An Economic Analysis of Decentralization
In China: The Coevolution of
Political Order and Property Rights

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In 1978 the People's Republic of China (PRC) embarked on an ambitious program to reform its economy. Economists specializing in China's economy have generally analyzed the economic reforms as the product of the leadership and ideological struggle after Mao Zedong's death in 1976. This emphasis on the supply-side of institutional change has been accompanied by a neglect of other factors which induce institutional change. This paper uses economic models of institutional change to understand the coevolution of political and economic institutions. The analysis uses simple general equilibrium models to clarify why the reforms were directed toward certain sectors of the economy and why the reforms have stalled in recent years. Finally, it clarifies the concept of decentralization and notes the tension between the use of this concept in political science and in economics.

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INTRODUCTION

In 1978 the People's Republic of China (PRC) embarked on an ambitious program to reform its economy. The decisions by the central government to relax its regulation of product prices in most agricultural markets and to allow agricultural workers to retain output beyond their contracted quotas were major components in this program (Wiemer, 1990; McMillan, Whalley & Zhu, 1989). Individuals were also allowed to form private businesses, and state enterprises gained the freedom to partially adjust their factor usage and outputs in response to market forces. Western and Chinese economists have hailed these changes as major steps forward in establishing a more decentralized, efficient economic system in the PRC.¹

Western economists have generally analyzed these economic reforms as the product of the leadership and ideological struggles after Mao Zedong's death in 1976. They argue that a popular reaction against the excesses of the cultural revolution allowed leaders to take power who recognized that communist economic policies since 1949 had failed to achieve their goals. The new leaders' pragmatism and understanding of the advantages of decentralized market allocation motivated them to institute economic reforms to attain better economic performance. This explanation of the economic reforms is surely too narrow, as it ignores numerous other forces capable of inducing substantial change in political and economic institutions. Variations in factor supplies, production and consumption technologies, the size of the market, the constitutional order, terms of trade, and the stock of institutional arrangements are all variables which affect relative prices and create new sets of opportunities for both elite decision makers and average citizens (Feeny, 1988). As these variables change over time, decision makers adjust their allocation of resources within the new environment but also often invest in changing the emerging political and economic institutions. In this analysis I focus on the coevolution of political and economic institutions to draw attention to more fundamental factors which often drive both types of change.

The combination of political and economic decentralization in the PRC (and more recently in some Eastern European countries) represents a rare exception to the modern tendency for central political institutions to accrue more power with time. One major element of the economic reforms is the shedding of some powers by the central government and the assumption of those powers by local and regional authorities. The
The paper ed follows. Sect ed analyzes the basic nature of the relationship between political and decentralization, briefly reviewing historical evidence from Europe and Asia, and applying this framework to the PRC's 978 reforms. Section III contrasts various notions of decentralized government and analyzes the relationship between rent-seeking and decentralization. Section IV discusses why some constraints on rent between provincial and local governments consistent with national wealth maximization identify constraints and channels between provinces, and discusses institutional mechanisms for enforcing such constraints. Section V presents examples of problematic rent-seeking between provinces, the Section VI lines policy recommendations ameliorating China's structural problems with its unitary system of government and concludes with some paradoxes concerning the relationship between power and rent-seeking by national governments in decentralized governing systems.

COEVOLUTIONARY INSTITUTIONAL CHANGE AND CENTRALIZATION

There is an old tradition that looks governmental and economic institutions exogenous analyses. The economist investigates how changes governmental intervention effect individual behavior. Analysis of reforms has generally been conducted with his aim. This perspective has been challenged in the new economic history (North, 1981) and in neoclassical political economy Colander 984) where governmental institutions and economic property rights both ex ante endogenous. Behavioral economists perspective provides insights into the rationale for and the role of the C. reform.

In this paper, more fundamental fact such international terms of trade, production and exchange
technologies, factor supplies, and ideologies, are treated as exogenous while political and economic institutions are treated as endogenous. This change in perspective has already affected analysis in several fields in economics. Traditional models of industrial organization treated industry structure as exogenous and industry performance as the endogenous product. Performance in concentrated industries could be improved if government antitrust authorities forced the largest firms to divest some production capacities and if "monopolistic" marketing and pricing practices, such as tie-in sales and resale price maintenance, were restricted or banned. Economists in this tradition (Scherer, 1980) generally condemned industries with a small number of firms by arguing that small numbers facilitate collusion and extraction of monopoly rents. This view has been challenged in the contestability literature (Baumol et al., 1982) which promoted the view that market structure should be analyzed as the endogenous product of more fundamental economic variables. In the same vein Coase (1972) and Williamson (1975; 1985) argued against the tendency in industrial organization to treat most pricing and marketing practices as devices to establish or extend monopoly power. Instead, firms ordinarily use these practices as means to reduce the costs of exchange. A similar tradition exists in the economic development literature where economists condemned the activities of landlords, middlemen, and foreign investors as exploitative and inefficient. Economists (Stiglitz, 1986; Feeny 1983; Landa, 1981) have only recently analyzed these institutions as effective endogenous responses to a variety of problems associated with exchange under conditions of positive transaction and information costs.

After discarding the exogeneity assumption for political and economic institutions, the analysis begins with the central proposition that the relative efficiency of economic institutions depends on the environment in which they exist. In certain circumstances exclusive, transferable, private property rights are less efficient than constrained property rights (Barzel, 1989; Roumasset & La Croix; 1988; La Croix & Roumasset, 1990). This is contrary to the assumption by most economists that pure private property is more efficient than alternative property rights specifications. While the association of pure private property with efficiency is appropriate in a zero transaction and information cost model, the introduction of costly exchange and costly enforcement of property rights vitiates this result. Private parties have incentives to form public and private institutions to reduce deadweight losses resulting from these impediments to exchange and investment. Economic institutions form
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plan restrictions th property rights order support exchange and enforce of property rights (Barzel, 989; Ulbeck, 982) restrict property rights red: the associated with exchange and enact cemen by reducing th ber of bargains that parties en public authorities monitor Gr benefits derived from restricted property rights fall, but benefits rise de-

transaction

Institution change when underlying economic variables change sufficiently for economic agents to the institutional change, whether institutional change depends on seeking other political considerations. The divergence between benefits and the viewpoint of society whole and the divergence from the viewpoint of possible coalitions of decision makers leads seeking behavior (Tullock, 967), the divergence approaches self-interested behavior by decision makers becomes with efficiency. Large divergence between he incentives decision makers and social incentives lead institution changes consistent with political equilibri but necessary, it's maximization gains may be exhausted, ceased gains from trade be utilized then pet power will tri

thing V. For or any achieved depends on the ability of groups that would gain the effi
gain spate power.

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correlation institutional changes. Adoption of decentralized economic institutions is usually accompanied by centralization of political power, propose (i.e., the PRC) the population promotes major determinations change benefit providing for increased specialization and exchange iner. The prospect of property and appropriable benefits in obtaining those, including in realized governance structures enforce specialization exchange broad spectrum of agents

Wallis (1986) has documented that can economy grown, the portion GNP devoted activities slated transactions costs substantially恩 ofplex oft published by providing

centives the contract allow its Self-enforcing contracts (Tolser 978) rent in specific capital
to support exchange (Williamson 1983; La Croix, 1989), and back-loaded incentive mechanisms (Lazear, 1979) provide good examples of contractually-induced contract enforcement. Yet in many other cases, private contractual enforcement proves to be a costly alternative to centralized governmental enforcement of property rights. In the U.S. the growth of a specialized, complex, decentralized economy has been accompanied by an increase in the central government's power. Other industrialized countries with decentralized economies have seen similar trends. Post World War II economic growth in West Germany, France, Britain, and Japan has been coterminous with an increase in the power and the expenditures of all four central governments.

Yet growth of government power per se provides no rationale for the growth of markets. Adam Smith's prescriptions for efficient government (defense, standards of contracting, law enforcement, and public works) facilitate market growth while other governmental activities that replace markets do not encourage economic growth. The growth of markets is, of course, only one of many reasons why central governments grow. Changes in military and police technology, the ability to collect taxes, outside forces posing challenges to the state, internal interest groups, and ideology have induced institutional evolution and growth.

The development of central government in Russia provides an example where the evolution of markets and the central government did not go hand in hand. While the Czars were consolidating their reign in the sixteenth and seventeenth centuries, service obligations were being imposed on all holders of land (Pipes, 1974: 93-95) Royal monopolies, internal tolls and tariffs on commerce, prohibitions on peasant trading, and restrictions on foreign merchants were present until the reign of Peter the Great in the early eighteenth century (Pipes, 207-211). This contrasts with the development of central government in England during the fourteenth and fifteenth centuries; centralization corresponded with the decline of traditional feudal institutions and the passing of fiefs into outright ownership. In Russia market institutions evolved in response to new pressures on the central government. Changes in military technology and outside pressure from Charles XII of Sweden prompted a recognition that for the Czar's government to survive, additional tax revenues for the military had to be generated; market institutions stimulated new growth and allowed tax collections to increase (Pipes, pp. 116-121).

Eighteenth- and nineteenth-century Hawaii provides similar evidence from a smaller nation with a
The introduction of military technology to Hawaii in the late eighteenth century enabled a single chief (King Kamehameha) to unify several smaller political entities into a single kingdom. Western military technology reduced the cost of maintaining the new kingdom and allowed Kamehameha to restrict the previously vigorous competition between ruling chiefs for labor services. The transition from autarchy to international trade also increased the value of Hawaii's vast stock of sandalwood trees. Since harvesting sandalwood was a labor-intensive activity, Kamehameha and his supporters had incentives to strengthen already centralized property rights in labor in order to extract the rents from sandalwood harvesting. The change in military technology thus facilitated increased centralization of Hawaii's economy. After 1820, the threat to Hawaii's government by western imperial powers was coupled with a rising cost of government. Higher costs stemmed from higher wages resulting from a massive population decline from the introduction of western diseases. A demand for additional revenue by the central government prompted Hawaii to adopt decentralized economic institutions (private property rights in land and free enterprise) in a bid to generate increased economic growth and tax revenue. In both Hawaii and Russia, additional tax revenues were critical for the survival of the government and, given the changes in the underlying economic environments, both governments moved toward decentralized market institutions as a solution to their problems.

The consolidation of central government in the PRC after World War II is consistent with the examples of Russia and Hawaii rather than England (La Croix, 1990). After the victory by communist forces in 1949, the government acted during the early 1950s to curtail individual property rights to the income from human capital and land. Newly formed agricultural cooperatives imposed service obligations on peasants; migration within the PRC was restricted by a system of residential permits specifying a narrow geographic region where an individual must reside; the state severely limited individuals in their pursuit of economic activities outside of the state plan, e.g., sideline activities on farms such as raising pigs; running small businesses in urban areas was completely prohibited; and the principal of the "iron rice bowl" removed the link between an individual's marginal product and wage rate. On the other hand, the state also constrained the ability of enterprises to discharge or penalize workers. Thus property rights in labor were transferred from individuals to local party and government
organizations and were transformed from pure private property into a more limited set of property rights, restricting both the appropriation of income streams and their use.

By 1956 most agricultural land had been collectivized and distributed to cooperatives. Cooperatives were not allowed to lease or sell their land. In addition, state procurement agencies set the procurement price of agricultural goods well below their market price. Together the restrictions on alienability and the product price controls severely reduced economic rents from farming. Cooperative management had few incentives to economize on the use of land in production and only limited incentives to maintain it in an economically efficient manner. The overall result was that property rights in land were transferred from individuals to the more centralized work unit (i.e., the collective) and were transformed from exclusive, alienable, private property into a bundle of nonalienable, communal rights. In sum, property rights in both land and man became both more centralized and more restricted. Wiemer (1990) has shown that rents for the government were generated by setting agricultural prices, agricultural wages, and industrial wages at low levels, while prices of industrial products were set at high levels. Party and government officials used the rents to finance desired industrial investment projects.

Economists have rightly ascribed the change in property rights in both labor and land primarily to the change in ideology as the communists began their rule. Most of the changes, particularly those pertaining to land, received broad support from the populace. In the early 1950s the appropriation of land and the murder of most landlords allowed some land rents to be transferred to peasants. The central government’s use of price controls and property rights restrictions facilitated extraction of rents by the central government. Although government aimed to extract most rents, peasants were often able to conceal outputs and exaggerate shortages in order to transfer fewer rents to the State. Perhaps the mixed signals from the government stemmed from two additional forces driving institutional change in the early and mid 1950s: the lack of an external military threat coupled with the Chinese military’s great strength and reputation after the revolution and the Korean War. The removal of Japan as an external threat as well as economic and military cooperation with the Soviet Union meant that it was less critical to generate tax revenue to ensure the government’s survival. At the same time, the increase in the power of the army attached to the central government facilitated extraction of rents via the central
government's system of central planning. The combination of an increased facility to extract rents with a less critical need for the rent may help to explain why the rent extraction framework was only loosely utilized by the central government.

The breakdown in Sino-Soviet cooperation during the late 1950s and the subsequent rise in border tensions as well as the deployment by the United States of surface-to-surface Matador missiles in Taiwan during 1957 increased the (perceived) external threat to the PRC. The government responded to the new challenges in three ways. First, in the summer and fall of 1958, cooperatives were amalgamated into larger units, the famous people's communes, that could be more easily monitored by central authorities. Second, with the deterioration of China-Soviet Union relations during 1959-60, the government reallocated its investment to realize additional military goals. Naughton (1989) argues that the economy was geographically "decentralized" during this period by the government's policy of scattering new industrial development in the PRC's remote provinces and mountainous regions, far from the Soviet border and the Taiwan Straits. The "geographic decentralization" reduced the economy's vulnerability from invasion of the coastal provinces yet markedly increased production costs (both fixed and variable). Third, the government hoped that the geographic decentralization policy would also make each province economically self-sufficient in food and most industrial goods. This policy led the central government and local governments to deemphasize the role of imports and exports, thereby restricting dramatically the influence of world relative prices on the economy.

La Croix (1990) argues that the reforms initiated by the party in 1978 were driven by three fundamental economic factors: increasing population, changing terms of trade, and a decreased external military threat. Between 1952 and 1978 the amount of land in cultivation decreased by 7.9% while China's population increased from 582.6 million in 1953 to 1,008.2 million in 1982. Cultivated land per capita fell from .44 acres in 1949 to .25 in 1979. Using a simple two-sector (agriculture and light industry), three-factor (land, labor, and capital) general equilibrium model in which land is specific to the agricultural sector and labor is mobile between the agricultural and light industrial sectors, I simulate shadow prices of land, labor and capital by plugging actual factor supplies and world prices into the model as parameters. The simulations show that between 1955 and 1978 the shadow price of land increased by over 200% relative to the shadow price of labor and capital.
increase the demand for land, the price of land increased.

The responsibility for mining 78-80 produced partly by sea
land rights. Communal farming began to negotiate short-term leases with individual farmers for particular plots of land.

By changing sharecropping, incentives for farmers to consider the opportunity of the land increased. Since the land mining by tenants under short-term leases, in

1984, communal farming began to end the long-term typical family lease. The original lease period was 15-30 years, reduced to 5-10 years. With these Agricultural land has been leased

Since the share of labor with respect to land decreased between 1955 and 1978, the property rights of labor were transformed into property rights

and the property rights of labor. The extent of the changes varied across rural sectors. In the rural labor market, the price of land increased, charges on jobs, and labor released by firms. Land reforms illegally radiated to urban areas. During the 1990s, Shanghai and Beijing each have approximately 1 million illegal residents.

The change in property rights has occurred in rural areas. As land reforms provided incentives for farming, labor released into other defines activities. The residual proceeds between activities (axes) represent the price of labor. When rural
families were given the right to choose production techniques on their leased plots of land, they made major adjustments in their use of inputs. Less labor was applied to the same amount of land, while incentives were adjusted to promote better allocation of labor time and increased effort. The net result was that millions of peasants were released from the farm sector for use in other industries. Permitting these individuals to work in rural "sidelines" businesses allowed China to rationalize the use of its most scarce factor of production, land. At the same time restricting migration to urban areas allowed government officials to maintain a serf-like relationship with the captive population.

The change in the international terms of trade during the 1960s and 1970s was a second factor driving China's reform program. Given the scarcity of land (which is specific to agriculture) relative to labor, China's comparative advantage most likely was in labor-intensive, light-industrial goods. During the 1960s and 1970s the world price of agricultural commodities relative to light industrial goods decreased markedly. In addition, the real value of China's extensive coal and oil reserves increased substantially after the 1973 and 1979 oil price increases. The gains from trade which could be realized by participating more fully in world trade increased with the positive change in China's terms of trade. By opening the economy to world trade, China's decision makers realized that the rents which could be earned from world trade outweighed those which could garnered from an internal system of restricted rights.

The opening of economic and political relations with the United States in 1972 was a third factor behind the reform program. In addition to the economic and social effects of increased trade and contacts with the West, the new relationship with the U.S. decreased the perceived external threat from Taiwan and the West. In the 1972 Shanghai Communique the U.S. promised that "it will progressively reduce its forces and military installations on Taiwan as the tension in the area diminishes." While tensions with the Soviet Union remained high throughout the 1970s (culminating in the February, 1979 Chinese invasion of North Vietnam, a close Soviet ally), decreased overall tensions meant that China could begin to move away from its self-sufficiency and geographical decentralization policies.

When the focus switches to political institutions, the relative shift in power from the central government to provincial and local governments is most striking. It appears to be an exception to the pattern noted above.
that decentralization of economic institutions is usually accompanied by centralization of political institutions. Consider some explanations for the shift in power. First, it may be that in a large, diverse country like the PRC more competition between lower levels of government will force local governments to minimize costs and provide efficient levels of public goods. Second, the central government may have been forced to concede these powers in order to maintain political support for its reforms. Third, the shift may have been an unintended consequence of the reforms. To help sort out the various explanations, the economics of decentralization (Section III) and federalism (Section IV) are discussed below.

III. DECENTRALIZATION AND RENT-SEEKING

"Decentralization" is a concept which has been rather loosely used by economists. Like many other economic concepts, it has a different meaning in the theoretical economics literature than it has in the common parlance. In common usage "decentralized decision making" usually means that decisions are made by individuals who are "closer" to the problem and are able to apply information concerning particular circumstances with respect to people, place, and time. Decisions by a local government or by workers on the factory floor are characterized as decentralized while decisions by "bosses" separated by several layers of hierarchy or by top leaders in the national government are labeled as centralized. There is often a presumption that decentralized decisions are "better" than centralized decisions because (1) decentralized decision makers have more precise information to apply to the decision and are, therefore, capable of making better decisions; and (2) decentralized decision makers are making decisions which affect them directly and are more likely to make careful decisions that conserve on resource use.

General equilibrium economic models usually characterize decision making as "decentralized" when individuals and private firms are endowed with a complete set of pure private property rights over tangible and intangible property. Pure private property rights allow the owner to exclude others from the use of the property, to sell the property, and to receive the income stream from its use. Exercise of property rights is governed by relative prices generated in competitive markets. Under the usual assumptions (no economies of scale, no consumption or production externalities), when individuals maximize utility and firms maximize wealth the price mechanism produces a Pareto-efficient equilibrium.
One major difference between common notions of decentralization and the more technical concept of the economics literature is that decision making may be very centralized in these "decentralized" competitive economies. The apparent paradox is resolved by realizing that decentralization in economic models refers to coordination of endogenous economic institutions by the price mechanism. Coordination by prices implies that no central authority need gather information to ensure equilibrium or efficiency. As Coase first noted in 1937, if discovery and use of market prices were free, virtually all choices would be effected as market transactions and decision making would be perfectly decentralized. Since transacting parties usually spend resources to negotiate, draft, and enforce contracts specifying prices with respect to multiple margins of exchange, institutions form to economize on the use of the price mechanism as transaction costs increase. They reduce reliance on prices by substituting internal hierarchies to reduce resource allocation costs. As the structure of transaction costs varies, institutions will also vary with respect to size and internal uses of the market mechanism. For some transaction cost configurations, large institutions with centralized decision making will be efficient. The variety of institutions that arise in a competitive economy contrasts with the populist vision of a decentralized economy embodied in most general equilibrium models: small firms with minimal hierarchies coordinated by the price mechanism. In sum, a well-functioning decentralized economy is likely to generate a wide variety of endogenous institutions, some of which will be quite large and centralized. In other words an optimally decentralized economy may, in many instances, not make much use of the price mechanism.

"Decentralization" discussions in economics usually focus on the transfer of decision making from public to private parties because economic models have something to say about how decisions will be coordinated between individuals and firms. In practice decentralization is rarely ever so straightforward that it can be characterized as a simple transfer of property rights from the public to the private sector. The process is more complicated because political institutions are more various and complex than the single central government of the general equilibrium model. Most nations have multiple layers of governments that both cooperate and compete with each other. In some countries (such as the PRC and India) provincial and local governments are creatures of the central government, yet retain some degree of independence due to agency costs and to the local interests that they represent. Lower levels of government introduce a new dimension to the structure of decision
Taking the maximizing occur within framework of petition with other decentralized governments they like govern delineating enforcing rights to property which the central government has neglected define.

Decentralization often initiated by central government deciding abandon the of its regulatory powers, because changes fundamental economic forces. Abandonment of regulatory powers the common be differentiated from the transfer of rights. The stage then for competition appropriate these additional tools which production heir property. This done the of pressing the mechanism and red future the provincial authorities determine the to interest support the rent and will be ized by leaving price setting powers be appropriated by public firms. Dual decentralization must be differentiated th book high reassigned the rate. The petition between private parties and local rent appropriation to sixth of property that arranged and than their access propert by.

The the corporation essential needs upon the them. ich competition proceed:

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political agents could offset the advantages of decentralization.

IV. ECONOMICS OF FEDERALISM

The PRC has a unitary system of government in which lower and upper level officials are appointed by the Communist Party; decisions by lower level governmental officials can be overridden by upper level officials. The unitary system can be contrasted with a federal system in which regional and local governments retain some degree of "sovereignty", thereby allowing them to make some decisions which cannot easily be overridden by the national government. Decentralization of decision making is often associated with federal systems of government. Yet in many federal governments (West Germany, U.S.), most of the power rests with the national government, and decision making may be very centralized. Unitary governments are rightly associated with centralized decision making, but regional governments do retain some power. This is due to (1) monitoring costs that limit the scope and depth of the central government's control; (2) important local interest groups that support the local government and the national government; and (3) efficiency considerations associated with decentralized government.

Some degree of governmental decentralization usually contributes to overall system performance. Heterogeneity of preferences and endowments across regions enables regional governments, with more homogeneous populations and economies, to provide public services on the appropriate scope and scale. Decentralization also removes some of the linkage between performance of top decision makers in the central government and overall economic performance; bad decisions by central government officials are less likely to prompt a recession, as they have less impact than in a centralized system and in many instances will be actions taken by provincial officials. Innovation may also be more likely within a group of regional governments than in a single centralized government. Regional experiments with policy carry less risk than national experiments and can provide a basis for changing national policy.10

More generally, some economists believe that natural selection mechanisms work more effectively in a number of decentralized, competing governments than in a central government. Easterbrook (1983, p. 34) has argued that competition among states may lead to better regulation:

There will be a powerful tendency toward optimal legislation to the extent four conditions are satisfied
(1) people and resources are more mobile; (2) the number of jurisdictions increases; (3) jurisdictions can select any set of laws they desire; and (4) all of the consequences of one jurisdiction's laws are felt within that jurisdiction.

When these conditions are satisfied, people who are unhappy with one jurisdiction's laws can easily move to another jurisdiction that has selected more preferred laws. Unitary governments provide less variety, and it is almost always more costly to move to another nation than to another province.

Easterbrook's four conditions are, however, rarely satisfied. In most large countries the fourth assumption is violated, while in the PRC the first and fourth assumptions clearly do not hold. In the U.S., states with market power over particular commodities enact regulations to limit competition in the commodity or to tax the export of the commodity from the state. The Supreme Court's Parker doctrine exempts such regulations from the purview of the Sherman Antitrust Act. Trade restrictions approximating the effects of traditional tariffs and quotas are viable when assumption 1 is violated, as many consumers and firms affected by these restrictions will find it too costly to move to another state.

Restricting the imposition of tariffs and quotas is particularly difficult, as there are many alternative methods of sheltering industry. Corden's (1957) classic result, that the gains to producers from a tariff can be replicated at lower welfare cost by a production subsidy, is particularly important. Subsidies can be given to firms in numerous ways. Is a highway that seems to go out of its way to connect with a firm's plant "a subsidy" or a public good? Do low corporate tax rates represent a corporate subsidy or optimal taxation? The list continues, leading to the conclusion that trying to limit state subsidies would interfere with the efficient provision of local public goods. And the U.S. Constitution makes no attempt to limit subsidies by states to industry. However, the Commerce Clause of the U.S. Constitution prohibits restrictions on trade across states. It would seem as if such restrictions would have no teeth, as the effects of tariffs can be replicated by subsidies. Subsidies are not only more efficient but also must be financed by taxes, and this sets some limits to the size and the scope of this type of aid to industry. By contrast, prohibitive tariffs can be imposed without increasing taxes. The effect of the Commerce Clause is to impose a ceiling on the amount of rent-seeking activities by decentralized governments. While a ceiling may not be the first-best solution, given the difficulties in distinguishing between subsidies and efficient public good provision, the Commerce Clause may be the best
institutional mechanism available to restrain government rent-seeking.

By prohibiting gross restrictions on trade between regions, specialization in production across regions is encouraged and national income increases. Setting and enforcing such a prohibition is most efficiently done by the national government. This is because efficient enforcement implies forcing the offending state to rescind its trade restrictions. Since the states have no forces with which to back up their case, enforcement would generally take the form of retaliatory trade barriers. In a noncooperative environment the new trade barriers may well form a new equilibrium rather than forcing the other province back to a "free trade" policy. By contrast, enforcement by the central government can force the province to back down. Moreover, the rule to be enforced is straightforward and the gains from implementing such a simple rule are likely to be large.

V. COMPETITION BETWEEN LOCAL GOVERNMENTS IN CHINA

The PRC has no constitutional restrictions resembling the Commerce Clause. This omission is particularly interesting because of some striking similarities between the Chinese and the U.S. constraints. Both nations have large, relatively homogeneous populations and are characterized by geographic regions with diverse endowments of resources. Given the large markets and the regional differences in endowments, internal trade is likely to be a relatively high proportion of trade in both countries. A policy which minimizes internal barriers to trade is likely to be welfare-maximizing in both countries.

Restrictions on trade barriers are even more important in the PRC than in the United States because of the restricted mobility of labor in the PRC. Individuals who are dissatisfied with a province's policies cannot "vote with their feet" and take their capital and labor to another province. Restrictions on internal migration mean that the local government can take action to benefit particular interest groups without incurring the costs stemming from the migration of groups that are losers in the rent-seeking process. And although tariffs are less efficient than producer subsidies, tariffs are more likely to be used due to the greater scope for achieving the desired level of political protection. The restrictions on individual mobility transform the analysis. Instead of an efficient equilibrium along the lines outlined by Tiebout (1956), the equilibrium will resemble that found between independent states, i.e., it will be characterized by nontariff and tariff barriers to trade. A few examples highlight the analysis.
First, in 1988 the Beijing municipal government blocked the movement of "unauthorized farm products" onto Beijing markets. The government set up checkpoints around the city to physically block the entry of vehicles carrying farm produce. The government purchases produce at a relatively high price from farmers in the Beijing area and then resells it to consumers in its state retailing stores. The state government subsidizes the local government to cover this loss. Why then would the state government be concerned about the "unauthorized produce" if it is merely breaking even on the subsidy program? One reason may be that it is responsive to the ready constituency for its farm program: the area's farm population. They stand to gain from the high prices paid for the farm products. While most farmers in developing countries are not politically influential (Balisican & Roumasset, 1987), the farmers surrounding Beijing differ from the typical Chinese farmer. They fit the stereotype of the influential interest group, as they are a small enough part of the Beijing population to have low costs of organization, yet are numerous enough to have some influence. In addition, they have better access to good communication and transportation networks than farmers elsewhere in the PRC or in most other developing countries.15

Second, county governments receive allotments of low-priced fertilizer, pesticides, and diesel fuel in exchange for their sale of low-priced grain under quota to the state. Peasants have been complaining of local government profiteering, i.e., collection of rents, as these inputs are sold at higher prices to local residents. More importantly, the local governments also force peasants to buy more expensive locally-produced farm inputs in order to support local industries. In this case rents are split between local government officials and well-organized interest groups. Nontariff barriers to trade are also found in the procurement of raw materials. Reynolds reports that textile industries near Shanghai tried to procure cotton from Shandong province but found that it was "unavailable." The implication is that the cotton is being diverted to other industries that have won the favor of the provincial government.

Third, the process of continuing economic reforms ground to a halt after 1988. While market forces strongly influence the organization and structure of the rural agricultural and sidelines economy, they have not been allowed to operate as fully in the still heavily regulated urban industrial sector. Wiemer has documented that the PRC has followed the usual pattern in developing countries where agriculture is taxed and industry is
subsidized. It was relatively easy for the government to introduce reforms in the agricultural sector because this sector was being taxed. Allowing procurement prices to more closely reflect market prices reduced (implicit) taxes on agricultural products and initially made reform a popular measure in rural areas. Yet as agricultural taxes were eliminated and food prices increased, the cost of government food subsidies for urban workers rose; the next logical step in the reform process would be to eliminate food subsidies for urban workers and to allow prices of industrial goods to fall, thereby eliminating the rents in the industrial sector created by the pre-reform economic system. Elimination of food subsidies for urban workers is difficult in any developing country as urban workers have low costs of organization and are small relative to the farm sector. While elimination of rents from the distorted industrial policy would increase efficiency, it would also harm the urban interest groups which receive the food subsidies. Provinces with large urban sectors are likely to oppose food subsidy/product price reforms, as they share in the rents generated by the system.16

Fourth, there has been a dichotomy between liberalization of manufacturing industry in the northern and southern provinces. Southern provinces have been quick to adopt market-oriented reforms and have encouraged entrepreneurship and competition; northern provinces have been slower to initiate reforms and to encourage private initiatives in manufacturing. One major reason may be that the northern provinces receive the bulk of the rents from the PRC’s previous industrial policy due to the concentration of heavy and light industry in the north (which includes the Shanghai/Yangtze Basin area). The south, with less industry and with fewer rents to lose from reform and competition, rationally adopted a policy of encouraging foreign investment and increased competition in most industries. The assumption is that the loss in current rents would quickly be made up by the increases in consumer and producer surpluses. Such changes would also be facilitated by the lack of established manufacturing interest groups. At the national level, the interest of the northern provinces effectively blocks the consensus required for further adoption of market forces in the urban manufacturing sector.

Fifth, monetary policy has been influenced by the rents that can accrue to local authorities from the expansion of credit to finance desired projects. In the 1980s, as more economic activity was permitted to take place outside the plan, provincial and lower level bank branches (all part of the state banking system) were given more authority in granting loans. Local bank administrators are told by province that if they don’t approve the
loans desired by the provincial leadership, they will lose their jobs. Since each provincial bank administration had incentives to expand credit and perceived minimal costs to the bank from the credit expansion, the result was a classic free-riding problem. In the aggregate, increased bank loans increased the supply of money and contributed to the inflation of 1987-89. Naughton (1990) rightly observes that the Chinese government emphasized the reform of goods markets, but undertook few reforms of financial markets; the inflation reflected the inadequacy of the old financial institutions when coupled with free markets for goods. While Naughton's analysis is correct, the inflation may also reflect inefficient institutional evolution. As the central government gave up some of its control over investment, the power to allocate resources to investment projects was not appropriated by private firms, but was instead appropriated by provincial governments. Since an efficient framework for competition between the provinces was not in place, it is unsurprising that the competition to expand credit dissipated resources, resulting in a higher price level.

VI. CONCLUSIONS AND POLICY RECOMMENDATIONS

Institutional change is driven by a wide variety of fundamental forces, including changes in ideology. There is, however, no guarantee that the process of institutional change will yield economic efficiency. Between 1955 and 1978, changes in factor supplies, ideology, external security threats, and world prices induced important political and economic changes in China's economy and government. While the new institutions allowed more careful use of valuable factors of production (in particular, land), they did not produce political institutions that were compatible with the new economic institutions. The devolution of power from the central government should have provided private agents with enhanced freedom to make decisions about resource allocation without interference from the central government. Instead provincial governments acted to assume the powers shed by the central government. Decentralization in decision making should have led to increased efficiency in resource allocation. Unfortunately, no constraints on competition between provinces were in place. The lack of a "commerce clause" barring barriers to trade between the provinces led to competition between provinces that dissipated resources and produced a halt to further reforms in 1987. While it would seem that the problem could be easily solved, some provinces have prospered under the new, flawed political institutions and they represent an interest group at the national level which opposes any efforts to restore some powers to the central
government. Some of the problem lies, however, in a misunderstanding of the concept of decentralization.

Perhaps the Chinese government should ponder the tenth amendment to the United States constitution:

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people.

Just take out that part referring "to the States" and delegate the powers to the people.
REFERENCES


"An Economic Theory of Political Change in Pre-Missionary Hawaii." 21 Explorations


FOOTNOTES


3. See Tullock (1990) and the accompanying references.

4. The market for Hawaii's sandalwood was China, where it was highly valued for its oil, its fragrance, and its appearance.


7. This also parallels the discussion in Hayek (1945).

8. The usual assumptions are no increasing returns to production and no consumption and production externalities.

9. In the United States, local governments, state governments, and the national government coexist in a federal framework set forth in the U.S. Constitution. The constitution allows the states to retain certain rights and cannot be changed without the consent of three-quarters of the states. States have, therefore, a certain degree of autonomy which cannot be legally infringed by the national government; local governments also retain considerable privileges not granted to the states.


12. The Commerce Clause [Article 1, Section 8] provides Congress with the power "[t]o regulate Commerce with foreign Nations, and among the several states." In addition, Article 1, Section 9 states that "[n]o Tax or Duty shall be laid on Articles exported from any State."

13. They still have to be concerned about these groups organizing if they do not migrate.

14. While some of these effects may be ameliorated by discretionary actions taken by the central government, the barriers are likely to remain.

15. In addition, the food purchased by the government is sold in the government's retail stores. If the government is earning rents from the stores, it will not want alternative sources of food supply to stimulate competition from private retail outlets.

16. Provinces only pay a lump sum to the central government. Thus they are the residual claimants to any additional rents created by trade barriers, etc.