Softening the Impact of Adjustment to Reform: The China Experience

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Abstract

This paper examines the structural adjustments induced as China moved from a planned economy that subsidized capital-intensive industry at the expense of agriculture to a nationally integrated market economy more fitting with China's underlying resource endowments. We argue that there were few losers in the process because of 1) a gradual implementation process that maintained transfers to the favored groups under the planned economy, such as urban industrial workers, while the market economy developed benefiting the non-favored groups, such as farmers; 2) high growth rates allowed a large portion of the economy to benefit from the overall reform process and bolstered the government's commitment to further reform; and 3) labor, the most important resource that farm households hold in China, was much less institutionally constrained than land and capital during the reform period, allowing rural workers to participate in the fast growing non-agricultural sector.

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1. Introduction

Over the last 25 years, China has undergone substantial economic reform, market integration and trade liberalization. The economic reforms exposed extreme distortions in China's pre-reform economy, weighted toward capital-intensive industry at the expense of labor-intensive light industry, and too much labor committed to the production of staple grains. Since reforms began in the late 1970s, China has maintained real an average GDP growth of over 8 percent annually, has developed the world's largest light industrial sector and become a major producer of labor-intensive horticultural products. In addition, reforms have served to establish markets, and to induce farmers to become increasingly commercialized and participate more in non-farm employment.

This paper examines the policies used to facilitate China's movement from a compartmentalized and planned economy that subsidized capital-intensive industry at the expense of agriculture to a nationally integrated market economy more fitting with China's underlying resource endowments. We argue that there were few losers in the process for a variety of reasons. A primary reason is the gradual implementation process that maintained transfers to the favored groups under the planned economy, such as urban industrial workers, while the market-oriented economy developed benefiting the non-favored groups, such as farmers. This gradual process is often referred to as a "dual-track" process as opposed to a "single-track", or "big bang", reform. Moreover, in China's case, the reform process was more of search and discovery, rather than gradual movement toward a specified goal. Opportunities for farmers to benefit from the expanding economy were enhanced by rapid economic growth and liberalizing labor market policies. Labor, the most important resource that farm households hold in China, was much less institutionally constrained than land and capital during the reform period, allowing rural workers to participate in the fast growing non-agricultural sector.

We organize the paper by first providing an overview of the China's reforms over the last 25 years and the changes that have taken place. We describe the "dual-track" policies and how they served to maintain rents for the potential "losers" from the reforms that liberalized China's economy while introducing markets that rationalized resource allocation and improved efficiency. In particular, we discuss reform of production, marketing, and trade. In addition, we look at how the labor market evolved to allow farmers and workers in poorer regions to participate in the rapidly expanding non-agricultural economy concentrated in eastern and urban China.

2.0 Dual Track Reform of Production, Marketing and Trade in Rural China

Before reforms initiated in the late 1970s, rural China was segmented into roughly 24,000 communes, each meant to be a self-sufficient economic entity. There was almost no internal trade between regions or trade between communes that were geographically close together. Most of the "trade" that did exist was the mandated rural-urban transfer of agricultural products controlled and managed by the central government and state agricultural product purchasing organizations. Labor was also not allowed to move between communes even between the subgroups of communes –

brigades.[1] The exception was on households' "private plots", small parcels of land (usually only 5% of all cultivated land) allocated to individual farm households to grow vegetables and other non-grain crops. Households often exchanged the production from their private plots in either informal or limited markets that remained in existence. Under such institutional arrangements, a majority of farmers were in grain production and the vast majority of land was sown to grain crops.

The communal agricultural system was the rural component of an overall urban and heavy-industry biased development strategy. After coming to power in 1949, China's government embarked on a strategy to buildup heavy industries that were capital-intensive. At that time, however, China had limited capital resources. Agriculture played a key role in the pursuit of this development strategy. Agriculture was China's main source of foreign exchange for purchasing capital equipment from abroad. In addition, requisitioning surplus agricultural production at low prices allowed China to deliver inexpensive food to urban areas. With artificially low food prices, industries could pay low wages, thus increasing their profits for re-investment. The communes made requisitioning surplus agricultural production much easier than contracting with individual households. China's pre-reform leadership failed to recognize the poor incentives faced by rural workers under the communes, where agricultural production was carried out in teams and there was no linkage between output and income.

With a change in leadership cemented in 1978 came a new attitude toward economic policy where ideology was less doctrinaire and a spirit of pragmatism was encouraged. Reforms for urban and the state-owned industrial sectors were politically impossible at the time. Agricultural reforms that could provide more food for urban and rural households, however, were feasible and became a policy priority. Initial reform policies included increasing prices for agricultural products (in order to alleviate the pronounced urban-industrial bias in the pre-reform economy) and to re-establish rural markets for farmers to sell agricultural sideline products and production from their private plots. China's state-owned grain bureaus carried out a price increase of 20 percent for grains in 1978, the number of rural markets doubled between 1978 and 1985, and the value of products exchanged on open markets increased even more (Carter, Zhong and Cai, 1996).

2.1 *Production Reform: Farm and Rural Non-Farm.* The most important policy adopted under the new regime, however, was the dismantling of the communes and the allocation of agricultural land to individual farm households under the condition that they deliver a fixed quota of grain to the state grain bureaus. Initially encouraged as a policy to alleviate poverty in poor areas, the new institutional arrangement, which became known as the Household Responsibility System (HRS), rapidly took hold all over rural China. By the time it was sanctioned as acceptable for all areas (not just poor areas) in late 1981, roughly 45 percent of the countryside had dismantled the communes and adopted HRS (Lin, Cai and Li, 1999). By the end of 1983, 98 percent of rural households were farming plots of land allocated to them by collective leaders.

The adoption of HRS profoundly transformed the nature of agricultural production in China. The policy change restored rural households as the primary agricultural decision-makers and gave them incentives to farm efficiently and effectively. Households faced "residual claimant" incentives: any production beyond the grain quota delivery obligation was theirs to consume or sell as they saw fit.

[1] Brigades were the level of organization directly below the commune; there were roughly 10 brigades in a commune. Below brigades were production teams, with roughly 10 teams in a brigade.

Under these incentives, households allocated less land and labor to grain production yet increased yields more than enough to overcome the fall in sown area. Grain harvested area fell by 5.6 percent between 79-85, but yields rose and production increased by 28 percent over the period (FAOSTAT). The increased yields were mostly attributed to the better incentives (both higher prices and residual claimant incentives) that induced farm households to allocate less labor time to grain production but the labor allocated, through care and energy, was of higher quality than under the collective teams.

HRS, however, was a reform only *at the margin* while the old planning system was kept largely intact. Farm households were restored as the primary production units under HRS but they did not receive full production autonomy. The main institutional arrangement that served to maintain some collective control over production is the unique set of land tenure practices. Land was "collectively" owned and village leaders allocated land to farm households for them to use, but they did not receive full rights of alienation. In addition, their tenure was not fully secure since they could lose the plots of land allocated to them if village leaders decided to re-allocate land, which happens in most villages, and frequently in some villages. Because of their power over land allocation, village leaders had some capacity to influence farmer's production decisions. This most frequently took the form of encouraging grain production to maintain grain self-sufficiency, even when more lucrative crops existed. In addition, farmers received subsidized inputs, such as fertilizers, for land in grain production, a remnant from the planned, pre-reform period. Beyond this, however, most village leaders left the bulk of farm production decisions up to the farm households.

The dismantling of the communes also served to transform China's industrial economy by initiating a boom in labor-intensive, rural industry. Under the self-sufficiency policies practiced by the communes, many rural industrial shops were set up and managed by either the commune or a brigade under the commune, referred to as commune-brigade enterprises (CBEs). These enterprises generally produced light industrial goods for consumption within the commune, or occasionally intermediate inputs for nearby state-owned enterprises (SOEs). When the communes were disbanded, these shops fell under the de-facto ownership of the local towns and villages that took over administrative duties from the communes and brigades, and became known as township-village enterprises (TVEs). TVEs did not receive the subsidies and other advantages of SOEs such as access to credit and planned input deliveries. However, TVES had advantages the SOEs did not have. Unlike the SOEs, TVEs could fully operate according to the market, did not need to fulfill plans made by the government, did not need approval from the government for hiring and firing decision, nor for investment decisions, for many other decisions that should be made by the enterprises themselves. Moreover, because of the high cost of credit and low cost of labor, TVEs adopted technologies more suited to China's true resource endowments (Naughton, 1994). Ultimately, the TVEs became the most dynamic part of China's industrial economy, with employment peaking at 135 million in 1995, up from 30 million in 1980, and producing 1/3 of China's industrial output, mostly in labor-intensive light industries.

The development of TVEs not only contributed to economic growth in China, but they also represented an important institutional innovation. TVEs were not private enterprises, they were under a somewhat ambiguous property right regime of "collective" ownership. The reality was that local township and village officials held all the important property rights that are generally associated with ownership, including authority over management, investment and employment decisions (Naughton, 1994). Thus, through TVEs, rural China created a unique institutional arrangement for the property rights of enterprise assets, one that was effective and efficient enough to undermine the economic dominance of SOEs.

For both rural land and rural enterprise assets, China developed a property right regime that fell short of what many economists might consider to be the clear property rights thought necessary for economic efficiency. Both were under "collective" ownership, without explicitly defining what "collective" really means. The reality was that there was substantial autonomy to make production decisions for both rural households and managers of rural industries. In the end, these ownership institutions were clear enough to generate a quasi-private market economy without threatening the political interests of those opposed to private ownership and other far reaching economic reforms.

The reforms in agriculture and rural non-farm economy established in the late 1970s and early 1980s were the seeds of the dual-track policies. The dual-track refers to maintaining a planned economy while developing a market-oriented economy alongside. In a nutshell, under the dual-track policy followed in China, rents from the planned system were generally maintained, or slowly diminished, while the market system contributed to growth and improved overall efficiency. In agriculture, farm households were given production autonomy, and markets were opened up for them to sell their products. This gave them the incentives to produce what the market demanded, and to apply inputs according to the marginal, market returns. But farm households were still obligated to deliver a grain quota to the state grain bureaus at prices below the market. This maintained the implicit tax on agriculture that policymakers used to subsidize urban residents and industry to facilitate industrial development. Rural industries operated with complete autonomy according to market principles and represented the market track in industry, while urban state-owned industry maintained planned production. Urban SOEs were also given some autonomy and encouraged to compete with rural enterprises after fulfilling their planned production obligations, but since their losses would be covered by the state and they were burdened by state-imposed restrictions, they had less incentive or capacity to compete.

2.2 *Marketing Reforms.* Despite the early success of reforms, China's economy was far from liberalized in the years immediately after de-collectivization. While TVEs were growing rapidly, SOEs still dominated industrial production, and produced largely according to a state-sanctioned plan. In addition, while free markets sprouted-up, the state-owned marketing companies still dominated the market for many agricultural products. Outside the state-owned marketing companies, the rural economy was still very poorly integrated after years of promoting local self-sufficiency under the communes. There were a wide variety of transportation costs and restrictions and the physical infrastructure to move products from one place to another was poor.

To complement the restoration of household and rural industrial production autonomy, China carried out a series of marketing reforms. Prior to these reforms, the state dominated all aspects of marketing and prices, from farming inputs to outputs, and from farm gate sales to urban consumer purchases. Throughout the '80s and '90s, the state system was largely replaced by a system that operates on market principles. Important marketing reforms included policy changes in farmers' quota delivery obligations, liberalization of marketing channels and prices, reducing consumption subsidies and elimination of the food ration system for urban residents and restructuring the state-owned marketing enterprises.

The dual-track approach played a critical role in balancing the interests of those seeking the efficiency of the market versus those beholden to the planned economy and state-controlled marketing enterprises. On one hand, without allowing some prices to be determined by the market, the HRS could not provide enough incentives for farmers to increase production and produce what consumers demanded. On the other hand, abolishing all the pre-reform marketing policies would cause the state to lose out on the implicit taxation embodied in the system and lose control of food prices and deliveries entirely. The prospect of such an abrupt and complete change in state policy was beyond the political feasibility of reform.

Under dual-track marketing reforms, farmers and industrial enterprises faced two or more prices for the products they produced. Taking grain as an example, the primary state component was the grain quota that, under HRS, households were obligated to deliver to the state-owned grain bureaus at prices determined by the state, generally well below the market prices. Beyond the grain quota, farmers could sell additional grain to the bureaus at a "negotiated price", which was also a price set by the state at the beginning of the marketing year, and was generally between the quota and the market price. Farmers could also sell their grain on free markets, where the price was even higher, but these sales could incur transaction costs since the markets were often well outside the village.

The pace and process of marketing reform for agricultural products varied significantly by different products. The general rule was that the less strategic or sensitive products, such as high-value cash crops, underwent reform before more strategic crops such as staple food grains. At the early stage of the reform, two-tier price systems covered all major grains, oil crops, livestock (except for chicken), cotton, jute, other industrial materials, and even vegetable and fruit products produced near the cities and supplied to the large cities. However, delivery quotas for most horticultural crops and livestock products were abandoned as early as 1985. Quotas for grain continued to be enforced, but the size of the quota deliveries varied year to year as marketing policies went through periods of liberalization, followed by retrenchment. According to Lardy, (2002), the share of agricultural commodities sold through free markets was just 6 percent in 1978, increasing to 40 percent in 1985, 79 percent in 1995 and 83 percent in 1999.

Marketing policies in urban areas also went through a dual-track reform process. Free markets were setup with the reforms and state marketing channels were liberalized, but ration coupons remained in place. These coupons were the means by which the state subsidized urban food consumption in order to keep industrial wages low. By the late 1980s, urban reforms began to bring urban incomes up and consumers began demanding better quality. The ration coupons were only good for purchasing grain delivered as quota, and farmers chose their lowest quality grain for quota delivery so the quality was poor. In addition, the state-owned marketing system was so inefficient and margins so high that private traders could earn money by outbidding them on both ends of the marketing chain. Private traders regularly purchased higher quality grain from farmers at prices higher than offered by the grain bureaus, then sold this grain in urban areas for less than the poorer quality grain sold at the state-run stores. Thus, urban consumers began to purchase grain on the market and forgo the ration coupons for grain at state stores. By 1993, urban ration coupons were abolished entirely.

To adapt to growing market liberalization and compete with the private sector, China's state-owned marketing companies were also reformed and given more autonomy. While the grain bureaus were still charged with collecting the grain quota deliveries, in the 1990s they were also encouraged to engage in commercial operations on the side. Some of bureaus lost so much quota business that they had no choice but to conduct commercial transactions in order to cover employees' wage and other welfare benefits. Private traders and the more autonomous state-owned grain bureaus quickly developed a distribution system that responded to supply and demand. However, many bureaus were hindered from evolving into efficient commercial operations by employment obligations and other restrictions on hiring and firing. Much like the state-owned industrial enterprises in urban areas, the grain bureau system was heavily over-staffed and had high payroll and other employee benefit obligations, forcing them to rely on subsidies from the state to survive. The fact that private traders were undermining the commercial viability of the state-owned marketing enterprises led to periodic crackdowns on private traders, the most notorious being the ban on private grain traders in 1997. But such crackdowns were impossible to enforce and invariably failed.

Rural TVEs also benefited substantially from the liberalization of markets. In the early years of reform, the TVE growth was constrained by a number of problems, the biggest of which was the planned economy for industrial inputs. TVEs could not always get access to important industrial inputs that were managed by the planned economy and allocated to SOEs. Even markets for industrial output were underdeveloped, and TVEs often sold only to local retailers. By the mid-1980s, however, input markets began to liberalize and the growth of TVEs took off. Over time, larger regional and national markets began to take shape and TVEs could expand and take advantage of economies of size and scale. This, however, also led to greater competition in the TVE sector.

Pricing and marketing reforms have led to measurable improvements in markets for even the sensitive commodities for which reforms lagged. Huang, et. al. (2002) show that by the late 1990s, competitive, efficient and well-integrated domestic grain markets had emerged, despite the interference of policies to promote local food self-sufficiency and the maintenance of state-owned grain marketing bureaus. The dual-track reform process also reduced the adjustment pain to the state-owned marketing enterprises by creating opportunities for commercial activity using the state-owned assets. Many local bureaus began behaving like, and competing with, private traders. Success in agricultural and non-agricultural marketing reforms has played a critical role in pushing China toward an integrated market-oriented economy.

2.3 *Trade Reforms.* China celebrated what it called an open door policy in the early years of reform, but in reality foreign trade and investment reform came much later than the rural and domestic market reforms. Administrative controls dominated most agricultural trade in the 1980s, even though some trade policy reforms took place as early as 1984-1985. At the start of the reform in 1978, all foreign trade, both agricultural and non-agricultural, was carried out through 12 state-owned foreign trade corporations (FTCs), which were responsible for implementing the plans made by China's central government. Grain exports were restricted due to the concern over domestic food security, which was linked by policymakers to grain self-sufficiency. Domestic state procurement corporations in agriculture (and state enterprises that had exporting orders in manufacturing) supplied targeted quantities to the FTCs for export. A similar mechanism was also used for imports. The FTCs were often not free to determine the goods that were exported and imported or the procurement and selling prices, and thus frequently incurred export or import losses. Losses on mandatory exports and imports were subsidized by the central government until early 1990s.

Foreign trade reforms also exhibited the features of a dual-track approach. Foreign trade reforms in general involved lower trade barriers, unifying and depreciating the *yuan* exchange rate, and decentralizing the trading system which included the reduction and eventual elimination of mandatory export planning. Trade reform was mainly pushed by, and complemented, the demand induced by dual-track reform of the domestic economy. Examples of the dual-track trade reforms are the two-tier exchange rate system in place before 1994, the two-tier foreign exchange retention system, and export and import systems that embodied both plan and market components. Taking the export reforms as an example, under the 1984 reform, about 60 percent of exports were from the more decentralized FTCs were still under the mandatory plan made by the central government, while an additional 20 percent were assigned as value targets to the provinces, and the remaining 20 percent were non-plan exports. These policy arrangements were very similar to the dual-track policies employed in the early rural reform, i.e., fixed government quotas (in this case, export quotas) with more market-oriented exports determined by the FTCs themselves. Also similar to the domestic trading system, the procurement prices for the mandatory export plans were fixed and target quantities were assigned to the producing enterprises. However, for the non-mandatory exports, procurement prices faced by FTCs were flexible and generally determined by market principles. Similar policy measures were also used for imports. The agency system, under which FTCs acted as import or export agents of the state-owned production enterprises, was much more prevalent for imports than for exports.

Also similar to domestic marketing reform, the commodities that fell into mandatory import/export categories were those that still had production quotas, such as grains, oil crops, and cotton. Vegetables, fruits and other minor crops were the first group of agricultural products that could be freely exported through the FTCs. This resulted in a significant increase in exports of these products. By grouping trade data according to factor intensity in production, one can see China's net exports of land-intensive bulk commodities, such as grains, oilseeds, and sugar crops, have fallen, while exports of high value and more labor-intensive commodities have risen (figure 1). Relaxing the restrictions on both agricultural exports and imports caused more imports to enter the country in 1980s and early 1990s, though there continued to be many year to year fluctuations for some commodities. These fluctuations were primarily due to policies to maintain near self-sufficiency in important staple grains both through restricting import quotas and encouraging domestic production.

Aside from extending more autonomy to the FTCs, China also carried out a variety of policies to encourage trade in general, both exports and imports. In January, 1994, China unified its exchange rate to the prevailing swap-market rate, which led to a depreciation of the official exchange rate of about 50 percent. The depreciation stimulated China's exports, but the reforms to foreign currency policy embodied in the unification also made imports easier by lowering costs associated with getting access to foreign currency. In addition, China systematically lowered tariff barriers on most products, including agricultural products, throughout the 1990s. These reforms increased the attractiveness of China as a destination for foreign direct investment. In turn, joint-venture enterprises (JVEs), particular in coastal areas, helped deepen domestic economic reform and maintain economic growth,

2.4 *Summary* The dual-track reform policies used by China to reform the planned economic system allowed China to develop an efficient and competitive market economy while maintaining the control and income streams embodied in the planned economy. Establishing markets and extending some autonomy to producers allowed producers to respond to market signals at least at the margin. Lau, Qian and Roland (forthcoming) show that such dual-track reforms can lead to significant efficiency improvements. The improved efficiency, coupled with the enhanced incentives faced by economic agents and growing market opportunities via marketing reforms, in turn leads to economic growth. With growth there is opportunity for all parties to gain. In addition, successful economic growth helped to provide reformers with the political support necessary to maintain, or expand, the reform agenda. Indeed, it is doubtful that China's leaders sought such wide-ranging reform when the reform period began, but rather started a limited process of reform at the margin that built upon itself as a response to its own success.

3. Reallocation of Labor: The Real Structural Adjustment

The capital-intensive industrial bias in pre-reform China was clearly evident in the labor allocation at the time. When reforms were initiated in the late 1970s, 80 percent of China' workforce was engaged in agriculture with a focus on land-intensive grain production. Much of the remaining 20 percent was engaged in the production of capital-intensive goods in large SOEs. Neither sector took advantage of China's abundant labor force to produce labor-intensive agricultural and industrial products. Liberalizing economic institutions created a force for a reallocation of labor that would not only facilitate development in China, but also become a phenomenon in rural industrial development and rural-to-urban migration of unprecedented magnitude.

At the farm household level, a profound effect of the HRS was not only gaining the autonomy to carry-out agricultural production as they wished, but also the freedom to allocate labor to optimize household income subject to a labor constraint. Freed from collective constraints by the adoption of the HRS households began making more efficient labor allocation decisions than the leaders of the communes. This exposed surplus labor in agriculture that could be allocated elsewhere to increase aggregate economic output. But at the time of the adoption of HRS, there were few opportunities for rural labor to find employment outside of agriculture.

A primary institution that prevented rural households from participating in the wealthier urban-industrial economy was the household registration, or *hukou*, system. The *hukou* system registered households as either urban or rural.[2] Workers were expected to stay in the area of their *hukou* registration. This not only meant that rural workers could not legally move to urban areas, but even rural-to-rural migration was constrained by *hukou* policies. If workers were found living in areas other than their *hukou* registered area, they were technically living there without permission and could be expelled. Since the *hukou* system was primarily an instrument to prevent rural-to-urban migration in the face of urban-biased policies, rural workers in urban areas were especially

[2] Households were also registered as agricultural or non-agricultural, but most agricultural households were rural and non-agricultural were urban.

vulnerable to being arrested and expelled. In addition, rural migrants did not receive the services and welfare benefits extended to urban residents, such as subsidized housing, food, education and healthcare benefits. There was no housing market for rural-to-urban migrants to find housing arrangements, and even food markets were limited while urban residents received coupons for food subsidies redeemable at state-owned stores.

Partly because of the constraints embodied in the *hukou* system, early opportunities for rural non-farm employment came with the expansion of the TVEs. TVE employment, however, also embodied obstacles that prevented many rural workers from finding employment in them, especially in the early years. TVEs were managed under the authority of local officials, and evidence suggests that many TVEs hired local worker as monopsonistic enterprises: jobs were doled out to village households in return for political favor or support (Chen and Rozelle, 1998). This led to large differences in income between villages that were in close geographic proximity, explained only by the presence of a TVE in the wealthier village (Knight and Song, 1996; Rozelle, 1994). For workers in villages that lacked a TVE, there was little opportunity for non-farm employment other than to migrate to an urban area or self-employment.

The system of favoritism began to break down by the early 1990s. As competition increased, many local officials contracted the management of TVES out to managers under a bid or other processes that gave managers incentives to make profits, and some fully privatized. Under these contracts, many mangers were no longer beholden to village interests and were allowed sufficient autonomy to make hiring and firing decisions based on productivity and profitability. Thus, the demand for labor in TVEs began to reflect market principles. Many of the larger, more successful TVEs began hiring large numbers of incoming migrants for their labor needs (Lohmar, Rozelle and Zhao, 2000). These were often the factories where labor-intensive light industrial products were manufactured for both domestic consumption and export markets. Employment in TVEs peaked in 1995 with over 135 million workers, up from only 30 million in 1980.

Regulations discouraging rural-to-urban migration were also reformed, primarily in the 1990s. Through the 1980s, rural-to-urban migration rose, but many of these were rural workers legally contracted by SOEs through villages and townships and were extended temporary housing and food benefits by the SOEs. Independent migrants were technically illegal and under the constant threat of being arrested, jailed and returned to their home province under the *hukou* system. Because they lacked access to housing and food markets, many of the independent rural-to-urban migrants in this period worked in the construction industry, where they could live on the construction sites while working in the urban areas, and employers provided them with meals.

By the end of the 1980s, urban areas began to develop even faster than rural areas. Urban residents, given their privileged position, would not take many dangerous, low-paid and otherwise undesirable jobs. This, in turn, led to a demand for low wage workers that could be filled by the large army of rural workers looking for gainful employment and happy to work for wages and in jobs that urban residents would not accept. In addition, suburban areas began to accept migrant encampments in return for rental payments on the land they occupied and markets for food began to develop as the food marketing system liberalized under the dual-track reforms. Thus, while urban-to-rural migration remained technically illegal, or at the very least in a legal gray area, the numbers of rural-to-urban migrants ballooned in the early 1990s as the economies in urban China tookoff and liberalization made it easier for rural workers to live in urban areas. By the mid-1990s, estimates of the number of undocumented rural-to-urban migrants ranged from 40 to 100 million.

The whole labor market development came as a response to market forces rather than a plan to liberalize the labor market. While *hukou* policies have yet to be fully rescinded at the national level, urban areas have come to realize the importance of migrants in their industrial development and have reformed the institutions that discourage migration on their own. In addition, TVEs have become more competitive as the national economy became more integrated and they were forced to compete with industries producing similar goods in distant regions. This has caused TVEs to employ workers according to market considerations rather than the monopsonistic practices of the past.

Labor allocation today looks very different than when China's reforms first began. In 1978, 60 percent of formal non-agricultural workers were permanent employees in state-owned industry. By 1994, the proportion had fallen to 26 percent (Lau, Qian and Roland, forthcoming). In addition, by the mid-1990s, over 10 percent of the rural workforce were engaged in informal, non-agricultural self-employment activities (DeBrauw, et. al., 2002). The migrant workforce had not only increased from around 5 percent of the rural labor force in the 1980s to over 15 percent by the later 1990s, but migrants were moving to further cities than before, indicating a more integrated national labor market. By the late 1990s, roughly one third of rural workers had some non-farm employment and one half of rural household income came from non-agricultural sources.

It should be pointed out that currently there still exists a large income difference between rural and urban areas in China, as well as between coastal and inland areas. These facts suggest that the labor market is still not developed sufficiently to equalize wages throughout the country. Indeed, limitations on migration, while far lower than before, still cause barriers between rural and urban migration, and concentration of public investment in urban areas still exists. Migrants also still do not receive the full education and health benefits offered to urban households. Coastal areas receive by far the largest share of FDI and are far more prosperous than inland areas. While migration to areas in coastal China that have a high demand for labor is largely legal, enforcement of labor laws is lacking and migrants receive few legal rights. Thus, China's labor market is far from fully integrated and further policy adjustments, including policies related to migrated workers' social welfare, health insurance and children education, are still facing opposition from constituents in the receiving urban and coastal areas.

4. Conclusion and Discussion

By all accounts, China followed a unique path toward reform. As pointed out by Rodrik, neoclassical economic orthodoxy would have prescribed, "the *liberalization of agricultural markets* and the *abolition of the state order system*" in addition to "the *privatization of land*" to induce full and proper incentives for China to move toward a market economy and achieve rapid economic growth (Rodrik, 2003, page 6, his italics). In addition, "*tax reform*" must be implemented to accommodate the loss of implicit taxes from the planned grain delivery system. A neoclassical economist would also have advised China to implement "*trade liberalization* in order to 'import' price discipline from abroad" and "*financial sector reform* so that financial intermediaries are able to assist domestic enterprises in the inevitable adjustments that are called for".

China did not follow these textbook recommendations, yet achieved many of the desired results. China allowed a market to develop at the margin to serve as a guide to further reform, all the while maintaining the vestiges of the planned economy and the rent that accrued to urban workers and other favored sectors. The outcome from this approach was a period of sustained economic growth and development that is seen as an enormous success by any measure.

The success of China's reform does not imply that China's experience is the only right path for reform. At the margin, China's success does not challenge the fundamental economic principles guiding the reform: establishing markets and property rights are the best way to achieve growth and efficiency. But China's experience does challenge the rigid belief in the choice of the institutional arrangements. There is typically much uncertainty about what institutional arrangements should be after the reform, so the process often requires search and discovery. Different choices in institutional arrangements and policies have different costs and benefits depending on prevailing political constraints, levels of administrative competence, and market failure (Rodrik, 2003).

China's experience implies that a feasible path in the reform may be more important than setting up an ultimate goal for reform. In addition, minimizing losers during reform was an important principle in China's reform and has guided the reform in many respects. A reform without losers can tremendously reduce the risk of reform and soften the objection against the reform. This principle can be employed to determine the rank or the priorities of policy adjustments. In the case of China, the rank of the reform priorities was not according to which reform was more important for reaching the final goal. Instead, the policy adjustment always started from those that were relatively weakly controlled under the older regime.

China's experience also implies that it is important to keep a balance between policy adjustments and maintaining economic growth. Without a respectable growth rate, it is almost impossible for reform to be carried out without a large constituency of losers. Moreover, gains from the reform can quickly disappear, resulting in more and more people turning against the reform policies. The dual-track policies not only served to maintain the flow of policy rents to the potential losers of reform, but also kept the old system functioning while it was being replaced by the new system. This kept China from suffering a shock that could generate resistance to reform while giving the old system an opportunity to reform and grow itself.

While it appears that the dual-track approach has been outstandingly successful, there are downsides to China's reform record that may prove more difficult to overcome in the future. Maintaining planned production and state-control of marketing has come at a cost and the cost has been building. As Lau, Qian and Roland show, the most pronounced inefficiency of the dual-track reform comes from the plan track allocating production to high cost producers (or marketing companies).[3] In agriculture, policies to encourage local grain self-sufficiency kept many uncompetitive areas in grain production. As TVEs began to produce superior goods than SOEs at lower costs, the planned SOE production became surplus and this increased SOE losses. China's levels of non-performing loans held by the state-owned banks are hign, estimated to be anywhere

[3] Lau, Qian and Roland do not consider planned marketing, but their analysis can easily be extended to these companies as well.

from 20 to 60 percent of GDP. This is the legacy of subsidizing the SOEs (including state-owned agricultural marketing companies) as they competed with a more efficient market-oriented sector that thrived outside of the plan and was unburdened by the restrictions placed on the SOEs. While these subsidies allowed the SOEs to maintain the benefit stream to the constituency of workers favored in the pre-reform era, the costs of such policies are high.

With WTO accession and the opening of China's financial sector as well as increased competition from imports and more advanced domestic producers, the maintenance of these subsidies through the state-banking system will become increasingly difficult and force more layoffs of SOE workers, a process begun in the late 1990s, but not with the rigor sufficient to make a large dent in SOEs subsidies.

References

Carter, C., F. Zhong and F. Cai, 1996. *China's Ongoing Agricultural Reform*. (San Francisco: The 1990 Institute)

Chen, H. and S. Rozelle, 1999. "Leaders, Managers and the Organization of Rural Industry Management in China," *Journal of Development Economics*, V.60: 529-557

DeBrauw, A., J. Huang, S. Rozelle, L. Zhang and Y. Zhang, (2002). "The Evolution of China's Rural Labor Markets During the Reforms", Journal of Comparative Economics, V.30: 329-353

Dong Y. and Putterman, L., (1997). "China's State-Owned Enterprises in the First Reform Decade: An Analysis of a Declining Monopsony", Working Paper Number 93, William Davidson Institute, October, 1997

Huang, J., S. Rozelle and M. Chang, (2002). "The Nature of Distortions to Agricultural Incentives in China and Implications of WTO Accession", Working Paper, Center for Chinese Agricultural Policy, Chinese Academy of Sciences.

Knight, J. and L. Song. 1995. "Towards a Labour Market in China," *Oxford Review of Economic Policy*. v.11(4): 97-117

Lardy, N., (2002). *Integrating China into the Global Economy*, Brooking Institution Press, 2002

Lau, L., Y. Qian and G. Roland (forthcoming). "Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition", *Journal of Political Economy*

Lin, J., F. Cai and Z. Li, (1996). "The Lessons of China's Transition to a Market Economy", *Cato Journal*, V.16(2), Fall, 1996

Lin, J., (1992). "Rural Reforms and Agricultural Growth in China", *The American Economic Review*, V.82(1), March, 1992.

Lohmar, B., S. Rozelle and C. Zhao, 2000. "The Rise or Rural-to-Rural Migration in China", *Asian Geographer*, 20(1-3): 101-123, December, 2001.

Naughton, B., (1994). "Chinese Institutional Innovation and Privatization from Below", *The American Economic Review*, V.88(2), May, 1994

Park, A., (2000). "Trade Integration and the Prospects for Rural Enterprise Development in China" Paper presented at the Workshop on China's Integration into the International Trading System: Issues for and Impacts on Agriculture, Organization for Economic Cooperation and Development, Paris, November 16-17, 2000.

Rodrik, D. (2003). "Growth Strategies", Working Paper, Harvard University.

Rozelle, S., 1994. "Rural Industrialization and Increasing Inequality: Emerging Patterns in China's Reforming Economy", *Journal of Comparative Economics*. v.19: 362-391

Figure 1. China's Agricultural Trade Increasingly Reflects its Comparative Advantage in Labor-Intensive Crops