

## CHALLENGES TO VAT IN THE ENVIRONMENT OF MULTIPLE TAX JURISDICTIONS

*The work considers a normative approach to VAT implementation in the environment of tax competition between multiple tax jurisdictions. One of the most severe problems with VAT is tax avoidance, which occurs due to differences in general taxation principles between regions (source-based or destination based taxation) as well as different tax rates. Three proposals are presented. However, as it is mentioned, none of them may be superior to others.*

### Introduction. Why VAT?

Value added tax (VAT) is used in many countries as a revenue-equivalent alternative to the retail sales tax or a use tax. This is a particular kind of tax that is levied at each stage of the production process. Producers pay the tax at the (usually) common rate<sup>1</sup>, and have a right to claim a tax credit on business purchases through the invoices they provide for the tax administration. When it comes to international trade, or to trade between different tax jurisdictions, usually exports are taxed at zero-rate, whereas imports are taxed at the rate of the importer. That is why the ideally administered VAT is destination-based. Proponents of VAT point out its lower administrative costs (although its opponents claim otherwise, probably, it depends on how to calculate these costs), greater tax compliance, and possibility to redistribute the immediate tax burden along the whole production process and generally to increase the revenues. Since the tax is collected through several locations, it leaves fewer opportunities for tax evasion.

However, in real life the complications arise and lead to significant inefficiencies. First, not all countries levy the tax using the destination principle. For example, in Russia, exporters of some goods (like gas, oil, some natural ores) are taxed at the federal rates, when the trade takes place within CIS countries, and applies the standard scheme when trades with Western European countries. I will not discuss possible reasons for such policy, but will mention, that protectionism issues and desire to exercise political pressure play not the last role in these decision making process.

Second, different types of business may enjoy certain tax exemptions from VAT. Also, different rates may exist for different stages of production process, especially between production and final retail sales. Such "deviations" add unnecessary complications for accounting the proper tax, increase administrative and monitoring costs, and provide more opportunities for "invoice fraud", when producers deliberately provide fake tax credit claims appealing to non-existent privileges. If the tax system is fairly complicated, and cooperation between tax administrations and entrepreneurs is weak (as in most LDC's and countries in transition), the total tax revenue may significantly suffer. Again, I will not discuss these issues in the current paper, but the role of different interest groups is worth to be mentioned here.

Finally, "pure" VAT scheme works perfectly well if all production stages take place in the same tax jurisdiction. The problem arises if subnational units (states, oblasts, provinces) have tax additional jurisdiction along with the national (or federal) one, and the borders between states are open for trade. Destination principle is heavily based on the chain nature of VAT: tax authority grants tax credit to every subject of taxation if proper invoices are provided. If some links of the chain are located in other jurisdictions, it is not clear who is going to provide (to finance) the credit, and whether these credits may even out in the interstate trade balances. It turns out that this is not a zero-sum game due to imperfections of VAT and greater fraud possibilities.

Also, this problem is even more severe in the international trade, because the ability to create a "supernational" tax authority (even in the form of

a clearing house) are limited due to the drastic differences between tax systems of countries and lack of political will. On the other hand possibilities for the fraud are much greater, and the role of linguistic differences is not insignificant.

One should understand why a difference between interstate trade and international trade is important for the purpose of this paper, since in the former case there is a possibility of the national (federal) tax authority that can administer the tax and then re-distribute it. In some countries (again, Russia, some EU countries), VAT is levied at the federal level, and then the central government is responsible for re-distribution of proceeds between states. Such mechanism, though it is easier for entrepreneurs and accountants, assumes an increase in administrative costs, and also opens lots of possibilities for misuse of the federal funds, temporarily accumulated all in one place.

Increase in the volumes of interstate and international trade has given a rise to the literature discussing imposition of VAT by different level of government and VAT — related issues of cross-border trade. This paper aims to provide a short review of this literature and possibly make some suggestions on how it is possible to improve them.

### **Modifications of VAT**

#### *Compensated VAT by Varsano/McLure*

First attempts to improve VAT were designed for cross-border trade that is "internal to the nation", or in other words, for the trade between states or within a group of countries integrated in a single market without fiscal borders, such as EU. In such setup two-level tax jurisdiction may be present in a form of local and federal administrations.

The first idea was suggested by Varsano (1995, English version 1999), who aimed to convert Brazil's origin-based VAT into the destination-based tax. This proposal introduces a dual federal/state VAT system. Varsano distinguishes between interstate and intrastate trade, and also between registered and unregistered (retail) traders. He suggests a uniform definition of VAT base and uniform administration of the federal and state VATs, the same VAT rate, with zero rating / deferred payment of VAT for registered traders on interstate trade (instead, these traders will need to pay CVAT at the uniform rate), and credit of CVAT instead of usual VAT. McLure (2000) believes, that Varsano introduces CVAT not as a separate tax, but as one integrated into the federal VAT applied to interstate trade. Unregistered traders will be subject to a usu-

al VAT (origin — based, that is, at the rate of the vendor's jurisdiction). Thus, tax credit will be based upon the CVAT rates and should be administered by the federal tax authority.

Although this proposal was rejected in the author's home country, McLure (1999) have used it as a base for his idea of Compensating VAT (CVAT). McLure claims that such clear distinction between registered and unregistered traders is of small practical value and unnecessarily complicates the administration of the tax and may "yield revenue to the wrong state". Instead, McLure suggested some changes to Varsano proposal. Particularly, he proposed to give states a right to determine state VAT rate at their discretion, whereas provide zero-rating (for state VAT) of all interstate exports, not only for registered traders. To secure the revenue streams, CVAT should be levied on all interstate exports and credited to the registered interstate importers. As a separate treatment, he also advocates introduction of VAT for the internet sales "due to the difficulty of determining the location of purchasers".

Further in his work, McLure addresses different aspects of introducing CVAT, particularly, the choice of the proper tax rate, taxation of interstate sales to unregistered traders, problems with excess credits / refunds, makes a note about problem industries (dealing with intangible goods), and builds comparisons with other proposals. He makes a conclusion, that CVAT applied to all kinds of interstate trade may provide "a simple, neat and elegant solution" when different tax jurisdictions are involved: "States could retain sovereignty over VAT rates, while employing destination-based taxation; preserve autonomy of the states. At the same time, introducing CVAT will not break the chain of tax credits, retaining zero-rating/deferring for interstate trade" (McLure, 2000, p. 735).

#### *Dual VAT by Bird and Gendron*

Bird and Gendron (1998, 2000) consider another modification of VAT, which they called a "dual VAT". They base their proposal upon the Canadian experience (in the province of Quebec), where some form of this tax is already in place. The authors claim that their proposal is very close in spirit to CVAT. In the essence, the dual VAT is a "two-tier" tax, when both national and sub-national tax administrations are present. Central tax authority sets up a uniform tax rate for international trade, leaving states with a right to determine their rates for local sales. Keen and Smith (2000) compare this system with pure-type "uniform rating", a system

when "all member states charge a uniform rate of VAT on exported goods".

This modification of VAT is administratively simpler, though the principle of "compliance symmetry" maybe violated (in a sense, that traders from different states may face different tax rates). However, the authors assert that compliance symmetry is already violated across countries of EU due to the reasons other than tax rates system design. Besides, a distinctive feature of the dual VAT is the inclusion of the central VAT in the tax base of sub-national VATs (as an example, authors refer to QST/GST system prevailing in Canada), which provides additional incentives for sub-national jurisdictions "to pay more attention to the proper application of the central tax". (Bird and Gendron (2000)) Dual VAT does not require rigor and perfect agreements between the involved governments; however, the central VAT is involved, that make it difficult to implement in the international trade settings.

#### *VIVAT by Keen and Smith*

To acknowledge a difference between centralized tax systems of Canada, India, or Brazil and currently decentralized conglomerate of EU countries, Keen and Smith (1996) proposed a system in which zero-rated taxation of intermediate sales within EU may be replaced with "viable integrated VAT" — a uniform Union-wide rate of VAT for all intermediate purchases (with refer to registered traders). This proposal does not involve any central tax administration. Instead, unlike CVAT or dual VAT proposal, it puts much more weight on delineation between registered and unregistered traders. Authors claim that this distinction is much more important in the modern "word without borders", where it might be difficult to determine the real citizenship (or, rather, tax jurisdiction) of vendors, and, sometimes, even buyers. VIVAT is also a destination-based tax, however, the author calls zero-rating "dangerously vulnerable to diversion fraud, that may jeopardize economic integration between member states". In VIVAT, compliance symmetry is given a particular attention, since the author sees dramatic increase in administrative costs for asymmetric systems on day-to-day basis. However, certain diversions between tax rates may exist, but bounded by the highest and the lowest rates within the Union. Altogether, the authors agree that their proposal is not in any aspect superior to the other two.

## **Conclusion**

Three proposals discussed above present a clear example of the normative analysis. Authors do not develop a formal mathematical or econometrical model, and most numerical examples in papers use only fake numbers for illustration purposes. All authors try to show the strongest arguments for their own proposals, and at the same time point out possible problems with others'. I would agree with all of them, that none of the proposals may be absolutely superior to others, and it looks like they are developed for different conditions. On the other hand, none of the proposal is confirmed by real data, thus it is only possible to discuss a possible design of the future international VAT system.

The authors pursue different goals, such as revenue equivalence, uniformity of compliance, or autonomy of local jurisdictions. That is why their proposals may differ so much. There is a difference between interstate trade and international trade. In the former case, central government may apply centralized VAT, create a "clearing house", abolish local tax jurisdictions for VAT at all (as it is done in the former Soviet Union countries), whereas the only way in the latter case may be to seek for agreements between independent tax jurisdictions. In the forthcoming paper, Michael Keen will discuss differences between these proposals in more detail.

I would rather support a proposal, which would stick to a destination principle; but I would not put too much attention to the geographic properties of vendors, as McLure and Bird and Brandon do, since it is really difficult sometimes to determine vendor's location. This comment refers to unregistered traders, because it is easier to deal with tax credits and reimbursements to registered suppliers. An "ideal" proposal should diminish a possibility of "invoice fraud" through eliminating of zero-rating and privileges, secure independence for local tax jurisdictions (or eliminate a centralized administration), provide revenue-relevant rates for all parties involved, and the current principle of allocation of revenues should not be distorted.

To accomplish this task, we would need information on revenue losses from the current VAT system, both for interstate and international level, estimate the volumes of trade between jurisdictions, both with intermediate and final goods, determine if it possible to find an agreement between countries on a uniform tax rate, since all measures would allow to develop a system with the lowest administration costs.

To conclude I should mention that the final word in the field is not yet said, and the current system needs many improvements, simplifications and clearness.

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### **ПРОБЛЕМИ ЗАПРОВАДЖЕННЯ ПДВ В УМОВАХ ПОДАТКОВОЇ КОНКУРЕНЦІЇ МІЖ РЕГІОНАМИ**

*У статті застосовано нормативний підхід до проблеми запровадження податку на додану вартість в умовах податкової конкуренції між регіонами, які мають право встановлювати власну податкову політику. Найгострішою проблемою запровадження ПДВ є ухилення від оподаткування через різницю у податкових ставках між регіонами та загальними принципами стягування ПДВ (у місці споживання або в місці виробництва). Розглянуто три різні підходи до розв'язання подібних проблем, але жодний метод не може вважатися всеохопним.*