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Economic Reform in China - 1v

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China's Economic Reforms in a Comparative Perspective¹

BELA BALASSA

The Johns Hopkins University, Baltimore, Maryland 21218 and World Bank, Washington, D.C. 20433

Balassa, Bela—China's Economic Reforms in a Comparative Perspective

The paper makes recommendations for extending the reform effort while establishing macroeconomic equilibrium in China. The recommendations concern increasing the decision-making power of enterprises, which are to respond to profit incentives; creating the conditions for effective competition in Chinese industry; reforming prices; linking bonuses to work performance; establishing an effective monetary policy; rationalizing the banking system; and setting realistic interest rates. The paper indicates the need for taking simultaneous action in all these areas. *J. Comp. Econ.*, September, 1987, 11(3), pp. 410–426. The Johns Hopkins University, Baltimore, Maryland 21218 and World Bank, Washington, D.C. 20433. © 1987 Academic Press, Inc.

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This paper will briefly review the economic reforms introduced in China after 1978, analyze the performance of Chinese agriculture and industry following the reforms, and examine prospective changes in the future. In the discussion, planning and markets, competition and profit incentives, price reform, as well as wages and bonuses will receive attention. Consideration will further be given to the macroeconomic preconditions of the reform effort. In regard to the individual topics, the experience of European socialist countries and, in particular, that of Hungary will be noted, based largely on the writings of the author (Balassa, 1983a, 1983b, and 1985).

¹ The author prepared this paper following a visit to China on November 11–21, 1985. He is grateful for helpful discussions he had at the Institute of Economics and the Institute of World Economics and Politics in Beijing, at the University of Nankai in Tianjin, and at the Economic Research Center and the Institute of World Economy in Shanghai. The author further acknowledges the valuable comments made on the first draft of the paper by A. Doak Barnett, William Byrd, Dong Fureng, Nicholas Lardy, Dwight Perkins, Thomas Rawski, Bruce Reynolds, and Edward Schuh, as well as comments received at the Arden House Conference on Chinese Economic Reform on October 9–12, 1986. He alone is responsible for the contents of the paper, however, and they should not be interpreted to reflect the views of the World Bank.

AGRICULTURAL REFORMS AND PERFORMANCE

As in the case of Hungary, the first major reforms in China were introduced in agriculture. After 1978, agricultural prices were substantially raised, resulting in improvements in agriculture's terms of trade. Also, mandatory quotas for sown area and output were eliminated and purchase (compulsory procurement) quotas were reduced, with the sale of above-quota output on free markets, and increased possibilities were provided for undertaking so-called sideline activities. Finally, the commune system gave place to family responsibility systems, among which the bao gan dao hu² has come to dominate, accounting for 94% of peasant households in 1984.

There are similarities as well as differences in the agricultural reforms introduced in China and in Hungary. Agricultural prices were raised in both cases; however, Hungary abolished the system of compulsory delivery as early as 1957. But, it retained the cooperatives as basic farming units while giving greater scope to household plots, with production on these plots accounting for one-third of agricultural output. Finally, similar to China, Hungary encouraged the expansion of sideline activities.

There are several reasons for the observed differences in institutional structure. The Hungarian farming cooperatives are relatively small, possess considerable flexibility, and provide performance incentives to their members whereas the Chinese communes were huge, unwieldy units. Also, the high degree of mechanization in Hungarian agriculture has necessitated the maintenance of large production units that has not been the case in China.

In response to the reforms, per capita grain production in China rose by one-sixth between 1978 and 1985, although the acreage devoted to the cultivation of grains declined. As grains accounted for a large proportion of total acreage, land under other crops increased considerably, notwithstanding some decline in the total sown area.³ With rising yields, the per capita output of cotton rose by two-thirds, that of oilseeds, sugar, and tobacco approximately doubled, and substantial increases were observed also in the case of minor crops. Assisted further by the expansion of livestock raising and sideline activities, per capita gross agricultural output grew by two-thirds, with crop output per head rising by two-fifths during the 1978–1985 period (Ma, 1983, Table 1; "Communique," 1986). According to one estimate, about one-half

² Under this system, land (adjusted for quality) is divided equally among households in per capita terms, or on the basis of the number of able-bodied workers per household. The obligations of individual households are limited to the payment of taxes, the fulfillment of purchase quotas, and contributions to social welfare funds. These obligations have been defined in absolute terms, rather than as a proportion of output, thereby providing incentives for increasing production.

³ In the 1979–1983 period, for which data are available, the area devoted to grains was reduced by 4%, that under other crops increased by 20% while the total sown area declined by 3% (Lim et al., 1985, Annex 2, p. 11).

of the increase in farm output (crops and livestock) between 1978 and 1984 can be attributed to increases in inputs and one-half to the growth of total factor productivity, which had fallen in the preceding 26 years (Johnson, 1986, Table 2).

The rapid rise of agricultural output was achieved, even though the share of agriculture in budget allocation for new investment and for current expenditures fell during the period and the agricultural credit system restrained investment, with increases in rural deposits substantially exceeding the rise in lending to agriculture (Lardy, 1986). Also, due to uncertainty about land tenure, private investments concentrated in housing.

It has been suggested that increases in prices might have led to the rise in output even in the absence of organizational changes (Khan and Lee, 1983, p. 52). But, in Soviet Central Asia, cited as evidence in support of this proposition, increases in agricultural production were much smaller than in China. And, the observed rise in yields could not have been accomplished under the commune system, where the link between performance and rewards was lacking. This conclusion is supported by the findings of a cross-section investigation, which show that the growth of agricultural production was positively correlated with the extent to which the family responsibility system was applied in individual provinces in the early 1980s (Lin, 1986).

The reduction in the number of agricultural commodities under compulsory procurement from 29 to 10 in 1984, followed by the replacement of compulsory procurement quotas by purchases under contract for grains and cotton, represents a further easing of controls although the state will continue to set the purchase price under the contracts. Zhao Ziyang, the Premier of the State Council, announced that agricultural prices and purchase quotas will be further liberalized in the future, with a view to developing exports (*Beijing Review*, No. 7–8, February 18, 1985, p. 16). In this connection, comparisons of domestic agricultural prices with world market prices are of interest.

According to a study by the Research Institute of Prices, in 1984 the average purchase prices for 18 major agricultural products were, on the average, 26% lower than world market prices, with large disparities shown among commodities. Thus, average prices paid for wheat were 22% and for oil and fat 17% higher than prices on the world market, while cotton and jute prices were 28% and average prices for animal products 48% lower than world market prices (Dong, 1985b, p. 26).

In 1985, prices for pig meat were raised to a considerable extent, so as to encourage production through improved profitability that was compromised as a result of earlier increases in the prices of feed grains. This change conforms to the price relationships found on the world market. Further changes in this direction would be desirable to permit the exploitation of China's comparative advantage in agricultural products, with account taken of the possible effects of Chinese exports and imports on world market prices.

Thus, China would export rice if its quality improved, although large exports would depress the world market price. Rapid expansion of Chinese exports of cotton, jute, and tea may also lower world market prices somewhat. However, for all remaining products, in particular for potential new exports, world market prices will provide an appropriate guide.

In the statement referred to above, the Premier of the State Council noted the possibility that in the coastal areas, where considerable potential exists for exports, as well as in areas suitable for forestry and animal husbandry, peasants may in the future pay a tax instead of delivering grain to the state. This alternative may be generalized by freeing markets for all agricultural products and replacing sales to the state at below-market prices, which represent an implicit tax, by a land tax.⁴

Such changes would contribute to the growth of agricultural output and incomes through increased intraregional and interregional specialization, complemented by international trade. This is of a particular importance since the large gains in yields, obtained chiefly through increased work effort, better organization, and improved marketing, could not be duplicated in the future. At the same time, the introduction of a land tax would also permit reducing interregional income inequalities that result from differences in the quality of land both within and among regions (Balassa, 1982, p. 329).

The development of Chinese agriculture would further require the increased availability of modern inputs, such as fertilizer, agricultural machinery, and improved seeds, as well as credit and support services. While higher agricultural prices would permit peasants to pay for modern inputs without the granting of input subsidies that tend to encourage their excessive use, improvements in infrastructure and the provision of extension services and research have to be a governmental responsibility as the social benefits exceed the benefits to the individual peasants.

Finally, there is need to encourage investments by the peasants themselves. This would require changing existing land tenure arrangements. Short of the privatization of land, granting for its use for a period of, say, 30–40 years and permitting the transfer of the contract would provide inducements to investment.

INDUSTRIAL REFORMS AND PERFORMANCE

The expression "responsibility system," originally applied to agriculture, has come to be employed in reference to state-owned industry as well. It is

⁴ There is today a rudimentary land tax in the form of an output tax that has changed little over the years, but the revenue it provides is rather small, considerably below 2% of value added in agriculture (Lardy, 1986). At the same time, the experience of other countries indicates that the difficulties of establishing a land tax can be overcome. Such a tax has long been used in Hungary, where the elimination of compulsory procurement in 1957 has led to higher output through increased specialization and exports.

used to refer to the increased role of material incentives, including profit retention schemes and productivity-based bonuses, the increased power of managers vis-à-vis party officials in the affairs of the firm, and the greater latitude given to the firm for making its own production and investment decisions, with above-quota output sold to consumers either directly or indirectly through commercial channels.

But, whereas under the family responsibility system there is a direct link between performance and reward, in state-owned industry the link is indirect through profit allocation and bonus schemes, in which profits are affected by factors extraneous to the firm, in particular prices, and profit retention by the firm depends on the norm established by the supervisory authorities. Also, with reductions in the scope of compulsory deliveries, together with the encouragement of sideline activities, the scope of market-oriented activities has been greater in agriculture than in industry, and the share of these activities in industry has varied considerably among firms. By contrast, Hungary abolished plan targets on January 1, 1968.

Following an initial slowdown, the growth of industrial output accelerated in China ("Communique," 1985, 1986). At the same time, while greater reliance on markets has encouraged production for the needs of the population, the pursuit of profits has often led to changes in the product mix that did not conform to demand. Also, there is conflicting evidence in regard to changes in the efficiency of industry in China.

According to one study, the ratio of value added net of depreciation to output value increased by 6% between 1978 and 1981 (Byrd, 1982, Table 2). However, other researchers found a decline rather than an increase in the share of value added in industrial output for the same period, with value added rising by 19.4% and output volume by 22.9%, both expressed in 1970 prices (Ma, 1983, Table 1; Rawski, 1984, Table 1). Also, available estimates show that total factor productivity in state-owned industry declined between 1978 and 1983 as the 28.4% growth in net output involved a 49.3% increase in capital and a 16.7% rise in employment (Tidrick, 1986, Table 2).

PLANNING AND MARKETS

In contradistinction to Hungary, after 1978 China maintained plan targets for its state-owned firms. While planning has subsequently been liberalized, the products remaining subject to mandatory plans continue to represent a substantial segment of industry, with estimates ranging from 20% upward. The products in question include coal, crude oil, petroleum products, rolled steel, nonferrous metals, timber, cement, electricity, chemical materials and fertilizer, synthetic fibers, cigarettes, newsprint, imported machinery and equipment, as well as munitions. For these products, the state continues to set production quotas and prices, although above-quota sales are permitted at so-called floating prices.

The October 20, 1984 Decision of the Central Committee stated that "other products and economic activities [i.e., those not subject to mandatory quotas] . . . should either come under guidance planning or be left entirely to the operation of the market, as the case may require" ("Decision," 1985, p. VIII). However, the meaning of guidance planning has not been clarified, and a large number of products, which do not come under mandatory planning, are subject to quota allocation for part of their output, with the rest marketed outside the plan at floating prices.

The two-tier system of sales and prices increases the freedom of decision-making for the firm, but may have adverse effects on the national economy. Since raising the quota allocation of inputs and reducing that of output may affect the firm's profits to a much greater extent than any improvements in production, bargaining and influence-peddling are at a premium. Nor should it be assumed that profitability at the prices of above-quotas sales represents social profitability, in part because these prices differ from equilibrium prices that would be obtained in the absence of quotas, and in part because the prices of capital and labor do not reflect scarcity relationships.

In order for China to reap the benefits of a market-oriented economy, it would have to reduce the number of commodities subject to mandatory planning, and to phase out quotas on all other products, relying on indirect policy instruments, such as taxes and monetary policy, to guide enterprises. Furthermore, one should reaffirm the freedom of decision-making for the enterprise vis-à-vis the various surrogates for the central planning authorities, including the industrial bureaus and corporations as well as the "guiding" role assigned to localities, which have assumed importance in recent years. As one observer noted:

In the early stages of reform implementation the position of enterprises was enhanced and the "excessive" control previously exercised by their immediate supervisors criticized. . . . Starting in 1980 and especially with the campaign to promote ERSs [economic responsibility systems] of 1981, the orientation of reforms shifted to the next higher level in the industrial management—the bureaus and corporations. Under the ERS these organizations commonly determine all of the key financial provisions of incentive schemes affecting their subordinate enterprises. (Byrd, 1982, p. 14)

According to the same author,

there are good economic reasons why in many cases decentralization should not proceed all the way down to the enterprise level. In particular, decentralization of investment decisions and control over investment funds to enterprises is likely to generate an inefficient and duplicative pattern of investment, in the absence of effective financial intermediation of the banking system. (Byrd, 1982, p. 15)

Decision-making on investment should not be divorced, however, from responsibility for profits and losses since otherwise profitability considerations will not appropriately enter into investment decisions. In this connection, the experience of Hungary is of interest.

At the time of the introduction of the economic reform, it was decided to decentralize investment decisions in manufacturing industries, except for large

investments that substantially added to capacity in a particular industry and for the establishment of new enterprises. In subsequent years, however, there were increased government interventions in investment decisions in linking the provision of budget support to state preferences.

Eventually, it came to be understood that the sharing of responsibility for the investment decision was not conducive to efficiency, and firms were provided with the opportunity to request government aid in the event that the investment proved to be unprofitable. Correspondingly, steps have been taken to restore decision-making authority on investment to the enterprise.

China is well-advised to follow Hungary's example in linking investment decisions to responsibility for profits and losses at the firm level, with government organizations retaining decision-making authority only over large investments in basic industries and the establishment of enterprises of nationwide importance. Thus, the recent inclusion of investments by collective and individual enterprises in the overall state plan (*Beijing Review*, No. 13, March 31, 1986, p. 26) represents a backward step. Rather than relying on central interventions, duplication in investment may be avoided through competition and rational pricing.

At the same time, to the extent that the industrial bureaus and corporations combine firms manufacturing particular products, as in the case of shipbuilding and the automotive industry, competition will be reduced. In any case, the industrial bureaus and corporations, established through the transformation of government offices, have remained administrative organizations imposed on the enterprises. In order to free enterprise decision-making from undue interference, similar organizations have been eliminated in Hungary.

Nor does the regional decentralization of administrative organizations represent an appropriate solution. Localities have played an important role in recent years in setting profit conditions for the enterprise and, under a recent State Council decision, the Ministry of Machine Building Industry will delegate its management power to the major cities where subordinate enterprises are located. Apart from the division of decision-making authority, the problem associated with this arrangement is that local interests may predominate over the national interest.⁵

In any event, there have been repeated reports of the localities setting barriers to incoming products and to the sale of raw materials in other regions. As in the Soviet Union at the time of the regionalization of decision-making, such actions aim at increasing regional self-sufficiency. This objective has also been served by investments undertaken by localities, which have assumed increasing importance notwithstanding exhortations to the contrary by the central government.

⁵ This was noted in the October 1984 Decision of the Central Committee that exhorted "city governments to separate their functions from those of enterprises . . . and not repeat the past practice of mainly depending on administrative means to control enterprises so as to avoid creating new barriers between departments and regions" ("Decision," 1984, p. x).

In presenting the Sixth Five Year Plan, the Premier of the State Council underlined the need that "no locality or department shall make investment in fixed assets outside the plan without prior approval by the appropriate higher authorities" ("Report," 1982, p. 25). As unplanned investments nevertheless increased rapidly, the need for checking their growth was repeatedly stated. Yet, in the first 7 months of 1985, unplanned investments were 95% higher than in the corresponding period in 1984, bringing the average increase of new fixed investments (in Chinese parlance, investments in capital construction) to 45%, although planned investments rose by only 9% (*Beijing Review*, No. 37, September 16, 1985, p. 2).

Investments by localities, undertaken to the neglect of national economic considerations, have led to considerable duplication of capacity. The financing of these investments has been accomplished in part by withdrawing funds from enterprises and in part by borrowing from the local branches of banks. Increasing the freedom of action of the enterprises would limit the availability of the first of these sources of funds while the second may be dealt with through the reform of the banking system, discussed below.

COMPETITION AND PROFIT INCENTIVES

Freeing enterprises from the dominance of the central and local authorities is a necessary step toward assuring that they bear "complete responsibility for profits and losses" and that "all enterprises compete on an equal footing"—the stated objectives of the Seventh Five Year Plan ("Proposal," 1985, pp. XVIII and XIX). This is because instructions and interventions by supervisory organizations cannot fail to affect the economic performance of the firm and the conditions under which it operates.

In this connection, it should be emphasized that the firm's profits and the conditions of competition depend to a considerable extent on its relationships with the supervising organizations and on its bargaining power in obtaining favorable treatment in the allocation of materials, the extent of above-quota sales, and the setting of profit targets (compensating taxes). Hierarchical differences among the supervising organizations have been further sources of differentiation among enterprises.⁶

Competition has also been limited by the desire of industrial bureaus and corporations to safeguard all firms under their jurisdiction. Protection at the provincial and local levels, referred to earlier, has represented another limitation to competition. According to one observer "barriers to interregional trade erected by local and provincial governments may be the most serious

⁶ According to an informed observer, there is a distinction between enterprises directly under the central government and local enterprises (including provincial enterprises, county enterprises, etc.), a distinction between key enterprises and non-key enterprises, and even distinctions between ministerial, departmental, and board categories. All these different enterprises were treated differently in terms of funds, materials, labor (including technical personnel), product marketing, foreign-directed economic activities, raw materials prices, and so on" (Dong, 1985a, p. 25).

obstacle to the development of competition and to such resulting benefits as improved efficiency and increased regional specialization" (Byrd, 1987, p. 259).

Apart from removing obstacles to competition, the pursuit of the stated objectives would require that the director of the enterprise be given full power to manage the firm's affairs. Thus far, directors have been freed from the tutelage of party committees in about one-third of the industrial firms; the rest should follow under the decision of the Central Committee, which calls for establishing "a system of the director or manager assuming full responsibility" for the firm ("Decision," 1984, p. XI). This objective was reconfirmed by Premier Zhao Ziyang in his report on the Seventh Five Year Plan ("Report," 1986, p. xii) and a new directive to this effect was promulgated on October 1, 1986 (Beijing Review, No. 44, November 1, 1986, p. 4).

Responsibility for the firm's operations means making the manager financially interested in the profits and losses of the enterprise. In addition to decision-making power over the distribution of enterprise funds, the director, and management in general, should share in the profits of the firm in the form of bonuses and in the losses through reductions in compensation. At the same time, unless they can be rehabilitated, enterprises which experience continuing losses would have to be eventually closed down.

The need for closing down enterprises that could not meet the test of the market has been recognized in the Decision of the Central Committee, according to which "our enterprises are put to the test of direct judgment by consumers in the market place so that only the best survive" (1984, p. X). But while a considerable number of collective enterprises have closed their doors in recent years, this has reportedly been the case for only one state-owned firm. At the same time, there would be a need to introduce bankruptcy legislation regulating the conditions and the modalities of closing down firms as has already been done in Hungary. However, for profits and losses to reflect enterprise performance in the context of the national economy, prices need to express resource scarcities. This, in turn, leads to the question of the rationality of prices and the need for price reform in China.

PRICE REFORM

Official prices in China are the result of governmental decisions taken at different points of time and for different purposes. They correspond neither to production costs nor to market conditions, and the few adjustments made since 1978 have changed the situation but little. Yet, price distortions favor some enterprises and penalize others; provide the wrong signals for production and investment; and entail a cost for the national economy.

To begin with, price distortions exist in input-output relationships. For example, the revenue derived from exporting one ton of granular active charcoal is \$800 while exporting the fuel necessary for its production would bring \$1680 (Chang and Lin, 1985, p. 4). More generally, prices are low for energy

and raw materials and high for finished products, compared with world market prices. On the average, the domestic prices of petroleum and petroleum products are 78%, and the prices of metallurgical products 47%, below world market prices. In turn, the prices for 21 chemical products are, on the average, 80% higher than world market prices and the prices of steel-based products also tend to be higher (Dong, 1985b, p. 26).

Distortions in the relative prices of inputs and outputs encourage the excessive use of energy and raw materials and discourage increasing their production. Furthermore, distortions in the prices of substitute products raise the economic cost of providing for domestic consumption. For example, despite the adjustments made in 1982, the domestic prices of cotton yarn and raw silk are 35 to 74% lower, and the prices of polyester and polyamide filaments 97 to 113% higher, than world market prices (Dong, 1985b, p. 26).

Furthermore, artificial differences in the prices of the enterprise's products have an adverse impact on the users, and hence on the national economy, in reducing product variety and compelling users to buy products that do not fully conform to their needs. This is of particular importance in the case of intermediate products, where the unavailability of the requisite variety adds to costs and reduces product quality.

It has been reported, for example, that a zinc smelter has abandoned the production of Grade 2 electrolytic zinc that had a similar cost but a lower price than Grade 1 zinc. For the same reason, a cement factory has ceased to produce lower grades of cement (Byrd, 1987, p. 260). Also, steel products do not conform to requirements because of artificial differences in their prices. Thus, it has been reported that the profit margin is 10 times as high on hot rolled steel than on cold rolled steel (*The Economist*, October 27, 1984), thereby favoring the production of the former over the latter.

Finally, high-quality product varieties are in excess demand, and low-quality varieties in excess supply, leading to shortages in the first case and to the accumulation of unsold inventories in the second. Prices do not perform their equilibrating function as the maximum price differential for consumer goods of different qualities has been set at 15%.⁷

These considerations indicate the need for price reform. Such reform is necessary, first of all, to ensure that profits and losses reflect the enterprise's performance rather than the vagaries of the price system. The setting of profit quotas and, more recently, the imposition of differential taxes on profits, designed to compensate for profit differentials that are unrelated to performance, cannot adequately cope with the situation.

⁷ The adverse economic effects of the regulations applied have been well-expressed by Tian Jiyun, the Vice-Premier of the State Council, "fine-quality products cannot have their prices raised and poor-quality goods cannot have their prices reduced. Therefore, the supply of fine-quality products falls short of demand, but production cannot be developed because of the low price. Poor-quality products do not sell well and they get stock-piled, but their production cannot be reduced" (1985, p. 17).

To begin with, compensating taxes are levied on existing profits that may result from favorable prices but may also reflect superior performance. Also, the setting of these taxes is subject to bargaining and may depend on the favoritism shown by the supervising organizations in regard to particular enterprises. And while periodical price adjustments are made for unfavorable changes in the underlying conditions of the enterprise, e.g., increases in the prices of inputs, an asymmetry is introduced by the fact that enterprises tend to conceal favorable changes in these conditions (Byrd, 1982, pp. 19–20).

Apart from eliminating the effects of price distortions on profits, the price reform would channel the energies of the enterprise from trying to obtain better treatment by the supervisory organizations to improving performance. It would further contribute to the objective of having enterprises compete on an equal footing. In turn, the appropriate valuation of fixed capital, with realistic charges made for their use, would permit eliminating differences in profits due to the age and the technical level of machinery in the enterprise.

Establishing realistic prices would also avoid having enterprises choose to manufacture products on the basis of their favorable prices. At the same time, greater price differentiation is necessary to establish equilibrium in product markets by providing appropriate signals for consumers as well as for producers.

Greater price differentiation would bring about an increase in demand for low-quality varieties, and a decrease in demand for high-quality varieties, of a particular product. This is of especial importance in regard to imports that have been encouraged by relatively low prices of high-quality products. Appropriate pricing provides a better way to limit the imports of consumer goods than controls, which invite evasion through smuggling and bribery.

Greater price differentiation would also encourage the manufacture of highquality products and discourage that of low-quality products. Apart from contributing to product upgrading, this would permit avoiding a situation in which new capacity is created by existing firms, as well as by firms entering the industry, to manufacture outdated products for which there is little demand, in response to misleading price signals.

Market-clearing prices would thus permit demand to guide production decisions. Furthermore, apart from providing incentives for energy and material savings, establishing appropriate price relationships as between inputs and outputs would encourage low-cost transformation activities while discouraging high-cost activities. More generally, rational prices would contribute

⁸ In the first half of 1985, China imported more consumer goods than it did in all of 1984 when these commodities already reached one-fifth of total imports (*Beijing Review*, No. 29, July 29, 1985, p. 2). Compared with the same period of the previous year, imports of television sets from Japan increased four times, reaching an annual rate of \$1.0 billion in the first half of 1985 (*The Economist*, August 10, 1985). Further increases occurred in subsequent months, leading to the subsequent introduction of restrictions.

to efficient resource allocation through changes in consumption, production, and trade.

The existing two-tier system of prices provides a basis for establishing market-clearing prices in China. In this connection, the interdependence of pricing and competition should be emphasized, when the possibilities for effective competition depend on the size of the domestic market. Comparisons with Hungary are of interest in this regard.

At the time of the introduction of the reform, Hungarian industry was greatly concentrated, with monopoly positions existing in some industries and oligopolistic market structures in others. In order to increase the scope of market prices, efforts were made to establish competition by breaking up trusts and large enterprises. Still, in a number of industries, the extent of competition is limited by the smallness of Hungary's domestic market, necessitating import competition.

While population is not an appropriate measure of market size, China's gross domestic product is 15 times that of Hungary and its manufacturing sector is about 12 times larger. Furthermore, China has much more state-owned enterprises than Hungary and individual enterprises are also assuming a greater role. Correspondingly, China has important advantages over Hungary in its possibilities to establish domestic competition in manufacturing industries, which is a precondition for the market determination of prices. At the same time, competition should also extend to commercial activities, including the establishment of multiple channels in wholesale and retail trade and the creation of trading companies operating across provincial boundaries.

In some basic industries shortages cannot be eliminated overnight, due to the lack of sufficient capacity. In these cases, mandatory targets and price fixing would need to be maintained on a temporary basis. But, the number of such products should be kept to a minimum, lest difficulties are created for the expansion of market relations in the rest of the economy. At the same time, world market prices would provide an appropriate standard for setting the prices of these commodities. Placing increased reliance on world market prices, in turn, necessitates establishing a realistic exchange rate.

The proposals made here would entail the establishment of a mixed price system in Chinese industry, with the market determination of prices in industries where planning targets are abolished and central price fixing retained in industries under mandatory planning, with links established to world market prices in the latter case. Apart from standardized products, world market prices could not be readily utilized in China because the varieties produced there generally differ in quality and specifications from those available abroad. At any rate, as the author earlier noted, given its large market and relatively low level of industrial development, it would seem appropriate for China to have domestic prices reflect domestic scarcities rather than world market relationships for such products (Balassa, 1982). This contrasts with Hungary,

where small domestic market competition needs to be complemented with import competition, involving reliance on world market price relationships.

WAGES AND BONUSES

The long-standing custom of providing practically equal wages to every worker, regardless of productivity, expressed by the saying, "everybody eating from the same big pot" gave place to a bonus system after 1978. Bonuses were supposed to reward performance and be paid from increases in profits. In fact, however, bonuses were often provided indiscriminately to all workers, even in the absence of profits, thereby contributing to general wage increases.

In order to combat these tendencies, in May 1984 the government introduced a tax on enterprises whose yearly bonus awards exceeded a certain level. The tax was set at 30% in cases when bonuses equalled 2.5 to 4 months' wages; 100% on bonuses between 4 and 6 months' wages; and 300% above this limit (*Beijing Review*, No. 26, June 25, 1984, p. 4).

The imposition of the tax on bonuses encountered practical difficulties of collection, however. Also, enterprises increased basic wages, in the place of providing bonuses, in order to escape the tax. Increases were undertaken, in part in response to worker demands and in part to establish a high base for the newly announced system of taxing increments in wages and bonuses from their 1984 level.

In any event, the growth of labor compensation accelerated, with the total wage bill of enterprises rising by 19% in 1984 over the previous years' level ("Current," 1985, p. XI). The government's exhortations notwithstanding, a further increase of 22% occurred between 1984 and 1985 (*Beijing Review*, No. 51, December 23, 1985, p. 23). These figures do not include increases in compensation in kind, such as clothing and free lunches, which have assumed considerable importance (*Beijing Review*, No. 16, April 22, 1985, pp. 4–5).

Apart from the need to soak up the resulting excess purchasing power, to be discussed below, questions arise about the appropriateness of the wage regulations actually applied in China. It is evident that the combination of hourly wages and bonuses has contributed to wage inflation. Nor do exhortations suffice to deal with the situation in the framework at the present wage system. Thus, the cited increases occurred notwithstanding the fact that, in his report to the Fifth National People's Congress on November 20, 1981, Premier Zhao Ziyang demanded that "the present practice of handing out bonuses indiscriminately snould be strictly checked and bonuses payable in 1982 limited to the 1981 level (*Beijing Review*, No. 51, December 21, 1981, p. 21).

Furthermore, one may object to linking labor compensation to profits, which depend on managerial decisions rather than on the performance of individual workers. It would be more appropriate to generalize the use of the piece-wage system that links wages directly to the worker's performance as is increasingly done in Hungary. The use of such a system was proposed by Ma

Hong, one of China's leading economists. Although piece wages are utilized today in less than one-tenth of Chinese industry, Ma's conclusions continue to be valid.

Following the example of Hungary, it would further be desirable to tax wage increments above a certain level. One such alternative would involve taking increases in the wage bill in excess of the rate of increase in profit taxes paid to the state ("Current," 1985, p. X); another would entail taxing wage increments in excess of a predetermined rate. The former of the two alternatives has the disadvantage that, under the present irrational price system, increases in profits do not necessarily reflect improved performance; in turn, the latter alternative does not take account of changes in the firm's productive activity. A possible compromise would be to tax increments in the wage bill in excess of increases in the firm's value added.

But the latter method, too, has the shortcoming that it takes the previous year's wages and output as the basis, although these may not represent an appropriate ratio of wages to output. And while enterprises have been told that "they must see to it that all irrational factors in their total payrolls of last year are eliminated" ("Current," 1985, p. X), the practical application of these instructions may encounter difficulties.

The ultimate objective should be to consider wages as a cost element as is done under the new wage regulations a number of Hungarian firms introduced in 1985. This, in turn, would necessitate progressive taxation for income recipients, for which the taxes on wage incomes above a certain level, introduced recently in China, provide a basis.

Further, there will be need to promote the movement of labor, permitting workers to leave their jobs and reducing the work force if conditions warrant. Steps in this direction were taken in September 1986 through the introduction of the contract system for newly hired employees, regulations concerning the dismissal of workers who violate labor discipline, and a system of unemployment compensation (*Beijing Review*, No. 37, September 15, 1986, pp. 37–38).

MACROECONOMIC PRECONDITIONS

We have seen that China experienced rapid increases in investment activity and in wage and bonus payments in 1984 and in 1985. These increases were supported by the expansion of bank loans. The loans financed a substantial proportion of unplanned investment undertaken by the localities. Also, the easy availability of financing allowed enterprises to increase wages and bonuses as they could finance investment from bank borrowing and may even have used borrowed funds directly to raise labor compensation.

⁹ "When the system of time wages plus bonuses was carried out in the past, bonuses were often divided equally among workers and staff members. The principle of distribution according to work was not followed. Only by implementing the general piece-rate wage system, or alternatively, piece-rate wages for output which exceeds the quota can we really adhere to the principle of more income for more work, less income for less work and no income for no work" (Ma, 1983, pp. 107–108).

The observed developments reflected the lack of ability of the People's Bank, newly becoming the central bank of China, to control the money supply. Thus, the local branches of the specialized banks (the Agricultural Bank, the People's Construction Bank, and the newly established Industrial and Commercial Bank), and of the People's Bank itself, reportedly did the bidding of the localities rather than following instructions from the People's Bank. Furthermore, it has been reported that, in response to the suggestion that "the amount of credit funds at the disposal of the specialized banks be determined with the amount of loans granted in 1984 as a base figure for 1985, . . . some monetary units . . . vied in granting loans so as to increase the base figures of credit" ("Current," 1985, p. VII).

In order to remedy the situation, the State Council decided to "introduce a unified credit and monetary policy, strengthen the regulatory functions of the People's Bank of China over macroeconomic activities, and firmly control the amount of credit and cash in circulation. . . . The People's Bank of China will fix in a unified manner currency issue ceiling for its branches . . ." ("Current," 1985, p. XI). The practical implementation of these measures is an urgent priority, so as to provide the macroeconomic conditions for the successful application of the reforms.

In fact, the interdependence of macroeconomic policies and economic reform has come to be emphasized in China. Attention has further been given on the need to improve the financial structure. Thus, in his report on the Seventh Five Year Plan, Premier Zhao Ziyang speaks of the need "to give full play to the role of the banking system in raising funds, guiding the flow of funds, making better use of them, and regulating social demand" ("Report," 1986, p. xiii).

In the meantime, it would be necessary to raise interest rates for loans as well as for deposits. While China has made progress in raising interest rates in recent years, the 4.8% interest rate on investment loans provides inducement for using borrowed funds in preference to profits to finance new investments and it permits undertaking investment projects that have low economic rates of return. Also, deposit rates are negative in real terms, thereby discouraging savings.

Higher deposit rates, then, would syphon off some of the excess purchasing power created by rapid increases in wages and bonuses. The increased use of financial instruments sold to individuals by enterprises would have similar effects. It would further be desirable to encourage the movement of funds among enterprises, to ensure the better allocation of savings.

CONCLUDING REMARKS

The economic reforms introduced since 1978 have led to considerable increases in production and in living standards in China. The growth in agricultural output permitted raising food consumption and upgrading its pattern, with substantial increases in the consumption of meat, dairy products, fruits,

and vegetables; the growth of industrial output made it possible to ease shortages and to expand the consumption of high-quality products; while average floor space per person rose by about two-fifths in both urban and rural areas. Also, national income per head rose by 6.6% a year between 1978 and 1984, compared with an increase of 3.9% in the 1953–1978 period (*Beijing Review*, No. 10, March 10, 1986, p. 14).

At the same time, the greater use of prices and markets should not carry the blame for excessive investments and increases in labor compensation or for profiteering and corruption. For one thing, excessive money creation has importantly contributed to rapid increases in investments and in wages and bonuses, with the delegation of decision-making power to the localities adding to the former and inadequate financial restraint on enterprises to the latter. For another thing, profiteering and corruption flourishes in a situation in which controls on prices and markets continue.

These considerations, then, call for adopting appropriate macroeconomic policies and simultaneously extending the reform effort. In fact, the former is a precondition for the latter; in particular, the application of price and wage reforms is hindered by the existence of a excess demand in China.

To establish macroeconomic equilibrium, China would have to utilize the tools of fiscal and monetary policy. While recent developments show success in eliminating the budget deficit, much remains to be done to establish an effective monetary policy that would aim at avoiding the excessive credit expansion. Also, there is need to modernize the financial system and to set realistic interest rates.

In extending the reform effort, one should reduce the decision-making power of the localities and increase that of enterprises while freeing prices and markets. Also, measures should be taken to establish the conditions for effective competition, to give full responsibility to the manager for the firm's operations, to reform the system of prices, and to improve the wage and bonus system.

Although it has often been argued that social and political considerations advise caution in the implementation of the reforms, the example of Hungary indicates the potential benefits of simultaneous actions on a broad front. This is because reforms in various areas are interdependent and only their simultaneous introduction can assure full success.

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