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To cite this version:
Guilhem Fabre. The Lion’s Share. What’s behind China’s economic slowdown. 2013. halshs-00874077

HAL Id: halshs-00874077
https://halshs.archives-ouvertes.fr/halshs-00874077
Submitted on 17 Oct 2013

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N°53 | octobre 2013

Following the global crisis, the stimulus package of 2009-2010, with its huge expansion of credit, marked the end of « Cheap China », with the underpricing of labor, capital, land, energy and currency, and disproportionally shifted growth in favor of the public sector and real estate, the lion’s share of the State-Party system. The present process of deleveraging must adress the unprecedented inequities which stem from distortions in the allocations of resources and the respective functions of the central and local governments.
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Octobre 2013

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The text

This text has been written within the frame of the BRICs seminar, FMSH/CRBC.

Acknowledgements

The author would like to thank his colleagues Pierre Salama (FMSH/BRICS seminar), Victor Rodwin (NYU) and Claire Bowen (University of Le Havre) for their useful comments and revision of this paper.

Citing this document

Abstract
Following the global crisis, the stimulus package of 2009-2010, with its huge expansion of credit, marked the end of « Cheap China », with the underpricing of labor, capital, land, energy and currency, and disproportionally shifted growth in favor of the public sector and real estate, the lion's share of the State-Party system. The present process of deleveraging must address the unprecedented inequities which stem from distortions in the allocations of resources and the respective functions of the central and local governments.

Keywords
China; economy; slowdown; leverage; inequalities

La part du lion : les dessous du ralentissement économique chinois

Résumé
Le plan de relance qui a suivi la crise globale, en 2009-2010, avec une expansion considérable du crédit, a marqué la fin de la « Chine bon marché », avec la sous-évaluation du travail, du capital, du terrain, de l'énergie, et de la monnaie, tout en déséquilibrant fortement la croissance au profit du secteur public et de l'immobilier, la part du lion de l'État-Parti. Le processus actuel de désendettement doit régler les problèmes d'inégalités majeures qui dérivent des distorsions dans l'allocation de ressources et des fonctions respectives du gouvernement central et des gouvernements locaux.

Mots-clefs
Chine; économie; ralentissement; endettement; inégalités

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China’s economic slowdown continues to provoke wide discussion in 2013, for the third consecutive year since its occurrence. This slowdown follows a huge expansion of credit during the stimulus package of 2009–2010, which led to the end of « cheap China » and disproportionately shifted growth in favour of State Owned Enterprises (SOEs) and real estate, the lion’s share of the state–party system. The present process of deleveraging must address the problem of income distribution for without some measures to deal with such unprecedented inequities, there can be no sustainable growth path.

The end of the commodity supercycle

As China accounts for 40 percent of emerging market GDP, its slowdown has already had large repercussions on commodity producers’ countries, especially South Africa, where exports to China represent close to 12 percent of GDP. Australia, where this ratio stands at 5 percent, or Brazil and Russia, where it is around 2 percent.

China accounts for 12 percent of global demand for commodities, 60 to 70 percent for iron ore and soybeans, and 40 percent for copper. As for crude oil, China imports 6 percent of global supply to ensure 60 percent of its consumption. It has represented more than 60 percent of projected oil demand from 2011 to 2013, and could bypass the U.S as the world’s largest net importer in October 2013, according to the U.S Energy Information Administration.

China’s economic slowdown has so far had only a small impact on its imports, which are partly driven by strategic stockpiling and speculative tendencies, but it is already affecting worldwide commodity prices. Australian Prime Minister Kevin Rudd said that 2013 marks the end of the China resources boom, as the prices for resources and commodities have fallen by almost 25 percent and may well fall further. At the St Petersburg International Economic Forum in June 2013, Russian President Vladimir Putin explained the abrupt fall in Russia’s growth rate by the fall of prices of its main exports.

The dramatic expansion of the Chinese economy after its membership in WTO in 2001, was threatened by the global crisis of 2008, which reduced its main export markets towards North America and Europe. It rebounded with the 4 trillion yuan (US $ 575 billion) stimulus package at the end of 2008, which boosted infrastructure construction and the import of natural resources and raw materials. The commodity « supercycle » where accelerating demand and rising commodity prices stimulated growth in at least three of the five BRICS countries that are commodity exporters (Brazil, Russia and South Africa), reached its peak in 2011, with copper prices six times higher than in 2003, before dropping 30 percent in 2013, along with iron ore.

The analysis of the determinants of China’s growth is thus essential to understand its cycles of expansion and slowdown, which have worldwide repercussions. The gigantic stimulus package of 2008, equivalent to 13 points of GDP, represented a forced transition from investment and export-led growth to a model focused mainly on investment, which seeks to rebalance growth in favour of consumption. Following the global crisis, the evolution of capital formation and investment is crucial to China’s growth and prospects. Official figures show that the contribution of exports to GDP growth was diminishing since the beginning of the global crisis, while fixed asset investment rose to extraordinary levels (48 percent of GDP) for four consecutive years (2009-2012), a trend that would have driven any other nations to overcapacities and crisis.

Although capital accumulation had contributed around half of China’s economic growth, since the reforms in 1979, outweighing the contribution of total factor productivity especially since 1993, such a high level of investment has a flip side in terms of low-consumption. The convergence of high savings and low consumption is a

4. Leslie Hook, Financial Times, 10/01/2013
long-term trend of the Chinese economy since the economic reforms and opening policy were relaunched in 1992. Households' savings have averaged 19 percent of GDP since then, with a strong increase to 22 percent at the onset of the global financial crisis. Corporate savings averaged 15 percent of GDP from 1992 to 2007, but similarly rose to 22 percent by the mid 2000s. The rest of the savings stem from government with a rate of around 5 percent of GDP since 1992, which more than doubled in the 2000s to 10.8 of GDP in 2007. All told, China's saving rate increased by 17 points, from 38 percent of GDP in the 1990s to around 52 percent of GDP by the late 2000s. As savings rose, households' consumption fell as a share of GDP from 50 percent in the early 1990's to 35 percent since 2007, while government consumption varied just between 13.5 and 15-16 percent of GDP during the same period. There are those, however, who contest the reality of this analysis⁷.

### The black hole of official statistics

In 2009, the National Bureau of Statistics released an article by one of its experts, criticising the quality of the consumption estimates. Subsequently, Wang Xiaolu and Wing Thye Woo suggested that China’s urban households' income might be underreported by 66 percent. Unidentified “gray income” totaled 6.2 trillion yuan, or 12 percent of GDP. Of the underreported income, 63 percent went to the wealthiest 10 percent households, which is really 65 times higher than that of the poorest 10 percent, and not 23 times indicated by official data. Households' income inequality is certainly much higher than suggested by the reported Gini coefficient (0.47). Secondly, expenditure on housing, if the housing is for own use is not entirely for investment, and rental equivalent costs should be treated as consumption expenditure⁸. Zhang Jun and Zhu Tian estimate that housing consumption standing at 6 percent of GDP is unrealistic in view of exorbitant property prices, and is more likely to represent around 10 percent of GDP. They also consider that a part of business costs or investment expenditures paid for by companies, correspond to private consumption. A large share of imported luxury cars and other goods fall in this category⁹.

The same is true for the management costs of central and local public administrative agencies, an important component of government consumption, which rose from less than 5 percent of budgeted expenditures in 1978 to 18.7 percent in 2006. The growth of these expenses have increased by over 21 percent for the whole period, twice that of the GDP¹⁰. Beginning in 2010, and thereafter, before the new direction of Xi Jinping/Li Keqiang decided to react by setting new standards for public management expenditures, 40 percent of the turnover of the Galeries Lafayette, Paris' biggest luxury department store, was made by Chinese clients travelling abroad…¹¹

The PPP and the bottom-up surveys change the general picture of consumption in favour of the top decile of wealthiest households but not necessarily the **downward trend of households’ consumption in GDP**, better reflected by the share of labor compensation and household income in national income, which declined from 66.8 percent in 1996 to 50.6 percent in 2007. This amount lost by wages went towards capital’s share and a depreciation of state assets, as shown by Simarro¹².

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11. Personal interview, Shanghai, november 2012.
Whatever the rate of household consumption in GDP (35 percent in the official figures or around 45 percent for the adjusted estimate), it remains practically identical, despite the gigantic stimulus package of 2008 which was supposed to rebalance growth in favor of consumption. To understand the reasons for these inefficiencies, we must first understand the growth dynamic before the global crisis of 2008.

**Pre-crisis growth or the height of «Cheap China»**

The most convincing explanation for China's dramatic growth and export performance from 2001 to 2008 has been developed by Huang Yiping of Beijing University. There is a strong asymmetry between trade liberalization for goods and services, where free markets determine the prices of more than 95 percent of products, and factor markets for labour, land, capital, energy and the environment, which remain under government control.

The underpricing of labor, which explains partly the performance of labor-intensive manufacturing and exports, is the result of the «household registration system» (hukou) which segments the rural and urban labour market and feeds the flows of migrants (mingong) uncovered by the social welfare system. «Were urban employers to make social welfare contributions for their migrant workers, their payrolls would rise by about 35-40 percent.» This impact is particularly significant on labor since in 2005, 46 percent of the Chinese workforce was employed in the informal sector, and half of these workers were excluded from the social protection system. According to a study by the Research Office of the China State Council, the migrants workers from the countryside worked an average of 11 hours a day, six or seven days a week, or nearly 50 percent more than formal employees, but received only 60 percent of the pay, without counting the difference in social protection. Philippe Huang underlined that if one adds to the migrants the urban workforce in small private enterprises and the self-employed, the total employed in the informal economy comes to more than 60 percent of the urban workforce.

The cost of capital has been fixed artificially low by the domination of four State Commercial Banks (ICBC, Bank of China, Construction Bank and Agricultural Bank), which allocate 60 percent of credit in China. Their managers are nominated by the State and they follow its priorities by lending to the State Owned Enterprises which get more than half of all bank loans and account for less than 30 percent of industrial output. The financial penalties induced by the spread between low deposit rates fixed by the People’s Bank of China (2 to 4 percent) which are negative in view of inflation, and lending rates (5.5 to 7.5 percent), has cost Chinese households about 255 billion yuan ($US 36 billion) or 4 percent of GDP in 2008.

Cheap credit given to SOEs has favoured a capital-intensive regime with a high investment rate in the priority sectors defined by the government, to the detriment of labour-intensive Small and Medium Enterprises, and the private sector. In Wenzhou region, where private credit was authorized on an experimental basis, the lending rates varied between 13 and 17 percent over the period, 2003-2010. The one-year interest rate to private credit agencies was around 20 percent.

Land is the main factor of production in the countryside and functions as a rural safety net for 250 million rural households. It is the property of the State in cities, and of local authorities in the countryside while user rights belong to the peasants, pending State approval when used for development purposes. Since the 1990s, the economic gain derived from transferring land use rights has been considerable, since «land and natural resources assets» are valued at 44.3 RMB trillion in 2010 ($6.54 trillion at the 2010 natural resources assets» are valued at 44.3 RMB trillion in 2010 ($US 6.54 trillion at the 2010

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17. Linda Yue, op.cit. p. 314.

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exchange rate) while non-financial state-owned enterprises have a book value of 59.1 RMB trillion (US $8.72 trillion)\(^1\). Since the mid 1990s, the main impetus for development shifted from Town and Village Enterprises (TVEs) to local government projects conducted in collaboration with outside and domestic enterprises. This trend must be understood in the context of the surge of cross-border Non Equity Modes of Production (NEM), as a form of governance of transnational corporations’ global value chain.

UNCTAD estimates that the direct local value-added impact of cross-border NEMs was roughly US $400-500 billion a year in 2010, with contract manufacturing and services outsourcing accounting for more than $200 billion. China has served as the « world’s factory » in international joint production projects where it has played the role of assembler of manufacturing products and the top importer of intermediate goods. It is these forms of processing activities that have led to its trade surpluses\(^2\).

A horizontal competition developed between territories to « attract businesses and investment » (zhaozhang yinzi 招商引资), by providing land and infrastructure for industrial use below cost. According to official statistics, the average fees for the negotiated granting of land use rights, generally used for industrial projects, were only about 30 percent of those collected through auctions, in 2003 (1, 69 million yuan/haecrate versus 5,67 million). Despite this huge price advantage, public auctions accounted for 15 percent of all land leasing deals in 1999, and rose to less than a third (27 percent) in 2003, following the central government’s policies enforcing greater transparency.

These subsidies were granted because of the expected rewards in terms of growth, its multiplier effects on employment through services to enterprises, the revenues from taxes (25 percent of the value-added tax, 50 percent of the enterprise income tax, and 100 percent of the new sales and income tax, yingyeshui 营业税, and suodeshui所得税), and especially housing and real estate development, the value of which tends to appreciate. In the Yangzi delta, for instance, local governments could sell the land to real estate developers at a price ranging from 4 to 14 times the average compensation paid to farmers, and the developed land could be resold at a price that was on average five times as high. Thus, the sale price of developed land could yield anywhere from 30 to 50 times the original-land-requisition price paid to the peasants, thereby contributing to a rising share of local government revenues\(^3\).

As for energy and environment, prices of oil, gas and electricity have been regulated by the State, under the National Development and Reform Commission, which since the end of the 1990’s tried to raise low domestic prices closer to international levels. However, the strong rise in crude oil prices from 2000 to 2008 (where the barrel was close to 150 $US in 2008) led the NDRC to maintain the domestic price at around 80 $US a barrel. Fan Gang estimates that Chinese enterprises pay around 660 yuans (83 dollars) less than foreign multinationals for the extraction of one ton of crude oil which means that in 2007 alone, the Chinese government received RMB 117,81 billion (US $15,5 billion) less on crude oil production than they would have at international prices\(^4\).

Low domestic prices of oil, gas and electricity have exacerbated waste, despite environmental laws and regulations neglected at the central and locals, to meet the clear priority of economic growth. Pollution of air, water and land has reached alarming proportions to the point of threatening productivity and the health of the population. Such environmental degradation, the partial cost of which came to 3.05 percent of GDP in 2004, has already affected climate change as evidenced by rapid melting of ice in the Himalayas, the accentuation of droughts in the North and floods in the South\(^5\).

The underpricing of factor markets is equivalent to a huge producer subsidy which Huang Yiping evaluates, from 2000 to 2008, at between 8.5

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and more than 12 percent of GDP at its peak years in 2006 and 2007. His main finding is that the underpricing of capital contributes on average of about 40 percent of the total subsidy to producers.

As for labor, migrant workers’ pay grew at only half the rate of the national average, their pay gap with urban workers widened from 30 to 50 percent, and their number rose from 88 million in 2000 to 140 million in 2008. Thus, the labor cost distortion rose from only 0.1 percent of GDP in 2000 to 3.6 percent of GDP in 2008, when it bypassed capital to become the largest cost distortion item. As this crude evaluation does not take into account the underdeveloped social welfare system, Huang Yiping suggests that it is underestimated. So the underpricing of labor represents certainly more than the average 25 percent of the producer subsidy linked with factor market distortions between 2004 and 2008.

The land issue is more complex since the non-market prices, through negotiation between users and local governments are generally reserved for industrial activities, and auctioning at market prices, on average six times higher than the off-market negotiations, are reserved for real estate developers. But as the property boom surged since 2005, the differential between market and non market prices may be artificial and according to Huang Yiping, « a better approach would be to look at the gap between the actual rental costs paid by industrial firms, compared with potential market rates ». Between 2000 and 2008, land may account for approximately 10 percent of the producer subsidy.

The same proportion may be true for the energy subsidy (10 percent), in the years where it was significant, between 2004 and 2008. But the producer subsidy on environmental degradation is more problematic, since its externalities are not taken up by enterprises, and the whole estimation is based on the official cost of environmental degradation.

Thus, in the pre-global crisis years of 2000-2008, the extraordinary expansion of China has nothing to do with a « miracle » and much to do with the underpricing of labour, capital, land and energy, which was equivalent to a gigantic transfer of resources from workers, households, and partly consumers to producers (especially SOEs) and governments. This annuity, in the sense that it is not linked to efficiency, productivity, and innovation, but derives mainly from the capacity to manipulate the allocation of the main factors of production through the command structure of the State, is basically the reward of power, as long as it is able to implement the conditions for strong economic growth, which may alleviate employment constraints and favour social mobility, its main tool of legitimation. At the same time, the liberalisation of prices for goods and services, coupled with the underpricing of the factors of production and the exchange rate of the RMB is a powerful tool of competition during the 2000-2008 period, when China has gained privileged access to the two main world markets, the U.S and Europe. The strong interactions of the US finance-led growth model and the Chinese investment and export-led growth model, explain, in part, why these two countries were responsible for half of the world’s economic growth between 2002 and 2008, and why this growth, based on strong income inequalities, led to the world financial crisis²⁴.

Post crisis growth: the role of SOEs and local governments

Although the stimulus package, launched in late 2008, helped China to avert a recession with the abrupt drop of demand for its main export products from North America and Europe, the steady growth of credit, the priority of SOEs in its allocation, and the way it was financed, raised doubts about the sustainability of the rebound in macro-economic growth.

Since then, China has depended on a much faster expansion of credit to generate growth. Official fixed asset investment jumped by 32 percent in 2009 alone. Total leverage, including through shadow banking, has risen from 150 percent of GDP in 2008 to an estimated 219 percent in the first half of 2013, an increase of 69 points of GDP, one of the highest shares in the world, compared to the U.S (+ 46 percent of GDP between 2002 and 2007), Malaysia (+ 40 percent) or Thailand (+ 66 percent) before the Asian crisis of 1997-1998. This level of credit depends on national savings, and is not from foreign countries, as in Japan,

where total leverage is equal to 392 percent of GDP. In this sense, China’s credit is manageable on a sovereign basis, and not subject to capital outflows and exit strategies by institutional investors, which accelerated the Asian crisis, or to interactions with global financial markets, which spread the U.S subprime crisis of 2007 to the rest of the world.

China’s high ratio of leverage, which has grown 18 percent year after year, twice the average growth of GDP, is comparable to the Eurozone (259 percent of GDP) or the U.S (253 percent of GDP), but much higher than the other BRICS countries (105 percent of GDP in India, 103 percent in Brazil and 71 percent in Russia)\(^25\). The risks do not concern consumer loans (23 percent of GDP) or central government leverage (22 percent of GDP) but the leverage of the corporate sector (151 percent of GDP) and of the Local Government Finance Vehicles (LGFV).

According to Guo Shuying, Chairman of the China Securities Regulatory Commission (CSRC), 40 percent of fixed asset investment has gone to industry since the beginning of the stimulus package. None of the manufacturing businesses with mature technologies have had a shortage of production capacity while, as early as 2009, twenty one out of twenty four industrial sectors had excess production capacities\(^26\). That may explain why the use of industrial capacities is relatively low – around 60 percent in 2011 according to the IMF, 70 percent for traditional industries (steel, cement, aluminium) according to the the National Development and Reform Commission (NDRC), and around 50 percent or much less for equipment industries in 2013\(^27\).

In short, the stimulus package has exacerbated the traditional supply-based growth model, which assumes that new industrial capacities and infrastructure lead automatically to demand growth\(^28\). The State-Owned Enterprises (SOEs) are a typical illustration of this logic. They dominate the Chinese economy under the supervision of the State-Party. The 117 largest SOEs in critical sectors such as commodity production, construction, rail and air transportation, shipbuilding, electronics, telecommunications, coal and electricity generation, oil, automobiles, and tobacco, are supervised by the State-Owned Assets Supervision and Administration Commission (SASAC), a government body directed until recently by Jiang Jiemin. In addition, the State Banks and Insurance Companies are regulated by the China Banking Regulatory Commission (CBRC), the China Insurance Regulatory Commission (CIRC) and other entities. The highest-level executives in the State Banks as well as the strategic SOEs are directly nominated by the Organisation Department of the Chinese Communist Party, which is one of the main tools of the CCP’s top-down structure, dealing with promotion.

SOEs which used to employ between 60 and 75 percent of the urban population in the 1980’s were drastically reformed in the 1990s. Their number fell from 10 million in 1994 to 7.9 million in 1997 and…165,000 in 1998. While their share of output has remained around 30 percent of GDP since then, their share of urban employment has declined to less than 10 percent, reflecting their transition from labor- to capital-intensive entities, as well as the end of their pivotal role in terms of income redistribution and social protection whose cost was massively transferred to households\(^29\). SOEs and especially the largest ones under SASAC’s supervision, were the largest beneficiaries of the 2008 stimulus package. Total net profit of SOEs continued to rise in 2009, to 4057, 7 RMB billion, 4.37 times that of 2001 and 12 percent of GDP. What is more, total profits of the Central SOEs administered by the SASAC accounted for 67.5 percent of total profit in 2010. And only ten companies accounted for 70 percent of all the profits made by the Central SOEs in 2009, including China Telecom, China Unicom and China Mobile, the three companies which shared a 900 million mobile subscribers market, China National Petroleum Corporation (CNPC), and Sinopec. CNPC and China Mobile alone accounted for more than one third of the profits. This impressive performance of SOEs is not a reflection of their return on investment, which is lower than that of the non-state sector (8.5 percent versus 12.9 percent) but the result of their market power, monopolistic or oligopolistic, and of preferential state policies\(^30\).


\(^{26}\) Renmin ribao, (Peoples Daily), July 2, 2013.

\(^{27}\) *Bulletin économique Chine*, juillet 2013.


\(^{29}\) Linda Yueh, *op.cit.* p. 308.

\(^{30}\) *The Nature, Performance and Reform of SOE’s*, Unirule In-
First, large corporations enjoy a large profit margin through the artificially low cost of capital, which is linked, as we have seen, to a resource transfer from the households’ captive savers, while Small and Medium Enterprises (SMEs) pay higher interest rates, as they must obtain capital from the non-bank or shadow banking system, where risk is higher. According to an IMF working paper, the total resource transfer by this two-tier financial sector depends on the size and spread between administrative and market interest rates, and the extent of credit allocated through the non-bank financial sector. From 2001 to 2008, the preferential financing cost on loans accounted for 47 percent of total nominal profits of SOEs, while from 2001 to 2011, the subsidy to SOEs through the underpricing of capital was estimated at around 4 percent of GDP, a continuation of the trend observed by Huang Yiping during the first decade of 2000. Were this bias toward SOEs redressed, China’s investment rate would fall by 5 percent of GDP without an adverse effect on economic growth.\(^{32}\)

The subsidy on land is even larger for SOEs than on capital. From 2001 to 2009, on the basis of industrial land rents set at 3 percent of the purchase price, SOEs should have paid rents equal to 67.2 percent of their total nominal profits.

As for energy, the government takes less than 2 percent of the price of oil in China, far below the 12 percent which is imposed on Joint Ventures. Combined with coal, natural gas and other resources, the SOEs underpaid more than 8 percent of their total nominal profits during the years from 2001 to 2009. Since they are capital-intensive, in contrast to SMEs, SOEs have the capacity to pay higher wages without jeopardizing their profits. In 2008, average compensation for their labor was 63 percent higher than that of private enterprises and 36 percent higher than that of non-state-owned enterprises. In monopolistic industries, the average income per year of employees could even reach RMB 128,000, about seven times the national average. And a large number of SOEs and government institutions provided housing at low prices to their staff.

Despite all these subsidies and huge profits, the contribution of SOEs to the state coffers was non-existent between 1994 and 2007 and negligible afterwards (6 percent of their profits in 2009, and 2.2 percent in 2010), whereas the tax burden of private enterprises was fixed at 25 percent. Most of their profits are reinvested or managed for Central SOEs by SASAC.

Finally, a set of laws has been adopted to support the central SOEs in key industries. The Merger and Acquisition Law passed in 2003, protected listed or non-listed SOEs from hostile takeover, the 2006 Enterprise Bankruptcy Law exempted 2100 SOEs, forcing them to close according to specific procedures, and according to Yuh, the 2007 Anti-Monopoly Law, apparently neutral, exempted SOEs from rules limiting monopoly power and market concentration, on the basis of « public interest, a clause usually applied to so-called strategic industries crucial for economic security or development »\(^{31}\). In essence, SOEs may be viewed as the lion’s share of the State-Party system concentrating the flows between power and capital, in a « revolving door system of mixed loyalty »… « SOE executives enter government to promote policies and and orient the allocation of resources, while officials enter SOEs to pursue economic gains »\(^{35}\).

The reform of SOEs according to the principle « zhuada fangxiao » (save the large, let go of the small), which privatized the small and medium sized SOEs and created « national champions » was enacted in 1994, the same year as an important fiscal recentralisation. Following an alarming report by Wang Shaoguang and Hu Angang, On the Chinese State Capacity (1993), the Tax Sharing Reform, was adopted in 1994 to increase the fiscal revenue to GDP ratio, which rose from 12.3 in 1993 to 20.7 in 2007.\(^{36}\) Before 1994, most fis-
cal revenues (78 percent) as well as expenditures (71.7 percent) went to local governments. From 1994 to at least 2010, the central government collected most fiscal revenues (52.6 percent on average), while its share of expenditures compared to local governments was basically unchanged (27 percent on average).

In summary, the Tax-sharing reform of 1994 resulted in a gigantic transfer of resources to the central government. Along with the reform of State enterprises, the creation of a strong top-down economic structure, local governments (at the provincial level, prefectural, or prefectural-city, district, township and village levels) were responsible for economic development and the provision of public services. Their total resources could not keep up with their financial obligations which included supporting retirees and laid-off workers from former SOEs in the 1990s. In 2012, local governments still accounted, on average, for 70 percent of local expenditures, 90 percent of general public service expenditures, 76 percent of public security, 84 percent of education, 68 percent of social security and employment, 78 percent of health care, 59 percent of environmental protection and 49 percent of science and technology.

This centralisation of revenue collection and decentralisation of expenditure responsibilities, led to a mismatch between revenues and expenditures at the local level, partly covered by transfer payments subject to government discretion, and mainly covered by the income of the land-use rights transactions for a period of 40 to 70 years. While the 1994 Tax sharing reform corresponded to a fiscal re-centralisation, revenue-sharing arrangements for land-leasing moved in the opposite direction. Following the generalisation of land-leasing as public policy and local practice in 1992, the State Auditing Office found that 80 percent of the land-leasing revenues were concealed from local fiscal authorities and that 90 percent of the remaining amount was allocated to local discretionary budgets, instead of being shared (60-40 percent) between the central government and the local authorities. Consequently, the central government decided to assign all land-leasing revenues to municipal governments, as a part of the 1994 tax-sharing reform.

Urban land is not a static asset as it can be created or valued by converting rural areas at the urban fringe or delocalizing state-owned industries, public services or residents from the city centres. As local governments assumed full responsibility for urban construction, they soon became infrastructure and real estate developers. Land-leasing was used to finance the bulk of infrastructure construction, the rest being borrowed from State-Owned banks and generally secured by municipally owned land. As Peterson noted, « Debt service often is paid by selling off the leasing rights to parcels of land whose value has been enhanced by the debt-finance infrastructure projects ».

Clearly, there are risks associated with such land-use development policies: if the proceeds of asset sales are not exclusively used for long-term infrastructure investments, but become part of the municipal operating budget, local governments become dependent upon asset sales for covering their expenditures. The situation may be viable as long as asset prices rise, which tends to create a real estate bubble, but may become problematic when land prices go down. Since land has been used massively, like in Japan in the 1980's, as a collateral for loans, this affects not only the fiscal balance of local governments that assume most of the public burden, but also the financial health of the State-Owned Banks and other financial entities. As we shall see, these risks have been exacerbated by the stimulus package of 2008.

**Land leasing as the main vehicle to finance the stimulus package, and its consequences**

As the bulk of the stimulus package in 2009-2010 (around 70 percent) had to be financed by the state companies and local authorities, the sale of land-use rights became a part not only of the investments but also of the operating budgets of local governments. Land sales had long been used as an important tool of government intervention,

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either by underpricing land for industrial projects (80-85 percent of land transfers) in a horizontal competition between local governments which encourages overinvestment, or by pursuing high prices for real estate projects which generate short-term taxable incomes for local authorities, particularly for house sales, leading to high business taxes. In the Pearl River Delta Region, often known as the world’s factory, local governments (city, district and township) even offered « zero land price » in the late 1990s and early years of 2000 to compete for industrial development projects.

From 2001 to 2008, the proceeds from land-use rights represented, on average, 40.5 percent of local government income, but they jumped to 61 percent of income during the two years of the stimulus package (48.8 percent in 2009 and 74.1 percent in 2010), before remaining flat in 2011 and 2012 at around RMB 2.9 trillion (5-6 percent of GDP). This dramatic leap is linked to the strong injection of credit. According to CBRC statistics, by the end of 2009, the local government loan balance was RMB 7.38 trillion, an annual growth of 70 percent.

The reliance on assets sales is especially risky because land prices are volatile. Recent research based on land auction sales in 35 major cities between 2003 and 2011 has shown that, despite significant heterogeneity, there is a large reversion to the mean on their annual price growth (on the order of 35 percent). Land price volatility is 3-5 times above house prices. Construction costs are flat, and construction workers’ wages grow strongly but with relatively low variation, so the volatility of housing prices is driven by the land market and not by other factors of production.

Despite skyrocketing land values in China between 2003 and 2011 – their average rate of growth is above 10 percent and exceeds 20 percent per annum in eleven cities, including Beijing (+ 20.2 percent) and Shanghai (23.7 percent) – the volatility of these prices was especially dramatic before and after the stimulus package. The surge in average land prices in 2007 (+ 46 percent) was followed by a slump (− 5.3 percent) in 2008, the year of the global financial crisis, and followed by two years of appreciation linked to the stimulus package (28 percent in 2009; 31 percent in 2010), and two years of practically flat growth (2011 and 2012). The typical amount of space supplied via land auctions in a 35 city sample doubled between 2008 and 2011. However, in the first part of 2012, permitted square footage levels of land sold decreased by 50 percent in comparison to the levels prevailing in the final year of the stimulus, especially in the coastal areas. Beijing numbers declined 75 percent; Shanghai, 91 percent; Fuzhou, 96 percent; Dalian 92 percent; while Guangzhou and Xiamen had no land sales, with levels down 100 percent.

This suggests that the volatility of land prices is not so much due to a fall in demand by private or para-public developers, but to the periodic intervention of the central government on land-supply, in order to restrict credit growth and overinvestment. In 2004, for instance, central regulation prohibited municipal land purchases for urban development, partly as a fiscal measure to restrain excessive local investment. The race for land reserves had led to the establishment of 6,015 development zones, of which only 20 percent had received the requisite approval of the State Council or provincial governments.

The same thing happened during the stimulus package. The Local Government Financing Vehicles (LGVF) or difang zhengfu rongzi pingtai, created for the first fiscal stimulus plan after the 1998 Asian financial crisis, boomed in order to borrow from the banks as leverage was forbidden at the local level, and State-Owned Enterprises, with the aid of easier credit policies, invested more and more in the growing real estate sector. Under the SASAC administration, 70 percent of SOEs were engaged in real estate operations and managed some 2,500 hotels throughout...
the country, not to mention local-level SOEs. More than 30 percent of fixed asset investment was directed, in 2010, towards the real estate sector, residential or non residential\textsuperscript{46}. Since 2011, central government has tried to rein the credit growth by raising the one-year interest lending rate and the reserve requirements of banks from 14 percent in 2009 to 21.5 percent in 2011, but the reduction of the square footage permitted to be sold in land auctions (~ 16 percent in 2011 in 35 major cities, confirmed in 2012) also served as a dissuasive tool.

The consequences of this real estate bubble are, above all, social: before the stimulus package, in 2007, a research report estimated that there were 40 million dispossessed farmers due to urban expansion and infrastructure projects, and land-related incidents were already the top-cause of rural grievances and protests, as the municipalities’ sale price for leasing land for urban use often exceeded the purchase price paid to farmers by a factor of 100\textsuperscript{48}. Yu Jianrong, a researcher on rural China, calculated in 2010 that the government expropriated 6.7 million hectares of rural land over a 20 year period, paying farmers 2 trillion yuan (US $ 326 billion) less than market value\textsuperscript{49}. Since 2010, more than a quarter of foreign direct investment in China has been directed to real estate, and the value of real estate assets owned by foreign investors in China has grown to 1.1 trillion US $, the second regional position behind Japan, and about 10 percent of global real estate investments\textsuperscript{50}. Recent research has shown that, from 2004 to 2009, property prices rose by 250 percent in 25 major Chinese cities\textsuperscript{51}. Access to property is more and more denied to urban average-income households, except in suburban areas, close to the informal «50.000 urban villages» and « small-property-rights housing» where half of the 140-150 million migrant workers live\textsuperscript{52}.

On the other side of the social spectrum, the number of Chinese billionaires in the real estate sector rose from 18 percent in 2008 to 27 percent in 2010, which indicates the magnitude of wealth distribution generated by the stimulus package\textsuperscript{53}. But apart from this strong social polarisation effect, (the main losers from this form of economic growth, -- landless peasants and low-income urban citizens – have more difficulty in achieving upward mobility) the conditions of economic growth have changed since the 2010 peak.

### The end of Cheap China and the expansion of shadow banking

In 2010, workers’ strikes in the giant Taiwanese Foxconn factory in Shenzhen, the number one assembler of consumer electronic products for well-known brands, attracted world attention to the labor conditions of migrants, underpaid and deprived of social protection. But the end of cheap Chinese labor really began with the stimulus package, which confirmed labor shortages in China’s coastal areas such as the Pearl River Delta and the Yangzi River Delta. In addition, the shortages pointed to the higher education and qualification of workers, and the propensity of potential migrants to remain closer to home and to work off farms, sometimes in factories moving from coastal areas inland because of rising production costs.\textsuperscript{54}

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\textsuperscript{48} The Economist, June 1st 2013, p. 55-56.

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\textsuperscript{50} Mylène Gaulard, Natacha Aveline Dubach, articles cited.


\textsuperscript{52} Tao Ran, Working Paper cited, p.13.

\textsuperscript{53} Asia Pacific Wealth Report 2010, cited by Mylène Gaulard, article cited, p.8.

\textsuperscript{54} In 2012, there were 160 million migrants who left their
In 2010 the annual wage of a Chinese urban worker reached 37,147 yuan (or US $ 5,487) about the same as in the Philipinnes and Thailand. International comparisons give a better idea of this catch-up phenomenon: the average wage in China was about twice that in Indonesia in 2000, but it rose to 3.5 times by 2011. From 2000 to 2011, cumulative wage growth in China was 473 percent, much higher than 238 percent in Indonesia, 137 percent in India and 46 percent in Mexico. On the currency side, from 2005 to 2012, the RMB appreciated by 57.4 percent and 56.8 percent respectively, against the Indian rupee and the Mexican peso.

The stimulus package, by easing credit, appreciated land prices not only as we have seen, for real estate projects, but also for industrial projects, especially in the largest cities of coastal areas where land reserves were diminishing, despite the constant extension of urban areas. According to official statistics, the average price per square meter of land on sale rose from RMB 573 in 2003 to RMB 3,393 in 2012, a 492 percent rise over ten years. The appreciation of land and labor costs led a lot of foreign as well as domestic enterprises to relocalise labor-intensive activities in inland regions.

With the rise of land and labor prices, the credit effects on growth tended to diminish, at the time (2011) when the central government tried to rein it in by raising repeatedly the one year lending rate and the obligatory reserve ratio of banks. But these traditional tools became less and less efficient, with the dramatic expansion of the two-tier financial system, or "shadow banking", to finance not only the SMEs but the Local Government Financing Vehicles (LGFV), which can no longer rely on cheap bank loans. According to the China Banking Regulatory Commission (CBRC), shadow banking, which refers to all lines of credit not regulated by the same standards as conventional bank loans, increased from RMB 800 billion (US $ 130 billion) in 2008 to RMB 7.6 trillion (1.2 trillion US $) in 2012, around 15 percent of GDP. Total off-balance-sheet activity in China, composed of credit to property developers (30-40 percent), LGFV (20-30 percent) and SMEs, individual and bridge loan borrowers, is estimated at around RMB 17 trillion (US $ 2.69 trillion), a third of GDP.

While regulators have been keeping control over risks in the banking sector, they have tolerated the boom in shadow banking to meet the financing needs of local governments and property developers. This tolerance explains its rapid growth. Investors tend to believe that there is an implicit government guarantee, since the borrowers are tied to the local governments. The moral hazard may aggravate financial risks and inequality. Since many shadow banking products are reserved for high net worth investors (the minimum subscription is usually RMB 1-3 million), as in the U.S hedge fund industry, this implies that only the wealthy can take advantage of the government guarantee, while the eventual losses of LGFV would be socialized. Bank of China CEO Xiao Gang, writing in the China Daily (12 October 2012) criticized the common practice of relying on a non transparent capital pool to manage Wealth Management Products (WMP), reserved for individuals with certain minimum deposit balances, which are essentially the informal securitization of bank-assets into a second balance sheet. As the banks or brokers do not provide guarantees for the payment of interest or principal, he accused them of "running a Ponzi scheme".

Shadow banking would appear to be a positive force, in a system dominated by state-owned banks lending to SOEs because it provides access to credit for labor-intensive SMEs that have difficulties getting bank loans. However, Charlene Chu who has followed Chinese banks for a long time, considers that its expansion in 2013 to about half of all new credit, is worrisome, as many of the credit decisions are driven by relationships with
heavy political influence, in the context of tremendous confidence in the ability and the willingness of the CCP to bail everyone out.61

At the end of 2012, banks had an exposure of 14 percent of their loans to LGFV and 6 percent to property developers, which is manageable, since their non-performing loan ratio is only 1.2 percent. But the problem comes from Wealth Management Products, apparently inspired by the U.S Credit Risk Transfer products (CRT), that banks sell to retail investors. According to CBRC, the amount of these short-term instruments (with an average time period of less than one year) soared to RMB 7.1 trillion at the end of 2012, 7.4 percent of bank deposits. Some of these funds are used in long-term projects such as infrastructure and property operations. And new WMPs are now issued to fill the gap left by expiring ones, which is equivalent to financial cavalry. Many WMPs are linked to stocks, bonds, exchange rates, and about 36 percent of them are related to trusts. With the tightening of bank lending control at the end of 2010, property developers and LGFV turned to the bond market and Trust companies, opened to high net-worth individuals and professional investors. Trust companies quickly became the second largest group of non bank financial institutions. Their assets under management rose six fold to RMB 7 trillion from 2008 to 2012, bypassing the insurance (6.9 trillion) and the mutual funds (2.9 trillion) sectors. In other words, the low non-performing loans of banks are linked to the capacity of WMPs and Trust companies to provide new loans to LGFV and property developers, which are largely used to pay off old debts.62

The exact amount of local government and LGFV debt has led to different estimates ranging, in 2010, from 10.7 trillion (State Auditing Office) to 14.7 trillion (Central Bank). In 2013, the conclusions of another auditing report are expected for October, but the best guess, based on grassroots surveys, is around 40 to 60 billion RMB, or 40 to 60 percent of GDP.63

In June-July 2013, the central bank decided to tighten short-term credit on the interbank market to control the expansion of credit in shadow banking. This move revealed the stresses in the financial system, since without intervention from the PBOC, the 7 day interbank rate had risen as high as 20-30 percent before the PBOC stated its intention to maintain sufficient liquidity thereby calming the markets. This episode attracted attention to the fragility of the financial system, which is directly linked to the LGFV and developers’ balance sheets.

In fact, as early as 2009, in more than nine provinces, the interest-bearing debt of LGFV was twice that of local governments revenues, notably in Beijing, Tianjin and Chongqing. But since these liabilities are off-budget sheet, the local governments have had to resort to off-budget revenues to pay for them. And as the land transfer fees are the most important off-budget revenues of local governments, just sufficient to cover their annual interest payments, the liquidity and solvency of local government finances, and more generally the financial stability of China, are directly linked to fluctuations in land markets.64 LGFV are directly tied to real estate developers. If the real estate market cools, developers are going to shy away from land sales and LGFV will face financing problems.65

Growth or financial stability: a political economy equation

As the stress-test of June, 2013 has shown, financial stability has become the priority of government policy. Growth slowdown due to the tightening of credit and the desire to deleverage is imperative to reduce financial risks. Maintaining high rates of growth to improve social mobility is no longer a necessity since the labor market remains tight and employment is no longer a big issue. But the deleveraging process, which may cyclically further the slowdown process, cannot be efficient if it is not backed up by a package of institutional and economic reforms aiming at the main beneficiaries of credit growth – high-leverage local governments, well-connected real-estate developers and State-Owned Enterprises, especially at the central level, under SASAC.

As Minxin Pei emphasizes, slower credit growth necessarily undermines elite unity: « The current

Chinese system is a gigantic rent-distributing mechanism. The ruling elites have learned to live with each other not through shared beliefs, values or rules, but by carving up the spoils of economic development. In a high growth environment, each group or individual could count on getting a lucrative contract or project. When growth falters, the food fight among party members will become vicious. Viewed in other terms, the capacity of the Xi Jinping/ Li Keqiang tandem to redistribute the lion’s share and to resist powerful lobbies by launching a much needed structural reform package will decide their political future, at the Third Plenary Session of the 18th CPC Central Committee, in November 2013. The structural reform package concerns the functional transformation of local governments, land use, financial intermediation, SOE monopolies, the household registration system, and the promotion of innovation and qualitative growth. As the CCP’s legitimacy in urban areas is largely dependent on continued improvement in living standards, a halt or even a slowdown in improving living standards could seriously erode it.

On the financial and economic front, the situation is not so rosy in 2013, despite the central government’s ability to manoeuvre by selling off local government assets and restructuring existing debts via the big four Asset Management Companies which have efficiently managed since 1999 the huge (40-50 percent) non-performing loans made by the banking system. Beijing could also provide direct support to local governments with proceeds from issuing treasury notes, or long-term measures such as the levy of a property tax, which accounts for a third of total tax revenues for state and local governments in the US in 2011.

The divergence in growth rate between credit (20 percent) and GDP (7.6) remains worrisome, as well as the huge growth of real estate investments in the second quarter, outpacing GDP growth by 12 percentage points. Given persistent reports of excess housing stock, it is clear that the race for land and the real estate bubble continue and serve to clear the intertwined debts of LGFV and property developers. At the bimonthly session of the National Congress Standing Committee, it was announced that in the first seven-months of 2013, the revenue generated from land-sales registered a 49.4 percent increase over the previous year. The Ministry of Land and Resources noted, in a March 2013 report, that second- and third-tier cities increased their supply of land for housing construction by 30 percent, in 2012, in comparison to the average annual supply over the previous five years. And at the national level in terms of volume, according to a Beijing based property research firm, a total of 121 million sq metres of residential land was put up for sale during the first quarter of 2013, up 22 percent over the previous year. The property market is heating up again in Beijing, where new home prices rose 21 percent over the previous year in August 2013, nearly double the national average increase of 11 percent, according to an index provided by professionals. And Sunac China acquired a 28,168 square meter site, in one of Beijing’s bigger urban green spaces, between Sanlitun and Chaoyang park, for RMB 2.1 bn (US $ 343 million). Including a commitment to build additional facilities at a separate site, the total price amounts to RMB 73.000 (US $ 1196) per square meter of buildable space, the most ever paid for a piece of land in China.

In short, China’s rapid urbanisation policy is now diverted to pursue the traditional supply side growth model, which assumes that infrastructure investment leads automatically to demand growth, without taking into account its economic as well as social costs stemming from rising discontent over property prices for citizens and forceful requisition of land for peasants. The growth rate of total enterprise loans and loans to SME’s continued to slow in the second quarter.

68. Yifan Hu, PIIE, September 3rd, 2013. AMC have well managed the non performing ratio of state banks, which fell from 40-50 percent in 1997 to 1.8 percent in 2009 (Bulletin Économique Chine), August 2009, p. 4.
69. Nicolas Borst, « China Rebalancing Update », PIIE, August 6th, 2013. Contrary to the real estate investment, the growth rate of total enterprise loans and loans to SME’s continued to slow in the second quarter.
70. According to Yu Yongding, « with per capita income at less than $ 6000, homeownership in China is roughly 90 percent, compared to less than 70 percent in the United States. Five of the ten tallest skyscrapers under construction worldwide are in China. China’s economy is being held hostage by real estate investment », Project Syndicate, 7 October 2013.
Central government has for the time being decided in favour of growth, with the rising risk of a debt trap, where new money is used to pay off old debts. The pyramidal structure of debts is linked to the power structure. SOEs under SASAC, as well as local government leaders, are appointed centrally, and until recently their promotion has been based largely on the ability to generate high profits or GDP growth at the local level, which are themselves funded on access to credit and state assets, without consideration for efficiency, overcapacities or overinvestment.

These considerations are delegated to the central government, which is supposed to regulate macro-economic management, to deal with financial stability, and to bail every one out in case of problems. China’s national balance sheet is estimated, in 2010, at $142.3 trillion for assets and $69.6 trillion for liabilities. In essence, this system where power provides access to credit, local authorities manage most public expenditures, and the central government is supposed to cover all risks, is based on a shared irresponsibility. To describe the complex relationship between the central and the local authorities, one must recall the famous joke prevailing in the ex-USSR (« they pretend to pay us and we pretend to work »). In China, from the perspective of the local authorities, « they pretend to command us and we pretend to obey ». In fact, since 1978, the saying goes that « the Center has its policy; we have a counter-policy » (中央有正刺 我们有对刺 Zhongyang you zhengci, women you duici). But this central-local dynamic, which has always been decisive in Chinese history, is impotent in the face of a potential financial crisis which may threaten the whole pyramid of power.

That is why the capacity to resist powerful lobbies is essential at the top. The launch of a long term campaign against corruption by Xi Jinping, in order to restructure the private game preserve of SOEs. On the radar of future investigation by the National Development and Reform Commission are the petroleum, telecommunications, banking and automobile sectors. Thus, the financial sector, tightly linked with the land issue, has become the main focus of growing conflicts of income distribution through the allocation of credit and assets.

In short, the end of cheap China, with the under-pricing of labor, capital, industrial land and currency, signals the end of the high growth period. The priority is now to reconcile growth and financial stability in a difficult and political risky deleveraging process, since the lion’s share of China’s economic and political elite is in question. If the rate of growth keeps slowing, it has to be linked with sufficient employment and rising household income (especially median income), as underlined by Premier Li Keqiang, in order to restructure the economy in favor of consumption. But in the short term, the necessary reduction of investment will put pressure on employment and household income growth, except if there is a significant transfer of resources from the state and real estate

sectors to households. China is thus on the eve of a crucial turning point for the next few years, as the postponement of problems by the real estate bubble has done nothing but worsen the situation.

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