

On the Reform of Mainland China's Value-Added Tax System

Yeh Chang-mei

On January 1, 1994, mainland China replaced its industrial and commercial consolidated tax system with a circulation tax system consisting of value-added tax (VAT), business tax, and consumption tax. Under the revenue-sharing financial system, the central government's share of VAT levies is 75 percent and local governments' share is 25 percent. As over 60 percent of mainland China's tax revenues have come from VAT, controlling central and local tax sources has become a serious challenge.

Keywords: VAT; the revenue-sharing system; tax credits; price deregulations; the Parato resources allocation efficiency; tax elasticity coefficient

* * *

Value-added tax (VAT) is a major indirect tax imposed on the sales or imports of goods. In the early 1980s, mainland China began to study it as an alternative to double taxation, which especially hurts specialized production. Pilot projects in selected cities, trial implementation, and regulation promulgations finally led to the establishment of a VAT system. By 1992, VAT with differential tax rates was applied to only 50 percent of industrial enterprises, while the remaining 50 percent paid production taxes, with most tertiary industries paying business taxes.¹ The gradual reform of the VAT system had enhanced exports, but not yet realized the ideal of fair tax burdens. Double taxation still existed, and modifications of levying measures also complicated VAT calculations, thus causing the highest loss rate among all mainland Chinese tax items.

To modernize its tax system, increase its financial revenue, and balance the tax burdens of its enterprises home and abroad, on January

Yeh Chang-mei is an Associate Research Fellow at the Institute of International Relations, National Chengchi University.

¹Zhou Xiaochuan and Yang Zhigang, *Zhongguo caishui tizhi de wenti yu chulu* (The problems and the way out of China's financial and taxation systems) (Tianjin: Renmin chubanshe, December 1992), 369.

1, 1994 mainland China replaced its industrial and commercial consolidated tax system with a circulation tax system consisting of VAT, business tax, and consumption tax. Since implementation of a revenue-sharing financial system in the same year, VAT has become a tax item shared by the central and local governments. The organization responsible for its collection is the State General Administration of Taxation, but the central government's share is only 75 percent. As over 60 percent of mainland China's tax revenues have come from VAT levies, controlling central and local tax sources has become a serious challenge.

The objective of Beijing's 1994 VAT reform was to establish a standardized taxation system. However, the transplant of a Western taxation system into a socialist economy will certainly cause incongruities. This study will discuss the theories behind the VAT, its special characteristics, and also its implementation in mainland China.

The Theories Behind the VAT and Its Special Characteristics

VAT is a kind of circulation tax levied on the added value of commodities or services through the implementation of the tax credit principle. It was first put into practice by France in 1954, and by 1994 it had already been implemented by a total of eighty-three countries and areas.² In theory, the VAT system is superior to all other kinds of circulation tax systems; however, the serious divergence between theory and practice constitutes an obstacle to its actual implementation. Many countries still refuse to put it into practice even after extensive study because they are unsure of its influence on commodity prices.

The commodity value is composed of three parts: C, V, and M. C constitutes the portion of production goods that has been consumed and will be recouped as costs after product sales. It will again be used to purchase goods used for reproduction; hence, it is not a taxable object. V refers to wages and M the surplus value. Theoretically, V plus M is the added value on which tax is to be levied.³ The VAT's

²Wu Jianguo, "An International Comparison of VAT Reforms," *Jingjixue dongtai* (Economics Information) (Beijing), 1996, no. 1:65.

³Xi Shuqin, Tang Gongliang, and Qin Feng, *Zuixin Zhongguo shuizhi tongshi* (A comprehensive introduction to China's new taxation system) (Beijing: Guoji wenhua chubanshe, April 1994), 158.

main characteristics include a tax on the added value ($V + M$) in sales or business volumes, while the transferred value C , which was already taxed in the previous sale or production stage, is not taxed again. Basically, a standardized VAT system can ensure prompt, balanced, and stable sources for financial revenues; enhance the normal development of industrial and commercial enterprises by eliminating double taxation; and facilitate tax refunds for exports and tax collection on imports.

Countries that have already implemented the VAT system have different tax collection scopes. In general, there are three types of VAT for taxable objects:

1. Consumption-type VAT, which deducts from the total sales of a taxable period the value of the fixed assets bought during that period and also the value of the intermediate goods used for production; the total amount of taxable objects is equal to the total value of society's consumer goods.

2. Income-type VAT, which deducts from the total sales of a taxable period only the annual depreciation of fixed assets; the total amount of taxable objects is equal to the national income.

3. Production-type VAT, which forbids deduction of any value of fixed assets (including annual depreciation) from the total sales of a taxable period. The total taxable added values are tantamount to the sum of wages, profits, interests, rents, and depreciations in free economies' GNP statistics.⁴

Of these three VAT types, the production type has the broadest tax base and the consumption type the narrowest. At present, the consumption-type VAT has been the choice of most countries.

An ideal VAT system should have three characteristics: high-quality taxpayers, a comprehensive tax base, and unified tax rates. Since invoices are the key to the efficient implementation of the VAT system, taxpayers' voluntary cooperation is essential. The tax base should include all goods and services, and tax should be collected at all links in the production, marketing, and servicing chains. Unified tax rates should be adopted to realize the neutrality principle and completely rule out discriminatory treatment. Any deviations in these three respects will cause the net VAT revenues to deviate from the desired

⁴Ho Shengming, ed., *Caijing dacidian* (Dictionary of finance and economics), vol. 1 (Beijing: Zhongguo caizheng jingji chubanshe, November 1990), 358.

objective, and taxation justice and efficiency will be unattainable. The realization of an ideal VAT system also requires certain objective conditions, such as a relatively developed market economy, a sound tax credit mechanism, and a relatively high tax administration standard.

The implementation of VAT with a broad tax base would create relatively less economic distortions as well as tax reductions and exemptions. However, tax exemptions are inevitable in reality, as there are always some duty-free goods. Moreover, the added values of some goods are difficult to define; hence, it is difficult to include them within the scope of VAT. From the production perspective, VAT vertical equity requires differentiation between taxpayers producing different goods or providing different services. Thus, basic industries, infrastructure projects, and agriculture are accorded preferential tax treatment such as lower tax rates or tax exemptions, while higher tax rates are imposed on items whose development the government desires to restrain. This policy will narrow the VAT tax base and increase levying difficulty.

From the consumers' perspective, when the VAT burden is shifted to ultimate consumers, consumers with different financial capabilities pay the same amount of tax when they consume the same products or services. This contradicts the taxation vertical equity principle, as low-income taxpayers assume a relatively higher burden than high-income taxpayers. Basically, the VAT is a degressive tax which affects the real consumption level of high-income families less than that of low-income families. The basic reason for this is that it is levied on the production, wholesale, and retail of all goods except agricultural products, and thus all daily necessities are included. If VAT comprises the bulk of a country's taxation system, remedies should be provided through other taxation measures, such as income tax and property tax. However, mainland Chinese analysts have not paid sufficient attention to the progressive or degressive nature of various taxes.

The Reform of Mainland China's VAT System

In mainland China, proposals for launching pilot VAT projects in the engineering industry were first made in May 1979. Starting from July of that year, Shanghai, Hangzhou, Changsha, Qingdao, Shenyang, and Xi'an joined these projects. Trial implementation of the VAT system began throughout the Chinese mainland on January 1, 1983. The promulgation of Draft Regulations on Value-Added

Tax on September 18, 1984 formally established the VAT as an independent tax item in mainland China's industrial and commercial taxation system.⁵ Before the end of 1985, VAT was imposed on a trial basis for twelve product categories which had been seriously affected by double taxation, including machinery, sewing machines, rolled steel, and bicycles. In 1986 and 1987, the VAT system was gradually extended to 147 categories of textile and light industrial products.⁶ By the end of 1993, the system was imposed on all products except tobacco, wine, rubber, construction material, chemicals, electric and heating power, and gas, on which business tax payments were still required.⁷

A relatively thorough reform of the VAT system which aimed to standardize the system according to international practices began in 1994. Thus, mainland China's implementation of the VAT system may be divided into three stages: (1) the exploratory stage (1980-September 1984); (2) the expansion and perfection stage (October 1984-1993); and (3) the reform and standardization stage (since January 1994). To this point, mainland China has gradually modified the tax base, tax rates, and levying measures (see table 1).

Major Problems Arising Since the Implementation of the New VAT System

The Tax Base and Tax Rates

In the 1994 reform, Beijing decided to continue implementing the production-type VAT system in order to achieve control over investment scale and stabilize financial revenues. However, practice has proven that the system has been inefficient in this respect. In actuality, although mainland China has implemented production-type VAT as well as a fixed assets investment orientation regulatory tax, the problem of rapid investment growth has not been reasonably solved, as mainland Chinese enterprises' investment policies are subject to the influence of state plans rather than that of the market prices of

⁵Jin Xin, Liu Zhicheng, and Wang Shaofei, *Zhongguo shuiwu baikequanshu* (China's taxation encyclopedia) (Beijing: Jingji guanli chubanshe, December 1991), 235-36.

⁶State General Administration of Taxation, ed., *Shuifa daquan* (A complete collection of tax regulations) (Beijing: Zhongguo caizheng jingji chubanshe, September 1989), 187.

⁷See note 5 above.

Table 1
Mainland China's VAT System Before and Since the 1994 Reform

Structure of the system	Before the reform	Since the reform
Taxpayers (Taxable subjects)	Domestically-funded enterprises, units, and individuals	Both domestically-funded and foreign-invested enterprises and individuals, classified into general and small-scale taxpayers.
Objects of taxation (Taxable objects)	Production and imports, mostly concentrated in the industrial realm.	VAT is levied on the production, wholesales, retails, and imports of all goods except primary agricultural produce, real estate, intangible assets, and other services.
Tax rate structure	There were twelve grades of tax rates, from 8% to 45%; the basic tax rate was 14%.	<ol style="list-style-type: none"> 1. The basic tax rate is 17%; a preferential tax rate of 6% is accorded to small-scale taxpayers only. 2. A lower tax rate of 13% is applied to daily necessities (including grain, tap water, air conditioning and heating, edible vegetable oil, and natural gas); books, newspapers, and magazines; and agricultural production means (including feeds, chemical fertilizers, agricultural machinery, and films for agricultural use). 3. A zero tax rate is applied to all exported goods and goods transported to customs-controlled bonded factories, warehouses, and zones; that is, tax refunds will be made after the customs procedures for exports of these goods are completed.
Calculation basis	VAT was included in the selling prices of products.	VAT is not included in the selling prices of products; the tax base is the commodity prices that do not include VAT. However, the practice of VAT being included in selling prices continues to apply to retail goods.

Table 1 (Continued)

Calculation method	Starting from 1979, VAT calculations were made according to <i>kou'er fa</i> or <i>koushui fa</i> . ¹	<i>Goujin koushui fa</i> has been adopted; tax credits are made according to records on invoices.
	In 1987, only <i>koushui fa</i> was in use.	1. Sales of goods or provision of taxable services by general taxpayers:
	In 1988, in addition to <i>koushui fa</i> , the <i>jiashui fenliu goujin koushui fa</i> ² was also introduced.	Tax payable = sum of taxes on sales of a taxable period - sum of taxes paid for purchases of that period.
	After July 1993, <i>goujin kouchu fa</i> , which requires the itemization of tax deductions, was implemented. The scope of deductions included the purchase of raw and semifinished materials, low-cost but highly consumptive articles, fuel, power, packing materials, and outside processing payments.	Sum of taxes on sales = total amount of sales × tax rate.
		The kinds of tax credits allowed include:
		(1) the sum of VAT as shown on the VAT invoices acquired by the sellers;
		(2) the sum of VAT as shown on the customs' tax payment certificates;
		(3) the sum of taxes paid for purchases of VAT-free agricultural products = purchase prices × credit rate (10%).
		The kinds of taxes paid for the purchase of the following items are not allowed to be credited:
		(1) fixed assets;
		(2) goods or taxable services that are used to produce non-taxable items;
		(3) goods or taxable services that are used to produce tax-exempted items;
		(4) goods or taxable services purchased for collective welfare or individual consumption;
		(5) goods purchased to remedy abnormal losses.
		2. Small-scale taxpayers whose annual sales total less than 1.8 million <i>yuan</i> are not included in the tax credit system. For them, tax payable = total sales × tax rate (6%). If the selling prices of the goods and services already include VAT, then, tax payable = total sales × (1 + tax rate).

Table 1 (Continued)

Collection methods	<p>1. Taxpayers are required to report all income from product sales and all deductible items during a stipulated taxable period, and pay the amount of tax calculated on the basis of this data.</p> <p>2. Taxpayers are required to pay VAT during each taxable period according to the tax rates approved by taxation administrations, but when tax calculations at the end of the taxable year show different results, the differences will be settled by further payments or refunds.</p> <p>3. Taxation administrations decide the tax deduction amount or rate of a stipulated measuring unit of VAT taxable goods according to which taxpayers calculate and pay tax at the end of each taxable period.</p>	<p>3. No tax credit is allowed for imported goods; for imports, tax payable = compositive tax calculation price × tax rate, and compositive tax calculation price = customs-paying value + customs + consumption tax.</p> <p>Taxpayers are required to register and acquire special VAT invoices.</p>
--------------------	---	---

Notes:

1. The *kou'er fa* calculation formula is: Tax payable = (income from product sales – deductible purchase items) × tax rate. Deductible purchase items refer to the amount of money used to buy raw and semifinished material for the production of VAT taxable goods.

The *koushui fa* calculation formula is: Tax payable = (income from product sales × tax rate) – deductible tax items. Deductible tax items refer to the taxes already levied on the purchases of raw and semifinished materials for the production of VAT taxable goods, which is calculated either according to the total amount of money used to purchase materials in the same taxable period (referred to as the *goujin koushui fa*)

or the total value of the materials consumed during that period (referred to as *shihao koushui fa*).

2. In *jiashui fenliu goujin koushui fa*, the tax paid for the purchase of raw and semi-finished materials in the same taxable period is separated from their purchase prices and directly deducted from the VAT of taxable goods.

Sources: "Implementation Rules of the PRC's Provisional Value-Added Tax Regulations," *Jingji ribao* (Economic Daily) (Beijing, December 29, 1993, 2; Wang Shu-yao and Zhang Yi, *Xinjiu shuizhi bijiao* (A comparison of the old and new tax systems) (Beijing: Gaige chubanshe, December 1993), 87, 97-101; Wen Wu and Wang Yong, eds., *Jiushi niandai Zhongguo shuishou zhidu zhuanhuan yaodian* (Main points of China's taxation system modifications in the 1990s) (Beijing: Zhongguo tongji chubanshe, January 1994), 80-82.

fixed assets. Moreover, tax revenues are basically affected by the tax base and tax rates. Enlarging the tax base and raising tax rates can increase tax revenues, but the increase will ultimately be limited by the ability of enterprises and individuals to pay. On the other hand, enlarging the tax base while lowering tax rates cannot efficiently increase tax revenues.

In contrast, production-type VAT cannot completely eliminate double taxation. Selling activities often involve both the sales of goods and the provision of nontaxable services. With these kinds of composite marketing activities, the state cannot levy both VAT and business tax according to business volumes. According to current VAT regulations, the composite marketing activities of enterprises that are mainly engaged in the production, wholesale, and retail sale of goods but also provide nontaxable services are regarded as commodity sales and subject to VAT levies. Defining the nature of the marketing activities of taxpayers is the responsibility of taxation administrations under the State General Administration of Taxation. However, since the introduction of the revenue-sharing financial system, the central and local taxation administrations have not performed their functions well; enlarging the VAT's scope has thus become necessary.

According to mainland China's current circulation tax system, VAT is levied on production, sales and purchases of goods, and processing, repairing, and assembling services; business tax is imposed on trades such as communications and transportation, construction and installation, and service. There are also clear stipulations about what kind of taxes enterprises or individuals engaging in composite marketing activities should pay. However, collection of these taxes involves both the central and local taxation administrations; hence, loopholes and contradictions often appear in the course of these

operations.⁸ A narrower VAT scope would increase composite marketing activities; on the other hand, a wider VAT levying scope will reduce these activities. If mainland China expands the VAT scope to include such trades as communications and transportation, the coexistence of VAT and business tax would come to an end. Mainland China also has the option of imitating international practices and collecting VAT from composite marketing activities according to the descending of priority: central taxes, tax shared by both the center and localities, and local taxes.

Mainland China's production-type VAT system prohibits deductions of taxes which have already paid for the purchases of fixed assets; hence, enterprises cannot receive complete tax refunds from their exports. This has placed mainland China at a disadvantage in trade competition with countries practicing a consumption-type VAT system, which allows deductions of the taxes on the purchasing of fixed assets. If mainland China switches to a consumption-type VAT system and allows taxpayers to deduct taxes paid for all their purchases, including fixed assets and management fees, its financial revenues will decrease and an appropriate increase of the tax rates would become necessary. However, consumption-type VAT, whose tax base is limited to means of consumption, can help check consumption and increase savings, as well as encourage investment, innovation of fixed assets, technological progress, and economic growth. Thus, mainland China should consider applying consumption-type VAT to industries in need of further development such as high and new technology, communications, energy, and electric power.

Mainland China should also expand its VAT tax base to include the production of primary products in agriculture, forestry, fishery, and the mining industry; communications and transportation; construction and installation; post and telecommunications; and catering services. Otherwise, the problems of double taxation and unbalanced tax burdens in these industries cannot be effectively solved. In addition, mainland China should consider allowing VAT-paying enterprises to deduct a fixed percentage of their service expenditures from their VAT so as to avoid double taxation.

Mainland China's 17 percent basic VAT rate lies within the normal VAT rate range of the European Union (15 to 20 percent).

⁸*People's Daily*, July 9, 1995, 2.

However, since mainland China is practicing a production-type VAT system, the actual VAT burdens of its enterprises are heavier than those of their European counterparts. On the other hand, mainland China's preferential VAT rate is 13 percent, much higher than the stipulated 5 to 10 percent level of the European Union.⁹ It seems appropriate for Beijing to consider reducing its basic VAT tax rate to 15 percent and readjusting the present VAT rate structure; for instance, instituting four grades of taxes (15, 13, 9, and 0 percent) for taxable services (general marketing activities), agriculture produce and articles for agricultural use, goods for civil use, and exports. The objective of lowering the basic VAT rate is to reduce the tax burden on enterprises. Therefore, readjustment of the basic rate depends mainly on the tax base. If the production-type VAT system is replaced by a consumption-type VAT system, the original basic tax rate can thus be maintained or even increased.

*Classification of Taxable Objects
and Tax Reductions and Exemptions*

The new VAT tax system classifies taxpayers as general and small-scale taxpayers. For small-scale taxpayers, VAT is levied according to a fixed rate. The objective of this practice is to strengthen control over VAT collection, reduce taxation costs, encourage small-scale taxpayers to keep account books, and strengthen economic accounting. However, in practice, this measure has increased the tax burdens on small-scale taxpayers and affected their business transactions with general taxpayers, which constitutes a serious taxation injustice.

Under the new VAT system, all general taxpayers are subject to standardized VAT control; VAT paid for goods is clearly recorded on invoices and a tax credit and refund system is enforced. Small-scale taxpayers (including individually-run private enterprises and rural enterprises) whose annual sales total less than 1.8 million *yuan* are required to pay VAT at a fixed tax rate and are not allowed to use VAT invoices. This has not only increased the VAT burden of small-scale taxpayers by about 20 percent, but also placed them at a disadvantage in business competitions with general taxpayers. In 1994, about 80 percent of all VAT payers were small-scale taxpayers, and

⁹Hu Yijian, "The Development Tendency of China's Reform of the Indirect Tax System," *Caijing yanjiu* (The Study of Finance and Economics) (Shanghai), 1995, no. 6:24-25.

the sum paid by them accounted for about 20 percent of all VAT payments.¹⁰ Without VAT invoices, their sales are not entitled to tax credits in the subsequent link of the production or marketing chain. This has created a serious obstacle to the small enterprises' marketing activities and operation. In addition, their purchases are not entitled to tax credits. Therefore, for the same amount of sales, small-scale taxpayers have a heavier VAT burden than general taxpayers. To solve this problem, Beijing could consider lowering the VAT rate for small-scale taxpayers, or introducing different tax rates for different trades.

According to the new VAT regulations, when taxpayers are also engaged in sales of VAT-free or VAT-reduced items, they must separate the amount of these sales from their total business volume for economic accounting. This stipulation is more advantageous to large enterprises with sufficient human and financial resources to handle the management, record keeping, and tax declarations of tax-free and tax-reduced items; small enterprises incapable of doing the same may be excluded from preferential tax treatment. Moreover, the regulations on tax exemptions for imported instruments or equipment that will be directly used for scientific research, experiment, or teaching are not clear-cut, which has led to the proliferation of tax-exemption rights. Some enterprises are engaged in both scientific research and production, and the equipment they import can be used for both; it is thus difficult to decide whether tax exemptions are applicable. This will increase levying costs as well as opportunities for tax evasion.

The new tax system also rules that VAT is not included in the selling prices of products and tax credits are made according to records on invoices. Since VAT collection involves tax credits in the subsequent links of the production or marketing chain, tax reductions or exemptions should be reduced as much as possible. Even if tax reductions and exemptions are granted, the method of requesting enterprises to first pay the VAT tax for purchases of raw and semifinished materials and then giving them tax refunds after product sales should be enforced, with the VAT circulation channel uninterrupted by VAT invoices. If enterprises in previous links of the circulation process

¹⁰The Comprehensive Analysis and Reform Planning Theme Group of China's Taxation System and Public Finance, "China's 1994 Tax Reform: Achievements and Problems," *Gaige (Reform)* (Beijing), 1994, no. 5:10.

are granted VAT exemptions, enterprises in the current links will not be able to enjoy any tax credits because they cannot acquire VAT invoices; hence, they will have to assume all the VAT burdens of previous links. If VAT is collected in the earlier links but is exempted in the later links and goods are exported at last, VAT refunds will become impossible. Since no VAT invoices can be provided for the sales of VAT-free goods, enterprises that have to pay VAT for their product sales will avoid buying VAT-free raw and semifinished materials. Thus, the business of enterprises dealing in VAT-free goods will be affected.¹¹

Utilization and Management of VAT Invoices

VAT special invoices have a decisive role in VAT collection and control: they provide clear records of VAT payments by sellers, which may become tax credits when buyers make VAT declarations for their own sales. According to the experiences of most countries, control of VAT special invoices depends on the following conditions: (1) the content of invoices should be complete; (2) the invoices should be in two or more copies, including the original and the duplicate(s); and (3) cross-examinations of VAT records should be carried out with a national computer network. Since the relatively broad-based VAT involves a large number of taxpayers, it is very useful in a society with complete transaction records. However, in a society where an underground economy flourishes and cash transactions are the mainstream, enforcing the VAT system might encounter difficulties. For instance, since the implementation of the VAT system, mainland China and other developing countries have had to deal with many cases of VAT evasions and crimes committed with VAT invoices.

According to mainland China's VAT regulations, small-scale taxpayers are not allowed to use VAT invoices, but taxation administrations may provide VAT invoices on their behalf for their sales of taxable goods and services. As a result, the VAT of their sales can only be calculated according to the 6 percent tax rate. However, the amount is only the VAT payment in this link of the circulation chain; VAT payments in the previous links cannot be credited, thereby causing double taxation.

¹¹Hu Daoxin, "Several VAT Issues That Need to Be Studied," *Jingji wenti tansuo* (Inquiry into Economic Problems) (Kunming), 1994, no. 12:27.

At present, mainland China has not yet installed a national computer network for VAT cross-checks. Therefore, the management of VAT invoices should be strengthened, and the system of only earning tax credits with VAT invoices should be modified. Tax credit conditions should be increased and relevant account books should be instituted to control the crediting of VAT already paid for purchases. To keep track of taxpayers who try to evade providing VAT invoices by conducting cash transactions, taxation administrations should keep abreast of their funds and goods' real circulation volumes. Moreover, most countries regard VAT payment registration as a necessary and basic measure for controlling taxpayers and taxable objects. Mainland China gives a number to each VAT registration card; therefore, a taxpayer may set up several enterprises and possess several VAT registration numbers, which has hindered taxation administrations' auditing efforts. Mainland Chinese taxation administrations should thus readjust the existing taxation identification numbering system and give only one taxation code to each taxpayer.

Tax Refunds for Exported Goods

In April 1985, mainland China replaced its export subsidy policy with a tax refund (exemption) policy. Consequently, when goods were exported, they were exempted from product taxes, and the VAT levied during their production links was refunded. The export tax refund burdens were shared by the central and local governments, and the proportion of refunds in the total amount of circulation taxes was lower than that of general exports in the gross domestic product (GDP).

In 1988, a policy of thorough tax refunds for exports according to an approved refund rate was introduced, and all tax refunds were paid by the central government. This policy change resulted in a large-scale increase in total exports that year, and tax refunds for exports continued to increase in the following years. In 1991, localities were required to pay 10 percent of tax refunds for exports within their foreign trade plans, and all tax refunds for exports beyond their foreign trade plans. In 1992, the localities' export tax refund burden was raised to 20 percent, and to prevent deceptive practices, special tax vouchers were introduced.

In the 1994 tax reform, the use of special tax vouchers for exports was abolished. Since then, tax refunds for exports have been made according to stipulated rates. This has aggravated the imbalance among the growth of export tax refunds, the growth of VAT revenues, and

the increase of export volume. In addition, the new VAT system has further increased the dependence of financial revenues on circulation taxes. Consequently, tax refunds for exports have had a great impact on the central government's balance of revenues and expenditures. Since tax refunds for exports in 1995 totalled more than 77 billion *yuan* and there were unpaid tax refunds carried forward from 1994, 1995's total payable tax refunds reached a high of 110 billion *yuan*. However, the central government's 1995 allocation for such tax refunds was only 55 billion *yuan*. Thus, unpaid export tax refunds that have been carried forward to 1996 total more than 50 billion *yuan*. If exports of 1996 increase by 20 percent and the allocation for VAT refunds for exports also increases by 20 percent, the total amount of unpaid tax refunds carried forward to 1997 will exceed 70 billion *yuan*. Such a large amount of financial debts cannot be settled only by levying taxes according to law, strengthening tax collections, and reducing tax exemptions. A better solution would be to reduce the proportion of tax refunds for exports in the total amount of circulation taxes and make it equal to or even lower than the proportion of general exports in the GDP.¹²

Since some preferential taxation measures for enterprises were not abolished with the introduction of the new VAT system, mainland China's effective VAT rate has been lower than 17 percent, but tax refunds for exports have mostly been collected according to the 17 percent rate. Consequently, total VAT collections have been less than the tax refunds, and tax refunds have sometimes been made for exports from which no VAT had been collected. In 1994, the taxes collected from the import link amounted to about US\$4 billion, but tax refunds for exports totalled as high as US\$8 billion in the same year. Thus, on July 1, 1995, Beijing reduced the tax refund rate for exports by an average of 3.7 percentage points. Another tax refund rate reduction by an average of 4.6 percentage points was made on January 1, 1996.¹³ The major results of the latest readjustment are as follows: (1) the tax refund rate for coal and agricultural products has remained at 3 percent; (2) for industrial products that are pro-

¹²Zhao Jie and Xu Yongxian, "Appropriate Tax Refunds: The Direction of the Reform of Tax Refund Measures for Exports," *Liaowang* (Outlook Weekly) (Beijing), 1996, nos. 8-9:7.

¹³Jin Pingguo, "How to Evaluate the Three Readjustments of the Tax Policy for Exports," *Jingji daobao* (Economic Reporter) (Hong Kong), 1996, no. 11:31.

cessed from agricultural products and goods on which VAT is collected at a rate of 13 percent, the export tax refund rate has been reduced from 10 to 6 percent; and (3) for goods on which VAT is collected at the 17 percent rate, the export tax refund rate has been reduced from 14 to 9 percent. Under the present circumstances, reducing the export tax refund rates should be an applicable interim measure.¹⁴

According to the taxation data of 108 countries and areas, tax items involving an export refund policy average about 16.37 percent of state revenues. The degree of support mainland China's taxation measures provide for its exports is about three times the average support of world countries' taxation measures for their exports. If only this is taken into consideration, mainland China's reduction of export tax refund rates will not obstruct its exports from reasonably competing in the international market.¹⁵

Taxation Effects and Impacts

Taxation efficiency refers to both administrative efficiency and the tax system's economic efficiency: tax collection and management should be such that the government's total tax revenues equal the total tax payments by taxpayers and the Parato resources allocation efficiency is achieved.¹⁶ A new tax system should serve to improve tax administrative efficiency, reduce collection costs and interference with economic activities to a minimum, and achieve the best allocation of resources.¹⁷ In 1993, mainland China had more than 500,000 tax staff, and according to a provincial survey, tax collection costs accounted for about 5.8 percent of tax revenues. However, corresponding costs accounted for only 0.58 percent of the United States'

¹⁴Han Fengqin, "Tax Refunds for Exports: Current Situation, Effects, and the Way to Deal with Them," *Zhongguo jingji xinxi* (China Economic Information) (Beijing), 1996, no. 1:26.

¹⁵Wang Haochuan and Tan Long, "Implementation Effects of the 1994 New Tax System and Ideas on Further Reform of the Taxation System," *Gaige*, 1996, no. 1:89.

¹⁶According to Parato's theory, if reform in an economic society can enable everyone to do better, or some to become better while nobody becomes worse, thus increasing the welfare of the entire society, then the reform or change will be regarded as the most efficient. His theory has become a theoretical basis for subsequent studies of the relationship between taxation and economy.

¹⁷Ge Jiashu and Chen Yuanxie, eds., *Zhongguo caikuai dacidian* (Encyclopedia of Chinese financing and accounting) (Beijing: Zhongguo dabaikequanshu chubanshe, December 1993), 882, 887.

tax revenues. Thus, mainland China's tax collection efficiency has been very low.¹⁸

Tax rates, the tax base, and preferential tax treatment influence one another. When the tax base is broad and stable, relatively low rates can be adopted to raise a fixed amount of financial revenues; when low tax rates are in force, preferential treatment to enterprises will be unnecessary and the tax base will not be eroded. From the perspective of administrative costs, if a single tax rate is adopted, the tax rate, either high or low, will have little influence on collection costs. However, the single tax rate should in general not be lower than 10 percent because VAT collection costs are higher than those of other indirect taxes. If a too-low single tax rate is adopted, total VAT revenues will be less than collection costs and VAT collections would be meaningless. On the other hand, an overly high single tax rate would not only lead to large-scale tax evasion, but also hold back economic development.¹⁹

For reasons of fairness, different VAT rates may be imposed on luxury goods and daily necessities. However, giving preferential treatment to certain items may increase the costs of both tax administrations and taxpayers and also lead to tax evasion. In fact, differential tax rates do not have much influence on consumers, and retailers' burdens caused by high-tax-rate commodities may be offset by their low-tax-rate commodities. They may also shift this burden to consumers according to the demand elasticity of these commodities. The tax burden of high-tax-rate commodities with a high demand elasticity is mainly shouldered by retailers, while that of high-tax-rate commodities with a low demand elasticity is shouldered by consumers. The tax burden of low-tax-rate commodities is also shared by consumers and retailers according to their demand elasticity. Luxury goods are mainly commodities with high demand elasticity and the high tax burden is mainly assumed by retailers, but daily necessities are mainly commodities with low demand elasticity, so the advantage of a low tax burden is also enjoyed by retailers. Thus, it is difficult for a government to change consumers' demands for commodities by adopting differential tax rates.

¹⁸Wang Shuyao and Zhang Yi, *Xinjiu shuizhi bijiao* (A comparison of the old and new tax systems) (Beijing: Gaige chubanshe, December 1993), 28.

¹⁹Chen Bingrui and Ren Xuequn, "On VAT's Efficiency Principle," *Caimao jingji* (Finance and Trade Economics) (Beijing), 1995, no. 7:48.

Since 1985, mainland China's tax revenues have not increased as fast as the national economy. This has resulted in a decline of the tax elasticity coefficient.²⁰ Theoretically, the annual tax revenues increase when the annual national income increases and the tax elasticity coefficient is more than zero. But in actuality, it is not possible for the annual tax revenues to equal increases in the annual national income, because if that happens, the latter would completely be transformed into tax revenues. Therefore, in general, the tax elasticity coefficient is usually between zero and one ($0 < \text{tax elasticity coefficient} < 1$). It is an important index for evaluating taxation efficiency and the level of marginal tax burden of the national economy. A smaller tax elasticity coefficient means lower taxation efficiency, lighter tax burden for enterprises, and weaker taxation control over national income distribution.²¹

During the Seventh Five-Year Plan period (1986-90), the tax elasticity coefficient was around 0.7; in other words, when the national income increased by 1 percent, tax revenues increased by 0.7 percent. It further declined to 0.67 in 1992. This decrease reflects tax revenues depression. The proportion of tax revenues from nonagricultural items in the total nonagricultural national income declined from 44 percent in 1985 to 23 percent in 1992, or an annual decrease of 3 percentage points.²²

According to mainland China's present revenue-sharing system, the VAT is a kind of tax shared by the central and local governments with a ratio of three to one. Thus, the localities have lacked enthusiasm in fostering the sources of VAT revenues. Moreover, fines for delayed payment of industrial and commercial taxes, payments of overdue taxes, and other fines were originally local revenues, but they have become VAT since the implementation of the revenue-sharing system, thus reducing localities' revenues. For instance, this problem has caused Liaoning province to lose about 80 million *yuan* in local revenues each year.²³

²⁰Tax elasticity coefficient = growth of tax revenues \div growth of national income.

²¹Ge and Chen, *Zhongguo caikuai dacidian*, 886.

²²The Expert Group of Report on China's Reforms and Development, *Xinde tupo yu xinde tiaozhan* (New breakthroughs and new challenges) (Beijing: Zhongguo caizheng jingji chubanshe, 1994), 129.

²³Zhang Suxun, "The Effects of the New Financial and Taxation System on Local Finance and the Way to Deal with Them," *Liaoning daxue xuebao* (Journal of Liaoning University) (Shenyang), 1995, no. 3:39.

Standard accounting practices have also yet to be instituted in mainland China. The accounting policies of different localities have different impacts on inventory values. Mainland Chinese taxation administrations allow for three methods of calculating refunds for VAT contained in the inventory value: (1) the use of the weighted average cost of inventory as the calculation basis; (2) the first-in, first-out method; and (3) the last-in, first-out method. So far, the weighted average cost of inventory has been the most commonly used basis for VAT calculations. However, according to this calculation method, not many enterprises can obtain tax refunds.²⁴

Local mainland Chinese enterprises are used to using cashes instead of checks and credit cards. Thus it is very easy for them to conceal their true transaction volumes and evade taxes. The proliferation of new enterprises in free trade zones and the placing of enterprises under control of the state and local governments have not only undermined the central government's tax collection abilities, but also weakened its control over capital flow. In actuality, customs officials normally collect VAT on imported goods as they cross the border, but in a pure free-trade zone, goods can enter through the initial port of entry without being checked by customs.²⁵ The central and local governments will improve their control over VAT collections if they jointly share VAT tax sources but collect their shares of VAT respectively.

Mainland China's tax losses probably amount to over 200 billion *yuan* a year.²⁶ In 1994, VAT losses amounted to approximately 6.12 billion *yuan*, accounting for about 35.5 percent of the 17.23 billion *yuan* from documented tax evasions. Usually, enterprises have evaded VAT by providing or selling VAT invoices for false transactions; not providing invoices for certain sales so as to reduce the total amount of VAT payable; providing false information on VAT already paid for purchased items to obtain more tax credits or refunds; and excluding from their total sales the self-consumed commodities, transferred raw materials, and waste products.²⁷ From 1994 to the first quarter of 1995, mainland Chinese customs found 372 cases of VAT refund

²⁴ *Xinbao caijing xinwen* (Hong Kong Economic Journal), December 5, 1994, 22.

²⁵ Ronald I. Mckinnon, *The Order of Economic Liberalization* (Baltimore and London: Johns Hopkins University Press, 1993), 135.

²⁶ Wang and Zhang, *Xinjiu shuizhi bijiao*, 12.

²⁷ Zhao Xianfeng, "The Shocking Funnel," *People's Daily*, September 19, 1995, 5.

frauds involving a total of 124 million *yuan*.²⁸

According to an estimate at the end of 1993, after the implementation of the new VAT system, the tax burden rate of industrial enterprises would increase from 8.53 percent to 8.7 percent; that of wholesalers from 0.6 percent to 1.39 percent; and that of retailers would drop from 2.44 percent to 1.88 percent. According to the new VAT regulations, preferential VAT treatment is granted to wholesalers of certain trades. The VAT collection rate for their sales is 17 percent and the VAT credit rate for their purchases is 10 percent; hence, the tax burden rate of their goods' added values is much higher than 17 percent. However, wholesale enterprises are not heavily affected because when their goods are sold, the VAT burden will be separately listed and shifted to the buyers.²⁹ Thus, the practice of production-type VAT will increase the tax burden of capital-intensive industries and also impose certain limits on the VAT levying scope, leading to new tax inequities.

Mainland China's VAT burden readjustment, of course, has influenced commodity prices. At present, most former VAT-free or VAT-reduced products have become the objects of VAT levies. Many of these products are basic raw materials for dutiable goods and VAT levied on them will surely increase the prices of downstream products. The original circulation tax burdens for coal, chemical fertilizers, pesticides, and textiles were lower than the existing VAT of 17 percent, though a preferential VAT rate of 13 percent is applied to some chemical fertilizers and pesticides. After payments of VAT and consumption tax, the tax burdens on gas and diesel oil increase by 17.2 percent and 16.66 percent, respectively. The increase in manufacturers' tax burdens can only be shifted to the consumers by raising sale prices, a practice the central government has allowed.³⁰ However, many enterprises have arbitrarily raised prices without actuarial valuations or added the amount of tax payments to retail prices; thus, the actual prices of their commodities have increased at a higher rate than their VAT burden. Some taxpayers have written prices (including tax) in the "price" column of VAT invoices and 17 percent of the prices (in-

²⁸Han, "Tax Refunds for Exports," 25.

²⁹Wang and Zhang, *Xinjiu shuizhi bijiao*, 67.

³⁰Pang Fengxi, "On the Effects of VAT," *Dangdai caijing* (Contemporary Finance and Economics) (Nanchang), 1994, no. 7:21.

cluding tax) in the "tax amount" column. Their violation of VAT rules has also been a factor in price increases.³¹

Mainland China experienced relatively serious inflation in 1984 and 1988, and it has once again been a serious issue since 1993. The inflation rate was 20 percent in the first half of 1994 and in the third quarter of the same year it was 25 percent; however, the figure was nearly 30 percent for large and medium-sized cities and as high as 40 percent for some cities.³² The main reasons for inflation were price deregulations for basic products and coal, rolled steel, and cement under unified distribution and the VAT reform in early 1994. In fact, Beijing has relaxed price controls over most production means and nonessential consumer goods; maintaining strict price control over certain production means and essential consumer goods would easily lead to serious trouble in public finance.

Conclusion

A socialist country that has modified the ownership and management systems of enterprises in order to move toward economic liberalization should prevent tax losses by reforming its enterprise tax system. The introduction of VAT with a broad tax base is the foundation of reform, but it cannot be effectively implemented if the state does not lift price controls over enterprises. In terms of indirect taxes, Beijing should consider the impacts of price controls as they can result in different sales prices for the same commodity, causing practical problems in VAT collection. For instance, taxation administrations do not know the exact prices at which goods have been sold, and are thus forced to adopt a fixed rate. Moreover, in deciding the rates of indirect taxes, Beijing should also take opportunity costs and shadow prices of relevant commodities into consideration. In this manner, it may not only be able to increase state revenues, but also reduce, under enforced state price controls, the negative influence of certain production means' unreasonable prices.³³

³¹Hu Junsheng and Zhou Lihua, "The Effects of the Tax Reform on Prices and the Way to Deal with Them," *Zhongguo gaige* (China Reforms) (Beijing), 1995, no. 6:32.

³²Li Xinjian, "Redressing the Understanding of Inflation," *Daidai caijing*, 1995, no. 9:14.

³³Yan Hengyuan, "An East-West Comparative Analysis: Whither China's Tax Reform," *Jingji ribao* (Economic Daily) (Beijing), November 24, 1993, 4.

In the 1994 tax reform, Beijing's emphasis was on introducing the VAT system so as to eliminate the tax burden imbalance caused by product tax levies. However, the adoption of the VAT as the principal tax item may not be an appropriate choice. On the one hand, enterprises which make little or no profit but still have prospects for success will be overburdened and forced to close down. On the other hand, the tax burden of highly-profitable enterprises will be relatively light and their VAT tax payments will not be able to ensure a steady growth of state revenues.

As VAT is not included in the commodity price, VAT burdens have been often shifted onto the ultimate consumers, except in cases when the price excluding VAT is lower than its value. Thus, consumers with different financial capabilities pay the same amount of tax when they consume the same products. This leads to taxation injustices, as low-income taxpayers assume a relatively higher tax burden than high-income taxpayers.³⁴

Like Western free countries, mainland China has made income taxes the principal direct tax items and circulation taxes the principal indirect tax items. However, the taxation systems of most developed countries regard direct taxes as the core and indirect taxes as supplements; mainland China's taxation system places more emphasis on the latter. Taxes collected according to commodity circulation volumes have always accounted for more than two-thirds of mainland China's tax revenues, with their share climbing as high as 80 percent in recent years. Income taxes are based on the net incomes of taxpayers and their calculations are more complicated than circulation tax calculations; hence, the costs of levying and collection are also higher. Mainland China's levying costs of enterprise income taxes are about four times larger than those of circulation taxes.³⁵ Enterprise income taxes cannot be raised in a short time, although Beijing has been paying more attention to the role they play. Thus, circulation taxes will remain mainland China's principal tax items.

Most countries include VAT in their financial systems mainly

³⁴Zhong Liang, "It Is Not Suitable to Make VAT the Principal Tax Item," in *Zhongguo: Caijing gaige xinsheng* (China: A new voice of financial and economic reforms), ed. the National Association of the Middle-Aged and Youths for the Study of Financial Theories (Beijing: Zhongguo caizheng jingji chubanshe, March 1996), 222-23.

³⁵Wang Xiaode and Liu Yong, "On the Special Functions of Circulation Taxes and Income Taxes," *Jingji tizhi gaige* (Economic Restructuring) (Chengdu), 1994, no. 1:55.

because of its extensive regulatory role. In general, VAT revenues account for only about 20 percent of the total tax revenues of these countries.³⁶ However, circulation taxes account for an excessive share of mainland China's tax revenues. Since the main source of Beijing's circulation tax revenues is the highly risky VAT, the distribution of its tax sources is unbalanced. In 1994, mainland China's VAT levies accounted for more than 60 percent of its total tax revenues, or about 30 percent higher than the world average. In the same year, Tianjin Municipality's VAT levies accounted for 64 percent of its tax levies from industrial and commercial enterprises; its circulation tax levies totalled 91 percent of its total tax revenues; and its share of VAT amounted to about 28 percent of its total financial revenues. Judging from this case, a very high proportion of mainland China's tax revenues has come from VAT levies.³⁷

Since the implementation of the VAT system, serious problems have arisen over tax refunds for exports and the tax credit mechanism. These problems can only be solved by improving collection and management methods. At the end of 1995, the State General Administration of Taxation decided to spend 10 billion *yuan* to realize computerization of tax data and management in mainland China's 40,000 taxation administrations.³⁸ This will probably reduce levying costs and prevent tax evasions and malpractice. However, to prevent corrosion of the tax base, abolition of preferential tax exemptions is necessary.

³⁶Wu, "An International Comparison of VAT Reforms," 67.

³⁷Wu Jianguo, "Some Ideas on Improving the VAT System," *Caizheng* (Finance) (Beijing), 1995, no. 11:44.

³⁸*Lianhe bao* (United Daily News) (Taipei), November 14, 1995, 22.