

China's Government Debt: How Serious?

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This paper analyses China's foreign and domestic debt. Foreign debt poses no threat to China. Although China ranks high in terms of total foreign debt, the relative size of its foreign debt to GDP is small, and all its risk exposures are low. Also, China's foreign exchange reserves are much higher than total foreign debt outstanding. As for its domestic government debt, the figure is large but manageable. There are four major types: explicit fiscal debt which is the result of expansionary fiscal policy, unreported local government debt caused by the 1994 tax reform, state banks' bad loans resulting from fiscal and SOE reforms and which may become the largest fiscal liability, and finally, fiscal subsidies made to social security pension funds. Despite its debts, the Chinese government still has massive assets.

China's rising debt has caused great concern over the country's economic future. Estimates of the size of China's government debt vary dramatically, from 16% to 150% of GDP, with different components and different estimations of each component. The Chinese government only considers explicit fiscal debt, i.e., government debt caused by budget deficits, and insists that its debt is only about 16% of GDP, low by international

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standards.¹ However, by including state banks' non-performing loans and social security pension debt, some have concluded that China's government debt is as high as 150% of GDP!² Predictions of an inevitable "collapse" of the Chinese economy due to high government debt and other problems have been reported recently. Debt problems have indeed led to economic crises in many developing countries. A clear understanding of China's domestic debt problem is necessary. This paper also provides a comprehensive analysis of China's foreign debt.

For several decades, the Chinese government followed a balanced budget philosophy. When deficits appeared in some years, the government tried to run surpluses in others. China's budget policy evolved through four periods. In the first period (1949–57), the government financed deficits through both domestic and foreign borrowing. In 1949, the People's Republic was founded. The new government confronted an extreme shortage of fiscal revenues. To finance large budget deficits, two methods were used, money creation and government bond issuance.³ Meanwhile, China and the Soviet Union signed the China–Soviet Friendship Allies Mutual Assistance Treaty, and the Chinese government borrowed from the Soviet Union to develop some essential projects.

In the second period (1958–78), China issued neither foreign nor domestic debt. In the late 1950s the relationship between China and the Soviet Union deteriorated due to ideological differences. The Chinese government's foreign borrowing from the Soviet Union came to an end. From 1958–78, China had no access to the international capital market, and was forced to adopt a development policy based on total self-reliance. Also from 1959 to 1980, China did not issue any domestic debt and monetarised budget deficits when necessary. For example, during the three-year Great Leap Forward movement (1958–60), the government ran huge budget deficits and financed the deficits entirely by money creation, causing high inflation and economic chaos. The government learned a lesson and since then has followed a budgetary policy called "balanced-budget or a-small-surplus policy" for many years.

¹ See Xiang Huaicheng, "A Report on the 2001 Central and Local Government Budget Execution and Draft 2002 Budget," 5th Session of the 9th Plenary of the National People's Congress, 2002.

² See *Business Week*, 6 May 2002. <www.businessweek.com> [6 Jul. 2002]. Other estimates are in between. See, for example, Nicolas Lardy, *Financial Times*, 22 Jun. 2001; Jia Kong and Zhao Quan-Hou, "The Size of China's National Debt," *World Economy and China* 9 (2001); International Monetary Fund, *World Economic Outlook* (Washington DC, Apr. 2002), pp. 36–7; Fan Gang, "China's NPL and National Comprehensive Liability" (manuscript, National Economic Research Institute, China Reform Foundation, 2002); and *Economist*, 13 Jun. 2002.

³ See Chen Yun, "Overcoming the Severe Fiscal Difficulties," in *Collection of Chen Yun's Articles: 1949–1956* (Beijing: People's Publishing House, 1984), pp. 6–7.

The third period (1979–93) is characterised by limited foreign and domestic borrowing. Entering the 1970s, the international capital market gradually became accessible to China. In 1978 China started economic reforms and adopted an open-door development strategy. China commenced borrowing from abroad in 1979. Domestic debt re-emerged in 1981. The decentralisation-oriented fiscal reforms resulted in large budget deficits, forcing the government to borrow from the public. However, up to the early 1990s, keeping government debt as low as possible was still the dominant strategy, and the Ministry of Finance was allowed to borrow from the People's Bank of China to finance a portion of its deficits.

The fourth period began in 1994 and featured a large increase in domestic borrowing and a decrease in foreign borrowing. In 1993 the government passed a law, prohibiting the Ministry of Finance from overdrawing money from the People's Bank. Since then the Ministry has had to finance all its budget deficits by issuing bonds. After the Asian financial crisis occurred in 1997, China adopted an expansionary fiscal policy and budget deficits increased at an extraordinary rate. At the same time, it dramatically reduced its foreign borrowing. Also in this period, state banks' bad loans, local government debt, and social security account deficits became serious issues.

In-depth analyses of China's foreign and domestic debt are still limited, although warnings of China's debt problems often capture media headlines. Jia and Zhao discussed the debt due to delayed wage payment, accumulated losses in the purchase and distribution of grain, state banks' bad loans, social security debt, as well as explicit fiscal debt. They are not optimistic about the overall situation of government debt.⁴ Lardy emphasised the worsening situation of China's debts. Based on his analysis of the state banks' non-performing loans, state asset management companies' debt, as well as implicit social security debt, he warned of China heading towards a possible full-blown fiscal crisis.⁵ Lin pointed out that China's pay-as-you-go social security system, which covers only the urban population, might not have a payment crisis despite the problem of an ageing population.⁶ China is in the process of industrialisation and rural migrants will enter industrial sectors and contribute to the social security funds. Fan constructed an index of national comprehensive liabilities. This index includes domestic fiscal debt, foreign debt and non-performing loans, but excludes social security debt. He argued that social security debt is already included in the non-performing loans and estimated that total Chinese government debt in 2002 would be about 72% of GDP.⁷

⁴ Jia and Zhao, "The Size of China's National Debt."

⁵ Lardy, *Financial Times*.

⁶ Lin Shuanglin, "The Effect of an Expansion of Pay-As-You-Go Social Security System in China," *International Journal of Economic Development* 1, No. 4 (1999).

⁷ Fan, "China's NPL."

The existing analyses of China's government debt are far from satisfactory. First, when discussing government debt, government assets were not emphasised, leading to an exaggeration of China's government debt problem. Second, the causes of various government debts were not discussed adequately, leaving the impression that government debts were caused by new policy mistakes. Third, there is no consensus on fiscal responsibility for social security payments and social security debt was either overestimated or underestimated in calculating China's total debt. Fourth, local government debts were not considered in the calculation of total government debt. This paper intends to fill the gap in the literature on China's government debt and provide a new evaluation of China's government debt problem.

The paper first analyses China's foreign debt. It examines the size of foreign debt, the composition of foreign debt, safety indicators, and distribution of foreign debt among provinces. It also discusses the ratio of foreign debt outstanding to foreign exchange reserves. It demonstrates the historical trend of foreign borrowing and foreign debt in China and explains why China's foreign debt is not high.

This is followed by an analysis of China's domestic debt which mainly includes the explicit fiscal debt caused by fiscal deficits, unreported local government debt, state banks' bad loans, and government fiscal liability for pension payments. This paper explores the reasons for the rise, size, and development trend of each type of debt, and raises the issue of the effect of China's government debt on the economy, and provides policy suggestions on how to reduce government debt.

Foreign Debt

Developing countries borrow from abroad usually to fill the savings and investment and the foreign exchange and capital imports gaps, to invest and reap the high marginal product of capital due to abundant labour, and to build infrastructure for facilitating domestic private investment and attracting foreign direct investment (FDI). China's savings rate has been extraordinarily high (around 40% of GDP) and the country does not really need foreign savings to fill the savings and investment gap. Early in the economic reforms, China needed foreign exchange to purchase foreign equipment and machinery but not now. It has borrowed from abroad mainly to take advantage of the low interest loans to build up its infrastructure.

Foreign debt can be classified by source: foreign government loans (funds borrowed from foreign governments), loans from international financial institutions (such as the International Monetary Fund and the World Bank), and commercial bank loans (funds borrowed from commercial banks). Foreign debt can be classified by the maturity time as: short-term (maturing within one year) and long-term (maturing in more

than one year). Foreign debt can also be classified as government loans (borrowed by government), government guaranteed loans (borrowed by private agents but guaranteed by the government to be repaid), and private non-guaranteed loans (loans from commercial banks without government guarantee).

Size of Foreign Debt

Total debt is an accumulation of borrowing and interest. Table 1 shows China's annual foreign as well as domestic borrowings from 1950 to 2001. Since the Chinese *renminbi* (RMB) was devalued significantly after the launch of the economic reforms, I have converted the RMB figures into US dollars to give a more precise picture of China's foreign borrowing. Foreign borrowing was \$4.3 billion in 1981, \$6.2 billion in 1993 (highest ever since 1979), declined since 1994, down to zero in 1999, and stood at 0.3 billion in 2000. Starting from 2001, foreign borrowing also includes the three-month international trade loans. That is why the borrowing figure is high in 2001.

China's total accumulated foreign debt had been increasing until 1999 and then started to decline. Total debt was \$15.8 billion in 1985, \$52.45 billion in 1990, \$106.59 billion in 1995, \$151.83 billion in 1999, and \$145.73 billion in 2000,⁸ making China the fourth largest debtor among developing countries, behind Brazil, Russia, and Mexico.⁹ At the end of 2001, it stood at \$148.5 billion.¹⁰

The ratio of China's total foreign debt to GDP was 5.2% in 1985, 15.2% in 1995 and 13.5% in 2000. China's debt-GDP ratio is much lower than that for heavily indebted countries. Thus, the World Bank has classified China as one of the least indebted countries. Most of China's debt is public- or public-guaranteed. Before 1992, all the debt was publicly guaranteed. Public- or public-guaranteed long-term debt accounted for about 98.9% of the total long-term debt in 1995, and 80% in 2000.¹¹ The remaining debt is private non-guaranteed. The government is responsible for all the publicly-guaranteed foreign debt. Thus, when calculating government liabilities only the guaranteed foreign debt should be included. China's public- or public-guaranteed foreign debt was about 11% of GDP in 2000.¹²

⁸ See National Bureau of Statistics of China, *Statistical Yearbook of China* (Beijing: China Statistical Press, 2001).

⁹ See World Bank, *Global Development Finance* (Oxford: Oxford University Press, 2002).

¹⁰ See People's Daily, 23 Apr. 2002. Including the international trade loans for three months, China's foreign debt was \$170.1 billion. See National Bureau of Statistics of China, *China Statistical Yearbook, 2002*.

¹¹ See World Bank, *Global Development Finance*.

¹² Calculations based on data from World Bank, *Global Development Finance*, and National Bureau of Statistics of China, *China Statistical Yearbook, 2001*.

Table 1: *Government Revenues from Debt Issues in China (in billions)*

Year	Total Borrowing (yuan)	Domestic Borrowing (yuan)	Foreign Borrowing (yuan)	Foreign Borrowing (US\$)	Others Borrowing (yuan)
1950	0.30	0.30	0.00	0.00	0.00
1951	0.82	0.00	0.55	..	0.27
1952	0.98	0.00	0.98	..	0.00
1953	0.96	0.00	0.96	0.39	0.00
1954	1.72	0.84	0.88	0.36	0.00
1955	2.28	0.62	1.66	0.67	0.00
1956	0.72	0.61	0.12	0.05	0.00
1957	0.70	0.68	0.02	0.01	0.00
1958	0.80	0.80	0.00	0.00	0.00
1959–78	0.00	0.00	0.00	0.00	0.00
1979	3.53	0.00	3.53	2.35	0.00
1980	4.30	0.00	4.30	2.87	0.00
1981	7.31	4.87	7.31	4.29	0.00
1982	8.39	4.38	4.00	2.12	0.00
1983	7.94	4.16	3.78	1.92	0.00
1984	7.73	4.25	3.48	1.50	0.00
1985	8.99	6.06	2.92	1.00	0.00
1986	13.83	6.25	7.57	2.19	0.00
1987	16.96	6.31	10.65	2.86	0.00
1988	27.08	9.22	13.86	3.72	4.00
1989	28.30	5.61	14.41	3.83	8.28
1990	37.55	9.35	17.82	3.73	10.38
1991	46.14	19.93	18.01	3.38	8.20
1992	66.97	39.56	20.89	3.79	6.51
1993	73.92	31.48	35.79	6.21	6.65
1994	117.53	102.86	14.65	1.70	0.00
1995	154.98	151.09	3.89	0.47	0.00
1996	196.73	184.78	11.95	1.44	0.00
1997	247.68	241.20	6.48	0.78	0.00
1998	331.09	322.88	8.22	0.99	0.00
1999	371.50	370.21	0.00	0.00	1.29
2000	418.01	415.36	2.31	0.28	0.00
2001	460.40	448.35	12.05	1.46	0.00
2002	..	592.90

Notes: 1. Government revenues from foreign borrowing in terms of US dollars are obtained by using the average exchange rate of yuan against US dollars in each year from 1981 to 2000. See *China Statistical Yearbook*, 2001, p. 586. The exchange rate for 1953 to 1973 was US\$1 = 2.46 yuan and that for 1974 to 1980 was US\$1 = 1.5 yuan.

2. Between 1951 and 1987, 'others' means borrowing from banks. From 1988 to 1998 it refers to specific borrowing. Thereafter, it is additions to the government debt repayment fund.

3. Starting from 2001, foreign debt includes international trade loans within three months.

Sources: China's Ministry of Finance, *Finance Yearbook of China* (Beijing: Fiscal Publishing House, 1997, p. 457; 2001, p. 249); National Bureau of Statistics of China, *China Statistical Yearbook* (Beijing: China Statistical Press, 2002), p. 267; Xiang, "A Report on the 2001 Central and Local Government Budget Execution and the Draft of 2002 Budget," 5th Session of the 9th Plenary of the National People's Congress, 2002.

Composition of Foreign Debt

Table 2 shows China's foreign debt by source and maturity between 1985 and 2001. From 1990 to 2000, borrowing from commercial banks and other sources decreased from 72% to 65%, while borrowing from foreign government and international financial institutions increased from 28% to 35%. A large proportion of borrowing from foreign government and international organisations was under concessionary terms.

Table 2: *China's Total Foreign Debt and its Composition*

Year	Total Debt (US\$ billion)	Sources of Debt (%)				Ratio of long-term Debt to Total Debt (%)
		Foreign Government	Int'l Financial Organisations	Commercial Banks	Others	
1985	15.828	23.0	7.5	40.8	28.8	59.5
1986	21.483	23.0	12.2	35.4	29.4	77.8
1987	30.205	16.6	12.4	40.3	30.7	81.1
1988	40.003	16.6	10.6	47.5	25.3	81.7
1989	41.299	16.8	12.9	52.5	18.5	89.7
1990	52.545	16.0	12.0	55.5	16.5	87.1
1991	60.561	15.7	11.7	52.2	20.5	83.0
1992	69.321	16.6	12.1	51.2	20.1	84.4
1993	83.573	17.1	12.5	49.2	21.2	83.8
1994	92.806	21.1	14.0	51.0	13.9	88.8
1995	106.590	20.7	13.9	49.4	16.0	88.8
1996	116.275	19.1	14.4	49.0	17.5	87.9
1997	130.960	15.9	14.7	49.4	20.0	86.1
1998	146.043	15.4	15.7	46.7	22.2	88.1
1999	151.830	17.5	16.5	43.1	22.9	90.0
2000	145.730	16.9	18.1	65.0	0.0	91.0
2001*	170.110	13.9	16.2	57.2	12.7	70.3

Note: * A new standard was used for measuring foreign debt in 2001 that includes the international trade loans within three months. Thus, the figure for foreign debt in 2001 is not comparable with those in the previous years. Using the old measures, foreign debt in 2001 would be \$148.500 billion (see *People's Daily*, 23 Apr. 2002).

Sources: National Bureau of Statistics of China, *China Statistical Yearbook*, 2001, 2002.

Most of China's foreign debt is long-term. In 1985 about 60% was long-term, and this rose to 91% in 2000 with only 9% being short-term. Compared with heavily-indebted countries, this figure is not high. In 1996 just before the Asian financial crisis, the ratio of short-term debt to total debt was 57.5% in Korea, 25% in Indonesia, 19.9% in Philippines, and 39.6% in Thailand.

Most of China's foreign debt is in US dollars and Japanese yen. In 1985, about 50% was in Japanese yen and 24% in US dollars. In 2000, about 15.3%

was in Japanese yen and 74% in US dollars.¹³ Japan has been China's largest creditor, with \$2,404.81 million owed in 1996. That year the World Bank was second, with \$1,880 million, the US ranked third with \$1,160.53 million, and the Asia Development Bank was fourth with \$1,102 million.¹⁴ Hong Kong, Taiwan, and Singapore had large amounts of direct investment in China, but did not have much tied to loans.

Safety Indicators of Foreign Debt

Table 3 lists the ratio of debt to exports of goods and services (XGS), the debt-GNP ratio, the ratio of total debt service to exports of goods and services, and the ratio of foreign debt to foreign exchange reserves. The first three are commonly used indicators of risk. I believe that the fourth one is another important indicator.

Table 3: *Risk Measures of Foreign Debt in China*

Year	EDT/ XGS	EDTc/ GNP	TDS/ XGS	EDT/ FER
1985	0.560	0.052	0.027	5.99
1986	0.721	0.073	0.154	10.37
1987	0.771	0.094	0.090	10.33
1988	0.871	0.100	0.065	11.86
1989	0.864	0.092	0.083	7.44
1990	0.916	0.135	0.087	4.74
1991	0.919	0.149	0.085	2.79
1992	0.879	0.144	0.071	3.57
1993	0.965	0.139	0.102	3.94
1994	0.780	0.171	0.091	1.80
1995	0.724	0.152	0.076	1.45
1996	0.677	0.142	0.060	1.11
1997	0.632	0.145	0.073	0.94
1998	0.704	0.152	0.109	1.01
1999	0.695	0.153	0.113	0.98
2000	0.521	0.135	0.092	0.88
2001*	0.568	0.147	0.075	0.80

Notes: EDT = total debt stock, XGS = exports of goods and service; GNP = gross national product; TDS = total debt service (interest payments plus principal repayments); FER = foreign exchange reserves. See also the note under Table 2.

Sources: National Bureau of Statistics of China, *China Statistical Yearbook*, 2001, 2002.

¹³ See World Bank, *Global Development Finance*.

¹⁴ China, Ministry of Finance, *Finance Yearbook of China* (Beijing: China Fiscal Publishing House, 1997).

The lower these measures, the less risky is a country's foreign debt. As can be seen, the ratio of debt to XGS was 96.5% in 1993 (highest for China) and 52.1% in 2000. The debt-GNP ratio was 17.1% in 1994 (highest) and 13.5% in 2000, and the ratio of total debt service to exports was 15.4% (highest) in 1986 and 9.2% in 2000. In 2000, for all developing countries the average ratio of debt to XGS was 114.3%, the average debt-GNP ratio was 37.4%, and the ratio of total debt service to exports was 17%. By all measures, the risk exposure of China's foreign debt is lower. Moreover, the ratio of China's foreign debt to foreign exchange reserves declined from 1,190% in 1988 to only 88% in 2000, i.e., China's foreign exchange reserves were higher than foreign debt outstanding. This ratio is still decreasing.

Regional Distribution of Foreign Debt

Foreign borrowing has not been equal among the provinces and regions of China. Shanghai, Guangdong, Tianjin, Beijing, Shandong, and Liaoning are amongst the largest, while Guizhou, Tibet, Gansu, Qinghai, and Inner Mongolia are the lowest. The latter also have less foreign direct investment. Hainan, Shanghai, and Tianjin had the highest borrowing-GDP ratio. For example, in 1995, this ratio was 9.2% for Hainan, 6.9% for Shanghai, and 5.3% for Tianjin. For Inner Mongolia, Gansu, and Qinghai it was negligible.¹⁵

Reasons for Low Foreign Debt

Why is China's foreign debt low? First, China has learned painful lessons from its own experience and that of other countries. As mentioned earlier, China borrowed a considerable amount from the Soviet Union in the early 1950s. When the two countries broke relations in the early 1960s, China was forced to repay the debt and interest. After the Great Leap Forward movement from 1958 to 1960 and three years of agricultural shortfalls from 1959 to 1961, the Chinese economy was on the verge of collapse. With great difficulty, China repaid all the debt and interest to the Soviet Union and thereafter followed Mao's policy of self-reliance. Moreover, the debt crises in Latin America in the 1980s and 1990s, and the recent Asian financial crisis all reminded China to be cautious in foreign borrowing.

Second, China's savings rate is extremely high. In 1999, the savings rate was 42%, while the investment rate was 40%.¹⁶ Thus, China does not have a shortage

¹⁵ National Bureau of Statistics of China, *Twenty Years' Regional Statistics after Reforms and Opening-Up* (Beijing: China Statistical Press, 1997).

¹⁶ World Bank, *World Development Report* (Oxford: Oxford University Press, 2000/1).

of funds. In fact, the governor of the People's Bank stated in Mar. 2002 that China has a surplus of capital.¹⁷ Third, China has accumulated huge foreign exchange reserves. These have been increasing, from \$0.84 billion in 1979 to \$165.6 billion in 2000, second only to Japan, who had \$354.9 billion in 2000.¹⁸ It was recently reported that China's foreign exchange reserves had reached \$242.76 billion at the end of Jun. 2002, larger than total outstanding foreign debt.¹⁹ Fourth, China has attracted large amounts of foreign advanced technologies through FDI. This approach is recognised as an especially good form of foreign capital utilisation. Total FDI recently reached more than \$400 billion.

To sum up, the ratio of China's foreign debt to GDP is low, most foreign debts are long-term, and all the indicators show that the degree of risk exposure on the foreign debt is low. Moreover, China's foreign exchange reserves are much larger than foreign debt outstanding. Thus, from a purely accounting perspective, foreign debt is not a problem for China.

Domestic Government Debt

The concern over China's government debt is mainly about domestic debt. Estimates of its size range widely with different components and different estimates for each component. This section discusses government debt accumulated from explicit fiscal deficits, local government debt, state banks' non-performing loans, and fiscal subsidies made to social security funds, and then provide an estimate.

Explicit Fiscal Debt

Explicit fiscal debt refers to accumulated government bonds issued for financing budget deficits. The fiscal deficit is the difference between government revenue and government expenditure. Table 4 shows government revenues, expenditures, and deficits from 1953 to 2002. The government budget deficits have been increasing since 1986. In the 1980s, they were relatively small. For example, in 1989 the budget deficit was 15.9 billion yuan. In 1993 a law was instituted which prohibited the Ministry of Finance from overdrawing money from the People's Bank of China, then in 1994 there was a tax reform. The Ministry of Finance began to finance all its budget deficits by issuing bonds. After the 1997 Asian financial crisis, the government adopted an expansionary fiscal policy to stimulate

¹⁷ See *People's Daily*, Mar. 2002.

¹⁸ See National Statistical Bureau of China, *China Statistical Yearbook*, 2001.

¹⁹ See *Guoji jinrong bao* (International Finance Daily), 4 Jul. 2002.

Table 4: *Revenues, Expenditures, and Deficits of Central and Local Governments (billion yuan)*

Year	Total Revenue				Total Expenditure				Deficits		
	Total	Central	Local	% of Centre	Total	Central	Local	% of Centre	Total	Central	Local
1953	21.32	17.70	3.62	83.0	21.92	16.21	5.72	73.9	-60	1.49	-2.10
1960	57.23	14.28	42.95	25.0	64.37	27.86	36.51	43.3	-7.14	-13.58	6.44
1965	47.33	15.61	31.73	33.0	46.00	28.42	17.58	61.8	1.33	-12.81	14.15
1970	66.29	18.30	48.00	27.6	64.94	38.24	26.70	58.9	1.35	-19.94	21.30
1975	81.56	9.66	71.90	11.8	82.09	40.94	41.15	49.9	-53	-31.28	30.75
1976	77.66	9.89	67.77	12.7	80.62	37.76	42.86	46.8	-2.96	-27.87	24.91
1977	87.45	11.39	76.06	13.0	84.35	39.37	44.98	46.7	3.10	-27.98	31.08
1978	113.23	17.58	95.65	15.5	112.21	53.21	59.00	47.4	1.02	-35.63	36.65
1979	114.64	23.13	91.50	20.2	128.18	65.51	62.67	51.1	-13.54	-42.38	28.83
1980	115.99	28.45	87.55	24.5	122.88	66.68	56.20	54.3	-6.89	-38.23	31.35
1981	117.58	31.11	86.47	26.5	113.84	62.57	51.28	55.0	3.74	-31.46	35.19
1982	121.23	34.68	86.55	28.6	123.00	65.18	57.82	53.0	-1.77	-30.50	28.73
1983	136.70	49.00	87.69	35.8	140.95	75.96	64.99	53.9	-4.25	-26.96	22.70
1984	164.29	66.55	97.74	40.5	170.10	89.33	80.77	52.5	-5.81	-22.78	16.97
1985	200.48	76.96	123.52	38.4	200.43	79.53	120.90	39.7	.05	-2.57	2.62
1986	212.20	77.84	134.36	36.7	220.49	83.64	138.66	37.9	-8.29	-5.80	-4.30
1987	219.94	73.63	146.31	33.5	226.22	84.56	141.66	37.4	-6.28	-10.93	4.65
1988	235.72	77.48	158.25	32.9	249.12	84.50	164.62	33.9	-13.40	-7.02	-6.37
1989	266.49	82.25	184.24	30.9	282.38	88.88	193.50	31.5	-15.89	-6.63	-9.26
1990	293.71	99.24	194.47	33.8	308.36	100.45	207.91	32.6	-14.65	-1.21	-13.44
1991	314.95	93.83	221.12	29.8	338.66	109.08	229.58	32.2	-23.71	-15.25	-8.46
1992	348.34	97.95	250.39	28.1	374.22	117.04	257.18	31.3	-25.88	-19.09	-6.79
1993	434.90	95.75	339.14	22.0	464.23	131.21	333.02	28.3	-29.33	-35.46	6.12
1994	521.81	290.65	231.16	55.7	579.26	175.44	403.82	30.3	-57.45	115.21	-172.66
1995	624.22	325.66	298.56	52.2	682.37	199.54	482.83	29.2	-58.15	126.12	-184.27
1996	740.80	366.11	374.69	49.4	793.76	215.13	578.63	27.1	-52.96	150.98	-203.94
1997	865.11	422.69	442.42	48.9	923.36	253.25	670.11	27.4	-58.25	169.44	-227.69
1998	987.60	489.20	498.40	49.5	1079.82	312.56	767.26	28.9	-92.22	176.64	-268.86
1999	1144.41	584.92	559.49	51.1	1318.77	415.23	903.53	31.5	-174.36	169.69	-344.04
2000	1338.01	698.61	551.43	52.1	1587.94	551.43	1036.51	34.7	-249.93	147.18	-485.08
2001	1637.10	857.80	779.30	52.4	1884.40	575.40	1309.00	30.5	-247.30	282.40	-529.70
2002	1801.50	1004.2	797.30	55.7	2111.30	641.20	1470.10	30.4	-309.80	363.00	-672.80

Notes: The figures before 2000 in this table do not include the revenues from issuing internal and external debt, nor interest payments on internal and external debt and basic construction expenditures financed by foreign debt. The figures on total government expenditures and central government expenditures include the interest payments on internal and external debt. The figures for 2002 are from the draft of the government budget.

Sources: China, Ministry of Finance, *Finance Yearbook of China*, 1997, 2001; Xiang, "A Report on the 2001 Central and Local Government Budget Execution and Draft 2002 Budget."

economic growth.²⁰ The government budget deficit increased from 58.3 billion yuan in 1997 to 247.3 billion yuan in 2001. The planned budget deficit in 2002 was 309.8 billion yuan.²¹

Deficits can be financed by either money or government bonds. Fearing the negative consequences of inflation, the government recently relied on bond issues to finance the deficit. It can be seen from Table 1, that such bonds amounted to 19.9 billion yuan in 1991 and 102.9 billion in 1994. Each year after 1994 was a record compared to previous years. In 2001, the government issued 460.4 billion yuan of government bonds, and in 2002 it planned to issue 592.9 billion yuan worth! The ratio of explicit fiscal debt to GDP increased at an astonishing rate, from 5% in 1994 to 16.3% in 2001.²²

Explicit fiscal debt is expected to grow. First, continuation of the expansionary fiscal policy will clearly increase fiscal debt. Second, the ongoing fiscal reforms may increase government debt. One fiscal reform called “separating revenue collection and utilisation” (*shou zhi liandiao xian*), aims to break the link between collection and utilisation of extra-budgetary revenues.²³ The extra-budgetary revenues of ministries and bureaus must be either treated as budgetary revenue or put into a special fiscal account and managed by the budgetary authority. This reform will also be extended to the local level. Local bureaus of security, industry and commerce, environmental protection and birth planning, and local law courts must submit all their extra-budgetary revenues to the central government, and the central government will cover their expenditures. This is actually a return to the old budget philosophy of uniform collection and uniform spending (*tongshou tongzhi*), with the exclusion of SOEs. This reform intends to reduce excessive fee collection, decrease corruption, and increase the transparency of the fiscal system. However, the reform is likely to reduce the incentive for local governments and government agencies and institutions to collect revenues, causing a decrease in total fiscal revenue and an increase in government debt.

²⁰ China's economic growth rates were 7.6%, 7.8%, 8.8% in 2001, 1998, and 1997, respectively, compared with an average of 11% from 1993 to 1997. The target growth rate of GDP for 2002 was 7%.

²¹ Based on 1978 constant prices, the budget deficit was 13.3 billion yuan in 1979, 13.3 billion in 1990, 15.3 billion in 1997, and 70.3 billion in 2000.

²² See Jia and Zhao, “The Size of China's National Debt,” and Xiang, “A Report on the 2001 Central and Local Government Budget Execution and Draft 2002 Budget.”

²³ Extra-budgetary revenues include non-tax revenues collected and disposed of by local governments, government agencies and institutions, and state enterprises. For a detailed discussion see Lin Shuanglin, “The Decline of China's Budgetary Revenue: Reasons and Consequences,” *Contemporary Economic Policy* 27 (2000): 477–90.

Moreover, the interest payment on government debt is increasing. Table 5 shows the payments for the principle and interest on government debt. Total interest payments had increased from 33.6 billion yuan in 1993 to 200 billion yuan in 2001, with an annual

Table 5: *Government Payments for the Principle and Interest of Debts (billion yuan)*

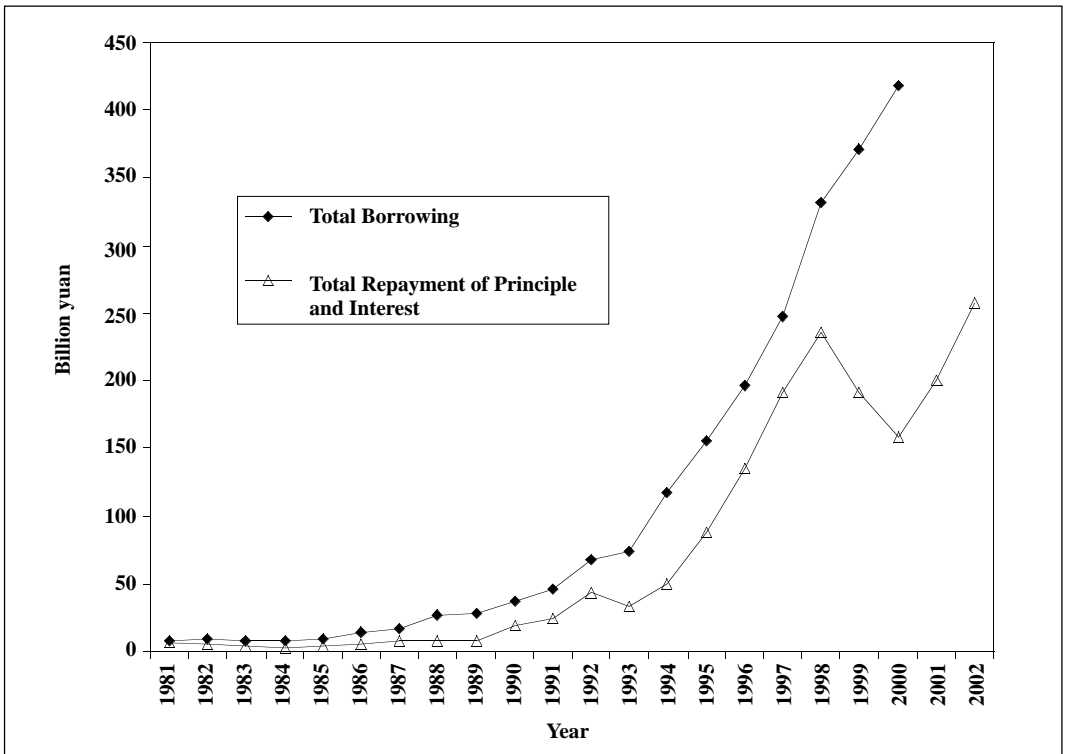
Year	Total	Payment for Principle and Interest on Domestic Debts	Payment for Principle and Interest on Foreign Debts	Payment of Interest on Loans from People's Banks	Sinking Fund from Excessive part of Revenue from Borrowings Minus Expenditure for Debts	Domestic Debt Outstanding
1950	0.003	0.003	0.000	0.000	0.00	..
1951	0.042	0.040	0.001	0.001	0.00	..
1955	0.665	0.158	0.498	0.000	0.00	..
1960	1.046	0.373	0.673	0.000	0.00	..
1965	0.636	0.566	0.070	0.000	0.00	..
1968	0.200	0.200	0.000	0.000	0.00	..
1974	0.050	0.050	0.000	0.000	0.00	..
1980	2.858	0.000	2.440	0.418	0.00	..
1981	6.289	0.000	5.789	0.500	0.00	4.87
1982	5.552	0.000	4.962	0.590	0.00	9.28
1983	4.247	0.000	3.656	0.591	0.00	13.45
1984	2.890	0.000	2.273	0.617	0.00	17.67
1985	3.956	0.000	3.259	0.697	0.00	23.80
1986	5.017	0.798	3.450	0.769	0.00	29.36
1987	7.983	2.318	5.196	0.469	0.00	39.18
1988	7.676	2.844	4.259	0.573	0.00	55.85
1989	7.237	1.930	4.584	0.723	0.00	77.14
1990	19.007	11.342	6.821	0.844	0.00	89.24
1991	24.680	15.669	8.022	0.989	0.00	106.17
1992	43.857	34.242	8.026	1.589	0.00	128.44
1993	33.622	22.430	8.922	2.270	0.00	154.24
1994	49.936	36.496	10.717	2.723	0.00	228.80
1995	88.296	78.406	7.169	2.721	0.00	330.19
1996	135.503	126.629	6.076	2.798	0.00	436.38
1997	191.837	182.040	7.076	2.721	0.00	551.11
1998	235.292	224.579	7.660	3.053	0.00	783.87
1999	191.053	179.233	9.099	2.721	1.29	1060.69
2000	157.982	155.221	2.761	0.000	0.00	1278.75
2001	200.773	192.342	8.431	0.000	0.70	1560.80
2002	258.100

Note: Starting from 2000, the figures are payments for principal on debts only.

Sources: China, Ministry of Finance, *Finance Yearbook of China*, 2001, p. 369; National Bureau of Statistics of China, *China Statistical Yearbook*, 2002, p. 271. The data on the domestic debt outstanding for the period 1981 to 1999 are from Jia Kong and Zhao Quan-Hou, "The Size of China's National Debt," for 2000, from Fan Gang, "China's NPL and National Comprehensive Liability"; and for 2001, from Xiang, "A Report on the 2001 Central and Local Government Budget Execution and Draft of 2002 Budget."

growth rate of 22%. Based on the draft of the 2002 budget, the total payment will reach 258 billion yuan in 2002, a 25% increase over 2001. In 2002, the government planned to issue debt of 592.9 billion yuan. Thus, nearly half (43%) of the new debt will have to be used for payment of the old debt and interest. Figure 1 illustrates the total borrowing and payment on principles and interest from 1982 to 2002. If this trend continues, the government's ability to use debt to finance infrastructure will be greatly reduced in the future.

Figure 1. *Government Borrowing and Payment of Principles and Interest*



Unreported Local Government Debt

Local government debt has not gained much attention in the discussion of total government debt. In China, local governments (provincial, prefectural, county, and township) do not have the right to issue bonds. Village resident committees, the lowest level of administrative organisation (officially not even a level of government), certainly do not have any right to issue bonds. However, over the years, local governments have accumulated a considerable amount of debt.

The 1994 tax reform put local governments in a very difficult fiscal position. The essence of the 1994 tax reform was the establishment of a tax-sharing system. However,

this system resulted in the central government receiving a much higher share of tax revenues. In 1980, of total government revenues (i.e., local government revenues plus central government revenues), 75% were collected by local governments, but by 2001, less than 48%. In 1980, local government spending accounted for 46% of total government spending (i.e., local government spending plus central government spending), but in 2001, nearly 70%. Also as the Chinese economy gradually moved out of a shortage economy, the profitability of township collective enterprises owned by local governments declined, leading to a decrease in local government revenues.

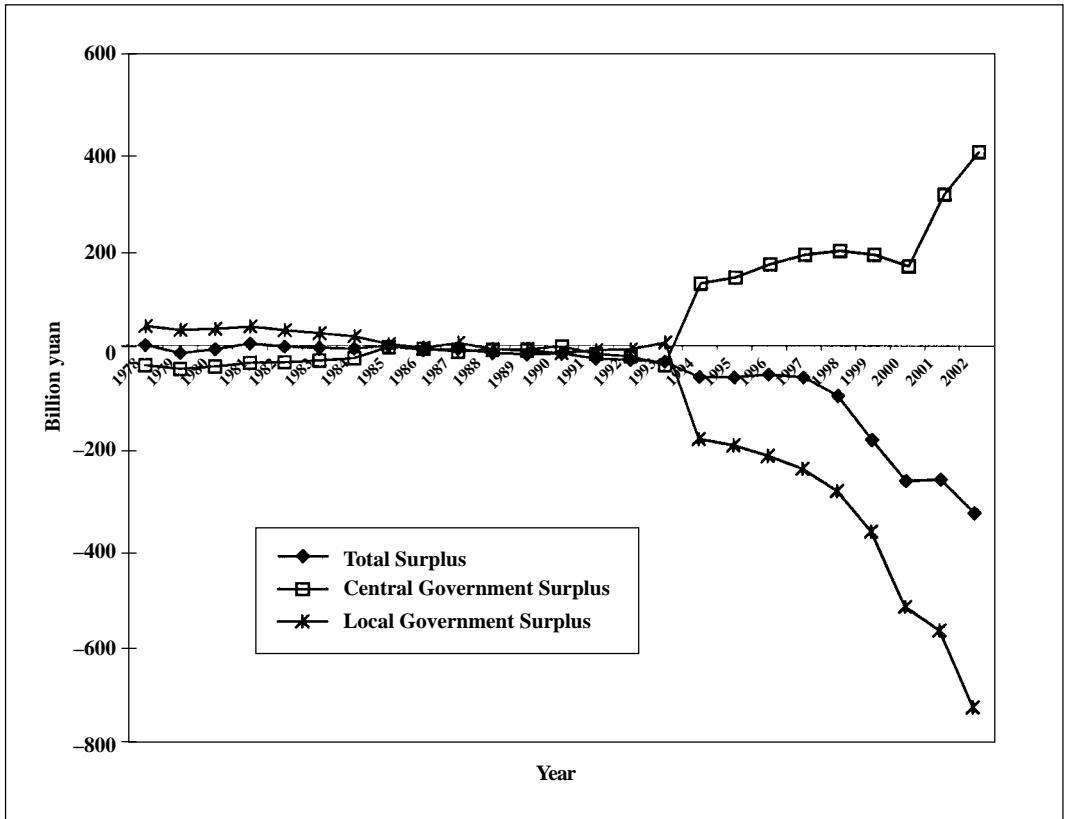
Table 4 also shows central, local, and total government budget deficits. It can be seen that in all years from 1960 to 1985, local governments had budget surpluses. From 1986 to 1993, local governments had surpluses in some years and deficits in others. The 1994 tax reform changed the story completely.²⁴ Local government budgets jumped from a surplus of 6.1 billion yuan in 1993 to a deficit of 172.7 billion in 1994. Local government deficits increased at an annual rate of 16% from 1994 to 2001. Based on the 2002 budget, local government debt will reach 363 billion yuan in 2002, a 25% increase over 2001! From 1994, every province had a budget deficit each year. Figure 2 shows the budget deficits of the central and local governments, as well as the total government budget deficits from 1978 to 2002. Since 1994, both local government deficits and central government budget surpluses have increased dramatically.

The central government received about 50% of the total revenue in recent years, but it covers only about 30% of the total expenditures. Local governments were literally begging for money from the central government. Even the richest provinces needed large rebates to cover their budget deficits. For example, in 1999 the central government's subsidies to Guangdong province were 20.9 billion yuan, accounting for 27% of the provincial budgetary revenue; to Shanghai were 22.9 billion yuan, accounting for 54% of its budgetary revenue; and to Jiangsu province, 20.3 billion yuan, or 59% of its budgetary revenue.²⁵

²⁴ In 1994, a new tax system — tax sharing — was established. Several significant changes in the tax system took place, including the reduction of the types of tax from 37 to 23; unification of the income tax rate for all enterprises to 33% (joint ventures maintain their preferential tax rates); division of taxes into three categories, namely, national taxes which were paid to the central government, joint taxes which were shared by the central and local governments, and local taxes which were paid to local governments; establishment of a central tax bureau (*guo shui ju*) and local tax bureau (*di shui ju*); and establishment of a central to local tax rebate (*shuishou fanhuan*) system.

²⁵ See China, Ministry of Finance, *Finance Yearbook of China* (Beijing: China Fiscal Publishing Press, 2001).

Figure 2. *Central, Local, and Total Government Deficits, 1978–2002*



What then is wrong with the rebate system? It involves a high transaction cost and hurts governments at the lower level. Lower-level governments must use scarce resources to lobby the higher-level government for more rebates. The central government rebates money back to provincial governments. Therefore, there is no debt problem for provincial governments but the prefectural, county and township levels of government must beg for money from the next level. There is less and less money available for the lower levels of government. They have deficits and cannot get enough rebates from the next level. As such, they have to borrow, and this explains why the debt problem is at the low level, particularly at the township level. The village committees cannot beg for money from the township governments. They must collect fees from the rural residents or borrow at high interest rates when the fees are not enough.

Local government debt includes: delayed wage payments, retirement payments, and healthcare payments to local government staff, middle school and elementary school teachers (mainly at the township and county levels); borrowing from individuals

(mainly at the township and county levels and often at high interest rates); and borrowing through the central government bond issuance (mainly at the provincial level).

No one knows exactly how large is the local government debt. It is believed that township government debt is widespread and severe. Conservative estimates put it at around 200 billion yuan, or 2.3% of GDP.²⁶ Looking at the ratio of township government debt to national GDP leads to an underestimation of the severity of the township debt problem since the township GDP is much lower. A survey in Hunan province in 1999 indicated that 88% of about 2,000 township governments had debt outstanding and some had already used up their 2003 budget revenues before 1999.²⁷ In a survey of 100 townships in Sichuan province in 2000, 82 had debt outstanding with 46% having debt higher than 1 million yuan, and some with debt as high as 12 million yuan. Some township governments have even used up budget revenues as far into the future as 2015!²⁸

The local government debt problem is severe and will get worse if the current tax system remains unchanged. The current system focuses too much on political control, instead of economic efficiency. A tax reform, aimed at expanding the tax sharing system, is now being implemented. The central and local governments will share more taxes after this tax reform. According to the State Council, from 1 Jan. 2002, except for a few special industries, enterprise income taxes, as well as all personal income taxes, must be shared proportionately by the central and local governments. The central and local governments will share the increase in income taxes equally in 2002, and at the ratio of 60:40 in 2003. The future proportions will be set according to future situations. The central government will transfer all of the increments of tax revenues to local governments, particularly those in the middle and west regions. This is another important reform after the 1994 tax reform that laid the foundation for sharing the VAT (value-added tax) between the central and local governments. This reform will increase the central government revenue share further, put more pressure on local governments, and therefore, may increase local government debt.²⁹

²⁶ Calculated on the basis of the 2001 GDP figure.

²⁷ "200 Billion Debt Disturbs China's Township," *Zhongguo gaige bao* (China's Reform Newspaper), 19 Jun. 2001.

²⁸ *Nongmin ribao* (Farmers Daily), 14 Oct. 2000. See also Xiang, "A Report on the 2001 Central and Local Government Budget Execution and Draft 2002 Budget."

²⁹ The central government transfers the increments of tax revenues to the provincial governments, which then transfer the funds to lower level governments. There will be increasingly less money available for these. Local government debts are mainly from the lowest level of government (township).

State Banks' Non-Performing Loans

The official number for non-performing loans (NPLs) was about 259 billion yuan by the end of 2001, accounting for 27% of GDP.³⁰ If the NPLs held by the state-owned assets management companies (AMCs) through the “debt-equity swap” programme were included, the NPLs-GDP ratio would be 41% at the end of 2001. Some international rating agencies have estimated China's NPLs at \$600 billion (nearly 5 trillion Chinese yuan), equivalent to about 50% of GDP.³¹

The NPL problem is caused by the change in government policies toward state-owned enterprises (SOEs). SOEs did not have a debt problem before 1978. Under the “uniform collection and uniform spending” (*tongshou tongzhi*) policy, they submitted all their revenues to the government which in turn covered all their production costs. Beginning in 1985, the government stopped directly allocating funds for fixed investment to SOEs and allowed them to borrow from the state-owned banks, a reform called “loan for grant” (*bo gai dai*). To make profits, SOEs increased their borrowing from the banks dramatically. Faced with competition from foreign and private enterprises and having to avoid massive layoffs, many SOEs have been losing money and been forced to keep borrowing. For years the government subsidised the loss-making SOEs, but the amount of subsidies was not enough to help the SOEs rise out of debt. Without a hard budget constraint, many SOEs have hoped the government would help them pay their debt eventually. The state-owned banks may have also counted on being re-capitalised by the government. These could be reasons for the increase in NPLs.

Debt-equity swap does not reduce government's liabilities. Recently a debt-equity swap programme was implemented, with four major state-owned asset management companies taking over the state banks' non-performing loans. The government owns SOEs, state banks, and the state asset management companies. The SOEs borrowed from the state banks which in turn borrowed from the public. Since the government is the owner of the SOEs, the SOEs' debt is also the government's debt. If the asset companies were domestic private companies or foreign companies, the debt-equity swap would indeed reduce government liabilities. The SOEs sell their shares to repay the debt and the private asset companies become shareholders of the SOEs. However, the asset companies are all state-owned. Thus, this reform merely transfers the problem of state banks to the asset companies. The government's liability to the public does not change, i.e., the government still owes the public the amount of money equal to the non-performing loans.

³⁰ Fan, “China's NPL.”

³¹ See *Business Weekonline*, 6 May 2002. <http://www.businessweek.com/magazine/content/02_18/b3781117.htm> [15 Nov. 2002].

The NPL problem is a result of fiscal and SOE reforms. These reforms were important in improving the efficiency of SOEs and in transforming China from a centrally-planned economy to a market-oriented economy. The emergence of NPLs was inevitable. However, there is no excuse for not reducing NPLs. After China's entry into the World Trade Organisation (WTO), state enterprises and banks will be confronted with increased competition from foreign enterprises and domestic private enterprises, and are expected to have more financial difficulties. On the other hand, entry into WTO may keep the Chinese economy growing at a high rate. This no doubt will lead to the ratio of NPLs to GDP becoming smaller and smaller if the growth of NPLs is slower than the GDP growth. Meanwhile the government has realised the severity of the NPL problem and taken measures to reduce them. Recently a policy called "lifetime responsibility" was implemented in state-owned banks, under which both the leading agent of a state bank and borrowing agent of a SOE must personally bear the lifetime responsibility for the loans they make. While this may cause a decline in a bank's lending incentives, it is expected to slow down the expansion of NPLs. Recent data shows that NPLs are decreasing at an annual rate of nearly 4%.³² Thus, the NPLs do not appear to be a long-term problem.

Many people have compared Chinese banks' bad loans with those of other countries such as Japan. It is important to realise that the government, which has enormous national assets, owns China's major banks. Thus, China's bad loan problem at the moment may not be as explosive as it seems. In the worst case, the government may have to issue bonds to repay the NPLs for the SOEs. Of course, efforts to reform the banking system and reduce NPLs should continue.

Fiscal Subsidies Made to Social Security Pension Funds

The unfunded social security liability (or more narrowly, implicit pension debt) is another major concern of economists inside and outside China. International experience indicates that pension debt is about 20–30 times the current pension payment. In 2000, pensions for retirees (excluding medical payments to the retirees) amounted to 273.3 billion yuan.³³ Thus, based on international experience, the pension debt in China would be between 5,466 billion yuan and 8,199 billion. In 2000, the country's GDP was 8,819 billion yuan, thus the ratio of pension debt to GDP would be 62% to 93% of GDP.³⁴ There are various estimates of China's pension debt. The World Bank estimated that China's pension debt was between

³² *People's Daily*, 4 Dec. 2002.

³³ National Bureau of Statistics, *China Labor and Social Security Yearbook* (Beijing: China Statistical Press, 2001), p. 725.

³⁴ National Bureau of Statistics of China, *China Statistical Yearbook*, 2001.

46% and 69% of GDP in 1994.³⁵ Wang *et al.* estimated it to be 71% of GDP in 2000.³⁶

China had a complete pay-as-you-go social security system covering mainly the employees of SOEs, government agencies and institutions, as well as collective enterprises in cities before the reform. Under the system, if the number of newcomers to the system is not decreasing, there will be no social security payment problem. However, if increasingly fewer people are involved in the system, there will be a social security debt problem. No doubt China is facing the problem of an ageing population. However, it is also industrializing and more and more young people are moving from the rural areas to the cities and paying social security taxes.³⁷ Therefore, if the complete pay-as-you-go social security system remained unchanged, China would not have a social security payment crisis. The real problem would merely be old age security in rural China, where the migrant young workers have a double burden: paying social security taxes to support city retirees and transferring money to support their own parents in the rural areas.³⁸

China's social security payment problem is caused by social security reforms. China is moving from a complete pay-as-you-go system to a partial pay-as-you-go system. A three-pillar system has been adopted: social-pooling account (pay-as-you-go), mandatory fully funded individual account, and voluntary private insurance account.³⁹ As a result, in the pay-as-you-go part of the system, there are insufficient revenues available for paying the social security payouts to retirees and former government employees. The government has to fill the gap between social security taxes and social security payments by using fiscal revenues. Many countries with the pay-as-you-go social security system, including the US, Japan, and European countries, have large social security debt. If these countries now abandon it, the social security payment burden on the governments

³⁵ World Bank, *Old Age Security: Pension Reform in China* (Washington DC: Oxford University Press, 1997).

³⁶ Yan Wang, Dianqing Xu, Zhi Wang, and Fan Zhai, "Implicit Pension Debt, Transitional Cost, Options and Impact of China's Pension Reform," *World Bank Working Paper* 2555 (2001).

³⁷ The annual urban population growth rate was 3.52% from 1952 to 1980, rose to 3.94% from 1980 to 1996, and reached 5.1% from 1996 to 2001. See National Bureau of Statistics of China, *China Statistical Yearbook*, 2002.

³⁸ Lin, "The Effect of an Expansion of Pay-As-You-Go Social Security System in China."

³⁹ The most important argument for moving away from the pay-as-you-go social security system is that it reduces savings and capital accumulation. See Martin Feldstein, "Social Security, Induced Retirement and Aggregate Capital Accumulation," *Journal of Political Economy* 82 (1974): 905–26. Unlike the US and other countries, China's saving rate is very high and has been increasing. It was 38% in 1990 and 42% in 1999. See World Bank, *World Development Report*, p. 298. I do not discuss what kind of social security system China ought to have in this article.

will be much higher. Thus, the fiscal burden of social security payments on the Chinese government is the cost of social security reform and has nothing to do with whether beneficiaries are from the SOEs or the private sector. If China drops the pay-as-you-go system completely, its fiscal burden will be equal to the total pension debt discussed earlier.

When estimating the government fiscal burden in the social security system, it is meaningful to include only the portion of social security debt that must be financed by government fiscal revenues. Local governments, instead of the central government as in the US and other countries, run China's social security system. Social security accounts in many regions have had deficits. In 1999, the government transferred 25.7 billion yuan to cover pension shortfalls at the local level and subsidise the laid-off SOE workers, up to 0.32% of GDP.⁴⁰ In 2000 the budgetary subsidies for the national pension funds were 30 billion yuan and for local pension funds 10 billion, accounting for 0.45% of GDP.⁴¹ In 2001, the central government provided a subsidy of 34.9 billion yuan, or 0.4% of GDP, to the national pension funds.⁴² If the government has to subsidise the pension fund at the same rate for the next 30 years, then the government's fiscal burden for social security would be 12% of the current GDP.⁴³

The estimates of China's fiscal subsidies made to the social security pension funds range widely. Yi estimated that the fiscal liability for the social security system was 28% of GDP, while Ma and Zhai said this fiscal liability amounted to 41% of GDP.⁴⁴ On the other hand, Fan excluded the social security debt from the government's comprehensive

⁴⁰ See Xiang Huaicheng, "A Report on the 1999 Central and Local Government Budget Execution and Draft 2000 Budget," 5th Session of the 7th Plenary of the National People's Congress, 2000.

⁴¹ See Xiang Huaicheng, "A Report on the 2000 Central and Local Government Budget Execution and Draft 2001 Budget," 5th Session of the 7th Plenary of the National People's Congress, 2001.

⁴² See Xiang, "A Report on the 2001 Central and Local Government Budget Execution and Draft 2002 Budget."

⁴³ To fill the revenue shortages in the social pooling accounts, local governments also borrowed funds from the mandatory individual accounts. The Ministry of Labour estimated that the total accumulated borrowings reached 199 billion yuan in 2000, accounting for more than 2% of GDP. See Ma Jun and Fan Zhai, "Financing China's Pension Reform" (manuscript, presented at the conference "Financial Sector Reform in China," Sep. 11–13, 2001. See <http://www.ksg.harvard.edu/cbg/Conferences/financial_sector/FinancingChinasPensionReform.pdf>). If this debt must be repaid, then the government's fiscal liability for social security will be higher.

⁴⁴ Yi Gang, "China's Economy and Banking Reform" (paper presented at the Fifth Annual NBER-CCER Conference, Beijing University, 30 Jun. 2002); Ma and Zhai, "Financing China's Pension Reform."

liabilities.⁴⁵ Reforms in the social security system will mean the government must change its fiscal subsidies made to the social security funds. In the short run, the further China moves away from the pay-as-you-go system, the higher the fiscal subsidies made to the social security account will be.

State-Owned Assets

China was under a centrally-planned economic system in which the government owned almost the entire economy. Thus comparing China's debt problem with that of private market economies can be misleading. China is moving towards a market economy through the growth of private enterprises. However, the government has not sold many state-owned assets. It still controls all the major industrial and financial sectors, including manufacturing, oil exploitation and refining, telecommunications, airlines, railroads, and banking.

Table 6 shows state assets between 1995 and 2000. In 1995 they amounted to 5.7 trillion yuan and accounted for 98% of GDP and increased to 9.9 trillion yuan, or

Table 6: *Net Assets Owned by the Government (billion yuan)*

	1995	1997	1998	1999	2000
Total Net Assets	5,710.6	7,221.7	8,221.1	9,096.4	9,885.9
Agriculture, Forestry, Animal Husbandry and Forestry	88.3	65.1	81.1	88.9	88.2
Manufacturing Industry	1,946.7	2,236.1	2,458.2	2,814.5	2,898.6
Construction Industry	89.2	108.6	111.4	102.4	112.5
Transport, Telecommunications, Postal services	665.9	894.9	941.0	1,151.0	1,475.2
Wholesale and Retail Trade & Catering Services	439.3	316.9	408.1	410.3	376.3
Banking and Financial Services	443.0	522.8	849.4	801.7	83.0
Administrative Units & Institutions	960.6	1,394.2	1,623.6	1,876.4	2,165.4
Others	1,077.6	1,683.1	1,748.2	1,851.3	2,769.8
Gross Domestic Product (GDP)	5,847.8	7,446.3	7,834.5	8,206.8	8,944.2
Net Assets/GDP (%)	98	104	105	111	111

Source: China's Ministry of Finance, *Finance Yearbook of China*, 1996–2001.

⁴⁵ Fan, "China's NPL."

111% of GDP in 2000. Most assets are from state enterprises. In 2000, total assets of state enterprises were 16 trillion yuan; total liabilities 9.6 billion yuan; and the net assets owned by state enterprises 5.8 trillion yuan.⁴⁶

In addition, the Chinese government owns all land in China. There were 130 hectares of cultivated land in 1996, though only 127 million in 2001.⁴⁷ Farmers now lease the land from the government. The original lease was 15 years, but this was extended to 30 years. The total value of the land is considerable.

Conclusions and Policy Suggestions

This paper analyses China's foreign and domestic debt and provides a new evaluation of China's debt problem. It shows that, although China ranks fourth in terms of total foreign debt among LDCs (less developed countries), the ratio of its foreign debt to GDP is small, and all its risk exposures are low. Also, China's foreign exchange reserves are much higher than the total foreign debt outstanding. Thus, foreign debt poses no threat to the Chinese economy. The size of the foreign exchange reserves has been neglected in the studies of foreign debt because they are generally relatively small in the heavily indebted countries.

Discussed here are the reasons for the rise of four types of government debt, as well as the size and development trend of each type. The rapid increase of explicit fiscal debt is caused by expansionary fiscal policy and its growing trend is worrisome. Unreported local government debt, mainly at the township level, was caused by the 1994 tax reform and may worsen if the current tax system remains unchanged. This paper shows that local government deficits have increased dramatically since the 1994 tax reform, the debts at the lower levels of government are considerably large, and the central government rebate system is inefficient and actually hurting governments at the lowest level. It is argued that the state bank's non-performing loans and social security subsidies, the largest part of China's government debt, are inevitable consequences of economic reforms. State banks' bad loans are a result of fiscal and SOE reforms and may become the largest fiscal liability for the government. Importantly, only fiscal subsidies made to the social security account, instead of total implicit social security debt, should be considered as government fiscal burden. Fiscal subsidies made to social security pension funds are caused by social security reform, i.e., the move away from a complete pay-as-you-go system to a partial pay-as-you-go system, and the size of the total subsidies depends on the new social security system.

⁴⁶ China, Ministry of Finance, *Finance Yearbook of China*.

⁴⁷ National Bureau of Statistics of China, *China Statistical Yearbook*, 2002, p. 385.

Many prior studies of China's government debt have ignored the enormous assets owned by the government. Under central planning, the government owned almost the entire economy. Comparing China's debt problem with the debt problems of private market economies can thus be misleading. China is moving towards a market economy through the growth of private enterprises. The ratio of government net assets to GDP is more than 100%, higher than the debt-GDP ratio. Also, the Chinese government owns all land in China. Thus, from a purely accounting perspective, China's government debt problem at this time is serious but still manageable.⁴⁸ Economic growth is essential. If the economy keeps growing at a high rate, the debt problem will vanish eventually.

Economists have long been concerned with the effect of government debt on capital accumulation and intergenerational redistribution. Based on Keynesian economic theory, government deficits and debt can stimulate the economy and have a multiplier effect on output. On the other hand, many studies based on the neoclassical framework showed that government budget deficits and government debt may cause a decrease in savings, an increase in the interest rate, and a decrease in capital accumulation, thus will be harmful to the economy in the long run.⁴⁹ Empirical evidence supporting this view can be found in Feldstein and Tanzi.⁵⁰ By introducing bequest motives, Barro developed a so-called Ricardian Equivalent

⁴⁸ It is interesting to compare the historical debt-GDP ratios of the UK and the US, superpowers in the 19th and 20th centuries, respectively. For the UK, the debt-GDP ratio was 0.22 in 1700, 1.22 in 1770, 1.04 in 1790, 0.94 in 1850, 0.29 in 1900, 2.03 in 1950, 0.38 in 1990, and 0.59 in 1996. For the US, the ratio was 0.31 in 1790, 0.03 in 1850, 0.25 in 1870, 0.05 in 1900, 0.69 in 1950, 0.41 in 1990, and 0.45 in 1996. Usually, debt increases in times of war, and declines in times of peace. In the UK, government debt dramatically rose during the two world wars, with debt-GDP climbing to 227% in 1945. In the US, the debt-GDP ratio was 107% in 1945. See Robert Barro, *Macroeconomics*, 5th Edition (Cambridge: John Wiley & Sons, 1997). Both countries substantially reduced their debt in the post-war years. In Japan, the debt-GDP ratio reached 130% at the end of 2000. In Russia, the debt-GDP ratio reached 140% at the end of 1998 but declined dramatically as economic growth picked up, and stood at only 40% at the end of 2002.

⁴⁹ Peter Diamond, "National Debt in a Neoclassical Growth Model," *American Economic Review* 55 (1965): 1125–50.

⁵⁰ Martin Feldstein, "Government Deficits and Aggregate Demand," *Journal of Monetary Economics* 9 (1982): 1–20; and Vito Tanzi, "Fiscal Deficits and Interest Rates in the United States: An Empirical Analysis," *IMF Staff Papers* 32 (1985): 551–76.

Proposition, showing that government debt is neutral.⁵¹ Assuming that government spending is productive, Lin demonstrated that the effect of government debt crucially depends on the cost of borrowing and the productivity of government spending.⁵² How about foreign debt? Fischer showed that foreign debt was negatively related to economic growth based on a cross-country analysis.⁵³ Using data from 1972 to 1992, Lin and Sosin showed that the relationship between foreign debt and the growth rate were negative only in African countries and are insignificant in the industrial, Latin American, and Asian countries.⁵⁴ Among the newly-industrialised Asian economies, Korea used a lot of foreign debt. However, Taiwan, Hong Kong, and Singapore had a balanced budget and had neither foreign debt nor domestic debt during their high growth periods. Efficient utilisation of the funds raised from domestic and foreign debt is crucial. The inefficiency of government spending has been widely documented in the economic literature.⁵⁵ An in-depth evaluation of the effect of government debt on the Chinese economy is thus necessary.

Debt financing is a transfer of debt burden to the future generations, i.e., the current generation is using their children's and grandchildren's money. Of course, if the money is spent on projects that will benefit future generations, such as some long-lasting infrastructure, then future generations will pay for what they receive. Even in this case,

⁵¹ Robert Barro, "Are Government Bonds Real Wealth?", *Journal of Political Economy* 82 (1974): 105–117. This proposition has been strongly criticised for unrealistic assumptions. See, for example, Andrew Abel, "Precautionary Saving and Accidental Bequests," *American Economic Review* 75 (1985): 777–91; and Martin Feldstein, "The Effects of Fiscal Policies When Income are Uncertain: A Contradiction to Ricardian Equivalence," *American Economic Review* 78 (1988): 14–23. Evidence supporting the debt-neutrality view can be found in Paul Evans, "Do Large Budget Deficits Produce High Interest Rates?", *American Economic Review* 75 (1985): 68–87.

⁵² Lin Shuanglin, "Government Debt and Economic Growth in an Overlapping Generations Model," *Southern Economic Journal* 66 (2000): 754–63.

⁵³ Stanley Fischer, "Growth, Macroeconomics, and Development," *NBER Macroeconomics Annual* (1991).

⁵⁴ Lin Shuanglin and Kim Sosin, "Foreign Debt and Economic Growth," *Economics of Transition* 9 (2001): 635–55.

⁵⁵ See, for example, Daniel Landau, "Government and Economic Growth in the Less Developed Countries: An Empirical Study for 1960–1980," *Economic Development and Cultural Change* 35 (1986): 34–75; Daniel Landau, "Government Expenditure and Economic Growth: A Cross-country Study," *Southern Economic Journal* 49 (1983): 783–92; Robert G. King and Sergio Rebelo, "Public Policy and Economic Growth: Developing Neoclassical Implications," *Journal of Political Economy* 98 (1990): 126–51; and Robert Barro, "Economic Growth in a Cross Section of Countries," *Quarterly Journal of Economics* (1991): 407–43.

the current generation needs to use the money raised from issuing debt efficiently. If the government borrows for the benefits of the current generation, future generations will be hurt. The government should be aware which expenditures are for the current generation and which for future generations, and should avoid benefiting the current generation at the expense of future generations.

To reduce government debt, the Chinese government should cut its size by reducing government organisations and personnel. The structure of the Chinese government was initially designed for a planned economy. It was unwieldy and too much talent was allocated to government administration. As China moves towards a market economy, many government planning functions are no longer necessary. Cutting size cannot only reduce government expenditures and reduce deficits and debt, but also allocate talents to productive activities and increase production. For years the government has tried to reduce its size. However, it is relatively easy to cut personnel at the top level since these people could find jobs at the lower levels of government or in companies. It is more difficult to cut personnel at the lower levels of government because it is harder for these to find other work. The government structure is like a pyramid where the bottom is much larger than the top. Hence, it is vital to reduce the size of local governments.

To reduce local government deficits, and therefore, local government debts, the central government must reform the tax system by allowing local governments to have a revenue share compatible to the spending share. Also, in order to prevent local governments from borrowing at high interest rates from individuals they know, the central government should allow local governments to openly issue local bonds to finance their deficits. Obviously, the issuance of local public debt must be for good reason and be under the supervision of the local public.

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