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The Chinese Response to the U.S. Pressure on RMB Appreciation

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On September 4, 2003, George W. Bush openly demanded China to appreciate its currency RMB. So far, China seems to be defiant . China's central bank has ruled out an immediate revaluation of its currency despite a visit from the US Treasury Secretary John Snow. However, the Chinese government believed that cutting tax rebates to Chinese exporters would help relieve the pressure for appreciation of the Chinese currency and it has decided to do so in the next couple of months. This paper explains why the Chinese government make this response to the U.S. Pressure. The first part of the paper describes the evolution of China’s export tax rebate policy and its dilemma; the second part puts the export tax rebate in its larger fiscal context: China’s effort to use deficit to stimulate domestic demand since 1998. The last part discusses the Chinese debates on the proper response to the US pressure on RMB appreciation. Paradoxically, the US pressure on RMB appreciation may play a positive role in China’s macroeconomic adjustment.

A. The Dilemma of China’s Export Tax Rebate Policy

Three Stages of China’s Export Tax Rebate Policy

1.1 Since economic reform, China’s export has been growing phenomenally, from US$9.8 billion in 1978 to US$266.2 billion in 2001. The average annual growth rate is 15.4%,[1] almost 6 percentage points higher than the average annual GDP growth rate (9.5%) in the same period of time. China's share in world exports increased from less than 1% in 1980 to 3.6% in 1999, and China now is the sixth largest export country in the world (Table 1). To encourage export, the Chinese government has formulated and implemented a series of policy, with export tax rebate being one of the most important among them.

1.2 Export tax rebate refers to the money the tax authority returns to exporting enterprises for the indirect tax they paid in the production and distribution process. It is commonly practised in international trade. To ensure fair competition, every country requires imported goods to be subject to the same tax rate as its domestically-produced counterparts. Therefore, regardless of whether export goods have been taxed by the exporting country, they will still be taxed by the importing country. Thus, the main purpose of the export tax rebate policy is to avoid a double taxation on export goods and to enhance a country's competitiveness in foreign markets. The practice is not WTO illegal. In fact, under both the General Agreement of Tariff and Trade and the WTO, the export tax rebate is not considered a "subsidy" as long as the tax rebate does not exceed the amount of tax paid to domestic tax authorities.[2]

1.3 The evolution of China's export tax rebate policy can be divided into three stages. The first stage is from 1985 to 1993. The Chinese government started to

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[1] The average annual growth rate of exports is a geometric average and was calculated by using USD amount.

[2] See "General Agreement of Tariff and Trade".

implement the export tax rebate policy in April 1985. In 1988, the principle of "fully refund" was established. By 1991 the export subsidy (above the amount of export rebate) was abolished. At that time, the old tax system (i.e., the industry and commercial standard tax system) was still in effect, with its serious problem of overlapping taxation. Since the export tax rebate rate was set by product categories, overlapping taxation made it difficult to determine how much tax should be rebated.

1.4 The second stage spans from 1994 to 1997. In 1994, China implemented a major tax system reform. It abolished the industrial and commercial standard tax ( ), and introduced a new value-added tax (VAT).[3] The basic rate of value-added tax was 17%, and a lower VAT rate was set at 13% for basic foodstuffs, utilities, newspapers, and agricultural production inputs. For export goods, VAT was zero.[4] That is to say, export goods would get a 17% or 13% VAT rebate in accordance with the tax rate paid. To realize export tax rebate, each year central government earmarks certain amount of its budget expenditure for it.

1.5 With the introduction of the new tax system based on VAT, the export tax rebate increased drastically. In 1994, realized export tax rebate reached 45 billion yuan; yet, there was an additional 30 billion worth of export tax rebate deferred to the first quarter of 1995 because of the central government's budget constraint. Thus, the export tax rebate in 1994 alone increased 150% from 1993, which greatly

[3] In fact, VAT existed before 1994, but it became the main source of government revenue in 1994.
[4] See State Administration of Taxation of China, "Value-added Tax Provisional Regulations of People's Republic of China", effective as of Jan. 1, 1994. (For small taxpayer, VTA is 6%.)

exceeded the export growth (97.2%). This is partly because for some export goods the actual VAT paid is lower than the stipulated rate due to preferential treatment. More importantly, cheating in export tax rebate by forging VAT invoices was rampant. The central government's export tax rebate obligation was therefore too heavy to fulfill. Consequently, in 1995 and 1996, China twice reduced the export tax rebate rate.

1.6 According to an estimate, the actual VAT paid for export goods was about 3% lower than the stipulated rate. In light of this, China's State Council decided that from July 1, 1995, for export goods that were receiving a 17% VAT rebate, the new export tax rebate rate was 14%; and for those receiving a 13% VAT rebate, the reduced rate was 10%. For agricultural products and coal, the export tax rebate rate was 3%.[5] (Table 2)

1.7 However, even with the reduced rate, the central government's budget in 1995 for export tax rebate (50 billion yuan) still could not cover all the tax rebate requests (90 billion yuan). Thus, the State Council further reduced the export tax rebate rate, effective as of January 1, 1996: For export goods that were receiving a 14% VAT rebate since July 1995, the rate was further reduced to 10%; and for those receiving a 10% VAT rebate, the rate was further reduced to only 6%. For agricultural products and coal, the rebate remained the same at 3%.[6] The reduced rebates certainly lightened the central government's fiscal burden. But it had a

[5] See Document of State Council of China, [1995] No.3, "Circular on Reducing Export Tax Rebate Rate and Strengthening Export Tax Rebate Management".

[6] See Document of State Council of China, [1995] No.29, "Circular on Reducing Export Goods' Tax Rebate Rate".

negative impact on China's export – in 1996 export only grew a mere 1.5% (as mentioned earlier, the average annual growth rate of export from 1978 to 2001 was 15.4%).

1.8 The third stage is from 1998 up to the present. The 1997 Asian Financial Crisis made China's export situation even worse, with the economy of neighboring countries plunging and their currencies significantly devalued. To counter the negative impact of the Crisis and to promote export, the Chinese government increased export tax rebate rates for various products nine times from early 1998 to the end of 1999 (See Table 3). At the same time, the State Administration of Taxation increased the export tax rebate budget quote for 1999 from 57 billion yuan to 63.6 billion yuan. The effect of these policies became evident in 2000 with China's export increasing by 27.9%.

Dilemma of China's Export Tax Rebate Policy

2.1 Export tax rebate enables Chinese products to enter foreign markets at real cost price, and thus help to fuel the remarkable growth of China's exports. However, the rebate has increasingly become a heavy fiscal burden on China's central government. From 1991 to 1997, the export tax rebate consumed more than one-fifth to one-third of the central government's total expenditure (Table 4), crowding out other expenditures on education, social security, etc. Because the export tax rebate was too big to fulfill, the State Council reduced tax rebate rates twice within six months between 1995 and 1996. The proportion of tax rebate in the central government's expenditure declined to 14-15% in 1998 and 1999, but climbed to 19% in 2000 with increased tax rebate rates.

2.2 This situation was not anticipated by the designers and promoters of the tax rebate policy. They believed that the export tax rebate will not become a heavy fiscal burden to the Chinese government because increased exports will give rise to increased imports and increased imports will bring in more import VAT and excise taxes to the government.[7] The logic of this reasoning might be valid, but in reality increased exports do not necessarily lead to increased import tax revenue, and the export tax rebate has become a heavy burden to the Chinese government.

2.3 As Table 5 shows, from 1994 export tax rebate grew faster than both exports and VAT revenue, except in 1997 and 1998 when tax rebate decreased.[8] Moreover, the increase in import VAT and excise taxes was slower than the increase in exports in 1995 and 1997. The reasons for export tax rebate growing faster than export and VAT revenue include widespread tax rebate cheating[9] and reduced VAT rates for preferred products. That the growth of import tax revenue in some

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[7]See Zhou Xiao Chuan and Ma Jian Chun, *Zou Xiang Kai Fang Xing Jin Ji* (*Toward Open Economy*), pp. 207-208, Tianjing People Publishing House, 1993.

[8]For 1994, exports grew 32% from previous year if we calculate it by USD amount (see Table 1), which is lower than export tax rebate growth (50%). The huge disparity between the two export growth rates for 1994, i.e., in Chinese yuan (97.2%) or US dollars (32%), might have arisen from the exchange rates convergence at the time.

[9]One estimate of export tax rebate cheating puts the figure for 1994 at as high as more than 10 billion yuan. See Chen Bing Cai, *Guo Ji Shou Zhi De Li Lun Yu Shi Jian* (*The Theory and Practice of International Payment*) pp. 47-48, China Planning Publishing House, 1996.

years did not measure up to the pace of export growth might be caused by import tax reduction and exemption granted to preferred importing enterprises.[10]

2.4 Besides tax rebate cheating and VAT reduction/exemption, another factor that has made export tax rebate a heavy fiscal burden to the central government is the new arrangement of the 1994 tax reform with regard to VAT revenue distribution and export tax rebate obligation between the central and provincial governments. Before the 1994 tax system reform, export tax rebate obligation was borne by both the central and provincial governments: the central government was responsible for export tax rebate paid to central government's (ministries') enterprises, while tax rebate obligation to local enterprises was shared between the central and provincial governments at a ratio of 8 to 2.[11] The 1994 tax system reform not only introduced a new tax system, but also established a new central-provincial fiscal relation, the so-called tax assignment system ( ).

2.5 The tax assignment system divides all taxes in China into three categories: (i) taxes (revenues) fully belonging to the central government; (ii) taxes that are dedicated to the provincial government budgets; and (iii) taxes for which revenues are designated for sharing between the central and provincial governments. VAT falls into the third category with central government retaining 75% of it and

[10] From 1994 to 1998, the ratio of import VAT & excise taxes to total imports were 3.3%, 3.5%, 3.9%, 4.3%, and 4.8%; it increased to 7.4% and 8.0% in 1999 and 2000 (calculated from data in *Finance Yearbook of China, 2001*, p. 381, 462).

[11] Document of General Office of the State Council, [1991] No.7, "Circular on Sharing the Obligation of Export Tax Rebate between the Central and Local Governments".

provincial governments 25%. Export tax rebate, i.e., VAT rebate to exporting enterprises, is now completely shouldered by the central government. In other words, the central government only gets 75% of VAT, but has to refund 100% of VAT to exporting enterprises. It certainly aggravates the central government's fiscal burden.

2.6 While export tax rebate consumes the lion's share of the central government's expenditure, export has become an important driving force for China's GDP growth. According to one prominent Chinese economist, Justin Lin, since the 1990s a 10% growth in China's exports has prompted a 1% growth in its GDP.[12] If Lin's analysis is tenable, then from 1990 through 2001, exports' contribution to China's GDP growth on average was close to 16%.[13] Although domestic demand is still the major source of China's GDP growth, the role of exports is no longer marginal.[14] In order to maintain the rapid growth of China's economy, the growth momentum of exports has to be sustained. Therein lies the dilemma of the export tax rebate: without tax rebate, exports growth levels off and GDP growth slows

[12]Lin and Li believe that many studies, which use an accounting identity of gross domestic products, underestimate the contribution of exports to China's economic growth in the past 20 years because in their models export's indirect impacts on domestic consumption, investment, and government expenditure have been overlooked. They employ a new model to capture export's indirect contribution to GDP growth and arrive at the above conclusion. See Lin and Li, "Export and Economic Growth in China: A Demand-oriented Analysis", Center for Study of Chinese Economy, Peking University, Paper No. C2002008, May 23, 2002.

[13]During this period, the average annual growth rate of China's exports was 14.9%, and GDP grew at 9.4% annually. By Lin's estimate a 14.9% export growth will translate to 1.49% GDP growth, thus exports' contribution to GDP growth is 15.9% (1.49 / 9.4 = 15.9%).

[14] For more discussion, see John Wong and Sarah Chan, "Why China's Economy Can Sustain High Performance: An Analysis of Its Sources of Growth", *EAI Background Brief*, No. 138, December 2002.

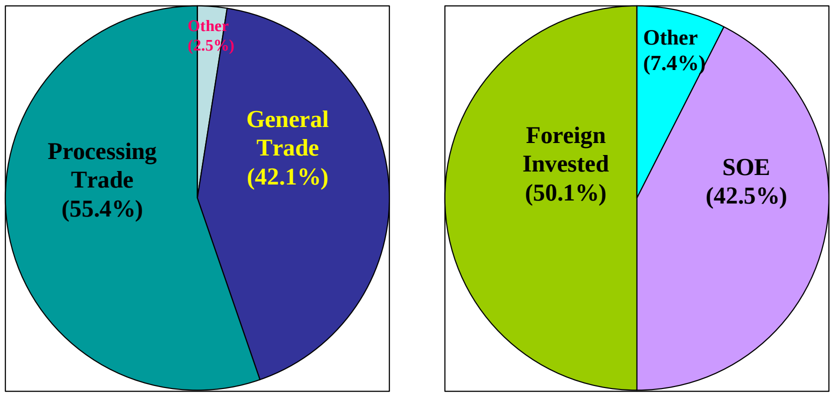
down; with rebate, the central government has a heavy fiscal burden and cannot undertake many socially beneficial programs.

Possible Solutions to the Dilemma

3.1 In my view, there are two possible solutions to this dilemma of the export rebate. The first is to reduce the share of the processing trade in China's total export. As shown in the Figure 1, the share of processing trade ( ) in China is as high as 55.4% of total export. It is quite unusual, since it means more than half of China's export is from "export-processing zones" or "export enclaves". Since the import materials for these "enclaves" are free of import duty and VAT, there is a strong incentive for firms engaging in "general trade" ( ) to convert to "processing trade". This will further decrease the government revenue from import taxes. By reducing the share of processing trade, the government can increase its coffer and therefore lessen the burden of the export tax rebate.

The Composition of China's Exports, 2001

Type of Trade **Type of Exporting Firms**



Source: China Foreign Trade Yearbook, 2002, p. 826.

3.2 Another solution, a more fundamental one, is to gradually expand domestic demand, thus reducing the role of export in promoting GDP growth. As a large continental country, China, like the United States, should depend mainly on its internal market as the engine of growth. The dilemma of the export rebate policy will be with us as long as China's internal market is underdeveloped due to the income gap between the countryside and the city as well as between classes.

Table 1 China's Export Growth, 1978 - 2001

Year	Exports (*RMB Billion*)	Exports		China' Share in World Exports (%)	China's Ranking in World Exports
		(*USD Billion*)	% change over previous year		
1978	16.8	9.8	**-**	-	-
1979	21.2	13.7	**39.8**	-	-
1980	27.1	18.1	**32.1**	0.9	26
1981	36.8	22.0	**21.5**	1.1	19
1982	41.4	22.3	**1.4**	1.2	17
1983	43.8	22.2	**-0.4**	1.2	17
1984	58.1	26.1	**17.6**	1.4	18
1985	80.9	27.4	**5.0**	1.4	17
1986	108.2	30.9	**12.8**	1.5	16
1987	147.0	39.4	**27.5**	1.6	16
1988	176.7	47.5	**20.6**	1.7	16
1989	195.6	52.5	**10.5**	1.7	14
1990	298.6	62.1	**18.3**	1.8	15
1991	382.7	71.8	**15.6**	2.0	13
1992	467.6	84.9	**18.2**	2.3	11
1993	528.5	91.7	**8.0**	2.5	11
1994	1042.2	121.0	**32.0**	2.9	11
1995	1245.2	148.8	**23.0**	3.0	11
1996	1257.6	151.1	**1.5**	2.9	11
1997	1516.1	182.8	**21.0**	3.3	10
1998	1523.2	183.8	**0.5**	3.4	9
1999	1616.0	194.9	**6.0**	3.6	9
2000	2063.5	249.2	**27.9**		7
2001	2202.9	266.2	**6.8**		6
2002					5

Sources: *Finance Yearbook of China, 2001*, p.462; *China Statistical Abstract*, 2002, p. 148; *China Foreign Economic Statistical Yearbook, 2000*, p.17, 18.

Table 2 Changes in China's Export Tax Rebate Policy, 1995-1996

Date	Export Tax Rebate		
	For Items paying a 17% VAT	**For Items paying a 13% VAT**	**For Agricultural Products & Coal**[15]
July 1, 1995	Reduced from 17% to 14%	Reduced from 13% to 10%	Set at 3%
January 1, 1996	Further reduced from 14% to 10%	Further reduced from 10% to 6%	Remained at 3%

Sources: Document of State Council of China, [1995] No.3;
Document of State Council of China, [1995] No.29.

[15] Starting from May 1, 1994, VAT rates for agricultural products and coal were reduced from 17% to 13%. See Documents of Ministry of Finance & State Administration of Taxation [94] No. 4 "Circular on Adjusting VAT rates for Agricultural Products and Exempting Some Items from VAT taxation", and No. 22 "Circular on Adjusting VAT rates for Metal and Non-metal Mineral Products".

Table 3 Increases in China's Export Tax Rebate Rates, 1998-1999

Date	Export Goods	Increased Export Tax Rebate Rate
Feb. 12, 1998	Textile input and finished product	Increase to 11%
Feb. 20, 1998	Sugar from Xinjiang	Increase from 3% to 9%
June 16, 1998	Coal Steel product Cement Ship and boat	Increase from 3% to 9% Increase to 11% Increase to 11% Increase to 14%
July 23, 1998	Sugar	Reinstate export tax rebate rate at 9%
Sept. 23, 1998	Aluminum, zinc, lead	Increase to 11%
Dec. 2, 1998	Ship and boat	Increase from 14% to 16%
Jan. 29, 1999	Machinery and equipment, electronic product, transportation, and instrument Agricultural machine Textile input and finished product, clock and watch, shoe, pottery and porcelain, steel product, and cement Organic chemical material, inorganic chemical material, paint, dyestuff, pigment, rubber product, toy and sports goods, plastic goods, traveling goods Export goods that are receiving 6% tax rebate (including industrial product that are manufactured with agricultural inputs) Agricultural product	Increase to 17% Increase to 13% Increase to 13% Increase to 11% Increase from 6% to 9% Increase to 5%
Aug. 2,	Clothing	Increase to 17%

1999	Export goods that are stipulated a 17% VAT but are receiving 13% or 11% tax rebate, Textile input and finished product (excluding clothing), and Electronic machine tools (excluding those that are receiving 17% tax rebate) Export goods that are stipulated a 17% VAT but are receiving 9% tax rebate Export goods (excluding agricultural product) that are stipulated a 13% VAT but receiving a tax rebate rate of less than 13%	Increase to 15% Increase to 13% Increase to 13%
Dec. 15, 1999	Diesel oil	Reinstate export tax rebate rate at 13%

Sources: Documents of Ministry of Finance & State Administration of Taxation, [1998] No.27, 28, 102, [1999] No.17, 225; Documents of State Administration of Taxation, [1998] No.118, 152, 207; Documents of Ministry of Finance, State Administration of Taxation, & Customs, [1999] No. 289.

Table 4 China's Export Tax Rebate and Central Government's Total Expenditure, 1985-2001

Year	**Export Tax Rebate (*RMB Billion*) (1)**	**Central Govt's Total Expenditure (*RMB Billion*) (2)**	**Percentage of Export Tax Rebate in Central Govt's Total Expenditure (%) (3) = (1) / (2)**
1985	1.8	79.5	**2.3**
1986	4.3	83.6	**5.1**
1987	7.7	84.6	**9.1**
1988	11.5	84.5	**13.6**
1989	15.3	88.9	**17.2**
1990	18.6	100.4	**18.5**
1991	25.5	109.1	**23.4**
1992	26.6	117.0	**22.7**
1993	30.0	131.2	**22.9**
1994	45.0	175.4	**25.7**
1995	55.0	199.5	**27.6**

1996	82.8	215.1	**38.5**
1997	55.5	253.3	**21.9**
1998	43.6	312.6	**13.9**
1999	62.7	415.2	**15.1**
2000	105.0	552.0	**19.0**
2001		575.4	

Sources: *Finance Yearbook of China, 2001*, p. 376, 379; *China Statistical Abstract, 2002*, p.61.

Table 5 A Comparison of the Growth of Export Tax Rebate, Exports, VAT Revenue, and Import VAT & Excise Taxes in China, 1994-2001

Year	**Export Tax Rebate**		**Exports**		**VAT Revenue**		**VAT &Excise Taxes on Imports**	
	(*RMB Billion*)	**% change over previous year**	**(*RMB Billion*)**	**% change over previous year**	**(*RMB Billion*)**	**% change over previous year**	**(*RMB Billion*)**	**% change over previous year**
1994	45.0	**50.0**	1042.2	**97.2**	230.8	**-**	32.5	**-**
1995	55.0	**22.2**	1245.2	**19.5**	260.2	**12.7**	38.3	**17.8**
1996	82.8	**50.5**	1257.6	**1.0**	296.3	**13.9**	44.8	**17.0**
1997	55.5	**-33.0**	1516.1	**20.6**	328.4	**10.8**	50.8	**13.4**
1998	43.6	**-21.4**	1523.2	**0.5**	362.8	**10.5**	55.6	**9.4**

1999	62.7	**43.8**	1616.0	**6.1**	388.2	**7.0**	101.6	**82.7**
2000	105.0	**67.5**	2063.5	**27.7**	455.3	**17.3**	149.2	**46.9**
2001			2202.9	**6.8**				

Sources: *Finance Yearbook of China, 2001*, p.376, 462, 350, 381; *China Statistical Abstract*, *2002*, p.61.

B. HOW SERIOUS IS CHINA'S FISCAL DEFICIT? APPLYING EU'S 'GOLDEN RULE'

Budget Deficit Set at 3% of 2002 GDP

1.1 China has been implementing a proactive (expansionary) fiscal policy since 1998 to counter the impact of the Asian Financial Crisis and to pump prime a gradually slowing economy. In 2001, the Chinese central government's fiscal deficit was 260 billion *yuan*, or 2.7% of its GDP of 9,593 billion *yuan*.

1.2 According to a report by Zeng Peiyan, Head of the State Development and Planning Commission, at the Fifth Session of the Ninth National People's Congress (NPC) on March 6, 2002, the central government's budget deficit for 2002 would be 309.8 billion *yuan*, and the growth of its GDP is aimed at 7% (from 9,593 billion *yuan* in 2001 to 10,265 billion *yuan* for 2002). Thus, the budget deficit would work out to be 3% of GDP for 2002.

1.3 The Chinese government's expansionary fiscal policy has met with a lot of misgivings and criticism from the public. Since the economic reform in 1979, the government has been very cautious about its fiscal policy. Before 1998, China's budget deficit/GDP ratio was kept quite low, at an average of below 1% (see Table 1), while GDP grew very fast (averaging more than 9%).

1.4 China's economic growth has slowed down since 1998, but its budget deficit increased about four times between 1997 and 2002. Therefore, many observers and commentators inside and outside China question the viability of the Chinese government's proactive fiscal policy. At the last session of the NPC in March 2002, some even called Zhu Rongji "deficit premier". Zhu rejected the criticism and held that China's budget deficit/GDP ratio of 3% was still within the internationally acknowledged "safety limit". Zhu emphasized that his deficit went into long-term capital investment, such as roads, ports, and other infrastructures.

1.5 The "safety limit" of 3% deficit/GDP ratio comes from the "Excessive Deficit Procedure" of the European Union's Maastricht Treaty in 1992. Zhu Rongji's above response to the suspicion and criticism indicates that the Chinese government is adopting the EU's criterion as its own fiscal safety limit.[16] The Maastricht Treaty's 3% deficit ceiling resulted from Germany's insistence. Due to the fear of hyperinflation in its history, Germany believes that a 3% deficit/GDP ratio is in accordance with the "Golden Rule" of public finance.

1.6 Later, in June 1997, EU countries signed the "Pact for Stability and Growth", which allows a member country to exceed the 3% deficit ceiling only if its GDP has declined by 2% in the previous four consecutive quarters. In addition, if a member country's real GDP should decline between 2% and 0.75%, then it could

[16] In fact, China's Minister of Finance, Xiang Huaicheng, explicitly referred to the EU deficit ceiling in his 1999 Fiscal Year Report to the People's Congress.

qualify to have a deficit in excess of 3%, but only with the special approval of the European Council.[17]

1.7 If China sticks to the Maastricht Treaty's deficit ceiling and the further requirements of the "Pact for Stability and Growth", it means that China cannot further raise its deficit/GDP ratio after 2002. Therefore, a crucial question for the Chinese policy maker is: how reasonable is it for China to adopt the EU safety limit for its deficit/GDP ratio?

Rationale for EU's 3% deficit/GDP Ceiling

2.1 There is no economic textbook to support any specific deficit/GDP ratio. EU's 3% deficit/GDP ceiling comes from the so-called "Golden Rule" of public finance. The golden rule makes a distinction between current and capital expenditures.[18] Borrowing is allowed for capital expenditures, while the current account must be balanced. Article 115 of the German Constitution spells out clearly the "golden rule": "Borrowing cannot exceed the total investment expenditure in the budget".[19] Since the historical average of public investment expenditure in the European Community is about 3% of GDP,[20] a reference value for the deficit as high as 3% of the GDP was arguably chosen by the architects of the Maastricht

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[17] Barry Eichengreen and Charles Wyplosz, "The Stability Pact: More Than a Minor Nuisance", *Economy Policy*, April 1998, p. 70.

[18] This distinction has a long tradition in public finance literature. One of the main advantages of separating capital from current account is to spread the costs of durables over the years. See Richard Musgrave, "The Nature of Budgetary Balance and the Case for the Capital Budget", *American Economic Review*, June 1939, pp. 260-271.

[19] The text of the German Constitution is cited from F. Balassone and D. Franco, "Public Investment, the Stability Pact and the Golden Rule", *Fiscal Studies* (2000), vol. 21, no. 2, p. 220.

[20] G. Corsetti and N. Roubini, "European versus American Perspectives on Balanced-Budget Rules", *American Economic Review*, May 1996, p. 409.

Treaty as a practical way to implement the "Golden Rule" of public finance: borrowing is allowed within the limits of capital expenditure.[21]

2.2 The budget of a developed country usually has two components: current or operating expenditure and capital or development expenditure. The Maastricht deficit criterion, thus, can be interpreted as an implicit and reasonable current component of the balanced-budget rule for EU members. However, in realty, practical problems in trying to distinguish current (consumption) from capital (investment) spending are well known. "Current" expenditures on education are only one example, as education spending can also be considered as a long-term investment. Even the United States did not provide separate measures of public current and capital expenditures until very recently. Sweden introduced the separation of current and capital budget in 1937, but suppressed it in 1980. In 1992, China established its own "dual budget" (*Fu Shi Yu Suan*), which separates "current" and "capital" expenditures.

2.3 If China wants to conform to the EU deficit criterion, it should follow the spirit of the criterion -- the "golden rule" -- rather than adopting literally 3% as the deficit ceiling. It means applying the "golden rule" to the Chinese dual budget. Table 2 shows the ratio of China's public investment expenditure to GDP from 1980 to 2000. The average ratio in the 1980s was 8.5, and in the 1990s was 3.9. Because China's public expenditure also comes from extra-budgetary funds, the actual public investment expenditure figures are bigger than those listed in column 2 of Table 2. If the capital construction expenditure in the extra-budgetary funds is included, the ratio of China's public investment expenditure to GDP would increase to at least 4.5 for the 1990s. Therefore, the application of the "golden rule" to China will give, conservatively, 4.5% as the deficit ceiling.[22]

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[21] It is interesting to note that UK also has its own version of "golden rule": public borrowing cannot exceed the level of the net public investment over the business cycle. See F. Balassone and D. Franco, "Public Investment, the Stability Pact and the Golden Rule", *Fiscal Studies* (2000), vol. 21, no. 2, p.220.

[22] It is reassuring to observe that public investment expenditure is 6% for low income countries and 4.7% for middle income countries (IMF, *Government Finance Statistics Yearbook 1995*).

2.4 The stakes are high whether China adopts 3% or 4.5% as its excessive deficit criterion. If 3% is chosen, China's continuation with its proactive fiscal policy will be limited after 2002. If 4.5% is chosen, China can still pursue this policy for several more years. In light of the fact that China has been in deflation since 1998, the proactive fiscal policy will not lead to high inflation.

China's Proactive Fiscal Policy since 1998

3.1 Public debt issuance was not a major policy instrument for the Chinese government before 1981. Between 1950 and 1958, when China first started central planning, only a small amount of public debt was issued. For 22 years between 1959 and 1980, China did not issue any domestic public debt at all. After 1981, the Chinese government restored the issuance of public debt. Since 1998, the issuance of domestic public debt has become the central policy instrument for proactive fiscal policy (see Table 3).

3.2 In the first half of 1998, the growth rate of GDP was only 7% (below the projected 8% target for the whole year), and the consumer price level declined by 2.2%. The adverse impact of the Asian financial crisis was increasingly felt and Chinese economists and policy makers considered China's economy as having entered the stage of deflation. Zhu Rongji was concerned about the possibility of declining rate of growth, since he had promised to ensure the 8% growth rate for 1998.

3.3 In August 1998, Zhu instructed the Finance Ministry to ask the Standing Committee of the NPC to approve the issuance of an additional 100-billion- yuan 10-year debt, of which 50 billion was lent to local governments. It was used exclusively for infrastructure spending, including farmland irrigation, vegetation and environment protection, railroad, highway, telecommunication network, airports, the state grain storage, rural electricity network, city infrastructure, and residential housing.

3.4 In August 1999, the Ministry of Finance was again requested to issue an additional 60-billion-yuan long-term debt (again, half of the additional debt issuance was for central government expenditure and another half was lent to local governments). This time the money raised was not only used for investment in infrastructure, but also for technological upgrading of key state-owned enterprises, and for increasing the income of poor urban and rural population. Meanwhile, China raised the tax rebate rate for exporting enterprises twice in 1999, and average tax rebate rate ended up at 15%.

3.5 Similarly, in the middle of 2000, the Ministry of Finance issued an additional 50-billion-yuan long-term debt to speed up the construction of public, debt-funded projects that were already under construction. In 2001, 150 billion yuan worth of long-term debt was issued, of which 50 billion was used to support the development of the Western region of China, such as the construction of the railroad from Tibet to Qinghai. Thus, from 1998 to 2001, the Chinese government issued a total of 360 billion yuan worth of long-term debts.

3.6 China's proactive fiscal policy has significantly increased domestic demand and promoted economic growth by 1.5, 2.0 and 1.7 percent for 1998, 1999, 2000, respectively.[23] Figure 1 depicts the original planned and adjusted budget deficit and debt issuance between 1998 and 2001.

FIGURE 1 ORIGINAL PLANNED AND ADJUSTED BUDGET DEFICIT AND DEBT ISSUANCE 1998-2001 (BILLION YUAN)

Year	Original Plan	Additional	Year End

[23] Xiang Huaicheng's report on Implementation of Central and Local Governments' Budget to the National People's Congress, 2001.

	Budget Deficit	[a]Debt Issuance	Debt Issuance in Mid-year	Adjusted Budget Deficit	Total Debt Issuance
1998	46.0	280.9	100 (of which 50 for local gov't)	[b]96.0	389.1 [c](331.1)
1999	150.3	341.5	60 (of which 30 for local gov't)	[b]180.3	401.5 [c](371.5)
2000	[d]229.9	388.0	50	[e]279.9	[c]418.0
2001	259.8	460.4	[f]150	259.8	460.4

Sources: Xiang Huaicheng's, Finance Minister's, reports on Implementation of Central and Local Governments' Budget to the National People's Congress, 1998, 1999, 2000, 2001. *China Statistical Yearbook 2001*, p. 249.

Notes: (a) Debt issuance here includes both domestic debts and foreign borrowing. But the proportion of foreign borrowing is very small. For example in 1998, foreign borrowing was 8.2 billion yuan, amounting to 2.5% of total debt issuance (331.1 billion yuan).

(b) Of the additional 100-billion debt issued in 1998, 50 billion was lent to local governments. Thus, the central government's adjusted budget deficit was 96 billion yuan for 1998. (According to Xiang Huaicheng, there might be a minor difference between the figure he cited and the final figure.) A similar situation applies in 1999: Half of additional 60-billion-yuan debt was for local governments, and therefore was not included in the central government's final budget deficit.

(c) The central government issued a total of 389.1 billion yuan of debt in 1998, of which a total of 58 billion was lent to local governments. Therefore, for the central government, the total debt issuance in 1998 was 331.1 billion yuan, of which 322.9 billion yuan was domestic debt.
The similar is the same for 1999: The total debt issuance was 401.5 billion yuan, of which 371.5 billon was for central government's debt. (There was no foreign borrowing in 1999)
For 2000, of the total debt issuance of 418.0 billion yuan, 2.3 billion yuan was foreign borrowing; the rest of 415.7 billion yuan was domestic debt.

(d) Since 2000, interest payment on the government debt began to be listed in government's current expenditure. Therefore, there was a big increase in government's budget deficit. In 2000, interest payment amounted to 74.9 billion yuan.

(e) The realized budget deficit for 2000 was 259.8 billion yuan, which was 20 billion yuan less than the adjusted budget deficit.

(f) This 150-billion-yuan long-term debt was part of the originally planned debt issuance, not an additional issuance.

Sustainability of China's Public Debt

4.1 Theoretically, there are two ways to finance budget deficit: issuing debt or issuing high-powered money. Because the Central Banking Law of the People's Republic of China that was ratified by the NPC in 1995 forbids the Ministry of Finance from borrowing money to finance budget deficit, the Chinese government has been resorting to debt issuance ever since.

4.2 Therefore, sticking to a 3% deficit/GDP ratio also means that the Chinese government must limit its debt issuance after 2002 if GDP growth is not increasing. (Figure 2 provides an estimate of China's GDP and budget deficit for 2003 to 2005 under the assumptions that the annual growth rate of GDP keeps at 7% and budget deficit/GDP ratio 3%.) In contrast, if 4.5% was adopted as the deficit ceiling, it means China could still have some space for a proactive fiscal policy.

FIGURE 2 ESTIMATE OF CHINA'S GDP AND BUDGET DEFICIT, 2003-2005

Year	Estimated GDP (7% annual growth rate) (billion yuan)	Estimated Budget Deficit (3% deficit/GDP ratio) (billion yuan)
2003	10983	329
2004	11752	352
2005	12575	377

4.3 Whether China adopts the 3% or 4.5% deficit/GDP ceiling, one important question remains, that is, is China's proactive fiscal policy sustainable? It depends on whether the interest rate on the government debt exceeds the growth rate of the economy. If the interest rate exceeds the growth rate, a debt dynamic is set in motion, which leads to an ever-increasing government debt relative to GDP over time (See Technical Appendix).

Technical Appendix

1. Whether China's proactice fiscal policy is sustainable depends on the relationship between interest rate and growth rate. This can be seen in the following simple reasoning:[24]

$$G - T + rB = dB/dt + dM/dt \qquad (1)$$

where G is the level of government spending (excluding interest payments on government debt), T is the tax revenue, r is the interest rate on the government debt B, and M the level of high-powered money (monetary base).

The right hand side of equation (1) is financing. It means the budget deficit can be financed by either issuing public debt (dB/dt) or by issuing high-powered money (dM/dt). Given that the Central Banking Law of China prevents the Ministry of Finance to borrow money from the Central Bank to finance budget deficit, we can assume dM/dt equals to zero.

Let b represent the ratio of debt to GDP:

$$b = B/Y$$

Then, we take the derivative to get:

$$B' = b'Y + bY' \qquad (2)$$

Substituting (2) into (1) yields

$$b' = (g - t) + (r - x)\, b \qquad (3)$$[25]

where $g = G/Y$, $t = T/Y$, $x = Y'/Y$ (the growth rate of GDP)

2. Equation (3) shows that if nominal interest rate, r, is higher than the nominal growth rate x, then the government must make sure that ($g - t$) is a negative figure; this means the government must run a budget surplus in order to prevent debt/GDP ratio from becoming unsustainable (i.e., increasing indefinitely). However, if nominal interest rate r is lower than the nominal growth rate x, then

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[24] This reasoning is taken from Paul De Grauwe, *Economics of Monetary Union*, the 4th edition, Oxford University Press, 2000, pp. 198-202.

[25] Divide both sides of equation (1) $G - T + rB = dB/dt + 0$, by Y, we get:
$G/Y - T/Y + rB/Y = B'/Y \quad (1)'$
Substitute equation (2) $B' = b'Y + bY'$ into the right side of (1)', we get:
$G/Y - T/Y + rB/Y = b' + bY'/Y \quad \Rightarrow \quad b' = (g - t) + (r - x)b$

the government can still run budget deficit without worrying about public debt level becoming unsustainable. Since China's current nominal interest rate on government debt is still lower than the growth rate of GDP,[26] it can continue to pursue proactive fiscal policy for the next few years and the safety limit of deficit/GDP ratio can be raised from 3% to 4.5%.[27]

[26] The interest rate for different types of government debt since 1998 is on average 3% in China, while the growth rate of GDP is about 7% to 8%.

[27] As mentioned above, since China has been in deflation for the last four years and the price level is continuing to decline, inflation is not a danger for proactive fiscal policy. As for "implicit debts" (such as unpaid pensions and bad loans of the state banks), the solution is to keep the economy growing at reasonably high speed so that "implicit debts" can be gradually phased out. This is exactly what proactive fiscal policy is doing.

TABLE 1 CHINA'S GDP GROWTH AND BUDGET DEFICIT, 1979-2002

Year	Growth Rate of GDP (%)	Total GDP (billion yuan)	Budget deficit (billion yuan)	**Budget deficit/GDP ratio** (%)
1979	7.6	404	13.5	3.4
1980	7.8	452	6.9	1.5
1981	5.2	486	*3.7	
1982	9.1	529	1.8	0.3
1983	10.9	593	4.3	0.7
1984	15.2	717	5.8	0.8
1985	13.5	896	*0.06	
1986	8.8	1020	8.3	0.8
1987	11.6	1196	6.3	0.5
1988	11.3	1493	13.4	0.9
1989	4.1	1691	15.9	0.9
1990	3.8	1855	14.6	0.8
1991	9.2	2162	23.7	1.1
1992	14.2	2664	25.9	1.0
1993	13.5	3463	29.3	0.8
1994	12.6	4676	57.5	1.2
1995	10.5	5848	58.2	1.0
1996	9.6	6788	53.0	0.8
1997	8.8	7446	58.2	0.8
1998	7.8	7835	92.2	1.2
1999	7.1	8207	174.4	2.1
2000	8.0	8940	249.1	2.8
2001	7.3	9593	259.8	2.7
2002	7.0	10265	309.8	3.0

Source: *China Statistical Yearbook*, 2001, pp.49, 51, and 245. The figure for 2002 is officially projected.

Note: * In 1981 and 1985 the Chinese government ran budget surplus not deficit.

TABLE 2 CHINA'S PUBLIC INVESTMENT EXPENDITURE/GDP RATIO, 1980-2000

Year	GDP (billion yuan) (1)	Public Investment Expenditure[28] (PIE) (billion yuan)						**PIE/ GDP ratio (%)** (3)	Extra-Budgetary Capital Construction Expenditure (billion yuan) (4)
		Total (2)	Capital Construction	Circulating Capital	Science & Technology Innovation	Geological Prospecting	Supporting Agricultural Production		
1980	452	56.8	34.6	3.7	8.0	2.3	8.2	**12.6**	
1981	486	44.1	25.8	2.3	6.5	2.2	7.4	**9.1**	
1982	529	46.5	26.9	2.4	6.9	2.3	8.0	**8.8**	36.6
1983	593	54.7	34.5	1.3	7.9	2.4	8.7	**9.2**	37.4
1984	717	69.8	45.4	1.0	11.2	2.6	9.6	**9.7**	44.9
1985	896	80.3	55.5	1.4	10.3	3.0	10.1	**9.0**	57.1
1986	1020	89.1	59.6	1.0	13.0	3.1	12.4	**8.7**	57.6
1987	1196	82.3	52.2	1.2	12.5	3.0	13.4	**6.9**	74.0
1988	1493	84.7	49.5	1.0	15.1	3.3	15.9	**5.7**	81.5
1989	1691	87.0	48.2	1.2	14.6	3.3	19.7	**5.1**	86.5
1990	1855	97.0	54.7	1.1	15.4	3.6	22.2	**5.2**	92.6
1991	2162	103.5	56.0	1.3	18.1	3.8	24.4	**4.8**	105.4
1992	2664	110.3	55.6	1.1	22.4	4.4	26.9	**4.1**	134.4
1993	3463	140.4	59.2	1.8	42.1	4.9	32.3	**4.1**	29.0
1994	4676	153.6	64.0	1.7	41.5	6.4	40.0	**3.3**	60.4
1995	5848	181.5	78.9	3.5	49.4	6.6	43.0	**3.1**	89.6
1996	6788	205.2	90.7	4.3	52.3	6.9	51.0	**3.0**	149.0
1997	7446	234.9	102.0	5.2	64.3	7.3	56.1	**3.2**	50.2
1998	7835	278.0	138.8	4.2	64.1	8.3	62.6	**3.5**	39.4
1999	8207	370.0	211.7	5.6	76.6	8.4	67.7	**4.5**	54.0
2000	8940	388.6	209.5	7.1	86.5	8.8	76.7	**4.3**	

Sources: *China Statistical Yearbook*, 2001, p.49, p.250, p.260; *China Statistical Yearbook*, 1998, p.283.

[28] The categories under China's capital (constructive) budget are listed in Wang Jinxiu and Chen Zhiyong, *Guo Jia Yu Suan Guan Li (The Management of State Budget)*, p.143, Zhong Guo Ren Min Da Xue Chu Ban She, 2001.

TABLE 3 DOMESTIC PUBLIC DEBT, DEBT/GDP RATIO, AND REPAYMENT/NEW DEBT ISSUANCE RATIO, 1981-2001

Year	Domestic Debt Issuance (billion yuan)	Total GDP (billion yuan)	Debt/GDP ratio (%)	Repayment for Principal and Interest (billion yuan)	Repayment/Debt ratio (%)
1981	4.9	486	1.0	-	
1982	4.4	529	0.8	-	
1983	4.2	593	0.7	-	
1984	4.3	717	0.6	-	
1985	6.1	896	0.7	-	
1986	6.3	1020	0.6	0.8	12.7
1987	11.7	1196	1.0	2.3	19.7
1988	13.2	1493	0.9	2.8	21.2
1989	26.4	1691	1.6	1.9	7.2
1990	19.7	1855	1.1	11.3	57.4
1991	28.1	2162	1.3	15.7	55.9
1992	46.1	2664	1.7	34.2	74.2
1993	38.1	3463	1.1	22.4	58.8
1994	102.9	4676	2.2	36.5	35.5
1995	151.1	5848	2.6	78.4	51.9
1996	184.8	6788	2.7	126.6	68.5
1997	241.2	7446	3.2	182.0	75.5
1998	322.9	7835	4.1	224.6	69.6
1999	371.5	8207	4.5	179.2	48.2
2000	415.7	8940	4.6	155.2	37.3
2001	460.4	9593	4.8	199.9	43.4

Sources: *China Statistics Yearbook*, 2001, p.249, p.49, p.256. The data for 2001 is from Finance Minister Xiang Huaicheng’s Report to the Fifth Session of the Ninth National People's Congress.

Table 6 China's Export Growth and GDP Growth, 1978-2001

Year	Exports		GDP	
	(*RMB Billion*)	**% change over previous year**	**(*RMB Billion*)**	**% change over previous year**
1978	16.8	**-**	362.4	**11.7**
1979	21.2	**26.2**	403.8	**7.6**
1980	27.1	**27.8**	451.8	**7.8**
1981	36.8	**35.8**	486.2	**5.2**
1982	41.4	**12.5**	529.5	**9.1**
1983	43.8	**5.8**	593.5	**10.9**
1984	58.1	**32.6**	717.1	**15.2**
1985	80.9	**39.2**	896.4	**13.5**
1986	108.2	**33.7**	1020.2	**8.8**
1987	147.0	**35.9**	1196.3	**11.6**
1988	176.7	**20.2**	1492.8	**11.3**
1989	195.6	**10.7**	1690.9	**4.1**
1990	298.6	**52.7**	1854.8	**3.8**
1991	382.7	**28.2**	2161.8	**9.2**
1992	467.6	**22.2**	2663.8	**14.2**
1993	528.5	**13.0**	3463.4	**13.5**
1994	1042.2	**97.2**	4675.9	**12.6**
1995	1245.2	**19.5**	5847.8	**10.5**
1996	1257.6	**1.0**	6788.5	**9.6**
1997	1516.1	**20.6**	7446.3	**8.8**
1998	1523.2	**0.5**	7834.5	**7.8**
1999	1616.0	**6.1**	8206.8	**7.1**
2000	2063.5	**27.7**	8940.4	**8.0**
2001	2202.9	**6.8**	9593.3	**7.3**

Sources: *Finance Yearbook of China, 2001*, p.462, 449; *China Statistical Abstract, 2002*, p.61.