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## Economic-Social Interaction during China's Transition

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# **Economic-Social Interaction during China's Transition**

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**Assar Lindbeck:**

## **Economic-Social Interaction during China's Transition<sup>\*</sup>**

### **Abstract**

I discuss the nature of the economic reforms in China during the last quarter of a century in the context of a typology of economic systems, emphasizing the interaction between economic and social mechanisms. I also consider China's options for further reforms. I focus on economic reforms that make the growth path less resource demanding and social reforms that enhance income security and improve education and health care for disadvantaged population groups.

JEL-codes: I18; I19; I38; O53; P30

Keywords: China; transition economies; social insurance; human services

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<sup>\*</sup> The paper is largely built on Lindbeck (2006b), which provides richer references to data sources and the literature on the Chinese economy. I am grateful to Harry Flam and Solveig Wikström for useful comments on a draft of the paper.

In this paper I apply a systems-oriented, “holistic” approach to economic reforms in China during the last quarter of a century (approximately 1979-2006). The purpose is to analyze the nature of the reforms and the interaction between economic and social mechanisms during the reform period. I also consider China’s options for further economic and social reforms, drawing heavily on relevant experiences over the years in developed countries. Since the focus is on long-term structural issues, short-term macroeconomic stabilization policy is de-emphasized.

### **1. The Nature the Economic Reforms**

Since the economic reforms in China imply a change of economic system, it is useful to analyze them in the context of a typology of economic systems. To this end, I regard an economic system as a multi-dimensional phenomenon, defined in terms of a nine-dimensional vector; see Figure 1. The *first two* dimensions concern the ownership of firms and assets, respectively – contrasting public (government) and private ownership. The *third* dimension deals with the choice between centralized and decentralized economic decision-making, and the *fourth* with the related choice between administrative processes and market mechanisms for transmitting information, coordinating economic decisions, and distributing goods and services among households. The *fifth* and *sixth* dimensions concern the extent to which economic behavior is influenced by non-economic motives and economic incentives, respectively – in the case of individuals as well as firms. The *seventh* and *eighth* dimensions refer to a crucial aspect of the relation between economic agents in the domestic economy: the role of competition. The *ninth* dimension, finally, concerns the relations between domestic economic agents and the outside world, contrasting autarkic and internationally integrated (“internationalized”) economic systems.

I depict the initial (“standardized”) position of China’s economic system in the late 1970s by the vertical vector of circles to the far left in the figure. This was clearly a rather consistent system, combining collective ownership of firms and assets with administrative command of production in an economy that was basically cut off from international markets. Today’s position (2006) is depicted schematically by stars in the case of agriculture, and by squares for the rest of the economy.

Undoubtedly, the economic system has gradually shifted to the right in all dimensions – from public ownership towards private ownership of firms and assets, to more decentralized decision-making and more reliance on markets, economic incentives and competition, as well as from autarky to internationalization. It should be noted that the figure refers only to *the economic system*, not to the organization within the political system and the public sector. Before as well as during the reform period, the public sector has displayed a combination of a highly centralized political regime and pronounced administrative decentralization, in particular regionally.

In the figure, I have schematically indicated the relative magnitude of the shifts in different dimensions of the economic system. Needless to say, the figure is only illustrative. (When I see no specific reason for asserting that a shift is larger in one dimension than in another, the shifts are simply depicted as having the same size in both.) In the case of agriculture, the most characteristic feature of today's ownership structure is the combination of private ownership of firms and public ownership of the most important physical asset in the sector – the land that is leased by family farms from local authorities. In the figure, this feature of the ownership structure in agriculture is illustrated by a much larger shift to the right in the first dimension than in the second.

Clearly, the move to private ownership of firms has been smaller in sectors other than agriculture: a number of large state-owned enterprises, SOEs, still play an important part in the case of public utilities, heavy industry and financial institutions, such as banks. However, the role of private firms has gradually increased also outside agriculture through the privatization of most small and medium-sized SOEs, the entry of private (including foreign-owned) firms, and the increasingly private features of so-called “collective” firms, mainly town-and-village enterprises, TVEs. After the mid-1990s, many SOEs have also been considerably downsized. As a result of these developments, it is fair to say that the bulk of aggregate production (GDP) today takes place in the private sector.<sup>1</sup>

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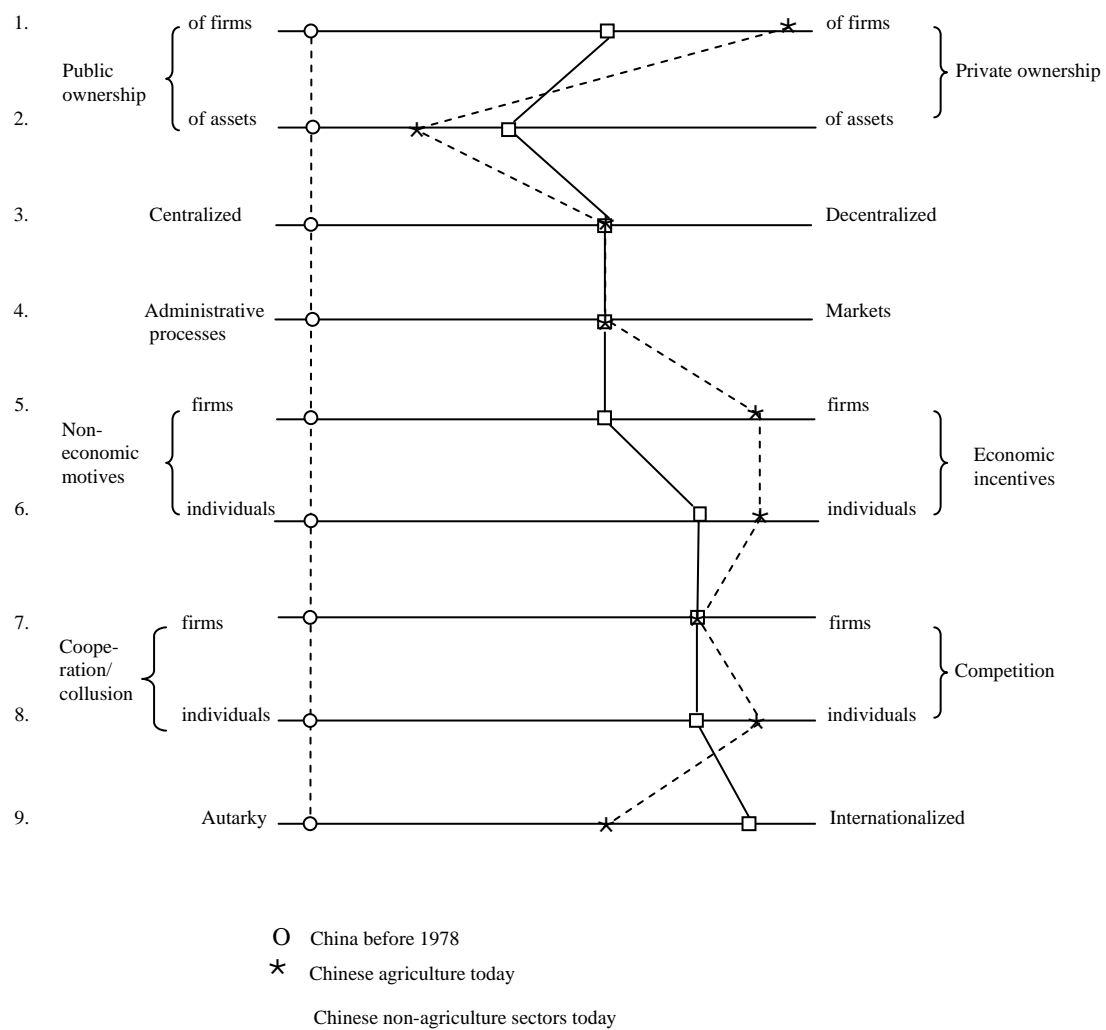
<sup>1</sup> OECD (2005, Table 2.1) estimates that about 60 percent of aggregate production in China in 2004 was accounted for by the private sector; Tseng and Zebregs (2002) present similar figures. The statistically recorded private share can be expected to rise after the revisions of the national accounts in the late 2005, reporting an

The partial and delayed privatization of firms and assets has not prevented huge and speedy reforms in other dimensions of the economic system. For instance, economic decision-making has largely been decentralized to households (in the case of consumption) and to firms (in the case of production) – schematically depicted in dimension 3 in Figure 1. Of course, an important prerequisite for this decentralization has been that markets have replaced administrative processes as the dominant mechanism for

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increase in the tertiary sector by about 9 percent of GDP. Indeed, in a speech to the yearly congress of the Chinese Economists Society, July 3, 2006, the Deputy Finance Minister of China, Jiwei Lou, stated that private firms account for 70 percent of aggregate output. Due to the large share of the population that still works in agriculture, the private share of the Chinese economy is larger in terms of employment than in terms of value added.

**Figure 1**  
Dimensions of economic systems



allocating resources and coordinating decision-making – illustrated in dimension 4 of the figure. This holds for industry and services as well as for agriculture. However, in several other dimensions, the reforms have progressed less in industry and capital-intensive services (such as electricity) because of frequent interventions in publicly owned firms by politicians and public-sector administrators. Indeed, this is the background for Gregory Chows' characterization of China's economy as a "bureaucratic market economy" (1997; 2002, Chap. 19).

Turning to the last dimension in Figure 1, the pronounced internationalization of the Chinese economy, in particular in manufacturing, is one of the most remarkable features of the reforms – in terms of foreign trade, foreign direct investment (FDI) and the import of technology.<sup>2</sup> The opening of the economy would also be expected to result in greater international cultural influences on Chinese citizens. One example is more individualistic (and perhaps also hedonistic) values, in particular among the urban young – a process that already seems to be underway.

Two other characteristics of China's economic system – not explicitly highlighted in Figure 1 – should also be emphasized. One is that *factor markets* have undergone less reform than product markets. For instance, the flexibility of the labor market is still constrained by various privileges of employees in state firms, which creates a pronounced insider-outsider situation in the urban labor market. Moreover, although the residence registration system in urban areas, the urban *hukou*, has recently become less restrictive, individuals without permanent residence permits – the "floating population" (often estimated at about 140 million) – are less rewarded in terms of earnings for their effort and investment in human capital than other inhabitants. (Maurer-Fazio and Dinh, 2002). These population groups, consisting mainly of migrants from agriculture, also enjoy less social protection (if any), and often have to pay substantially more than others for human services, such as health care and education for their children. Thus, the *hukou* system accentuates the insider-outsider feature of the urban labor market.

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<sup>2</sup> The export share has recently hovered around 30 percent of GDP (when measured by the official exchange rate). FDI has recently amounted to 4-5 percent of GDP – although much of this is probably accounted for by purchases of already existing real capital assets rather than by "greenfield investment". These figures can be derived from official statistics on investment by non-mainland firms, assuming an aggregate investment ratio of 43 percent of GDP. (Chinese Statistical Yearbook, 2005, Table 6.1).



Financial markets are much less developed than labor markets. A basic explanation is that government institutions heavily dominate the markets for bonds, equities and bank lending, and that these institutions have systematically favored publicly owned firms at the expense of private firms. Typically, about two thirds of all bank credit seems to have been granted to the state sector over the last decade, often in the form of "soft loans", which in many cases have turned out to be non-performing in the sense that neither interest nor amortization has been paid.<sup>3</sup> The resulting distortions of the allocation of resources have been mitigated by the spontaneous emergence of informal markets for credit and capital. However, such a dual market system is in itself a distortion, reflected in the large differences in interest rates for loans with similar risks.

Another characteristic feature of the economic system in China – not encompassed by Figure 1 – is the heavy reliance on *informal networks* of managers and entrepreneurs, partly as a substitute for a well functioning legal system. More specifically, economic relationships among economic agents are founded largely on social norms of cooperation, with roots in traditional kinship and community institutions (Wank, 1999). These norms are then based on a distinction between business insiders (*neiren*) and business outsiders (*wairen*). Indeed, such networks are often extended by close ties with local officials – ties that are crucial for entrepreneurs because legal rights are often enforced in a haphazard manner.

Needless to say, such networks are not unproblematic. "Kickbacks" and other types of corruption are difficult to avoid in "clientele-like" relations between public-sector representatives and private entrepreneurs. Moreover, as emphasized by Zhang (2006), while such networks favor economic transactions among influential individuals, they may take place at the expense of weak groups of citizens. The most obvious example is perhaps the expropriation of land-tenure contracts held by farmers, when local politicians and administrators ("cadres") turn over such contracts to developers in industry, retailing, and housing when land is rezoned. Although such interventions often speed up the reallocation of resources from agriculture to other sectors, this occurs at the expense of

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<sup>3</sup> The share of non-performing loans has been reduced considerably in recent years (perhaps from above 30 to less than 10 percent), mainly through injections of new capital to the banks from the Government, and a shift of bad loans to special asset management corporations. Of course, these are only temporary solutions as long as the quality of bank lending and asset management in general is not improved considerably. See, for instance, Lardy (2000), Goldstein and Lardy (2004) and Dobson (2006).

farmers' economic security. For instance, at least 34 million farmers seem to have lost their land-lease contracts (partly or completely) between 1987 and 1991 due to expropriation (UNDP, 2005, footnote 120). Social concerns are relinquished for other purposes, such as a fast rate of structural change or, indeed, the enrichment of local cadres, who often receive a share of the capital gains from such reallocation of land-lease contracts.

Although corruption usually tends to reduce the efficiency of the allocation of resources in a national economy, it may very well have speeded up the *transition* to private entrepreneurship in China. The reason is that kickbacks to local politicians and public-sector administrators, as well as “asset stripping” associated with management buyouts in SOEs, have contributed to the emergence of a class of private capitalists. Still, in a long-term perspective, after the “transition period”, it is likely that a system based on the “rule of law” will be more efficient than network relations that function as *substitutes* for the rule of law, and with large elements of corruption (Svensson, 2005, and references therein).

There is no lack of recent official commitments by the Chinese authorities to fight corruption. But as long as public-sector politicians and public-sector administrators have something to “sell”, such as various types of permits and other favors, corruption is difficult to avoid. This is an additional argument for further deregulation of the Chinese economy – on top of conventional arguments in favor of improved economic efficiency. International experiences and research also suggest that a free press helps contain corruption (Svensson, 2005).

How, then, should the economic system in China be labeled? Some observers have called it “state capitalism”. While this label may have been appropriate in the 1980s, it is rather misleading today. The bulk of production, output growth, employment expansion and probably also technological change now takes place in privately owned firms, including firms controlled by foreign (non-mainland) owners via the import of technology. The term market socialism, although often used by the Chinese authorities, is also misleading since dominating models of market socialism – such as those developed by Oskar Lange (1938) and Abba Lerner (1934) – presuppose public ownership of firms and, in the case of Lange, also government-determined prices. Considering the nature of the economic

reforms, the Chinese economic system is probably most appropriately characterized as a special type of “mixed economy” – with less private ownership of assets than of firms, frequent political and bureaucratic interventions in public-sector firms, poorly developed factor markets (in particular the financial markets), and business networks that partly replace “the rule of law”. In spite of various limitations of the economic reforms, the emergence of a labor market and the establishment of product markets with equilibrating prices (hence without physical rationing) have enhanced the economic freedom of individuals considerably. I refer mainly to individuals’ freedom to choose their employer, workplace and consumption bundle – as well as to set up a business and become an entrepreneur.

## 2. Economic Performance

We do not really know which specific features of China’s economic reforms during the last quarter of a century best explain the country’s successful growth performance – officially recorded as a yearly GDP growth rate of 9.5 percent over the last 27 years.<sup>4</sup> We can only say that the actual *combination* of features of the country’s economic system, schematically illustrated in Figure 1, has been conducive to fast GDP growth. It is also rather generally agreed among observers that the gradual and experimental approach to the economic reforms – across production sectors, regions and reform areas – has served China well. In particular, gradualism probably helps explain why China experienced a much better synchronization of job destruction and job creation during the transition period than the former Soviet Union and Eastern European countries. We cannot be sure, however, that gradualism (as compared to a big-bang strategy) will succeed equally well in the future. First, successful reforms of factor markets often require a large number of complementary policy measures, including the build-up of market-supporting institutions of various types, such as in the legal and financial systems. Second, there is always a risk that a gradualist reform process will come to a halt, since gradualism gives various interest groups time to build up resistance to further reforms (“veto points”). By way of comparison, recent attempts in Western Europe to gradually deregulate services and factor markets, and to reform various welfare-state arrangements, have encountered such problems. Although the mechanisms of resistance to reforms differ between non-

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<sup>4</sup> Unless indicated otherwise, I have relied on official Chinese statistics in this paper. Although these statistics may be unreliable in many respects, so are many of the alternative calculations by individual

democratic and democratic societies, “veto points” certainly exist in the former as well. It is also difficult to predict how a future democratization of China would affect the aggregate growth rate. The main result of research on the relation between forms of government and economic growth seems to be that the variance of growth rates is smaller among democracies than among non-democratic countries.

When evaluating China’s economic success in recent decades, it does not suffice to look solely at the GDP growth rate. It is also important to take into account the resource costs of the chosen growth strategy – i.e., the *efficiency* of the growth path. Clearly, China has followed a highly resource-demanding, i.e., “extensive”, growth path. I refer to the exceptionally high investment ratio for real assets as compared to human capital (43 versus 4 percent of GDP), the high input of energy and raw materials per unit of output,<sup>5</sup> and the notorious environmental damage. Overstaffing and excessive inventories of finished and intermediary products in the SOEs during most of the reform period might be regarded as further signs of inefficiency in the Chinese economy, although these features have mitigated the rise in unemployment during transition.

In principle, this indirect evidence of inefficiencies in the Chinese growth path should also be reflected in estimates of total factor productivity (TFP) growth in the country – although calculations of this variable are probably even more hazardous in China than in developed countries.<sup>6</sup> At first glance, TFP growth looks reasonably good during the reform period – it is often estimated in the interval of 3-4 percent per year. However, these figures partly reflect reallocation gains across sectors (basically shifts of labor from agriculture to other sectors) and improvement in human capital through education and training, rather than better technology and organization in individual firms. To get a grip on the latter factors (technology and organization), we may want to exclude the former (reallocation gains and improved human capital) from the calculations, hence confining the analysis to what is often called “multifactor productivity” (MFP) growth. We then obtain figures in the

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observers and organizations. The uncertainty regarding official statistics should, however, be kept in mind.

<sup>5</sup> For example, China’s energy consumption per unit of aggregate output seems to be more than double the world average (IIE, 2006, p. 34), although this kind of waste is lower today than a decade ago.

<sup>6</sup> Indeed, Holz (2005, section 4a) argues that there is no stable aggregate production function for China for the reform period.

interval of 1.5 to 2.5 percent during the reform period as a whole.<sup>7</sup> Moreover, it should be noted that figures on both TFP and MFP growth during the reform period as a whole partly reflect temporary spurts in productivity growth in connection with two special productivity-enhancing reforms: the shift from collective to family farms in the early 1980s and the comprehensive price reform in the early 1990s – both typical “transition phenomena”. Moreover, much of the introduction of new technology and organization has taken place in foreign (non-mainland) firms rather than domestic firms.<sup>8</sup> On balance, productivity changes through better technology and organization within domestic firms may not have been so impressive.

The huge differences in economic development across geographical areas within China is another well-known feature of the growth process in the country – with the eastern (coastal) provinces as the leaders, and the mountainous provinces in the west, along with the “rustbelt” areas in the north, as the laggards.<sup>9</sup> In fact, the regional differences in the level of per capita GDP among China’s provinces (and large cities) today are so striking that China looks like a *continent* with a mixture of a number of middle-income industrial countries and some of the poorest countries in the world.<sup>10</sup>

One explanation for these regional differences is, of course, that the shift from a closed to an open economy increased the comparative advantage of the coastal areas. These regional income differences were accentuated by the fact that the opening took place in a selective manner via “Special Economic Zones” (SEZs), characterized by deregulations and special tax breaks. The improved competitive position of these areas was further strengthened by a concentration of infrastructure investment to these regions. Thus, the

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<sup>7</sup> For surveys of studies of TFP and/or MFP growth, see, for instance, Heytens and Zebregs (2003), Blanchard and Giavazzi (2005), OECD (2005); and Wu (2006).

<sup>8</sup> See, for instance, Tseng and Zebregs (2002) and OECD (2002, pp. 195-230). Whalley and Xin (2006) estimate that foreign firms contributed about 40 percent to China’s GDP growth in 2003 and 2004.

<sup>9</sup> Official statistics suggest that while GDP has grown by about 11.5 percent per year during the reform period in the most successful provinces (Fujian, Guangdong, Jiangsu and Zhejiang), the growth rate has been about half that size in the least successful province (Qinghai). Today’s *level* of per capita GDP is reported to be about seven times higher in the most developed than in the least developed province, even if we exclude the very poorest province (Guizhou).

<sup>10</sup> The income gap between urban and rural areas has also increased since the mid-1980s, although this does not seem to be the case if we instead use 1978 as the starting point for the comparison (and taking differences in cost of living into account. (Ravallion and Chen, 2006.)) According to official statistics, average income in urban areas is 3.3 times higher than in rural areas.

regional income differences today are closely related to China's choice of strategy for rapid economic growth during the reform period.

### 3. Social Problems

The sixfold increase in per capita income and the related dramatic fall in the incidence of so-called "absolute poverty" are the most obvious social achievements in China during the reform period.<sup>11</sup> However, it is not difficult to identify a number of remaining, and in some cases increasing, social problems. As a background to the subsequent discussion of China's options concerning future social arrangements, I will emphasize three such problems.

*First*, according to the World Bank (2003, 2004), the Gini coefficient has increased from 28 in 1981 to 43 in 2001 – a figure not much below the Gini coefficient in some of the least egalitarian countries in the world, such as Brazil and Mexico. From a social point of view, the most important aspect of this development is probably the increase in *relative* poverty in China. Today, while the poorest 10 percent of households seem to earn about 2 percent of aggregate disposable household income, the richest 10 percent earn about 35 percent (World Development Indicators, 2006). This development has been a result not only of the uneven path of average income across provinces and between urban and rural areas (the latter probably only since the mid-1980s<sup>12</sup>). It is also a result of the increased dispersion of income *within* such areas (UNDP, 2005). One important factor behind the latter development is simply the shift to an incentive-based economic system, reflected in a huge increase in the skill premium (Blanchard and Giavazzi, 2005). Naturally, in the new more incentive-based economic system, some individuals have been more successful than others in improving their economic situation.

*Second*, it is not surprising that previous social arrangements largely broke down during the process of economic reform. Even to a larger extent than in the Soviet Union and the socialist countries in Eastern Europe, the responsibility for social arrangements in China during the pre-reform period was delegated to work units (*danwei*), while government

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<sup>11</sup> If absolute poverty is defined as an income of less than (about) one dollar a day, the incidence fell from about 50 percent to less than 10 percent of the Chinese population between 1981 and 2002 (World Bank, 2003).

<sup>12</sup> See Ravallion and Chen (2006).

authorities were responsible for major production and investment decisions (a rough type of input-output planning). In other words, in addition to serving as executors of centrally assigned production and investment tasks, work units functioned as mini-welfare states. In a typical Chinese formulation, they were “enterprises running small societies” (Xiaoyi, 1996). With only slight exaggeration we could say that the division of tasks between the government and the work units in China during the pre-reform period was more or less the reverse of the corresponding division in developed countries today, where firms are in charge of production and investment, and the government (particularly in Western Europe) runs most of the social arrangements.

However, before the economic reforms, the budgets of individual SOEs were to a considerable extent integrated with the government budget: the surpluses (profits) of individual firms were delivered to the central government budget, and the government covered their losses. Some of the social costs borne by individual SOEs were therefore pooled across the nation as a whole. Thus, the financing of the social arrangements in urban areas formally resembled high (close to 100 percent) profit taxes with “fully offset loss”. However, wages were kept down to generate sufficiently high profits to finance these social benefits. It may therefore be more appropriate to say that the financing of social spending in urban areas, *in fact*, was largely equivalent to payroll taxes with the incidence on wage earners.<sup>13</sup>

It is easy to understand why the economic reforms rendered the pre-reform social arrangements dysfunctional. The new competitive environment meant that many firms could no longer afford to live up to their social obligations – such as job guarantees, pensions and various types of human services, including health care, recreation facilities and the education of employees’ children. Moreover, benefits tied to specific work units do not sit well in a market economy, since an efficiently functioning labor market requires social benefits to be portable.

Ad hoc selective subsidies, capital transfers from the government and soft loans from state banks functioned as “stop-gap solutions” to make it easier for firms live up to their social obligations. As a result, bank loans to private firms were further constrained, which

accentuated the discrimination of such firms in financial markets. This, in turn, further reduced the ability of such firms to expand production and employment. The “double bind” – state firms constrained in shedding labor and private firms constrained in acquiring loans – has implied a kind of catch-22 situation during much of the reform period. It will be difficult to remove this “double bind” until non-state firms are able to expand their employment sufficiently to absorb a large fraction of the redundant labor force in state firms, and before a comprehensive system of income security is in place.

Inadvertently, households have also helped finance firms’ social obligations during the reform period, since households’ deposits in state banks (at low, and during some periods even negative, real interest rates) have been intermediated into low-interest loans to state firms. As a result, the social obligations of state firms have, in fact, been partly financed by an “inflation tax” on households’ financial saving (although less so during years with low inflation). This, in turn, implies that much of the real return on household saving has been transferred to the beneficiaries of various social arrangements – much like a tax-financed pay-as-you-go system, although in this case the “tax” was imposed on the return on saving rather than on work.

Moreover, since the government has only partially and quite slowly taken over the financing of “human services”, such as education and health care, it has been necessary to finance such services from other sources. For instance, the funding of education from sources other than government budgets seems to have been as high as 43 percent in recent years; see, for instance, Chow (2006a). Indeed, a considerable share has taken the form of out-of-pocket money (13 percentage points in recent decades according to Zhang and Kanbur (2005). In the case of health care, the share of non-government expenditures seems to have become as high as 60 percent (in 2001) – largely through insurance among urban insiders and out-of-pocket money for the rural population.

*Third*, structural changes create new problems. One example is the increase in market risks inherent in any shift to a market-based economic system. Another is

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<sup>13</sup> Before the economic reforms, the social costs of firms seem to have been about the same size as the wage bill; see Hussain, 2000, p. 70.



the expected demographic development.<sup>14</sup> So far, lower fertility has diminished the “demographic burden” for the active generation – a so-called “demographic dividend”. However, within a few years, this dividend will be turned into a rising “demographic deficit” when the ratio between individuals of working age and the size of the rest of the population falls drastically. Indeed, reasonable forecasts for the next few decades suggest that the number of individuals of working age will be about the same as the number of “dependents” (the sum of children below 18 and elderly above 60).<sup>15</sup>

Since China is “getting old before getting rich”<sup>16</sup>, these problems will emerge at a lower per capita income level in China than in today’s developed and middle-income countries. As a caricature of the demographic development, observers talk about the “4-2-1 problem”: a situation where one child may be required to support and care for two aged parents and four grandparents. The caricature is, of course, only intended to illustrate the likelihood of either a heavy burden for individuals of working age, or serious unsatisfied needs among elderly citizens – or, most likely, a combination of both. The aging of the population will probably also impede the long-term vitality of the economy, since innovation and new entrepreneurship often emerge among young cohorts. The demographic development could also be expected to reduce the household saving rate – a prediction that follows immediately from the life-cycle saving theory.

Recent suggestions to soften the “one-child policy” are probably partly a response to these future demographic threats, although they may also be a reaction to the distorted proportion between newborn boys and girls (1.18 instead of the more normal figure of around 1.03). However, it is unlikely that removal of the one-child policy can ameliorate the demographic situation to any considerable extent. There is a rather universal (country-independent) relation between modernization on one

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<sup>14</sup> Broadly speaking, the fertility rate has dropped from about 6.0 immediately after World War II to about 1.5 today, and life expectancy (at birth) has increased during the same period from about 35 to about 72 years.

<sup>15</sup> The UNDP (2005) predicts that the population share of individuals of working age will start to fall after 2010 and be as low as 53 percent by 2050 – the lowest predicted share at that time among East Asian countries except Japan. The share of the population aged 60 years and above is predicted (by UN, 2003) to be about 30 percent by 2050.

<sup>16</sup> Quotation from the title of article by Tian (2004).

hand, and falling fertility and rising life expectancy on the other. Experiences from many countries also suggest that it is not easy, although not impossible, for governments to boost fertility after it has declined substantially.<sup>17</sup>

The *urbanization* process is another important structural factor that affects social arrangements. In principle, it is administratively easier to build up systems of income insurance for employees in urban areas than for the farm population, simply because concepts such as income and unemployment are easier to define for employees in industry and services than in agriculture. Moreover, the reallocation gains from urbanization expand the aggregate tax base, and this helps finance both income insurance and human services. In both respects, urbanization facilitates the build-up of mandatory systems of income insurance.

Urbanization is, of course, also accompanied by detrimental social consequences. Problems related to congestion are perhaps the most obvious example. Without intervention against motor vehicles in cities, for example through congestion fees, the traffic system is bound to create inefficiencies in the transportation system and harm the quality of city life due pollution, crowding and noise. Indeed, this has already happened in many places in China, but the worst is yet to come. Since the required policy interventions are politically easier when car owners are still a small minority, the Chinese authorities have a political “window of opportunity” in the near future to deal with these problems.

City life is, of course, accompanied by other social problems, such as criminality, the misuse of drugs and alcohol, and mental disorders – not least in large cities. General social policies – like income insurance and human services such as education and health care – have turned out not to be sufficient to solve these problems. Experience suggests that highly *selective* (targeted) social interventions (“rehabilitation”) among specific groups of citizens are also urgent. Perhaps China could mitigate some of the problems related to urbanization by promoting the growth of small and medium-sized cities as alternatives to ever-larger mega-cities (with 10 to 50 million people). “Medium size” in

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<sup>17</sup> Although the drastic fall in fertility in China has probably been speeded up by the official one-child policy, the time path of the fertility rate in China does not differ drastically from the situation in other East Asian countries during comparable periods of “modernization” (UNPD, 2005).

this case might then be interpreted as cities with between half a million and one or two million people.

All these social problems – the widening of the distribution of income (in particular, the increase in relative poverty), the breakdown of previous social arrangements, and new social problems due to various socio-economic changes – have recently attracted more attention both within China and among foreign observers. Against this background, it is of interest to look at alternative options in future social policies in China – an issue to which I now turn.

#### **4. Options for new social arrangements**

It is hardly surprising that new arrangements for income security and human services did not emerge spontaneously through market forces as the old arrangements began to break down in connection with the economic reforms. Indeed, this experience is consistent with traditional economic theory, which highlights a number of limitations in voluntary markets for both income insurance and the provision of human services, such as education and health care (Barr, 2004). It is also well known that the Chinese authorities have been slow in building up new social arrangements, except mainly for urban insiders. It is useful to classify the task of building up such arrangements into three categories: (i) interventions designed to boost the level and stability of *factor income* (income before taxes and transfer payments), in particular among low-income groups; (ii) *tax/transfer arrangements* that stabilize and redistribute disposable income for given factor incomes ("income insurance"); and (iii) improved and more evenly distributed provision of various types of *human services*.

##### *Factor-income policies*

Naturally, since China is still a poor country, there is a strong social case for a continuation of rapid factor-income growth for the population as a whole, and hence rapid GDP growth.<sup>18</sup> China also has much to gain by gradually shifting from an extensive to a more intensive growth path – with more emphasis on human relative to physical capital, a more efficient allocation of resources, and faster introduction of new technology and organization. It may then be possible to increase the GDP share of both ordinary private

consumption (today only about 40 percent of GDP) and consumption of human services without much, if any, fall in the GDP growth rate. Less capital-intensive production, including an increased role of labor-intensive services, would also be important to limit unemployment in the future.

Most likely, better functioning factor markets would facilitate such a change in the character of the growth path. Better working conditions for private entrepreneurship would also be beneficial in this respect. One indicator is that private firms seem to be more efficient than comparable publicly owned firms in China.<sup>19</sup> Experience from developed countries also indicates that private entrepreneurship is highly conducive to innovations; see, for instance, Baumol (2000). Moreover, at least a partial privatization of the banking system would be expected to reduce the bias of lending in favor of state enterprises, and hence remove an important obstacle to expansion of the private sector.

There is also a strong case for implementing highly targeted policies to boost factor income in poor regions and among low-productivity individuals regardless of where they live. Indeed, empirical studies in China indicate that targeted infrastructure investment in poor areas (including investment that increases market access) tends to raise productivity considerably among both family farms and other firms. There is also evidence of productivity improvements as a result of better nutrition, sanitation, basic health services and education in geographical areas with a large incidence of impoverished citizens.<sup>20</sup>

Removal (or at least further softening) of the urban *hukou* would also be expected to boost per capita factor income, both among those who move to urban areas and among those who remain in the countryside (as a result of increased remittances and diminished labor supply in rural areas).<sup>21</sup> In principle, it would also be possible to spread the income gains through tax-transfer programs. The most obvious losers would be urban insiders who

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<sup>18</sup> According to World Bank (2003) calculations, about 40 percent of the population still seems to live on less than \$2 a day.

<sup>19</sup> See, for instance, empirical studies that compare SOEs and private firms by Anming et al. (2003), Xu et al. (2005) and McKinsey Global Institute (2006).

<sup>20</sup> For instance, Jalan and Ravallion (2002) find that investment in *both* infrastructure *and* human capital has significantly raised the return to farmers' investment in physical assets (other factors held constant).

<sup>21</sup> On the basis of a computable general equilibrium (CGE) model, Whalley and Zhang (2004) find non-trivial redistributive effects of this type as a result of an assumed removal of the *hukou*.

would be exposed to more wage competition; this would, however, contribute to reducing overall income inequality in the country as a whole.

Indeed, such developments would extend the period of Arthur Lewis-type “unlimited supply of labor” in urban areas. During a comparable phase of industrialization, today’s developed countries in Europe also experienced a huge outflow of labor from agriculture. But a considerable share of the rural population could then migrate to other continents with ample availability of agricultural land and subsequently expanding urban labor markets. China’s current agricultural population does not have the same opportunities.

The future development of the distribution of factor income in China is also related to what happens to the ownership of agricultural land. In a similar way as the shift from collective farms to family farms in the early 1980s stimulated productivity in agriculture, a shift to private ownership of agricultural land is likely to have the same result. Farmers be encouraged to make long-term investments in the land that they cultivate, and it would be easier to consolidate fragmented patches of land, with better exploitation of returns to scale. This would be particularly useful, for instance, in the case of wheat, vegetables and animal products.<sup>22</sup> A shift to outright ownership of land would also be likely to strengthen farmers’ property rights, thereby improving investment incentives.

There thus seems to be a conflict between lingering socialist ideology with respect to land ownership and concern about both long-term efficiency and higher per capita factor income in agriculture. Deng Xiaoping is famous for the metaphor that the color of the cat does not matter as long as it can catch mice. But in regard to the ownership of land, the “color” of the land still matters. “Political economy” mechanisms may also help explain the resistance among powerful interest groups to the privatization of land: local politicians and public-sector administrators have a strong vested interest in government ownership of land – in terms of power as well as financial gains (corruption in many cases).<sup>23</sup>

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<sup>22</sup> Improvements in the transferability of land-lease contracts would facilitate such consolidation. Indeed, Wan and Cheng (2001, p.191) estimate that consolidation of fragmented patches of land would increase labor productivity by as much as 12-17 percent, depending on the types of crops.

<sup>23</sup> There may also be more pragmatic considerations behind the reluctance of the Chinese authorities to privatize agricultural land. One might be that the distribution of wealth could gradually become more uneven *within* the agricultural population (since some farmers will be more able than others to consolidate land holdings) – although the distribution of income and wealth among the Chinese population as a whole could very well become more even. Another consideration might be that an ensuing consolidation of land holdings

Could price regulations be another useful device for redistributing factor income across social groups? There is no doubt that the income of tenants could be augmented at the expense of landlords, at least temporarily, by rent control that keeps rents below market equilibrium. However, the disadvantages of such policies are also well known from experience in developed countries; excess demand for housing (“housing shortages”), black markets for rental contracts, deterioration in the quality of the housing stock, and a fall in new construction (which has often induced governments to start subsidizing housing construction). The distributional consequences among tenants are also rather dubious, since personal contacts with landlords and transactions on black markets tend to favor high-income groups in markets with a permanent housing shortage as the result of rent control.

Agricultural price regulations have also been used extensively in many countries to redistribute and stabilize factor income. While developing countries have often implemented such regulation to keep down the prices of agricultural products, primarily to favor urban consumers at the expense of farmers, most developed countries have done just the opposite. There is no doubt that such policies have boosted revenues for the agricultural population, at least initially. But there are serious problems inherent in such policies. For instance, inefficient farms will survive more easily, thereby retarding the consolidation of land holdings and hence rationalization in the agricultural sector. There are also well-known distributional problems associated with agricultural protectionism. Owners of large farms tend to be favored as compared to owners of small ones, since the latter themselves consume a considerable fraction of the output from their farms. Moreover, low-income consumers are harmed relative to other consumers since they use a larger share of their income to buy agriculture products. Thus, schematically speaking, there would be a redistribution of income from poor consumers to relatively affluent farmers.

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could reduce the possibilities for migrants to urban areas to return to agriculture, after having failed in the cities: there would simply be fewer family farms to receive them. This disadvantage would, however, be mitigated by the fact that private ownership of land would enable elderly farmers to transform their land into cash and, in turn, provide financial assistance to family members who did not “make it” in the cities.

Hence, if the authorities want to boost the factor income of low-income groups, policies that improve their productivity are much more promising than price regulations. Not only do such policies increase rather than reduce economic efficiency, they are also better targeted.

Needless to say, both the level and the *stability* of factor income are vital from a social point of view. This holds, in particular, for the poorest segments of the population, since their margins in terms of misery are especially narrow. Policies that smooth macroeconomic fluctuations may therefore be regarded as a first line of defense against income instability.<sup>24</sup> In so far as stabilization policies have been pursued at all in China during the last decades, they mainly seem to have taken the form of direct quantitative regulations of investment and credit flows rather than general fiscal and monetary policy incentives. One reason is probably that public-sector firms have been regarded as quite insensitive to economic incentives. However, as the economic system gradually becomes more incentive-oriented, stabilization policy can rely increasingly on such incentives.

#### *Tax/transfer arrangements*

What, then, are the basic policy options in the case of tax/transfer arrangements? One issue concerns the choice between (fairly) generous income-insurance arrangements for a narrow group of individuals and less generous arrangements for the population as a whole. So far, the Chinese authorities have chosen the former alternative. Indeed, new arrangements of mandatory income insurance usually cover no more than 110-180 million employees – mainly “urban insiders”. Moreover, per capita transfers to households seem to be about 10 times as large in urban as in rural areas (UNDP, 2005, p. 3).

So what would a strategy with broader coverage of tax/transfer arrangements look like? From an administrative point of view, unemployment insurance and pensions (the two major systems of income insurance) could certainly be extended to basically all employees in industry and services – in urban as well as rural areas. Of course, it is more difficult to organize similar systems of income insurance in agriculture; indeed, concepts such as unemployment and retirement are difficult to apply in this sector. However,

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<sup>24</sup> On the basis of a dynamic simulation model of the Chinese macroeconomy, Zhang (2001) reports that temporary external shocks tend to reduce the growth path of the economy for a considerable period of time (several years). Of course, this is not unique for China.

improved crop-failure legislation and/or improved natural-disaster relief may to some extent fulfill similar functions. In the case of pensions, some kind of basic, lump-sum benefit would also be administratively feasible for the population as whole.

However, there are also a number of country-specific problems to be found in China's emerging systems of income insurance. One example is that risk pooling often takes place only across limited geographical areas, such as a city, or possibly a province. At first glance, this may seem to be a trivial problem, since the geographical domains of risk pooling are often more populous than many European nations. However, the composition of industries often differs strongly across geographical areas, so that the payroll taxes, designed to finance the benefits, vary strongly across such areas. In particular, firms in areas with many unemployed or pensioners are exposed to much higher social costs than firms in other areas. For instance, payroll taxes are relatively high in regions with old industries, such as mining and steel, whereas they are relatively low in regions with new industries, such as banking, electronics and civil aviation. This tends to influence the relative competitiveness of firms in a rather arbitrary way, especially if local wages do not adjust fully to the differences in the payroll taxes. The limited area of risk pooling also reduces the portability of benefits, which impedes the emergence of a national labor market. Generally speaking, de facto fragmentation of the social arrangements across the country has created problems for both the competitiveness of firms in different regions of the country and the mobility of labor.

Like several other countries, China has in recent years experimented with a *combination* of pay-as-you-go ("paygo" for short) and funded pension systems, thus far mainly covering urban citizens. However, both types of arrangements are likely to be confronted with financial problems in the future. Since the main problem in the paygo part of the pension system is related to the "graying" of the population, this specific problem could in principle be mitigated by a gradual increase in the effective retirement age. (The formal pension age today is 60 years for males and 55 for females, with an effective retirement age of only 55 for the former). If this would not suffice, what remains are a shift less generous benefits and/or higher contributions (although *total* payroll taxes are already quite high, about 40 percent).



A more specific problem for China is that contributions originally paid into the funded part of the pension system have, in fact, been used to finance deficits in the paygo part of the system – the problem of “empty individual accounts”. As a consequence, the funded part of the mandatory pension system, so far, looks like merely another paygo system with “notional” (book-keeping) rather than real accounts. The Chinese authorities could basically choose between two alternative strategies to deal with this issue. One would be to abandon the idea of funded individual accounts altogether and be content with the paygo part of the system. The other alternative would be to “recapitalize” the accounts. One possibility would then be tax-financed capital injections into the accounts. Another possibility, suggested by Pieter Bottelier (2002), would be to let the National Social Security Fund take over the shares in a number of state firms. The fund could then be instructed to sell the shares gradually on the open market, at appropriate intervals to avoid strong negative effects on share prices. The revenues from the sales could then be used to recapitalize the empty individual accounts. In this way, two birds would be killed with one stone: a restoration of the individual accounts and a speed-up of the privatization of government-owned corporations. A more modest version of this idea has, in fact, already been implemented. The collective fund in China is entitled to receive 10 percent of the proceeds from sales of shares in state-owned companies every time there is an initial public offering (IPO), or new share issue.

A more general problem with funded government-run pension systems is whether the government should opt for government-operated or privately-operated funds. The latter alternative is, of course, more consistent with the notion of a decentralized and competitive market economy. Government-operated funds always run the risk of being “high-jacked” by politicians who insist that they should decide the portfolio policy of the funds, appoint the members of the board of the fund(s), appoint board members in firms where the funds have bought shares, and perhaps also give direct instructions about the allocation of the portfolios of the funds.

The most promising way of significantly reducing the probability of such political intervention in government-created pension funds, and hence de facto nationalization of the national economy, is to opt for a number of decentralized, non-government funds from the very beginning. Considering China’s recent tradition of government ownership and political intervention in individual firms, the risk (or “hope” among some observers) that

a funded, government-created pension system will, in fact, result in a strongly nationalized economy is hardly less in China than in other countries.

### *Human services*

As in the case of income insurance, the provision of human services in China, including education and health, have lagged as compared to the successful GDP growth during the reform period. In the case of *education*, the basic problem is not that the services are currently provided by several different types of agents: organizations affiliated with SOEs, local governments and private schools. Indeed, this pluralism on the supply side seems to have contributed to greater variation in terms of curriculums and teaching methods (Hannum, 1999). Many observers seem to agree that the most pressing tasks today are instead to expand the number of students in secondary and tertiary education, to improve the quality of education at all levels, and to reduce the financial burden of schooling for low-income parents.<sup>25</sup> Certainly, these improvements cannot be achieved without increased resources to education from the central government, including grants to local governments in poor areas of the country.

China also has to deal with a number of well-known organizational problems. One is to decide the number of years students should follow a single track and when (and how) students should be separated according to interest and ability (dual or multiple tracks). Another problem is the trade-off between “basic skills” (reading, writing and arithmetic) and broader, more vague “social abilities” (including preparation for civic duties and leisure activities). A third-trade off is between theoretical skills and vocational skills.

In all these dimensions, it is probably a good idea to avoid extreme solutions. There is rather general agreement among specialists in education that early separation of schoolchildren (as, for instance, in Germany) into different tracks (in some countries as early as the fifth grade) disfavors children from homes without an academic background. Other countries have instead chosen a single-track system that extends through the ninth grade or even further, thereby emphasizing theoretical training that prepares a large share of a cohort of youngsters (one-third or even half) for university studies. While problems

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<sup>25</sup> Out-of-pocket expenses on education seem to have increased from about 2 to 13 percent of total spending in this sector during the 1990s (Zhang and Kanbur, 2005) – largely to finance tuition fees,

associated with early separation are then avoided, the highly heterogeneous classes of students in the upper grades of the secondary school system have made it necessary to limit intellectual ambitions in theoretical education. At the same time, students who are better fitted for, and show more interest in vocational (rather than academic) training often have difficulties following such a highly theoretical education, with a large drop-out rate as a result. Moreover, several countries that have emphasized general “social abilities” rather than “basic skills” (ability to read, write and count) now seem to regret having done so. It is also interesting to note that many of today’s rich countries did emphasize “basic skills” when they were poor 50 or 100 years ago.

Most countries also have serious problems with their systems of *vocational training*. China is, I believe, well advised to take inspiration from the German experience with apprenticeship work at firms, combined with general education in school (i.e., two days a week in school and three on the job, or the reverse). This could be accomplished without very early separation of students into a two-track system (as in Germany). Vocational training in China today is divided among SOEs, training centers affiliated with such firms, as well as schools affiliated with the Ministry of Education (MOE) and, to some extent, with the Ministry of Labor and Social Security (MOLSS).<sup>26</sup> However, there seem to be huge variations in the quality of this training.<sup>27</sup> Deficiencies in quality in many places may explain why many individuals have recently chosen to finance vocational training themselves.<sup>28</sup>

From a social point of view, many observers regard *health-care* reforms as even more urgent than educational reform, in particular for the rural population. An important background factor is the abolishment of health services previously provided by agricultural communes and “barefoot doctors”. As a result of the stagnation of public-sector and collective health services during the reform period – indeed a regress for large parts of the population in many rural areas – the private sector has taken over the

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school books, transportation and school uniforms. To this figure should be added unrecorded spending on extra education outside the ordinary school day.

<sup>26</sup> See, for instance, Fleisher and Wang (2001) and Li (2004).

<sup>27</sup> For instance, Li (2004) reports many examples of poor supervision, considerable disorder and inefficiencies, as well as large mismatches between the demand for skills and the availability of training opportunities for different types of skills. The number of vocational schools has also fallen gradually – by at least 50 percent since the early 1990s.

<sup>28</sup> In a sample used by Li (2004), about a third of the individuals engaged in vocational training participated in programs financed mainly by out-of-pocket money.

responsibility for about a third of the production of such services (Kin et al., 2002), although some assets (medical facilities) are still owned by public-sector authorities, and rented to private agents. As in the case of education, the shift to private producers is not necessarily problematical, perhaps even the opposite.<sup>29</sup> The real problem is rather that the public sector has reduced, and decentralized, its responsibility for the *financing* of these services. Among the entire population, only about 105 million individuals seem to be covered by comprehensive “basic” health-care insurance (China Compendium, 2005). However, a modest cooperative system of such insurance is currently being set up in rural areas.

Although serious deficiencies are often reported in the provision of health services, health spending seems to amount to as much as 5.3 percent of GDP.<sup>30</sup> This observation suggests that there may be serious inefficiencies in the provision of such services. One indication is that about 68 percent of government funding is reported to be allotted to hospitals rather than to health clinics and preventive health services, in spite of the fact that many experts regard the latter activities as potentially more important (on the margin) for overall health conditions (UNDP, 2005, p. 3).<sup>31</sup> Indeed, about 80 percent of health spending in recent years seems to have been concentrated to large and medium-sized cities (Chow, 2006b; UNDP 2000, p. 3). These allocations and distributions of health care cannot possibly reflect the need for such services in the country as a whole. Clearly, a considerably improved health-care situation in China requires both a shift of resources to rural areas and a drastic reduction in the financial burden of households, in particular among the poor.

As in all countries where a “third party pays”, there are also problems of moral hazard in the health-care sector, including excessive medical examinations in many cases – demanded by patients or suggested by physicians; see, for instance, Chow (2006b). A more specific moral hazard problem in China is that strict price controls on many types of

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<sup>29</sup> The diversity of providers of education also seems to have contributed to diversity of content and teaching methods in the country (Hannum, 1999).

<sup>30</sup> This seems to be some 2-3 percentage points higher than in countries with a similar level of per capita income in Southeast Asia (except for Vietnam).

<sup>31</sup> Of China’s total health expenditure (in 2002), 50 percent is reported to have been allotted to urban hospitals, and only 7 percent to health centers. It also appears that as little as 7 percent was devoted to “public health” (preventive health care) in spite of the fact that such treatment is particularly important in poor countries (UNDP, 2005, p. 58).

health services have induced hospitals and health clinics to finance much of their health-care provision by revenues from the sale of drugs (Hesketh and Zhu, 1997). This, in turn, has created strong incentives to charge high prices for drugs and to over-prescribe drug medication<sup>32</sup>. Thus, a more symmetric price system for drugs and other types of treatment is likely to improve the allocative efficiency of the health-care sector.

In fact, health-care reforms have recently been announced by the authorities, and such reforms are to some extent underway. As in the case of pensions, the financing of future health-care insurance in urban areas is supposed to rely on a combination of paygo financing and funding (with individual accounts), the latter organized along similar lines as in Singapore and Malaysia.<sup>33</sup> Presumably, individual accounts are particularly useful for relatively inexpensive, mainly “out-patient” treatment, rather than expensive treatment. Costly treatment (including “catastrophic health care”) is then supposed to be covered by the paygo (“risk pooling”) part of the system. However, the individual accounts already seem to have run into financial difficulties (similar to those in the pension system), thereby forcing the government to inject new money from the general budget into the paygo part of the system.<sup>34</sup> The state also encourages enterprises to establish supplementary medical insurance for their employees, mainly to settle medical expenses not covered by mandatory medical insurance.

Moreover, as in the case of education, a number of well-known trade-offs have to be addressed. I refer, in particular, to the trade-offs between preventive and curative care, and between basic (relatively inexpensive) and more sophisticated (relatively expensive) health care. As for developing countries in general, both ethical and efficiency concerns make a case for preventive health services *and* basic curative health services for broad population groups rather than sophisticated (specialized) curative health care for a minority of the population. This would be expected to contribute to both broad

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<sup>32</sup> According to Blumenthal and Hsiao (2005), as much as half of total spending on health care consists of costs for drugs, while more normal figures in developed countries are usually 10-15 percent.

<sup>33</sup> An individual's entire contribution (two percent of earnings) and a third of the contribution covered by the employer (six percent of the wage bill) are supposed to be paid into the individual's (funded) personal account, while the remaining two thirds of the employer's premium is allotted to the paygo part of the system (i. e., the common “health insurance pool”). See, for instance, Social Insurance Research Team (2003).

<sup>34</sup> The payroll tax that finances health insurance is currently 8 percent of the wage rate (OECD, 2005, Table 4:3). Social Policy Research Centre (2002, p. 9) estimates that this figure would have to be considerably higher than 10 percent in the future to avoid deficits.

improvement in the quality of life and higher labor productivity among poor segments of the population.

Whereas preventive health care in developed countries is mainly an issue of individuals' life style (smoking habits, diet, exercise, etc.), in poor countries it is also a matter of sufficient nutrition, sanitation and efforts to combat transmitted diseases. Not least in China, it is also an issue of exceptionally serious pollution. Indeed, some research indicates that China's air pollution problems are among the most damaging in the world. The severe environmental problems are, of course, partly side effects of China's one-sided emphasis on capital-intensive, raw material-intensive and energy-intensive industry – another illustration of the interaction between growth strategy and social concern. These problems are also a result of the limited priority assigned to environmental protection as compared with production of goods and services – a historical parallel to similar neglect during the early phase of industrialization in today's developed countries. Although the costs of substantially reducing pollution would be considerable, so would the gains in terms of improved health (Brajer and Mead, 2004). This would also apply to policy interventions requiring firms to improve working conditions.

The Chinese authorities have recently tried to deal with pollution by quantitative regulations and graduated charges when emissions exceed certain mandated ceilings. But many SOEs do not seem to be particularly sensitive to such charges, simply because profit considerations do not dominate their objectives. (This resembles the insensitivity of state firms to monetary and fiscal incentives in the context of stabilization policy.) There have been recent experiments (conducted in cooperation with the World Bank) to exert *social pressure* on firms, rather than simply relying on quantitative restrictions and economic incentives.<sup>35</sup> In other words, as a complement to the latter types of policy measures, the idea seems to be that firms' pollution behavior could be influenced by social norms, which are supposed to be upheld by the general public's through its approval or disapproval of firms' behavior. In the future, when most firms in China are likely to be profit-oriented, it will be easier to pursue successful incentive-based policies to improve both the environment and working conditions by way of Pigouvian tax/subsidy programs, such as fees on polluters and experience-rated fees in the work-injury insurance system.

In spite of the modest ambitions of social and environmental policies in China during the period of economic reforms, life expectancy is rather high as compared to other countries with about the same per capita GDP. The level of adult literacy is also relatively high. Indeed, according to several cross-country evaluations, China ranks higher in terms of such “social” (or “human”) variables than in terms of per capita GDP – in spite of the rather low priority given to social and environmental issues during the reform period.<sup>36</sup> There are at least two ways of explaining this apparent paradox.<sup>37</sup> One could be that high life expectancy and widespread adult literacy have to a considerable extent been “inherited” from the pre-reform period, when widely distributed, although quite simple, health care and basic education were emphasized. As regards health, another explanation could be that China – more than other countries with a similar GDP per capita – has a long history (after World War II) of promoting widespread sanitation and nutrition for the population as a whole – factors that, on the margin, may have been more decisive for life expectancy than health care.<sup>38</sup> Moreover, serious health effects of environmental damage may only emerge after rather long time lags (several decades).

A more general problem concerning the provision of human services is related to difficulties in providing effective mechanisms for adjusting quantities and qualities of human services to consumers’ needs and preferences. In particular, in countries where local governments have a monopoly on the provision of human services, the “exit option” is not available as a means for consumers to exert such influence (except possibly when moving to another municipality). The “voice option”, exerted via the political system, is necessarily also rather weak in most countries. Citizens’ political influence basically

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<sup>35</sup> One attempted method is to rank firms (publicly) according to their degree of environmental concern – the so-called “Green Watch Program” (Wang et al., 2004).

<sup>36</sup> For instance, while China was ranked as country number 96 in terms of GDP per capita (measured on a PPP basis) in 2003, it was ranked as number 85 in terms of the Human Development Index (HDI), which is based on a number of broad economic and social indicators (UNDP, 2005, p. 81). In another study, the China Center for Modernization Research (2005) concludes that China is in about the same position in terms of “economic modernization” as the most modern countries today were 100 years ago, while the lag is 80 years in terms of “social modernization”. While economic modernization is measured by variables such as GDP per capita, the share of the farming population and the share of GDP produced in agriculture, human modernization is measured by health variables, such as average life expectancy, and basic education variables, such as adult literacy rates.

<sup>37</sup> Nicholas Lardy brought this apparent paradox to my attention.

<sup>38</sup> However, during the Mao period, the authorities were also responsible for the devastating famine in connection with the “Great Leap Forward” in the late 1950s and early 1960s and the huge educational regress during the “Cultural Revolution” in the late 1960s and early 1970s.

refers to the “policy packages” offered by politicians, rather than to specific services and/or service providers. Naturally, the voice option would be expected to be especially weak in countries without free media and contestable elections. To strengthen the voice option at the local administrative level, China has recently introduced elections of village leaders in some parts of the country (and in a few townships). There is some evidence that this reform has heightened the responsiveness of local authorities to the demands of public goods by citizens’ demand for public goods (Luo et al., 2006). But the extent to which such reforms will actually strengthen citizens’ influence on the provision of human services is limited since there are no competing political parties and centrally appointed party officials (party secretaries) still have strong political power over local administrations.

#### *Broad trade-offs in social policies*

Future social policies in China cannot avoid delicate trade-offs between further improvements in the social arrangements for a minority or urban insiders and modest social arrangements for broad population groups. Ethical and possibly also efficiency considerations suggest priority for the second alternative. Nevertheless, the minority of urban insiders in China have already been favored in this sphere. Most likely, this reflects the distribution of political powers in Chinese society. However, the risks of increased social unrest among disfavored population groups – rural residents as well as the “floating population” – could possibly generate a shift of relative political powers in the future. I refer, in particular, to considerable and recently growing social unrest outside of the large cities, although this unrest may partly be the result of circumstances other than unsatisfactory income security and unaffordable human services.<sup>39</sup>

Is there also an unavoidable trade-off between social and economic ambitions? This depends partly on the *methods* applied to pursue social objectives. For instance, such trade-offs might be avoided altogether, to the extent that the earnings of low-income groups are boosted through policies that raise their productivity and hence factor income – rather than through policies that create wide tax/benefit wedges between factor income and disposable income. Indeed, under the first mentioned policy strategy, redistributions

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<sup>39</sup> *China Daily* reported about 80,000 “social incidents” during 2005.



to low-income groups and increased economic efficiency might be brought about simultaneously.

Since tax-transfer programs, including mandatory income insurance, are bound to be an important component of welfare-state arrangements, disincentive effects are, in fact, impossible to avoid. But tax wedges can be limited by tight links between contributions and benefits for the individual – as in so-called “quasi-actuarial” income insurance. The drawback is that the tighter the links, the smaller the possibilities to use income insurance as a method to redistribute *ex ante* lifetime income.

A realistic analysis of incentive problems of welfare-state arrangements also requires concern for moral hazard, which is unavoidable in social insurance. I refer, in particular, to situations where individuals exploit such systems to obtain more leisure at the expense of the after-tax income of others. In developed countries in Western Europe, the problem seems to be particularly severe in the case of unemployment benefits, sickpay, and early retirement benefits. Today, about 20 percent of the population of working age in Western Europe lives on various types of welfare-state benefits. The problem is accentuated if individuals gradually develop a more “liberal” interpretation of their right to live on various types of benefits from the government, rather than on work, i.e., if attitudes and social norms in favor of work, or against living off government benefits, are weakened. Outright benefit cheating is an extreme case. I have hypothesized elsewhere that contemporary welfare-state problems in developed countries are partly due to such changes in attitudes and social norms (Lindbeck, 1995; Lindbeck, Nyberg and Weibull, 1999). If welfare-state arrangements gradually become encompassing and more generous in China, the country will hardly be immune to disincentive effects – through tax wedges, moral hazard and induced changes in social norms. Of course, such effects should then be compared with the gains in terms of income security and redistribution, and possibly also greater social stability in society at large. This point reflects the traditional observation that social-security arrangements cannot avoid a trade-off between insurance and redistribution, on one hand, and moral hazard and tax distortions on the other.

Another lesson from welfare-state arrangements in developed countries is the importance of making social insurance financially robust to “unfavorable” shocks, for instance, in demography, productivity growth and macroeconomic development. One way of

achieving this is to ensure that the contributions and/or benefits are automatically contingent on the development of variables such as the number of individuals above retirement age, the rate of growth of the aggregate wage sum (and hence the tax base), and the number of individuals of working age living on various types of benefit systems (Lindbeck, 2006a). A main advantage would be that politicians could then be relieved of the task of making recurrent, unpopular reductions in the generosity of the rules for various social arrangements in response to financing problems. Measures to provide such arrangements with financial stability would be taken routinely by administrative authorities according to rules predetermined by politicians, i.e., through administrative delegation.

Lessons such as these from developed countries may seem self-evident, but experience has shown that they are not easily learned, and even less easily adopted. Indeed, it has turned out to be politically difficult to avoid creating “over-generous” welfare-state arrangements in the first place (“overshooting”), as well as to reducing their generosity after serious problems have actually been identified by experts and politicians. It is imperative for China to watch out for such problems in the future. It is also worth noting that in their early phases of economic development, today’s developed countries relied mainly on (modest) safety nets, often in the form of lump-sum benefits – rather than on arrangements for income protection (i.e., benefits in some proportion to previous earnings). It was only after these countries had become rather well off, mainly after World War II, that comprehensive and generous arrangements for income protection in the form of social insurance became common.<sup>40</sup> Thus, both recent and previous experiences in developed countries are well worth considering by the Chinese authorities when traveling the route to more ambitious social arrangements.

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<sup>40</sup> Germany under Bismarck introduced social insurance for industrial workers earlier than other countries, and the United States built up universal social security, mainly in the form of old-age pensions, as early as in the mid-1930s.

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