

CHINA: PREFERENTIAL TAX POLICY

E. C. Hwa and Heng-fu Zou

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INTRODUCTION

1. Central to China's strategy to sustained economic growth and stability over the medium-and-long term is raising the efficiency of investment. Thus, the government's ninth five-year Economic and Social Development Plan (1996-2000) has laid down a key objective, which is to alter the pattern of economic growth from one based on an "extensive" use of investment resources to one that is based upon an "intensive," meaning efficient, use of investment resources. In its blueprint of a social market economy promulgated in late 1993, the government recognized that fiscal policy should play a prominent role in promoting structural adjustment and economic growth in China. This view was reinforced in the 15th Party Congress held in September 1997. Since early 1994, fiscal reforms have occupied a key chapter in the government's overall reform plan.
2. The rapid increase in profit-motivated enterprises as a result of market-oriented economic reforms paves the way for the government to use investment incentives to influence their investor's decisions, as well as calls for developing fiscal policy instruments in general to manage the economy.

3. This note summarizes the finding of a Bank report on Fiscal Policy and Structural Adjustment: the report examines how effective China's fiscal incentives on investment have been in correcting structural imbalances in the economy. It also presents international experiences relevant to China. The first of three sections evaluates China's fiscal incentives based on estimates of the cost of capital for the three major investment activities that fiscal incentives were intended to encourage: (a) foreign direct investment; (b) infrastructure investment; and (c) new and high technology investment. The second section assesses the effectiveness of fiscal incentives. The last section presents possible reforms in preferential tax policy.

What Does Preferential Fiscal Policy Promote?

4. China's preferential tax policy has given priority to three investment activities: (1) foreign direct investment, (2) infrastructure investment, and (3) new/high technology investment.¹ The Chinese government's rationale for applying fiscal incentives to these is to promote the economic structural adjustment which would otherwise be neglected. Foreign direct investment provides China with advanced management skills, production technology, external markets, and foreign exchange earnings. Infrastructure investment alleviates a key bottleneck or economic growth. And technology investment stimulates efficient production by providing strong externalities for the economy as a whole.

5. To stimulate these investments, the Chinese government provides general tax benefits such as tax holidays combined with reduced corporate income tax rates, exempt

¹ Another economic activity wherein fiscal incentives are judiciously applied is the restructuring of state-owned enterprises.

or reduced customs duties and value-added tax (VAT) on imports, and the investment regulation tax.

6. The preferential tax policy clearly states that its objective is to promote industrial development. However this objective becomes less clear when it intersects with regional objectives because the location an investment project has a profound effect on the tax benefits it receives. Investment projects in special economic zones (SEZs), coastal open economic zones, economic and technology development zones, new/high technology development zones, and central and western China have lower tax burdens than those located elsewhere. In addition, the preferential tax policy has a strong bias in favor of *foreign* investment over *domestic* investment; in fact it discriminates against existing and potential domestic investors in general. As a result, the confusion created by the preferential tax policy's multiplicity of objectives has not only blurred its policy objective, but also has greatly complicated its understanding by investors. Untangling the preferential tax regime is essential so that investors can understand it and the government can evaluate its effectiveness. This note, which summarizes the main findings of a larger report undertaken by the World Bank on this subject, reports the estimates on the cost of capital implied by the preferential tax policy, plus the results of a modest attempt to evaluate the effectiveness of preferential tax policy.

What does the cost of capital reveal?

7. It is generally assumed that the impact of the preferential tax policy on investment is transmitted thorough its impact on the *marginal* cost of capital. Lower fiscal incentives would lower the cost of capital thus stimulating investment, and vice versa. Thus the starting point for revealing the degree of fiscal incentives implied in preferential

tax policy for each investment activity is to estimate the cost of capital for that investment. We use *user cost of capital* (UCC) as the measure of the cost of capital and estimate it for the three main investment activities mentioned above that the tax policy aims to promote. In the literature the marginal effective tax rate is sometimes used (METR) to measure the impact of tax incentives on investment activities in different sectors. Although UCC and METR are equivalent concepts, UCC is a more comprehensive measure of the cost of capital than METR in that it incorporates factors other than taxes that have a bearing on the cost of capital.²

8. The estimates of UCC reveal quantitatively the biases of preferential tax incentives over the activities they intend to promote.³ Three types of tax preference are revealed: (1) the preference for specific ownership (foreign investors); (2), the preference for specific geographical location (coastal regions); and (3), the preference for specific investment activities (infrastructure and new and high technology).

9. *Ownership preference.* The user cost of capital is much lower for foreign investors than domestic investors in the first five years by a range of 45 to 200 percent, with UCC facing domestic investment in general production the highest. The only important exception is for new and high technology investment in high technology zones where domestic and foreign investors are treated equally.

10. *Location preference.* For both domestic and foreign investors, Special Economic Zones (SEZs), the Shanghai and Pudong new area, and various economic zones in the

² Alan Auerbach argues the METR calculations may be in error for many reasons and adopts a more comprehensive measure of tax and nontax elements that have a bearing on the cost of capital.

³ The formulae of UCC and tax and other parameters used to estimate it is provided in the technical annex at the end of this note.

coastal regions enjoy more favorable tax treatment than investors in other localities in the country; investments located in Shanghai and Pudong New Area enjoy the largest fiscal incentives (lowest UCC), followed by SEZs, open regions, and the rest of the country. Investing in general production faces the highest UCC whereas infrastructure investment is region/zone neutral for the first ten years of operation, but this changes after the 10th year when central and western region begin to get more favorable tax treatment.

11. *Industrial preference.* Infrastructure and new/high technology are the two industrial activities most favored by tax policy compared with other industrial activities. However, the fiscal incentives for an industrial project can vary depending on where it is located and whether the investor is domestic or foreign.

Tax Incentives: Weighing the Costs

12. The effectiveness of preferential tax policy could be evaluated by the benefits it has derived for the economy against costs it has incurred. The benefits are the additional investment which would not otherwise taken place without tax incentives and the costs are tax revenue foregone. The cost and benefit analysis requires undertaking a careful econometric analysis to isolate the effects of tax policy on investment from a host of other factors, some of which are noneconomic that have a bearing on investment, which is beyond the scope of this note. Without the benefit of a quantitative evaluation, this note draws from relevant international experience the lessons for China's preferential tax policy.

13. On the face of it, preferential tax policy appears to have been effective because investment activities targeted by it all have enjoyed high growth. Foreign enterprises in

China have grown by leaps and bounds to become one of the most dynamic segments in the economy. Infrastructure investment has made impressive gains, in particular in the 8th five-year period. New and high technology industries in development zones dedicated to new and high technology, many of which are run by private enterprises, also have enjoyed enough growth to become a major source of foreign exchange earnings.

However, several factors cast doubt on preferential tax policy as the instrumental factor for these impressive gains in the economy. This raises the larger question of whether preferential tax policy should continue without modifications especially in the context of new challenges facing the Chinese economy.

The policy focuses blurred

14. Preferential tax policy has plural objectives: o promote foreign investment; to promote coastal region development; and to promote infrastructure and new and high technology investment. These multiple objectives weaken the ability of preferential tax policy could serve any single objective well. Although international evidence suggests that national tax policy can influence the choice of location for FDI, much of the growth in FDI in China came after 1991 and coincided with a renewed push by the government to pursue a full market economy,⁴ notwithstanding a constant regime of tax incentives, more or less. Moreover, the bulk of FDI consists of inflows from neighboring Asian economies, where escalating wages and land prices encourage capital export. Thus, it is more likely broad based policy reforms than narrowly focused preferential tax policy, that has been more instrumental in attracting the large FDI inflow into China after 1991. This is not surprising since the class and universal justification of preferential fiscal

incentives lies in its ability to offset domestic policies and legal imperfections that sour the investment environment.

Ineffective tax instruments.

15. The main instruments of China's preferential tax policy are tax holidays and, after the holiday is over, reduced corporate income taxes, plus exemptions of customs duties and VAT on imports. However, international evidence suggests that tax holidays are the least cost-effective instrument of fiscal incentives. Tax holidays and reduced corporate taxes can confer substantial tax benefits for short-term investment that fully depreciates before the end of the holiday, in which case capital bears no taxes at all.⁵ However investors with long-term depreciable assets may face a large rise in the cost of capital at the end of the holiday, which may compel them to sell capital stock before the holiday is terminated or may discourage reinvestment.⁶ Therefore, tax holidays may be a poor fiscal incentive for investment in durable capital and structure with a long gestation period, such as infrastructure and, or one involving high risks such as new and high technology investment. The fact that relatively little FDI has gone into infrastructure and new and high technology may evidence the futility providing fiscal incentives to attract foreign capital to these areas.

⁴ The Party made the decision to transform China into a socialist market economy in its 14th Party Congress held in October 1992.

⁵ Tax holidays and Investment, Jack M. Mintz, in *Fiscal Incentives for Investment and Innovation*, Anwar Shah, editor. Oxford University Press, 1995

⁶ This is because a firm that writes off tax depreciation allowances during the holiday may face a relatively high effective tax rate if the allowances that remain after the holiday are inadequate in relation to the income-generating capacity of the assets, i.e. to cover the economic depreciation. Thus, the effect tax rate for a long-term depreciable asset whose useful life is longer than the holiday is not zero even if taxes are exempted.

16. Furthermore, tax holidays can result in substantial losses in fiscal revenue because they attract short-term investments by transient industries which frequently try to extend the holiday by closing down in one location and restarting in another under the guise of new ownership. Also, tax holidays are poor instruments to promote new investments from capital-exporting countries that allow foreign tax credits against tax liabilities incurred abroad because they amount to a transfer of revenues from host country to the capital-exporting countries.

Significant Revenue Loss

17. Rough estimates of foregone revenue foregone stemming from fiscal incentives can shed some light on the high cost of preferential tax policy but the complexity of preferential tax policy defies an easy quantification of the impact of fiscal incentives on fiscal revenues and an elaborate analysis is beyond the scope of this note.

18. The following table presents estimates showing the tax incentives provided to foreign invested enterprises (FIEs) based upon corporate income taxes and customs duties. The effective tax rate on corporate profits for foreign invested enterprises was 0.09 percent in 1996 against a statutory rate of 33 percent. The implied tax concession on corporate income taxes amounted to 28.4 billion yuan or 0.42 percent of GDP.⁷ FIEs also enjoy a wide range of duty free imports plus exemptions on value-added tax and consumption tax which means they probably pay scant taxes associated with imports. If that is the case, the estimated tariff concession for imports of FIEs was 109.4 billion yuan in 1997, or about 1.5 percent of GDP, accounting for nearly two thirds of the total tax

⁷ IMF reported a similar estimate in *An Inquiry into the possible causes of the decline in Tax Revenue as a Share of GDP*, Howell H. Zee, John Brondole, George Tsibouris, and John Bristow, International Monetary Fund, February 1998.

concession attributable to imports.⁸ This estimate may be on the high side because it assumes that all imports of FIEs are duty free, but it may also underestimate the true costs because it excludes exemptions on valued-added tax and consumption tax on imports.⁹

China: Tax Concessions Due to Foreign-Invested Enterprises

Unit: 100 million RMB

Year	GDP	Corporate Income Tax				Custom Duties		
		Corporate	Corporate Income	Tax Loss	Effective Rate	Tariff Loss		
		Profits*	Tax Rate(%)	Amount		% of GDP	Amount**	% of GDP
1993	34634	467.19	6	128.17	0.37	4.25	412.47	1.1909
1994	46759	783.46	6	210.54	0.45	2.79	760.05	1.6255
1995	58478	1131.63	7	299.44	0.51	2.66	889.99	1.5219
1996	67885	1175.83	9	284.02	0.42	2.62	1066.54	1.5711
1997	74772	N.A.	N.A.	N.A.	N.A.	2.71	1093.97	1.4631

*estimated on the basis of foreign-invested industrial enterprises, by a factor of 1.42.

**estimated by multiplying imports of foreign-invested enterprises by the difference of 17% and effective tariff rates.

Source: China Customs Statistics Book; China Statistical Yearbook.

19. Foreign Invested Enterprises enjoy the equivalent of nearly 2 percent of GDP in combined tax concessions, or nearly 20 percent of total fiscal revenue. The disproportionate generosity of the tax concessions is even more glaring when compared with the central government revenue, 6 percent of GDP in 1996, assuming that all tariffs and part of the corporate taxes are central government revenue. These

⁸ Due to the wide exemptions on customs duties, a large processing trade (50 percent of imports) whose import duties are completely exempted, as well as significant smuggling, the overall effective tariff rate on imports was only 2.3 percent in 1997 against an average nominal tariff rate of 17 percent.

⁹ This estimate in fact comes close to the estimate of the tax authorities of 100 billion yuan provided verbally to the Bank mission.

estimates do not even include tax incentives granted to infrastructure investors and new and high technology investors, plus sizable fiscal incentives granted to state-owned enterprise. These figures reveal that in the aggregate, preferential fiscal incentives could contribute significantly to weakening fiscal revenue in general, and the central government's investment capacity in particular.

Possible Directions of Reform

20. International experience on tax incentives applied in developing countries suggests that tax incentives that are not properly targeted and that ignore limitations in tax administration capabilities frequently bring in less than a dollar of investment for each dollar lost in government revenues. Thus broad tax incentives, such as tax holidays and general corporate tax reductions, that are below comparable levels in industrial countries, prove to be cost-ineffective to promote investment. Over time incentives tend proliferate because as pressures mount to extend tax incentives to new areas. This is certainly the case in China. As the analysis presented below shows, that the benefits of preferential tax incentives - investment stimulating effects- are uncertain while the costs – revenue loss and the likely crowding effects on government investment-- could be prohibitive.

21. Even if fiscal incentives could stimulate investment, they should play a less important role in China's economy now because their original purpose -- to compensate for imperfections in domestic legal system, economic policy, and inadequate provisions of public goods or other factors -- is redundant because the domestic investment environment is improving as policy and legal reforms proceed. In addition, the marginal returns to fiscal incentives are reduced as the law of diminishing returns sets in. For

instance, in light of rapid growth of foreign invested enterprises and coastal regions, one dollar's tax incentive to promote FIFs or coastal development can no longer bring as much benefits as used to be. Therefore fiscal incentives should be gradually withdrawn and the integrity of the tax system should be given the priority. There are several areas in which preferential tax incentives could be improved.

Sharpen industrial policy focus and targeting.

22. If the purpose of preferential tax policy is to restructure the economy, it must have a clear industrial policy focus. Preferential tax policy that is biased towards foreign investors and coastal regions dilutes its industrial policy outcomes and creates anomalies. For instance, a *foreign* investment project in general production enjoys better tax incentives than a *domestic* investment in the State's priority activities such as infrastructure and new/high technology. General investment projects in Shanghai and Pudong New Area and SEZs enjoy similar fiscal incentives to those of a high technology project in any high technology development zone, or those of a foreign infrastructure project in other regions. Although fiscal incentives favor infrastructure over other investments, the incentives are weak considering the long-gestation period of a typical infrastructure project. Finally, the regional bias of preferential tax policy has widened regional income inequality. This merits a correction by public policy.

23. The first step to neutralize fiscal incentives by reducing those that are biased towards regions and foreign investment, particularly in general production. This steering of fiscal incentives more sharply towards industrial policy focus would stimulate domestic investment in infrastructure and new/high technology industries by all investors,

but would encourage domestic investors even more by creating equitable conditions in the market place for them. This step would reinforce the fiscal stimulus package that targets domestic demand for infrastructure and new/high technology.

24. Second, fiscal incentives should be attached to economic activities that create across-the-board benefits for industrial restructuring or upgrading rather than choosing a specific industry for promotion. Theory argues that fiscal incentives are better used to support activities such as research and development, industrial human resources development, industrial design and automation, marketing, and industrial pollution prevention because they satisfy “externality” or “market failures” considerations unlike incentives directed towards a specific industry, whether it be steel or shipbuilding. Empirical studies on economic growth increasingly point to technology, knowledge, quality of human resources as being the key factors for sustaining economic growth. Furthermore, as the economy has grown in size and complexity, the government would also find it increasingly difficult to choose the “winners”, a priori. Thus, several successful East Asian economies have had to make the transition from industrial targeting to “functional” targeting soon or later in their development experience. Taiwan, China made this transition in late 1980s, so did the Republic of China.

Improve instruments of fiscal incentives.

25. International experience suggests that accelerated depreciation and investment tax credit/allowances are more cost-effective fiscal instruments than tax holidays or reductions in corporate tax rates. China’s tax authorities could expand the menu of tax instruments by offering these choices to potential investors. Accelerated depreciation

allows greater after-tax profits in the early period of a fixed investment than would normally be obtained under normal depreciation. It is equivalent to an interest-free loan from the government in the early period of a fixed investment. Similar effects can be obtained by lowering the durability of depreciable fixed assets for tax purposes. An investment tax credit allows companies to reduce taxes paid by a percentage of investment expenditures, while an investment allowance lets companies write off a percentage of qualifying investment expenditures from their taxable income. However, under an investment credit or investment allowance the government frequently loses more revenue than occurs using accelerated depreciation.

26. The substituting of tax holidays or reduced incorporate income taxes by accelerated depreciation or investment tax credits can raise MoF's intake on corporate income taxes while not raising the cost of capital at the expense of investment. This is because this substitution would not necessarily raise the cost of capital, which is a function not only of corporate income taxes but also depreciation charges, investment tax credits, and other parameters. Here the experience of Taiwan, China in the 1970s offers an interesting example. In decade of 1970s, the effective corporate income tax rate in manufacturing rose from 7.5%, which was even lower than China's as of today, to ...% by the end of the decade, while the cost of capital (UCC) barely rose as the increase in corporate income taxes were offset by more general rules on investment tax credits and accelerated depreciation. Investment witnessed a large room in this decade. (Chart on corporate income taxes, UCC, and invesment.)

Attract FDI through nontax incentives.

27. Tax policies to encourage FDI require taxation in the host country to discriminate among various foreign investors on the basis of the tax regime for outward investment available in the home countries. But different corporate income tax rates based on the nationality of the company would not be desirable because they would place an even tax burden on similar economic activities. Thus for most developing countries, a desirable first step of an effective investment promotion strategy is to develop a climate of business confidence by instituting sustainable economic policies and eliminating tax and nontax disincentives to invest.¹⁰ According to a recent survey of managers of foreign invested enterprises in China, steady policy reforms and dismantling barriers to entry by foreign firms by forging more open and competitive markets, strengthening courts for contract enforcement and settlement, would greatly improve the investment climate for FIEs.¹¹

Budgeting tax incentives to increase transparency.

28. The government grants large fiscal incentives to direct investment, and in many respects tax incentives are not different from government expenditures since both have similar revenue implications—but accounting for the costs and benefits of tax measures is often less rigorous and less frequent than for direct expenditure. Thus, the government may consider budgeting fiscal incentives and have them approved annually by the National People's Congress as the formal budget.

¹⁰ See, Anwar Shah, "Overview:", in Anwar Shah, ed., *Fiscal Incentives for Investment and Innovation*, Oxford University Press (published for the World Bank), 1995.

¹¹ *Behind The Open Door, Foreign Enterprises in the Chinese Marketplace*, Daniel H. Rosen, Institute for International Economic, Washington, DC, USA 1998.

29. The experience of OECD countries offers a useful guide here.¹² In seven of the 14 OECD countries - Austria, Belgium, France, Germany, Portugal, Spain, and the United States - the authorities are legally obliged to produce a tax expenditure report. In most countries, the report is produced annually, except for Germany (biennial), Italy and the Netherlands (sporadically). The tax expenditure report is linked explicitly to the budget process in Belgium, Finland, France Portugal and Spain. Austria and Germany produce ‘subsidy reports’ which use a broad concept of subsidy, including all forms of support through both direct and tax expenditure. In the other countries, tax expenditure reports have been mainly produced as separate documents. In the United States, the tax expenditure report is produced as part of the government’s budget but is not integrated with the budget process.

30. The concept of a tax expenditure was developed to recognize that the tax system can be used to achieve similar goals to public spending programs. The arguments put forward in favor of tax expenditure accounts are:

- Tax expenditures enable governments to pursue their policies and should be subject to the same evaluation and control procedures that are used for direct expenditures subsidies;
- Any review of government policies will be more effective if all the methods of government intervention (direct expenditures, tax expenditures regulations, etc.) are taken into account and if similar budgetary techniques are used to evaluate the cost of tax and direct expenditures;

¹² Tax Expenditures, Organization for Economic Co-operation and Development, 1996

- Control of government expenditure will be weak if tax expenditures can be easily substituted for direct expenditures.
- Tax expenditures may be seen as more flexible than direct expenditures, because they allow the individual or firm to determine how much the particular activity is to be supported, and because of the variety of instruments which can be used. Thus, a tax allowance encourage investment by profitable firms because they gain the most; and tax credits are more effective to provide assistance to firm with low income.

THE CONCEPTUAL FRAMEWORK –THE USER COST OF CAPITAL

31. The UCC facing a profit-maximizing firm can be summarized in the following formula:

$$c = \frac{(r + \pi + \delta)(1 + T + F)}{1 - \tau}$$

where c is the cost of capital, r is the real interest rate, π is the inflation rate, δ is the depreciation rate, T is the tariff rate on imported equipment, F is the regulation tax on fixed asset investment, and τ is the corporate income tax rate. (The price of capital good is omitted from the above formula because it is assumed to take the value of unity.)

32. This formula shows that higher (lower) taxes would raise (reduce) the cost of capital, *ceteris paribus*. It also shows that UCC is not solely influenced by tax rates. The rate of interest, the inflation rate, and the price of capital goods including imported investment goods all affect UCC. In particular, it shows that monetary policy through its

impact on the rate of interest also affects the cost of capital. Thus, tax policy could be adjusted to complement monetary policy to effect a change in a firm's investment decision.

33. Estimating UCC for each investment activity targeted by tax policy permits a comparison of fiscal incentives in various investment activities. In numerical calculations of UCC, the value of non-tax parameters are set as follows: the real interest rate at 5 percent ($r = .05$); the inflation rate at 3 percent ($\pi = 0.03$), and the depreciation rate at 10 percent ($\delta = .10$). The corporate income tax, τ , is in the range between zero and .30.¹³ The average tariff rate, T , is assumed to be 17 percent. The regulation tax on fixed asset investment, F , has four rates: 0, .05, 0.10, .15, and .30, with the highest rate reserved for discouraged activities such as real estate development.

¹³ The statutory corporate income tax rate is 33 percent of which 30 percent is levied by the central government and 3 percent by the local government. Since the 3 percent is rarely collected, we use 30 percent in the calculations.