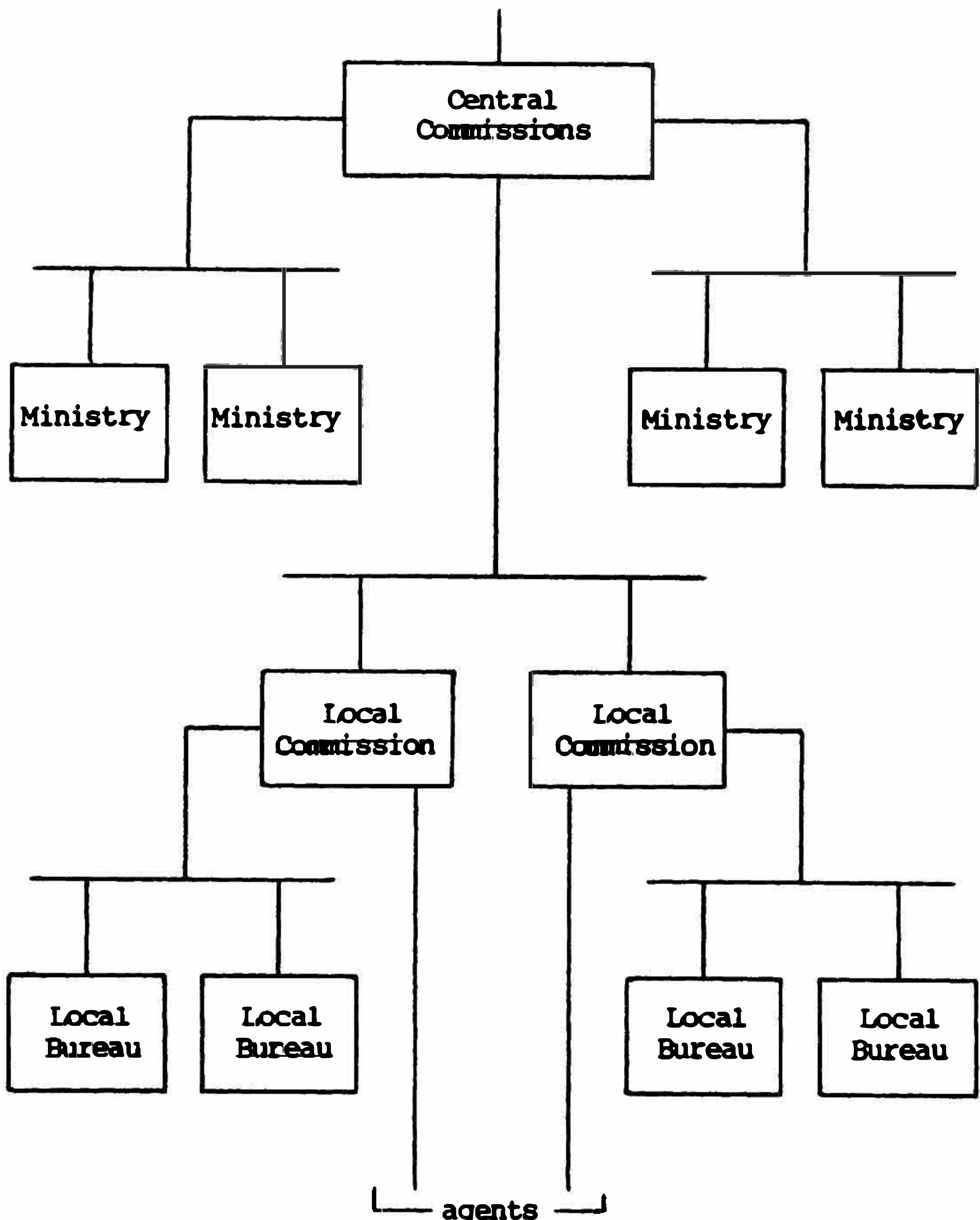


under municipal planning, by incorporating them into the municipalities themselves or into newly formed economic zones centered on municipalities (Yu 1985, 111-12, 114, 121); Provinces are to cede planning authority, partly through elevation of some municipalities to provincial-level status for planning purposes (Li Mengbai 1984, 268; Zheng 1984a, 70); Mandatory planning is to be more centralized than in the past, with lower-level planners having limited power to expand upon the sets of directives sent down to them from the center (Zhongyang renmin 1985, 54; Zeng 1984, 105-06). Guidance planning, however, is to be parcelled out among levels, with the municipalities having considerable power in such spheres as pricing (Zhongyang renmin 1985, 47, 89). Similarly, the power to veto investment projects is apparently to remain dispersed among levels (He Jianzhang 1984, 51).

Proposals for city-based planning zones address the relationship between planners at the national level and those at lower levels of government. A second set of structural prescriptions concerns the relationships between commissions and "specialized" planning offices at each level. (The specialized offices are national ministries and lower-level bureaus, with responsibilities defined along branch lines.) Although each ministry in the old system engaged in a variety of activities, most of its efforts were aimed at formulating and implementing plans for those agents directly subordinate to it. Due to the wide dispersion of agents among planning offices, the ministry for a particular industry typically did not control all of the agents in that industry; hence, they were not subject to a unified plan. In the new model, each ministry formulates an industry-wide plan rather than focusing primarily upon a particular subset of agents (Wang Zhuo 1984, 181-82; Zeng 1984, 104-05). More importantly, from their own positions in the vertical lines of authority, ministries are moved to "staff" or advisory positions and are no longer interposed between commissions and agents, except in special cases. As shown in Figure 2, the commissions "lead" the ministries, coordinating their industry-specific efforts and integrating the components of the plan into a coherent whole (Zeng 1984, 106; Liu 1980, 331). Structural changes at each lower level mirror those at the center. As a result of such changes, ministerial branches bypassing the municipal commissions are greatly reduced in number and importance. The municipal commissions will now attempt to issue integrated sets of mandatory and guidance plans -- including components handed down from higher levels and components generated locally (Zheng and Zeng 1984, 103; Li Mengbai 1984, 268-69).

In addition to the relationships between levels and between commissions and specialized offices in the new system, the outlines of several other structural features are evident in the "Decision" and the surrounding discussion. First,

Figure 2
Proposed Structure of Post-Reform Planning



financial institutions assume much more prominent roles than in the past, reflecting the new emphasis upon control of funds (rather than direct control over materials) and the attendant pruning of the state supply system. The People's Bank becomes a central bank, responsible for implementing cash and credit plans and for overseeing the specialized commercial banks (Zhao 1984, 186-88). Second, a realignment of the fiscal system permits different levels of government to share directly in the revenues originating in any particular source (He Zhenyi 1984, 100). An enterprise -- regardless of ownership -- pays taxes both to the municipality in which it is located and registered and to the central government.¹² Finally, a number of new organizations are to take over certain functions that might previously have been monopolized by government departments. These organizations -- "economic corporations"¹³ trade associations, perhaps municipal economic councils -- may become important in, for example, disseminating guidance plans, popularizing technical and managerial innovations, and coordinating operational decisions (Yu 1985, 115-16; Jiang 1984, 141).

III. The New System in Operation: An Interpretive Comment

As the observations in previous sections suggest, Chinese discussions of the new economic model are most informative on general characteristics desired of post-reform planning and on certain elements, such as "guidance" and city-based planning zones, thought to be consistent with the desired characteristics. They are less informative on the manner in which these separate elements are to be integrated into a system, on the sorts of outcomes that might be expected (rather than desired) of such a system, and on its sustainability (or, conversely, the potential internal inconsistencies that might require further systemic change).

The tendency to emphasize lists of ingredients rather than explanations of how to combine them is evident in discussions of regulation by spontaneous (e.g., free-market) forces, mandatory planning, and guidance. Some writers point out that individual agents and commodities are typically subject to more than one type of regulation and call attention to the conceptual problems in delineating three distinct spheres of activity (Liu 1984, 14-15; Zeng 1984, 97; Balassa 1986, 16). The predominant analytical framework, however, appears to be premised upon a clear partitioning, not only for expository convenience but as an interpretation of how the new system is supposed to work. Hence, an enterprise may be embedded in separate "production-circulation systems". In one system, it produces according to mandatory directives, perhaps with state planning departments responsible for ensuring supplies of inputs and for distribution of outputs; in the other system,

it produces according to market demand, making its own procurement and marketing arrangements (Sun Xiaoliang 1984, 38-39). Similarly, the "socialist market" is composed of a planned market, in which production and exchange are undertaken in accordance with state plans, and an extra-plan market, in which the state provides only guidance (Yu 1985, 132).

Coordination and control are also clearly distinguished in Chinese analyses. The complex task of coordinating the details of operational plans is to be devolved to agents themselves--without sacrificing state control over such major matters as the overall structure of production and the pattern of accumulation. If changes in the capacity to produce a certain type of commodity typically required new construction, the state could maintain control through the project approval process, allocations of funds, and monitoring of readily observable construction activities. But in fact some existing capacity can be switched easily to new product lines, and a substantial portion of new capacity is acquired through "technical renovations" rather than construction. Under these circumstances, decisions taken by profit-maximizing agents--even within the formal rules of the game -- are likely to spill beyond the realm of flexibility in coordinating operational details. Some writers do mention this "contradiction" (Wang Zuo 1984, 153). Others approach the matter obliquely, suggesting that competition among enterprises cannot be limited to details of product specification and to firms within each sector; rather, competition should elicit adjustments in the structure of production (Sun Shangqing 1984, 113; Yu 1985, 75). The prevailing inclination, however, is to treat coordination and control as separable problems.

Fortunately, the separate elements described by Chinese analysts actually do imply a coherent model -- one strongly reminiscent of the classic Lange system (Lange 1938). Even an informal characterization of this model, however, raises serious doubts as to its workability.

Trial-and-error guidance. In theory, if collecting and processing information about preferences, technologies, resources, and the environment were sufficiently cheap, the state's economic bureaucracy could produce a comprehensive plan prescribing in great detail the activities of every agent during every period. The plan could be implemented through delivery and enforcement of mandatory directives, through announcement of prices and lump-sum transfers (with decentralized decision-making), or through a combination of these two polar types. With cheap information, planning of either type (or of the two combined) could be superior to free markets. Planners could choose to replicate the market outcome -- or rather to replicate the best of the market outcomes that might conceivably emerge,¹⁴ and could improve upon it by correcting market failures. In fact, Chinese analysts claim

that the pattern of activity under China's pre-reform planning system was inefficient and tended to become more so as the size and complexity of the economy increasedn Inefficiency is viewed as inherentn for the Chinese informational contextn in any planning based primarily upon mandatory directives and is not attributed to incompetence and irresponsibility on the part of planners or to aspects of the old system that might be addressed through minor repairsn

Although mandatory directives are still issued for major activities and commodities, implementation through manipulation of prices is at the heart of China's new economic model. State planners attempt to anchor the prevailing vector of prices by fixing some prices and placing bounds on others. These anchors permit the actual vector to float over those possibilities that planners judge likely to support acceptable patterns of activity. A number of prices move freely (or within fairly wide bounds) -- perhaps being driven by market forces to values that, in conjunction with those prices set by the state, do approximate a general equilibrium.

In the new model, price-setting is largely a matter of trial and error. Although formation of prices theoretically proceeds from calculation of values, the initial prices (and bounds) posted by planners are best viewed as educated guesses based upon their development program and current balances and informed by certain theoretical precepts and rules of thumb. After observing agentsn responsesn planners can update their initial guesses. Iteration of this interplay between planners and agents may result in convergence toward a satisfactory set of fixed prices and price bounds.

As a first approximation, the entire spectrum of supplementary measures available for guidance planning (i.e., measures nominally distinct from price controls) can be subsumed in the process of trial-and-error pricing. Some "guidance" measures are dedicated to specific purposes and are not free for discretionary usen Many others actually operate on prices (and, in the case of indicative guidance, on agentsn projections of future prices) or are used to effect the transfers associated with implementation through pricing.

Ideallyn many of the mandatory directives issued by planners serve only to backstop price controls. This redundancy of mandatory planning follows form "using the law of value" (i.e.n setting prices and providing other forms of guidance) so that agents fulfill mandatory directives in the course of pursuing their own economic interestsn When planners mistakenly set prices that are inconsistent with their own development program and current balancesn mandatory directives become bindingn preventing radical departure from the intended pattern of activity while¹⁵ planners are discovering and correcting their mistakes. And mandatory directives are

available to address specific problems involving, for example, externalities and public goods.

In conjunction with the power to veto investment projects, mandatory directives may also be used to redirect investment toward preferred projects that are crowded out or for whatever reason, would not otherwise be undertaken and carried to completion. Planners cannot be expected to implement their investment program solely through guidance measures, which would require formation of numerous prices for goods to be delivered in future periods.

This brief interpretation of how the new model is supposed to work provides some insight into its widespread appeal. Implementation primarily through pricing promises to permit effective and timely use of information in decentralized calculations, to accommodate both agents' differing motivations and the leadership's right to represent the interests of society, and to provide adequate control while minimizing bureaucratic interference in operational planning and coordination of details. There are good reasons to suspect however, that the new model may not deliver on such promises.

Sustainability The mandatory backups built into the planning process suggest the possibility that planners will fail to set satisfactory prices and price bounds. Either because no solution exists or because planners do not find one, the prices they set could preclude any reasonable approximation of equilibrium or could support a pattern of activity inconsistent with their development program. In either event, mandatory directives become binding; floating prices are driven into their ceilings or floors, and the distribution of profits among producers directs investment into industries that are benefiting from pricing mistakes. Planners attempt damage-control, posting price changes (the impact of which they may not be able to predict) and resorting to administrative methods.

If such pricing failures are severe and frequent, agents routinely incorporate the possibility of failure into their operational planning. In other words, agents use their knowledge that goods are likely to be unavailable or unmarketable at legal prices; that the price structure may shift suddenly and that they may find themselves subject to bureaucratic intervention. To minimize exposure to pricing failures and their consequences, agents are likely to shorten their planning horizons, inclining toward activities with short term payoffs. They are also likely to protect business interests that have come to be viewed as legitimate against arbitrary intervention; as a result, cheating may become widespread and widely accepted. By exploiting the new direct lateral contacts built into the system, agents can circumvent bounds on prices and other forms of guidance to

which they are legally subject and can perhaps escape mandatory directives as well. In the extreme, pricing failures might ultimately debase pricing itself as a means of plan implementation, as agent simply cease to interpret posted prices as reflections of real opportunities to buy and sell.

Any speculation as to how the new system might perform clearly hinges upon the probable severity and frequency of pricing mistakes (or, more generally, of failures to generate satisfactory combinations of guidance and mandatory plans). Pricing is a matter of "scientific decision-making" on the part of the economic bureaucracy -- and its success therefore a matter of information requirements and costs and of the bureaucracy's capacity and willingness to use information properly. The new planning process may well be more economical, in that producing an equally desirable pattern of activity always requires a smaller diversion of resources to the bureaucracy and to provisioning it with information under the new system than under the old. Nevertheless, the bureaucracy's appetite for information remains voracious. And even if all necessary information were acquired, it is not immediately apparent that the tasks faced by the economic bureaucracy are much less imposing under the new system than under the old. In view of its own past performance, the demands upon the bureaucracy may well exceed any reasonable expectation of what it can deliver. Furthermore, planners must still be induced to direct their efforts toward goals specified by political leaders, goals that they may find inconsistent with their own "bureaucratic ideologies" (Shirk 1986, 29; Sun Xiaoléang 1984, 39).ⁱ

Of course, the fact that planning remains an extremely complex and expensive undertaking does not mean that it cannot be done satisfactorily. The hopes implicit in much of the discussion concerning China's new economic model, however, do seem overly sanguine. Some commentators envisage effective fine-tuning by experts using sophisticated econometric models and timely data fed to them through a nationwide computer network (Yu 1985, 295-304). In all probability, attempts to maintain fine control would throw the system repeatedly into its backup mode -- with price volatility and appeals to administrative intervention.

Finally, it must be noted that guidance planning can be harmful even when it seems to be working satisfactorily. The transition to implementation through pricing and supplementary forms of guidance does little to remedy the inadequacies of socialist planning in identifying efficient (as opposed to consistent) programs and in choosing among projects. Under the new process, as under the old, the program chosen and implemented by the bureaucracy may be dominated by others that are technically feasible and otherwise readily available. If agents autonomously deviate toward such a dominating path, they

are guided back onto the one chosen by the bureaucracy; in other words, in posting prices and providing other forms of guidance, the bureaucracy imposes inefficiency. Despite the increased importance of medium- and long-term planning, scientific balancing, and feedback, the new model still incorporates no effective mechanism to force efficiency upon planners themselves. If as a result of this fundamental deficiency the expected benefits of a more market-oriented system cannot be fully realized, the compromise embodied in the "Decision" may prove to be unsustainable.¹⁶

Conclusions

Previous sections demonstrated that a fairly detailed and coherent "model" is implicit in the discussion among Chinese reformers over the past few years. This new model is not presented formally in any single document or in the works of a single writer, nor is it free from inconsistencies and ambiguities. Nevertheless, the set of shared assumptions and prescriptions is sufficiently well-defined to be of use in discriminating among potential reform measures and, hence, in prosecuting a reform.

Guidance planning and, in particular, the implementation of a development plan primarily through manipulation of prices represent the most innovative aspects of coordination and control in the new model. Even though mandatory planning and the peripheral free-market sector are carried over from the pre-reform system, the intended predominance of guidance planning marks a clear break with past practice. In fact, an understanding of this redefinition of "planning" sheds light on recent statements that might seem to contradict the spirit of the model. For example, a number of writers call for "bringing the activities of collective enterprises into the sphere of socialist unified planning" (Yu 1985, 56). Bringing more activities under guidance planning and into social balances is, of course, consistent with the intended reduction in the scope of mandatory planning and traditional transfer balances.

It remains to inquire whether or not the urban reform effort has actually been informed by -- or at least generally consistent with -- the body of prescriptions synthesized in this paper. In fact, key elements of the new model -- such as operational autonomy, civil law, bankruptcy, labor contracting, and reductions in the scope of mandatory planning -- have been formalized in central government decisions and directives during the past three years.¹⁷ And, conversely, dimensions of reform that are not entirely consistent with the new model -- notably the decontrol of prices -- have tended to proceed slowly. Of course, the limited progress in reforming price formation may reflect obstacles to implementation however -- a

strictly limited reform -- one that retains many prices under close governmental control -- is implied by the model associated with the "Decision". Finally, certain widely publicized measures of the early reform period are now being reversed, just as appeal to the new model would dictate.¹⁸

The practical relevance of the new model and its potential usefulness in understanding the current phase of urban reform do not imply that it will eventually be implemented in its entirety. According to one Chinese official, the pace of change in China is so rapid that "reforms of just six months ago are out of date" (Stepanek 1984, 4). While change in prescriptions for the future is probably less rapid, details of the new model have undoubtedly been modified or clarified since publication of the materials surveyed in this paper. Furthermore, the current model has come to be viewed as transitional, although no clear picture of its successor has emerged.

Of course, one could imagine many directions of change in prescriptions for China's economic future. Indeed, a retreat toward the traditional planning system may remain a real possibility. Assuming that such a reversal does not occur, relaxation of price controls -- even for in-plan output-- would seem to be a likely modification of the current model. One factor pointing in this direction is simply the difficulty of enforcing controls. The current model grants agents the right independently to enter many types of transactions, but then attempts to constrain the terms of those transactions within narrow bounds. And to the extent that price controls are successfully enforced, a second inconsistency arises from simultaneous guidance and mandatory planning. In practice, the pattern of economic activity tends to be over-determined by different sorts of regulatory effort that are mutually inconsistent; under these circumstances, agents' responses to manipulation of the various instruments are likely to remain unpredictable.

If price controls are relaxed, planners might then reduce their regulatory efforts outside the sphere of mandatory planning and lean more toward blunt instruments of macro policy. Planning capacity released from price formation could be redirected toward budgetary balance (made more difficult by uncertainty as to prices) and control of money and credit (made more important by upward flexibility in prices), with enforcement efforts focused more narrowly upon those agents receiving mandatory directives or wielding great market power. In fact, some Chinese analysts are now considering such changes (Hua 1986, 6). Revitalization of the dragging price reform may signal general acceptance of their proposals.

The East European experiences have suggested to some observers that the market elements in "partial reforms" are

difficult to protect from emasculation by bureaucrats engaged in indirect regulation or "guidance" (Kornai 1986). The tendency toward over-determination -- or, in Chinese parlance, the "contradictions" -- in the new model of 1984-86 may reflect an instability inherent in systems intended to rely heavily upon both markets and bureaucracy for coordination of operational decisions. Revision of the new model to accommodate more free markets at the expense of guidance would perhaps indicate recognition, by China's reformers, that markets and bureaucracy are not easy to mix and that, if the balance must tip, it cannot be allowed to tip back toward the inherited system.

Bibliographical Note

Any discussion of China's new economic model must be based upon a relatively small sample of the relevant literature. Because this literature is highly repetitious, a manageable sample can yield a reasonably accurate impression of the whole. The interpretations in this paper rest largely upon five books, all published within eight months of the Central Committee's "Decision on Economic Reform" and all identified, in their subtitles or prefaces, as contributing to an understanding of the spirit or intent of the "Decision."

A Brief Discussion of Economic Reform (Zhongyang renmin 1985) was commissioned by the State Commission for Economic Reform and prepared under the direction of the People's Central Broadcasting Station (Theory Section) and the Chinese Association for Research on Economic Reform. It consists of thirty-four short lectures, intended for general audiences. Basic Questions Concerning Our Economic Reform: Theory, Content, and Significance (Yu 1985) is aimed at cadres, professionals, and students and faculty. A Chinese-Style Socialist Economic System (Hongqi 1984) includes papers contributed by economic theorists and practitioners in Beijing at the invitation of the Red Flag editorial department. (Red Flag is the journal of the Chinese Communist Party's Central Committee.) A New Model for China's Economic System (Zhongguo jingji tizhi gaige yanjiu hui 1984) and Selections on China's Urban Economic Reform (Shanghai 1984) are collections of papers, some by very well-known economists. The papers in the latter volume were all written before the "Decision" and, with a few exceptions, appeared in newspapers and journals during 1984. They are said to be indicative of discussion and research on problems of economic reform in academic circles.

In the text of this paper, citations are necessarily selective and, of course, are not limited to the five books.

Financial Reform: Decentralization and Liberalization

WANG Yan

In April 1985, Chinese Premier Zhao Ziyang announced that China was to develop a complete market system including commodity financial and labor markets. Since then, developments in the financial sphere have moved most rapidly; indeed, China has surged ahead of the East European economies, where reform has been in progress for some twenty years. Remarkably, after being closed for almost four decades, the Shanghai stock exchange reopened on September 26, 1986. There has been a great deal of confusion on the nature and objectives of the Chinese financial reform in the West since the changes have been so rapid and profound and since no detailed official reform program is available. The Economist, for example, made the following comments: "China is dabbling with financial markets and competition between banks. in reforms ranging from socialist joint stock companies to trading in shares, bonds and foreign exchange . One thing is plain Chinese shares are not quite like anybody else's" (Chinese 1986).

In fact, the nature of the financial changes can be better understood in the context of the overall post-Mao reform and in comparison with relevant experiences of other less-developed countries (LDCs). One cannot help noticing the similarities between the Chinese financial reform and the experience of financial liberalization (i.e., a shift of development strategy from government intervention in credit markets to capital allocation by market mechanisms) in Mexico, South Korea, Indonesia, Yugoslavia, Brazil, and Malaysia.

This paper first investigates the characteristics of China's financial reform; it then explores the appropriate analytical framework relating the reform to the literature on financial liberalization and comparing it with the experiences of other LDCs. Section I provides necessary background by examining the pre-reform financial system. Section II studies the current reform, focusing on the structure and operation of the short-term and long-term (money and capital) markets. Section III summarizes the problems and

issues now being debatedn In Section IV, these problems are compared with those identified in the literature of financial liberalization, with special reference to the landmark studies of McKinnon (1973) and Shaw (1973). Some concluding remarks are made in the final sectionn

I. The Pre-Reform Financial System

China was probably one of the least monetized economies in the world before 1978n¹ While partly attributable to the low level of development, this was due primarily to the suppression of domestic traden Like many centrally planned economies, China had no markets for producersn goods, for capital, or for laborn Most domestic trade was replaced by the central planning and "product distribution" systemsn The only monetary exchange in any real sense was on the consumersn market, with a considerable portion distributed by means of ration coupons even heren

In the pre-reform financial system, the banking sector was state-owned, highly centralized, and monopolistic; it played an unimportant and passive role in resource allocation. There were only four banks: the People's Bank, the Agricultural Bank, the Bank of China, and the People's Construction Bank. The People's Bank was the central bank and also acted as a commercial bank, with branches in every province, city, and county. Its functions included formulating the nation's credit plans, overseeing the issuance of currency, fixing interest rates, accepting demand deposits and savings deposits, and providing short-term loans to enterprisesn The Agricultural Bank handled low-interest or interest-free loans in rural areasn The Construction Bank was responsible for managing the government's grants for capital investment, and the Bank of China dealt only with foreign exchangen The Banks acted strictly in accordance with the national mandatory credit plan, which in turn was consistent with the national production and investment plann Actually, these institutions were not well-defined "banks", but rather credit rationing agencies and government bookkeepers with no autonomous decision-making powersn

Under this system, there were only two ways for enterprises to finance their operationsn direct financing through government budget grants or indirect financing through bank loans carrying a fixed interest rate. As shown by Table 1, 76.6 percent of the investment in 1978 was financed by government grant, and only 23n4 percent by bank creditn In both cases, investment projects had to be approved by the state and included in the annual production and investment plann No funding was available otherwise. Even trade credit between enterprises was prohibitedn Consequently, it was impossible

for any enterprise to enter a new market or new line of production without being permitted to do so by the planning authorities. Thus, the state's control of production and investment was reinforced by a monopolistic financial system.

Interest rates were (and still are) strictly controlled by the central planning agencies. Both the deposit and lending rates were set well below the market equilibrium level, and the long-term rate was lower than the short-term rate (ostensibly to facilitate the financing of major investment projects). In fact, the total interest costs on loans of "within-quota" working capital counted for only 2 percent of the total sales of state-owned enterprises as late as 1984 (Li Hong, 1985). The repayment of loans could easily be extended and even cancelled -- one important reason for the existence of "soft budget constraints" and "investment hunger".² As a result of this rigid and monopolistic system, consumers found saving unattractive. At the same time, capital and other resources were misallocated and often inefficiently utilized.

As most farms became independent production units and millions of collective and private businesses emerged after 1979, it became obvious that the financial system could not meet the growing needs of a more market-oriented and trade-oriented economy. The initial objectives of the financial reform in 1983 were only to raise more funds from the public and to improve the allocation and utilization of resources by restructuring the banking system and encouraging competition among financial institutions. As it turns out, the financial reform has gone far beyond what Chinese leaders then expected.

III Characteristics of the Financial Reform

The rapid development of the financial reform can be partly attributed to the fact that mandatory planning has been greatly reduced. Among all the products produced by individual farmers, more than 63 percent are for the market. Almost all types of producers' goods are marketable, with only 20 of them still subject to unified distribution.³ The development of inter-regional trade has created a growing demand for financial assets and financial services. Thus, the Chinese financial reform, though initiated and controlled by the government, can be regarded as a natural process driven by underlying real economic factors. Five key components in the financial reform are sketched in the following subsections.

Restructuring of the state banking system. Restructuring and decentralization have led to fundamental changes in the banking system. On 1 January 1984, the People's Bank officially became a central bank, while its local branches formed the new Industrial and Commercial Bank of China (ICBC), which specialized in urban savings and credits. The People's

Bank and four specialized banks -- the ICBC, the Agricultural Bank, the Bank of China, and the People's Construction Bank--compose the main framework of the banking sector. According to the Temporary Provisions of Bank Management published by the State Council in January 1986, these banks are supposed to be autonomous economic entities, fully responsible for their profits and losses. The central bank should implement its control by way of a national (guidance) credit plan, reserve requirementsⁿ, minimum capital requirements, the central bank lending rate, and interest rate floors and ceilings (Guowu yuan 1986c).

Great changes have taken place in the traditional rules of credit management. Under the old system of vertical distribution and "one fund for one use", the total amount of loanable funds in the banking system was divided into different portions, one for each plan-specified use -- a very inefficient method of resource allocation.⁴ In October 1984, Interim Measures of Credit Management were published by the People's Bankn The specialized banks were given more flexibility in making loans, and were permitted to start interbank borrowing and lending.

As a result of such changes, the banking system is playing an increasingly important role in resource allocation. The share of investment financed by bank credit increased from 23.4 percent in 1978 to 68.4 percent in 1986, as shown in Table 1. However, interference in the banks' operations from administrators at all levels is very strong at present. Despite efforts to "make banks into enterprises", the state owned banks are still far from being independent economic entities.

Diversification of financial institutions. During the reform, many new financial institutions emerged and developed. There are now insurance companies, trust and investment companies, share-issuing banks, credit co-operatives, and "fund adjustment centers".

Trust and investment companies have been established in most provinces and big cities; the first appeared in 1979, and the total number reached 538 by August 1987 (Jin 1987) These included state-owned trust companies under the specialized banks, the Chinese International Trust and Investment Corporation (CITIC)n and collective-owned companies For example, the Shanghai Aijian Banking, Trust and Investment Company was the first collectively-owned financial company in China. It is allowed to trade both in the domestic interbank commercial loan market and in foreign currencies All trust and investment companies are also allowed to underwrite stocks and bonds for enterprises.

The Bank of Communications is the first shareissuing bank in socialist China. It was set up in 1908 and resumed its

Table 1
Changes in the Role of Bank Credit, 1978-1986

	1978	1986
Ratio of government revenue to national income	37.2%	26%
Total amount of rural and urban savings deposits in banks	21 billion yuan	223.8 billion yuan
Ratio of annual incremental deposits to national income	2.3%	14.7%
Share of investment financed by government budget grants	76.6%	31.6%
Share of investment financed by bank credit	23.4%	68.4%
	1980	1986
Share of investment by state-owned enterprises	81.9%	65.5%
Share of investment by collectively- and privately-owned businesses	18.1%	34.5%

Sources: Li Tieying 1987 and Sheng 1987.

inland operations in late 1986ⁱ. It has total assets of 2 billion yuan (\$536 million) with 50 percent of the shares owned by the national government, 25 percent by the municipal government of Shanghai, and the rest by other institutions and by individualsⁱ. The bank handles renminbi and foreign currencies in both short-term and long-term lending. It is given flexibility to determine interest rates, within a range set by the People's Bank.

Although they have existed since the 1950s, rural credit cooperatives were tightly controlled and acted as official credit agencies in the 1960s and 1970sⁱ. During the financial reform, rural credit cooperatives resumed their cooperative nature and, along with newly established urban credit cooperatives, started issuing shares (saving accounts) to their members, issuing short term loans, and opening checking accounts to individual farmers and to collective and private businessesⁱ. (Checking accounts were not previously available for individuals.) Other non-bank financial institutions such as financial companies also emerged, to act as cross-regional go-betweens for borrowers and lendersⁱ.

Mutual banks or "Fund Adjustment Centers" were established within certain industries in big cities like Shanghai and Chengdu. They provide inter-firm short-term credit and other financial services for member firms (most of which are state-owned).

The unofficial and less tightly regulated financial institutions are becoming more and more important in resource allocationⁱ. Their emergence is breaking the monopolistic power of the state-owned banking sector and may substantially improve the allocative efficiency of the credit marketⁱ. Table 2 lists different forms of financial institutions reported since 1985ⁱ.

Development of a short-term (money) marketⁱ In January 1986, the cities of Shenyang, Chongqing, Wuhan, Guangzhou and Changzhou were chosen for experiments in fund raising and money tradingⁱ. The experiment was subsequently extended to 27 cities (including Shanghai, Beijing and Tianjin) and to the province of Guangdong. There are two kinds of short-term market: the commercial paper (CP) market, and the market for interbank loansⁱ.

The experiment in discounting of commercial paper started in Shanghai in February 1982. In December 1984ⁱ the People's Bank decided to extend these operations throughout the country and issued a document on Provisional Methods of CP Discountⁱ. In 1986ⁱ, it also started CP rediscounting for specialized banks under its domainⁱ. However, the utilization of commercial paper and bank acceptances (BA) is very limited at present. A large part of the trade credit among small enterprises takes the forms of oral agreements and hand-written notesⁱ. Therefore, the CP and BA markets are actually developing only in Shanghai,

Table 2
Different Forms of Financial Institutions, 1985-1987

Name of Institution	Number of Institutions and Places Reported
Postal Depository Service	2,974, in 29 provinces and cities, with 2.14 million accounts and 546 million yuan in deposits in 1986
Trust & Investment Company	538 in China, by August 1987
Share-issuing Bank	One in Shanghai; one in Chengdu
Industrial Mutual Bank	One in the Shanghai textile industry, with deposits of 83 million yuan and loans of 140 million yuan in 1986
Fund Adjustment Center	One in Shanghai light industry, with deposits of 65 million yuan and loans of 56 million yuan in 1986
Rural Credit Co-op	More than 50,000 in China
Urban Credit Co-op	More than 1,000 in China
Mutual Deposit Union	14,000 in Jiangxi rural areas with 2.4 million accounts and 40 million yuan in deposits
Rural Service Company	87 in Zhenjiang (in Jiangsu province) raised funds of 58 million yuan in 1985-1986
Syndicate of Banks and Industrial Firms	One in Xian consists of 10 firms and a bank branch
International Finance	Shenzhen, Guangdong; Corporation first international finance company, owned by 5 companies of the US, Japan, Hong Kong and Shenzhen

Note: This is an incomplete list compiled from reports in the Chinese press. Sources are available by request.

Wuhan, Shenyang, and a few other big cities. Table 3 gives statistics on the size and development of the CP market.

Although started later than the CP market, the market for interbank loans is developing more rapidly and more widely. In the Temporary Provisions of Bank Management, it is specified that "...the funds of the specialized banks can be loaned to each other", and that "the interest rates for interbank loans are determined solely by negotiations of the two parties". By September 1986, the five official pilot cities had formed a short-term interbank market, with 14 billion yuan worth of trading (Wuchengshi 1986). Among the short-term markets, the Wuhan financial mart is reportedly the largest. More than 400 business people -- representing banks, credit cooperatives, insurance companies, and enterprises from 25 cities -- attended its opening in November 1986. In the first hour after the market opened, 34 transactions worth 330 million yuan (\$89 million) were completed; most were cross-regional interbank loans, commercial loans, commercial paper discounts and swaps of foreign exchange among enterprises. An official in charge of the market reportedly said that state financial organs had no right to interfere in the market to control interest rates (Chinese 1986).

By the end of 1986, nearly 100 interbank loan networks were established (Zhongguo 1986). These networks facilitate cross-regional "horizontal" capital floats among their members. The total amount of cross-city interbank loans reached 30 billion yuan (\$8 billion) in 1986 and 200 billion yuan (\$53.6 billion) in 1987 (Jinrong, 1987; Ding 1988). However, most of these networks are primary loan markets, characterized by negotiation rather than securitization. In fact, only a few securities are traded, since the government has not issued any short-term securities, and BAs and large CDs have just been issued recently. Furthermore, operational techniques in these markets are very primitive. Most have market floors with specified market dates, since the telecommunications system is out of date and there is no national computer network. Only a few networks are said to be "non-physical" markets connected by telephones, telegrams and teleprinters. Table 4 shows statistics on some short-term fund networks.

Development of a long-term (capital) market. As early as 1983, some collectively-owned businesses were allowed to issue shares and bonds to their own employees, on a experimental basis. In July 1984, the Tianqiao Department Store in Beijing was permitted to sell stocks to the public and became the first share-issuing state-owned enterprise. The primary long-term market was founded in the five experimental cities in September 1986, with a total of 780 million yuan (\$210 million) raised by issuing stocks and bonds. By October, 1480 businesses in Shanghai had issued stocks and bonds worth 220 million yuan. In Guangdong province, about 1000 enterprises, mostly

Table 3
Development of the Commercial Paper Market, 1981-1987

Period	Activities and Places	Volume of CP Discounts
1981-1986	In Shanghai only	8000 deals† 900 million yuan
1986-March 1987	In Shanghai Economic Region	8000 deals¶ 2.5 billion yuan
January 1986-December 1986	The ICBCs in big and medium-sized cities	8.7 billion yuan
January 1987‡ April 1987	The ICBCs in big and medium-sized cities	5.3 billion yuan
January 1986-June 1986	ICBC in Shanghai	230 million yuan (with 40 million yuan rediscount from the People's Bank)

Notei Data are compiled from scattered reports in the Chinese press. They may not be strictly comparable, due to differing conventions in the original reports. Sources are available by requesti

collectively-owned, raised 650 million yuan (\$175 million) by issuing stocks and bonds (Wuchengshi, 1986). By the end of 1986ⁱ there were about 7000 share-issuing enterprises in Chinaⁱ and more than 6 billion yuan (\$1.5 billion) had been raised by selling stocks alone (Li and Liu 1986).

Local governments use this primary security market to raise funds directly from the public for big investment projects. For example, Shanghai is going to raise 514 million yuan for an ethylene plant; of the 90 million yuan already raised as the first stepⁱ two thirds were invested by individuals (Zhongguo 1986). Nanjing issued "Electricity Stocks" for a new power plantⁱ which give institutional stockholders priority in using the incremental electricity. Financial institutions also make active use of this market. Since July 1985ⁱ the ICBC and the Agricultural Bank have been permitted to issue bonds to rural and urban residents. In 1985ⁱ the Agricultural Bank issued 1.5 billion yuan in bondsⁱ and the ICBC, 2 billion. The Agricultural Bank planned to issue 1 billion yuan in bonds during 1987, and the ICBC, 1.5 billion. These were to be one-year bonds with an annual interest rate of 9 percentⁱ (The interest rate on one-year savings deposits was 7.2 percent.) The Construction Bank also issued bonds for "National Key Construction Projectsⁱ" with a maturity of 3 years and an interest rate of 10.5 percent. It was reported that Beijing residents stood in line to buy these (Beijing 1987). By the end of 1987ⁱ the accumulated amount of bonds and stocks issued over time reached 64.63 billion yuan (including government bonds)

The development of a primary market increases the need for secondary security marketsⁱ. After 300 million yuan in bonds were sold in Shenyangⁱ the first bond exchange opened in that city on 5 August 1986; illiquidity had by then already affected the attractiveness of bonds. In six weeks after its openingⁱ the total amount of secondary-market transactions reached 450,000 yuan (including security mortgage loans)ⁱ. Its secondary-market transactions averaged about 100 deals per day in November 1986ⁱ.

On 26 September 1986ⁱ when the first stock market opened in Shanghai, hundreds of people lined up to buy the stocks of the two listed corporationsⁱ. One of themⁱ the Shanghai Yanzhong Business Companyⁱ has 18,000 shareholders, with shares worth a total of 5 million yuan (\$1.4 million). The annual return on its shares will probably be 15 percentⁱ as estimated by its managerⁱ. Secondary transactions are also allowed in this market. Anybody wanting to sell his shares can go to the exchange's banking counterⁱ which quotes the price and acts as a jobber (Mo 1987a).

The number of cities with secondary security markets increased to 40ⁱ and secondary-market transactions totalled

Table 4
Development of Short-Term Markets, 1986-1987

Period	Participants and Activities	Volume
January 1987a December 1987	Interbank loans in the financial system of China	200 billion yuan
January 1986a December 1986	Cross-city interbank loans in China	30 billion yuan
January 1986- December 1986	13 networks of ICBC; interbank loans	20 billion yuan
January 1986- June 1986	Network of 5 pilot cities of financial reform; interbank loans	12e5 billion yuan
May 1986- October 1986	Northeastern 7-city network; interbank loans	880 million yuan
January 1986- December 1986	Financial market of Shanghai Economic Region (5 Provinces and 1 city) interbank loans	15 billion yuan
June 1986- June 1987	Southwest network, (5 provinces including Sichuan, Yunnan and Tibet), cross-regional fundraising	6.3 billion yuan
November 1986	A financial "Ring" is formed in Tianjin by 14 cities around the Bohai Sea (including Qingdao and Dalian)	6.3 billion yuan
December 1986	Network of Yangtze River region, formed in Wuhan by People's Banks of 27 cities	
17 December 1986	Lanzhou financial network, formed with 25 banks in 4 provinces and 8 cities; Interbank loans (single day)	180 million yuan
March 1987	"Financial Cross", formed in Wuhan by 55 cities along the Beijing-Guangzhou railway and Yangtze River; consists of 5 existing financial networksn	

Note: These statistics are compiled from scattered reports in the Chinese pressn They cover periods of different lengths and different regions, and are reported by different agenciesn Sources are available by request.

more than 100 million yuan by the end of 1987 (Ding 1988). However, long-term government bonds and bank bonds are not transferable in secondary markets. Moreover, it is reported that the trading floors of the exchanges are often deserted because prices are not flexible enough to match supply with the high demand. These problems limit the liquidity and attractiveness of financial assets and the effectiveness of secondary markets in resource reallocation.

The nature of shares in China is rather unusual-- and not entirely clear. In fact, at present there is no general law on securities, although some provinces have published their own regulations. Guangdong, for example, published Interim Measures for the Management of Stocks and Bonds in October 1986 (Interim 1986). The State Council published an Interim Regulation on Management of Enterprise Bonds in March 1987 (Guowu yuan 1987), but none for stocks as yet.

According to these documents, there are four kinds of shares. First, "state shares" derive from accumulated state investments and from loans on which repayment was cancelled. Dividends on these shares are either paid to administrative departments or reinvested. Second, "institutional shares" are sold to enterprises and other institutional investors. In this way, horizontal cooperation (and mergers) among enterprises are facilitated. Third, "employee participation shares" are derived from assets created by internally financed projects (under a profitsharing system). These shares are distributed to employees in accordance with the number of years they have served. They provide the basis for sharing dividends, but they cannot be withdrawn, transferred, or inherited. Last, "individual shares" are sold to employees and to the public (if the firm is permitted to go public). These shares are transferable and inheritable. Most of them have limited liability and limited life, since the secondary market is underdeveloped. Some of them are called "preferred stocks" and yield not only dividends but also a fixed interest of 8-12 percent; interest plus dividends usually will not exceed 15 percent of the principal. The others are called "common stocks" and pay dividends only (Liu and Zhang 1986). There is a board of directors and a shareholders' meeting in each shareholding company, but voting procedures and the extent of control are not clear since there is no corporation law.

Emergence of an informal credit market. A remarkable aspect of financial reform is the rapid development of an informal credit market (or of "folk credit" as it is called in the Chinese press). Some rich farmers have become active moneylenders in the prosperous rural areas of Jiangsu and Zhejiang. Private "moneyhouses" -- the Chinese banks of pre-war times -- have appeared in some places. These private moneylenders and moneyhouses help to meet the financial needs of millions of individual farmers and small businesses. They

charge interest rates of 2-15 percent monthly -- some ten times higher than those charged by banks (Mei 1986). Individual security brokers are also active outside the Shenyang security exchange (Shenyang 1986).

Although the Temporary Provisions of Bank Management specify that "individuals are not allowed to open banks or other financial institutions, and are not allowed to handle financial transactions" (Guowu yuan 1986c) no drastic measures have been adopted to prohibit these activities. On the contrary, the government-controlled press views them as a "delightful break-through." The high interest rates, however are arousing concern, and there is debate on whether usury laws should be drafted and implemented. Most economists favor a policy of "guiding" rather than "suppressing" (Yin and Wang 1986). Because the formal capital market of China is so segmented and inefficient at present, it does seem likely that an informal market can induce competition, reduce the distortions caused by credit rationing, and improve allocative efficiency.

III. Problems and Issues Under Debate

From the last section, one can see that the process of monetization has started in China and that the first vague contours of financial markets are emerging. However, the development of financial markets has lagged far behind the needs of the economy. These markets are still fragmented, price signals are distorted, and operational techniques are primitive. Inefficient allocation of capital is still a major problem of China's economic development.

Irrational interest rates and prices. Inefficiencies and distortions caused by irrational interest rates and prices have not yet been successfully addressed in the reform. Interest rate adjustment and redesign of the rate-formation process are subordinated to other items on the reform menu. Indeed, interest rates remain rigid except on the interbank loan market and in a few experimental cities like Wenzhou, Shenzhen and Chongqing, where floating rates are allowed.

The real return on savings deposits is zero or negative, since the nominal interest rate on one-year deposits is set at 7.2 percent, but the general index of living expenses increased by 11.9 percent in 1985 and by 7 percent in 1986 (Guojia 1987). Although the nominal amount of savings deposits increases at an amazingly high average rate (34 percent annually since 1980) this growth is caused partially by rapid growth of income and partially by "forced saving" -- the unavailability of high-quality consumer durables. The average amount of cash held by an individual business owner is 30,000 - 80,000 yuan, according to the ICBC of Shanghai. And farmers with 10,000

yuan or more on hand are common in Wenzhou (Queues 1986)i This reflects unsatisfied needs for financial services and the unattractiveness of savings deposits.

Naturally, low interest costs have even smaller restrictive effects on a firms' behavior in the presence of inflation. The average length of time needed for turnover of working capital grew by 7.3 days for in-budget state-owned enterprises in 1986 (Guojia 1987), which meant less efficient use of (mostly) borrowed funds. At the same time, credit rationing prevails, in that some groups of borrowers are rationed out of the market even if they are willing and able to pay higher interest rates. State banks have to finance state-owned enterprises running at losses, while it is very difficult for more productive small enterprises to get loans.

Because they are related to interest rates, the prices of financial assets are also distorted. The prices of stocks are subject to ceilings and floors in secondary markets and are not fully adjustable, so they cannot convey information on changes in the real rate of return or in the productivity and riskiness of firms. Moreover, due to the erratic structure of China's prices and subsidies, investors cannot judge the performance of a company on its profits alone. Under these circumstances, the price mechanism is not able to give correct signals in guiding capital to where it can be used most productivelyi

Lack of legislation and regulations. Due to the lack of security laws, the nature of Chinese stocks is not well defined, and the interests of lenders and borrowers are not adequately protected. It is difficult to distinguish shares from bonds, since both are issued for limited terms and earn fixed interest rates (plus, for shares, dividends). The level of risk involved in these shares and bonds is not clear since there is no corporation law and since the bankruptcy law, passed in December 1986, has not been fully implemented. On the one hand, the risk may seem very high, because no one knows how a "corporation" clears its debts if it goes bankrupt. On the other hand, the risk may be considered minimal: so far, only one state-owned firm has been allowed to go bankrupt officially, and its assets were auctioned.

It is not surprising that a debate has occurred on whether or not state-owned enterprises should be allowed to issue stocks. Conservatives fear that the leading position of public ownership in China's economy would be destroyed by the introduction of stocks in the state sector. Reformers argue that the state can maintain the proportion of shares necessary to keep controli Tong Dalin argues that share-issuing corporations are compatible with the socialist economy and have great potential because they "harmonize the interests of the state, the investing enterprises, the employees, and other individual investors". The risk and the profits (or losses)

are shared by all parties, which will create incentives to improve efficiency. Furthermore, it is not possible for one individual shareholder to control the corporation, since the proportion of individual shares in total assets and voting power can be restricted by legislation (Tong 1986).

General Secretary Zhao seems to have concluded the debate by saying that "markets for funds, labor, and the issuance of stocks and bonds are phenomena which are not peculiar to capitalism but are bound to appear in the wake of large-scale, socialized production and the development of a commodity economy". A system of shares is "one means of raising money for socialist enterprises and can be further implemented on a trial basis" (Zhao 1987). However, in practice, only a few state-owned enterprises are being allowed to issue shares, in pilot cities of the reform. Most enterprises which issue stocks are collectively-owned and are medium- or small-sized. In April 1987, the State Council published a new regulation prohibiting state-owned enterprises from issuing shares. Restrictions on the types of enterprises that can issue stocks and on the prices of secondary transactions severely handicap the equity market in performing its normal role in resource allocation.

Fragmented and regionally monopolistic market. China's financial market is fragmented, and the state bank monopoly still exists in a large part of the market. Fragmentation is shown by the non-existence of capital floating between regions outside "financial networks" and by the unused investable funds in bank branches located in remote areas. Private financial institutions are still uncommon and are illegal. Where credit co-ops are absent, individual farmers and collectively owned businesses have few ways to get external finance other than seeking and waiting for loans from state banks.

Even for the experimental sites of financial reform, small credit cooperatives have little access to the CP market or interbank market. Very few financial instruments are traded in the short-term and long-term markets. For example, government treasury bonds are not transferable. Some 80 percent of the transactions in the short-term market are interbank or commercial loans. All these factors make the financial market difficult to enter for small newcomers. More diversification of financial institutions and instruments is badly needed to improve allocative efficiency and facilitate competition.

Inadequate monetary policy instruments. China's central bank (the People's Bank) lacks policy instruments for macroeconomic management and control of the money supply. For "independent economic entities", direct control by mandatory credit planning is not appropriate. At present, however, there is no alternative policy instrument powerful enough to replace

credit planning. The system of rigid interest rates must be reformed before it can be used as a policy instrumenti Moreover, since government bonds are not transferable and the size of the secondary market is very small, the central bank cannot use other policy instruments such as open market operationsi

China's inflation rate has been close to two digits in recent years, arousing doubts about economic reform among the public. However, the harsh reduction of commercial loans at the end of 1985 and into 1986 -- an attempt to control inflation -- caused a recession during 1986. Since then, there has been a debate on the kind of monetary policy China should use to control inflation and to maintain a stable economic environmenti No consensus has been reached so far.

IV. Analytical Framework and Possible Solutions

Although Chinese economists have recognized the problems shown in the last section and theoretical debates have been going on for over a year, little progress has been made toward a consensus and a set of policy prescriptions. This is due largely to the lack of a theoretical frameworki Unawareness of the broad range of literature in development economics and a tendency to rely only upon China's own experience have prevented analysis useful for financial reform.

There has been much research on "financially repressed" economies and the beneficial effects of "financial liberalization" since the seminal works of McKinnon (1973) and Shaw (1973). A careful comparison of the Chinese system with the McKinnoniShaw framework suggests that key elements of this framework may prove relevant to the Chinese reformi Furthermore, China may benefit from empirical studies of financial liberalization in other LDCsi

The pre-reform financial system of China might be characterized as "financially repressed," as defined in the literature of financial liberalization. "Financial repression" involves slow growth or atrophy of financial assets, with concomitant depressant effects on the real economyi It is caused by inappropriate policies such as direct government control of capital allocation or restriction of interest ratesi China was like a "financially repressed" economy, not simply in the sense of fixed interest rates, but in the sense that its financial sector was deprived of a proper role in resource allocationi Banks were nothing more than agents of planning bureaus, and economic criteria like real rates of return were irrelevant to capital allocation decisionsi This caused inefficient resource allocation, much as in a market economy where market signals (such as interest rates) are suppressedi Adverse effects of "financial

"repression" in other LDCs, such as the wasting of scarce capital and the development of capital-intensive industries inconsistent with resource endowment, were also present in China. Of course one might well doubt the relevance of the McKinnon-Shaw framework to pre-reform China since China was centrally planned. However, as China becomes more market-oriented, the McKinnon-Shaw framework becomes increasingly applicable.

In his "complementarity" model, McKinnon describes an underdeveloped economy where the capital market is segmented and rudimentary, and where self-financing prevails. These assumptions are very realistic for China and other LDCs. In such an economy, McKinnon argues, real money (including savings deposits) is the only conduit for saving and investment. Thus, real money and capital formation are complements rather than substitutes when the real return of holding money (i.e., the interest rate for saving deposits) rises, the demand for capital formation increases also. In a somewhat different model, Shaw argues that real money has an income effect by reducing transaction costs and, hence, that the growth of real money and other financial assets is beneficial to economic development.

Although different models are used, both McKinnon and Shaw emphasize the crucial roles of real money balances in saving and investment since financial assets are very limited in LDCs. In other words, they argue that the real return of holding money matters in financial development. They suggest that a comprehensive, step-by-step program of financial liberalization, including the elimination of exogenous restrictions on interest rates and encouragement of competition among financial intermediaries, would lead to financial deepening (defined as the accelerated growth of financial assets relative to the growth of physical assets). Financial deepening would in turn facilitate saving and investment and, hence, stimulate economic development.

Numerous studies have been done to extend the model theoretically. One of the most recent is Yoon Je Cho's (1986). He argues that the McKinnon-Shaw theory is incomplete because it emphasizes the relaxation of exogenous constraints on interest rates without considering the inefficiencies that could be caused by imperfect information and credit rationing. Cho concludes that substantial development of the equity market is a necessary condition for successful financial liberalization.

The McKinnon-Shaw framework has been shown to fit the economies of LDCs fairly well. Most empirical work confirms the key hypothesis. For example, Jao (1976) used pooled time series data for 67 countries in 1967-73, and his results support the McKinnon-Shaw hypothesis that financial deepening

(allowing expansion of real money balances and the financial sector) is highly conducive to economic growth. In his 1978 paper, Fry estimated savings functions for seven Asian countries and areas (Burma, India, South Korea, Malaysia, the Philippines, Singapore, and Taiwan) for the period 1962-72. He found that "the real rate of interest exerts a positive influence on the ratio of domestic saving to GNP". Fry (1980) extended his study to 61 developing countries and found that the signs and magnitudes of all the coefficients in the eight savings functions agreed with a priori expectations based upon a modified McKinnon-Shaw model.

Although further empirical research is needed, one might suspect that the McKinnon-Shaw model can provide an appropriate analytical base for China as well as for other LDCs. Most problems described in Section III can be identified as problems of financial repression and problems of "half-way" financial liberalization. Hence, it is possible that analyzing the reform using this framework may suggest solutions overlooked to date.

Most importantly, the McKinnon-Shaw view that "relative prices matter in economic development" is crucial for overall economic reform and especially for financial reform. In the last eight years, the Chinese economic reform has focused upon incentive structures, implementing the household production responsibility system in rural areas and diversifying economic ownership in urban areas. However, reform of the irrational price structure and interest rate structure has lagged behind institutional reforms. The McKinnon-Shaw approach would clearly suggest that it is time for the Chinese to relax the ceilings imposed on interest rates and other relative prices, which give distorted market signals on scarcity and lead to misallocation... even with a correct incentive structure. Since there exists a "dual price system" (i.e. planned and market prices) and "dual interest rates" (i.e. controlled and floating interest rates), it is possible to adjust the controlled interest rates (or prices) step by step, until they converge to equilibrium interest rates (or prices). An increase in real interest rates would stimulate saving and induce financial deepening, which would in turn facilitate economic growth. Rationalization of the interest rate structure would help solve the information problems shown in Section III and improve the allocative efficiency of financial markets.

Based upon the experiences of other LDCs, a comprehensive program of financial liberalization should include several elements: (1) Relaxation of exogenous restrictions on interest rates is the key to financial deepening. (2) Substantial development of the equity market is a necessary condition since, in the presence of imperfect information, the banking sector alone cannot assure efficient allocation of capital.

(even without interest rate ceilings). (3) Because monopolistic and oligopolistic market structures prevail, diversification of financial institutions and competition among them should be encouraged. Small credit co-ops can act as information producers in the credit market and improve allocative efficiency (Wang 1987). (4) A complete set of general laws and regulations is needed to protect the interests of borrowers and lenders¹², to regulate the behavior of the participants in financial markets, and to control the money supply.

The McKinnon-Shaw framework also has implications for monetary policy. Most importantly, control of inflation may be combined with financial liberalization, since raising interest rates (both the nominal rate of return on deposits and the lending rate) is required by both financial deepening and the curbing of inflation. A higher return on deposits would increase the opportunity cost of current consumption and encourage saving. Higher borrowing costs would help to cure the "investment hunger" of enterprises and, hence, to reduce inflationary pressure. The effect of this policy depends, of course, on whether the enterprises' budget constraints are "soft" or "hard". In this respect, reform of the ownership structure, promotion of the share-issuing system, implementation of the bankruptcy law, and other measures that can harden the budget constraint will also increase the effectiveness of interest rate policy.

An appropriate monetary policy for China derived from the McKinnon-Shaw framework consists of two parts: stimulate money demand by increasing the real return on holding money and by inducing financial deepening, and strictly control the money supply (perhaps by adhering to a constant growth rate of nominal money).

Concluding Remarks

Premier Zhao Ziyang, in a speech on 25 March 1986, called financial reform an important step in deepening the overall economic reform (Zhao 1986). However, the lack of an analytical framework has prevented Chinese leaders from understanding both the nature of the financial reform and the best ways to tackle the problems it raises. As emphasized throughout this paper, financial reform is a long development process -- a process of monetization and financial deepening driven by real economic forces. In this respect the reform can be regarded as a transition of development strategy from financial repression to financial liberalization. It is far more important than just "one part" of the overall reform; rather, it is the key to improving the efficiency of resource allocation, and hence, the key to China's economic development.

Although the McKinnon-Shaw framework may not fit China perfectly, it becomes increasingly relevant as the market plays a more important role in resource allocation. And Chinese reformers are committed to moving toward the market, as shown by the introduction of markets for housing, for property rights, and for securities. This framework suggests substantially different priorities than those announced by Chinese leaders. According to Zhao, financial reform in the Seventh Five-Year Plan will focus on enhancing the leading role of the central bank and on efforts to transform banks into enterprises. While these are important, greater priority should be given to rationalization of relative prices and other market signals. Within the financial reform itself, greater priority should be given to the relaxation of interest rate ceilings and to development of primary and secondary security markets, which are crucial for the efficient allocation of capital.

As already suggested, one possible reason for decisions contrary to those indicated by the theory of financial liberalization may be the ignorance of the relevant literature. Another -- and perhaps more important -- reason is the fear of losing direct control over enterprises. Financial reform does have implications other than improving allocative efficiency. It may imply larger income gaps, broader operational horizons for enterprises, and more difficulties for the government in implementing macroeconomic control. Furthermore, even the goal of allocative efficiency is not immediately achievable, since financial markets cannot become perfect overnight. The Chinese leadership should be prepared for these consequences so that transitional problems will not become reasons for a return to financial repression or for a resort to direct intervention in credit markets.

Finally, the time path and success of financial development also depend on China's attitudes towards the experiences of other countries. Some degree of unwillingness to learn from the relevant experiences of other countries is evident in the Chinese reform process. Chinese leaders often hesitate to adopt policies that proved successful in other developed or developing countries, preferring to rely only on China's own experiments. However, "trial and error" is an expensive way to conduct reform. In this rapidly changing world, the progress of a country depends not only on its own creativeness, but also on its ability to learn from others' experiences. Only a change in the way of conducting the reform will permit China to catch up with the rest of the world.

Notes

Thomas P. Lyons "Mandatory Planning and Guidance"

1. Concerning disillusionment with the scattershot approach, see Halpern 1985, pp. 1009-12. Concerning the identities of groups characterized as "reformers", see Chen 1985, pp. 8-15 and 26-28. "New economic model" appears in, e.g., the title of *Zhongguo jingji tizhi* 1984.
2. See the Bibliographical Note appended to this paper.
3. In the pre-reform system, rights were not formally vested in enterprises themselves --- even though enterprises exercised de facto authority based upon, e.g., their control of certain types of information. This situation contributed to the continual "bickering" between enterprises and the government departments that claimed all rights.
4. In fact, the extent of autonomy is supposed to vary across enterprises so as to accommodate the special circumstances of each.
5. Li and Fu 1986 briefly surveys the recent Chinese literature on guidance planning.
6. In most discussions of the urban economy, the free-market list and the list of goods subject to mandatory planning are clearly disjoint. The possibility that above-mentioned output might enter the free market is mentioned in Yu 1985, p. 166.
7. I.e., an agent properly informed of the overall state of the economy would, in the pursuit of his own interests, choose a course of action acceptable to the government.
8. The stages themselves are delineated largely for analytical convenience; they are not necessarily sequential. The following discussion follows the broad outlines in Yu 1985, p. 143, and Sun Xiaoliang 1984, p. 38. Since Chinese discussions do not tie planning procedures

to structural prescriptions, the interaction among different tiers and branches of the planning organization -- an important aspect of procedures -- is not clear.

9. Social balancing is especially important if mandatory directives are to be formulated in terms of values rather than physical units.
- 10i Chinese discussions provide no clear indication of how this coordination is to be accomplished. Lack of coordination among planning offices, especially in the sphere of investment, was a major weakness of the old system.
11. For a sketch of the pre-reform structure, see Fan and Tao 1985, pp. 1-4; for comments concerning its defects, see Zeng 1984, pp. 91-94; Zheng 1984b, pp. 184-88; or Tao 1984, pp. 198-203. See also Lyons 1987, Chapter 7; and Wong 1986, pp. 574-9.
- 12t In the old system, the allocations of both planning authority and revenue were closely tied to ownership. For example, central planners controlled primarily centrally-owned enterprises, with the resulting revenues remitted directly to the central government (The center also received budgetary transfers from lower levels, through a revenue-sharing scheme.) In the new system, some types of taxes (e.g., commodity taxes) are reserved to the center; some (e.g., income taxes) are shared. See Wang Zhizheng 1984, p. 116; and Wang Shuigen 1984.
13. Economic, or enterprise-type, corporations are explicitly distinguished from those of an administrative nature. The latter, dating mainly from 1979-82, are viewed as organs of government control that threaten enterprise autonomy--and are therefore inconsistent with the new model. See Zheng 1984b p. 194; and Tao 1984, p.200.
14. Of course, planners might fail to exploit the opportunities available Concerning "quantity" and "price" planning, see, e.g., Weitzman 1974 and Yohe 1977.
15. Hence, mandatory planning is integrated into guidance planning, in the sense that the former insures against errors in the latter
16. The new model does not solve an even more fundamental problem -- the motivational problem posed by the absence of identifiable owners with personal stakes in making or monitoring decisions about the use of their assets (Von Mises 1951, 137-42). State-owned enterprises endowed with a significant measure of autonomy may be expected to exploit informational asymmetries, plundering the state (and society) in pursuit of private benefit Protection of state assets falls to bureaucrats in a complex game

that pits their interest in -- and comprehension of -- the public good against agents' interests in immediate economic gain and resourcefulness in pursuing it. Admitting private stockholding in state enterprises provides a partial solution, by introducing an identifiable set of owners whose interests in the protection of enterprise assets overlap those of the state. For further comment, see Yang 1985, pp. 7-12.

- 17t E.g.t Guowu yuan 1984; Zhonghua renmin 1986a; Zhonghua renmin 1986b; Guowu yuan 1986a; Guowu yuan 1986b; and Guojia jihua 1984.
18. For example, the national motor vehicle corporation, established in 1982, was disbanded in early 1987. The corporation was criticized for "holding too much power while individual enterprises had little. 'This is why the industry failed to bring its initiative into full play,' according to the minister in charge of machine-building. See "National Automotive Company" 1987; and note 13, above.

WANG Yan, "Financial Reform"

1. The level of monetization of a centrally planned economy cannot be measured in terms of the ratio of money supply (M1 or M2) to GNP, which is quite high in China according to some researchers (e.g., Feltenstein and Farhadian 1987). "In a socialist economy, money acquires the additional function of a planning tool, albeit a passive one . . . Money enters economic planning mostly as a common denominator for the purpose of aggregation. It facilitates planning by making different activities comparable. Associated financial categories, such as credit and interest, are merely technical devices for implementing central command (planning) decisions" (Garvy 1977, 42).
2. By "soft budget constraint", Janos Kornai means that the budget constraint of a socialist enterprise is not binding since the government is ready to bail it out at any time. "Investment hunger" means that enterprises demand for investment is unlimited (under soft budget constraints). See Kornai (1980 and 1986).
3. "Unified distribution" is a system of allocating producerst goods and important consumer goods through the state planning system. For data, see Gao (1987)t
4. The pre-reform rules of credit management included

repayability, adherence to the state plan, and attachment to commodity inventory. "One fund for one use" is the combination of the latter two and is tantamount to the "real bills" doctrine. It is designed to prevent diversion of short-term funds to long-term uses, but it may, under some circumstances, cause loanable funds to sit idle.

5. The bank was one of the four largest in pre-war China. In 1958, its inland services were taken over by the People's Bank. See Mo (1987b) and "First" (1986).
6. Its first issue of 3 million yuan sold out in six days. After its first issue of stocks, the proportions of shares owned by the state, banks, enterprises, and individuals were 50.97, 25.89, 19.68 and 3.46 percent. The performance of this store reportedly improved greatly after stocks were issued. See "Tianqiao" (1986) and "Yige" (1986).
7. This amount includes treasury bonds (35.4 billion yuan), "key construction project" bonds (5.23 billion), "key enterprise" bonds (2.2 billion), and financial bonds (8.5 billion); the rest are bonds and stocks of other enterprises. See Ding (1988).
8. It was reported that 5,013 bonds were purchased and 4,972 were sold in the first six weeks. The reason for the difference between the numbers bought and sold is not clear. (See "China's" 1986).
9. The growth rate is calculated from statistics in Guojia tongji ju (1985). The 1985-1986 data are from Guojia tongji ju (1986 and 1987).
10. In Sections II and III, it was shown that at present Chinese financial markets are fragmented and primitive and that only a few financial assets are available. Neo-classical models premised upon a fully monetized economy and a perfect capital market are clearly even less appealing than the McKinnon-Shaw approach.¹¹
11. Real money is defined as the money supply deflated by the general price level. There are several definitions of money supply (M_1, M_2, \dots, M_5). In the literature on financial liberalization, M_2 is often used; it includes cash, checking account balances, travellers' checks, and saving deposits at banks.
12. Some steps have already been taken in this direction; for example, a loan contract law was implemented in early 1985.

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