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# Risk Management and the Rise of the Regulatory State

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**SciencesPo.**

# **Governance and Globalization**

## **Sciences Po in China**

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**THE INTERGENERATIONAL CONTENT OF SOCIAL SPENDING:  
HEALTH CARE AND SUSTAINABLE GROWTH IN CHINA<sup>2</sup>**  
**社会支出的代际意义：中国的医疗保健与可持续发展**

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## Abstract

The paper endorses the thesis that current macro imbalances are partly due to an excess of household savings in China, whose origin is to be found among other things in household uncertainty about the provision of public services like health care, pensions and education. Focusing on health services, because of their priority in the concerns of the Chinese people, we describe the recent trends in the provision of health care. We then argue that social spending by the government may have important intergenerational content, in that it allows higher private spending, lower inequality, higher levels of human capital and the like. All these factors are related to the potential growth rate of the economy. We conclude that a more important role of the government in the sector of public services, and in particular of health care, may help reduce the possibility of future bottlenecks, and hence help keeping the Chinese economy on a sustainable growth path. We conclude the paper by an assessment of the current debate on how to reform the system, and we advocate universal publicly funded basic health coverage.

**Keywords:** Social Spending, Health Care, Sustainable Growth, Chinese Economy, Savings Glut

JEL Codes: H51 I18

## 1. Introduction

The Chinese economy is becoming increasingly unequal. The outstanding long term growth performance of the country has been obtained partly thanks to the very low priority given to all the other policy objectives, including spatial and sector equality. But the rise of inequalities has been so large in size that in the past few years the phenomenon triggered a reaction by the Chinese authorities, in fear of social unrest that could undermine the economic performance of the country and its political stability.

This paper argues that growing inequality should be combated also because it may have long lasting effects on human capital, macroeconomic imbalances, and the overall efficiency of the economy. We suggest that current public spending, in particular social spending (health, education etc.), has a strong intergenerational content as it affects the distribution of resources among generations, and hence the future level of “well being”, whatever the definition of the term.

In particular, this paper focuses on health policy. While other categories of social spending in China require attention because of the distortions and inequalities linked to their provision (notably education and social security), none of them seems to generate the same level of public anxiety than health expenditures. In November 2007, the Chinese National Bureau of Statistics organized the *Seventh Sampling Survey on Public Sense of Security*, interviewing more than

100,000 households<sup>5</sup>. According to the survey, medical care was the top concern of the household (15.3% of the respondents), followed by a vaguer “social issues” with 14.3%. “Social Security”, related to the affordability of health and retirement came third with 13.2%. The growing public concern about health care access has prompted in the past few years a response from the government, which is rolling back on the deregulation implemented before. A new plan, “Healthy China 2020”, has been unveiled in December 2007 by the Chinese government<sup>6</sup>. This plan spells out an intermediate objective, a basic Medicare system to be set up by 2010, with the goal of universal health care and equal access to public services for its 1.3 billion people by 2020.

The structure of the paper is as follows: in Section 2 we discuss the role of China in today’s global macro imbalances: we tend to agree with the thesis that the source of excess savings – a too high level of households’ saving rate – can mostly be traced to the uncertainty about future provision of social goods which in turn is due to the gradual disruption of the community based social protection system. Section 3 discusses the evolution of the health care system in the post reform period. In section 4 we develop the reasons why current social spending may have strong intergenerational content. Finally, section 5 gives a snapshot of today’s attempts to correct the distortions in the provision of health care, which are based on voluntary adhesion to an insurance scheme. After showing why this attempt would not have the positive effects that the authorities hope for, we conclude by giving some indications about what we believe to be the necessary policy and institutional changes for the future, and by trying to assess whether the “Healthy China by 2020” plan responds to these requirements.

## **2. The sources of Excess Savings**

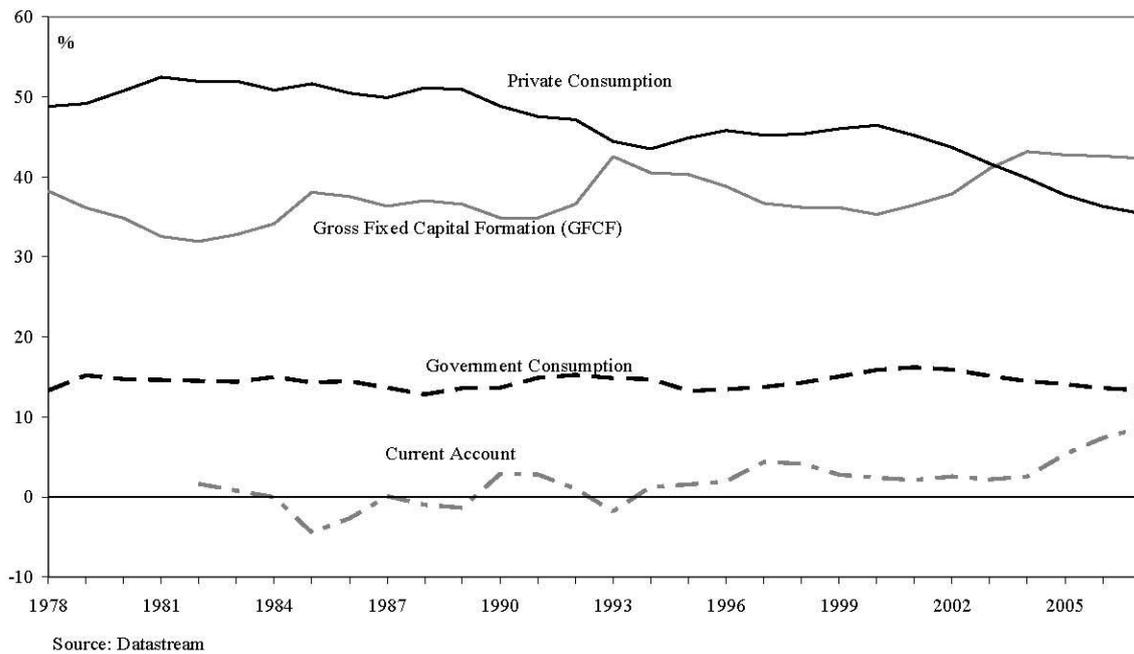
In the debate on global imbalances that rages in the academic literature and in the specialized press, the excess expenditure of US consumers and firms is usually contrasted with the “saving glut” (Bernanke, (2005)) of other areas of the world, notably East Asian countries. Because of its size, China is usually pointed out as the main example of this world excess saving that helps sustain the current global imbalances. In fact, as figure 1 shows, both the remarkable levels of investment that China experienced since the early 1980s and the recent boom of the current account surplus happened thanks to an important reduction in consumption, from a level above 50% of GDP in the early 1980s to the abnormally low level of 35% in 2007.

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<sup>5</sup> The communiqué summarizing the results of the survey can be found on the NBS website at [http://www.stats.gov.cn/english/newsandcomingevents/t20080109\\_402457006.htm](http://www.stats.gov.cn/english/newsandcomingevents/t20080109_402457006.htm)

<sup>6</sup> [http://english.gov.cn/2007-12/26/content\\_844593.htm](http://english.gov.cn/2007-12/26/content_844593.htm)

Fig. 1 - Macro Aggregates as % of GDP



This aggregate figure hides wide regional and sector diversity, along the well known differences in growth between coastal and western provinces, and between rural and urban areas (for a survey see, Lim, Spence and Hausmann, (2006)). If we look at the savings rates (figure 2), we can observe two remarkable trends: The first is a generalized increase (that obviously mirrors the decrease in consumption) of savings, which today account for almost 25% of household incomes. The second is, within this general trend, a more than proportional increase in savings for rural households, This is somewhat counterintuitive, as being on average poorer, rural households should on the contrary save less. The saving rate, that in the early 1990s was lower for poorer rural households, has since the mid 1990s been consistently larger, and has converged only recently (Kraay, (2000; Kuijs, (2005)). Over the same period, their relative income decreased.<sup>7</sup>

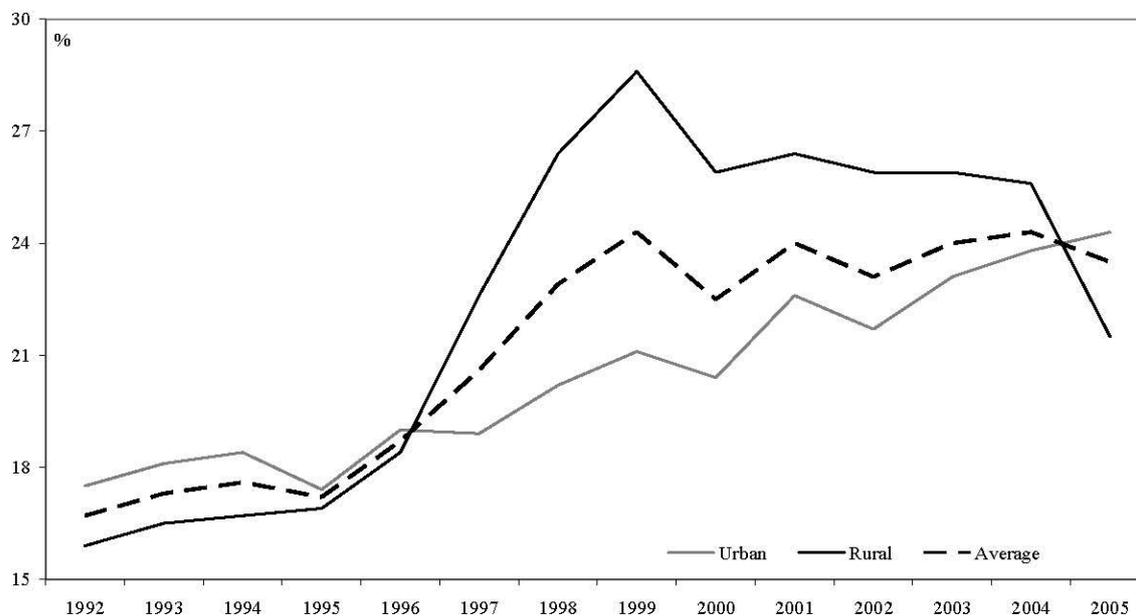
While there is some debate as of the causes of this excessive savings (see e.g. He and Cao, (2007), who argue that demand deficiencies are to be attributed to a decrease of disposable income and not to the increase in savings rate), the changing behaviour of rural and urban households seems to be undoubtedly related to increased income uncertainty and to lower social protection. A high saving rate is then a rational reaction against the increase of both risks. For example, Lim, Spence and Hausmann, (2006) point out how household surveys reveal that rural household savings are largely precautionary saving, for retirement and medical expenses and for life-cycle events such as children's education, weddings and funerals (see also Kraay, (2000) and Kuijs, (2005), already cited).<sup>8</sup> The precautionary nature of savings would in fact also help to explain the

<sup>7</sup> The ratio between the disposable income of urban and rural households in 1990 was 2.2; by 2005 it had climbed to 3.22. (National Bureau of Statistics of China, (2008)). For a recent detailed analysis of the increasing income inequality, both across regions and categories, see Wu and Perloff, (2005)

<sup>8</sup> Modigliani and Cao, (2004) argue that following the implementation of the one child policy, Chinese households substituted investment in human capital with savings; while somehow exotic, this explanation also points to the essentially precautionary characteristics of

counterintuitive larger savings of rural households, that while poorer, also enjoy lower social protection than rural households. Besides the growing uncertainty, Chamon and Prasad, (2007) point to the insufficient development of financial markets, as one of the main causes of the lack of consumption smoothing by Chinese households.

Fig. 2 - Household Savings Rates



Source: Chamon and Prasad (2007)

In the same vein, the literature on savings, risk and insurance (for a survey, see Besley, (1995)) documents that developing rural economies experience widespread income risk, and that households adapt their behaviour in order to be protected from this risk, either in the form of self insurance, or of more or less informal risk sharing contracts with other households. Changing patterns in the social contract, notably in the items that play the role of insuring households against risk, quite naturally affect the expected payoffs of households, and hence the intertemporal consumption-saving choices. Pradhan and Wagstaff, (2005) recently provided an example of this behaviour, showing that in Vietnam overall consumption was positively affected by the implementation of a public health insurance scheme. This finding is hardly astonishing, since we know at least from Lucas' Critique (Lucas, (1976)), that a change in policy affects the parameters of the behavioural functions of a model. In a more pedestrian way, a transfer from private to public insurances is equivalent to "forced saving", which implies a reduction in (residual) private hoarding.

The intertemporal decisions of households affect among other things the distribution of resources between generations. As we will further develop later, it follows that current spending, notably in social items (education, health, social security), has an important intergenerational

content, through its effect on private spending. This content, often neglected, appears to be particularly important in fast growing economies undergoing deep structural change like China.

### **3. The Evolution of Social Spending During the Reform Period**

The health coverage system put in place in the early 1950s by Maoist China was based on the employment units of the workers, mainly the State Owned Enterprises (SOEs) in cities, and the communes in rural areas. Prevention was given a prominent role, and the system was designed to fit within the dual structure of the economy (Guan, (2000)). In urban areas, the two main pillars of health were the Government Insurance Scheme (GIS), which covered current and retired government employees plus selected categories like students, and the Labour Insurance Scheme (LIS), that applied to SOEs. Both schemes were financed by the government, and offered total coverage to the employees (and generous, although not total coverage to their dependents). In rural areas, preventive health action was organized and financed through the Cooperative Medical System (CMS), ran by the collective organizations (communes) and subsidized by the government. The capillary provision of basic health care services, from prevention to cure, was provided through a mass of practitioners with basic training, the so called barefoot doctors. Finally, hospitals were owned and funded by the government. The three-tiered<sup>9</sup> organization for the delivery of health care was designed to promote the efficient allocation of health care resources between primary and tertiary care facilities. This system quickly extended health care provision, and provided an efficient framework for patient referral and treatment.

To summarize, through subsidies, direct coverage, and low prices, the system provided near to universal health care. As a consequence of the focus on prevention, and on basic health services, the improvement in health conditions of the Chinese population was spectacular. The two most cited figures are life expectancy, that almost doubled (rising from 35 to 69 years) between 1950 and 1990, and infant mortality, that fell from 200 to 34 per 1000 live births over the same period (Hesketh and Wei, 1997; Blumenthal and Hsiao, 2005). While limited by the availability of data, the comparison with countries at similar stages of development is striking<sup>10</sup>.

The radical transformation of China's society that began in the late 1970s consisted in a *de facto* privatization of the economy and a far-reaching decentralization process. The main, if not the only focus of the three decades since 1978 has been economic growth. The issue of a fair distribution of resources has been virtually absent, at least until very recently. As soon as the reform period begun, reorganizing the provision of public services' quickly became a priority

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<sup>9</sup> In urban areas they were the street (sub-district), district and municipal level hospitals, and in rural areas they consisted of village stations, township health centres, and county hospitals.

<sup>10</sup> Life expectancy at birth in 1960 was about 40 years, a level similar to the average of LDCs (and slightly lower than the level of Low and Middle (LM) income countries according to the World Bank classification. In 1980, it had risen to 68 years in China and only to 60 and 48 respectively in LM income and LDCs countries respectively (World Bank, *World Development Indicators*)

because they were seen as a source of inefficiency for the economy (Guan, (2000)). The dismantlement of the pre-reform welfare system was extremely fast, and in some cases (like health care) there was no clear substitute. The main innovation introduced in the early 1980s was a strong reduction of central government involvement in the provision of public services, with the idea of freeing resources to be allocated at more productive uses. For what concerns health care, expenditure by the government was dramatically reduced, going from around a third of total expenditure in 1978, to the current (2004) level of 17%. In the same time span private expenditure went from 20% to 54%, and SOEs and rural communities dropped from almost 50% to less than 30%<sup>11</sup>. Local governments, were forced to finance their share of spending through the receipts of local taxation. To compensate for the reduction of transfers from the central government, the local communities were allowed to raise funds from some services, like sanitary controls and high-end medical services. As was easily predictable, local authorities focused on the provision of these profitable services, neglecting prevention and unprofitable basic health care. The main effect of this process of decentralization was a dramatic increase in regional inequality both in income and in public goods provision (Kanbur and Zhang, (2005); Chou, (2007); Qiao, Martinez-Vazquez and Xu, (2008)). The richer regions (mainly the metropolitan areas and the coastal regions) were able to provide a decent level of public services, while the others experienced serious deficiencies in the provision of even the most basic public goods. Zhang and Kanbur, (2005) describe at length the huge differences in education and public health levels that stemmed from this inequality, and Chou, (2007) isolates them in a panel econometric model with provincial data. Besides the decentralization of public services' provision and financing, two other specific decisions had an impact on China's health care system. First, the government put in place a partial system of price regulation with the idea of continuing to provide access to basic health care. The price of routine visits and standard diagnostic tests was strictly regulated, while new drugs and technologies were left unregulated. Furthermore, a system of wage incentives was put in place, linking the remuneration of physicians to the amount of revenues generated for the hospitals. The result was an exponential increase of expensive drugs sales, and high tech services, and once again the neglect of the price regulated basic health care. Second, the dismantlement of the rural communes and the shift from what Guan, (2000) calls public ownership to a multiple-ownership economy, also entailed the disruption of the system of safety nets that had assured basic health services for the mass of inhabitants of rural China. Without the Cooperative Medical System, hundreds of millions of Chinese peasants became uninsured, because of their lack of resources. As recently as 2003, surveys highlighted that 36% and 39% of households in urban and rural households respectively gave up medical treatment because they were unable to afford it. (Markus, 2004; Yu,

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<sup>11</sup> *China Health Care Statistical Yearbook, 2007*. We thank Win Lin Chou for providing the data.

2006; Lim, 2006). Unemployed barefoot doctors were forced into the private sector, where in absence of regulation they found it more profitable to sell drugs or to provide high end services (for which they were untrained) than to provide basic health care and prevention. As a consequence, the price regulation and the dismantlement of the communes had the unintended effect of skyrocketing prices and out-of-pocket expenditures, together with a substantial deterioration of the quality of the service.

National spending on health care (including public expenditure) almost doubled from 3.04% to 5.55% of GDP between 1978 and 2004. Nevertheless, today less than one third of the population has medical insurance, 54% of health care expenditures are private, and a vast majority (85.3%) of them are out-of-pocket.<sup>12</sup> Furthermore, half of this expenditure is devoted to the purchase of drugs, compared with a worldwide average of 15 percent (Sun *et al.*, (2008)). Today the number of health care facilities is substantially larger than in the 1970s, but they are dramatically less efficient and less accessible than they used to be, because of prohibitive costs and lack of coverage. The effect of “reforms” on the cost and the quality of China’s health care is quite clear: “To many in the United States, this portrait of pockets of medical affluence in the midst of declining financial access and exploding costs and inefficiency will sound depressingly familiar” (Blumenthal and Hsiao, (2005), p. 1168).

The consequence on public health indicators is also striking. All the spectacular improvements experienced until the late 1970s were stopped and sometimes even reversed by the reform. Liu, Hsiao and Eggleston, (1999) document how some indicators (like infant mortality) improved only slightly since 1980, and argue this slight increase hides wide inequalities between rural and urban areas, with mortality rates actually increasing in many poor rural provinces.. It does not come as a surprise then if at the turn of the century China’s overall health system performance ranked only 144<sup>th</sup> in a pool of 191 countries, well behind the other Asian emerging giant, India, that has a rank of 112<sup>th</sup> (WHO, (2000), Ma and Sood, (2008)).

To sum up, the spectacular growth performance triggered by the reform period was not matched by a similar improvement in health care provision. The fading insurance role of the government contributed to the widening of inequality which, in turn, made the absence of social spending and collective insurance more problematic.

This vicious circle until now has not affected the overall efficiency and the growth performance of the Chinese economy. In the next section we argue that this may not be the case forever, in the light of a number of theoretical and empirical results which show how increasing inequality may in the long run harm growth.

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<sup>12</sup> Source: *China Health Care Statistical Yearbook*, 2007 and the website of the WHO for out-of-pocket expenditure

#### 4. The intergenerational Content of Current Spending

The analysis of business cycles has for a long period been dominated by the belief that nothing substantial would be lost if growth and fluctuations were studied separately. According to this “common wisdom”, growth would be linked to supply factors (technology, endowments and other “fundamentals”), while business cycles depend on demand factors. True, no economist would have admitted that the two phenomena were completely independent, and many have expressed the idea that the building of new capacity today (investment) have long lasting effect on either potential output or growth (cf. e.g. Hahn and Solow, (1995)). More generally, economists have investigated the mechanisms through which a number of short term phenomena (like for example unemployment, “false prices” in Hicks’ sense, and so on) may have long lasting effect. But the two frameworks were not really integrated, until the emergence of Real Business Cycles (RBC) theory (initiated by Kydland and Prescott, (1982)). What the RBC theory accomplishes is to present a single model able to account for growth and fluctuations. But this effort of construction of a unifying model was realized at the expense of demand factors that are absent from the RBC models, which also attribute short run fluctuations to supply factors. Hence whether the dichotomy between growth and fluctuations holds or not, economic policy, and in particular social spending, has at best only short run effects through changes in aggregate demand. This view being obviously debatable, it has been questioned by theoretical and empirical work alike. For example, in a widely known paper, Ramey and Ramey, (1995) robustly show using a large sample of countries, that higher aggregate income volatility is associated with lower long term growth.

Fatas and Mihov, (2001) further document a strong negative correlation between government size and output volatility across OECD countries and, even more markedly, across US states. This empirical regularity is shown to correspond to a simple new Keynesian model in which consumers are not perfectly rational (Andrés, Doménech and Fatas, (2008)). But it may have other interpretations as well. For example, if we assume the level of corruption not to be overwhelming, a higher level of public spending means the provision of more public goods, including social goods, and stronger automatic stabilizers. For both reasons – better collective risk insurances, and “built in” stabilization – the volatility of output will be lower. <sup>13</sup>

The most straightforward channel through which public spending reduces income variability is the smoothing of income volatility (for a survey, see Creel and Saraceno, (2009)). It has to be emphasized that income volatility in developing countries, where almost by definition the system of social protection is less developed, may have very disruptive effects on social and productive structures. As Amartya Sen has for long documented (Sen, (2001)), in these countries the stability

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<sup>13</sup> On this kind of mechanism and other fundamental issues regarding stability, cf. Stiglitz *et al.*, (2006)

of growth matters much more than the level of growth, as a recession may have irreversible consequences on the destiny of the more vulnerable fraction of the population.

In particular, social spending strengthens the correlation of current spending and current income, and the reduction of precautionary savings.<sup>14</sup> On the other hand, one should also consider the opposite effect, namely that excessive income security distorts the incentives and results in a reduction of labour supply. This argument has been used extensively in the European debate on fiscal policy. In addition to not being extremely robust,<sup>15</sup> the argument can be raised only for developed countries, and has limited relevance for the purpose of this paper. For developing countries, in effect, it exists a vast empirical literature showing that larger social spending increases the level of private consumption and reduces its variability. A number of recent empirical results are an indirect proof of the existence of resources' constraints on the poorest households, that can be lifted by social spending thus leading to a more efficient allocation of resources. To quote only a few recent contributions, Dehejia and Gatti, (2005) show that schooling duration increases with reductions in parent's income variability. Similarly, Mangyo, (2008) shows that in poor households the food intake of children is directly affected by income increases. Increased provision of health care may also bring about a general improvement of the conditions for the creation of wealth. Liu *et al.*, (2008) show a direct impact of household health on income and productivity. In a country like China, where income is growing at unprecedented pace, resource constraints play a relatively limited role for an increasing number of households, but a very important one for those who are not benefiting from growth, a huge number indeed. Its effect could become even more important when in the future the average growth rate will fatally decrease.

Besides its role as an "insurance" against income and consumption fluctuations, especially for poorer households, social spending has a more direct effect. Increasing the collective supply of public goods would free part of the income that is now saved for precaution, and make it available for investment in both physical and human capital. In other words, social spending could "crowd in" private expenditure and raise the economy's current and future growth rate alike while decreasing its volatility.

Other mechanisms may also play a role. Higher civil servants' wages could make public service more attractive and reduce the extent of corruption.<sup>16</sup> This would increase the quality of public services that are complementary to private spending in sustaining present and above all future growth. The same holds for expenditure geared to strengthen the legal system (faster and

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<sup>14</sup> See e.g. Creel and Saraceno, (2009)

<sup>15</sup> The counterexample of Scandinavian countries shows that the incentive argument has limited validity.

<sup>16</sup> See for example Chand and Moene, (1997). For a different point of view, see Sosa, (2004)

more equitable trials, larger resources devoted to investigation, legal equipment, etc.), and to set up an effective means to protect property rights.

Furthermore, social mobility (“giving to my children better opportunities than I had”) is one of the engines of growth and prosperity. But social mobility is all the more likely if somehow “counters are reset”, at least partially, at each generation. One of the roles of social spending is a transfer of resources that helps reducing inequalities of initial conditions for the new generations.

When thinking about some of today’s challenges – environment and the use of natural resources, population aging, etc. – we frequently reason as if the welfare levels of future and present generations were substitutes. But if we consider the infinite chain of generations and extrapolate for future ones the relationship existing between two successive generations, say “parents” and “children”, we may be led, concerning health, education, income stability and more generally the social protection system, to a quite different perspective; in fact, complementarity rather than substitutability, seems to us much more appealing in explaining decision mechanisms at the microeconomic level. The hypothesis amounts to saying that if the parents care about their children and the latter about their own children etc., there should be, at least for the kind of expenditures we are discussing here, strong complementarity between the welfare of different generations. Current public spending on all levels of education have obviously an intergenerational content. What is almost universally verified is that the consent to pay by the parents for the education of their children is very high. The health of the parents is almost a precondition for that of their children: willingly or not, current spending on health has thus an intergenerational content. The same can be said of a number of public spending items, including those which are aimed at fighting unemployment. To belabour the obvious, the conditions of education are certainly disturbed by the unemployment of the parents. The improvement of housing conditions through public schemes will likely benefit the chain of generations. <sup>17</sup>

In fact, the argument should not revolve on whether public spending affects future generations or not. We argue that all current spending may have long lasting effects, as long as it is not wasteful. Abandoning the artificial distinction between a demand-driven short run and a supply-driven long run would allow to shift the focus of the on the relative efficacy of different types of expenditure in ensuring a sustainable increase in the long term performance of the economy.

Besides, there is a domain where the welfare levels of present and future generations may be considered to exhibit an important degree of complementarity, that of social justice. If social justice is not a sufficient condition of complementarity it is at least a necessary condition. There

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<sup>17</sup> Many studies have shown that housing conditions play a very important role for the success of children at school, which explains that part of the uneven results of schooling is due to inequalities in between present generations. For a survey, see Goux and Maurin, (2005)

are two reasons why it is so; the first is more of the order of a conjecture:, in a society where would prevail a pervading feeling of injustice, it seems unlikely that there would be space for intergenerational altruism. It would be hard to assume that *intergenerational* equity would preoccupy the members of the society in a context where *intragenerational* equity is not assured. The second reason is a constraint related to the state of inequalities. When these are large and growing, an important fraction of society does not have the means to project itself towards the future, even if it wished to do so. The difficulties of day to day conditions make it prisoner of the present. It is why a well functioning social protection system, by giving people a feeling of fairness and allowing them to contemplate the future with less anxiety would benefit the chain of generations.

This section outlined a number of mechanisms through which social spending may not only sustain current activity, and the standard of living of current generations, but also, and more importantly, affect the potential for future growth and benefit future generations. In the light of this discussion, the next section will describe the recent changes in health policy in China, and conclude on some characteristics that the reformed system should have in light of our analysis.

## **5. The Role of Social Spending for Sustainable Growth**

The latest WHO health report aptly summarizes our argument so far: “Whether by choice or because of external pressure, the withdrawal of the state that occurred in the 1980s and 1990s in China and the former Soviet Union, as well as in a considerable number of low-income countries, has had visible and worrisome consequences for health and for the functioning of health services. Significantly, it has created social tensions that affected the legitimacy of political leadership” (WHO, (2008), p.17).

The Chinese leadership proved to be aware of these risks. The beginning of the years 2000s marked an important change in priorities for the Chinese government. The deepening spatial and sector inequality, both in income and in the provision of public goods, was eventually perceived as a potential cause of excessive imbalances, with possible effects on social stability and overall growth. In October 2002, the first China National Rural Health Conference was held in Beijing, and a set of reforms in the provision of health care was announced. (Liu and Rao, (2006), Wagstaff *et al.*, (2007)). The scheme is now in a pilot phase..

The New Cooperative Medical System (NCMS) is based on voluntary adhesion. The unit of the scheme is the county instead than the village, increasing the scale of each unit for better risk pooling and economies of scale in the provision of health care services. To enrol in the program households have to pay a flat 10 remimbi per person and per year contribution, that is matched by public subsidies amounting to up to 40 remimbi for the poorest households (the burden is shared

equally by the provincial and the central government). The level of discretion of each county is very high, from coverage to cost sharing, to fees, etc., in observance to the principle of decentralization in health policy introduced with the reform.

A voluntary insurance scheme is confronted to all the typical asymmetric information problems associated with the provision of public goods. These concerns are reinforced by the wide inequalities in income level and in needs in the recipient population, and by the diversity in economic structures among provinces. Even if it is too soon to assess the effectiveness of the new system, an attempt has been made by Wagstaff and Yu, (2007), and Wagstaff *et al.*, (2007). Their first remark is that the budget of the NCMS is too small to significantly affect households' out-of-pocket spending. The per capita contribution, including the subsidies, is around 20% of total per capita rural health spending; furthermore, the large deductibles, and high coinsurance rates make copayments large. The excessive financial burden that remains on the insured could induce the poor households to avoid enrolling in the scheme, thus letting out of medical coverage the group that is supposed to be the main beneficiary of the program (a finding that is hardly surprising, see also Jalan and Ravallion, (1999) and Wang and Rosenman, (2007)). By looking at the urban program, Lindelow and Wagstaff, (2005) further argue that, because of the distortions in the pricing mechanism and in the widespread practice of fee-per-service reimbursement, higher end care is more profitable and hence over-provided with respect to basic health services (see also Eggleston *et al.*, (2006)). As a consequence, actual spending by households may even end up increasing.

The preliminary assessment of Wagstaff *et al.*, (2007) at any rate gives mixed results. On the positive side, the cost remained unchanged in spite of increased utilization of expensive equipment. On the other hand, enrolment by the poor was as expected low, as well as their access to health care. Furthermore, the authors report no evidence of decreases in out-of-pocket expenditure.

As the discussion above suggests, these results are hardly surprising. All the standard asymmetric information problems experienced by insurance schemes for the provisions of public goods are likely to be exacerbated in presence of strong inequalities and high income uncertainty.

This overview of the reform in the health care sector, and of the recent attempts to roll back on some of its more harmful effects, seems to suggest a number of policy conclusions:

1. First, and in general, attention to equality should be paid, in order to obtain income stabilization and provide private households with a less uncertain environment (see also Kuijs and Wang, (2006)). In particular, for the Chinese case, the region/sector inequality seems to be one of the most serious obstacles on the way of continued strong growth.

2. An effective solution to the worsening conditions in health provision seems to be the move towards universal health coverage. Collective insurance seems to be the only way to reduce the huge differences in access to health care. This does not mean that the provision of health services should necessarily be public. In fact, there is no reason to reduce private involvement in this sector, rather the contrary (see Eggleston *et al.*, (2006) for *pros* and *cons* of the different frameworks). Nevertheless, for a socially sensible public good like health care, appropriate regulation is a priority.

3. The spatial inequality that inevitably accompanied the process of decentralization has been a major cause for increased inequality in income and in social conditions. (Qiao, Martinez-Vazquez and Xu, (2008)). This calls for a central management of the health system, and/or for a system of strong interprovincial transfers (Chou, (2007) documents a strong correlation between provincial government deficit and health care provision). In both cases problems of free riding and moral hazard should be appropriately taken into account.

To summarize, it is our belief that a reformed health care sector should be centred around universal coverage to be managed centrally, or at the provincial level. In this latter case, nevertheless, an interprovincial transfer system would be necessary to guarantee sufficient financing of the insurance scheme regardless of the income level of the provinces. Furthermore, very detailed regulation should be designed prior to further involvement of the private sector in the provision of health care services. A recent (October 2008) study appeared on *The Lancet*<sup>18</sup> reaches similar conclusions, noticing on one side that public spending has begun increasing again after reaching the low levels of 2000-2001, but on the other that the main challenge is today to reduce the disproportionate burden on individuals represented by out-of-pocket expenditure.

The plea for universal publicly funded coverage is of course not new, and such an arrangement has been experimented in other countries with mixed results. In particular, the risks associated with public intervention (inefficiency, excessive costs, rent-seeking, etc.) may apply. Nevertheless, past experience also shows that, in particular in the field of social protection, the private sector's performance is often at least as poor.

One of our arguments in this paper has been that the main role of social protection is not charity, but insurance. The assessment of different systems has hence to go through an evaluation of costs and benefits of private and public insurance schemes. As pointed out by Paul Krugman with reference to the debate in the United States<sup>19</sup>, a major advantage of universal, government-provided health insurance is lower administrative costs. This is not surprising, as, systems based on private insurance have to bear the costs of screening out high-risk clients, and of ensuring adequate profits for insurance companies. And in fact, even a casual look at the data

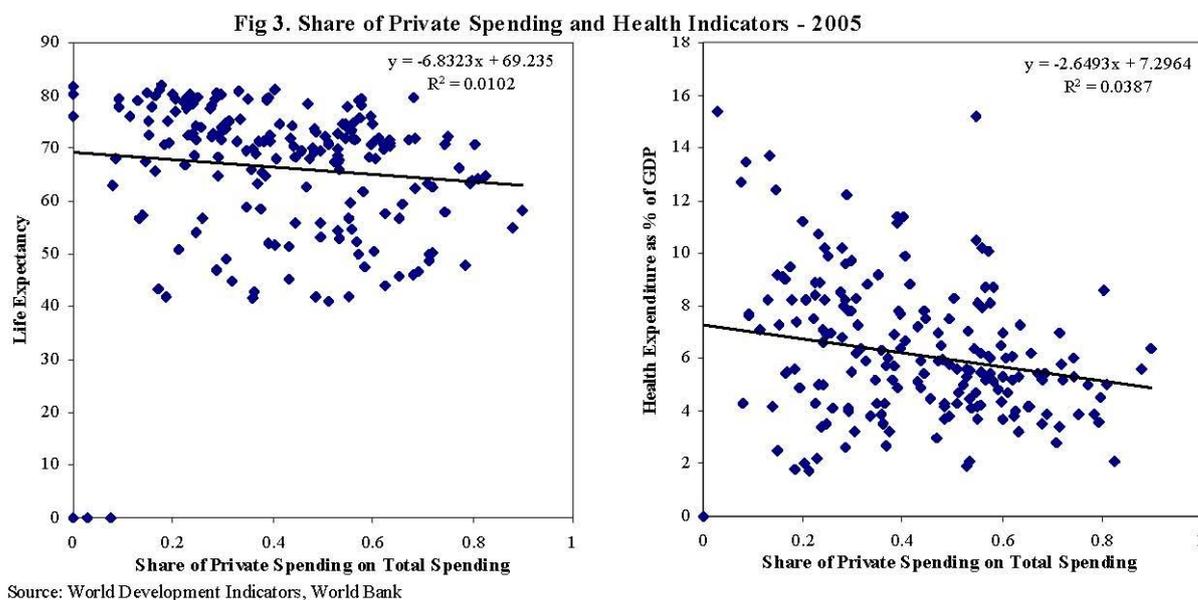
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<sup>18</sup> The Lancet, (2008)

<sup>19</sup> "One Nation, Uninsured" By Paul Krugman, *The New York Times*, June 13, 2005

confirms this view. Figure 3 shows a scatter plot of the share of private expenditure on the total, versus life expectancy at birth (left panel) and health expenditure as a percentage of GDP (right panel). In both cases there is not discernable evidence that increasing the share of private expenditure has effects. Both total spending (that we take as a proxy of cost effectiveness) and life expectancy (that we take as a proxy of performance) are unrelated to the composition of health expenditure.

To clarify our argument, we can take two particular points, in the figure, France and the United States. Table 1 summarizes the health indicators for these two countries. Both in per capita terms (6349 US\$ vs. 3818US\$), and as a percentage of GDP (15.2% vs. 11.2%), the United States spent more than France in health care. In the US 45% of this expenditure was private, against only 20% in France.



**Table 1: Selected Health Indicators - 2005**

	France	United States
Health expenditure per capita (current US\$)	3818.85	6349.53
Health expenditure, total (% of GDP)	11.2	15.2
Health expenditure, public (% of total health expenditure)	79.9	45.1
Out-of-pocket health expenditure (% of private expenditure on health)	33.2	23.9
Maternal mortality ratio (modeled estimate, per 100,000 live births)	8	11
Incidence of tuberculosis (per 100,000 people)	14.3	4.5
Mortality rate, under-5 (per 1,000)	4.51	7.73
WHO Ranking	1	37
Source: World Development Indicators, World Bank		

Nevertheless, both health performance indicators commonly taken (child and maternal mortality) show that conditions in France are better (the incidence of tuberculosis, on the contrary, sees the US fare better). In the WHO ranking already mentioned, that while controversial in many respects, takes into account a whole range of measures, the United States rank well beyond France. The comparison of any two countries is of course anecdotic, but it serves our purposes of giving a counterexample.

To conclude, a casual look at the data suffices to realize that there is no clear superiority of a privately based social protection system. The standard textbook efficiency argument runs into the problems of huge administrative costs typical of insurance mechanisms. There is no reason therefore, to believe that a carefully designed public system aimed at universal coverage would be more expensive or less effective than a private one.

The Chinese government has been working for almost two years at a new plan, far more ambitious than the NCMS. As of today (March 2009), the details are not fully known yet, the plan being currently fine-tuned in consultation with the various government agencies involved. But the guidelines were unveiled in December 2007 by the Health Minister Chen Zhu: by 2010 (a date that will probably be pushed forward, given the delays in the finalization of the detailed plan), China will set up a basic medical and health care system to balance the disparity between medical access and quality of services in urban and rural areas, as well as between different regions within the country and for people with different income levels. By 2020, according to the plan, China will have completed the establishment of a public medical and health care services network, a universal coverage medical insurance system, a drug supply system and a medical institution

management system. Most of the concerns outlined above would hence be addressed by the plan, which would go in the direction that the present paper envisions.

In particular, two aspects of the plan emerge as new with respect to the current situation.

The first and more important is the commitment to an increased involvement of the central and local government in the health sector; this would take the form of an increase of public spending as a percentage of total health expenditure. Such an effort would initially be addressed to increasing affordability of health care for the poorest households, and in a second moment to improve the quality of service. Increased involvement of the government would also take the form of a more balanced allocation of resources between urban and rural areas, the latter being today strongly underfunded. According to the plan, the government and households should split the cost of basic medical care, but the burden of specialized medical care would still be borne by patients directly or through private insurance.

The second important innovation of the new plan concerns the management of health care facilities, in an effort to change the incentive structure from profits to public health performance. This is the part of the plan that the government has more difficulties in finalizing. The main lines of action are clearer definition of the responsibilities and rewards of public managers, and a disconnection of hospital funding from revenues; the latter should help curb drugs' over-prescription, and excessive prices.

Increased dialogue and engagement with the private sector is announced, but no details are given on whether this will lead to the much needed substantial redesign of the regulatory framework.

A careful assessment of the new plan will have to wait for the details to be made public. From the vague guidelines described above it seems that the burden that the redesigned system will impose to households is still important; nevertheless, the proposed reform plan certainly represents an important step ahead in the direction of providing access to basic health care to all citizens, regardless of their means or of their region of residence. If the implementation of the plan will proceed as announced, this will contribute to smoothing the current imbalances and to provide sustainable growth in the years to come.

## References

- [1] Andrés, J., R. Doménech and A. Fatas (2008). "The Stabilizing Role of Government Size." *Journal of Economic Dynamics and Control* 32(2): 571-93.
- [2] Bernanke, B. S. (2005). The Global Saving Glut and the U.S. Current Account Deficit. Remarks at the Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia
- [3] Besley, T. (1995). "Savings, Credit and Insurance". in J. Behrman and T. N. Srinivasan, Eds. *Handbook of Development Economics. Volume 3a*. Amsterdam; New York and Oxford; Elsevier Science, North Holland: 2123-207.
- [4] Blumenthal, D. and W. Hsiao (2005). "Privatization and Its Discontents -- the Evolving Chinese Health Care System." *New England Journal of Medicine* 353(11): 1165-70.
- [5] Chamon, M. and E. S. Prasad (2007). "Why Are Saving Rates of Urban Households in China Rising?" *IZA Discussion Paper*.
- [6] Chand, S. K. and K. O. Moene (1997). "Controlling Fiscal Corruption." *IMF working paper* #97.
- [7] Chou, W. L. (2007). "Explaining China's Regional Health Expenditures Using Lm-Type Unit Root Tests." *Journal of Health Economics* 26(4): 682-98.
- [8] Creel, J. and F. Saraceno (2009). "Automatic Stabilisation, Discretionary Policy and the Stability Pact". in J. Creel and M. C. Sawyer, Eds. *Current Thinking on Fiscal Policy*. New York, Palgrave Macmillan: 112-44.
- [9] Dehejia, R. H. and R. Gatti (2005). "Child Labor: The Role of Financial Development and Income Variability across Countries." *Economic Development and Cultural Change* 53(4): 913-32.
- [10] Eggleston, K., L. Ling, M. Qingyue, M. Lindelow and A. Wagstaff (2006). "Health Service Delivery in China: A Literature Review." *The World Bank, Policy Research Working Paper Series*.
- [11] Fatas, A. and I. Mihov (2001). "Government Size and Automatic Stabilizers: International and Intranational Evidence." *Journal of International Economics* 55(1): 3-28.
- [12] Goux, D. and E. Maurin (2005). "The Effect of Overcrowded Housing on Children's Performance at School." *Journal of Public Economics* 89(5-6): 797-819.
- [13] Guan, X. (2000). "China's Social Policy: Reform and Development in the Context of Marketization and Globalization." *Social Policy and Administration* 34(1): 115-30.
- [14] Hahn, F. and R. M. Solow (1995). *A Critical Essay on Modern Macroeconomic Theory*. Cambridge, Mass., MIT Press.
- [15] He, X. and Y. Cao (2007). "Understanding High Saving Rate in China." *China and World Economy* 15(1): 1-13.
- [16] Jalan, J. and M. Ravallion (1999). "Are the Poor Less Well Insured? Evidence on Vulnerability to Income Risk in Rural China." *Journal of Development Economics* 58(1): 61-81.
- [17] Kanbur, R. and X. Zhang (2005). "Fifty Years of Regional Inequality in China: A Journey through Central Planning, Reform, and Openness." *Review of Development Economics* 9(1): 87-106.

- [18] Kraay, A. (2000). "Household Saving in China." *World Bank Economic Review* 14(3): 545-70.
- [19] Kuijs, L. (2005). "Investment and Saving in China." *The World Bank, Policy Research Working Paper Series*.
- [20] Kuijs, L. and T. Wang (2006). "China's Pattern of Growth: Moving to Sustainability and Reducing Inequality." *China and World Economy* 14(1): 1-14.
- [21] Kydland, F. E. and E. C. Prescott (1982). "Time to Build and Aggregate Fluctuations." *Econometrica* 50(6): 1345-70.
- [22] Lim, E., M. Spence and R. Hausmann (2006). "China and the Global Economy: Medium-Term Issues and Options - a Synthesis Report." *CID Working Paper #126*.
- [23] Lindelow, M. and A. Wagstaff (2005). "Can Insurance Increase Financial Risk ? The Curious Case of Health Insurance in China." *The World Bank, Policy Research Working Paper Series*.
- [24] Liu, G. G., W. H. Dow, A. Z. Fu, J. Akin and P. Lance (2008). "Income Productivity in China: On the Role of Health." *Journal of Health Economics* 27(1): 27-44.
- [25] Liu, Y., W. C. Hsiao and K. Eggleston (1999). "Equity in Health and Health Care: The Chinese Experience." *Social Science & Medicine* 49(10): 1349-56.
- [26] Liu, Y. and K. Rao (2006). "Providing Health Insurance in Rural China: From Research to Policy." *Journal of Health Politics, Policy and Law* 31(1): 71-92.
- [27] Lucas, R. E., Jr. (1976). "Econometric Policy Evaluation: A Critique." *Carnegie-Rochester Conference Series on Public Policy* 1: 19-46.
- [28] Ma, S. and N. Sood (2008). "A Comparison of the Health Systems in China and India." *R. C. o. p. series.*: xiii, 44 p.
- [29] Mangyo, E. (2008). "Who Benefits More from Higher Household Consumption? The Intra-Household Allocation of Nutrients in China." *Journal of Development Economics* 86(2): 296-312.
- [30] Modigliani, F. and S. L. Cao (2004). "The Chinese Saving Puzzle and the Life-Cycle Hypothesis." *Journal of Economic Literature* 42(1): 145-70.
- [31] National Bureau of Statistics of China (2008). *China Statistical Yearbook*, China Statistics Press.
- [32] Pradhan, M. and A. Wagstaff (2005). "Insurance Health Impacts on Health and Non-Medical Consumption in a Developing Country." *The World Bank, Policy Research Working Paper Series*.
- [33] Qiao, B., J. Martinez-Vazquez and Y. Xu (2008). "The Tradeoff between Growth and Equity in Decentralization Policy: China's Experience." *Journal of Development Economics* 86(1): 112-28.
- [34] Ramey, G. and V. A. Ramey (1995). "Cross-Country Evidence on the Link between Volatility and Growth." *American Economic Review* 85(5): 1138-51.
- [35] Sen, A. K. (2001). *Development as Freedom*. Oxford ; New York, Oxford University Press.
- [36] Sosa, L. A. (2004). "Wages and Other Determinants of Corruption." *Review of Development Economics* 8 4: 597-605.

- [37] Stiglitz, J. E., J. A. Ocampo, S. Spiegel, R. French-Davis and D. Nayyar (2006). *Stability with Growth : Macroeconomics, Liberalization and Development*. Oxford, Oxford University Press.
- [38] Sun, Q., M. A. Santoro, Q. Meng, C. Liu and K. Eggleston (2008). "Pharmaceutical Policy in China." *Health Affairs* 27(4): 1042-50.
- [39] The Lancet (2008). "A Special Series on Health System Reform in China." *October 2008*.
- [40] Wagstaff, A., M. Lindelow, G. Jun, X. Ling and Q. Juncheng (2007). "Extending Health Insurance to the Rural Population : An Impact Evaluation of China ' S New Cooperative Medical Scheme." *The World Bank, Policy Research Working Paper Series*.
- [41] Wagstaff, A. and S. Yu (2007). "Do Health Sector Reforms Have Their Intended Impacts? The World Bank's Health Viii Project in Gansu Province, China." *Journal of Health Economics* 26(3): 505-35.
- [42] Wang, H. H. and R. Rosenman (2007). "Perceived Need and Actual Demand for Health Insurance among Rural Chinese Residents." *China Economic Review* 18(4): 373-88.
- [43] WHO (2000). "The World Health Report 2000 - Health Systems: Improving Performance." *World Health Organization*.
- [44] WHO (2008). "The World Health Report 2008 - Primary Health Care: Now More Than Ever." *World Health Organization*.
- [45] Wu, X. and J. M. Perloff (2005). "China's Income Distribution, 1985-2001." *Review of Economics and Statistics* 87(4): 763-75.
- [46] Zhang, X. and R. Kanbur (2005). "Spatial Inequality in Education and Health Care in China." *China Economic Review* 16(2): 189-204.

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