China’s VAT Experience

By Xu Yan

Xu Yan is a postdoctoral fellow on the Faculty of Law of the University of Hong Kong. E-mail: lawxuyan@hku.hk. The author wishes to thank Prof. Richard Cullen for his helpful comments and support in writing the article, and Prof. Michael Tumpel for his valuable comments on a previous draft and kind direction when the author took an Austrian scholarship to study European tax law in Austria. The author alone bears responsibility for the content.

The People’s Republic of China introduced the VAT as part of a general tax reform initiative in 1994. The tax can be viewed as one element of China’s “open door” economic reforms. Although China borrowed many basic principles from the European VAT, the Chinese VAT has evolved differently. It has been used both as a fiscal stabilization device and as an incentive mechanism for business locations and activities.

This article provides an introduction of the Chinese VAT and describes the features of the tax before the reforms that came into force in 2009. It also looks at tax evasion in the application of the credit invoice method and the problems caused by the system’s lack of neutrality. It concludes with a discussion of recent reforms and several unresolved problems.

China’s VAT Family

In December 1993 the P.R.C. State Council promulgated three related tax measures: the VAT, the business tax (BT), and the consumption tax (CT). The laws took effect on January 1, 1994. Together these three taxes form China’s VAT family. The P.R.C. Ministry of Finance promulgated implementation rules in accordance with the State Council’s law.

The VAT applied to the sales of most goods, but only to some services — for example, services involving the provision of labor.

1China’s VAT has its source in the Resolution on Various Issues Concerning the Building of the Socialist Market Economy, passed by the Central Committee of the Communist Party of China on November 14, 1993.
The BT applied to most services not covered by VAT. These services include transfers of intangible assets and immovable property. The impositions of VAT and the BT are mutually exclusive. The same transaction cannot be subject to both taxes. VAT and the BT together have roughly the same scope as a classical European-style VAT. The CT applied to, very often, goods such as cigarettes, wine, and expensive jewelry. These items are subject to the CT in addition to VAT.

China’s VAT family replaced a cascading wholesale turnover tax\(^2\) and was considered an improvement in terms of removing

\(^2\)The cascading effect was the major shortcoming of the old Chinese turnover tax. The turnover tax was imposed on the gross value without allowing the deduction of taxes paid on inputs. Consequently, consumer prices are increased through the business cycle. For example, a manufacturer purchases raw materials (input) worth CNY 500 and pays tax of CNY 50 at the rate of 10 percent. Since he is not allowed to deduct the input tax, he will add CNY 50 to the cost of input. If the cost of his labor and service and other (Footnote continued on next page.)
tax distortions and providing a stable revenue source. The three-part tax system has become a major revenue source. In 2007 revenue from VAT was about CNY 1.5 trillion, or 33.9 percent of China’s total tax revenue. Figure 1 shows the importance of China’s VAT revenue since the system was implemented.

The VAT is administered by the State Administration of Taxation (SAT), and the VAT regulations are uniformly applied across the country. VAT revenues collected are split 75/25 between the central and local governments.

VAT applies at a standard rate of 17 percent. The reduced rate of 13 percent applies to basic staples or household necessities such as food, fuel, electricity, books, newspapers and magazines, and agricultural products. A zero rate applies to export goods, except for those stipulated by the State Council.

There are two categories of VAT liable persons under China’s VAT system, and a taxpayer’s status may affect his VAT liabilities. The first category, general taxpayers, is defined as firms with substantial annual sales and an accounting system sophisticated enough to enable tax officials to accurately determine outputs and inputs for VAT purposes. The revenue thresholds are CNY 1 million in production-type sales or CNY 1.8 million in nonproduction-type sales.

The second category, small-scale taxpayers, includes firms with relatively small or infrequent taxable sales and incomplete accounting records. They are charged VAT based on a simple computation that precludes any right to deduct VAT paid on inputs.

General taxpayers may deduct inputs unless they: (1) fail to maintain a sound accounting system, (2) otherwise cannot provide accurate tax information on inputs and outputs, or (3) have sales revenue exceeding the threshold but fail to apply for formal designation as a general taxpayer for VAT purposes.

expenses to produce a commodity using the raw materials is CNY 450, which includes his profit (added value), the value of his product becomes CNY 1,000. The tax on his sale is CNY 100 at 10 percent, which contains the input tax of CNY 50 that has already been taxed at the time of purchasing. Thus, the tax of CNY 5 is paid again on the tax of CNY 50 paid earlier. Double taxation and tax on tax result, causing the cascading. The product may also be used as an input for manufacturing other products, exacerbating the effect.
The VAT rate permitted as an input deduction does not always match the VAT rate paid on the purchase. The amount of a taxpayer’s deduction could be capped depending on the category of good or the time of input purchase.

Computation methods for the VAT for the two types of taxpayers are summarized in the table below.

<table>
<thead>
<tr>
<th>Computation of VAT Payable</th>
<th>Method</th>
<th>VAT Payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>General taxpayers</td>
<td>Output VAT - Input VAT&lt;sup&gt;a&lt;/sup&gt; (purchase invoice must be certified by the tax authority)</td>
</tr>
<tr>
<td></td>
<td>(general computation)</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Small-scale taxpayers</td>
<td>Sales amount x rate (no input credit)</td>
</tr>
<tr>
<td></td>
<td>(simple computation)</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>VAT regs, article 4. According to articles 5 to 7 of the VAT regs, output VAT = current taxable sales x applicable VAT rate. According to articles 8 to 10 of the VAT regs, input tax = costs of eligible goods or services purchased in current period x applicable deduction rate for input VAT.

The Chinese VAT has some differences compared with a classical European VAT. First, it is not a true broad-based tax because it applies only to tangible goods and a limited range of services.

Second, it is production based rather than consumption based. Purchases of capital goods such as equipment and fixed assets sometimes aren’t permitted to form the basis of an input deduction. This feature was adopted primarily to address fiscal problems facing both the central and local governments in the early 1990s<sup>3</sup> and because inflation had to be constrained.

Third, the tax is not consistently charged and collected on all transactions by businesses throughout the production and distribution process. Differentiation between general and small-scale taxpayers results in inconsistent treatment. Even among general taxpayers, disparities in VAT payment and deduction rates exist for different sectors. The 1994 VAT regulations did not allow for deduction of input tax on capital investment. Capital-intensive industries would suffer a comparatively higher VAT burden than labor-intensive industries.

---

<sup>3</sup>Studies showed that between 1978 and 1995 total government revenues in China fell from over 34 percent of GDP to less than 12 percent of GDP.
Finally, China’s VAT is not neutral in that it is formally administered on a destination basis, though rebates of input taxes are variable by sector and commodity. Border adjustments were also used for stabilization purposes. Like most other countries, China normally uses zero rating for exports, but the government frequently adjusts the rates at which input taxes are credited or rebated on exports.\(^4\)

In theory, neutral refunds should be equal to the domestic VAT paid for the exported goods. In practice, VAT refunds for exported goods are determined by the government, which has become difficult because there was a significant difference between the statutory and effective VAT rates under the production-based VAT system. The government may increase the refund amount when it attempts to encourage exports but reduce it to avoid conflicts with foreign trade partners.\(^5\) This has made the VAT on exports nonneutral and an instrument of trade policy (typically in the textile and clothing sectors).

The 1994 VAT law requires businesses to apply for a special VAT invoice (SVI) in all commercial transactions in China. The amount of input VAT that the taxpayer pays for the purchase of input goods can be used as a tax credit to offset the sales VAT (output VAT). This credit is available only if input VAT payments can be verified by SVIs received from the input seller (or by the special receipt for the payment of import VAT obtained from Customs).

To qualify for input VAT credits for purchased goods, the purchaser must ask the seller to issue an SVI as opposed to an ordinary commercial invoice.\(^6\) The seller should issue SVIs

\(^4\)In the first year of the VAT, much of the claimed 1994 rebates had to be deferred because of rapid export growth and fraudulent invoices and rebate claims. Over the next two years, the government budget still didn’t allow for the requested rebates, so the rebate rates were changed.

\(^5\)VAT refunds on exported goods and the VAT exemption on importation of capital equipment were often subject to official adjustments. The government has issued a number of circulars on this. Normally, most taxpayers must pay the VAT for VAT goods first and then can claim VAT refunds from the tax authorities based on the exported goods declaration certified by Customs. The procedures for, and assessment of, VAT refunds are complicated and sometimes adjusted.

\(^6\)The ordinary commercial invoice is used for supplies that are not for VAT purposes, that is, supplies that are not subject to VAT regulations and rules.
indicating the amounts and the output tax separately. When the supply of goods or taxable services is made to consumers, the supply is VAT exempt, and when the supply of goods or taxable services is provided by small-scale taxpayers, ordinary commercial invoices, not SVIs, should be issued.

The SVIs are controlled by the SAT. All taxpayers must purchase the tax invoices from their local tax bureau. While general taxpayers can usually purchase both SVIs and ordinary commercial invoices for their own use according to the type of goods sold and the tax status of the buyer, small-scale taxpayers cannot purchase SVIs for their own use. If a small-scale taxpayer wants to sell goods to general taxpayers, he may ask the governing tax authority to issue the SVI on his behalf, and it is provided to the buyer.

Qualified users of SVIs cannot always issue SVIs when they are selling a consumer good or a non-VAT item. SVIs cannot be used for the following:

- the sale of goods or the supply of taxable services to small-scale taxpayers;
- the sale of goods exempt from the VAT;
- the sale of goods or taxable services to final consumers;
- the sale of specific types of goods in the retail sector (such as cigarettes, wine, food, clothing, shoes, hats, and cosmetics);
- the sale of export goods or taxable services for consumption outside the P.R.C.;
- the use of goods for nontaxable items (such as using stock-in-trade for the construction of own assets);
- the use of goods for collective or personal consumption;
- the supply of goods at no consideration (a gift); and
- the provision of nontaxable services (except for those subject to the VAT in mixed sales).

In those circumstances, sellers must issue ordinary commercial invoices.

For sales of goods, VAT services, and non-VAT services (that is, mixed sales), sellers must maintain separate accounts for those activities lest their sales of non-VAT services be subject to the VAT and the tax rate levied on the nontaxable services be the highest applicable. For mixed sales, only those who engage in production, wholesale, or retail of goods, and are concurrently tied to
nontaxable services, are liable for VAT. Business tax (not VAT) is levied on mixed sales made by other entities and individuals.

For transactions in which intermediate or nonconsumer goods are involved, SVIs serve both as evidence of VAT payment and as the ordinary commercial invoice. An SVI contains some items not found on an ordinary commercial invoice, such as the rate and amount of VAT payment and the registered tax numbers of the supplier and purchaser. The unit price and total price indicated on an SVI exclude the VAT, while those on an ordinary commercial invoice include the VAT.

SVIs are the only document used to assess VAT due, input VAT deduction, or export VAT refunds.

Practical Problems

Although the VAT has been the most important revenue source for the government in recent years, revenue losses from it are substantial. Some studies estimate that about 55 percent of VAT revenue is lost to tax evasion and weaknesses in tax administration, particularly through the control of SVIs and related fraud.⁷

In theory, a paper trail exists that tax authorities can follow to track VAT paid at all stages of production and distribution until the taxable goods or services are purchased by the final consumers. The reality is more complicated. When forged or fraudulent invoices are used to improperly claim an input VAT refund, the amount refunded may be limited only by the claimant’s greed.

Although SVIs are printed exclusively by an authorized agency in accordance with a form designed by the SAT, and only those invoices can be used to claim VAT refunds, verifying the authenticity of the invoice is difficult. When input tax is paid in one region and a refund is claimed in another region, because the tax authorities in the two regions do not have integrated processing systems, forged or fraudulent invoices may not be detected. Forged VAT invoices, invoices for fictitious transactions, the

---

illegal sale or purchase of SVIs, and failure to report VAT by not issuing invoices to purchasers are common means of evading the tax.

To reduce VAT evasion, the SAT has recently focused on controlling invoices from the beginning of the process. The control measures include the mandatory use of state-regulated computerized cash registers by retailers, the use of an SVI antifraud control system to print and verify SVIs, and improvements in the networking of tax offices to allow invoices issued in different locations to be cross-checked. However, these measures will likely have minimal impact on most businesses that conduct cash transactions. Even though forged SVIs can sometimes be detected, fraudulent claims of input VAT for transactions that did not take place or that took place with smaller amounts than the amount claimed are difficult to detect. Although a primary goal of making SVIs mandatory is to bring the disorganized record-keeping practices of Chinese businesses under the control of the government, the achievement of that goal seems a long way off.

Another problem is the nonallowance of deductions of input VAT for purchases of capital assets, which is at odds with international practice. The production-based VAT has a relative advantage. It prohibits the deduction of input VAT for purchased capital assets, leading to a relatively broad tax base, which can ensure more tax revenue for the government. However, the input VAT that must be capitalized adds to the cost and sale price of manufactured goods within the production and distribution chain. This can lead to duplicated VAT levies through the supply chain in the entire business cycle, and it increases the tax burden on enterprises in general. It also penalizes the purchase of assets by a business and, more broadly, penalizes capital-intensive production techniques.

Although the standard tax rate is 17 percent, the effective tax rate may amount to 23 percent after converting the production-based VAT into the consumption-based VAT. This lack of credits for input VAT for capital assets has also created problems. In

---

8The SVI antifraud control system refers to the computer management system that manages VAT invoices by using special equipment and applying digital ciphering and electronic storage technology. The State Council approved its use nationwide.
view of the regional disparities in production, this type of VAT penalizes the noncoastal regions because their business tends to be labor intensive while business in the inland regions is capital intensive. This production-type VAT has suppressed technological advancement and economic growth in the country, further reducing the competitiveness of Chinese enterprises in international markets.

Also, the VAT applies at multiple rates and is subject to various adjustments. That has reduced the uniformity of VAT treatment and the consistency of input deduction at each stage of the production and distribution process and has led to unequal tax burdens among VAT payers. Limits are placed on export VAT refunds. Unlike the conventional credit-invoice VAT, export VAT rebates are unrelated to input taxes paid on materials, and the allowable refund rates are occasionally changed by the government. This ad hoc approach may help with international trade and with increasing government revenue, but it makes tax burdens unequal.

Another problem is that not all sales of goods and services are subject to the same tax since goods and limited services relating to the sales of goods are subject to the VAT while most services are taxed by the BT. This has cut off the input VAT deduction chain from the flows of services in the business cycle, and it has become impossible to fully reflect the value added processes in the cycle. Unlike the VAT, the BT does not allow for the deduction of input tax from output tax. Thus, the largest advantage of a credit-invoice-based VAT system (that is, cross-checking input and output VAT) is removed under the Chinese VAT and BT regulations.

Further, with the growing integration of business activities, the distinction between the supply of goods and the supply of services has blurred. In contrast, the BT regulations are based on the source of the services and the nature of the transaction. For example, the tax payable for BT taxpayers who provide taxable services, transfer intangible assets, or sell immovable properties should be computed based on the turnover and the applicable tax rates. The turnover should be the total consideration and additional fees and charges the taxpayer received from the provision of taxable services, transfer of intangible assets, or sale of immovable properties.
services has become blurred. More enterprises engage in diversified economic activities that include mixed supplies of goods and services across traditional industrial and commercial lines. The VAT system could hardly prevent enterprises from engaging in tax arbitrage to minimize their tax burdens. And the coexistence of parallel taxes with varied tax rates on the turnovers of service leads to tax evasion or abuse. The BT is a local tax, and revenue from it goes to local governments, while the VAT is administered by the central tax authority and most VAT revenue goes to the central government.

Also, China’s tax administration has long relied on manual operations for collection, refunds, and auditing. The administration lacks efficiency and accuracy in monitoring tax payments. The tax authorities are unable to cross-check detailed information on VAT payers on all of their transactions because of problems with the use of SVIs and inconsistent application of the VAT. Relying solely on SVIs for VAT imposition and auditing doesn’t allow for reliable controls. Fraud and evasion have reduced government revenue. Complexity and vagueness in the VAT regulations allow for arbitrary decisions in the enforcement of the tax, providing incentive to evade the tax and inviting corruption.

Unsolved Problems

The government began a pilot program in three provinces — Heilongjiang, Liaoning, and Jilin — in January 2004 to evaluate the VAT. The program covered eight industrial sectors. It was extended to 26 cities in the central region in July 2007 and to parts of the Inner Mongolia Autonomous Region and the areas hit by the Wenchuan earthquake in July 2008.11

Based on those programs, the State Council approved an overhaul of the VAT law, along with revisions in the BT and CT regs, as part of a large stimulus package before the end of 2008. The MOF and SAT then published revised rules for VAT, the BT, and the CT that took effect January 1, 2009.

The most significant change is that registered general taxpayers may deduct input tax on purchases of equipment and other non-real-property fixed assets. If the fixed assets used in items subject to the VAT are also used in items not subject to the VAT, VAT exemption items, collective welfare, and personal consumption, the input VAT is still creditable. However, it is not clear how the input tax credit should be attributed to a taxable item.

This change only partially transformed China’s production-type VAT into a conventional consumption-type VAT in that capital investments in real and tangible property are not creditable in the production and distribution process. The term “real property” has been clarified to mean property that is immovable or whose nature or shape will be changed after movement, including buildings, structures, and other land attachments. Real property that is newly built, rebuilt, expanded, repaired, or decorated by a taxpayer should be considered a real property project under construction. A right of deduction for input tax on non-real-property fixed assets is a major step in rationalizing the Chinese VAT system.

Other revisions in the VAT are worth noting.

First, the annual sales thresholds for qualifying as a general VAT payer have been reduced from CNY 1.8 million to CNY 800,000 for commercial enterprises and from CNY 1 million to CNY 500,000 for industrial enterprises. That means some previous small-scale taxpayers may be included in the category of general taxpayers so that they can receive the input deduction benefit. The practice of dividing small-scale taxpayers into commercial and industrial types and applying different tax rates has also been repealed, mainly because it was difficult for the authorities to clearly define the type of small-scale taxpayers performing real economic activities. The VAT rate for small-scale taxpayers in all industries is now reduced and standardized to 3 percent. This may help equalize the tax burden between general

12The term fixed assets should include machinery; transport vehicles; and other equipment, tools, and apparatus for production and operation use that have a life of more than 12 months. Fixed assets do not include motor vehicles, motorcycles, boats, or yachts that are subject to consumption tax and are for private use.
and small-scale taxpayers and advance small and medium-size enterprises’ development as well as increase employment.

Second, preferential treatment of VAT exemptions on some imported equipment and VAT refunds on the purchase of domestically produced equipment by foreign investment enterprises have been ended. This was in conformity with the transition from a production-based VAT into a consumption-based VAT. The VAT exemption for imported equipment was provided to encourage some domestic industries to expand the use of foreign investments and to introduce advanced technology. However, the broad scope of the exemption discouraged innovation and didn’t help develop the domestic manufacturing industry. It also created unequal tax burdens among foreign and domestic enterprises because the scope of the exemption for domestic enterprises was narrower than that for foreign enterprises. Since the reform now allows for the deduction of input tax on the purchased equipment, the exemption for imported equipment was no longer needed. The same is true for the VAT refund for domestically produced equipment.

Third, the VAT rate for mineral products was raised to 17 percent from the prior rate of 13 percent. Since the reform provides an input tax credit for purchased equipment for general taxpayers, including mining enterprises, the tax burden on mining enterprises would have decreased. To equalize the tax burden, standardize the VAT system, and promote energy conservation, the government returned the tax rate for mineral products, including metal and nonmetal mineral products, to the standard rate of 17 percent.

Fourth, there were changes regarding some mixed sales activities and all composite sales activities. For mixed sales, the taxpayer who supplies self-produced goods and concurrently provides construction services should separately account for its sales amount of goods and the turnover of non-VAT services. The VAT should apply to the sales of goods, while the BT applies to the provision of non-VAT services. If necessary, the tax authority may determine the sales amount of the goods. For composite sales, the previous rule was that if a taxpayer failed to separately account for the sales amount of goods or taxable services and the turnover of items not subject to the VAT, VAT would be charged.
on the whole transaction. Under the revised VAT rules, the tax authorities may determine the sales amount of goods or taxable services. Therefore, the taxpayer pays VAT and BT separately according to the prices determined by the tax authority. This would help eliminate the double taxation problem caused by the old rule.

The BT treatment of cross-border services will be similar to the Chinese VAT, which uses destination taxation regarding the cross-border flow of goods (that is, taxing imports but exempting exports). The change in the BT rules was also made to mixed sales and composite sales activities to comport with the change in the VAT rules as noted above. The major changes under the new CT regime include the changes to CT policies provided in various tax regulations promulgated during the past 15 years to help the CT conform to changes in the VAT and the BT. The revisions seem to indicate policymakers’ willingness to consider the eventual merging of the current VAT, BT, and CT into a single, standard VAT regime.

But, as SAT officials explained, the recent reform in China’s turnover tax system is limited. The deduction for input VAT on the purchase of fixed assets doesn’t apply to real property and intangible property, though their values may be included in fixed assets for accounting purposes. Also, small-scale taxpayers cannot benefit from the transition to the VAT since their input VAT on the purchase of fixed assets is still not creditable. The BT will eventually be replaced with the VAT, and full deductions will be allowed.

VAT remains the largest revenue source for the government. The government estimated a loss of revenue of CNY 120 billion in 2009 from the changes. An important and sensitive issue is intergovernmental fiscal reform, specifically the fiscal and political relationship between the central and local governments. Currently, most sales of services are subject to the BT instead of the VAT, and the revenue goes to local governments. The BT has been the largest revenue source for local governments, and replacing it would cause a substantial loss of local revenue.

Also, the Chinese tax administration is divided between the state administration (central) and the local administration. The local administration collects the BT. If the VAT were to include
the tax base of the BT, the need for local administration becomes questionable. A full right of deduction, if it extends to the entire production and distribution process regardless of taxpayer status and type of supply, would greatly affect government revenue but increase fairness. Many believe it would be better to phase in a purely consumption-based VAT to minimize any adverse impact on the government’s tax revenue as well as government relations.¹³

In 1994 the SAT began the Golden Taxation Project,¹⁴ a nationwide tax database connecting databases run by public finance departments, banks, customs authorities, securities exchanges, and large enterprises. This network was to be in full operation by 2005, so that tax authorities could monitor taxpayers’ transactions beyond what has been based solely on the SVIs and thus reduce tax evasion from the illegal use of SVIs. Although the technological improvement is commendable and of great help in preventing SVI abuse, the best way to fight VAT evasion and abuse is to change the current VAT to a pure one so that the tax authorities can cross-check input and output VAT at each stage of production and distribution of goods and services.

Conclusion

VAT regimes are widely accepted because the VAT is good at raising revenue — revenue increases with economic growth but is still comparatively stable in economic downturns. And VAT revenue can be earmarked to fund specific public entitlements such as universal healthcare, education, and pensions. This justifies the tax’s regressivity.

Unlike the European VAT, the Chinese VAT covers only goods and a few services. It is not neutral because it does not tax only the value added at each stage of production and distribution. It does not provide for the full right to deduct input tax throughout the supply chain. And it does not guarantee the full implementation of zero rating on exported goods.

Although the Chinese VAT has efficiently raised revenue and promoted economic development, many policy and operational challenges remain. Recent reforms have attempted to address some of these challenges, but much broader reform is needed if the VAT is to realize its true potential in China.