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HAND OUT

THE FISCAL STIMULUS PROGRAM AND PROBLEMS OF MACROECONOMIC MANAGEMENT IN CHINA

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I. INTRODUCTION

China was the first major economy to emerge from the global financial crisis, and it did so in spectacular fashion. After a brief – though sharp – downturn in 2008, the Chinese economy grew by 8.7% in 2009, and 10.4% in 2010, and the robust growth in China helped a host of resource-rich countries avoid the economic downturn. A big factor behind this enviable success was the massive stimulus program introduced in fourth quarter 2008, and implemented through 2009 and 2010. The initial program that was announced totalled RMB 4 trillion (US$ 586.68 billion), comprising RMB 1.18 trillion in central government funding, plus local government inputs and bank credit. The package amounted to 12.5 % of China's GDP in 2008, to be spent over 27 months. In relative terms this was the biggest stimulus package in the world, equal to three times the size of the US effort.[1]

Following Premier Wen Jiabao's call to make the stimulus "big, fast, and effective", the program was implemented with great force and in record time. Along with the huge fiscal injection, state-owned banks opened their spigots, and total credit grew by more than one-third in 2009. Local government inputs also far surpassed expectations. Altogether the total "stimulus" grew to an estimated 27 % of GDP, with an injection of 19 percent in 2009 alone.

One obvious inference to draw from this bold stimulus program and the economy's quick recovery is that China has a strong, rich, and effective public sector. This was indeed the one drawn by George Soros, who opined admiringly at a network meeting of his Soros Foundation-supported Open Society Institutes in mid-2010, that "the Chinese government works better than ours (in the US)".

This is incontrovertible if the metric one uses is solely that of economic growth and how quickly China returned to its high growth path, but the performance through the crisis looks weaker when a broader metric is used. First of all, once unleashed, the stimulus appeared to spin quickly out of control. Investment in fixed assets jumped to 66 percent of GDP in 2009, and infrastructural investment leapt to more than 16 percent of GDP, raising immediate concerns about the economy's absorptive capacity and the care with which projects were selected and implemented.

Indeed, by mid-2009 many policymakers and observers in China had begun to worry about the nature of the growth brought by the stimulus program and its by-products. The big ramp-up in easy credit, for example, helped to fuel an asset bubble that sent prices of land and housing steeply upward, to more than doubling in some big cities during 2009. The torrid pace of local investment was raising worries about rising local government debt. By early 2010 the government was sufficiently alarmed to call for an immediate freeze and audit of local government investment platforms, and by year-end the urgent problem for macro management had shifted decisively to slowing growth and tamping down inflationary pressures. At this writing in mid-2011, controlling inflation is now the top priority task for the government this year.

This paper analyses the fiscal stimulus and related measures applied in the People's Republic of China in the wake of the global economic and financial crisis, and links them to issues of governance to draw some insight on China's reform needs going forward. The next section starts with a "scene setter" discussion of the fiscal and economic situation in China prior to the onset of the economic and financial crisis and how

[1] The US stimulus including temporary tax cuts and increased government spending was worth just over $ 700 billion, or about 5% of GDP, spread over two years.

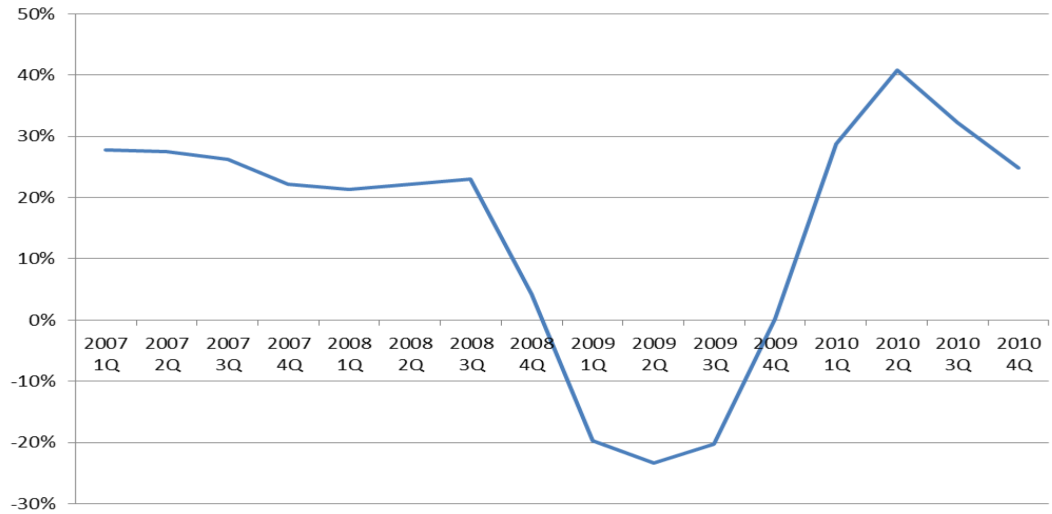
they shaped the crisis response. Section III provides a comprehensive overview of the fiscal stimulus measures applied. Section IV reviews the implementation of the fiscal stimulus measures through 2010, and examines the responses of local governments on the demand side, and the financial sector on the supply side, to explain the overheated outcome. Section V concludes with observations on China's exit strategy and reform challenges ahead for strengthening macro management in China.

II. BACKDROP TO THE STIMULUS: THE ECONOMIC AND FISCAL SITUATION

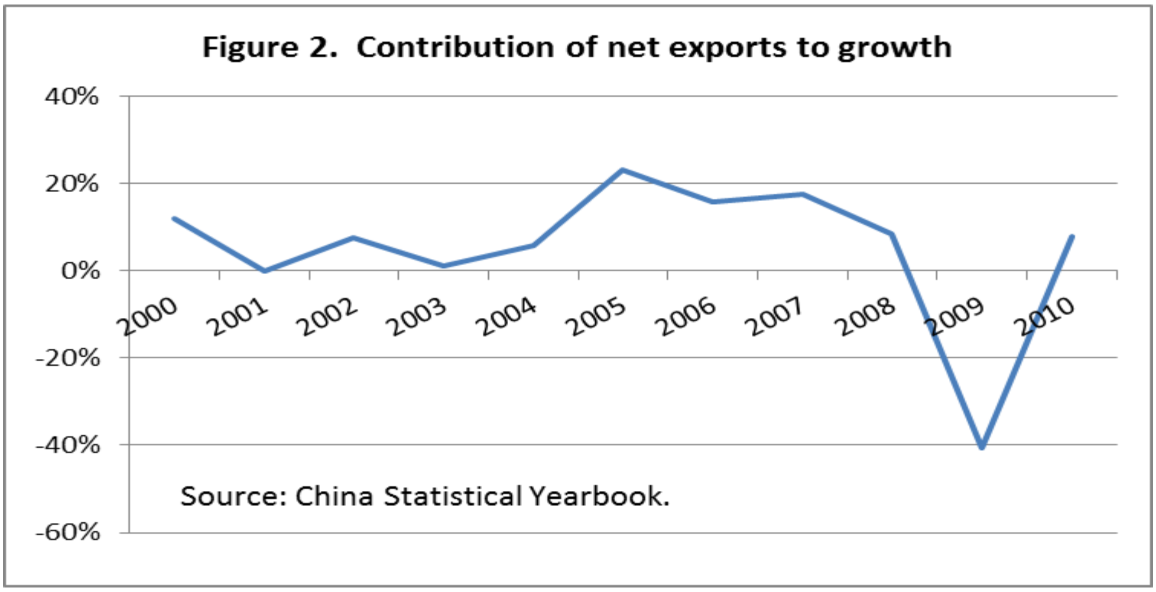
Through its transition to a market economy, China has achieved a remarkably long and sustained growth, and has emerged over the past few years as a global economic power. In 2009 it surpassed Germany to become the largest exporting nation, and in 2010 it passed Japan to become the second largest economy in the world. These achievements came perhaps earlier than expected, partly as a result of the global economic slowdown that began in 2007 and ensnared virtually all countries, but from which China's remarkably quick recovery helped propel it past the others.

But China did not escape being hit hard by the economic crisis. The effect was first felt in the export sector, when world markets collapsed and exports fell precipitously. This can be seen in the quarterly statistics on export growth in Figure 1, which saw China's export growth plummeting in 2008-4Q through 2009. Factories closed seemingly overnight, and workers were laid off. In the coastal export enclave of Dongguan in Guangdong province, in mid-2009 so many workers had been sent home that huge industrial parks resembled ghost towns. Given that exports had comprised one-third of GDP in value, the sharp downturn in exports exerted a drag on GDP growth that was a stunning minus 41 percent in 2009 (Figure 2).

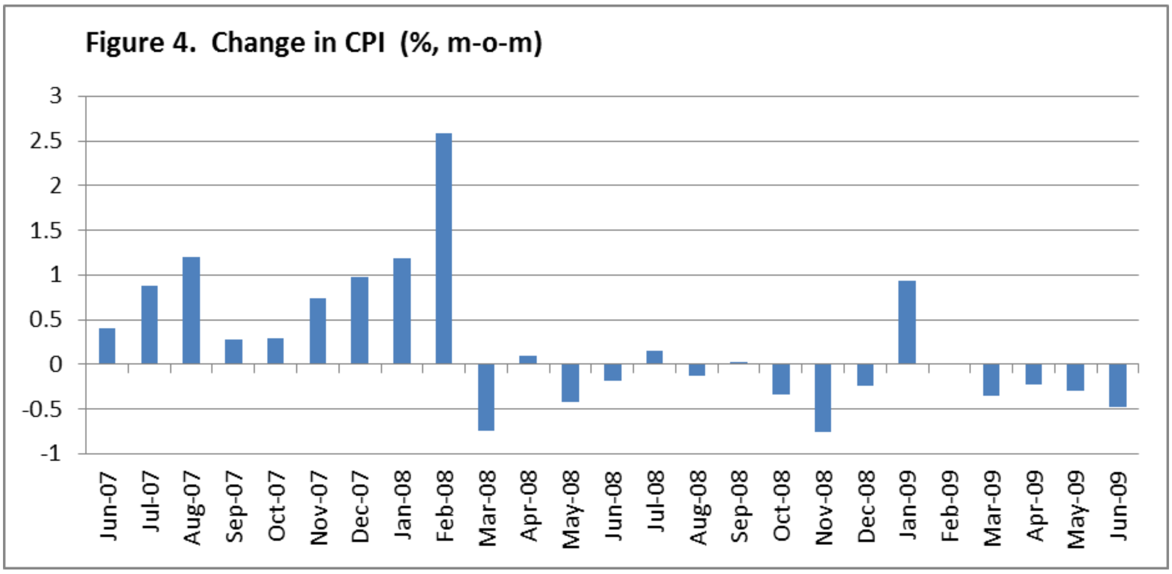
Figure 1. Growth in exports (quarter-on-quarter)



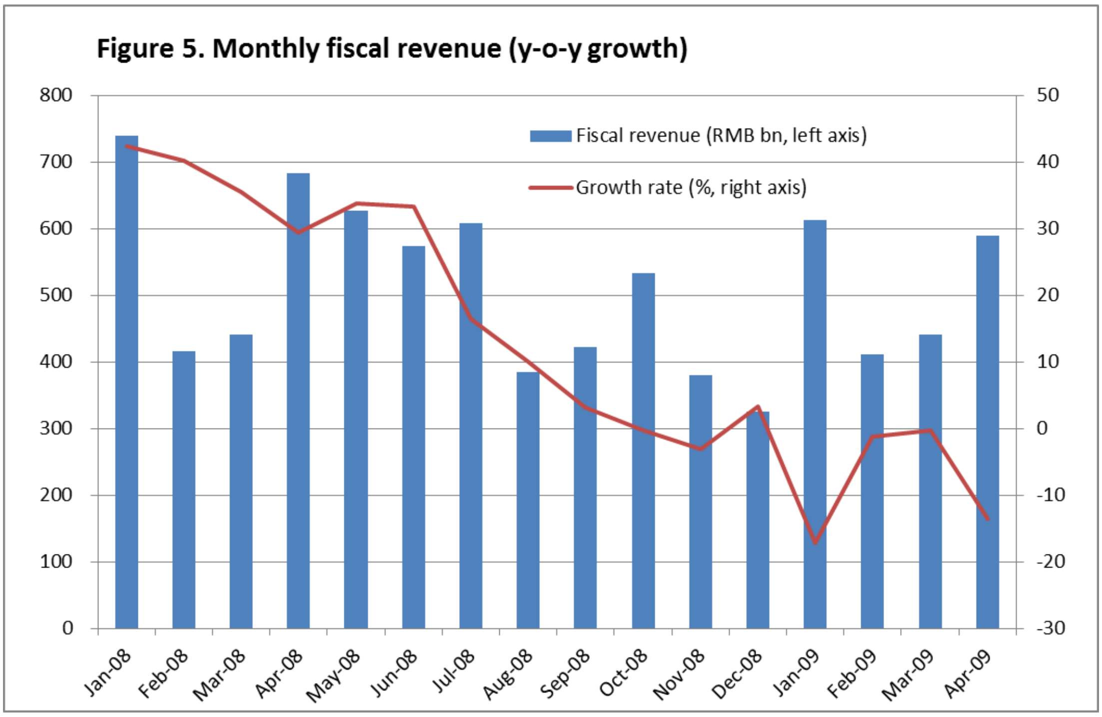
source: General Administration of Customs of China.



Ironically, in China the government had actually begun to implement contractionary policies in November 2007 to tamp down the torrid pace of growth and accompanying inflationary pressures that had been building since 2003. As late as June 2008, the central bank raised the commercial bank reserve requirement twice (by a half percentage point on June 15 and another half on June 25), to further restrain monetary growth. The quick reversal of economic fortunes during the year is reflected in quarterly GDP growth rates in Figure 3, and shocked policymakers watched as the spreading global crisis turned the growth moderation into what looked like a free fall. Even more threatening was the deflation that was appearing to take hold, as month-on-month changes in the consumer price index dipped into negative territory in mid-2008 and stayed there through the rest of the year (Figure 4).



Monthly growth in government revenues had been declining throughout 2008, but turned steeply downward during the second half year, ending in negative growth at year end (Figure 5). By January 2009 the Minister of Finance was warning of "a very tough year" ahead, as government revenues plunged 17.1 percent that month from a year earlier.2 Given the centrality of maintaining high rates of growth to government legitimacy, policymakers were alarmed, and determined to do everything necessary to reverse the trend.



Source: China Data Online, MOF website.

2 Xinhua 26/2/2009.

The fiscal cushion

Against this backdrop, the government's determination to move decisively to counteract the effects of global economic slowdown was emboldened by two considerations. First, in 1998 it had intervened with a fiscal stimulus program that was widely credited with success in helping China stave off contagion in the Asian Financial Crisis.[3] Second, unlike the first time, when the fiscal stimulus was rolled out at a time when government finances were still fragile, China's fiscal status was far stronger in 2008.[4] Since the 1994 fiscal reform, China has rebuilt its revenue mechanism, and the new tax system has proven quite buoyant. With rapid economic growth bringing in robust revenues, government coffers were overflowing, with the budget controlling a bigger share of a much larger GDP. Moreover, throughout the transition period, the government has managed its fiscal stance prudently, keeping budget deficits to less than 1% of GDP in most years. On the eve of the global financial crisis the national debt was small – about 19% of GDP, leaving the government plenty of scope for decisive action.

III. THE STIMULUS PACKAGE

Although most public attention has been focused on the "RMB 4 trillion stimulus program", the total package of stimulus measures actually comprised four main components: an investment program, accommodative monetary policies, tax cuts, and measures to ease the burden on state-owned enterprises.

A. The Investment Program

The RMB 4 trillion "program" refers to the investment component, which was officially announced by Premier Wen Jiabao on 5 November 2008, as a set of investments totaling RMB 4 trillion, to be spent over 27 months from fourth quarter 2008 through 2010. The program would be focused on seven priority areas:

1) Transport and power infrastructure (railroads, roads, airports, electricity grids)
2) Earthquake reconstruction
3) Rural village infrastructure
4) Environment, energy efficiency and carbon emission reduction
5) Affordable housing
6) Technological innovation and restructuring
7) Health and education

The weighting of these components went through some adjustments during the first months of implementation. Their final distribution is presented in Table 1. These investments represent new

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[3] World Bank (1999). *China: Weathering the Storm and Learning the Lessons*. Country Economic Memorandum. Washington, DC.

[4] In 1998 government revenues were less than 12 percent of GDP. In 2008 it was 19.5%.

budgetary spending, although some were already planned – such as the RMB 1 trillion on post-earthquake reconstruction, whose implementation would be accelerated under the stimulus program.

Table 1. Sectoral Composition of Stimulus Investment (March 2009 plan, as percent of total)

Transport & power infrastructure (railroad, road, airport, electricity grid)	37.5%
Rural village infrastructure	9.3%
Environmental investment;	5.3%
Affordable housing	10.0%
Technological innovation and structural adjustment	9.3%
Health & education	3.8%
Post-earthquake reconstruction	25.0%

Source: NDRC website.

For these investments, at the outset the central government committed to funding RMB 1.18 trillion from the budget, with the remaining RMB 2.8 trillion to be financed by local governments, enterprises, and banks.

B. Accommodative Financial Policies

In 2008 China was in the second year of a contractionary monetary policy regime aimed at slowing the 11-12 percent rate of growth over the previous years and reining in inflationary pressures. Faced with the sudden global economic meltdown and the threat of contagion to China, policymakers made an abrupt shift during the second half of 2008, to ease into an increasingly accommodative policy regime. In September the central bank reduced the one-year lending rate from 7.47 percent to 5.58 percent.[5] In the period from September through December, interest rates were cut five times, with a 108 basis points-cut on 26 November.[6] To give an added boost to the financial sector, in December the State Council released a nine-step plan for financial reform. The package included new credit mechanisms for small- to medium-sized enterprises (SMEs), a broader scope for issuing corporate bonds, and new regulations for the creation of real estate investment trust funds (REITs) and private equity (PE) funds.[7] Also in December 2008, the State Council issued a document authorizing an additional RMB 100 billion loan allocation to the policy banks. Commercial banks were urged to increase lending. The credit quota was abolished, and a call was issued to strive for increasing total lending by RMB 4 trillion in 2008.[8] As will be seen below,

[5] China Daily, 17 December 2008. http://www.china.org.cn/business/news/2008-12/17/content_16962514.htm. Accessed 8 April 8, 2011.

[6] James Areddy, "China Cuts Interest Rates for Fifth Time Since September," Wall Street Journal, 23 December 2008, http://online.wsj.com/article/SB122994387266426043.html?mod=todays_us_page_one. Accessed 8 April 8, 2011.

[7] Li Qing, Wen Xiu, and Zhang Yuzhe, "A nine-measure package broadened the government's economic stimulus plan to embrace REITs, PEs and other vehicles," http://english.caijing.com.cn/2008-12-09/110036510.html. Accessed 7 April, 2011.

these liberalizing steps together created the conditions for an overwhelming response to the call to stimulate the economy.

C. Tax Cuts

In addition, the government cut taxes, sometimes through accelerating the rollout of some reforms that had been planned. These included increasing VAT rebates on exports, reducing taxes on small firms by cutting the tax rate from 6 percent to 3 percent, and raising the threshold for tax levy from monthly income of RMB 5,000 to 10,000. The conversion of the value-added tax from an investment-type VAT to a consumption-type VAT, which had been "forthcoming" for much of a decade[9], was finally rolled out on 1 January 2009. With this reform -- firms can now deduct purchases for investment as well as for current operations. Given the high proportion of investment in GDP, this change represented a significant cut in VAT revenues, by perhaps RMB 150 billion.[10]

D. Bailing out and Easing up on SOEs

To help state-owned enterprises (SOEs) weather the crisis, the government began to provide subsidies to the weaker firms through the State-owned Assets Supervision and Administration Commission (SASAC), which has management responsibility over SOEs and collects dividends from them. In November, SASAC at the central level injected funds into two airlines, China Southern and China Eastern, using its own funds.[11] In addition, SASACs at all levels were encouraged to reduce remittance requirements from their subordinate SOEs, and bailouts were undoubtedly provided to other SOEs. No figures have been reported for the overall size of these changes, but Premier Wen Jiabao has claimed that the combination of reduced claims on profit of state-owned enterprises and reductions in taxes and fees would put RMB 500 billion into the hands of enterprises.[12]

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8 State Council Office, "Several Opinions of the State Council Office on Finance Stimulating Economic Development under Current Conditions", 13 December 2008, Guobanfa [2008] No. 126, at http://news.xinhuanet.com/newscenter/2008-12/13/content_10500530.htm. Accessed 4/7/11.

9 This consumption-type VAT was put under "pilot implementation" in the northeastern provinces of Liaoning, Jilin and Heilongjiang in 2004, and a nationwide rollout was then expected to follow within 2-3 years.

10 The cost of this change in VAT was projected at RMB 120 billion, but as investment grew by 30% in 2009, the tax cut also grew in size.

11 For example, central SASAC collected RMB 55 billion in dividends from firms under its supervision in 2009. These funds are normally kept by the SASACs.

12 Wen Jiabao, "We will consider further measures to stimulate the economy more directly", Xinkuaibao, 15 December 2008, http://finance.sina.com.cn/roll/20081215/01472572419.shtml. Accessed on 7 April 2011.

IV. IMPLEMENTATION

Implementation began in fourth quarter 2008 under a sense of great urgency that pervaded the top policy circles and emanating from the top leaders on down.[13] The RMB 4 trillion stimulus program was announced with great fanfare, and the program was quickly followed by a Communist Party document that outlined policies to "further expand domestic demand and assure stable rapid growth." The document called for an immediate injection of RMB 120 billion in investment funds during the final quarter of 2008, by accelerating approval of investments of RMB 100 billion in priority areas and moving forward RMB 20 billion of the planned earthquake reconstruction spending. With the instruction to abolish lending quotas and for commercial banks to support investment, the document expressed the hope that the RMB 120 billion of fiscal spending would be leveraged to achieve an increase in investment totaling RMB 400 billion before year-end.[14]

The release of four tranches of the central government funding was announced – RMB 104 billion in 2008-Q4, and RMB 130 billion, 70 billion and 80 billion, respectively, in 2009-Q1-Q3.[15] The actual disbursements are presented in Table 2 below. From the start, the emphasis was on the timely and full disbursement of funds, and for all projects to start by third quarter 2009. With three-quarters of all investment projects assigned to local governments [16] the worry was whether local governments would be able to raise the co-financing needed to meet their counterpart funding requirements in a timely fashion. In 2010 the central government made an additional appropriation of RMB 572.2 billion – perhaps to offset the lagging local government inputs, to bring the disbursement to RMB 992.7 billion for the year.[17] Altogether, central government input to the stimulus totaled RMB 1.6 trillion, 36 percent larger than the RMB 1.18 trillion envisioned at the start.

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[13] Naughton (2009) has written vividly of the sense of urgency that permeated all levels of government in China during this period, from the central government to the provinces and downward.

[14] Central Document No. 18 of 2008 (Zhongfa [2008] 18).

[15] Figures from NDRC website.

[16] See, for examples, Xiao Liang, 130 billion central investment plan has begun to be allocated; 95 billion will be allocated to localities", 21 Shiji Jingi Baodao, 3 February 2009, accessed at http://finance.sina.com.cn/roll/20090203/01305807294.shtml; and Huo Kan, Wang Changyong and Wang Jing, "Can Stimulus Light China's Consumer Fire?" Caijing, 6 March 2009, at http://english.caijing.com.cn/2009-03-06/110114349.html. (Accessed 9 April 2011.)

[17] Li Pumin, "China will continue to implement the 2010 RMB 4 trillion investment plans," China News, March 7, 2010, http://www.chinanews.com.cn/cj/cj-gncj/news/2010/03- 07/2155764.shtml.

Table 2. Disbursement of central government stimulus spending (2008-2009)

Disbursements	Period	Amount (RMB billion)
First tranche	2008-4Q	108
Second tranche	2009-1Q	130
Third tranche	2009-2Q	70
Fourth tranche	2009-3Q	80
Fifth tranche	2009-4Q	223.8
Final year	2010	992.7
Total injection		1604.5

Source: NDRC website.

A. Response from Local Governments[18]

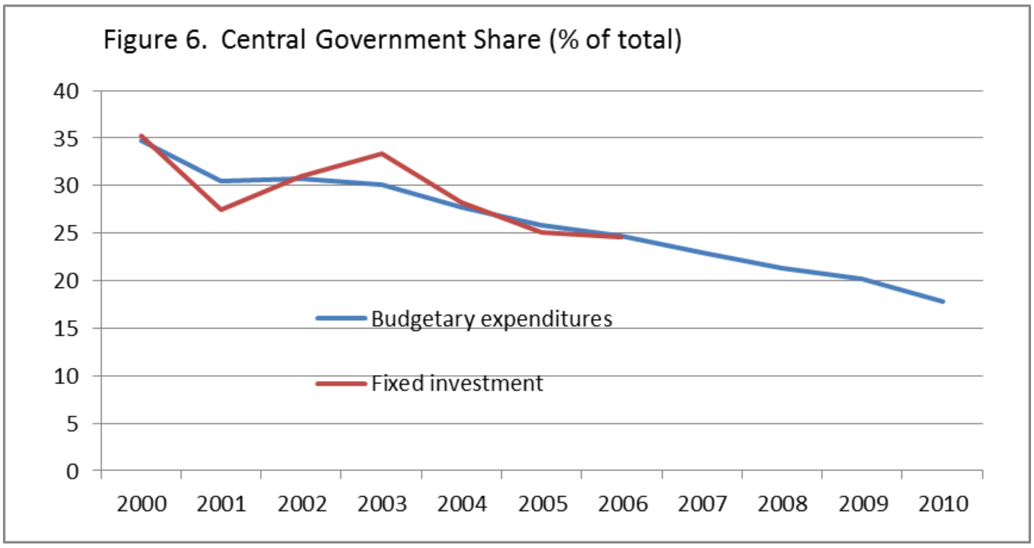
China's fiscal system is highly decentralized.[19] The vast majority of responsibilities for providing public services are assigned to sub national governments, and the central government accounts for less than one-fifth of national budgetary expenditures – a share that has fallen steeply over the past decade (Figure 6).[20] The provision of infrastructure also mainly falls to local governments, and they have accounted for 70-75 percent of budgetary expenditures on fixed investment in recent years for which data is available.[21]

[18] In this paper, unless otherwise noted, "local government" refers to all units of sub national government, including provinces, municipalities, counties and townships.

[19] See, for examples, World Bank 2002, Wong passim.

[20] In 2010 the central government's share was only 17.8% of total expenditures (Budget report presented at the National People's Congress, March 2011).

[21] Data on fixed investment ends in 2006 because, with a change in budget classifications in 2007, capital spending is no longer reported in budget statistics.



Source: CSY.

The fiscal stimulus program was likewise to be largely implemented by local governments, and they embraced it with frenzied enthusiasm. Although the government did not spell out in detail the division of responsibilities for undertaking and financing the stimulus investments, anecdotal evidence indicates that the usual rules were applied both for the assignment of projects and for cost sharing between central and local governments.[22]

Under the "normal process", the National Development and Reform Commission (NDRC) is responsible for formulating the national investment plan and approving the list of projects to be included. With guidance from the NDRC on priority areas in which funding is available, local governments (and central ministries) prepare project lists to be submitted each year for inclusion in the national investment plan. Once chosen, a project becomes eligible for budgetary funding as well as bank credit, which is available only for approved projects.

While local governments and ministries compete for national investment funds, the competition is constrained by the availability of funding at localities, since virtually all projects implemented by local governments require counterpart funding, the proportions for which vary by sector and by region. For example, school construction requires one-third contribution from local governments, and for low cost housing the central input is a flat rate of RMB 300 per square meter for the central provinces and RMB 400 for the western provinces.[23] Eligibility for application usually requires proof of funding availability from the local government. To be eligible for bank credit, the banks also require proof of requisite own funding in the form of equity or paid-in capital – usually 25-35 percent.

With the fiscal stimulus program, the available pool of central funding was vastly expanded, but the goal for quick implementation of the ambitious investment program required the NDRC to be especially vigilant in ensuring that projects would be allocated only to local governments that have sufficient funds to meet co-financing needs. From the outset, the worry was that with three-quarters of the projects assigned to localities, local governments would struggle to meet this burden of counterpart funding.

[22] See footnote 16 (Xiao Liang and Huo et al.).

[23] These are lower income provinces that are the main recipients of intergovernmental transfers.

Under the climate of urgency that characterized the late 2008 – 2009 period, every effort was made to facilitate local government application for projects. First, the government introduced several new measures to make it easier for local governments to meet the co-financing requirements. On 17 March, 2009, the State Council approved a special RMB 200 billion treasury bond issue by the Ministry of Finance on behalf of local governments, and stipulated an accelerated disbursement of the funds to the provinces.[24] The ostensible purpose of this bond issue is as a first step toward allowing local governments to raise debt for funding capital investments. Until an institutional framework is installed to monitor and control local debt issue, the government has chosen to issue the debt centrally, through MOF, but under the names of recipient provinces. MOF spokespersons explained that these funds "should mainly be used in public infrastructural projects for the provision of public goods … and not for enhancing recurrent expenditures."[25]

Second, in a more radical move, the government officially endorsed the use of local government financial platforms and other means of raising debt. On 24 March, 2009, a document was jointly issued by the People's Bank of China and the China Banking Regulatory Commission, which called for "supporting localities with appropriate conditions to organize and build financial platforms, issue corporate debt and medium term notes and other financial products, to broaden the channels of funding for providing counterpart funds for central government investment projects."[26]

Third, the Ministry of Finance relaxed the standards on what is eligible as counterpart funds to qualify for stimulus projects, specifying that local governments can use the following sources: budgetary resources, land revenues, proceeds from local bonds issued by MOF, funds raised by local financial platforms, and all other resources at the discretion of local governments.[27]

In fact, all of these changes had been outlined by Zhang Ping, Director of NDRC, at a press conference during the National People's Congress meetings in March 2009, signaling a consensus approval by policy makers at the highest level of government.[28] Altogether, these changes greatly expanded the space for local governments, and a dynamic was set up whereby local governments competed fiercely for stimulus investment projects, which represented an unprecedented windfall of funding opportunities for all manner of pet local projects. As a legacy of the planned economy, all local governments and line ministries have medium and long term plans with project pipelines. Ready or not, many of these projects were quickly rolled out and brought forward, and new projects were hastily put together to meet the calls for new spending in environmental and green technology areas. Within less than a month of the announcement of the stimulus package, local governments, in aggregate, had proposed a staggering total

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[24] Han Jie and Luo Sha, New China News, "State Council agrees to issue 200 billion yuan bonds to enhance and expand local government matching funds in support of the implementation of proactive fiscal policies". http://news.xinhuanet.com/newscenter/2009-03/17/content_11028110.htm (accessed 5/5/11).

[25] Han Jie and Luo Sha, New China News, http://news.xinhuanet.com/newscenter/2009-03/17/content_11028131.htm (accessed 5/5/11).

[26] "Some guiding opinions on further strengthening the adjustment of credit structures to promote the stable and relatively rapid growth of the national economy," 24 March, 2009.

[27] Ministry of Finance, "on speeding up implementation of central fiscal stimulus investment projects: notification on issues of local counterpart funds", MOF Construction Department Document no. 631, 12 October, 2009.

[28] Zhang Ping press conference at the Second Session of the 11th NPC, 6 March 2009. http://www.ndrc.gov.cn/xwfb/t20090306_264932.htm (accessed 4/28/11).

of RMB 18 trillion in investment projects. Soon after, the figure rose further to RMB 25 trillion for the first 18 provinces reporting their plans.[29]

The central ministries, too, joined in the competition. Among the most aggressive was the Ministry of Railways, which grabbed an estimated RMB 1.5 trillion of the RMB 4 trillion investment approved by NDRC. The Medium-Long Term Plan for the National Railway Network, set in 2004, had called for the network to reach 100,000 kms of rails by 2020, with 12,000 of them high-speed lines. The Plan's centerpiece was the adoption of Chinese-made high speed trains operating at or above 200 km/hr. This was amended in 2008 to set targets of 120,000 kms of total length; 16,000 of them high-speed lines, and with train speeds raised to as much as 350 km/hr.[30]

B. Response from the Financial Sector

On the supply side, in answer to the calls from all quarters to support the stimulus effort, China's state-owned banks responded, also with frenzied enthusiasm. The State Council document issued in December 2008 (cited earlier) had called on the financial sector to support the government's industrial policy by increasing lending for investment in a long list of sectors, projects and conditions including public infrastructure, earthquake reconstruction, energy saving, technical renovation and technology upgrading, regional development, small and medium enterprises, and rural projects. The document also encouraged banks to provide credit to support "financially sound enterprises that faced temporary difficulties." The document called, as well, for rolling out policies to expand consumer credit, to support mortgages for first time buyers and for car purchases. It even specified quantitative targets for the expansion of bank credit – to strive to increase new lending by RMB 4 trillion in 2008, and for broad money supply to grow by 17 percent. The document also called for reducing restrictions on corporate bond issuance and expanding the range of financial products available for financing investment. In sum, the government was calling on the banks to pull out all the stops.

Bank officials were only too happy to oblige. After all, the directives from the government and political leaders effectively eliminated all personal responsibility for the lending decisions, and credit growth exploded. Especially favored were projects backed by local governments. Net new credit grew by RMB 4.2 trillion in 2008 (Table 3), in a year when demand was sharply reduced by the economic slowdown. It surpassed the average annual growth of RMB 3-4 trillion in the boom years of 2005-2007, and even exceeded the government's target of RMB 4 trillion. In 2009, new lending more than doubled from the 2008 level, to RMB 9.6 trillion. In the first quarter alone it expanded by RMB 4.6 trillion.

C. The Perfect Storm

The stimulus was spinning out of control. In Table 3, I assemble available data on fiscal deficits, growth in bank credit, and corporate bond issuance for 2008, 2009 and 2010. The huge fiscal injection was joined, and indeed dwarfed by what some commentators have called "a tsunami of credit expansion." Together they injected new funds totaling RMB 4.8 trillion into the economy in 2008, and more than double that in 2009.

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29 Huo Kan, Wang Changyong and Wang Jing, "Can Stimulus Light China's Consumer Fire?" Caijing, 6, March 2009, at http://english.caijing.com.cn/2009-03-06/110114349.html.

30 Liu Weixun, Chen Yong and Zhang Xiangdong, "Gaotie yinji" (Secret Ills of High-Speed Rail), Economic Observer Online (in Chinese), 22 February 2011.

Table 3. Fiscal and Credit Expansion

(RMB billion)	2008	2009	2010
Fiscal deficit	111	950	650*
New bank loans	4,178	9,622	7,932
New bond finance	502	935	-465
Total	4,791	11,506	8,117

* This is equal to the reported deficit of RMB 1 trillion minus set-asides for the Budget Stabilization Fund and rolled over commitments.

Source: Chinese statistical yearbook, China Data Online, and author's estimates.

In Table 4, I estimate the size of the stimulus effort during the past three years. To derive the net effect of the stimulus program, I distinguish between the "normal" growth in credit that accompanies economic expansion, from the extraordinary growth created by stimulus. I use the average credit growth of 15 percent per annum during the 2003-2007 period as the norm, and subtracted RMB 3.93 trillion, 4.55 trillion and 6.0 trillion as normal credit growth in 2008, 2009, and 2010, respectively. For new bond finance, I have simply taken half of the new addition each year, since it is not possible to define "normal" for such a nascent sector.[31] These figures show that altogether, a conservative estimate would place the stimulus at RMB 9.5 trillion, or 27 percent of GDP over the 27 months. This was 2.4 times the size of the announced stimulus package. In 2009 alone it was RMB 6.5 trillion, or 19.3 percent of the current year GDP.

Table 4. Estimated Size and Composition of Stimulus

Stimulus (RMB billion)	2008	2009	2010
Fiscal deficit	111	950	650
Net new bank loans	252	5070	1936
Net new bond finance	251	467	-232
Total	**614**	**6487**	**2354**
Stimulus (% GDP)			
Fiscal deficit	0.4%	2.8%	1.6%
Net new bank loans	0.8%	15.1%	4.9%
Net new bond finance	0.8%	1.4%	-0.6%
Total	**2.0%**	**19.3%**	**5.9%**

Source: China Data Online, and author's estimates.

This outcome was hardly surprising given the combination of the large fiscal injection, the relaxation of fiscal rules on local government debt, the substantial liberalization of the financial sector, and, especially, the politicization of the whole stimulus effort. Altogether, these created an extraordinarily enabling environment, and it was met with local governments (and ministries) whose incentives were all in favor of expansion.[32] And they were aided by banks – especially state-owned banks that have been told by

[31] Bond issuance increased from RMB 9 billion in 2003 to 396 bn in 2005, 648 bn in 2007, to 2085 bn in 2009.

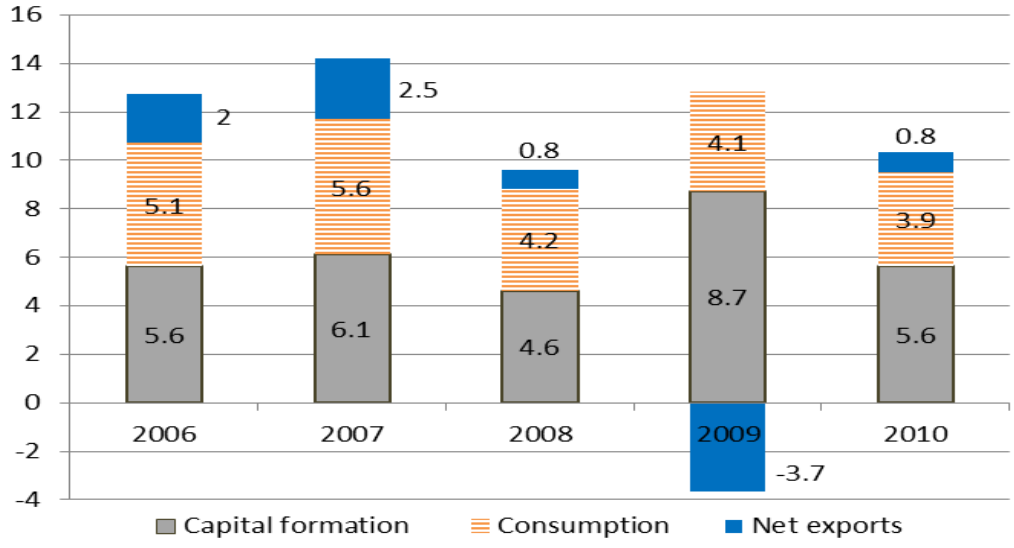
[32] In the words of one commentator, "Who wants to be the mayor who reports that he didn't get 8 percent GDP growth this year? Nobody wants to come forward with that… And if that's the easiest way to achieve growth, then you build."

government to open their spigots. Loan officers, too, were eager to expand their balance sheets, especially for investments that appear to be essentially risk-free since they are implicitly or explicitly guaranteed by government.

V. THE EXIT AND POST-MORTEM

The stimulus program worked. It produced growth and jobs – the two ingredients for stability that the top leaders most urgently sought. Growth began to pick up in 2009, accelerating through the year. Quarterly growth rose from 5.3 percent in Q1 to 5.7 percent in Q2, 8.6 percent in Q3, and 13 percent in Q4 (Figure 3 above). For the whole year it reached 8.7 percent – comfortably above the 8 percent that has long been considered the minimum required to keep economic problems from spilling over into social problems. This was an impressive achievement in the face of collapsing exports, which had contributed a shocking minus 3.7 percent to overall growth in 2009 (equal to a minus 41 percent of total growth), after falling to 0.8 percent in 2008, from 2.5 percent in 2007 (Figure 7).

Figure 7. Sources of Growth (% GDP)



Source: CSY 2010 and DragonWeek (March 2011).

Employment, too, grew robustly. The fear of massive unemployment among migrant workers never materialized, and indeed government officials estimated that aggregate employment grew by 8.5 million in the first three quarters of 2009, and could reach 12 million by year end.[33]

[33] Yang Yiyong, "The employment target for 2010 should be adjusted upwards," 21st Century Business Herald, November 28, 2009. Accessed at http://www.21cbh.com/HTML/2009-11-30/155834.html (accessed 5/18/2011).

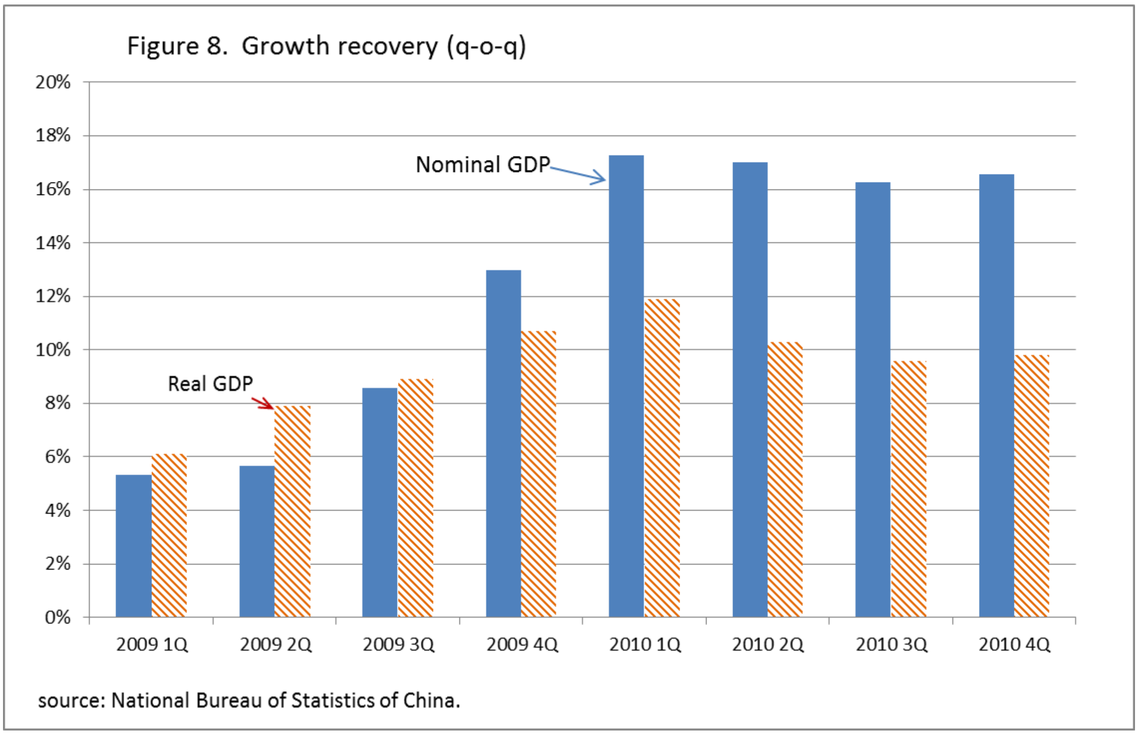
But the costs were high. First, all of the growth came from investment, which jumped to 66 percent of GDP, and investment in infrastructure leapt to 16 percent of GDP. As seen in Figure 7, gross capital formation contributed 8.7 percent of GDP to growth, equal to total net growth in 2009. This was nearly double the 4.6 percent in 2008. More importantly, the 96 percent share of growth from capital formation was double the already-high level of 48 percent during 2003-2007, raising alarm on the efficiency of investment and project selection. It also set back the policy goal, pronounced annually since 2003/2004 and enshrined in both the 11th and 12th five year plans (2006-2010 and 2011-2015), to rebalance the economy toward more consumption, and move away from the investment-driven growth model of the past.

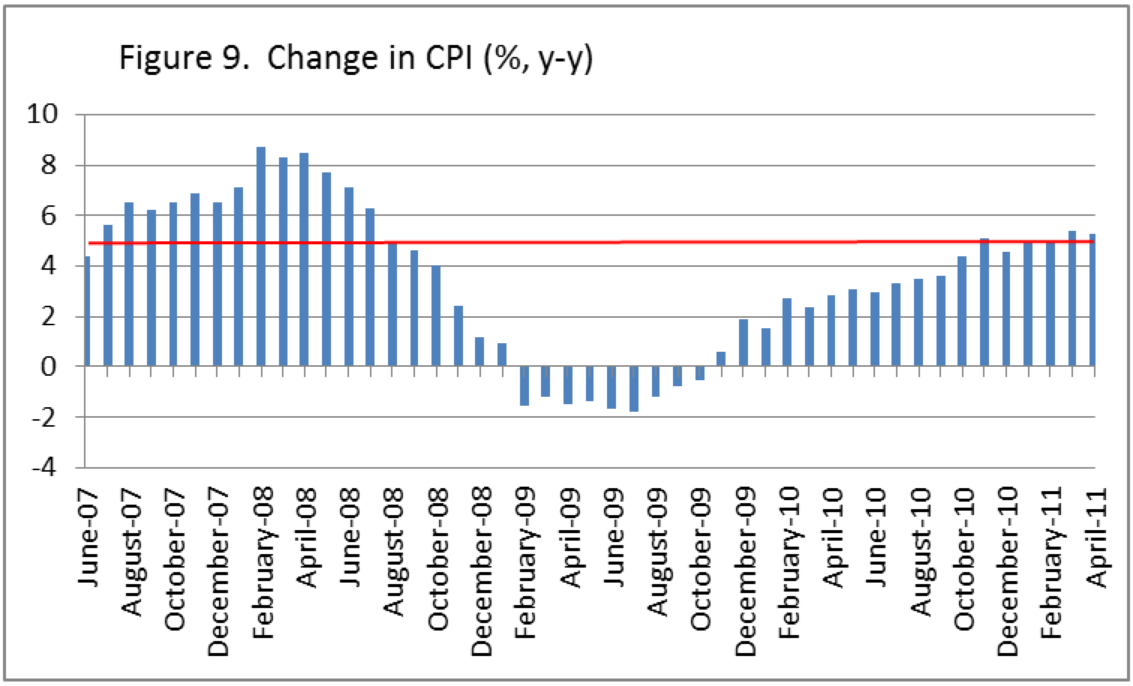
Second, in the rush to ensure quick implementation of the stimulus program, the government went beyond pumping in new fiscal spending and easing monetary policy to changing fiscal rules and liberalizing financial regulations. While these changes were on the whole consistent with market reforms, they were sometimes pushed too far and too fast amidst the campaign style rhetoric coming from both the government and party urging “support” for the stimulus program. In the process, much painstaking progress on governance reform was reversed – building professionalism in the banking sector and cleaning up balance sheets, improving budgeting and public investment management, refocusing local governments on public service provision rather than investment, etc. When combined with the huge spike in easy credit that allowed state-owned enterprises and government agencies – especially at the local levels, to extend their reach, the process has also seen the private sector being squeezed out in some industries and services, reversing the decades-long retreat of the state from economic activities.[34]

A. Exiting from Fiscal and Monetary Expansion

By the end of 2009, the economy showed firm signs of rebound. Growth was accelerating quarter-by-quarter (Figure 8). After nearly a year of deflation, prices were trending gradually upward again (Figure 9). With worry about the stimulus program growing through 2009, and with the popular economics press filled with talk of impending inflation, the government began in early 2010 to take measures to tamp down the growth momentum and slow credit creation.

[34] Through 2010, the press was filled with a rising chorus of complaints about *guojin mintui*, “the state advances and the people retreat,” with SOEs “consolidating” at the expense of private enterprises especially in the coal and steel industries.





The fiscal stimulus had been scheduled to be completed by year end 2010. In fact, even with the unexplained additional injection of RMB 572 billion during 2010, the deficit had fallen to RMB 650 billion, below 2 percent of GDP, due to strong revenue growth. The 2011 draft budget plans for a deficit of RMB 900 billion, but it will be less if, once again, revenues exceed the budgeted amount.

Exiting the financial stimulus was more protracted. On 7 January, the central bank raised the discount rate by 4 basis points. A few days later it raised the reserve ratio, and began open market operations to repurchase RMB 30 billion of bonds over 91 days.[35] These signals, though, failed to reduce the pace of bank lending. In the first two weeks in January, new loans totaled RMB 1.1 trillion, equal to the frenetic pace of the blowout first quarter of 2009. An emergency meeting of the monetary policy committee was convened on 18 January, and administrative measures were reportedly adopted at a 22 January meeting of the leadership, to enforce credit tightening.[36] Although the government denied it, credit quotas were once again rumored to be enforced. Even so, as seen in Table 3 above, credit expansion remained very high for the year, nearly RMB 8 trillion. Moreover, as banks tightened lending, there was a surge in the growth of off-balance sheet financial products, including bankers' acceptances, designated loans, and loans issued by trust companies. The central bank estimated these to have more than doubled from RMB 1.6 trillion in 2009 to RMB 3.8 trillion.[37] In total, then, despite the government's efforts, credit expansion in 2010 stayed at roughly the same level as 2009.

Monetary tightening appears finally to be taking effect in 2011. New loans totaled RMB 2.2 trillion, compared to 2.6 trillion in Q1 of 2010. At this pace it is staying on track to meet the government's target of RMB 7.2 trillion. The government has cracked down on lending by trust companies, and this is finally slowing the growth of off-balance sheet financing. However, designated loans reportedly more than doubled in Q1 y-o-y, with large SOEs and listed companies profiting from high interest rate lending to property developers, whose access to bank loans is being sharply curbed in the current tightening.[38] Even so, monetary policy has moved toward normalization, and the growth rate in investment and GDP have moderated somewhat since 2010, with recent reports indicating some easing of inflationary pressures.[39]

B. Managing Local Government Debt

The super-sized stimulus program has left in its wake a huge run-up in local government debt whose dimensions and potential effects are still not yet known. Since mid-2009, this has come to the attention of top policy makers, and much investigative effort has been unleashed to try to bring it under control.

In spite of a decade-long effort at building a debt reporting system, China has no reliable national figures on local government debt. A main reason is that aside from the bonds issued by MOF on behalf of local governments, local government debt is primarily accumulated through local government investment corporations (LICs).[40] These are commonly called local government financial platforms (*difang zhengfu rongzi pingtai*). There are no reliable national statistics on LICs because there is no system in place that requires LICs to report on their activities and financial status.

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35 The Central Bank Sends Signals of Tightening, January 22, 2010. http://finance.ifeng.com/news/special/jshbzc/index.shtml (accessed 5/21/11).

36 Sun Jianfang, Cheng Zhiyun, and Hu Rongping, "Clear signs of monetary tightening: the central bank returns to the use of administrative methods," *Jingji Guanchabao*, January 22, 2010, http://finance.ifeng.com/news/special/jshbzc/20100122/1747319.shtml (accessed 5/21/11).

37 GaveKal Dragonomics, 28 February 2011, p. 2/3.

38 GaveKal Dragonomics, China Economic Outlook, April 2011.

39 Ibid, and World Bank, China Quarterly Update, April 2011.

40 CBRC estimated that local government debt totalled RMB 11 trn at year end 2009, and LIC debt was RMB 7.38 trn.

Local Government Investment Corporations (LICs)

LICs are not new. Since the late 1980s, local governments – mostly at the municipal and provincial levels, have been creating corporate entities to undertake the task of raising funds to finance public investment, and they are variously called urban development investment corporations (UDICs), highway or transport corporations, and the like. These corporations were an innovation to allow local governments to work around a central contradiction in the intergovernmental fiscal system in China, under which local governments are assigned the primary responsibility for the provision of public services including infrastructure, but they are not given the right to borrow, nor are they assigned enough revenues to take on this responsibility. LICs were initially created as financially independent, single-purpose entities often for the purpose of taking on loans from international financial institutions. Being financially independent restricted their undertakings to those with the capacity for debt servicing and repayment, and LICs were prevalent in the construction and operation of toll roads, power companies, water companies, and utilities.

A breakthrough came in 1988, when Shanghai created the first broad-based investment corporation to undertake investment in urban infrastructure, the General Corporation of Shanghai Municipal Property, and gave it the mission to coordinate and provide for the construction of facilities such as water, sewerage, roads, utility hook-ups, etc. To finance these tasks, the corporation was assigned earmarked revenues from the municipal budget, and authorized to borrow from banks and issue corporate bonds (Appendix A).[41] Its creation made possible a quantum leap in the financing available for investments in infrastructure to support urban renewal and expansion in Shanghai. Over time, the model gradually spread to other municipalities, and LICs have come to play a key role in financing urbanization in many localities. Typically, the LICs raise and bundle together bank loans and other financing, using a variety of municipal assets including budgetary and off-budget revenues as equity and collateral. Increasingly, with urbanization raising land values, land has become the principal asset backing LICs, and municipal governments have also increasingly relied on off-budget receipts from land lease sales to finance debt service in these LICs.

Under the stimulus program, LICs were on the frontline in competing for investment funding and bank credit. Indeed, with three-quarters of the stimulus investments made by local governments, the LICs were, as a group, the biggest players. In the sea of liquidity and permissiveness, they proliferated and greatly expanded their scale of operation. According to the China Banking Regulatory Commission (CBRC), LICs grabbed nearly one-third of all new loans issued in 2009, and increased their total debt by RMB 3 trillion to 7.38 trillion at year end.[42] In 2010 Q1, LICs accounted for 40 percent of all new bank loans, and their total debt may have reach RMB 10 trillion by year end 2010.[43] It is the investment hunger of LICs/local governments that has helped push the economy into overheating and contributed to the housing bubble. In turn, the dependence of LICs/local governments on rising land values severely constrains government options in deflating the bubble.

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41 Christine Wong (2001). "Converting Fees into Taxes: Reform of Extrabudgetary Funds and Intergovernmental Fiscal Relations in China," in Richard Bird, Robert Ebel, and Christine Wallich, Eds., *Decentralization of the Socialist State: Intergovernmental Finance in Transition Economies*, World Bank, (Chinese edition), Beijing: Central Translation Press.

42 "A Tight Hoop Should be Put on Local Government Financing Platforms", *Investors Bulletin*, June 6, 2010. http://finance.ifeng.com/news/special/dfzwwj/20100606/2282325.shtml (accessed 20/5/2011).

43 Ibid, and Wei Jianing (2010).

In aggregate terms, the implied level of local government debt (of perhaps RMB 15 trillion in total)[44], equal to about 38 percent of GDP in 2010, is not especially alarming. Servicing the debt, though, may pose problems for local governments given how highly constrained their budgets are under the present intergovernmental fiscal system, where they have no taxing powers, and are already straining to meet growing expenditure needs. As a result, the UDIC/LIC model is heavily reliant on rising land valuations to supply investment funding and debt servicing, but it's a revenue source that is highly cyclical and volatile. In addition, some localities have taken on far larger debts, and they will be especially vulnerable. The central bank's Tianjin branch, for example, reported that the municipality's LICs doubled their debt in 2009.[45]

Equally worrisome for the national government is the extent to which the banking sector is dependent on the LIC loans and their quality. Nationwide, LICs account for one-fifth of all outstanding bank loans, but the degree of exposure varies greatly across banks and regions. This share is highest for the China Development Bank, which has had the longest history of lending to LICs, and where LICs accounted for more than half of total loans in 2009. In Tianjin, LICs took 62.5 percent of all new loans issued in the city in 2009, and they were 17 of the 20 largest recipients of new loans during the year.[46]

Since mid-2009, the government has been engaged in a massive catching up exercise, with several regulatory agencies undertaking investigations and surveys of LICs to collect information, including the CBRC, the Audit Office, the MOF and NDRC. They found numerous and serious problems with LIC loans. The most common were that fiscal guarantees were widely used as backing for the loans in lieu of collateral, and that when land is held as collateral, excessively optimistic valuations were placed on it. In Tianjin, the central bank found that loans backed by traditional collateral accounted for only 22 percent of the 2009 lending to LICs, while 71 percent were backed only by guarantees.[47] Nationwide, the CBRC reported that 47 percent of all LIC debt were guaranteed by fiscal revenues, and it classified 26 percent of LIC debt as "high risk" at mid-year 2010.[48]

C. Reform Challenges for Macroeconomic Management in China

After more than three decades of market-oriented reform, the Chinese economy is highly decentralized, and the central government's ability to direct national policy implementation is attenuated. The stimulus program was intended to leverage fiscal inputs to produce a much larger effect through mobilizing other "social" resources. However, a decentralized system of investment finance requires a financial sector that has the capacity for appraising the viability of projects and the credit-worthiness of the borrowers. These conditions were clearly absent when the majority of the borrowers were LICs whose financial relationships with local governments are often ambiguous, and when the LICs were allowed to borrow for "bundles" of projects. Moreover, local government finances are themselves extremely complex and non-transparent. Fiscal resources are scattered across several budgetary and extra budgetary accounts; reporting is incomplete, and there is little coordination among them.

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44 This is based on the assumption that LIC debt constitutes two-thirds of all local government debt, a proportion derived from CBRC estimates for 2009. See fn 39.

45 Andrew Bateson, "A window onto local government debt in Tianjin," June 9, 2010. Accessed at http://blogs.wsj.com, June 11, 2010.

46 Ibid.

47 Ibid.

48 GaveKal, DragonWeek, Nov 8, 2010.

The stimulus program has once again exposed the Achilles Heel of China's macroeconomic management – the tendency toward overinvestment that is rooted in the growth orientation and soft budget constraint of state sector agents, including local governments. Hardening the budget constraints requires a system with clearly defined responsibilities and accountability, which are lacking in the current intergovernmental fiscal system.

The stimulus program, its implementation and exit have shown the extent to which the government continues to rely on administrative instruments, alongside indirect/market instruments, to manage the macro economy. The experience has shown both the advantages – quick results, and disadvantages – inefficiencies and distortions. The use of administrative controls is both a cause and symptom of the immaturity of markets. To rein in the build-up of local government debt, for example, the government will, in the short-term, resort to instituting freezes and caps on LICs, to buy time for building up an appropriate institutional and legal framework for improving their governance.

The bigger challenge, though, is to strengthen governance for the whole public sector to improve the efficiency and effectiveness of public expenditures and public investment. Reforming the intergovernmental fiscal system will be a prerequisite to strengthening accountability for the whole sector.

APPENDIX A. GENERAL CORPORATION OF SHANGHAI MUNICIPAL PROPERTY (SMPD)