



VALUE-ADDED TAXES IN CENTRAL AND EASTERN EUROPEAN COUNTRIES

**A Comparative Survey
and Evaluation**



OECD Centre for
Co-operation with Non-Members

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EUROPEAN COMMISSION
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

Tax reform, as shown by experience in central and eastern European countries, is an important element in the transition from a planned to a market economy system. During the 1990s, these countries have moved their tax systems towards the tax structures typically found in OECD countries. The introduction of Value Added Tax (VAT) has been a cornerstone of these reforms.

This report examines the policy issues and administrative questions that arise in designing VAT systems for transition economies. It focuses on the ten countries from Central and Eastern Europe that have applied for membership of the European Union (EU), enabling these countries to compare their VAT systems and to evaluate them against the legislative criteria to determine their eligibility for integration into the EU's Internal Market, as set out in the Sixth VAT Directive.

The report, which was co-sponsored by the European Commission (DG XXI) and the OECD, serves as a companion volume to the OECD's *Taxing Consumption* (1988) and *Consumption Tax Trends* (1995). Through its PHARE programme, the European Commission has provided extensive assistance to Central and Eastern Europe in the area of taxation. The Fiscal Affairs Division of the OECD, within the framework of the programme of the Centre for Co-operation with Non-Members (CCNM), has disseminated information on the design and operation of VAT through the OECD multilateral tax centres.

The report was prepared by Sijbren Cnossen of Erasmus University, Rotterdam, with assistance from officials in the ten participating countries (see Annex). A team of OECD and European Commission officials oversaw the work, the OECD team being led by Robin Adair and Ian Hutchison, and the European Commission team being headed by Tom Carroll.

The views and opinions expressed are those of the author and do not necessarily represent those of the OECD or the European Commission. The publication is issued on the responsibility of the Secretary-General of the OECD.

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Chapter I

INTRODUCTION

Ten Central and Eastern European countries, *i.e.* Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia, have applied for membership of the European Union (EU). Pending the immediate or postponed consideration of the applications, these countries have entered into Europe Agreements (EAs) with the EU. These agreements are the most complete form of cooperation, short of actual membership, aiming at the harmonisation of various legal and administrative provisions. The major aims of the EAs are the move towards the four freedoms, *viz.* the free movement of goods, services, persons and capital, which govern the EU's internal market, and the establishment of a regime that does not distort competitive conditions. The introduction of the VAT is considered essential to the achievement of these aims.

A. Why a VAT?

The VAT was pioneered in France, which introduced a value-added type of consumption tax on goods in 1954 that was levied at the production stage. In 1968 this tax was merged with the existing turnover tax on services and a local tax on retail sales into a single, comprehensive VAT extending through the retail stage. In the following years, the VAT was adopted by the other original member states of the EU: Germany, Italy, and the Benelux countries. Because the tax was made a condition for membership, the later entrants to the EU introduced it as well. The base of the common VAT was nearly fully harmonised in 1977 with the promulgation and subsequent enactment of the EU's Sixth Directive at member state level.

The EU attaches great importance to the VAT, because, unlike the cascade type of turnover taxes levied earlier, it is very successful in treating intra-Union trade, as well as trade with third countries, according to the destination principle. A VAT enables the precise identification and rebate of

the tax on exports, so that they can leave a country free of tax, while imports can be taxed on exactly the same footing as domestically produced goods. Obviously, this form of neutrality is essential for the proper functioning of the internal market. More generally, the border tax adjustments under the VAT agree with the tax provisions of the General Agreement on Tariffs and Trade (GATT), superseded by the World Trade Organisation (WTO).

In addition to being neutral with respect to foreign trade, the VAT does not distort domestic production and distribution. Thus, under the VAT, it makes no difference how often a product is traded before it reaches the consumer or whether its value is added earlier rather than later in the production-distribution process. Furthermore, the VAT is neutral regarding the production technique that a business adopts. In other words, it makes no difference for the tax liability whether a product is manufactured with capital- or labour-intensive technology. Also, the VAT is not influenced by the forms or methods by which business is conducted. Other things being equal, the tax bill is the same whether a product is made in the corporate or noncorporate sector, or whether it is made by integrated or specialised firms. It will be appreciated that these features are important attributes of a "good" tax in economies that leave the optimal allocation of resources to the free play of market forces.

Beyond that, the VAT is an exceptionally stable and flexible source of government revenue. The revenue yield of a broadly based VAT with few exemptions, as found in the EU, approximates on average 0.4 per cent of gross domestic product (GDP) for every 1 percentage point of the rate. Since consumption as a share of GDP fluctuates little, by implication the VAT is a stable source of revenue. For much the same reason and because the VAT is collected on a current basis, it is a flexible tax instrument: a change in the rate translates immediately into more or less revenue. As a transactions-based tax, moreover, the VAT is a certain levy and relatively easy to understand. Because the tax is broadly based, applying to all sales in the business sector, its base is less subject to differing interpretations than the base of the income tax. Also, opportunities for tax avoidance and tax evasion are probably more limited.

No doubt, these features are important to the Central and Eastern European countries. Because these countries rely increasingly on market forces for allocating economic resources, they need a tax on goods and services that does not unintentionally interfere with those forces. Similarly, the integration of their economies with those of other industrialised countries demands a tax system that does not distort international trade. Beyond that, the role of government in Central and Eastern European countries in providing human and

physical infrastructure and in taking care of the elderly and the poor is likely to remain substantial. Financing requirements in this situation can best be met by a product-neutral, factor-neutral, and revenue-productive tax, such as a VAT.¹

B. VATs at a glance

As shown in Table 1.1, all but one of the Central and Eastern European countries that have entered into EAs with the EU, have already introduced a VAT. Slovenia is the exception; it plans to do so as of 1 January 1999. In most countries, initially, the VAT was rushed in to make up for the loss of revenue that accompanied the break-up of the old planned economies. Subsequently, as they gained experience with the VAT and established closer ties with the EU, these countries undertook major revisions of their VATs to bring them more closely into line with the EU's Sixth Directive.²

The VAT that has been adopted, which is the one used in the EU and in most countries elsewhere, is a multistage, comprehensive, tax credit type of destination based, net consumption VAT. It is multistage and comprehensive, because the VAT covers all stages of production and distribution and, in principle, includes all goods and services in its base. It is a tax credit type of VAT, because it eliminates cumulative effects by granting registered firms a credit or deduction for the tax paid in respect of purchases from registered suppliers against their own tax payable on sales. It is destination-based, because goods and services are taxed in the country of destination or consumption, not in the country of origin or production. Finally, the VAT is a net consumption tax, because it purports to confine the tax to goods and services in consumer hands; all other tradable items, including inventories, are held free of tax.³

Table 1.1 indicates that VATs in Central and Eastern countries are levied at rates ranging from 18 per cent to 25 per cent. The average standard rate is 20.7 per cent compared with 19.3 per cent in the EU. Various countries, moreover, impose one or more reduced rates on items regarded as essential, such as food products, pharmaceutical and medical goods, books and newspapers, and public transportation. In addition to the standard exemptions (education, health, finance, insurance) found in the EU, some countries exempt various products, such as basic foodstuffs, from the VAT. In four countries, some items of consumption are zero rated. The high standard rates in combination with the relatively limited coverage of the lower rates have made the VATs buoyant sources of revenue. As shown in the table, VAT revenues average 8.4 per cent of GDP (against 7.3 per cent in the EU) or 24 per cent of total tax revenue (against 18 per cent in the EU).

Table 1.1 VATs: Introduction, rates, and revenue contributions

Country	Dates of introduction and major revision	National name, number of act and latest amendment (SG= State Gazette)	Standard Rate	VAT rates Exemptions and lower rates ^a	Revenue contribution (%) ^b	
					Total tax revenue	GDP
Bulgaria	April 1, 1994; major revision April 1, 1996	DANAK DOBAVENA STOYNOST SG 90/1993, revised by SG 51/1997 Regulations SG 17/1994, amended by SG 101/1995	22	X	25*	7.0*
Czech Rep.	January 1, 1993; major revision January 1, 1996	Zákon o dani z přidané hodnoty Act 588/1992, amended by Act 133/1995	22	X;5	18	7.8
Estonia	January 10, 1991; major revision January 1, 1994	Käibemaksuseadus Act 60-847/1993, amended by Act 48-776/1997 Regulations September 24, 1996	18	X;0	26	9.1
Hungary	January 1, 1988; major revision January 1, 1993	Általános forgalmi adó Act LXXIV/1992, amended by Act LXXX/1996	25	X;0;12	17*	7.6*
Latvia	January 1, 1992; major revision May 1, 1995	Par pievienotas vertības nodokli SG 9 May 11, 1995, amended by SG 82 May 10, 1996 Regulations 331, November 16, 1995	18	X	24	8.9
Lithuania	May 1, 1994	Pridėtinės vertės mokesčio įstatymas Act I-345/1994, amended by Act VIII-126/1997 Resolution 546 May 9, 1996	18	X	35	8.3
Poland	July 5, 1993	Podatku od towarów i us-ug Act January 8, 1993, amended November 21, 1996 Regulations December 21, 1995	22	X;0;7;17	31*	12.1*
Romania	July 1, 1993	Taxa pe valoarea adaugata Ordinance 3/1992 approved by Act 130/1992, amended by Ordinance 2/1996 and Act 110/1997	18	X;0;9	18*	4.9*
Slovak Rep.	January 1, 1993; major revision January 1, 1996	Zákon o dani z přidané hodnoty; Act 222/1992, revised by Act 289/1995; amended by Act 386/1996	23	X;6	25	10.1
Slovenia	Planned January 1, 1999	Zakon o davku na dodano vrednost	...	...	...	...

a X means that some (essential) goods are exempted from VAT, in addition to the standard exemptions permitted under the EU's Sixth Directive.

b Including social security contributions. Fiscal year 1995;

An asterisk (*) denotes figures for 1996.

Source: Country legislation and data supplied by correspondents.

It should be emphasised that the new VATs have hardly anything in common with the product taxes previously levied in most Central and Eastern European countries. These taxes were either computed as the difference between a predetermined retail price (net of a retail margin) and production costs or were imposed at low but cumulative rates on trading activities. Obviously, in a command economy, these taxes are little more than a bookkeeping instrument to transfer funds from state enterprises to the central budget. This form of taxation is a world apart from that of a transactions-based, accounts-controlled VAT in a market economy based on a free enterprise and pricing system. In this light, most Central and Eastern European countries did surprisingly well in introducing the VAT.

C. Criteria for analysis

In this book, the review of the VATs in Central and Eastern European countries proceeds from the widely agreed premise that the tax should be used almost exclusively to generate revenue for the government budget in as neutral and administratively feasible a manner as possible. While the income tax can be employed to achieve distributional objectives and the excises to attain allocative goals, the focus of the VAT should be on revenue. Accordingly, the requirements for a properly designed and operated VAT are the following:

- The VAT should be productive of revenue and responsive to changes in revenue needs. This requires that *a)* the tax base be broad, covering as many goods and services as possible; and *b)* the point of impact of the tax be as close to the consumer as possible, so as to capture the largest value for tax of any single taxable item.
- Under the VAT, unintended distortions of producer choices, with respect to the form and the methods by which business is conducted, and of consumer choices for one good over another should be minimised. This means that *a)* the anticascading device of the VAT -- that is, the tax credit method -- should be as comprehensive as possible, applying to all producer goods: raw materials, intermediate goods, and capital goods; *b)* refunds should be paid quickly; and *c)* tax-to-consumer price ratios should be as uniform as possible.

- The VAT should permit the unequivocal application of the destination principle. In other words, commodities should be taxed in the country where they are consumed, not the country where they are produced. This means that *a)* the tax on imported goods should be the same as the tax on domestically produced goods; and *b)* exports should leave the country completely free of tax.
- The VAT should be simple and easy to understand. Thus, *a)* the value for tax should be based on the actual selling price of goods and services rather than on presumptive or deemed selling prices; *b)* exemptions of goods and services should be limited to those essential for social reasons or those involving administrative complexity; *c)* the rate of tax should be uniform or as little differentiated as possible; and *d)* the zero rate should be confined to exports.
- Costs of collecting and enforcing the VAT should be kept low. This requires that *a)* the tax be fully administered on a self-assessment basis; *b)* small shopkeepers, artisans, and small services establishments be exempted; and *c)* tax invoices play a central role in enforcing the tax.
- The VAT should be easy to comply with and should interfere as little as possible with the free functioning of business and trade. This objective implies that *a)* the tax should be attuned as closely as possible to actual business transactions and accounting methods; *b)* taxable firms should be obliged always to charge tax regardless of whether a purchaser is a consumer, another business, or a government entity; and *c)* the tax should be verified primarily through checks on accounting records rather than through other types of control.

It will be seen that the VATs in Central and Eastern European countries satisfy many but not all of these criteria for a "good" VAT.

D. Organisation of the monograph

Chapter II examines how the VAT works. It indicates why the indirect-subtraction VAT is preferred over other broadly based consumption taxes, such as the retail sales tax, the direct-subtraction method tax, and the

addition method tax. Although in theory all of these approaches to taxing consumption are economically equivalent, in practice the VAT is the most feasible and neutral option. Subsequently, the workings of the VAT are explained in some detail regarding its neutrality properties, the treatment of imports and exports, exempt products and activities, and zero-rating vs. exemption. An Appendix shows the links between a VAT and a firm's Profit & Loss Account.

Chapter III tries to put some flesh on the broad conceptual outline sketched in Chapter II. Because taxes are confiscatory levies, VAT laws have to spell out in considerable detail what is taxable, where and when. VAT is imposed on transactions and persons if the transactions are supplies of goods and services which are taxable and not exempt and if they are made by taxable persons in carrying out economic activities. Besides identifying what transactions and persons are within the scope of the VAT, rules are required to determine where transactions occur, when they occur, and what the value is on which VAT should be imposed.

A "good" VAT taxes the broadest possible range of goods and services that are used by or benefit businesses and individuals. In this light, Chapter IV provides an overview of the VAT bases in Central and Eastern European countries and the rates that are applied to various categories of goods and services. The treatment of public sector activities receives special attention, because most Central and Eastern European countries provide a wider range of goods and services through public sector bodies than EU member states. Exemptions in the public interest and other exemptions are also reviewed.

The ability to tax all current consumption under a VAT is limited for administrative reasons. The value of some goods and services is difficult to ascertain, because they are consumed over many years. This is the case, for example, with the housing services provided by owner-occupied property. It would be an administrative burden, moreover, to register all home-owners for VAT purposes. This observation can also be made with respect to property that is partly used for housing purposes and partly for commercial purposes. Accordingly, housing services have to be taxed indirectly. Chapter V examines the issues and the actual treatment of immovable property in Central and Eastern European countries.

Administrative difficulties are also encountered in applying the VAT to financial services (and insurance). As Chapter VI explains, financial services are difficult to tax properly under a tax credit method VAT, because the

intermediation charge, which should be taxed, cannot be separated from the pure rate of interest, which should not be taxed. Taxation of the combined amount is distortionary because it drives a wedge between the pure rate of interest paid to households and the pure rate of interest paid by businesses. Zero-rating of financial services would be a form of overkill. Hybrid tax credit and addition or subtraction methods exacerbate cascade effects and unduly complicate the administration of the VAT. The cash-flow method is a promising new approach, but requires considerable more design work, testing, and analysis. For the time being, the practice of exempting financial services appears to be the most feasible second-best solution.

The most basic criterion for tax policy and design is a fair distribution of the tax burden. Under VATs this objective is often sought to be achieved by taxing essential products that are disproportionately consumed by the poor at lower or zero rates or by exempting them. Chapter VII reviews the issues and practices. The burden distribution of VATs is generally calculated on the basis of consumption data drawn from expenditures surveys. The difficulties in collecting suitable data are briefly discussed, as well as the issues involved in choosing the most appropriate index -- income or consumption -- for measuring the impact of the VAT. Next, actual rate structures are surveyed; many are highly differentiated with exemptions, zero or lower rates for various products. It is concluded that these rate structures are largely ineffective in mitigating the VAT burden on the poor, misallocate resources, and impose high administration and compliance costs.

The VAT is imposed on the destination principle, *i.e.* goods and services are taxed only if consumed domestically; exports are zero rated and an equivalent tax is imposed on imports. As discussed in Chapter VIII, the destination principle contrasts with the origin principle, under which exports are taxed but imports are not. Several economic and administrative reasons can be given why the destination principle should be preferred. The principle becomes more difficult to operate, however, if border controls are abolished as has happened in the EU. Currently, the taxation of imports is shifted inland under a deferred payment or postponed accounting scheme which is similar in operation to the reverse charge mechanism for services originating abroad, also found in Central and Eastern European countries. Alternatives, such as the tax credit clearing mechanism and the most recent proposal by the European Commission, are reviewed.

To reduce compliance and administrative costs under their VATs, all Central and Eastern European countries exempt small businesses from the

obligation to register and pay tax. Without exception, as shown in Chapter IX, the small-business exemptions are based on an annual (or quarterly) turnover threshold without regard to the type of business or the kind of supply (goods or services). This contrasts with the complicated small-business schemes in most EU member states. The approaches to the treatment of farmers show more variation. Some countries apply the small-business exemption, while other countries use a flat-rate scheme under which farmers are compensated for the tax borne on inputs. Poland exempts the entire agricultural sector.

Generally, Central and Eastern European countries disallow the tax on purchases of various goods and services which, although used for the purpose of the business, are indistinguishable from supplies for private use. Chapter X discusses the issues. Similarly, the input tax on goods and services used for exempt supplies must be denied in a presumptive fashion if these supplies are mixed with taxable supplies. In all countries the tax on purchases is apportioned on the “turnover” basis. Most countries also have rules for recouping or allowing the tax on capital assets whose use changes from taxable to exempt use or vice versa. Three countries have no special rules to deal with second-hand goods that are bought and sold by taxable dealers. The other countries tax only the margin.

Chapter XI outlines the basic obligations of taxable persons to register, issue VAT invoices, file returns and pay the tax by the due dates. The VAT invoice is looked upon as an important enforcement tool. In all countries, late payment charges increase with each day that the tax remains unpaid. Thus, the penalties provide a continuous disincentive to delay payment. Objections and appeals against assessments and other matters can be lodged with local tax offices, VAT departments, and with the courts. Generally, the administration of the VATs is coordinated with the administration of the business income taxes, except in Bulgaria. Administrative and compliance costs have not been estimated, but they are believed to be high. Probably, countries should guard against pursuing legal, procedural and accounting purity, which increases compliance costs instead of revenue.

Appendix I lists the departures from the standard exemptions (health, education, social services, finance, insurance) listed in the Sixth Directive, that are found in the countries under review. Similarly, Appendix II shows the standard rates and the goods and services covered by a zero rate or a lower-than-standard rate. Appendix III contains a selected bibliography.

It should be emphasised that the information on the VATs in Central and Eastern European countries provided in the tables and the text reflects the situation as of August 1, 1997. Subsequent changes have not been taken into account. Furthermore, Slovenia has not yet introduced the VAT, although it plans to do so as of January 1, 1999. The information on its VAT, therefore, reflects the situation after the first reading of the VAT bill before the Slovenian Parliament in May 1997. The third and last reading is expected to take place in March 1998. Finally, national currency units have been converted into US dollars at exchange rates prevailing on October 10, 1997 published in *Financiële Dagblad*.

Notes

1. For an early analysis of the social, economic, and technical issues pertinent to the introduction and operation of the VAT in the region under review, see Sijbren Cnossen, "Key Questions in Considering a Value-Added Tax for Central and Eastern European Countries," *IMF Staff Papers*, vol. 39/2 (June 1992). Reprinted in Cedric Sandford, ed., *Key Issues in Tax Reform* (Bath, UK: Fiscal Publications, 1993).
2. The most comprehensive comparative survey of VATs in the EU countries -- all members of the Organisation for Economic Cooperation and Development (OECD) -- is provided in OECD, *Taxing Consumption* (Paris, 1988), as updated by *Consumption Tax Trends* (1995) and *Consumption Tax Trends*, Second Edition (1997).
3. For a broad ranging discussion of VAT problems, analysis of effects, and examination of administration, see Alan A. Tait, *Value Added Tax: International Practice and Problems* (Washington, DC: International Monetary Fund, 1988). For a useful concise treatment of the various issues, see also Charles E. McLure, Jr., *The Value-Added Tax: Key to Deficit Reduction?* (Washington, DC: American Enterprise Institute, 1987).

Chapter II **TAXING VALUE ADDED**

Before examining various aspects of the VATs actually being administered in Central and Eastern European countries, it seems useful to dwell briefly on the nature and mechanics of the VAT and other broad-based consumption taxes.

A. *Alternative consumption taxes*

As discussed below, there are four, basically identical, forms of taxing consumption indirectly. A brief comparative review shows that the VAT is the best form.

1. *Forms of consumption tax*

The nature of the VAT and other consumption taxes can be illustrated by reference to the example in table 2.1, which traces the manufacture and sale of the desk at which the first draft of this monograph was written. Following the production and distribution cycle, we start with the lumber company (the primary producer: P), who sells wood to the furniture manufacturer (M), who delivers the desk to the wholesaler (W), who distributes it to the furniture store (the retailer: R), who in turn puts the desk at our disposal. For simplicity, it is assumed that each stage purchases the whole output of the previous stage and that P has zero inputs.

In each stage, the value of the inputs increases by the value of labour and capital applied in the production or distribution of the desk. In terms of the example: $A_2 + A_3 = A_1$ which may also be written as: $A_3 = A_1 - A_2$. In other words, value added is identical to the difference between sales and purchases. Consequently, at the final stage, that is the retail stage, the sum of all values added throughout the production-distribution process, and, by the same token, the sum of all the differences between sales and purchases (in either case, \$1,000 in the example) equals the consumer price, exclusive of tax.

Table 2.1 **VAT, RST and direct-subtraction VAT (levied at a rate of 10%)**
(in US dollars)

Basic information/ Kind of tax	P	M	W	R	Total
A. Transactions (exclusive of tax)					
1. Sales	200	600	700	1000	-
2. Purchases	0	200	600	700	-
3. Value added ($A_1 - A_2$)	200	400	100	300	-
a. Labor income	(190)	(375)	(95)	(280)	-
b. Capital income	(10)	(25)	(5)	(20)	-
B. Value-Added Tax (VAT)					
4. Tax on sales (10% of A_1)	20	60	70	100	250
5. Tax on purchases (10% of A_2)	0	20	60	70	150
6. Net tax liability ($B_4 - B_5$)	20	40	10	30	100
C. Retail Sales Tax (RST)					
7. Tax on retail sales (10% of A_1/R)	-	-	-	100	100
D. Direct Subtraction Method Tax					
8. Tax on sales minus purchases (10% of A_3)	20	40	10	30	100
E. Addition Method Tax					
9. Tax on value added (A_3)	20	40	10	30	100

Source: Author.

The example incorporates a number of accounting identities which are worth repeating, because they are fundamental to a good understanding of the VAT. Thus, the consumer price = is always equal to the sum of all values added = is always equal to the sum of all the differences between sales and purchases = is always equal to the sum of labour payments and receipts of capital income. If this is borne in mind, it will be readily apparent that exactly the same total tax can be collected in either of two ways:

- a) in full at the retail stage under a retail sales tax (RST); and
- b) fractionally throughout the production-distribution process by confining the tax to the value added at each stage. In turn, the

fractional or multistage collection technique can be effected in either of three ways:

- indirectly by crediting the tax on purchases against the tax on sales under the indirect subtraction technique, called VAT in this study;
- directly by subtracting purchases from sales and applying the tax rate to the difference under the direct subtraction technique; and
- directly by taxing labour and capital income at all stages under what is called the “addition method” in the tax literature.

Table 2.1 illustrates these accounting identities. The total net VAT (heading B) collected throughout the production-distribution process (*i.e.* \$100, line 6) equals the tax collected under an RST (heading C, line 7), which equals the tax collected under a direct-subtraction VAT (heading D, line 8), which equals the tax collected under an addition-method VAT (heading E, line 9). Although all of these forms of taxing “value-added” are theoretically identical, in practice large differences exist, which in turn affect the economic outcome of the tax and its administration.

The meaning of “value added” in the above example, as the sum of the value of labour and capital applied in production and distribution, requires explanation. The value added by labour equals the sum of wages paid by the firm. The value added by capital, however, does not equal profits as usually defined. To understand this, note that capital income consists of the normal return to investment, the entrepreneur’s risk premium, and above-normal profits or rent income associated with headstarts, such as a favourable location, a well-known brand name, or a new technique or product. The value added by capital included in the VAT base represents the sum of the entrepreneur’s risk premium and his above-normal profits. It does not include the normal return to investment, because investments (which represent the capitalised value of the normal returns over the life-time of the investments) are expensed immediately. This is equivalent, in VAT language, to a full and immediate credit for the tax on purchases of investment goods. Also, the value of capital does not include capital income receipts from other firms in the form of interest, dividends and rents.

2. *Choosing among alternatives*¹

If a VAT is identical to an RST, why not collect the full tax at the retail stage? The VAT is preferred for two reasons. To begin with, the RST concentrates the tax liability in full at the weakest link, from a tax administrative point of view, in the production-distribution cycle, *i.e.* the retailer. In contrast, the VAT disperses the collection process over the whole of commerce and industry. It transfers part of the burden of proof concerning tax liability to taxable persons who must prove that they are entitled to the tax credit on purchases. In fact, every VAT invoice throughout the production-distribution process is a “public declaration” of the tax liability.

Furthermore, RSTs have difficulty distinguishing between producer and consumer goods. How does a registered firm know that a shovel it supplies tax free is not used for (taxable) gardening purposes instead of as an (exempt) input for factory work? A VAT has no such difficulty, because the seller is simply told always to charge tax, leaving it to the purchaser to obtain a tax credit if it is also a taxable person. In practice, under RSTs, many producer goods (*e.g.* fuel, office furniture, computers) are taxed. This discourages capital-intensive production and discriminates against exports. By the same token, imports are favoured, because the price of domestic goods incorporates an element of tax on producer goods, whereas the price of imports generally does not include this element of tax.

Likewise the “indirect-subtraction method” VAT has advantages over the direct-subtraction approach. Under the VAT, an exemption in the middle of the production-distribution process means that the tax on purchases cannot be passed on. As a result, the tax load on the affected product will ultimately be higher than in the absence of an exemption. This feature creates a strong inducement for business firms to register for VAT purposes. No such inducement exists under the direct-subtraction approach. An exemption creates an arbitrary and indeterminable benefit for favoured products. Once lost, the tax cannot be recouped. This means that the direct-subtraction method will be subject to relentless political pressure to exempt certain products, activities, and sectors. Fairness and neutrality would suffer. Beyond that, the direct-subtraction method cannot accommodate differentiated rates which, although not to be recommended, may be desired for technical reasons or to mitigate the presumed regressive burden distribution of the tax.

The last alternative, the addition method, is more complicated than either the direct or indirect-subtraction method. In addition to information

on sales and purchases required under the subtraction methods, data are also required on investment income, as well on changes in the value of inventory and the cost of capital goods. In fact, the addition method cannot be applied before all items of the profit-and-loss account have been determined, something which most business firms cannot do on a monthly or quarterly basis, which is the period for which most VAT laws require the submission of returns and the payment of tax. Basically, the addition method entails the same complexities as a business income tax.

The choice for the indirect-subtraction method of VAT is confirmed by the decisions countries in the real world have taken. The Nordic countries replaced their RSTs by VATs that have a broader base and achieve greater neutrality. Furthermore, no country uses the direct-subtraction method. Until recently, the Finnish VAT had some features akin to the direct-subtraction method, but these have now been abolished. Also, the Japanese VAT has an optional direct-subtraction technique, but it is confined to small firms (to ensure that these firms do not face tax cumulation). Furthermore, no country uses the addition method. In the past, Argentina and Israel applied it to selected economic activities, such as banking, where the value of inputs and outputs is difficult to measure, but the schemes have been abolished.

The VAT emerges as the most robust form of broad-based consumption tax. Its structural and administrative integrity, and hence its revenue productivity, appear easier to maintain than the integrity of other types of consumption taxes in light of potential political demands, economic complexities, and existing accounting conventions. The base of the VAT is less easily eroded, its economic effects are more certain to be neutral, and the tax liability can readily be ascertained under prevailing accounting systems.

B. How the VAT works

The issues that have to be faced in designing and operating a VAT can best be illustrated by working through a basic example showing the salient features of a full-fledged, comprehensive VAT. The example is highly stylistic, but this has the advantage of putting the concessions that have to be made for social and administrative reasons in a proper perspective, while keeping the ‘ideal’ form of the tax in full view.

1. *Example*

Table 2.2 traces the importation of raw materials worth, say \$500, through the manufacturers and wholesale stages to the retail stage where the final product is sold to the consumer at, say, \$3,000. In each stage, taxable value added is defined as the difference between imports or sales and purchases. As the bottom of the Table shows, the tax liability is calculated by applying the tax rate, assumed to be 20 per cent, to each sale. (Note that importation is a separate taxable event integrated with the tax liability incurred on domestic transactions.) However, to ensure that the tax is confined to the value added in each stage, each stage is permitted a credit for the tax on purchases from the prior stage, against the tax payable on sales. Furthermore, it may be noted that at the time of the retail sale, the total tax of \$600, collected in instalments throughout the production/distribution process, equals the consumer price (\$3,000) times the tax rate (20 per cent).

As table 2.2 illustrates, the VAT is computed by allowing a deduction for the tax on purchases against the tax on sales (tax credit technique or invoice method). Virtually all countries have chosen the invoice method, because sellers can then be required to state the tax on invoices. This facilitates border tax adjustments (zero rating of exports and taxation of imports) and compliance control (cross-checking). In other words, the tax leaves a clear audit trail. The invoice method also facilitates the computation of the tax liability: the tax shown on all purchase invoices is simply summed and subtracted from the tax shown on all sales invoices.

2. *Tax neutrality*

The above example clearly illustrates that the VAT is imposed only on the value added in each stage. Value added in previous stages is not taxed again (if this were done, the effect would be called cascading). The effective rate of tax, moreover, does not depend on the number of stages that a good passes through before it reaches the consumer or, for that matter, on the fact that value is added in earlier rather than later stages in the production/distribution process. To illustrate, consider what would happen if the manufacturer in table 2.2 would sell the final product directly to the retailer for \$3,000. In that case, he would have to remit \$470 tax, *i.e.* \$600 tax on the sales price less a credit of \$130 in respect of his purchases. Even if the wholesaler is left out of the chain, the consumer still pays \$600 in tax.

Table 2.2 Workings of value-added tax

a. Computation of value-added

(Transactions in US\$, exclusive of tax)

Production/ distribution stage	Sales or imports	Purchases	Value-added
Importer			
Importation	500	--	500
Domestic sales	650	500	150
Manufacturer	1,500	650	850
Wholesaler	2,000	1,500	500
Retailer	3,000	2,000	1,000
Consumer		3,000	3,000

b. Calculation of tax liability

(20 per cent tax in US\$)

Production/ distribution stage	Gross tax	Tax credit	Net tax
Importer			
Importation	100	--	100
Domestic sales	130	100	30
Manufacturer	300	130	170
Wholesaler	400	300	100
Retailer	600	400	200
Consumer	600	--	600

Source: Author.

But the economic neutrality of the VAT is even more comprehensive than the foregoing implies. To understand this, it should be emphasised that value-added is simply defined as the difference between sales and purchases, regardless of whether or not such purchases and sales are related. Stated differently, the tax on all purchases made for the purpose of the business is immediately creditable against the tax on sales (in principle, any excess credit should be refunded without delay). In legal terms, a taxable firm's right to a tax credit (and refund) arises at the same time that the supplier has to account for the tax: the date of both events is based on the same VAT invoice. Thus, in the example, the gross tax of \$130 payable by the importer on the domestic sale is

cancelled by the tax credit permitted to the manufacturer, the gross tax payable by the manufacturer (which includes his net tax) is cancelled by the tax credit permitted to the wholesaler, and so on, until the retail stage where the consumer, not being registered², has no opportunity for collecting tax from the buyers of his labour services and offsetting the tax on his purchases.

But if no net tax is borne by registered firms in relation to their own value-added, how come each firm nevertheless remits some tax to the tax authorities? To understand this apparent paradox, the appropriate focus is to look upstream at financial flows rather than downstream at the flow of goods and services. The answer is then that the consumer pays the full tax which is collected, again in full, by the retailer, but which is remitted to the tax authorities by all taxable persons in proportion to their share in the total value-added embodied in the final product. Any net tax remitted by upstream firms is simply paid to them by their successors in the production/distribution chain. The only assumption that needs to be made for this to occur is that the average length of time required for settling accounts receivable and payable is the same as the length of time for remitting tax and processing any net refunds. It is this feature that has made the VAT such a neutral tax from the business point of view.

Thus, the VAT is not a cost to registered businesses and does not enter a business firm's profit-and-loss account (except if, say, an exempt item is purchased whose price includes an element of VAT incurred in earlier stages). Obviously, usually the VAT will be an item on a firm's balance sheet to account for the algebraic difference between the VAT collected from customers and the VAT remitted to the tax authorities. The appendix to this chapter shows the link between the VAT and a firm's profits-and-loss account.

3. *Imports and exports*

In the international context, consumption goods are taxed according to the destination principle, that is, in the country where consumed not in the country where produced. This means that imported goods should be taxed on the same footing as domestically produced goods and that exports should leave the country completely free of tax. These adjustments are called border tax adjustments. A VAT is uniquely designed to effect them fully and unambiguously. This is essential for the proper functioning of the EU's internal market in which competitive conditions are not to be distorted by the tax system.

To show that the tax is neutral between home-produced and foreign-made goods, assume that the product in table 2.2 had not been manufactured domestically, but purchased from a foreign producer and imported by the wholesaler at the same price as charged by the manufacturer. The wholesaler would pay \$300 tax at the border and \$100 upon sale to the retailer (\$400 on sales minus \$300 on purchases). As before, the retailer would pay \$200. At the time of purchase by the consumer, therefore, the total amount of tax would again equal \$600. The VAT, therefore, does not discriminate in favour of or against imported goods.

The example can also make clear that, as a rule, a multistage VAT is not plagued by any valuation problems. If the importer and the manufacturer in table 2.2 were integrated and the manufacturer acting as importer underdeclared his imports of \$500 by \$250, the result would be that upon importation he would pay \$50 VAT. However, at the time of the sale of the product manufactured by him he would pay \$300 tax on his sales minus \$50 tax on his purchases or a net tax of \$250, instead of a net tax of \$170. In other words, the tax forgone at the import stage would have been recouped and the total tax at the time of the retail sale would still be \$600. Of course, this would not happen if the whole production/distribution chain were engaged in the underdeclaration of sales, but this is not very likely and becomes less so the closer tax coverage is extended to the consumer. To be sure, the full tax would not be collected if the manufacturer would not remit his tax of \$250 to the tax office. Even so, \$350 would still flow into the tax office. Evasion of the tax liability for the full amount of the tax is less likely under a VAT, therefore, than under other consumption taxes.

Similarly, the VAT permits exports to leave the country completely free of tax. Thus, in table 3, the manufacturer who decides to sell his product abroad rather than on the domestic market, would not pay tax in respect of the value added by himself. Rather, he would receive a refund of \$130 for the tax paid in previous stages and shown on his purchase invoices. In effect, the exported product is zero-rated, ensuring that its competitive position abroad is not hampered by domestic taxes.

4. *Exempt products and activities*

Given the interlocking nature of a VAT, the effective rate of tax (the tax expressed as a percentage of the consumer price) is always determined by the last taxable stage through which the taxable product passes. Consider, for example, what would happen if, for social reasons, the government would tax

essential consumer items at a lower rate of, say, 10 per cent, and this rate would apply at the retail stage (because the essential nature of the item cannot be determined at previous stages). The result would be that the retailer would pay \$300 gross tax on his sales and receive a tax credit of \$400 for the tax invoiced by the wholesaler. Therefore, he would obtain a refund of \$100 and the total tax collected in respect of the product would be \$300, or 10 per cent of the consumer price. To prevent the tax office from becoming too heavily involved in tax refunds, many countries set their lower rates of tax at a level so that as a rule refunds do not arise. Applying a zero-rate at the retail stage would involve a refund of \$400, which nullifies the whole collection effort in previous stages.

In addition to taxing selected products at a lower or a zero rate, certain activities may be exempted from tax, that is, firms carrying on such activities would neither pay tax on sales nor receive a refund of tax on purchases. If, in the example, small retailers would be exempted for administrative reasons, the tax incorporated in the price of the final product would be \$400, or 13.3 per cent of the final consumer price (excluding tax), instead of 20 per cent. Clearly, vis-à-vis other goods and services, exempt products receive favourable treatment. But this may be the only way to keep small retailers without proper accounts off the VAT register.

In EU member states, the exemption method is confined to selected services sectors, such as education, health, social and financial services, either for social policy reasons or because their value added is difficult to determine. The discrimination vis-à-vis other products is small if the value added in the exempt stage is also small. Of course, this is unlikely in respect of the services listed above, because their labour content as opposed to their input of taxable producer goods, is generally high. On the other hand, a high labour content is a helpful feature, if the objective is to exempt certain activities as fully as possible. For instance, if labour-intensive agricultural activities were exempted, related products sold through untaxed channels would bear little tax, which may be a desirable feature for equity reasons.

5. *Zero-rating versus exemption*

Two terms have been used in the previous discussion that require some further elaboration: zero-rating and exemption. Under accepted terminology, zero-rating under a VAT means that all prior-stage tax (which can be readily ascertained from purchase invoices) is credited or refunded with respect to particular goods and services or transactions, such as exports. On the

other hand, exemptions do not involve tax credits or refunds of tax, because purchasers of taxable commodities, like consumers, are not allowed to register with the tax office. Hence, they are not taxable in respect of their sales and cannot take credit for the tax on their purchases or file a claim for a tax refund. While zero-rating clears a product or transaction of all tax, exemption leaves an arbitrary element of tax in the price of a good or service, namely the tax that has been paid with respect to the inputs used in producing that good or service. That element becomes indistinguishable from the price and cannot be credited against the tax on sales in subsequent stages of production.

Firms selling goods and services that attract a zero-rate (say, exporters) must register for tax purposes. Their returns must be processed, their books of account examined, etc. for the purpose of refunding amounts of tax collected in earlier stages of the production/distribution process. Obviously, zero-rating is a very labour-intensive administrative process that does not yield any net revenue. Zero-rating may also be subject to abuse if firms selling zero-rated products claim greater refunds than the tax paid with respect to their purchases. Registration of firms selling zero-rated products might be avoided by allowing them to buy their inputs free of tax. But this approach would involve the seller and the tax office in the administration of notoriously difficult to monitor end-use exemptions. Therefore, with few exceptions (Ireland and the United Kingdom), all EU member states confine the zero-rate to exports.

With exemptions, the problem is that firms selling both taxable and exempt goods must allocate their prior-stage tax between the two types of goods. After all, the tax credit with respect to purchases relating to exempt commodities must be denied. Usually, this is done in a fairly arbitrary fashion. For instance, the tax credits to which the taxpayer is entitled may be allocated to exempt and taxable commodities in relation to their respective turnovers (see Chapter X). Again, close monitoring by the tax administration is required. For these reasons, European countries never exempt goods, but confine exemptions to designated services sectors that render services primarily to consumers. In addition, they exempt some activities, such as farming, fishing and horticulture on administrative grounds.

Appendix

VAT AND THE PROFIT AND LOSS ACCOUNT

The workings of a VAT can usefully be illustrated by reference to the profit and loss account, which, after all, is the central summary statement of a business firm's activities. Consider the stylised example in table 2.3, which shows the quarterly profit and loss account of a Polish trading firm, as well as the items that enter into the VAT base and the corresponding gross and net tax liability. The business sells goods and services that it produces by adding the value of the services of its own labour and capital equipment to its purchases from other firms. The top of the table shows the transactions liable to VAT, namely sales (line B) and purchases (line A). The difference between sales and purchases is the net value added by the firm (line F). Since the tax is levied at a rate of 10 per cent, the net VAT liability is PZ 160 minus PZ 110, or PZ 50 (also line F).

Clearly, the entries in the profit and loss account on purchases cannot be used directly to ascertain net taxable value added. The reason is obvious. Although the profit and loss account and the VAT both record the transactions on an accrual basis, the net consumption type of VAT is also levied on a cash flow basis of accounting. Thus, no correction needs to be made for the change in the value of inventory (which must be made in the profit and loss account to match sales and purchases). Furthermore, the cash flow basis of accounting implies that the tax on the purchase of machinery (which is assumed to be depreciated over four years in the profit and loss account) is credited immediately against the VAT on sales. As a result, as accountants will note, gross profits (PZ 400; not shown in the table) are not the same as net value added (PZ 500).

In the table, the net VAT liability is computed by deducting the tax on purchases (more generally referred to as inputs) from the tax on sales (also referred to as outputs) for each tax period. Obviously, as is evident from the table, the net VAT liability can also be ascertained by deducting the aggregate

Table 2.3 VAT and the Profit & Loss account
(In Polish Zlotys, excluding 10 per cent VAT)

Costs	Profit and Loss Account	VAT		Proceeds	Profit and Loss Account	VAT	
		Base	Tax			Base	Tax
A. Purchases	1,200	1,100	110	B. Sales	1,600	1,600	160
Goods	950	950	95	Goods	1,200	1,200	120
Inventory - open: 350				Services	400	400	40
close: 150	200	-	-				
Services	50	50	5				
Machinery	-	100	10				
(depreciation- 4 years)							
C. Factor rewards	800	-	-	D. Investment income	400	-	-
Wages	450	-	-	Dividends	125	-	-
Depreciation	25	-	-	Interest	275	-	-
Interest	90	-	-				
Net profits	235						
E. Total (A + C; B + D)	2,000	-	-		2,000	-	-
F. Net value added (B - A)	-	500	50				

Source: Author.

value of purchases (PZ 1,100) from the aggregate value of sales (PZ 1,600) and taxing the difference (PZ 500) between them. As noted above, this approach to computing the VAT is called the direct-subtraction technique, or accounts method.

Apart from identifying value added through the indirect- or direct-subtraction technique as the difference between outputs and inputs, value added can also be computed as the sum of factor rewards: wages and capital income (line C in table 2.3). In the literature, this approach is referred to as the addition method. To arrive at net value added, investment income (line D; this income does not represent value added by the firm) and the purchase price of the machinery (PZ 100) must be deducted from factor rewards (line C), while the change in the value of inventory (PZ 200) must be added (or deducted if the value of closing inventory exceeds the value of opening inventory). Clearly, this approach is more complicated than the subtraction method, which does not require inventory accounting.

Notes

1. For a broad review of the factors involved in choosing among types of consumption tax, see Carl. S. Shoup, "Choosing among Types of VATs," Chapter 1 in Malcolm Gillis, Carl. S. Shoup, and Gerardo P. Sicat, eds., *Value Added Taxation in Developing Countries* (Washington, DC: World Bank, 1990). A summary of the arguments can also be found in Sijbren Cnossen, "Consumption Taxes and Global Competitiveness," *Tax Notes*, vol. 52/10 (September 2, 1991).
2. If this were done, the whole production/distribution chain would resemble a merry-go-round of VAT payments and credits without any net tax being collected by the tax authorities. The chain is broken, however, at and only at the consumers stage.

Chapter III

LEGAL FRAMEWORK

The basic principles of the VAT, outlined in the last chapter, have to be worked out in detail if they are to be applied successfully in the real world. Unambiguous legislation is essential if a VAT is to be effectively implemented. Under any tax, but particularly a tax that is based on voluntary compliance, clear definitions are required of who should be taxed, on what, where, when, and to what extent. In legal jargon, the terms “taxable person,” “taxable and exempt supplies,” “place and time of supply,” “taxable value,” and various other terms should be minutely prescribed.¹ This chapter briefly reviews the VAT laws of Central and Eastern European countries regarding these aspects.

A. Taxable persons

Analogous to the terminology of the Sixth Directive, the person in Central and Eastern European countries who has to account for and remit VAT is called a “taxable person.” Taxable persons are liable to tax on all amounts received or receivable by them for taxable supplies made in the course of a business, trade, or similar activity. Persons must apply for registration as taxable persons if their taxable output exceeds the prescribed threshold. Since Central and Eastern European countries are civil law states, partnerships and associations of persons do not have separate juridical personality. Nonetheless, most countries regard a partnership or association as a taxable person, separate from the individuals in the partnership or association (Bulgaria is a notable exception). Usually, however, the individual partners are required to register for VAT purposes as well.

As a rule, groups of companies can register together as one taxable person. Registration as a group means that a supply by one of the companies to another company within the same group is not a taxable supply. This reflects the situation in various EU member states where joint registration is also possible, provided prescribed criteria relating to ownership, managerial control,

and the nature of the joint activities that are being performed, are met. Estonia's VAT refers explicitly to these criteria. In all countries, fixed or permanent establishments of foreign companies are required to be registered. Similarly, public sector bodies are included as taxable persons if they engage in activities which compete with similar private sector activities.

In all Central and Eastern European countries, persons are considered taxable persons only if they make taxable supplies 'independently'. As a result, employees are not considered taxable persons because they have a dependent, contractual working relationship with their employer, who may be a taxable person. To remove any doubt, most VAT laws explicitly exclude employees from the taxable persons category. Furthermore, agents of taxable persons working for and on behalf of taxable persons other than in an employee-employer relationship do not make a taxable supply for the goods or services supplied by the supplier, but only for the services rendered in their capacity as agent for which they receive a (taxable) fee or commission. Where taxable supplies are made by auction and the supplier declines to reveal his identity, the agent is treated as the principal for the purpose of accounting for the VAT on the whole transaction. This applies also where an agent acts on behalf of an undisclosed non-resident principal who is not a taxable person.

Taxable persons have to meet specified obligations. They and only they can issue VAT invoices which show the tax for which the person supplied can take a credit for against the VAT on his taxable supplies if he is also a taxable person. Furthermore, taxable persons must keep prescribed records of their economic activities which serve as the basis for verifying whether or not they have met their obligations. And of course, taxable persons have to file returns showing the VAT due on taxable supplies, the credit for the VAT on inputs, and the net VAT due and payable to the tax authorities.

B. Taxable and exempt supplies

The VAT is imposed on "supplies of goods and services," meaning all economic activity unless specifically exempted. In the EU's Sixth Directive, the "supply of goods" is defined as "the transfer of the right to dispose of tangible property as owner." Property includes movable as well as immovable property, except in Estonia where property is explicitly confined to movable property. In most Central and Eastern European countries tangible property includes "electric current, gas, heat, refrigeration, and the like." Since the VATs want to impose tax on the economic substance of what is occurring, goods are also deemed to be supplied if title to the goods is being reserved, *e.g.*

under hire-purchase or leasing arrangements. Goods held on consignment are not taxed (ownership is not transferred), and most countries exempt the sale of a business as a going concern.

According to the Sixth Directive, “supply of services shall mean any transaction which does not constitute a supply of goods.” Accordingly, services cover the use of all forms of property and also transfers of the right to dispose of intangible property, such as intellectual property rights, as well as negative events or, in the words of the Sixth Directive, “obligations to refrain from an act or to tolerate an act or situation.” Although services are defined as a residual taxable category, the distinction between goods and services is still relevant for VAT purposes, because of unavoidable differences in the rules determining the location and time of supply of either goods or services. Furthermore, the customs regime is applicable to goods but not to services. Generally, in interpreting most of these concepts, Central and Eastern European countries follow a civil law tradition.

Under the Sixth Directive, all supplies of goods and services made in the course of business are taxable supplies, unless specifically exempted, if made for consideration to the supplier from some other person. Consideration includes all forms of payment received by the supplier, in cash or in kind, whenever and however paid, and regardless of who pays them. In principle, if there is nothing paid or payable for a supply, then it is not a taxable supply. Exceptions are made, however, for nonbusiness uses of a supply, such as personal consumption, gifts of goods, and supplies of goods made without charge to employees.

In contrast to EU member states, many Central and Eastern European countries also consider supplies for nil consideration to be taxable supplies. (Latvia is a notable exception.) Presumably, this reflects the fact that some segments of the economy do not yet operate on the basis of the market principle. The charge to VAT of taxable supplies for nonbusiness use, moreover, extends to services. In contrast, in EU member states, the nonbusiness use of a supply of services is not considered a taxable supply, presumably because such services are difficult to distinguish from leisure or do-it-yourself activities.

Exempt supplies are dealt with at some length in Chapter IV. It will be seen that in addition to the exemptions permitted under the Sixth Directive, some countries also exempt various basic foodstuffs, medicines and other products from tax.

C. Place and time of supply

When it has been determined that a supply of goods or services has taken place, it is important to ascertain the place and time of the supply. The charge to VAT extends only to goods and services supplied within a particular country or imported into that country. Furthermore, the timing of the supply is important for deciding when a VAT invoice has to be issued. This in turn generally determines the tax period in which the VAT is due in respect of the supply (and as a corollary in which tax period a tax credit can be claimed by the recipient of the supply).

Generally, under Central and Eastern European VATs, supplies of goods are located where the goods are delivered, made available, or handed over. For goods that are transported, the rule is that goods are delivered where the transportation starts. This accords with commercial practice which puts goods at the risk of the buyer while being transported and ensures that there is a legal basis for rebating the VAT on inputs used to produce goods that are exported. Exceptionally, if goods are to be assembled or installed, the place of supply is the place where the goods are assembled or installed.

The place of supply of services is much more difficult to determine. Since services cannot be the subject of physical observation and control, some other definition of the place of supply must be found. The main rule is that the supply of services, in the words of the Sixth Directive, is located “where the supplier has established his business or has a fixed establishment .. or .. his permanent address or (where he) usually resides.” As in EU member states, Central and Eastern European VATs make exceptions to this rule for services to immovable property, work on and valuation of movable tangible property, ancillary transport services (handling, loading, packing), cultural, entertainment and education services -- which are deemed to be supplied at the place where the services are physically carried out.

Obviously, this still does not provide a rule for services received from or provided to foreign customers. In the latter case, the Sixth Directive, in Article 9(2)(e), enumerates a number of services (finance, insurance, advertising, professional advice), mainly rendered to businesses, which are deemed to be supplied at the place where the recipient of the services has established his business, etc. This means that those services are effectively zero rated when supplied to foreign customers. A logical sequel of this rule is to impose a charge (reverse charge) on recipients of services originating abroad; this is what most countries do.

Following the determination of the place of supply, the question is when a supply takes place. The rules on the timing of the supply generally are uniform throughout Central and Eastern European countries. With respect to goods, the time of supply occurs when

- a VAT invoice is issued for the supply;
- the goods are delivered;
- the goods are made available;
- the goods are removed or transported to or for the customer, or
- the goods are paid for in whole or in part -- whichever event occurs earlier.

Normally, of course, the time at which the VAT invoice is issued is the determining criterion, because the invoice will show a date to which all subsequent events can be related. The timely issue of invoices therefore is crucial and most VAT laws prescribe that the invoice must be issued within a week after one of the other events mentioned above takes place. Furthermore, the abovementioned rules imply that when payments are made in advance of the supply of goods, the VAT applies to those payments as they are made. Subject to administrative discretion, Romania makes an exception for construction companies which are allowed to pay the VAT upon completion of the immovable properties, regardless of the progress payments that have already been made.

The time of the supply of services occurs when the services are rendered. Analogous to the timing rules for goods, continuing services generally are deemed to be supplied when invoices are issued or payments made, whichever is earlier.

D. Taxable value

VAT is imposed on the value of the taxable supplies, representing the payment or consideration, that the supplier receives or is entitled to receive as a result of the supply. In other words, the taxable value is the actual realised value. This value includes all forms of payment, in money or money's worth, whether paid by the customer or by some other person. In all countries, the taxable value is defined to include incidental expenses for packing, transport, insurance and commission, as well as taxes, duties, levies and charges, other than the VAT itself. Several subsidies and grants, on the other hand, are not

included in taxable value. Like the Sixth Directive, some countries do tax product-specific price subsidies, although these subsidies are difficult to distinguish in practice from general subsidies.

In countries that previously had command economies, it is important to emphasise that for VAT purposes it is irrelevant whether the total payment for the taxable supply represents a price that is higher or lower than the value of comparable transactions, as long as the supply is a genuine supply. The mechanism of the VAT, after all, ensures that any under- or overpricing of the supply, and hence any under- or overpayment of the tax, is corrected in the next stage of the production-distribution process, because the offsetting tax credit is correspondingly smaller or greater.

While the actual realised value is usually taken as the value to which the VAT is applied, an alternative basis of valuation is needed if the supplier and the person supplied are the same or are related. For self-supplies, supplies to relatives, employees or shareholders, therefore, it is possible to override the general rule and to replace the actual value by an independently determined value called the arm's length or open market price. But this should be the exception rather than the rule. Generally, the exception should be applied only if the person supplied is not a taxable person, including a person making tax-exempt supplies.

VAT is charged and accounted for when the taxable supply is made (accrual basis of accounting) not when payment is received. Accordingly, cash flow advantages or disadvantages arise if payments, inclusive of VAT, are received before or after the tax has to be remitted to the tax authorities. Generally, it may be assumed that these cash advantages and disadvantages are offsetting. If the cash flow disadvantage is dominant, moreover, the supplier might add an interest charge to his price which, as a rule, would not be subject to VAT. Whatever is done, sooner or later the supplier would receive the VAT invoiced by him. This would not happen, however, if the debt, inclusive of the VAT, would not be paid at all, even though the supplier would already have paid the VAT on the taxable value to the tax authorities. Contrary to practice in EU countries, however, most Central and Eastern European VATs (except the Romanian VAT) do not have an allowance for bad debts.

E. Input tax credits

1. General rule

The general principle in determining the net tax liability should be that, as far as possible, there should be a matching (in terms of both the timing and the amount) of tax charged and credit claimed for transactions between taxable persons. Input tax credits, therefore, in respect of an amount should follow the timing of supply rules noted above, although a taxable person should not be allowed to claim a tax credit in respect of tax on inputs unless the person has an invoice to support the claim. In line with this matching principle, there should be no obligatory carry-forward of the excess of VAT on inputs over VAT on output until exhausted. This would be unfair and harmful to new and innovative firms that invest heavily in machinery and equipment. The carry-forward provision appears to give the tax administration more time to check the validity of the claim to a tax credit. By the same token, however, it may lull the administration into an unwarranted sense of security.

Most Central and Eastern European countries stipulate explicitly the length of the period within which excess credits must be refunded, if the amount cannot be applied to outstanding debts of other taxes. The most common period is 30 days which, of course, permits the offset against any positive VAT due in the next month. This period is automatically extended in Bulgaria, because its VAT permits the credit for input taxes in the month following the month in which the output tax had to be accounted for. Lithuania permits the refund of excess credits without delay only for exports, the acquisition of long-lived assets, stock piling of seasonal goods, and inputs for production processes lasting longer than six months. If these situations do not occur, excess credits have to be carried forward for three periods before a refund is granted. Reportedly, in practice, the timely processing of refund claims does not meet the legal requirements.

Apportionment rules are in place for those cases where taxable persons make exempt as well as taxable supplies, or where they make personal use of business assets. In these cases, a credit is available only to the extent that the purchased input may reasonably be regarded as being for use in the taxable activity. As discussed in Chapter X, the proportion of the input tax that is creditable is determined as that portion of the input tax as the amount of taxed sales bears to the amount of total sales.

Chapter X also discusses the special change-of-use rules that are needed if capital goods change from exempt to taxable use or vice versa. Where the

change is from exempt to taxable use, a tax credit is allowed of that portion of the tax paid upon the original acquisition of the property as the remaining years of the useful life of the property bear to its total life. Likewise, if a capital good changes from taxable to exempt use, that portion of the tax originally credited against the tax on sales is added back as the remaining years of useful life of the property bear to its total life.

2. *Special situations*

It seems useful to give systematic consideration to the treatment of goods returned, discounts, rebates, gifts and bad debts touched upon above. VAT should be collected only on the net consideration received by the seller.

- When goods previously sold are returned or the sale price is reduced, the supplier is entitled to an input tax credit if the VAT has already been accounted for. Conversely, the VAT liability of the purchaser should be increased.
- Cash and volume discounts entitle the supplier to an input tax credit where the supplier has previously invoiced the customer for the full sale price. Similarly, the customer, if he is a taxable person, is required to account for tax on discounts earned. Of course, no adjustments are required if the amount invoiced by the supplier is recorded net of any discount taken.
- Cash rebates offered by suppliers to customers, when paid out, entitle the taxable person to an input tax credit. Conversely, the rebate is taxable to the customer if he is a taxable person.
- The issue of discount coupons is still rare in Central and Eastern European countries, but this may change with time. If money coupons are issued, the original purchase price is taxed in full, inclusive of the nominal amount of the coupon. On the other hand, the issue of retailers' coupons (which offer a discount on the purchase of specific products) has no tax implication. On redemption, only the amount paid (net of the coupon) is subject to tax.
- If a debt becomes irrecoverable, taxable persons should be allowed to claim an input tax credit for the tax included in the debt. Any part of the debt subsequently recovered should be included in taxable receipts.

3. *Non-creditable supplies*

Since an input tax credit can be claimed only with respect to a purchase which has borne tax, generally no tax credit is allowed in respect of payments for wages and other forms of remuneration, interest and dividends, tax-exempt and zero-rated supplies made to a taxable person, and government taxes, fees, fines, penalties or other statutory levies. Also, no input tax credit is allowed for goods and services which have borne tax but which are not used in the course of a taxable activity.

Special rules are in place to deny the tax credit for a number of goods and services which although used in the course of taxable activities are indistinguishable from goods and services bought by consumers. Thus, no input tax credit should be allowed in respect of *a)* personal or living expenses of a taxable person (including travelling expenses and any amount paid for the lease of residential property); *b)* employee benefits, such as the cost-free provision of food and drink, and rent-free or low-rent housing; *c)* recreational equipment and facilities (except if used by taxable persons in a sporting or recreational business or by persons engaged in the business of selling or leasing such property); and *d)* passenger vehicles (except if the vehicle is part of the stock of a taxable car dealer or car leasing business). This issue is also treated at greater length in Chapter X.

F. *Imports and exports*

Central and Eastern European countries generally follow the same rules with respect to imports and exports as EU member states. Thus, the liability for tax extends specifically to imports, regardless of the “person” who imports or the nature of his economic activity. Imports falling within the definition of taxable supplies are always taxable. No tax is payable, however, where the import qualifies under the existing exemptions for returning residents, tourists, and diplomatic personnel.

Furthermore, there are various exemptions on imports relating to transit goods and the temporary importation of goods. Most countries have aligned these VAT exemptions on imports with the customs duty exemptions, so as to avoid unnecessary inconsistencies. A problem, noted in Lithuania, has been the conditional exemption at the import stage of foreign-produced machinery and equipment for the use of local businesses. While full taxation at the border should be the rule, restrictions on input tax credits and refunds favour a conditional exemption.

For imported goods, all countries follow the standard practice in EU member states to use the “customs value” of goods as the taxable value for VAT, increased by import duties and excises, if any. The customs value is the c.i.f. price, that is, it includes cost, insurance and freight charges to the border, as well as any inland charges if the goods are not delivered to the domestic customer at the time or place of customs clearance. This approach to the valuation of imported goods for VAT purposes is also used when the goods that are imported are not subject to import and excise duties but liable to VAT. The VAT on imported goods is collected as if it were an import duty. Usually, this means that goods are not released from customs control before the VAT has been paid.

Imported services do not flow across borders in the same manner as goods. In fact, it is difficult to identify and value services at the time they are imported. The advice of a foreign accountant rendered by fax to a domestic business escapes the “eye” of the customs officer. Two solutions to this problem are found in Central and Eastern European countries. One group of countries confines the liability to tax to the import of services for use in the country other than in the course of a taxable business or trade. Thus, if the foreign accountant, mentioned above, renders his service to an exempt government agency in the country, the agency would have to file a return and pay the VAT just like a domestic accountant would have to do. The service rendered to a taxable person, on the other hand, would be taxed implicitly, because its value would be reflected in the value of the taxable supplies made by that person. The other group of countries makes all recipients of services from abroad liable to tax on a self-assessment basis. This approach is equivalent in effect, because an input tax credit is now available to the recipient of the foreign service if a taxable person.

The zero rate on the export of goods is extended to international transportation services. Outbound freight transportation services supplied to a non-resident who is not a taxable person (in other words, the service is billed outside the country) is not liable to tax. However, the zero rate does not apply to outbound freight transportation services billed to taxable persons in the country. Such services are taxable and the recipient is allowed to claim a credit for the tax charged in respect of the services. Likewise, a combined domestic and outbound international freight transportation service billed in the country is fully liable to tax (and entitles the purchaser to an input tax credit).

International passenger transportation services also are tax-free, including trips both to and from the country. An airline or shipping company

providing such services is allowed to claim an input tax credit in respect of all its purchases of taxed goods and services supplied to it in the country. Where a combination of domestic and international passenger transportation services is provided, the domestic portion is liable to tax. An exception is made, however, for the domestic portion of a continuous journey into and out of the country. Special rules are in place for travel agents and tour operators. These rules ensure that only the portion of the travel sum spent in the country is liable to tax. Furthermore, services performed in the country for non-resident operators of ships and aircraft for use in transporting passengers or goods to or from the country are zero-rated.

In addition, services supplied to a non-resident who is not a taxable person for use exclusively outside the country are zero-rated; management fees are an example. Also zero-rated are services supplied to a non-resident who is not a taxable person in respect of goods for export from the country; export packaging services are an example. Another obvious example would be services in respect of real property located outside the country. Finally, the supply of intellectual property rights, such as patents, industrial designs, copyrights or know-how is not taxed if made in the country to non-residents who are not taxable.

Note

1. For an excellent summary treatment of the legal issues, on which this chapter draws, see David Williams, "Value-Added Tax," chapter 6 in Victor Thuronyi, ed., *Tax Law Design and Drafting* (Washington, DC: International Monetary Fund, 1996).

Chapter IV

THE BASE OF THE VALUE-ADDED TAX

On the basis of the criteria summed up in Chapter I, a “good” VAT would tax the broadest possible range of goods and services which are used by or benefit businesses and individuals at a uniform rate, because this would best satisfy revenue, neutrality, and equal treatment conditions. In line with this rule, there is general agreement that all or nearly all private sector activities should be taxed. But there is less agreement on how far the VAT should go in taxing public sector activities. Should ‘public interest activities’, such as health care and education or, to take the argument a step further, the administration of justice, be taxed? New Zealand, for example, has indeed adopted this comprehensive approach, but the EU takes a less-than-comprehensive view of the taxation of public sector activities. The maintenance of neutrality, *i.e.* no violation of competitive conditions and no cascading, supports the inclusion of these activities in the base. Administrative considerations (registration and compliance control of several additional entities, although no net revenue will be collected) argue against inclusion.

Against this background, this chapter reviews and evaluates the bases of the VATs in Central and Eastern European countries. Generally, Central and Eastern European countries, like the EU, have adopted a less-than-comprehensive view of the taxation of public sector activities. In line with the Sixth Directive:

- generally, the public sector, *i.e.* central, regional and local governments and their agencies are considered not taxable;
- moreover, a wide range of ‘public interest activities’ is exempted on social grounds, including health care, education and social services;
- beyond that, a number of hard-to-tax sectors, such as housing, finance and insurance are exempted.

In addition to these ‘standard exemptions’, many Central and Eastern European countries exempt other goods and services considered essential items of consumption. For this reason, four Central and Eastern European countries even apply the zero rate to various items.

A. Treatment of public sector activities

The proper VAT treatment of public sector activities is very important in Central and Eastern European countries. Even as former state enterprises are granted autonomy and various government agencies are being privatised, the reach of the public sector is likely to remain substantial.

Under a pure approach to the taxation of public sector activities, individual public sector bodies would all be registered for VAT purposes, except if, exceptionally, they make exempt supplies. They would pay VAT on all their “sales”, i.e. the revenue that they receive in the form of fees, charges, grants, subsidies and, in the case of local governments, in the form of proceeds from the local taxes. Even central government departments would incur VAT on the money appropriated to them from the central government’s budget. Furthermore, all VAT-liable public sector bodies would receive a tax credit for the tax on purchases. This is the approach adopted by New Zealand, which is unique in the way it treats public sector bodies. The authorities believe that the registration and payment of VAT by public sector bodies increases the accountability and transparency of government operations.

Clearly, the New Zealand approach obviates the need of having to distinguish between activities which are taxable and activities which are not taxable, because they are performed by governments in the exercise of their public authority. In contrast, the EU’s Sixth Directive attempts to make this distinction. Article 4 states that regional and local government authorities and other public law bodies are not taxable in respect of the activities or transactions in which they engage as public authorities, even if they collect dues, fees, contributions or payments in connection with the activities or transactions.

In short, two conditions must be met if the government activity is to be exempted: *a)* the activities must be performed by a public law entity, and *b)* such activities must be carried out under public authority. According to the European Court of Justice only those bodies are public law entities which form an organisational unit of the public administration. Third parties performing public law tasks on behalf of the public entity, such as notaries public, are not

exempted. Furthermore, the Court has ruled that a crucial feature of the exempt activity must be that it has public law configuration; in other words, in carrying out the activity the public authority must be acting within the legal framework specifically applicable to it.

Even if the two conditions mentioned above are met, the public authority is nonetheless liable to VAT if treatment as a non-taxable person “would lead to significant distortions of competition,” a clause that has not yet been the subject of any jurisprudence. The clause has little meaning if legal restrictions, pricing-cum-subsidy policies, or the status of public monopoly in effect precludes competition by the private sector. Generally, there are few goods and services produced by public sector bodies which could not be supplied by the private sector.

To minimise dispute, a number of activities is always taxable, regardless of the legal form of the entity undertaking them or the absence of any infringement of competitive conditions. These goods and services are listed in Annex D of the Sixth Directive. Their treatment in Central and Eastern European countries is shown in table 4.1. Clearly, most goods and services listed in the table are taxable. A notable exception is “the running of staff shops, cooperatives and industrial canteens and similar institutions” which are exempted in Bulgaria, Poland and Lithuania. Exemption means, of course, that the input tax is not creditable. In other words, the VAT on product margins and overhead is not collected. Furthermore, agricultural intervention agencies are sometimes exempted. Lithuania exempts passenger transport. Most importantly, the provision on “the supply of new goods manufactured for sale” is violated if the exemptions for basic foodstuffs, medicines, newspapers and books which some countries have are taken into account.

So far, the debate on the extent to which public sector bodies should be taxed is inconclusive, perhaps because the practical outcome under the New Zealand and EU approaches is largely the same. Thus, the economic services of public sector bodies, such as the supply of water, gas and electricity, telecommunications, transport of goods and passengers, port and airport services are taxed under both approaches. Furthermore, the provision of purely non-economic services, such as the payment of social benefits, is exempt under either approach. Beyond that, local governments are taxed in New Zealand, but registration is optional in France, Luxembourg, and the United Kingdom. In the latter country, local government bodies can claim refunds of VAT paid on purchases of goods and services used for non-business activities. In effect, these bodies are zero-rated.

Table 4.1 Treatment of Annex D activities

Annex D items		Bulgaria	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Slovak Rep.	Slovenia
1.	Telecommunications	S	L	E or S	E or S	S	S	L	S	L	S
2.	Supply of water, gas, electricity and steam	S	L	S	L	E or S	S	L	Z	L	S
3.	Transport of goods	S	L or S	S	L	S	S	S	S	S	S
4.	Port and airport services	S	S	S	S	S	S	Z	S	S	S
5.	Passenger transport	S	L	S	L	S	E	L	L or S	L	S
6.	Supply of new goods manufactured for sale	E or S	E,L or S	E or S	Z,L or S	E or S	E or S	E, Z, L or S	E, Z, L or S	E, L or S	S
7.	Agricultural intervention agencies	E	L or S	S	L	E or S	S	E	E	S	S
8.	Trade fairs, exhibitions	S	S	S	S	E	S	S	S	S	S
9.	Warehousing	S	L	S	L	S	S	S	S	S	S
10.	Commercial publicity	S	S	S	S	S	S	S	L	L or S	S
11.	Travel agencies	S	S	S	S	S	S	L	S	S	S
12.	Staff shops, canteens	E	L	S	L	S	S	E	E	S	S
13.	Radio and TV commercials	E	L	S	S	S	S	S	S	S	S

Notes: E = Normally exempt from tax
S = Normally subject to the standard rate
L = Normally subject to the lower rate
Z = Normally subject to the zero rate

Source: Country legislation.

What remains are services by public sector bodies that fall somewhere between economic and social or public administration services. The most important categories in this grey area are health and education. These services are taxable in New Zealand, but exempt in the EU. The nature and treatment of these services is discussed in the next section.

B. Exemptions

Exemptions can be usefully distinguished into standard exemptions and other-than-standard exemptions.

1. *Standard exemptions*

The standard exemptions of the EU's Sixth Directive and those in Central and Eastern European countries fall into two categories: *a)* activities in the public interest, *e.g.* health care, education, social and cultural services; and *b)* other activities relating mainly to banking, insurance, and immovable property. In the case of the latter exemptions, the Directive permits optional registration and payment of tax enabling taxable persons to pass the tax on purchases on to customers. The exemption of these hard-to-tax sectors is not dealt with here but discussed in detail in the next two chapters.

a) Activities in the public interest

Generally, Central and Eastern European countries exempt, in summary, the following public interest activities:

- hospital and medical care; professional medical and paramedical services; dental services; human organs, blood and milk; ambulance services;
- school or university education; vocational training or retraining; private tuition; sport or physical education;
- welfare and social security work, including old people's homes; services related to the protection of the young;
- religious or philosophical institutions; organisations with aims of a political, trade-union, religious, patriotic, philosophical, philanthropic or civic nature;

- cultural services;
- public postal services, except passenger transportation and telecommunication services; public radio and television broadcasts, except if commercial in nature;
- associations of persons if the services are rendered on a quid-pro-quo basis vis-à-vis the members.

The exemptions for health, education, welfare and culture extend to fund-raising activities carried on by the institutions providing the services. In order to qualify for the exempt status, however, the institutions must be operated on a non-profit basis by an essentially volunteer management and the services must be rendered against administered prices and not distort competition vis-à-vis the commercial sector. Generally, religious, charitable and designated non-profit institutions are allowed a limited exemption for activities, such as the provision of food services, that do compete with commercial activities.

The Central and Eastern European countries closely follow the Sixth Directive's prescription for the exemption of public interest activities. This seems logical. As in EU member states, nearly all health, educational and social services are rendered either by government or by heavily-subsidised institutions. Hence, their taxation would mainly be a bookkeeping exercise. Generally, the taxation and subsidisation of these services can be exactly replicated by the exemption. Consequently, the answer to the question of whether or not these services should be included in the VAT base depends largely on the administrative feasibility of including them. Administrative considerations favour exemption over taxation, which involves registration, audit, and refunds. Exemption violates the neutrality criterion, however, to the extent that exempt institutions are induced to perform laundry, cleaning, food, and administrative services themselves in order to save the payment of VAT on the labour element of the value of the service. The VAT laws in most Central and Eastern European countries include a tax avoidance clause designed to ensure that such in-house services, if excessive, do not escape tax.

Generally, in the EU, the exemptions in the public interest have stood the test of time, although the tendency has been to restrict them. This has been particularly true of the exemption for cultural services, postal services, and public radio and television broadcasts. More and more, the view is being adopted that these services constitute activities that compete with other forms of taxable entertainment, telecommunication services, and private letter or

parcel carriers, newspapers and periodicals. Exemption raises the cost of the services for business (the tax on inputs to the exempt service cannot be passed on) and lowers the cost to consumers. This is hard to square with the philosophy of the VAT. Recognising this, Romania taxes postal services, for instance, and Hungary applies its VAT to admissions for zoos and botanical gardens.

Neutrality considerations have also been brought to the fore in looking more closely at the justification for the exemption of health care and education. Hospitals, for instance, may undertake research for pharmaceutical companies which would be interested in the application of the VAT to the research services which are billed to them. Consequently, they would be able to take credit for that tax against their VAT on sales. Similarly, hospitals would have an interest in being able to credit the VAT on the purchase of intermediate and capital goods that are used in the production of the research for the pharmaceutical company. A similar reasoning applies to universities which undertake research or provide training courses for the private sector. Possibly, for this reason, Bulgaria taxes the proceeds of conferences, seminars and holiday schools.

b) Other activities

In line with article 13B of the EU's Sixth Directive, in summary, the following other activities are exempted:

- land;
- buildings and land on which they stand, except when first occupied;
- leasing and letting of immovable property, except for the following: hotel accommodation, holiday or camping sites, parking space, permanently installed equipment and machinery (which, in most countries, is immovable by law), and the hire of safes;
- financial transactions;
- insurance and reinsurance;
- betting, gambling, lotteries; and
- postage stamps and similar stamps.

In addition, the Sixth Directive exempts the supply of goods that have been used for an exempt activity and for which no tax credit has been enjoyed.

The extent to which this exemption is relevant for individual countries depends on whether the law exempts the transactions themselves or the institution rendering the exempt services.

The exemption of immovable property is a roundabout way of excluding rents (with the possibility of optional taxation in the business sector) and property transfers, but taxing new housing as a proxy for housing services capitalised. The taxation of construction is one of the most complicated and sensitive areas under the VAT in any country. For this reason, it is treated separately in the next chapter. Here, it may be noted that most Central and Eastern European countries tax the leasing and letting of hotel accommodation, holiday or camping sites, parking space, and the hire of safes. The discussion of the difficulties in the treatment of the financial sector is placed in Chapter VI.

Betting, gambling, and lotteries could be taxed by imposing the VAT on the price of tickets and wagers and permitting a tax credit for the imputed VAT on payouts (and purchases of equipment used in the course of the betting business). In the EU, countries are obliged to exempt betting and gambling; Central or Eastern European countries have followed the same approach. New Zealand is the only country that imposes its VAT on betting activities. Finally, Article 13B of the Sixth Directive permits an exemption for postage stamps. Receipts from postage stamps should be taxed, of course, if postal services are included in the VAT base.

2. *Exemptions other than standard exemptions*

With the exception of Slovenia, all Central and Eastern European countries exempt various goods and services from their VATs beyond those enumerated in Article 13 of the Sixth Directive. The exemptions apply to basic foodstuffs (Bulgaria, Poland), medicines (all but four countries), newspapers, books and periodicals (Bulgaria, Latvia, Lithuania, Romania), passenger transportation (Lithuania), funeral services (Baltic states, Romania), and various other services. The exemptions are listed in table 7.1. and discussed in Chapter VII along with other goods and services subject to the zero rate or the lower rate.

Generally, exemptions other than standard exemptions are frowned upon in the tax literature. They are difficult to monitor properly and result in an indeterminate effective VAT rate at the point of sale to the consumer. Clearly, some exemptions, such as meals provided to employees, can be justified on administrative grounds, because they simply imply the denial of the relating

input tax. Other exemptions, such as funeral services and requisites, presumably do not distort competitive conditions. But the exemption of foodstuffs and medicines discriminates against imports of similar products subject to the lower or standard VAT rate.

C. Computation of the VAT base

As a first approximation, the base of the VAT consists of total final sales, *i.e.* gross domestic product (GDP), plus imports, minus exports (table 4.2). This equals total expenditures, consisting of private consumption expenditure (the real base of the VAT), government consumption expenditure, fixed capital formation, and increases (decreases) in business inventories. Figures for these items can be found in national accounts.

Not all of these expenditures on goods and services are taxable. As indicated in table 4.2, excludable expenditures comprise government wages and salaries (which might be taxed as a proxy for government services rendered, but usually are not), government sales (which are normally exempt), fixed capital formation (which should not be taxed), increases (decreases) in business inventories (which should be held tax free), consumption abroad (which is not taxed domestically), exemptions, and zero-rated items (other than exports). Also, the VAT should be excluded.

Total expenditures minus excludable expenditures equals the VAT base, excluding the VAT itself. As indicated, this base consists of goods and services used for consumption as well as investment goods (fixed assets and intermediate goods) of exempt sectors which cannot take credit for the VAT on their purchases. To avoid double counting, taxable investment goods must be netted out under fixed capital formation and exemptions shown under excludable expenditures. Consumption or investment can be subject either to the standard rate or the lower rate (and the zero rate, if applicable).

What are the rough magnitudes of the aggregates shown in table 4.2? First, based on calculations for EU member states, approximately one-third of total consumption expenditure would be exempted or cannot properly be considered part of the tax base. Second, a sizeable part (easily one-fourth) of the base of any VAT consists of investment expenditure, a fact that cannot readily be inferred from the law. In other words, a large part of the tax is collected on intermediate goods and fixed assets bought by exempt sectors and on new residential buildings. As a result, the VAT is not completely free of cascade effects and attendant distortions of consumption and investment.

Table 4.2 Computation of the VAT base

Item	Currency units (to be filled in)
A. Gross domestic product	
Add: Imports	
Deduct: Exports	
B. Total expenditures (A=B)	
Private consumption expenditure	
Government consumption expenditure	
Fixed capital formation	
Increase (decrease) in business inventories	
C. Excludable expenditures	
Governmental wages and salaries	
Government sales, depreciation	
Fixed capital formation ¹	
Increase (decrease) in business inventories	
Consumption abroad	
Exemptions ²	
Activities in the public interest	
Other activities	
Other goods and services	
Small businesses	
Zero rated items	
Value-added tax ³	
D. Value-added tax base (B-C)	
Consumption	
Lower rate	
Food products	
Medicines	
Newspapers, books, periodicals	
Public transportation	
Other items	
Standard rate	
Other goods and services	
Housing	
Fixed assets of exempt sectors	
Intermediate goods of exempt sectors	

1. Gross fixed capital formation minus taxable capital investment expenditures (including tax).
2. Adjusted for expenditures on taxable intermediate goods (including tax).
3. May differ from actual receipts on account of the use of data on commodity flows rather than household budgets, the application of rates to broad categories of goods and services, and lags in collections.

Source: National Accounts.

Chapter V

IMMOVABLE PROPERTY

This chapter examines some of the difficulties that are encountered in the VAT treatment of housing as part of the wider sector of immovable property.¹ The potentially taxable activities of this sector consist of the use, lease and sale of land and buildings, residential as well as commercial. The treatment of building materials, repair and maintenance services, and newly created buildings must also be taken into account. Some theoretical considerations and practical observations are followed by an analysis of the actual treatment of immovable property in Central and Eastern European countries. An evaluation concludes.

A. Theoretical considerations

Land and buildings embody stocks of services that can be used for consumption or production purposes. If immovable property, such as a factory building, is used for production purposes, the services that it generates should not be taxed. Normally, the value of these services will be incorporated in the price of production that, if sold, would be subject to VAT. Moreover, any tax paid at the time of purchase of the building should be creditable against the tax on the products made by the factory situated on the property. If there is no tax on sales, simply because there are no sales, a refund would be due. On balance, no tax should attach to the factory, regardless of whether or not it is used.

From an economic point of view, the same treatment should be accorded immovable property that generates housing services. The theoretically most attractive solution would be to register all persons, natural as well as juridical, who own or buy residential real estate, for VAT purposes. By purchasing a dwelling, these persons would become producers of housing services. In their role as producers, they would subsequently sell the housing services to consumers. These consumers could be lessees who buy the services for consideration, *i.e.* a rental charge. It is also possible that the producers

would put the dwelling at their own disposal. In other words, as owner-producers, they would “sell” the housing services to themselves in their role as occupier-consumers. The VAT consequences of these events are obvious. The taxable person who buys a bundle of housing services in the form of a dwelling pays tax on the purchase price, but at the same time, he is entitled to a tax credit (and refund, if due) for the same amount. If he sells the housing services to a lessee, he would have to charge VAT on the amount of the rental. The lessee, being an unregistered consumer, would not be able to pass the tax on; he would be stuck with it just like consumers of other services. Similarly, in his role as owner-occupier, the producer of housing services would “charge” VAT on these services, whose value equals the rental value of the dwelling, rendered to himself as consumer. And like the lessor, he would have to remit that tax (net of any tax on inputs, such as repair and maintenance services) to the tax office.

In summary, under a pure theoretical VAT, immovable property would always be a producer good. Sales, rentals, and rental values would be taxable and a credit would be available for the tax on purchase. The treatment of land would not differ from the treatment of buildings. If land generates production services, as in agriculture, it should be treated in the same manner as the factory above. If it is a producer good that generates consumption services (because it is used for hunting hares or simply to sit on), then the same reasoning holds as given above in respect of housing services. Feasibility considerations may dictate other solutions, but it seems incorrect to say that land should be left out of the base because it is not a consumption good. The issue is whether land generates (on balance, nontaxable) production services, or (in principle, taxable) consumption services.

B. Practical observations

In practice, the registration of all owner-occupiers and the computation of all rental values would present formidable administrative (and political) problems that a VAT should not take on. But if rental values cannot be taxed, the taxation of rental charges would appear to favour owner-occupiers over lessees. Also, the practical difficulties of taxing small landlords might be severe. As a second-best approach, therefore, all countries with a VAT exempt rental values and nearly all countries rental charges as well. Instead, these countries tax new residential construction. Since the purchase price of a house may be taken to represent the capitalised value of its future services, the tax on

the purchase price may be considered a proxy for the capitalised value of the tax that should have been levied on the flow of housing services.

Two approaches are used to effect this philosophy: the exemption method and the tax method. Under the exemption method, prescribed in the Sixth Directive of the EU, the sale and rental of immovable property is, in principle, exempt, but newly constructed buildings, as well as alterations and maintenance of the existing building stock, are taxable. The exemption method needs a definition of specified nonresidential use, such as hotel accommodation, boarding houses, camping facilities, and parking space, all of which are taxable. Furthermore, since commercial use and sale of existing immovable property are exempt, an opportunity for optional registration must be provided to avoid potential discrimination and cumulation of tax.

Under the tax method, found in Hungary, Poland and Romania (as well as, outside the EU, in Canada and New Zealand), the sale and rental of immovable property is, in principle, taxable, but residential rents (and rental values) are exempt, as is the sale of previously occupied residential property. This implies that the construction, alteration, and maintenance of all buildings is taxable, as is the rental of commercial accommodation. Sales of existing buildings also are taxable, unless such buildings constitute residential property. The tax method requires a definition of residential use, but optional registration and payment of VAT is not an issue.

Both methods must address the VAT implications of the supply of land, which is traded less often than buildings and is used more often for productive purposes in exempt sectors, such as agriculture. New Zealand and Canada exempt only agricultural land. Under the Sixth Directive, on the other hand, all land is exempt, except building sites. As may be expected, the reach of the tax method is greater than the reach of the exemption method. As a result, it provides more evenhanded and neutral treatment.

C. How is immovable property taxed?

Table 5.1 shows the treatment of immovable property in the Central and Eastern European countries. For expository purposes, it seems useful to distinguish construction activities from the lease and sale of immovable property. In several countries, property transfer taxes, including stamp duties, that are imposed on gross selling prices, interact with the VAT. Hence, these taxes are also shown.

Table 5.1 Treatment of immovable property

Country	Construction			Leases		Sales of used property			
	Building materials	Repair and maintenance	Newly created	Residential real estate	Other real estate	Residential real estate	Other real estate	Alternative Tax	
								Kind	Rate
Bulgaria	S	S	S	E	E*	E	E*	Local taxes	...
Czech Rep.	S	L	L	E	E*	E ^c	E ^a	Transfer tax	5%
Estonia	S	S	S	E	S	E**	E**	Stamp duty	Specific
Hungary	S	S	S	E	S	E	S	Stamp duty	2-10%
Latvia	S	S	S	E*	S	E	E*	No	-
Lithuania	S	S ^b	S ^b	E	S	E	E	No	-
Poland	L	L	Z	E	S	E	S	Stamp duty	1-5%
Romania	S	S	L	E	S	E ^c	S	Stamp duty	4-1%
Slovak Rep.	S	L	L	E	E*	E	E	No	-
Slovenia	S	S	S	E	E*	E	E*	Transfer tax	2%

Notes: S = Normally subject to the standard rate; L = Normally subject to the lower rate; Z = Normally subject to the zero rate; E = Normally exempt

* Option of VAT registration available; ** Not subject to VAT;

^a Taxed if sold within 2 years of acquisition or construction; ^b Exemption for residential construction paid out of the state budget; ^c Taxed if sold by taxable person

Source: Country legislation.

1. Construction

Obviously, the consistent VAT treatment of various construction activities, such as the sale of building materials, the rendering of repair and maintenance services, and the creation of new buildings, is essential to avoid distortions and administrative difficulties. As indicated in the table, nearly all countries tax building materials at the standard rate. As an exception, Poland applies the lower rate of 7 per cent to essential building materials, as well as repair and maintenance services, while new housing units are taxed at the zero rate.

In most countries, the treatment of repair and maintenance services follows that of building materials. Major exceptions, however, are found in the Czech and Slovak Republics, which tax these services at the lower rate. This requires that for any repair or maintenance work to immovable property, the VAT on materials must be calculated separately from the VAT on the labour component of the total price. Obviously, for a given price, construction firms will be tempted to undervalue the input of standard-rated building materials and overvalue the input of lower-rated repair services to immovable property.

Logically, building materials and repair and maintenance services (broadly interpreted as construction services) add up to a new building. Most countries realise this; under their VATs, the rate on newly constructed buildings is the same as that of materials and labour. If the rate on new buildings were different, the effective rate on materials and services embodied in these buildings would, of course, be different from the rate applied to materials and services used for maintaining, repairing, and renovating the existing housing stock. This would create distortions, raise administrative difficulties, and be a breeding ground for tax evasion and avoidance.

Again, the Czech and Slovak Republics are the exceptions since they tax newly created buildings at the lower rate. As a result, complications arise when builders' hardware is supplied along with new buildings. To ensure that the standard rate continues to apply to builders' hardware, Annex 3 of the Czech VAT law stipulates that the value of (and the tax on) a large number of items must be shown separately when supplied along with a new building. These items include all kinds of household appliances, upholstery, and various fittings. No doubt, it must be difficult to ensure that the provision is properly complied with. Similar problems arise under the Polish and Romanian VATs.

2. *Leases*

No country has contemplated the taxation of the imputed rental value of owner-occupied property under its VAT. Hence, information on this aspect is not shown in table 5.1. In principle, all countries also exempt the lease of residential real estate. Of course, this does not necessarily mean that lessees pay less tax, because VAT will have been paid at the time the dwelling was created. The exemption, however, does mean that lessors, like owner-occupiers, are stuck with an element of VAT on repairs and alterations. This does not have to happen in Latvia, which permits lessors the option of registration and payment of VAT at the standard rate.

Bulgaria, the Czech and Slovak Republics, and Slovenia, like most EU states, in principle exempt the lease of commercial immovable property. The potential cumulative effect of this approach is mitigated, however, by allowing lessors to opt for registration and payment of VAT (treating them at par with other taxpayers: full credit for input tax and payment of tax on lease payments), provided the lessee is also a taxable person (ensuring subsequent taxation) or agrees to become a taxable person. This provision takes the “cascade sting” out of the exemption. Given a choice, lessors will opt for the least tax-expensive option, but they must take into account that the choice is irreversible. Interestingly, other Central and Eastern European countries, in contrast to most EU member states, tax the lease of commercial immovable property at the standard VAT rate.

The countries that exempt immovable property and, hence, housing services, do tax hotel accommodation, the rental of parking spaces and camping grounds. An exception applies if hotels and similar transient accommodation, such as boarding houses, are used for residential purposes. Usually, a simple period test, say, an uninterrupted stay of 60 days or more, as in Lithuania, is used to establish eligibility for the exemption. Countries that follow the tax approach have a similar provision to distinguish essentially residential use of immovable property from non-residential use. Furthermore, permanently installed equipment and machinery also is taxed, as is the rental of safe-deposit boxes.

3. *Sales*

As table 5.1 indicates, all countries exempt the sale of used residential immovable property and most exempt the sale of other used immovable property as well. Exemption means that increases in the value of the stock of

property services are not taxed (nor is a tax credit provided for decreases in the value). These increases in value are taxed in Hungary, Poland and Romania, which include the sale of commercial immovable property in the base of their VATs. In line with the EU's Sixth Directive, the option of registration and payment of VAT is available in Bulgaria, Latvia and Slovenia. Interestingly, in the Baltic countries, the sale of commercial immovable property is exempt, whereas its lease is taxed. This provides lessors with the opportunity to deduct the VAT on repair and maintenance services or alterations from the VAT on lease payments, yet to enjoy the resulting increase in the value of the immovable property free of VAT.

In countries other than the Baltic states, the exemption approach or the tax approach to the VAT treatment of immovable property should cause little discrimination, except if the purpose to which the building or the land is applied changes from exempt to taxable use or vice versa. To counter this tendency, the Central and Eastern European countries provide for an adjustment period of up to ten years from the day of purchase (see table 10.2). If, say, after four years, a building changes from exempt to taxable use, a tax credit is permitted for 6/10ths of the tax originally denied. Conversely, if the building has been used for taxable purposes for, say, seven years, a change to exempt use implies that a VAT payment of 3/10ths of the original tax must be made. Annual apportionment of the tax, depending on the relationship between exempt and taxable use, is also possible.

Seven countries levy various stamp duties and transfer taxes on the sale of immovable property. By any standard, these duties and taxes are an anachronism. They exhibit the same capricious cumulative effects as a cascade turnover tax. In most countries, they yield little revenue. At best, they can be viewed as a proxy for the VAT that should have been levied on the increase in the value of immovable property that belongs in the VAT base. If so, it would be better to abolish the stamp duties and transfer taxes and subject gains realised upon the sale of immovable property (including dwellings) to the VAT. This would justifiably resemble the treatment of (other) second-hand goods.

D. Evaluation

The second-best solution that all Central and Eastern European countries apply to housing services (exemption of rents and rental values, taxation of newly created houses) broadly satisfies generally accepted criteria of horizontal equity, neutrality, and feasibility. The tax method (tax all

immovable property, exempt housing services, and the sale of existing dwellings), applied in Hungary, Poland and Romania, is superior, however, to the exemption method (exempt all immovable property, except new dwellings) found in other Central and Eastern European countries. Under the tax method, commercial exploitation of immovable property, not being houses, is fully taxed. Under the exemption method, increases in the value of commercial building services are not taxed. Moreover, optional taxation causes differential effects.

As this chapter has shown, the consistent and neutral application of the VAT to immovable property requires that all building activities, forms of leasing, and sales should be taxed at the standard rate. Preferential rates cause distortions and raise administrative complications. Their effect may be undone if low-taxed activities, *e.g.*, repair and maintenance services, are supplied in combination with normally taxed goods, such as building materials or new buildings. Similarly, building materials, subject to the standard rate, may effectively attract a lower rate if supplied in combination with preferentially treated new housing. Furthermore, it is essential that leases and sales be taxed at the same rate. In the immovable sector, goods (buildings) and services (renting) have become nearly perfect substitutes. Equal treatment should be more fully achieved under the tax method.

Note

1. This chapter draws heavily on Sijbren Cnossen, "VAT Treatment of Immovable Property," *Tax Notes* and *Tax Notes International*, vols. 66 and 10 (March 20, 1995). Reprinted as chapter 7 in Victor Thuronyi, ed., *Tax Law Design and Drafting* (Washington, DC: International Monetary Fund, 1996).

Chapter VI

FINANCIAL SERVICES

Conventional wisdom holds that financial services cannot be included in the VAT base calculated on the tax credit method, because the intermediation charge which should be taxed cannot be separated from the pure interest rate, premium, or rate of return which should not be taxed. The exemption of financial services means that financial institutions incur input VAT on their purchases, but cannot charge VAT on their sales of financial services. As a result, consumers of such services face effective tax rates that differ from statutory rates distorting their choice between different goods and services. What is probably worse, the input VAT incurred by financial institutions cannot be passed on to business users of financial services in a way that does not distort producer choices. The noncreditable input tax causes cumulative effects (cascading) which violate the neutrality criterion.

This chapter reviews the issues. First, it is explained why it is so difficult to tax financial services under a tax credit method VAT. Second, the exemption approach of the EU's Sixth Directive, which has also been adopted by all Central and Eastern European countries, is described. Third, the German and French variants on the exemption approach are analysed. Fourth, the addition and subtraction methods and the contours of a new approach that have been proposed as alternatives to the tax credit method are reviewed. A brief evaluation concludes.

A. Financial institutions and the tax credit method

Financial institutions facilitate the flow of funds between savers and lenders to investors and borrowers. For instance, banks, to which this discussion is confined, bring together depositors and borrowers with different preferences regarding the location, timing and duration of transactions. Banks "buy" the use of money from depositors against a charge, called interest. They mix this money with the funds received from other depositors and "sell" it to

borrowers against a higher charge, also called interest. The spread between the interest charged to borrowers and the interest paid to depositors represents the cost of the intermediation services provided by banks. This cost consists of risk pooling, the provision of scale economies, the use of checking services, etc.

To understand the VAT problem, it is useful to distinguish three components of banking transactions: the principal, the pure rate of time discount or pure rate of interest, and the intermediation charge. Clearly, the principal should not be taxed since it is merely a transfer of funds and does not represent consumption. Also, the pure rate of interest should not be taxed since it is the depositor's reward for postponing consumption. The intermediation charge, presumably, should be taxed. It represents the value of services rendered to depositors and borrowers, consumers as well as producers.¹

To illustrate, suppose that a VAT liable business deposits US\$1,000 with its VAT registered bank, which pays interest at the rate of 5 per cent. The bank charges the business \$10 for the use of the deposit account. If both the pure rate of interest and the amount of the intermediation fee are known, the consequences of the transaction under a VAT levied at a rate of 10 per cent would be the following. The business sends the bank a bill for \$50 interest plus \$5 tax; in turn, the bank charges \$10 for its intermediation services plus \$1 tax. Subsequently, the business has to remit \$5 output tax minus \$1 input tax or \$4 to the tax office, while the bank is entitled to a net refund of \$4, *i.e.* \$1 output tax minus \$4 input tax.

The problem, however, is that the intermediation charge is embedded in interest rates. In essence, depositors receive a rate of interest which is lower than the pure rate of time discount and borrowers pay a higher rate of interest than the pure rate of interest. The inability to separate the intermediation charge from the pure rate of interest, makes it difficult to tax the charge without also taxing the interest, particularly if received by households. By taxing the net interest, neutrality is achieved in transactions between registered VAT payers. If, in the above example, the intermediation fee would be embedded in a lower interest rate of 4 per cent, the business would charge the bank \$40 net interest plus \$4 VAT, which would be deductible by the bank.

The same cannot be said, however, for transactions between banks and households. The problem is not that all households with a bank account would have to be registered for VAT purposes. This can be circumvented by requiring banks to collect and remit the tax owing by depositors under some kind of reverse charge mechanism. The banks would then issue themselves an

invoice for the VAT on the net interest and treat this as a deductible input tax. However, this approach drives a wedge between the pure interest received by the depositor and the pure interest paid by the borrower. The intertemporal distortion can be avoided by permitting banks to calculate a phantom input credit for interest paid. But this would move us back to square one. Instead of having to calculate the VAT on an indistinguishable intermediation charge, the banks would have to calculate the tax on the pure rate of interest -- which is equally indistinguishable from the net interest.

A way out of the dilemma would be to zero rate the provision of financial services. Under this approach, banks would register for VAT purposes and be reimbursed for the tax incurred on inputs. This would solve the cascading effect with respect to the business sector, but would be a form of overkill with respect to financial services provided to consumers. While it might be defensible to zero rate services related to saving, it would clearly be inappropriate not to tax services related to consumer loans and checking accounts. Moreover, banks also provide a variety of other services relating to, say, financial advice, real estate and travel, which should be taxed. More generally, the zero rating of financial services would be an even stronger inducement than the exemption already is for banks to perform various services in-house.

B. Exemption of financial services

In view of these difficulties, all countries with a VAT exempt financial services, including Central and Eastern European countries. In doing so, generally, these countries follow the Sixth Directive's distinction between "core" services and "secondary" services. The exempt core services include transactions in money, stocks and other securities, the operation of current or deposit accounts, lending money or advancing credit, and the management of special investment funds. Generally, the exemption does not extend to debt collection, financial advice and the keeping of securities, for which an explicit charge is made, but most countries do exempt debt factoring from VAT. Most countries also exempt financial services supplied to other countries (as do Austria, Finland and Sweden in the EU), but the Czech Republic, Estonia and Slovenia zero-rate them (as do most EU member states). Table 6.1 provides some details.

Table 6.1 Treatment of financial services

Country	Core financial services ^a	Secondary financial services			Exported financial services
		Financial advice	Debt collection	Keeping securities	
Bulgaria	E	S	S	S	E
Czech Rep.	E	S	E	L	Z
Estonia	E	S	E	E	Z
Hungary	E	S	S	S	E
Latvia	E	S	S	S	E
Lithuania	E	S	E	E	E
Poland	E	S	E	E	E
Romania	E	S	E	E	E
Slovak Rep.	E	L	E	L	E
Slovenia	E	S	S	S	Z

Notes:

E = Normally exempt from tax

S = Normally subject to the standard rate

L = Normally subject to the lower rate

Z = Normally subject to the zero rate

^a Dealings in money, shares, bonds, etc., lending money, bank accounts.

Source: Country legislation.

1. Definitions

Generally, Central and Eastern European countries have incorporated the provisions of Article 13(B)(d) of the Sixth Directive in their VAT legislation. Accordingly, they exempt the following financial services.

a) *Coins and bank notes*, defined as “transactions, including negotiation, concerning currency, bank notes and coins used as legal tender, with the exception of collectors' items; collectors' items shall be taken to mean gold, silver or other metal coins or bank notes which are not normally used as legal tender or coins of numismatic interest.”

This provision has not given rise to much litigation in the EU. Theoretically, the exemption should probably be considered an anomaly, because by definition the transfer of money cannot be considered consumption. In the EU, the minting of coins and the printing of bank notes is either exempt because the activities are performed by government as such, or the activities are zero rated (United Kingdom). Generally, gold is subject to VAT, except in transactions with the Central Bank, in which case the zero rate applies. The same practice is found in Central and Eastern European countries.

Sales of collectors' items by taxable persons are subject to the standard rate applied to the difference between the sale price and the purchase price. Taxation at the full standard rate of these "used" goods might cause unwarranted cumulation of tax and divert the trade to private channels. The Sixth Directive harmonises the treatment of collectors' items and other used goods in the EU by prescribing the application of the standard rate to the gross margin without a deduction for input tax. Exports of used goods are not zero-rated and imports are not taxed.

b) Payment activities, defined as “transactions, including negotiation, concerning deposit and current accounts, payments, transfers, debts, cheques and other negotiable instruments, but excluding debt collection and factoring”.

This exemption covers all services related to the opening and closing of financial accounts, postings to such accounts, the preparation and issue of financial statements and documents, etc. Courts have ruled that the provision should be interpreted restrictively. The installation of automatic payment facilities, for instance, would be subject to the regular VAT. Gift and value coupons which entitle the holder to a payment in money or a discount upon the purchase of specified goods are considered "other negotiable instruments." However, coupons issued on an individual basis which entitle the holder to the in-kind provision of goods, such as books or cds, are taxable at the time of issue.

Activities related to debt collection are not exempt. In all member states, debt collection is interpreted as the performance of an indivisible sequence of activities to ensure the payment of an outstanding debt and not as the mere receipt of money or checks. The term factoring is interpreted somewhat differently in various member states. In Germany, genuine factoring involves the taking over of the payment risk from the person who originally issued the invoice. The transfer of the debt is exempt as are the subsequent

collection activities of the factorer. Non-genuine factoring occurs if the original creditor retains the payment risk. In this case, the collection and administrative activities on behalf of the creditor are taxable. The Czech Republic, Estonia, Lithuania, Poland, Romania and the Slovak Republic follow German practice (table 6.1).

Somewhat different positions have also been taken with respect to the treatment of “plastic money” -- notably credit cards. Generally, services supplied to cardholders are considered exempt payment activities or the exempt granting of credit. The fee charged by credit card organisations to traders, however, is taxable. Various attempts to label the transaction as a form of (genuine) factoring, which would be exempt, foundered in the British courts.

c) *Credit transactions*, defined as “the granting and the negotiation of credit and the management of credit by the person granting it” [and] “the negotiation of or any dealings in credit guarantees or any other security for money and the management of credit guarantees by the person who is granting the credit”.

The term ‘credit’ is broadly interpreted. It covers ordinary loans, but also extensions of payment (suppliers’ credits) and payments in advance (customers’ credits). Normally, VAT is due when goods or services are supplied. Thus, VAT is due immediately on supplies under a hire-purchase contract or an instalment sale, but the tax applies to the price exclusive of interest, if shown separately. The treatment of financial leases is similar to that of hire-purchases, but operational leases, which are considered a continuous rental service, are taxable on the amount of the periodic “rental” payment. Discounts for advance payments or payments in cash are not taxable. In all Central and Eastern European countries, the exemption for credit activities comprises not only the interest, but also the costs incidental to the conclusion and prolongation of the credit. The tax on inputs to these activities, therefore, is not deductible. This applies also to any dealings in credit guarantees or any other security for money.

d) *Securities*, defined as “transactions, including negotiation, excluding management and safekeeping, in shares, interests in companies or associations, debentures and other securities, excluding: - documents establishing title to goods, - the rights or securities referred to in Article 5(3) [rights in immovable property which may be considered tangible property] [and] “management of special investment funds as defined by Member States”.

The exemption, which is to be interpreted restrictively, does not comprise financial advice, market research, or similar activities which are not directly related to dealings in securities. The management and safekeeping of securities are taxable in the EU, analogous to the rental of safe-deposit boxes, but practices in Central and Eastern European countries vary (table 6.1). In contrast, the management of special investment funds is exempt. The rationale of this exemption is unclear. Perhaps, the objective is to provide equal treatment vis-à-vis securities or money deposits held by individuals.

2. *Evaluation*

This summary conveys that it is not easy to define the scope of the exemption for financial services. Often, the supply of financial services *per se* brings in its train various complementary or component services, such as legal, accounting and tax advice which, if supplied independently, are taxable. Segregating these taxable elements from pure financial transactions is difficult. If the complementary services are also exempted, financial institutions would be induced to provide them “in-house” rather than purchasing them from specialised traders. Equal treatment between financial institutions and between such institutions and specialised traders is difficult to achieve in practice.

Another complication is the apportionment of the input tax between taxable supplies (including zero-rated exports and supplies related to exports) and exempt supplies. In the EU, financial institutions can use a variety of methods for apportionment purposes, including the turnover basis, the direct attribution rule, or other bases, such as floor area or computer time. A *de minimis* rule below which no recognition of exempt use is required is also allowed. The turnover basis is the most widely used apportionment basis in Central and Eastern European countries (see Chapter X). It divides the tax on inputs into deductible and nondeductible amounts in the same proportion as taxable (including zero rated) and exempt supplies bear to total turnover. Usually, the apportionment is based on turnover figures of current or previous tax periods with annual year-end reconciliations.

Surprisingly, the exemption of financial services causes few complaints in the EU. One reason may be that some member states permit financial institutions to use the gross margin, *i.e.* the difference between lending revenues and borrowing costs, instead of total lending revenues as the denominator in the apportionment formula. This “bankers’ method” significantly increases the amount of deductible input tax. Another way in which institutions might be able to maximise their input tax recovery using the

turnover method is to artificially increase the level of taxable supplies by transacting a small number of high value zero-rated transactions (such as gold). Nonetheless, some cascade effects remain.

C. The option to tax financial services

A little known (and little appreciated) clause in Article 13C of the Sixth Directive grants EU member states the right to give financial institutions the option of registration and payment of VAT in respect of financial services (the clause is referred to as the optional option). Three member states, namely Germany, France, and Belgium have incorporated the option in their VAT legislation.²

1. Germany

Germany has had the financial services option ever since it introduced the VAT in 1968. The option can be exercised with respect to all financial services listed in Article 13B(d) of the Sixth Directive, except the management of special investment funds. Since the prevention of cascading was the primary motive for its introduction, the option can only be used for financial services supplied to taxable entities. In other words, financial services supplied to nontaxable entities, including private individuals, are treated as being exempt. Cascading is not prevented to the extent that taxable businesses use taxable financial services supplied to them for exempt activities. In effect, cascading would be more serious than in the exempt situation. For this reason, in 1980, the “Gesamtoption” (meaning that the option, if exercised, applied to all services, except if supplied to nontaxable entities) was replaced by an option applicable on a transaction-by-transaction basis.

Few conditions are attached to the exercise of the option. Both supplier and customer must be registered VAT payers and financial institutions must account separately for taxable transactions and the input tax attributable thereto. In conformity with the Sixth Directive, financial services exported to other EU member states are treated as being exempt, but services exported to third countries are zero rated. Initially, the option was used mainly by small new banks (with large amounts of input tax). Presently, large banks also use the option, particularly for large transactions. Apparently, for small transactions the costs of having to account separately for the tax are greater than the amount of the remaining input tax.

2. *France*

France restricts the option to specified financial services and institutions (as was the case under the legislation predating the VAT). Financial services that are covered include activities relating to credit transactions (but not the interest), legal means of payment, the management of bank accounts, the trade in securities, the management of investment funds, and factoring. The option is not available for transactions between banks (apparently to prevent the shifting of input credits). Two categories of persons are eligible for the option. The first category comprises credit institutions, stock exchanges, “changeurs,” “escompteurs,” and “remisiers.” The second category comprises persons primarily engaged in the rendition of financial services (more than half of turnover). If used, the option, which is irrevocable (except for the second category of eligible persons), applies to all financial transactions, including those supplied to private individuals.

Although precise figures are not available, the option is apparently widely used. Possibly, its use is stimulated by the *taxe sur les salaires*, which is levied on the payroll of financial institutions at rates ranging from 4.25 per cent to 13.6 per cent. However, an exemption applies if 90 per cent of turnover is subject to VAT. Proportional relief is granted if taxable turnover is less than 90 per cent of total turnover. In effect, the payroll tax resembles a partial, non-creditable, addition type of VAT which induces banks to register and pay the normal VAT.

3. *Comparison*

Between Germany and France, the option may be used in respect of all financial institutions (Germany) or it may be restricted to specified financial institutions (France). The option may apply to individual transactions (Germany) or to all transactions (France) and it may be exercised at any time (Germany) or it may be irrevocable (France). The option may be restricted to financial services supplied to taxable businesses (Germany) or it may apply to financial services supplied to registered as well as nonregistered persons (France). If the concern is with cascading, the German approach suffices. If the concern is with cascading as well as uniformity of tax-to-user price ratios, the French approach is preferable. Clearly, the German approach is the simplest to administer and comply with.

There is as yet no consensus in the EU on the use of the optional option. The European Commission has proposed that the option should be

abolished. Apparently, it believes that the condition of equality of competitive conditions is also satisfied if every member state faces the same handicap. The Committee on Economic and Monetary Affairs and Industrial Policy of the European Parliament has suggested that the option should be made mandatory throughout the EU.³ This would reduce cascade effects. The Commission has not yet responded, but has promised to review the issue.

D. Alternatives to the tax credit method

Various alternatives have been developed, mainly in the tax literature, to tax financial services more fully than is possible under the exemption method or the tax credit system. These alternatives include the addition method and the subtraction method. Furthermore, a completely new approach is being tested by the EU Commission.

1. Addition method

Under the addition method, value added is computed as the sum of wages and capital income net of the normal return on investment. The Michigan Business Activities Tax (BAT) is based on the addition method, but banks are exempted. The Shoup Mission recommended the addition method as an alternative to the subtraction method, at the choice of the business, when proposing the introduction of a VAT in Japan in the early fifties. However, the Government withdrew the proposal in 1954. Israel used the addition method, as part of its tax credit type VAT, to tax the financial sector from 1976 (when the VAT was introduced) through 1979. In 1980, the tax on the financial sector was divorced from the regular VAT. It is now being administered separately.

There are several considerations why the addition method has not caught on as an alternative to tax financial services. First, since the tax is not transactions based, it cannot be invoiced to business users of financial services and hence cannot be taken by them as a credit. As a result, cumulative effects probably are greater than under the exemption approach of a tax credit VAT. Presumably, some presumptive approach for allocating tax credits to business transactions could be used, but it would be highly arbitrary. Second, there is no way of rebating the tax directly on the exportation of financial services. This rebate should comprise the tax levied under the addition method, as well as the input tax paid with respect to purchases by the financial sector. In the absence of a rebate, the destination principle would be violated and exports of financial services would be discriminated against. Third, the base under the addition

method cannot be derived directly from commercial accounts. Profits determined for commercial accounting or income tax purposes must be adjusted for changes in the value of inventory and capital goods purchases must be fully expensed. In addition, reimbursements for employment related expenses must be verified to ensure that they are not disguised wage income.

2. *Subtraction method*

Under the (direct) subtraction method, value added is calculated as the difference between taxable sales and purchases already taxed in a previous stage of production or distribution. By this definition, the value added of financial institutions is the difference between interest received and interest paid or, more generally, the difference between lending revenues and borrowing costs. This basic idea led the Canada Department of Finance to propose a hybrid credit and subtraction method VAT for financial services in its 1987 White Paper. The credit method would apply to the sale of non-financial goods and services by financial institutions (and other entities) and to the sale of financial services for which an explicit fee or commission would be charged. The subtraction method would be used for the bulk of banks' activities, such as unpriced intermediation and checking services.

As the White Paper made clear, the calculation of the taxable margin under the subtraction method would not be easy. First, in view of the great variety of transactions, the computation of the taxable margin would only be possible on an overall (annual) basis and not separately for each transaction. Second, a deduction from the taxable amount would be required for bad and doubtful debts, because the margin includes a premium for default risk which should not be taxed. Third, rules would have to be drawn up for the timing of various inclusions and deductions akin to those under the income tax. Fourth, adjustments would have to be made in respect of exports and transactions with connected corporations. Fifth, a deduction would have to be allowed for the cost of equity funds (in addition to the deduction for the cost of borrowed funds) to ensure that the tax applies only to the margin earned on the investment of the equity funds, rather than to the gross revenue therefrom. Finally, a credit would be allowed for any tax paid on purchases.

Clearly, the proposed computation of the taxable base for financial services would be complicated. The subtraction variant for dealing with financial services was dropped from the Canada Government's final proposal for a tax credit type of VAT. Instead, it was proposed to exempt financial services. In addition to administrative considerations, the business community

objected to the denial of an input credit for business depositors and borrowers. The White Paper had ruled out the credit because it would not be possible to specify the credit on a transaction-by-transaction basis. The Department of Finance believed that the cascade effects would be small, but this point of view was not shared by the business community.

3. *A new approach*

None of the alternatives considered above offers a satisfactory solution to the problems posed by the indistinguishability of the intermediation charge and the pure rate of interest. To break the gridlock, a radical new approach has been proposed which essentially bypasses the problem, yet fully taxes consumer use and only consumer use of financial services. In the proposal, financial services would be taxed on a cash-flow basis which excludes the pure rate of interest without explicitly requiring it to be identified.⁴

Under the new approach, cash inflows from financial transactions (deposits, interest receipts) are treated as taxable sales, and cash outflows (loans, interest payments) are treated as purchases of taxable inputs. The VAT on these inputs along with the VAT on inputs of nonfinancial goods and services would be creditable against the VAT on outputs. The VAT on outputs, in turn, would constitute input tax credits for other taxable persons involved in industry and trade (or, for that matter, banking). (At the same time, of course, these taxable persons would pay VAT on their inflows, *i.e.* loans extended by banks.) As a result, tax cascading, inherent to the exemption approach, would be avoided, while consumers would be taxed in full. The cash-flow method can be made compatible with the destination principle, simply by ignoring the provision of financial services to or from non-residents.

The pure cash-flow method, however, is not directly equipped to deal with tax rate changes. Also borrowing requirements would increase, because taxable persons taking out loans would have to finance the VAT on the loans. Beyond that, compliance costs, especially of small- and medium-sized businesses would increase, because nonfinancial businesses would be required to carry out various calculations in order to obtain input tax credits for financial services purchased.

To resolve these problems, a tax calculation account (TCA) would have to be introduced, to be administered by financial institutions and not by nonfinancial businesses. The TCA would permit the tax on cash outflows from financial institutions charged by nonfinancial businesses to be carried forward

to the time that the loan would be repaid. Thus, there would be no increase in borrowing requirements. The tax on cash inflows from financial institutions would be similarly postponed until deposits are withdrawn. To account for differences in VAT liabilities due to differences in timing, the net balance in the TCA would be subject to an indexing adjustment at the short-term government borrowing rate (as a proxy for the pure rate of interest). The grossed-up balance would be payable or refundable (if negative) periodically, subject to a deduction of a notional amount equal to the tax rate times the amount of the loan outstanding at the end of the tax period. Tax rate changes, including the introduction of the VAT on financial transactions, would be handled by grossing up (down) the TCA balances when the VAT rate would be increased (decreased).

Further conceptual and administrative review of the cash-flow method is required. The choice of the appropriate indexing rate, single or composite (reflecting different maturities of loans and deposits), and the frequency of the indexing adjustments require further study. Administrative issues that need to be addressed concern the valuation of financial assets and liabilities required at the time of commencement of the cash-flow method and at the time of VAT rate changes, as well as the proper definition of financial institutions permitted to keep TCA accounts. Currently, the EU is involved in various pilot projects to test the cash-flow method.

E. Concluding comments

Financial services are difficult to tax properly under a tax credit method VAT, because the intermediation charge which should be taxed cannot be separated from the pure rate of interest which should not be taxed. Taxation of the combined amount is distortionary because it drives a wedge between the pure rate of interest paid to households and the pure rate of interest paid by businesses. Zero rating of financial services would be a form of overkill. Hybrid tax credit and addition or subtraction methods exacerbate cascade effects and unduly complicate the administration of the VAT. Although the verdict is not in yet, taxation on a cash-flow basis seems to be a more promising approach, but various teething problems still have to be resolved.

In searching for alternatives to the tax credit method, various authors may have focused unduly on the correct calculation of the value added by financial institutions. In the process, they paid less attention to the neutrality criterion, particularly the desirability of preventing cascade effects and interfering with savings decisions. If neutrality is the main concern, yet

consumer use is to be taxed, then exemption and optional taxation of business use seems a reasonable second-best approach. Like the option for immovable property transactions, it breaches the vendor basis of the credit method, but that seems a lesser evil than the cascade effects of full exemption. Financial services supplied to consumers would not be taxed as fully as other goods and services, but the resulting distortions probably are small.

For the time being, the inclusion of financial services in the VAT base, however desirable, remains an elusive goal. As Alan Tait puts it succinctly: “Trying to get to grips with banking ... is akin to trying to get your hands around a piece of jelly.”⁵ Most economists and lawyers probably still share his conclusion that “while unsatisfactory, the exemption of financial services from VAT, and the subsequent cascade effect, look to be the best solution for the time being.” This would seem to be particularly applicable to Central and Eastern European countries. The domestic problems of prudential and regulatory controls of the financial sectors in these countries are such that they simply cannot cope with putting any more weight on these already fragile structures.

Notes

1. For a useful treatment, see Yolanda K. Henderson, “Financial Intermediaries under Value-Added Taxation,” *New England Economic Review* (July/August 1988).
2. For lack of information, the Belgian optional option is not discussed below.
3. See *De-Gucht Report*, PE Doc. A-2-320/88 (December 18, 1988).
4. This section draws heavily on Satya Poddar and Morley English, “The Taxation of Financial Services under a Value-Added Tax: Applying the Cash-Flow Approach,” *National Tax Journal*, 50/1 (March 1997). Satya Poddar is the *auctor intellectualis* of the cash-flow method.
5. See Alan A. Tait, *Value Added Tax: International Practice and Problems* (Washington, DC: International Monetary Fund, 1988), p. 100.

Chapter VII

DISTRIBUTIONAL ISSUES AND RATE STRUCTURES

The most basic criterion for tax policy and design is a fair distribution of the tax burden. Under the ability-to-pay principle, this means that taxes should bear some relationship to people's capacity to pay them, that is, the amount of tax should be the same for people in the same economic position (horizontal equity), but different for people in different positions (vertical equity). In the absence of a comprehensive tax base, VATs are generally judged only with respect to the vertical equity criterion (progressivity).

This chapter examines the burden distribution of VATs on the assumption that it is generally undesirable to make market-determined incomes more unequal through the tax system. A discussion of the problems encountered in measuring the VAT burden distribution is followed by a survey of actual rate structures in Central and Eastern European countries, and concluded by an evaluation of how effective and cost-efficient these rate structures are in influencing the overall tax burden distribution.

A. Measuring the VAT burden distribution

The discussion on the measurement of the VAT burden distribution begins with a brief sketch of the incidence of the VAT, *i.e.* the question whose disposable income is reduced on account of the tax. Then a brief look is taken at the difficulties that are encountered in the collection of suitable data, in determining the most suitable unit of comparison, and in choosing between income or consumption as the most appropriate index of the VAT burden distribution.

1. *Who bears the VAT?*

There are two ways of analysing the incidence of a VAT. In a partial equilibrium setting, the analysis focuses primarily on the structure and adaptability of the market for the taxed commodities. Demand schedules for products of tax-free industries (including lower taxed industries) and related factor supply schedules are assumed to remain unchanged. Recent incidence theory, on the other hand, attempts to account for all changes in real income. In a general equilibrium setting, the effects of a tax on households are examined both in their role as consumers of goods and services -- the income-uses side of the budget -- and that of suppliers of factor services -- the income-sources side.

The partial equilibrium approach studies the effects of a VAT as a price phenomenon in which incidence analysis simply involves the application of general price theory to taxation. In a profit-maximising competitive world -- and, except for extreme circumstances, in monopoly situations, too -- the direction and extent of a VAT-induced price change then depend on the demand and supply elasticities of the taxed products. The general rule is that the more inelastic the demand, the greater the amount of the tax borne by the consumer relative to the producer. This appears logical, since with elastic supply the producer can readily leave the industry, and with inelastic demand the consumer is less able to turn to alternative goods. Generally, it is assumed that supply is the more elastic, particularly in the longer run, and therefore, a forward shifting of the tax to consumers is considered the most plausible outcome.

In a more complete analysis, the impact of the VAT on factor rewards and its effects on the demand and supply schedules of tax-free industries would have to be accounted for. If a differential approach is adopted (under which the tax replaces a uniform, equal-yield tax on all consumption) and full utilisation of resources is assumed, then the tax-induced price increase of a category of goods, say *X*, would lead to a decline in the output of *X* and factors employed in producing *X* would then move into the production of tax-free goods, say *Y*, where they would receive a relatively higher reward. At the same time, as the price of *X* increases, the demand for *Y* would rise and consequently the output of *Y*. Assuming that both goods are produced under conditions of increasing costs, it is then conceivable that the tax burden of *X* might have to be shared by *Y* to an extent depending upon the elasticities of substitution of *Y* for *X* on the part of both producers and consumers. In addition to the effects resulting from the uses side, there may be effects from the sources side, because the altered product mix would lead to a fall in the return of factors specific to production

in industry X , and an increase in the earnings of factors of particular importance to the production in industry Y .

On the whole, however, complete forward shifting of VATs is assumed to be the rule. Tax burdens are generally assumed to fall on consumers and to be distributed on the basis of consumption expenditures on taxable products. This assumption is made because: *a*) the imposition of a VAT drives a wedge between saving and consumption, and therefore the primary determinant of tax incidence arises on the income-uses side of household budgets; and *b*) distributional effects on factor rewards and demand and supply schedules in tax-free industries are probably neutral, or may be disregarded in most cases, because the size distribution of factor income arising in various industries remains largely unchanged by the imposition of VATs. Thus, the working hypothesis under general and partial equilibrium analysis is the same and bears out the old maxim that consumers bear consumption taxes, *i.e.* VATs.

Once it is assumed that VAT burdens are distributed in relation to consumer expenditures on taxable commodities, changes in the ratio, or effective rate, of VATs paid to income received or expenditures made by households at different points in the income or consumption distribution, may be taken to indicate the nature of their impact: a declining rate implies that a VAT is regressive, a rising rate that it is progressive, and no change in the rate means a proportional impact. Although the mathematics of impact analysis may seem simple, there are usually great conceptual and empirical difficulties in defining and measuring both the numerator and the denominator for various levels of income or consumption. These difficulties have been discussed at length in the professional literature and are briefly alluded to below.¹

2. *Problems with expenditures surveys*

Most impact studies draw on expenditures surveys for consumption data on taxable products. These surveys are normally undertaken to collect information for cost-of-living indices; hence they tend to concentrate on expenditures for basic products, such as foodstuffs and possibly traditional excise goods, rather than, say, on luxury items. Further difficulties are that people may not remember accurately expenditures on goods that consist of small amounts spread over relatively long periods of time, while some individuals may be reluctant to disclose large spendings on, say, alcoholic beverages.

Furthermore, low and high income groups tend to be under-represented, because dissavings, occurring when annual consumption exceeds annual income, are usually ignored, as are large purchases of consumer durables (dwellings) and expenditures on holidays abroad. Also, certain government-provided services (*e.g.* health care and education), the value of non-market services rendered by individuals or businesses, and the value of production for own consumption (farmers) are usually not covered for lack of adequate data. And, finally, some VAT elements on goods and services used in the production, transportation and marketing of taxable goods cannot be allocated to final consumers.

In practice, expenditure surveys are based upon households, usually defined in terms of shared accommodation. The joint nature of household expenditures, however, makes it difficult to identify the spending of the individuals who make up the household. On the other hand, it can be argued that what tax policy should be about is the welfare and taxable capacity of households, since the individuals that belong to a household may pool their resources and undertake a wide range of joint expenditure decisions. These arguments are generally considered to override the argument in favour of the individual as the unit of comparison. Still, it may be conceded that for tax policy it is the welfare and taxable capacity of the individual which is of most significance, since before being able to say anything about how tax burdens should be distributed, it is necessary to know the resources at the disposal of individuals.

By taking average group incomes and consumption patterns, moreover, the income distribution approach adopted for most impact studies in effect suppresses individual differences between families in the same income class. These interfamily variations in consumption patterns can be highlighted under what is called the 'typical household approach' to tax impact, under which tax burdens are computed for families of given size, income, and consumption habits (rather than actual tax payments allocated to income classes). Generally, two-person and four-person households constitute the unit of analysis.

3. *Income or consumption as impact index?*

The impact of VATs looks different according to whether income, which includes saving, or consumption is chosen as the base for comparison. As the share of income saved rises as one moves up the income scale, it follows that VATs will appear to be more progressive or less regressive, if measured on

a consumption base than if measured on an income base. Thus, to take an example, a single-rate VAT applying to all goods and services if measured with reference to consumption would be, by definition, proportional and, if measured with reference to income, would be regressive. But if lower or zero rates are applied to food and other essential goods and if higher rates are applied to luxury goods, according to usual assumptions about consumption patterns at different income levels, the VAT could be expected to be slightly progressive if measured on a consumption base and perhaps more or less proportional if measured on an income base.

Intuitively, it seems reasonable to express the amount paid in VAT as a proportion of disposable income, since income is what the individual or family starts out with in the first place. It represents the pool of resources which the individual recognises easily, spends from and from which consumer choice is made. Admittedly, at a given moment in time income is either spent or saved, but when viewed over the individual's lifetime, then savings are spent also, at least if bequests or gifts at the end of an individual's life are ignored. If consumption out of real capital or from borrowing is included, then since capital is no more than a flow of income discounted to the present at some appropriate rate of interest, again an income base appears to be the most appropriate. One view would therefore be that the income concept is to be preferred when attempting to measure the overall impact of VATs, as the use of this variable takes account satisfactorily of consumption from both savings and capital.

One of the main arguments which is put forward in favour of the use of a consumption base is that for a given individual or family, expenditure patterns are likely to adjust relatively slowly with respect to changes in disposable income. There are likely to be more sharp or transitory changes in income than there are in consumption. In a typical cross-section of families, or individuals, therefore, a number of these transitory or temporary elements in measured income which are not relevant for the typical set of household spending decisions could be expected to occur. In other words, it is argued that the observed measured income at a moment in time does not represent the true economic concept of income. The 'true' notion of income here corresponds to the economists' definition of so-called 'permanent income' and the best proxy for this is consumption, which is less likely than income to contain sharp erratic or random movements.

Another argument which is put forward in favour of the use of a consumption base is that the impact of a VAT should be measured in the same

way as that resulting from an increase in the price level, *i.e.* the distribution of the change in real purchasing power of command over resources. The proponents of this view argue that an increase in a VAT which is shifted forward partially or wholly into higher prices not only reduces the purchasing power of that proportion of income which is spent, but also of that proportion which is saved. Insofar as the rate of VAT is not reduced in future years, the potential future purchasing power of savings is reduced and this reduction is referred to as the “imputed tax” on savings. Another way of stating the argument is that what is relevant are the effects of VATs on the real command over resources, and not on the proportion of disposable income accounted for by VATs.

On the other hand, the whole concept of imputed tax may be questioned on the ground that there is no flow of payments to governments, whereas a tax is normally considered as a means by which a government gains control over resources. In fact an imputed tax of this kind is unlikely to disturb in any major way the balance between public and private sectors, even though it may have some distorting effect on the choice between saving and consuming. In addition, a similar claim that an imputed tax arises could be made in respect of any government action (or inaction) which increases inflation.

In view of the divergence of opinions as to the appropriate base and the effect they have on the apparent impact of VATs, most impact studies present wherever possible the figures on both an income and consumption base. Because of limitations on available data, consumption is defined as current expenditure on market goods and services. Largely for the same reasons, income is defined as gross income, including earned and unearned income, plus social transfers -- but excluding output for own consumption.

B. Survey of actual rate structures

As indicated above, a VAT extending through the retail stage, covering all goods and services, and levied at a uniform rate, would, by definition, have a proportional impact when measured on the consumption base and a regressive impact when measured on the income base, because savings as a proportion of income rises when income rises. The proportional or regressive impact may be mitigated, *i.e.* be made slightly progressive or less regressive, by exempting, zero-rating, or applying lower rates to essential goods that are disproportionately consumed by the poor, and higher rates to luxury items that are disproportionately consumed by the rich.

1. *Overview*

Table 7.1 provides an overview of the VAT rate structures in the countries under review. Their main features can be summarised as follows.

- Generally, as noted in Chapter I, the standard rates are high compared with those in the EU member states. The lowest standard rate is 18 per cent (Baltic states, Romania) and the highest rate is 25 per cent (Hungary). Hence, the various VATs should have a significant impact on the overall tax burden distribution.
- Apart from some minor exceptions, Estonia is the only country that imposes a single, uniform rate on all goods and services other than services relating to the provision of health, education, finance, insurance, and housing, which are exempted in the public interest or on administrative grounds.
- Six countries, *i.e.* the Czech Republic, Hungary, Poland, Romania, the Slovak Republic and Slovenia impose a lower-than-standard rate on food products, medicines, newspapers, books, and passenger transportation, similar to practice in most EU member states.
- In contrast to practice in most EU member states, the Czech Republic, Hungary, and the Slovak Republic also apply the lower-than-standard rate to electricity and gas. Poland levies an intermediate rate on these items.
- The Czech and Slovak Republics extend the lower rate to new (residential) buildings, whereas most EU states favour the standard rate for new buildings. Poland even levies a zero rate.
- Particularly noteworthy is that the Czech and Slovak Republics tax many services at the lower rate.
- Some countries apply the zero rate to selected items for domestic consumption, such as newspapers, approved periodicals and books (Estonia, Poland, Romania), and basic medicines (Hungary, Poland). Romania is the only country that has a zero rate for bread and water.

Table 7.1 Major features of VAT rate structures

Country	Standard rate (%)	Lower rate (major items)	Zero rate (major items other than exports)	Major exemptions (other than standard exemptions)
Bulgaria	22	-	-	Basic foodstuffs, water Medicines Approved textbooks Admissions
Czech Rep.	22	<u>5 per cent</u> Most food products, water Pharmaceutical products, aids for the disabled Thermal energy, electricity, coal, gas Newspapers, periodicals, books New buildings, construction activities Recreation, cultural and sports activities Transportation Telecommunications Funerals	-	Medicines
Estonia	18	-	Admissions to theatres and state concerts Estonian subscribed periodicals and approved textbooks	Medicines, medical equipment Funeral services

Table 7.1 **Major features of VAT rate structures** (continued)

Country	Standard rate (%)	Lower rate (major items)	Zero rate (major items other than exports)	Major exemptions (other than standard exemptions)
Hungary	25	<u>12 per cent</u> Most food products, water Washing, dry-cleaning Pharmaceutical products, aids for the disabled Electricity, household fuel Newspapers, periodicals, books Social housing Hotels, motels, boarding houses Transportation Funerals	Medicines for human use	Legal services
Latvia	18	-	-	Baby food Medicines, medical equipment Educational publications Newspapers, periodicals, books Admissions Funeral services
Lithuania	18	-	-	Medicines, medical equipment Newspapers, periodicals, books Public passenger transportation Social housing Funeral services

Table 7.1 **Major features of VAT rate structures** (continued)

Country	Standard rate (%)	Lower rate (major items)	Zero rate (major items other than exports)	Major exemptions (other than standard exemptions)
Poland	22	<u>7 per cent</u> Food products (unless exempted) Children's goods Medicines, medical supplies Building materials, basic appliances Passenger transportation Telecommunications <u>17 per cent</u> Electricity, fuel	Basic medicines Newspapers, periodicals, books Housing units Feed, fertilisers, pesticides Farm machinery and equipment Domestic air services	Semi-processed foodstuffs, water Horticultural products Cultural services Agricultural services Legal services R&D activities
Romania	18	<u>9 per cent</u> Basic foodstuffs Medicines Clothes and shoes for newborn, school uniforms Urban public passenger transportation Fertilisers Advertising in newspapers	Bread, wheat, barley, water Prosthetic and orthopaedic products Electricity and fuel Newspapers Waste disposal	Periodicals, books Admissions Funeral services

Table 7.1 Major features of VAT rate structures (continued)

Country	Standard rate (%)	Lower rate (major items)	Zero rate (major items other than exports)	Major exemptions (other than standard exemptions)
Slovak Rep.	23	<u>6 per cent</u> Most food products, water Pharmaceutical products, medical aids and supplies Thermal energy, electricity, gas Newspapers, periodicals, books Cultural activities Hotels, motels, boarding houses Building activities Transportation, telecommunications Feed, seed, fertilisers R&D activities	-	Medicines sold in pharmacies
Slovenia	...	Foodstuffs for human or animal consumption Pharmaceutical products, medical equipment Newspapers, periodicals, books Children's clothing	-	-

Source: Appendixes I and II.

- In contrast with practice in EU member states, many countries exempt some goods from VAT, such as basic foodstuffs (Bulgaria, Poland), medicines (all but four countries), newspapers and books (Bulgaria, Latvia, Lithuania, Romania), and various other goods.
- Interestingly, no country imposes higher than standard rates on items regarded as luxuries. Many EU member states used to have higher rates, but these were abolished in 1992.

2. *Treatment of selected goods and services*

In Annex H of the Sixth Directive, the EU lists those goods and services which may be taxed at a lower-than-standard rate. The Annex has been used in constructing table 7.2. The areas that are covered are food, health, transportation, the media, fitness, shelter, agricultural inputs, death and waste disposal. The specific goods and services may either be taxed at the standard rate (S), attract a lower-than-standard rate (L) or a zero rate (Z), or simply be exempted (E).

Of all essential consumer items, *food products* (subdivided in the table into basic foodstuffs, other food products and luxury food items) occupy the most important position in the household basket of lower income groups. Three countries, *i.e.* Estonia, Lithuania and Slovenia, tax all food products at the same rate. Although this treatment is strongly favoured in the tax literature, Denmark and Finland are the only EU countries that also follow this approach.

Romania is the only country which applies the zero rate to some very basic foodstuffs: bread, wheat and barley. In the EU, Ireland and the UK have a zero rate for all food products, except when supplied by hotels and restaurants. Instead of applying a zero rate (which requires registration and VAT refunds), Bulgaria and Poland exempt basic foodstuffs, such as bread, dairy products and meat. Latvia exempts baby food. Various countries also exempt meals supplied to employees. Presumably, this is another way of denying the credit for the tax on purchases.

Since luxury food items are generally taxed at the standard rate, countries that apply a lower rate to other food products must enumerate the items considered as luxury foods. In the Czech and Slovak Republics, luxury foods comprise caviar, crustaceans, molluscs, fruit and vegetable juices, and cat and dog food. This echoes the treatment found in Austria and Germany. In Hungary,

Table 7.2 Treatment of selected goods and services

	Bulgaria	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Slovak Rep.	Slovenia
Annex H items										
Basic foodstuffs	E	L	S	L	E or S	S	E	Z or L	L	L
Other food products	S	L	S	L	S	S	L or S	L	L	L
Luxury food items	S	S	S	S	S	S	S	S	S	L
Water	E	L	S	L	E or S	S	E	Z	L	L
Pharmaceutical products	E	E or L	E	Z or L	E	E	Z or L	L	E or L	L
Medical equipment	E	L	E	L or S	E	E	Z, L or S	L	L	L
Accessories for the handicapped	S	L	E	L	E or S	S	L	Z or S	L	L
Public passenger transportation	S	L	S	L	S	E	E or L	L	L	S
Books, newspapers, periodicals	E or S	L	S or Z	L	E or S	E	Z or L	E	L	L
Authors, composers, artists	S	L	S	E, L or S	E or S	E	E	E	L	L
Radio and TV broadcasts	E	E or L	E or S	E	E	S	E	E	E	E
Cultural events	E	L	S or Z	E or L	E	E	E	E	L	L
Sporting events and facilities	E	L	S	E or L	E	S	E	E	L	L
Social housing	S	L	E	L	S	S	Z or L	E	E or L	L
Hotels, boarding houses, camping sites	S	S	S	L	S	S	L	S	L	S
Agricultural inputs, except machinery and buildings	E or S	L or S	S	L or S	E or S	S	E, L or S	L	L	L
Funerals	S	L	E	L	E or S	E	E	E	L	S
Garbage collection, waste treatment	S	L	S or E	L	E or S	S	E	Z	L	S
Other items										
Food services	S	S	S	L	S	S	L	S	S	S
Legal services	E	L	S	E or S	S	S	E, L or S	E	L	S

Notes: E = Normally exempt from tax;
S = Normally subject to the standard rate;
L = Normally subject to the lower rate;
Z = Normally subject to the zero rate.

Source: Country legislation.

specified juices as well as confectionery are considered luxury foods. Poland and Romania also tax luxury foods at the higher (standard) rate, but only by implication, since food products to which the lower rate applies are explicitly enumerated in the law. Food services are generally taxed at the standard rate, except in Hungary and Poland, where they attract the lower rate. Generally, water for human consumption is also accorded favourable treatment.

Nearly all countries either zero rate basic *medicines* (Hungary, Poland) or exempt them, often along with medical equipment and accessories for the handicapped. Most ordinary pharmaceutical products and other medical supplies are taxed at the lower rate, if available.

Public passenger transportation is taxed in a variety of ways. Lithuania and Poland exempt public passenger transportation along designated routes. Four countries tax such transportation at the lower rate and four countries apply the standard rate. Taxis and employer-provided means of transportation are taxed at the standard rate.

Books, newspapers and periodicals receive favourable treatment in all countries. Poland taxes these items at the zero rate, as does Denmark with regard to newspapers, for example. Latvia, Lithuania and Romania exempt books, newspapers and periodicals, but Bulgaria confines the exemption to approved textbooks or publications for educational purposes. Broadly, the original work of *authors, composers and artists* follows the same treatment as the publications mentioned above.

Not surprisingly, various cultural services are also exempted or taxed at a lower-than-standard rate. Generally, *public broadcasting* is exempted in line with the Sixth Directive, but advertising is usually taxed at the standard rate. Although *cultural activities* are now widely taxed in EU member states, Central and Eastern European countries generally exempt admissions to theatres, concerts, circus performances, etc. Estonia applies the zero rate to theatre performances and state concerts. Similarly, admissions to *sporting events and facilities* are often exempted.

Estonia, Romania and the Slovak Republic exempt the construction of housing units for low-income groups; the Czech Republic, Hungary and Slovenia tax them at the lower rate. Transient accommodation in *hotels, motels, boarding houses* or on *camping grounds* is generally taxed at the standard rate. Hungary, Poland and the Slovak Republic, however, apply the lower rate -- which obviates the need of delineating the price for the accommodation from the price for food services supplied concurrently.

The most detailed treatment is meted out to *funeral services*, which are generally exempted or taxed at the lower rate. In Estonia, the exempt services are minutely defined. They include the use of cold storage, tolling the bell, and writing the text for songs and funeral announcements. *Garbage collection* and *waste treatment* also receive favourable treatment. Romania taxes waste disposal at the zero rate.

Many countries also mitigate the VAT burden on other goods and services, including electricity and household fuel (Romania even applies the zero rate), children's clothing (which are taxed at the lower rate in Poland and Romania), and legal services.

Various exemptions noted above should be considered in conjunction with Article 28(3) and Annexes E and F of the EU's Sixth Directive, which permits their continuation during the transitional period prior to EU membership. The most important exemptions in this category are the following:

- dental services
- public radio and TV broadcasting
- admissions to sporting events
- authors, artists, performers, lawyers and other members of the liberal professions
- telecommunications
- funeral services
- economic activities by the blind
- cemeteries, graves and monuments
- water
- new buildings and building land
- passenger transport
- aircraft, warships

C. Problems with rate differentiation

Central and Eastern European countries have little experience with VAT rate differentiation. As yet, no household budget surveys are available to

gauge the effect of various lower and zero rates or exemptions on the burden distribution of the VAT. But the experience of EU member states with (highly) differentiated rate structures sheds light on several reasons for avoiding extensive rate differentiation. The first set of reasons involves targeting problems: exempting basic foodstuffs is not really an effective way of helping the poor. The second set refers to economic distortions: rate differentiation causes total output to be less than it would be under a uniform rate. The third set is related to administrative and compliance costs, which are higher the more complicated is the rate structure.²

1. *Targeting problems*

Impact studies for EU countries undertaken in the late 1970s and early 1980s show that the VAT burden is distributed proportionally over much of the income range.³ Usually some progressivity is noted for very low incomes and some regressivity for upper incomes. Widely applied zero rating is responsible for the slight progressivity of the United Kingdom's VAT. Rate differentiation makes the tax broadly proportional in Germany, the Netherlands, and Belgium. The Swedish VAT used to apply a single rate of tax without any differentiation for essential commodities; as might be expected, its impact was generally more regressive than that of a proportional income tax. Notice, however, that these studies posted gross income as the denominator of the ratio of tax paid to income received. If consumption, disposable income or permanent income had been taken as the denominator, the burden would be more progressive -- or less regressive -- than indicated.

Four studies published in the mid-1980s generally support the earlier, intuitively plausible finding that the VAT burden distribution is broadly proportional when measured on the consumption base, and somewhat regressive when related to income. Perhaps more importantly, these studies also indicate that the impact of a VAT changes less than might be expected when necessities are zero rated (as in the United Kingdom), taxed at a lower rate (as in the Netherlands), or taxed at the standard rate (as in Denmark and Norway). The reason seems to be that the consumption patterns of various income groups have converged. If that is true, the application of higher- or lower-than-standard tax rates is becoming less and less important for increasing progressivity or reducing regressivity.

On the whole, there is general agreement that the VAT is a relatively ineffective instrument for narrowing differences in pre-tax incomes and, by extension, for eliminating the impact of the tax on the poor. In Ireland, for

example, it was found that although the poor spend relatively more of their income on groceries than the rich, in absolute amounts the rich spend twice as much as the poor.⁴ Consequently, Ireland's zero rating of groceries gives twice as much tax relief to high-income groups than to low-income groups, an odd way of alleviating the plight of the poor. In the same vein and perhaps more telling, a study in Sweden showed that abolition of that country's standard rate on groceries would mainly benefit single people with higher incomes.

No doubt, these arguments apply also to most Central and Eastern European countries. While a lower rate may have some justification in light of the shortcomings of the personal income tax and the fact that people without taxable income still pay VAT, it makes no sense to distinguish between basic foodstuffs, other food products and luxury food items. Singling out sea food, confectionary, or cat and dog food for the (higher) standard rate has no perceptible effect on the VAT burden distribution. Presumably these arguments apply with equal force to medicines and medical equipment, particularly if subsidised or supplied through government-run hospitals. Furthermore, the demand for books, newspapers and periodicals is fairly income elastic. Exempting these items or zero rating them makes the VAT more regressive.

A good example of a well-intentioned but misdirected form of rate differentiation is the application of a lower rate to children's clothing, shoes, cosmetics, school stationery, skis and bicycles in Poland. First, many of these items would also fit or could also be used by small adults. Second, rich parents also benefit from the concession. Third, the really poor do not buy new clothes, but instead mend or refashion worn out clothing of adults into children's clothing, or repair second-hand skis and bicycles which are not subject to VAT. Not surprisingly, research in other countries has established that these kinds of concessions make the VAT more instead of less regressive.

2. *Misallocation of resources*

Tax policy proceeds from the assumption that the market achieves an optimal allocation of resources. It follows that a VAT should be neutral with respect to the economic behaviour of producers and consumers -- that it should not distort that behaviour. Yet it is well known that differentiated rate structures distort consumer preferences (leading them to prefer one product over another) and producer choices (leading them to choose one line of production over another). If the tax rate differs from one category of goods to another, relative prices will change. These changes will, in turn, affect the quantities demanded, induce intersectoral movements of factors of production,

and result in changes in factor prices. Resources will be directed from their most profitable use to less profitable uses. In the end, total output will be less than it would be with a single rate.

Although the effects on total output are probably small, it should be emphasised that, given the amount of revenue to be raised, applying a lower or zero rate to essential products means that the standard rate must be higher than it would be in the absence of rate differentiation. This higher standard rate will magnify the distortion of consumer preferences and producer choices described above. This defect should be taken seriously because, as a rule, the severity of tax distortions increases with the square of the tax rate that causes them.

Another area in which experience shows that it is wise to guard against misallocating resources is the exemption or reduced taxation of government services, particularly those that compete with services provided by the private sector. Public transit, for example, competes with private cars, taxis, and other forms of transportation. Competitive conditions are distorted if the government service bears a lower tax or no tax, while private-sector services are taxed in full. Moreover, to the extent that the prices of government services are regulated or subsidised (which may be justified on the grounds of, say, externalities), the application of a zero or lower-than-standard rate makes little sense. In such cases, the levy of the VAT is little more than a bookkeeping exercise. If policymakers want the price of a publicly provided service to stay level despite the tax, the better alternative is to apply the standard rate and increase the subsidy. This approach has the additional advantage of confronting policymakers with the full cost of public intervention.

3. *High administration and compliance costs*

Differential VAT rates involve a significant increase in administration and compliance costs for the government and for businesses, particularly small businesses. Ideally, a firm that deals in products with different rates -- for example, a grocery that sells zero-rated milk along with standard-rated soft drinks -- should keep separate accounts for the different kinds of items. It is usually not possible to do so. But if the VAT on differentially taxed products cannot be accounted for separately, the tax liability must be determined by applying presumptive methods, an approach that increases the difficulty of monitoring the taxable person's compliance. Furthermore, there is evidence that the increase in compliance costs on account of differentiated rate structures is distributed regressively with respect to income: small businesses bear proportionately more of the burden than large ones.

The costs of administering a VAT are also increased by a differentiated rate structure, because it brings in its train problems of delineating products and interpreting the rules regarding which rate should be applied. Tax staff must spend extra amounts of time issuing additional assessments (if the wrong rate has been applied), settling objections, and dealing with appeals. Even with careful design, anomalies cannot be avoided, as an examination of the rate schedules in various countries shows. If basic foodstuffs include herring and pork but not expensive varieties of fish and meat, how are the latter to be distinguished from the former?

A telling example of the additional administrative and compliance costs imposed by differentiated rates is found in the Czech Republic which taxes most goods at the standard rate, but most services at the lower rate. When goods and services are supplied in combination (installation, repairs), this means that the price has to be separated into a part representing the price for goods and a part representing the price for services. In addition, rules provide that where the goods element is the dominant part of the supply, the whole taxable value has to be taxed at the standard rate, if applicable. The reverse applies to services. Clearly, these provisions require substantial audit oversight. A similar situation is found in the Slovak Republic which, although generally taxing services at the standard rate, has put so many services in the lower rate category (including many repair services) that delineation problems are bound to occur.

Another problem, as the history of many rate-differentiated VATs testifies, is that it is difficult to keep the coverage of a reduced- or zero-rate within its original bounds. A large number of reasons, often hard to counter, can usually be invoked for extending preferential treatment to other goods and services. For example, typical national products inexplicably appear to be more deserving than foreign products and soon move into the lower- or zero-rate category. Even if demands for preferential treatment can be resisted, high-caliber staff members must devote scarce time to answering queries from pressure groups -- time that might be better used in checking compliance.

Basically, zero rating (other than for exports, for which it is imperative) nullifies one of the important administrative advantages of a VAT: namely, that the whole production-distribution process is involved in collecting the tax from the consumer. In addition to wasting administrative resources, zero rating seems to increase the chance of tax evasion, and it certainly involves the tax office in an expensive collection-and-refund process that does not yield any net revenue. If a lower-than-standard rate applies to a product, its

higher taxed inputs may yield the trader enough tax credits to claim a refund. Such claims are inevitable if a zero rate frees some commodities from the tax completely.

D. Evaluation

The considerable experience that many countries have with a VAT suggests several compelling reasons for a simple VAT rate structure. Differentiated rates greatly complicate administration and compliance. Perhaps more importantly, lower-than-standard rates for “necessities” are largely ineffective in mitigating the VAT burden on the poor. The very poor, the people who rely more or less completely on income-support payments, are helped more effectively if those payments are increased *in tandem* with the increase in the VAT burden. Other low-income groups, the people who rely partially on income-support payments, are better off with the VAT-corrected transfer payments and a reduction of income tax liability.

A review of the history of VAT rate structures indicates that most countries tend to become locked in to the multiple rate structure with which they started. Concessionary treatment once extended is difficult to withdraw. Yet, for the sake of simplicity, Central and Eastern European countries might make certain modifications to their VAT rate structure. Broadly, these modifications should comprise the following measures.

- Withdraw all exemptions, except those in the public interest (health, education and social services) or involving undue administrative complexity (finance, insurance, rents and rental values). Transfer the goods and services now exempted to the lower or standard rate categories, as appropriate.
- Tax all food products, whatever the degree of processing or fanciness, at one rate, be it the lower rate (if available) or the standard rate. Treat all non-alcoholic beverages in the same fashion.
- Tax food services in restaurants as well as all forms of transient accommodation at the same rate as food products. This obviates the need for differentiating between on-premise and off-premise consumption.
- If it is considered advisable to provide favourable treatment to energy, then tax all forms of energy, regardless of to whom

supplied, at the same rate. The excises should be used to impart heavier differential burdens, if desired.

- Tax all medicines and medical supplies, books, newspapers and periodicals, public passenger transportation, and admissions at the same (lower) rate.

Notes

1. For a useful discussion of the issues, see Charles E. McLure, Jr., “Income Distribution and Tax Incidence under the VAT,” chapter 3 in Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat, *Value Added Taxation in Developing Countries* (Washington, DC: World Bank, 1990).
2. See OECD, *Taxing Consumption* (Paris, 1988), especially chapter 8 and its appendix 1.
3. For the arguments that follow below, see also Sijbren Cnossen, “What Rate Structure for a Goods and Services Tax? The European Experience,” *Canadian Tax Journal*, vol. 37/5 (September-October 1989).
4. See Ireland, Commission on Taxation, *Third Report: Indirect Taxation* (Dublin: Stationery Office, 1984), appendix 9.

Chapter VIII

INTERNATIONAL AND INTRA-UNION TRADE

An important rationale for choosing the VAT is that it does not distort the trade between different countries. Obviously, this form of tax neutrality is of crucial importance in a rapidly integrating economic world. This chapter explores the issues, problems and solutions that are encountered in the treatment of exports and imports. First, the factors that bear on the choice between the destination and the origin principle are discussed. Second, the chapter reviews certain developments in the EU in connection with the abolishment of the customs controls which used to straddle the borders between the member states.

A. Destination versus origin principle¹

Goods and services entering international trade may be taxed in either of two ways. Under the first approach, called the destination principle, commodities are taxed on the basis of location of consumption or destination -- that is, the country in which they are consumed, regardless of where they are produced. Exports must leave the exporting country free of tax, and a compensatory tax is required on imports so that they compete on an equal tax footing with domestically produced goods. The export rebate and the import tax, termed border tax adjustments, are generally effected through customs controls.

Under the second approach, called the origin principle, commodities are taxed on the basis of their place of production or origin -- that is, the country in which they are manufactured, regardless of where they are consumed. The revenue from the tax on a traded good, up to the time it is exported, goes to the exporting country, that is, the country in which the good has been produced. On the face of it, the origin principle does not require explicit border tax adjustments because imports are not taxed and no rebate is given on exports.

Although no doubt other factors bear upon the choice between the destination principle and the origin principle, the main considerations have to do with carving up the VAT base between two or more countries as fairly as possible (inter-nation equity), in a manner that does not interfere with consumer and producer choices (in particular, decisions about the location of manufacturing activities, *i.e.* locational neutrality), and in a form that is as simple and certain as possible for the taxpayer and the tax administrator (administrative feasibility).

Inter-nation equity is often associated with the benefit-received approach, under which the VAT is considered a proxy for the payment of goods and services, such as appropriate legal institutions or a favourable infrastructure, supplied by the government. The benefit-received approach, however, does not cut much ice as a rationale for VAT base entitlement. Appropriate legal conditions, for instance, have great financial and economic significance, but they can be provided at practically no cost. It is therefore not possible to justify the VAT on this ground. Similarly, taxable persons do benefit from government services, such as the provision of roads, canals and environmental protection, but clearly sales are not an appropriate base for charging such persons for the benefits received. Rather, selective taxes, such as road user charges (gasoline, diesel and motor vehicle taxes) and environmental levies are needed.

As regards locational neutrality, the theoretical tax literature postulates that under certain conditions it makes no difference to trade (and investment) whether the destination principle or the origin principle is applied. Compensating exchange rate and domestic price movements will ensure that the levels of real trade (and investment) remain the same. After all, a tax on exports is equivalent to a tax on imports, because imports are exchanged for exports and the same tax is levied on that exchange, regardless of whether the nominal tax is imposed on exports or on imports.

But a number of highly restrictive conditions must be met if this “equivalence theorem” is to hold. Thus, exchange rates and domestic prices, including wages, must be perfectly flexible (which, in practice, they are not). In an internal market, moreover, most exchange rates are fixed rather than flexible. Furthermore, the theorem applies only to a fully general VAT, which includes all goods and services in its base. Such a VAT, however, has no counterpart in the real world. Beyond that, trade between countries must initially be balanced and there should be no net transfer payments or capital flows from one country to another.

These considerations point towards the destination principle as the preferred choice. This choice is strongly backed up by administrative feasibility arguments. Under a tax-credit type of destination-based VAT, administrators do not have to worry about underlying taxable values. The notion of taxable value is irrelevant for export rebate purposes; all prior-stage tax is simply refunded. But even at the import stage there is little concern, because any underpayment of tax owing to undervaluation at the border is caught at the first taxable stage inland.

The tax aspects of internationally traded goods, which are handled with relative ease under the destination principle, become a nightmare when the origin principle is applied in full. Since the country of production then claims the tax on value added up to the time of export, exported goods must be valued for tax purposes, which can be a highly contentious matter. Presumably, in some cases actual selling prices might be used, but in a large number of interlocking international transactions some arm's length principle would be necessary. This would be difficult to administer. Similarly, problems would arise on the import side of the ledger. To prevent the import value from being taxed at subsequent stages under the tax credit technique, some notional credit would have to be attached to imports, at the import stage, equal to the importing country's VAT rate times the import value. Again, the underlying value would be an issue on which parties would not be likely to readily agree.

Not surprisingly, international trade in commodities subject to a VAT is invariably conducted under the destination principle. Internationally, the principle is implicitly embodied in the provisions of the General Agreement on Tariffs and Trade (GATT, subsequently superseded by the WTO). Article 3, paragraph 2, of part II of the GATT provides that "the products of the territory of a contracting party imported into the territory of another contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied directly or indirectly to like domestic products." Furthermore, by implication, Article 16, in conjunction with a note attached to it, permits the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption. Although these and related provisions have been the subject of much debate, clearly their purport is that compensatory import taxes should not be used to protect domestic production and that export rebates should not be employed to subsidise exports.

To implement the destination principle, border tax adjustments in Central and Eastern European countries and elsewhere are enforced through

border controls, which also ensure compliance with the import duties. Invariably, VAT laws stipulate that compensatory import taxes should be levied as though they were import duties administered by the customs authorities. Generally, the compensatory import tax is calculated on the import-duty value of goods (an arm's length price concept) plus any import and excise duties. Unless a suspension technique applies, this implies that the compensatory tax on imports is due and payable on purchases rather than on sales. The import tax is creditable by the importer upon resale of the goods, but unlike the situation with domestic transactions, the importer forgoes the interest on the prepaid tax until he receives the tax back from his customer.

B. Developments in the European Union

In the EU, border controls, used to effect border tax adjustments, were abolished by the end of 1992. Given the preference for the destination principle, the question was and still is: how should border tax adjustments then be effected? For some time, it was recognised that there are two destination-based schemes available to achieve this: the deferred payment scheme, currently in place in the EU and favoured by the member states, and the tax credit clearance system preferred by the European Commission until 1996, when it came out in favour of some kind of unitary VAT for businesses with EU-wide manufacturing and trading activities.²

1. *Deferred payment scheme*

The deferred payment scheme was pioneered in the Benelux countries and has been in use there ever since the VAT was introduced. Under this approach the compensatory import tax is not levied and imported goods are not checked physically at the border. Instead, the credit mechanism of the VAT is relied on to ensure that the first taxable person in the importing country implicitly pays the compensatory tax, since there is no offsetting credit. Even before 1992, the method worked so well that nearly all of the compensatory import tax otherwise payable on goods entering from abroad was shifted inland. Eligibility for the export rebate could be proved on the basis of documentary evidence (*e.g.*, bills of lading, payments from abroad) rather than through physical clearance at the border. Exporters did not have to show a certificate or affidavit signed by the customs authorities (as proof that the goods had left the country) to qualify for a rebate.

Under the Benelux deferred payment scheme, therefore, customs clearance methods were set aside by incorporating the compensatory import tax in the domestic ambit of the VAT. The scheme made the recipient, not the importer, of goods liable to tax. The recipient had to compute and report the compensatory import tax but could take credit for that tax in the same return. The return for the compensatory import tax had to be filed at the time the imported goods were received (which, at the latest, was on the eighth day following the day of importation). This self-assessment procedure, which in theory is redundant, facilitated compliance control. In most cases the effect of the scheme was that the compensatory tax was not paid until the imported goods were resold by the firm that actually received them.

The principle of the deferred payment scheme was adopted in Article 23 of the EU's Sixth Directive. Subsequently, in 1982, the draft Fourteenth Directive was issued with a detailed proposal for the EU-wide application of the scheme. The preamble of the draft Directive cited experience showing that the scheme met the requirements of simplicity and effectiveness in combating fraud. The draft Directive limited the scheme's application to intra-EU trade, to goods used for taxable, non-exempt, activities, and to regular taxpayers. The scheme would be administered through a system of permits.

It should be noted that the deferred payment scheme for goods is equivalent to the reverse-charge mechanism for services provided by non-residents that most Central and Eastern European countries already have under their VATs. The reverse-charge mechanism obliges taxable persons receiving services from non-residents without an agent or permanent establishment in the country to account for the VAT on those services. At the same time, of course, they are entitled to a credit for that tax.

2. *Tax credit clearance system*

In 1985 the European Commission dropped its support for the deferred payment scheme. The draft Fourteenth Directive was withdrawn in 1989. In its place, the European Commission proposed to adopt the tax credit clearance system. As under the deferred payment scheme, border tax adjustments would be shifted to books of account, thus eliminating the need for border controls. Unlike the deferred payment scheme, however, vendors of goods traded within the EU would pay the full VAT in their jurisdiction of registration; export rebates would not be provided to them. However, the first taxable person in an importing member state would receive a credit for the out-of-state VAT charged on the goods imported. The importer would list that

credit and those of other out-of-state suppliers separately on the return filed with the local VAT office. Next, the importing state's VAT administration would collate and tabulate out-of-state tax credits separately for each exporting state. Finally, the out-of-state tax credits would be presented for payment to the VAT administration of the exporting states. An EU-wide clearing house would be set up to handle the various claims.

The main idea of the tax credit clearance system is that the destination principle would be administered on an EU-wide basis regarding trade between registered businesses. Out-of-state consumer purchases, however, would be taxed on the basis of the origin principle, that is, only the VAT of the country of the vendor would be payable. To prevent undue revenue leakage, mail-order firms would be obliged to compute and remit the VAT of the customer's member state. Furthermore, for expensive durable consumer goods, such as cars, which attract higher rates of VAT in some member states, existing registration requirements in destination countries would be used to collect the full VAT (if the cars would not be imported through local dealers). Also, the system would be supplemented by rules for the taxation of out-of-state imports by exempt organisations and institutions, including governments.

The tax credit clearance system has been criticised on various counts. Thus, it has been pointed out that the system exhibits asymmetric interests as regards each member state's role in allowing a credit for the exporting country's VAT on imports, on the one hand, and paying the VAT on exports to the importing country's tax administration, on the other hand. The lack of confidence in the system might induce member states to require detailed information on intra-EU transactions, which would place an undue burden on business firms. Furthermore, the increase in importer's prices on account of the VAT would increase the payment risk of exporters. In response, the Commission proposed to permit related firms to suspend the VAT liability on cross-border transactions, as is already being done with regard to domestic transactions in Denmark, France, Germany, the Netherlands, and the United Kingdom. Thus, some eighty per cent of the EU's internal trade would not be affected by the tax credit clearance system. Finally, the Commission proposed to allocate the remaining VAT revenues with respect to intra-union trade on the basis of aggregate economic data on imports and exports rather than on the basis of information culled from the returns of individual importers and exporters.

3. *Further developments*

The Commission's arguments, however, failed to persuade the Governments of the member states. The Governments wanted to maintain full control over the VAT administration of imports and exports and, therefore, opted for the deferred payment scheme which had proved its feasibility in the Benelux. The new proposals, which were upheld by the Economic and Finance Committee (ECOFIN) of the European Council, prescribe that, as a general rule, exports should be zero rated. Exporting firms are obliged to furnish quarterly statements to the tax authorities of the sales per customer (and VAT number) to other member states. This information is fed into an interstate computer network. The deferred payment scheme was introduced on an EU-wide basis, effective January 1, 1993.

There are three exceptions to the general application of the deferred payment scheme. First, exempt businesses and institutions (unless they make purchases in excess of ECU 10,000) as well as individuals, have to pay the VAT of the country of origin. Purchases by exempt entities in excess of ECU 10,000 are taxed as self-supplies in the member state of destination. Second, mail-order firms with intra-union exports of more than ECU 100,000 per annum have to charge and remit the VAT of the country of destination. Below that amount, firms have a choice between an origin and a destination basis of taxation. Third, new motor vehicles, boats, and airplanes, not bought through registered dealers, are taxed in the country of registration.

The transitional regime has thus far worked reasonably well. Member states have been able to continue with their old and trusted legislation and regulations, and there is no evidence that the break in the VAT chain at intra-EU borders has led to unacceptable levels of fraud and evasion. Perhaps the complaints about the VATs in various member states are directed more at the differences in legal provisions and practices than at the transitional regime *per se*.

C. *A common system of VAT*

In 1996 the European Commission issued a paper which heavily criticised the differences in the design and operation of various VAT systems, in the process casting doubt on the efficacy of the transitional regime. Since intra-EU exports are zero rated, the Commission noted that goods worth more than ECU 700 billion circulate VAT-free in the EU. No doubt, as the

Commission observes, “some of that amount may well be diverted to the black economy.”

More generally, the Commission believes that the transitional regime has three failings. First, the VATs are unnecessarily complex, as exhibited by differences in the place of supply rules, the rules applicable to non-residents which, although not having a nexus in some states, nonetheless are required to register and pay VAT, and the special schemes for mail-order businesses, motor vehicles, and purchases by exempt bodies. Second, in the Commission’s opinion, the present methods of VAT operation rely too much on physical controls. And third, there are wide differences in the application of the common VAT between member states, such as special arrangements, options, temporary or transitional derogations which have not been repealed, shortcomings in transposition or differences in the interpretation of common provisions.

The Commission believes that the shortcomings of the current VATs can only be repaired by a complete overhaul of the VAT system. Its proposal has five main elements.³

- Taxation of goods and services subject to VAT on the basis of the place of business establishment instead of the location of the transaction. Consequently, businesses involved in EU-wide trade would have to deal with the VAT system of one member state only.
- Abolition of zero rating of intra-EU transactions, cross-border sales being taxed in the same fashion as domestic sales and cross-border movement of goods within the same business going untaxed. As a corollary, importers would be able to credit the VAT on purchases from other member states against their own VAT liability.
- Allocation of VAT revenues between member states on the basis of statistics of aggregate consumption. Without revenue allocation rules, net exporting states would stand to gain from the taxation of exports, while net importing states would lose. Furthermore, the introduction of a single place of taxation would involve a shift in revenue compared with the present situation.
- Complete uniformity in the scope and definition of VAT, and very close convergence in rates. Definitions and interpretations of the concepts of taxable persons, taxable and exempt supplies, time of supply and taxable value would all have to be harmonised.

- A logical consequence of the adoption of this common system of VAT would be close cooperation and EU supervision of VAT administration, collection and compliance control. To ensure uniform interpretation, for instance, the EU VAT Committee would have to be given regulatory powers.

The Commission's proposal is currently being discussed in the EU. As always, neutrality arguments have to be weighed against subsidiarity considerations relating to tax sovereignty. Member states are probably willing to discuss proposals for greater uniformity in scope and definition of VAT, but for the time being they may want to retain the transitional regime for intra-EU trade.

Notes

1. For a broader discussion, see Sijbren Cnossen, "Interjurisdictional Coordination of Sales Taxes," chapter 4 in Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat, *Value Added Taxation in Developing Countries* (Washington, DC: World Bank, 1990).
2. For an early review of developments in the EU and a proposal in favour of the tax credit clearance system, see Sijbren Cnossen "Harmonization of Indirect Taxes in the EEC," chapter 8 in Charles E. McLure, Jr., *Tax Assignment in Federal Countries* (Canberra: Australian National University Press, 1983). Reprinted in *British Tax Review*, nr. 4 (June 1983).
3. For a useful summary and analysis of the Commission's proposal, see Stephen Smith, *The Definitive Regime for VAT*, Commentary 63 (London: Institute for Fiscal Studies, 1997).

Chapter IX

SMALL BUSINESSES AND FARMERS

To reduce compliance and administrative costs under their VATs, all Central and Eastern European countries exempt small businesses from the obligation to register and pay tax. The compliance costs of small businesses, as a percentage of sales, are proportionately much higher than the compliance costs of large businesses. In the United Kingdom, for example, the compliance costs of small businesses have been estimated to be on average twenty times higher than the compliance costs of large businesses. Also, the administrative costs of collecting VAT from small businesses is relatively high in relation to the additional revenue (net of the VAT on inputs, which is paid anyway) raised from them. For similar reasons, some countries have devised special schemes to exclude farmers from the VAT.

A. Small businesses

All Central and Eastern European countries exempt small businesses, whether manufacturers or traders, from the requirement to register and pay VAT. In addition, in some countries modified administrative obligations apply to them, such as longer return and payment periods.

1. *Turnover exemptions*

As shown in table 9.1, all Central and Eastern European countries exempt small businesses on the basis of an annual turnover threshold below which they can choose whether or not to register for the VAT. The threshold ranges from the equivalent of a low US\$6,500 in Romania to a high US\$43,300 in Bulgaria. Generally, optional registration is available (except in Bulgaria), but a minimum registration period of 1-5 years applies to prevent small businesses from moving in and out of the system at will. Lithuania is the only country without a minimum registration period. Very small businesses, on the

other hand are not allowed to register in Lithuania if their annual output is less than LTL 5,000.

Table 9.1 Small-business exemptions

Country	Turnover exemption		Optional registration	Minimum registration period
	Domestic currency	US\$ equivalent (rounded)		
Bulgaria	BGL 75 million	43,300	No ^a	-
Czech Rep.	CZK 3 million ^b	9,300	Yes	1 year
Estonia	EEK 250,000	17,900	Yes	2 years ^c
Hungary	Hf 2 million	10,300	Yes	1 year
Latvia	LVL 10,000 ^d	17,300	Yes	1 year
Lithuania	LTL 50,000 ^e	12,500	Yes	None
Poland	PZl 80,000	23,600	Yes	1 year
Romania	RL 50 million	6,500	Yes	5 years
Slovak Rep.	SK 3 million ^b	9,000	Yes	1 year
Slovenia	SIT 2 million	12,200	Yes	5 years

a Special refund procedures for exporters.

b Legally, the exemption is CZK/SK 750,000 for a 3-month period.

c Earlier deregistration is possible at the discretion of the Tax Board.

d LVL 30,000 for farmers.

e Excluding sales of long-lived assets. Registration is not allowed if annual output is lower than LTL 5,000.

Source: Country legislation.

Small businesses that choose not to register for the VAT cannot take a tax credit for the tax on their purchases. As a result, this tax increases the cost

of their purchases. On the other hand, they do not have to charge VAT on their sales. Whether or not the exemption is advantageous to small businesses depends on the VAT status of their customers. If these customers are consumers, then small businesses should benefit from the exemption, assuming that they operate under the same cost/price conditions as large businesses. They would suffer, on the other hand, if their customers would be registered VAT-payers, because, in fully competitive markets, they would not be able to pass the VAT on to these customers.

Most Central and Eastern European countries require all legal persons to register for the VAT; they therefore cannot benefit from the exemption. Partnerships and associations of persons are considered as one entity for VAT purposes, although each partner is obliged to register. Also, most countries have provisions ensuring that small businesses cannot split up their operations to benefit from the exemption. Proprietors of more than one business have to add up the sales of all their businesses to determine the eligibility for the exemption. Exempt supplies, however, are left out of account in determining the threshold. This proviso is important in countries which exempt various consumer goods, such as bread, dairy products and meat. The Czech VAT defines precisely what “related persons” are in determining the size of a taxable person’s business unit

The option of registration, available in nine countries, is important for businesses situated between registered suppliers and registered customers, because it provides them with the opportunity to pass on the tax on purchases. Optional registration may also be beneficial for small businesses incurring heavy capital expenditures -- enabling them to obtain a refund of any excess tax credits. In no country, however, can the tax on capital assets be refunded without registration. Similarly, optional registration is important for small businesses exporting their output or being subject to a lower rate on sales than on purchases.

2. *Arrangements in EU member states*

The simplicity of the small-business exemption schemes in Central and Eastern European countries contrasts sharply with the complicated schemes that have been introduced by most EU member states. With the notable exceptions of the United Kingdom and Germany, these states have very low thresholds for small businesses. Consequently, to ease compliance or notch effects of businesses above the threshold but too small to be required to

compute the tax as normally required, several member states have presumptive assessment and tax rebate schemes.

These schemes take a variety of forms.

- Spain levies a so-called equalisation tax on suppliers to exempt small retailers in lieu of the tax that should have been paid by the small exempt businesses themselves. The weakness of the tax is that it requires identification by the purchaser, who is unlikely to be interested in complying with the tax.
- To reduce the impact of the VAT on small businesses with a turnover just above the threshold, Finland, France, Luxembourg and the Netherlands provide a vanishing reduction related to either net tax payable or to turnover.
- In Belgium, France, Italy and Spain, the tax liability of small businesses just above the threshold is determined by the tax office. Generally, tax ratios are derived from various business surveys or from the taxpayer's past sales volumes, which in turn are applied to (current) turnover or purchases or, as in Spain, to various physical factors, such as the size of the business premises, number of staff, business location, etc.
- Rather than having the tax office determine the tax liability, other countries, such as Germany and Italy, permit specified small businesses to apply a flat rate to turnover in lieu of an exact calculation of the tax liability. The assumption of these schemes is that the amount of turnover is easier to establish than the amount of purchases.
- Still other countries, such as Ireland, the Netherlands, Spain and the United Kingdom assume that small taxable firms have accurate records of sales and purchases, but cannot allocate the tax between various categories of goods sold at different rates. In most cases, the tax on sales, which is included in price, is calculated on the basis of purchase invoices, which show the tax separately. This assumes that profit margins are the same between differentially taxed goods, to some extent nullifying the purpose of the rate differentiation.

Most of the presumptive assessment and tax computation schemes in EU member states are rooted in similar arrangements under the turnover taxes that were levied before the introduction of the VAT. Nearly all schemes add

greatly to administrative (and compliance) costs without contributing much to revenue. Perhaps the simplest small-business scheme is to have a fairly generous exemption without any strings attached. Norway and Sweden, as well as New Zealand, have followed this philosophy from the date the VAT was first introduced. Austria adopted it in 1989 by abolishing all simplified schemes for small taxable businesses.

Clearly, the lesson is that Central and Eastern European countries should not complicate their small-business exemptions, but simply keep them under review to ensure that they are not eroded by inflation. Currently, none of the exemptions are indexed for inflation. In the event, delayed ad hoc adjustments, enacted recently in Bulgaria for instance, mean that large numbers of taxable persons have to be deregistered.

3. *Administrative concessions*

In view of their straightforward approach to the problems posed by small businesses -- exemptions based on sales volumes without further ado -- Central and Eastern European countries, in general, have few modified administrative requirements to ease compliance with the VAT. Such concessions might take the form of longer return and payment periods than afforded taxable persons with greater sales volumes, accounting for the VAT on the basis of cash received and paid (as opposed to an accrual or invoice basis of accounting), calculating the VAT liability by reference to sales or purchases only instead of both, and keeping simplified records in connection with one or more concessions mentioned above.

All Central and Eastern European countries have a “standard” return period of one month which all taxable persons are able or required to use (table 9.2), while due dates for filing the return and remitting the net tax range from 14-30 days. However, the Czech Republic, Hungary, Latvia, the Slovak Republic and Slovenia have longer return and payment periods of three months for small-scale businesses whose turnover falls below a specified amount. In the Czech and Slovak Republics, this amount is a multiple of the small-business exemption. In Latvia the annual turnover below which a business is eligible for a longer period is expressed in terms of tax. Latvia also has a return and payment period of 6 months for very small businesses. An annual reconciling return is planned in Slovenia, in addition to the one or three-monthly returns.

Table 9.2 Return and payment periods for small-businesses

Country	Return and payment periods available to all taxable persons		Return and payment periods available to small businesses		Annual turnover below which small businesses eligible for longer return period	
	In months	Due date	In months	Adoption optional?	Domestic currency	US\$ equivalent
Bulgaria	1	14 days	No	-	-	-
Czech Rep.	1 and 3	25 days	3	Yes	CZK 10 million	30,700
Estonia	1 ^a	20 days	No	-	-	-
Hungary	1 and 3 ^b	30 days	3	Yes	Hf 2 million	10,300
Latvia	1 and 6	15 days ^c	3 and 6	Yes	LVL 1,800 tax	3,100
Lithuania	1	15 days	No	-	-	-
Poland	1	25 days	No	-	-	-
Romania	1	25 days	No ^b	-	-	-
Slovak Rep.	1 and 3	25 days	3	Yes	SK 10 million	29,800
Slovenia	1, 3 and 12	15 days	3	Yes	...	...

a The Minister of Finance may provide for other return periods and due dates.

b A 15-day return period is available for exporters.

c But 25 days for companies registered as a group.

Source: Country legislation.

The longer return and payment periods ease compliance problems, because the tax liability has to be computed less often. In addition, the extended periods confer a cash-flow benefit on small businesses if the payment dates of their customers fall before the date on which they have to remit the tax to the tax authorities. They can, as it were, put the net VAT in the bank or in their business where it might earn a positive return which would not be subject to VAT (although taxable under the income tax or the corporation tax). Generally, this cash-flow benefit would accrue to most retailers whose activities are conducted on a cash basis. The benefit would not be available to small businesses (exporting or incurring heavy capital expenditures) that would be in a net refund position. In all countries, however, these businesses can opt for the one-month return and payment period.

In contrast with practice in most other EU member states, Central and Eastern European countries do not explicitly permit taxable persons to account for their transactions, and hence the VAT, on a “payments or cash basis.” In nearly all countries, the law prescribes the “invoice basis” of accounting. In other words, the tax on sales has to be accounted for in the return covering the period during which the sale was invoiced (or any payment received, whichever occurs first). The tax on purchases has to be similarly accounted for, except that no credit is allowed until such time as a “tax invoice” is held by the taxable person (as proof that that person is entitled to the tax credit). The invoice basis of accounting is also called the accrual method used for commercial accounting purposes and the business income tax.

Obviously, an invoice basis of accounting is more difficult to maintain than a payments or cash basis, because records have to be kept of cash received and paid, as well as of invoices issued and received. Large businesses would do this as a matter of course. Small firms, however, while keeping a record of cash transactions, generally would not maintain records of accounts receivable and accounts payable. So as not to impose this additional bookkeeping obligation on them, nearly all EU countries (Denmark is an exception) allow small businesses (defined by reference to turnover or type of trade) to compute the net tax liability on a cash basis of accounting.

It should be noted that the cash basis of accounting coincides with the invoice basis when all or nearly all transactions are conducted on a cash basis. The cash basis of accounting is less advantageous to a business which is on more favourable payments terms with its suppliers than the terms the business provides to its customers. A cash basis of accounting is also less favourable to exporters, which, being zero rated, are entitled to a refund of VAT on inputs. Finally, a cash basis of accounting is disadvantageous to firms purchasing expensive capital goods on extended payment terms. These disadvantages have to be weighed against the greater accounting complexity of the invoice basis of accounting. The best advice in these circumstances is to leave the choice to the taxable person himself, provided his turnover does not exceed a prescribed threshold.

B. Treatment of farmers

In all Central and Eastern European countries, agriculture accounts for a sizeable portion of GDP and employment. Moreover, substantial value is added beyond the farm gate. As elsewhere, consumer expenditures on farm products are a multiple of the farm value of food. Also, the agricultural sector is one of the

countries' largest exporters. On the basis of these considerations, the appropriate VAT treatment of the agricultural sector is obviously important.

1. Approaches

Table 9.3 shows the VAT treatment of farmers in Central and Eastern European countries. Farmers are defined to include all traders involved in agriculture, animal husbandry, horticulture, viticulture, forestry and fishing. Obviously, the special rules that may apply to the agricultural sector depend to a large extent on the size of individual farm units. If farms are generally large, *i.e.* in the nature of agribusinesses, there seems to be no reason to treat them differently from other large business entities. For small units, the small-business exemption would reduce compliance costs. However, if farms are generally small, yet it is considered desirable to exclude them from VAT registration and payment, some way must be found to mitigate the VAT borne by exempt farmers on purchases. Hence, table 9.3 also shows the VAT treatment of major agricultural inputs and output.

Broadly, three approaches are being followed as regards the treatment of farmers:

- farmers are liable to VAT like every other business, subject to the small-business exemption;
- the entire farm sector is exempted or the exemption is contingent upon the size of the farm unit; and
- farmers are covered by a “flat rate” scheme which compensates farmers indirectly for the VAT on inputs without requiring them to meet any of the administrative obligations of the VAT.

a) *Small-business exemption*

In Bulgaria, the Czech Republic, Estonia and the Slovak Republic farmers are treated like any other VAT-liable business. They have to charge VAT on the sale of their produce and can claim a credit for the VAT incurred on purchases. Similarly, returns have to be filed regularly and the difference between the VAT on sales and the VAT on purchases has to be paid over to the tax authorities.

Table 9.3 Treatment of farmers

Country	Type of concession	Optional registration	-----Treatment of inputs-----				Treatment of output
			Seed, feed	Fertiliser, pesticides	Machinery, equipment	Services	
Bulgaria	Small-business exemption	Yes	S	S	S	E	E or S
Czech Rep.	Small-business exemption	Yes	L	S	S	L or S	L
Estonia	Small-business exemption	Yes	S	S	S	S	S
Hungary	Exemption and presumptive tax credit by purchaser - animal husbandry: 7% - other: 12%	Yes	L	S	S	L	L
Latvia	Small-business exemption ^a and presumptive tax credit for purchaser of 12%	Yes	S	S	S	E or S	S
Lithuania	Small-business exemption and presumptive tax credit for purchaser of 6%	Yes	S	S	S	S	S
Poland	Exemption	No	Z	Z	Z	E	E
Romania	Exemption of individually-owned and operated farms	No	Z or S	L	S	L	Z, L or S
Slovak Rep.	Small-business exemption	Yes	L	S	S	L or S	L
Slovenia	Small-business exemption and/or presumptive tax credit for purchaser	Yes	S	S	S	S	L

Notes:

S = Normally subject to the standard rate

L = Normally subject to the lower rate

Z = Normally subject to the zero rate

E = Normally exempt

a Triple the usual exemption of LVL 10,000

Source: Country legislation.

In these countries, small farms have to look to the small-business exemption for relief, just like other small businesses. No compensation is provided to non-registered farmers for the tax borne on purchases. As table 9.3 indicates, these purchases are generally subject to standard VAT rates. Only feed and seed are taxed at the lower rate in the Czech and Slovak Republics. Furthermore, concessionary treatment may be accorded to farmers cooperatives, which provide machinery and other services to their members for a fee. Bulgaria exempts these services and the Czech and Slovak Republics apply the lower rate.

Overall, this approach should cause little cumulation of tax if there are few small farms, if small farms use few taxable inputs, or if they sell their products directly to consumers. Small farms will have to bear the prior-stage VAT, however, if they sell their produce to processors at competitive prices and if compliance costs would be too high for them to become registered on an optional basis, as provided for in the legislation of most countries.

b) Full exemption

Poland has so many small farm units that the Government decided to keep farmers out of the ambit of the VAT altogether. Even optional registration is not available. Nonetheless, to relieve farmers of the VAT on purchases, seed, feed, fertiliser, pesticides, as well as machinery and equipment are all zero rated. Beyond that, agricultural extension services are exempted, as is farm produce. Once farm products are fully processed, however, they become liable to the lower VAT rate.

Full exemption raises two problems. First, it is difficult to zero rate inputs properly if they have various end-uses. While it should be feasible to zero rate seed, feed, fertiliser and pesticides (which are rarely used outside the agricultural sector), it is difficult to monitor the zero rating of farm machinery and equipment. A tractor can indeed be used on the farm, but it can also be employed in a factory or for private purposes. Second, the exemption of semi-processed farm produce, such as dairy products, honey, eggs, poultry, meat and fish may discriminate against imports of similar products which are taxed at the lower rate.

Romania also exempts farm units, but only if they are individually owned and operated. In other words, farms that are jointly owned by an association of persons or a company are liable to VAT. Unlike Poland, Romania generally taxes agricultural inputs at positive rates. Fertiliser, pesticides and services provided by agricultural cooperatives are taxed at the lower rate, but

machinery and equipment are subject to the standard rate. This means that bread, wheat and barley, which are zero rated, would still bear some tax if bought from exempt farm units. Other basic foodstuffs, such as milk, meat, fish, poultry, edible oil, fruit and vegetables, are taxed at the lower rate, while fully processed foodstuffs are taxed at the standard rate. In view of this diverse picture, it may be difficult to ascertain how much VAT is paid in respect of each product.

c) *Flat-rate scheme*

In Hungary, Latvia, Lithuania and Slovenia, registered purchasers of agricultural products receive a presumptive tax credit approximately equal to the tax borne by the farmers on their inputs. The purchaser is expected to pass that benefit on to the farmer who is not otherwise involved in the compensation procedure. Hungary applies the flat-rate scheme to all farmers (subject to optional registration), distinguishing between animal husbandry and other forms of agricultural production. Seed, feed and agricultural extension services are taxed at the lower rate, but other inputs at the standard rate.

Latvia and Lithuania operate the flat-rate scheme in conjunction with the small-business exemption which, in Latvia, is triple the usual exemption. In Latvia, small exempt farmers are required to obtain a certificate indicating that they are entitled to the flat-rate compensation. In both countries, most inputs are taxed at the standard rate. Farm produce is subject to the standard rate. Slovenia plans to introduce similar arrangements in applying the VAT to its agricultural sector.

In the four countries using the flat-rate scheme, consumers will ultimately pay approximately the same tax as if farmers had been registered. Nonetheless, only rough equal treatment is provided. While some farmers may be overcompensated, other farmers may receive too little compensation. Of course, they have the option of registration and payment of tax, but the attendant compliance costs might wipe out the benefit. Cash-flow costs may be incurred if the tax on inputs is paid before the flat-rate compensation is received from purchasers of farm produce. Finally, if, on the aggregate, the flat rate is set higher than the average tax on inputs, farm produce of exempt farmers is subsidised through the VAT system.

2. *Concluding comment*

In the EU, Denmark, Sweden and the United Kingdom also treat farmers like other registered businesses. The small business exemption is all that is available in terms of relief. Belgium, the Netherlands and Spain use flat-rate schemes without involving farmers in the compensation procedure. In Austria, Germany, Ireland and Luxembourg, like Hungary, farmers are expected to apply the flat rate to their sales. Since the flat rate by presumption is equal to the tax on inputs, no net tax needs to be paid nor a return furnished.

The preferred approach depends on the characteristics of primary producers which may differ between sectors: agriculture, animal husbandry, horticulture, viticulture, forestry or fishing. However, the following general observations seem pertinent:

- if the products of a particular sector are a major export, the maintenance of competitive conditions requires that the VAT on inputs be eliminated to the fullest extent possible; this can only be achieved through registration and refund of prior-stage VAT;
- special schemes will not ensure equal treatment if expenditures on feed, seed, fertiliser, pesticides, machinery and equipment are an important share of farm costs and if input/output ratios vary widely;
- if marketing and supply cooperatives play a pivotal role in selling farm produce and in purchasing major inputs, they should be integrated in the VAT system.

If one or all of these circumstances are present, registration (subject to the small-business exemption) and payment or refund of VAT seem indicated. At the same time, the full tax on inputs may be considered a reasonable proxy for the tax on produce used for own consumption or sold directly to consumers if self-provision or direct sales cannot be taxed.

Chapter X

TREATMENT OF SPECIFIED SUPPLIES

The most basic feature of the VAT is that taxable persons are permitted to offset the tax payable on purchases against the tax on sales. The tax credit is permissible only, however, if the goods and services purchased are used for the purpose of the (registered) business, *i.e.* in or in connection with the production or trade of taxable supplies. Obviously, the tax paid in respect of raw materials and other items that are incorporated in intermediate and finished products, as well as the tax paid on capital goods, would be eligible as an offset. So would the tax paid on any goods purchased and resold for the purpose of the business in unchanged form. The debatable issues concern the purchase of goods and services for the use of the owner of the business, his employees or shareholders; the purchase of goods and services for exempt sales; the appropriate treatment of the tax on capital goods whose end-use changes; and the treatment of the tax on second-hand goods bought by taxable persons.

A. Business supplies deemed to be private supplies

To avoid abuse of the tax, all VATs in Central and Eastern European countries have special rules for the treatment of goods and services whose end-use for business or private purposes is indistinguishable. A box of fine Schimmelpenninck cigars may be legitimately used for the purpose of the business, but to ascertain such use would largely depend on an assessment of the intent of the taxable person, a feature that would be too difficult to verify. This applies to a large number of goods and services and to a large number of potential recipients of these goods and services, including the owners of a business, their employees (who might receive them in lieu of salary) and shareholders (in lieu of dividend). Without special rules, goods and services might be routed “through the business” and thus be consumed free of VAT.

To deal with this potential evasion issue, generally, a number of goods and services are deemed to be always supplied for private purposes. These goods and services include:

- food, drink and tobacco
- hotel accommodation
- entertainment services
- passenger cars
- motor fuel
- samples and promotional gifts

As shown in table 10.1, nearly all countries deem supplies of food, drink and tobacco to be supplies for private use. The VAT on expenses for hotel accommodation used for business purposes generally is disallowed in half of the countries, but allowed in the other half. Accepting the input tax on hotel accommodation, but not the input tax on food, drink and tobacco means, of course, that the related expenditures have to be separated if shown on one bill. The VAT on entertainment expenses is disallowed in all countries, except Romania. Similarly, generally, no credit can be taken for the VAT on passenger cars, except in Romania. The VAT on motor fuel, however, is deductible in four countries. The treatment of samples and promotional gifts is also mixed. The Czech Republic, Hungary and the Slovak Republic disallow the input tax only if the value of the sample or gift exceeds a specified amount. Some other items which are deemed to be supplies for private use include taxi services in Hungary and returnable bottles in the Czech Republic.

Romania is an important exception among Central and Eastern European countries concerning the treatment of various supplies for business use that are indistinguishable from supplies for private use. Although, generally, no credit is available for the tax on supplies which are not directly and exclusively related to the taxable activities of the business, all businesses are permitted to take credit for the tax on goods and services supplied free of charge to employees and customers, subject to prescribed ceilings. The ceiling is 1.5% of the payroll for employees and 1% of taxable profits (6% in the case of advertising agencies) for customers. These concessions appear indistinguishable from an arbitrary rate reduction. The reduction is arbitrary, because it varies between businesses depending on the size of their payrolls and profits. Presumably, the concession can easily be abused.

Table 10.1 Treatment of specified supplies for business use

Countries	Food, drink, tobacco	Hotel accom- modation	Entertain- ment	Passenger cars	Motor fuel	Samples, promotional gifts	Other items	Basis of assessment	
								Self-supply	Employee benefits
Bulgaria	N	N	N	N ^a	N	N	-	M	C
Czech Rep.	N	F	N	N	F	N if value > CZK 200	Returnable bottles	M	M
Estonia	N	F	N	N	N	F	-	M	M
Hungary	N	F	N	N	N	N if value > HUF 500	Taxi services	M	M
Latvia	N	N	N	N	N	F	-	M	M
Lithuania	N	N	N	N	N	N	-	C	C
Poland	N	N	N	N	F	F	-	M	C
Romania	F ^b	F	F ^b	F	F	F ^b	-	M	C
Slovak Rep.	N	F	N	N	F	N if value > SK 200	-	M	M
Slovenia	N	N	N	N	N	F	-	M	M

Notes: C = Cost

F = Tax on purchases deductible

N = Tax on purchases not deductible

M = Market price

a Including jeeps, mini buses, motor cycles, caravans, trailers, spare parts, repair and maintenance.

b Subject to a ceiling of 1.5% of the payroll if supplied to employees, and to 1% of taxable profits if supplied to customers (6% in the case of advertising agencies).

Source: Country legislation.

Supplies for business use which are deemed to be private supplies can be taxed in one of two ways: by explicitly deeming the supply to be a taxable supply for private use, or by denying the credit for tax on purchases. The first option means that the good or service is taxed at market value, the second that it is implicitly valued at its cost to the business. The latter “valuation” method usually involves some benefit to the recipient, because cost should generally be lower than market value. Valuation at market value, however, introduces administrative complications. Therefore, the easiest way to deal with these supplies is to deny the tax credit, except if the business is a producer or trader in the commodities for which the tax credit is denied (in which case the supply should be taxable at its market value).

As indicated in table 10.1, market price is the most common basis for valuing supplies for the use of the owner of the business. This seems obvious, because the owner would have the greatest incentive to purchase goods “through the business” and to benefit from not having to pay the tax on the difference between market price and cost. This difference may be especially large if the supply involves a costly durable consumer good, such as household appliances, cars, or a house supplied by a construction company. On the other hand, cost may be a more appropriate basis for valuing supplies to employees. This seems fair, because it permits employers to provide, say, canteen services to their staff without the administrative hassle of having to compute VAT on the value of the labour supplied by the own business and the trade margin. Denial of the input tax suffices. Nonetheless, most Central and Eastern European countries have opted for the market price as the basis of assessment.

It should be noted that market price and cost result in the same tax consequences if goods and services are purchased at their retail price. This may often be the case for occasional purchases of food, drink and tobacco or other items. Finally, all Central and Eastern European countries tax the supply of goods for private use, but the Baltic states, like EU member states, do not tax the supply of services for private use, presumably because they consider such supplies indistinguishable in practice from non-taxable do-it-yourself activities.

B. Purchases related to exempt supplies

As explained in Chapter II, under a VAT, exempt supplies are not taxable (and suppliers solely of exempt goods are not registered); hence, no credit is allowed in respect of the tax paid on goods and services purchased to produce or trade in exempt supplies. Rules are therefore needed for the tax treatment of persons dealing in both taxable and exempt supplies who cannot

readily allocate the tax on purchases between the two kinds of supply (mixed supplies). In the EU, mixed supplies are largely confined to the financial and insurance sectors. In Central and Eastern European countries, in addition, mixed supplies occur in the food sector (Bulgaria, Poland), the pharmaceutical branch (all except four countries), the printing media (four countries) and some other sectors. Two issues arise. How should the tax on purchases of goods that are incorporated in sales be allocated between taxable and exempt sales, and what should be done in the case of capital assets whose use changes from taxable to exempt use or vice versa.

1. *Regular purchases*

As shown in table 10.2, all Central and Eastern European countries allow taxable persons with mixed supplies to apportion the tax on purchases on the "turnover" basis. Under this method, the tax on purchases related to taxable sales (creditable) and exempt sales (noncreditable) is divided in the same proportion as taxable and exempt sales bear to total turnover. Total turnover excludes the revenues generated from the sale of capital assets used in the operation of the business, but it includes the value of zero-rated supplies (exports as well as domestic sales in countries with a zero rate for such sales). The Czech Republic, Latvia, Lithuania and the Slovak Republic base the apportionment ratio on the current tax period (which may be one or three months) with year-end reconciliation (except Lithuania). Estonia, Hungary and Romania use previous tax year turnover figures, again with year-end adjustments once current year sales figures are known.

The turnover basis of apportionment does not require taxable persons to account for the use (taxable or exempt) to which purchases are put. The only additional accounting requirement for taxable persons is to keep separate records of taxable and exempt supplies. The result will be skewed, however, if the apportionment coefficient departs significantly from the actual attribution of purchases between taxable and exempt supplies. A business will be advantaged/disadvantaged where the purchases to exempt/taxable turnover are proportionately lower/higher than those generating taxable/exempt turnover. To deal with this situation, Estonia and Poland allow taxable persons the option to attribute purchases directly to exempt and taxable supplies whenever these purchases can be identified, *e.g.* through cost accounting techniques. The balance of the tax on purchases which is not readily attributable to taxable and exempt sales is then apportioned on the turnover basis. Finally, no country

Table 10.2 Treatment of mixed supplies

Country	Use	Simple turnover Period to which coefficient relates	Direct attribution	Adjustment period for capital assets/ land and buildings (in years)	De minimis rule (%)
Bulgaria	Yes	Current year	No	Based on book value	No
Czech Rep.	Yes	Current tax period with year-end reconciliation	No	No	Yes (5%)
Estonia	Yes	Previous tax year with year-end reconciliation	Yes ^a	3 ^b	No
Hungary	Yes	Previous tax year with year-end reconciliation	No	5/10	Yes (10%)
Latvia	Yes	Current tax period with year-end reconciliation	No	5	No
Lithuania	Yes	Current tax period; no year-end reconciliation	No	5/10	No
Poland	Yes	Previous 6 months	Yes	No	No
Romania	Yes	Previous tax year with year-end reconciliation	No	No	No
Slovak Rep.	Yes	Current tax period with year-end reconciliation	No	No	No
Slovenia	Yes	Previous tax period with year-end reconciliation	Yes	5/10	No

a At the discretion of the Tax Board

b Buildings are not subject to VAT.

Source: Country legislation.

allows other bases of apportionment, such as floor space, computer time or machine time to enhance the accuracy of apportionment of overhead costs, although Estonia's VAT has an enabling provision to make this possible. In the EU, these bases of apportionment are permitted in Germany, Ireland, Luxembourg and Sweden.

2. *Capital assets*

Normally, the decision on the extent to which the VAT on capital assets purchases is creditable against the tax on supplies is made at the same time of purchase. If such assets are fully used for the purpose of the business, the tax credit would be allowed in full; if they are partly used for private or exempt purposes, the tax credit would be correspondingly disallowed. Exceptionally, however, the use to which capital assets are put may change during their useful life. For these situations, five Central and Eastern European countries provide tax credit correction rules. Generally, as shown in table 10.2, such rules are limited to a five-year or ten-year period after the year of purchase. For example, if a machine is fully used for the purpose of producing taxable supplies at the time of purchase, but in year two it is decided to apply it 25 per cent of the time to the processing of exempt supplies, then one-fifth times 25 per cent of the tax credit allowed in year one would be repayable in year two. Hungary, Lithuania and Slovenia prescribe a ten-year adjustment period for buildings.

The Czech Republic, Poland, Romania and the Slovak Republic, as was previously the case in the United Kingdom, do not have ongoing adjustments for capital assets. In these countries, the situation at the time the capital asset is purchased determines if and to what extent the tax should be apportioned between taxable and exempt use. Central and Eastern European countries that make ongoing adjustments for capital assets generally have shorter periods than EU member states which have a five-year period for capital assets and a 20-year period for buildings.

The Czech Republic and Hungary are the only countries which provide for some minimum change in use below which no adjustment is required to be made. This is the case, if the circumstances with respect to an asset have changed by less than five or ten percentage points as compared with the circumstances in the preceding tax period. Similarly, the input tax credit is not disallowed if the exempt supplies are less than 5 per cent (10 per cent) of total supplies. Such a *de minimis* rule is a useful instrument to eliminate minor, but highly contentious, situations from consideration.

C. Second-hand goods

Some countries have thriving markets for second-hand goods that, having previously been sold to final consumers, return to the taxable trading circuit of the VAT. Motor vehicles, household appliances, various fixtures, works of art, antiques and collectors items are examples of goods that may be offered for resale after having been used by consumers. If these goods would be taxed on the gross consideration, cumulative effects would occur. After all, the new tax would be in addition to the old tax for which no credit would be given. Thus, without good reason, the VAT would deter the re-use of goods and would divert the trade in second-hand goods from taxable persons to private channels. Specialisation would suffer.

Essentially, there are four ways for treating the taxable trade in second-hand goods. First, the issue may be largely ignored if the trade in second-hand goods is mainly a small-business problem that can be handled under the small-business exemption. In the main, this used to be the approach in Austria and Germany, although it should be emphasised that a large part of the trade in second-hand goods in these countries was not affected anyway, because it was sold at auction on behalf of private vendors. Commonly, only the auctioneer's commission would then be subject to VAT as services rendered. Some countries make an exception to this approach for motor vehicles. In Norway, for example, taxable car dealers are entitled to deduct the purchase price of a second-hand car from the VAT-inclusive price for which it is resold. As a result, the dealer's margin is taxed.

A second rough-and-ready approach to the treatment of second-hand goods would be to tax them at a lower rate. The Benelux countries, for instance, used to apply the lower rate of their VAT (6 per cent in Belgium, Luxembourg, as well as the Netherlands) to works of art, antiques, coins and stamps. The same result is achieved by applying the standard rate to a proportion of the sale price (without tax credit for the purchase). Thus, the 6 per cent rate in the Benelux would be equivalent to a standard rate of 18 per cent applied to one-third of the sale price. Spain used to follow this approach. In the example, any dealer whose mark-up exceeded 50 per cent of the purchase price would benefit from the tax base reduction.

The third and most sophisticated approach allows registered traders in second-hand goods a full credit for the tax that may be assumed to be included in the purchase price. In contrast to the dealer who is taxed on his margin, the credit can immediately be offset against the tax on (other) sales. Moreover, like

new goods, the tax credit is also available if the dealer decides to use the good, say, a motor vehicle, in his own business. A disadvantage would be that the tax credit would also be available if the price of the purchased item has increased while in the hands of the consumer. In other words, a tax credit is given for value added on which tax has never been paid. In the event, the tax credit should be limited to the tax paid at the time of purchase by the consumer who sells the good.

The fourth option, and the one which has been incorporated in the Sixth Directive, would be to tax only the gross margin of the registered trader buying second-hand goods for resale. The margin is taxed by allowing the purchase price as a deduction from the sale price at the time the second-hand good is resold. In other words, unlike other goods held in inventory, second-hand goods cannot be held tax free by dealers. Moreover, the dealer cannot pass on the tax on his trade margin, because he is not allowed to issue a tax invoice for second-hand goods. On the other hand, any value added by consumers in the case of, say, antiques, is left out of the base. The Sixth Directive applies the approach to second-hand goods, works of art, collectors' items and antiques.

As shown in table 10.3, Bulgaria, Latvia and Poland, following the old Austrian and German approaches, apply their VATs to the full sales price of second-hand goods without taking into account the 'old' tax paid by the consumer. In contrast, the other Central and Eastern European countries have adopted the approach of the Sixth Directive by taxing only the margin on second-hand goods which are resold. Also, these countries do not allow the implied credit for the tax on purchases at the time of the purchase, but only at the time of sale.

Table 10.3 Treatment of second-hand goods

Country	Tax on margin or sale price	Margin taxed by:	
		Credit on purchase	Credit on sale
Bulgaria	Sale price	-	-
Czech. Rep.	Margin	No	Yes
Estonia	Margin ^a	No	Yes
Hungary	Margin	No	Yes
Latvia	Sale price	-	-
Lithuania	Margin ^b	No	Yes
Poland	Sale price	-	-
Romania	Margin	No	Yes
Slovak Rep.	Margin	No	Yes
Slovenia	Margin	No	Yes

a Only if second-hand goods are sold in lots, separate from new goods.

b Applicable to special second-hand goods shops.

Source: Country legislation.

Chapter XI

ADMINISTRATIVE ASPECTS

This chapter outlines the basic obligations of taxable persons to register, issue VAT invoices, file returns and pay the VAT by prescribed due dates. Objections and appeals against assessments imposed by the tax authorities are also reviewed. In addition, some comments are made on the fact that the VAT is an accounts-controlled tax and hence that compliance should be ensured in close association with the business income tax.¹ Finally, attention is drawn to the administrative and compliance costs of the VAT, which are higher than is generally assumed.

A. Registration, invoices, returns

1. Registration

Persons who are, or should be, taxable persons have to take the necessary action to seek to be registered for the VAT. In most Central and Eastern European countries, a special registration form has to be submitted with particulars of the taxable person and the nature of his business. Upon registration, the name is entered into a VAT register and the taxable person is given a unique VAT number which is usually the same as the taxpayer identification number used for personal and company income taxes. Taxable persons are under the obligation to put their VAT identification numbers on the VAT invoices which they issue. This number will become even more important when the Central and Eastern European countries join the EU, because at that time it will also have to be used in intra-Union transactions.

Voluntary registration is allowed in all countries, except Bulgaria, for persons who are regularly in a refund position (exporters) or who wish to be able to pass the VAT on inputs on to their customers who can then take a credit for it. Uncontrolled voluntary registration is deterred by prescribing a minimum registration period (see table 9.1) of at least one year. Latvia deters voluntary

registrants only interested in receiving refunds on inputs and not much in paying VAT on output, by setting a minimum level for voluntary registration at half the minimum level for compulsory registration. In effect, this excludes persons conducting economic activities which are primarily in the nature of hobby activities. This provision, however, does not apply to exporters who are allowed to register regardless of their level of activity.

Table 11.1 shows the total number of taxable persons in each country. The number should be larger, the larger the country and the greater the number of independent business units. The number will be smaller the higher the small-business exemption and the broader the exclusion of farmers. Hungary has the highest density of taxable persons, measured as the number of inhabitants per taxable person, and Romania the lowest density.

Table 11.1 Number of registered persons in 1996

Country	Number of registered persons (thousand)	Population (million)	VAT density^a	Small business exemption (US\$)
Bulgaria	88	8.4	95	43,300
Czech Rep.	325	10.3	32	9,300
Estonia	36	1.5	42	17,900
Hungary	543	10.2	19	10,300
Latvia	28	2.5	89	17,300
Lithuania	41	3.7	90	12,500
Poland	779	38.6	50	23,600
Romania	227	22.7	100	6,500
Slovak Rep.	98	5.4	55	9,000
Slovenia	..	2.0	..	12,200

a Inhabitants per registered person.

Source: World Bank, *World Development Report 1997* (Oxford University Press: 1997) and information provided by the tax authorities.

2. Invoices

The invoice which a taxable person who makes a taxable supply issues to his customers is a pivotal link in the proper imposition and enforcement of the VAT. VAT invoices show amounts of money which can be

credited against or deducted from money owed to the tax office, *i.e.* the output tax. Hence, such invoices are a form of money and subject therefore to strict rules regarding the time of issue and the information which they should convey. Thus, the supplier is usually required to issue the VAT invoice at the same time as, or soon after, the supply. This enables the buyer to obtain a tax credit against the tax on his output.

All Central and Eastern European countries require the following information to be included in the VAT invoice:

- the name, address, and VAT number of the taxable person making the taxable supply;
- the nature of the supply (type and quantity of goods or services);
- the time the supply was made;
- the amount of payment for the supply;
- the amount of VAT;
- the name, address, and VAT number of the taxable person to whom the supply was made;
- the date on which the invoice was issued; and
- the serial number of the invoice.

Most countries do not allow simplified invoices which, for instance, do not record the details of the customer. Generally, small businesses do not have to issue VAT invoices if they are retailers making supplies to customers who are not entitled to take a credit for the VAT. A VAT invoice can be an invoice, roll print, chit, other document or, yet, an electronic record, provided it shows the required information.

VAT invoices are an important enforcement tool. Bulgaria makes the most of this tool. In addition to prescribing that all the information of the supplier and customer, enumerated above, be shown on the invoices, the invoices must also indicate the name and address of the person who printed them. Furthermore, each taxable person must inform the tax office by the third day of each month of the number of invoices he has issued during the previous month, separate for each branch. This declaration has to be filed in two copies. Beyond that, the tax office must be notified immediately of any theft, loss, damage or destruction of blank invoices. Defective or damaged invoices cannot be destroyed but must be kept under lock. Clearly, the obligations represent an

unwarranted, onerous burden on registered businesses. Moreover, it is not possible to legislate fraud away. Proper audits are the only tool to enforce compliance with the VAT.²

3. Returns

In all countries, the standard return period is one month (table 9.2). The return has to show information on all taxable transactions (including exports) made by the taxable person during the month, as well as the net amount of VAT that is payable to the tax office for that period. A return is also required if the taxable person has no taxable supplies for a VAT period. This permits the office to separate taxable persons who do not owe VAT for that period from taxable persons who are delinquent in filing. In addition to the monthly, quarterly or semi-annual return, Slovenia plans to require an annual return.

The periodic return is essential in processing the accompanying VAT payment or the request for a refund, and as a check on the current VAT status of a taxable person. The return cannot and should not be used as the basis for verifying the reliability of the information provided by the taxable person. For that purpose, obviously, more complete desk or field audits are required. Information which cannot be checked every month, because its volume is excessive, should not be requested in a VAT return. The most essential information to be contained in a return is therefore the following:

- the total taxable transactions by rate category and the total VAT collected;
- the total inputs by rate category and the total VAT for which a credit is allowed;
- the amount of tax included in bad debts which are or have been declared uncollectible; and
- the amount of any net VAT due and payable or refundable.

Most VAT returns in Central and Eastern European countries require an abundance of information which cannot possibly be checked. Examples of better return forms are found in the Scandinavian countries.

4. Penalties

In most Central and Eastern European countries, failure to register for the VAT attracts a penalty which is unrelated to the amount of VAT that should have been paid. This seems logical since failure to register implies that no data are available on the taxable person's VAT liability. Nonetheless, Latvia and Lithuania relate the penalty to the amount of tax due which must then be determined first. Expressing the penalty as a percentage of the tax due has the advantage that the corresponding amount is not eroded by inflation. Generally, the penalties for failure to file a return (assuming the taxable person to be registered) are similar to those for failure to register, although penalties expressed as a percentage of the tax raised in the assessment, as in the Czech and Slovak Republics, would seem more appropriate. In most countries the penalties for failure to charge VAT, issue invoices, keep prescribed accounts, or provide information are similar to those for failure to register. Generally, the penalties are expressed in absolute amounts. In other words, their real value declines (rapidly) with time.

B. Late payment charges and refunds

In all Central and Eastern European countries, the VAT has to be paid at the same time as the return has to be filed. As shown in table 9.2, the standard return period is one month and the return has to be filed within a period ranging from 14 days (Bulgaria) to 30 days (Hungary) following the end of the return period. In a number of countries, longer return and payment periods are available to small businesses. Hungary has a short return period of 15 days for exporters. Bulgaria requires advance payments from very large businesses -- even though the standard return period is one month and the due date is only 14 days.

It is important for the efficient administration of the VAT and the timing of tax collections that payments are received by the due date. This is even more essential under the VAT than under other taxes, because returns and payments come in every month. Once any lingering is treated casually, delays multiply and soon become unmanageable. Arrears tend to breed further arrears. Accordingly, appropriate late payment charges are crucial in stimulating taxable persons to meet their VAT obligations on time, and in properly penalising those who do not.

The charges for late payment, imposed automatically, are invariably expressed as a percentage of the tax outstanding (table 11.2). In all countries,

the charge increases with each day that the tax remains unpaid, reaching 36% in the Czech and Slovak Republics after one year and 90% in Romania. Thus, the charge provides a continuous disincentive to delay payment. These figures should be compared with the various going rates of interest, say, on long-term government bonds, to gauge the penal effect. Taxable persons will have a strong incentive to delay payment as long as possible if commercial interest rates are higher than late payment charges. With inflation abating in most countries, this should occur less often than it did in the past.

Table 11.2 Late VAT payment charges^a
(in per cent)

Country	Daily charge	Monthly charge	Total charge for tax outstanding for 12 months
Bulgaria	0.05	1.5	18
Czech. Rep.	0.1	3	36
Estonia	0.12	3.6	43.2
Hungary	0.12	3.6	43.2
Latvia	0.05	1.5	18 ^b
Lithuania	0.06 ^c	1.8	21.6
Poland	0.14	4.2	50.4
Romania	0.25	7.5	90
Slovak Rep.	0.1	3	36
Slovenia	Absolute amount	..	..

a Charges are in addition to the general rate of interest, except in Estonia where the entire late payment charge is decreed by the Minister of Finance.

b Or amount of tax due -- whichever is lower.

c Also immediate penalty of 100% of the tax due.

Source: Country legislation.

Late payment charges are credible only if matched by expeditious refunds of VAT where the input tax credits for any tax period exceed the output tax. This situation will arise in the case of exporters, businesses incurring heavy

capital expenditures (*e.g.* because they are starting operations), and seasonal businesses which temporarily buy more taxable inputs than they produce taxable output. Obviously, failure to refund excess input tax expeditiously undermines the fairness and economic neutrality of the VAT. Exporters in particular would be placed in a disadvantageous position vis-à-vis their foreign competitors. Repaying excess input VAT without further ado, on the other hand, would invite the submission of fraudulent refund claims. Accordingly, adequate safeguards are essential in the form of (extra) audits or security (*e.g.* a bank guarantee) to protect the integrity of the revenue.

C. Objections and appeals

In all Central and Eastern European countries, the VAT is a self-assessed tax in that the taxable person has to compute his own VAT liability, file at his own initiative, and pay the tax accordingly. Generally, the return is accepted by the tax office. Assessments are made by the tax office, however, if the taxable person, assumed to be liable to VAT, fails to file a return or if the tax office believes that the amount shown in the return is inaccurate. The assessments show the estimated amount of (additional) VAT that a taxable person is believed to owe to the tax office.

Where a taxable person disagrees with the assessment, in all countries he can lodge an objection with the local tax office within a specified period ranging from two weeks to one month (see table 11.3). The right of objection extends to decisions made by the tax office regarding the liability for registration, the books of account that have to be kept, the return period to be allocated to the business, and similar matters. Subsequently, the tax office can confirm the assessment or uphold the objection. If the assessment is confirmed or the objection only partly upheld and the taxable person still disagrees, in all countries he can subsequently lodge an objection with a higher tax authority, such as the regional tax office (Bulgaria, the Czech Republic, Poland), the National Tax Board (Estonia), or the tax department within the Ministry of Finance (other countries). In most countries, the periods within which this subsequent objection must be lodged are similar to those within which an objection must be filed with the local tax office. Finally, an appeal can be filed with the general courts, if the higher tax authority decides to confirm the decision taken by the tax office or modifies it insufficiently to meet the taxpayer's grievances. Usually, appeals to the general court are restricted to points of law and procedure (rather than facts).

Table 11.3 Objections and appeals against assessments of tax

Country	Order in which objections or appeals are considered		
	Local tax office	Higher tax authority	General courts
Bulgaria	Yes; 14 days	Regional tax office; 14 days	Yes; 14 days
Czech. Rep.	Yes; 30 days	Regional Directorate; Ministry of Finance; 30 days	30 days Yes; 2 months
Estonia	Yes; 1 month	National Tax Board; 1 month	Yes; 1 month
Hungary	Yes; 15 days	Ministry of Finance, 15 days	Yes; 30 days
Latvia	Yes; 30 days	State Revenue Service; 30 days	Yes; 30 days
Lithuania	Yes; 20 days	State Inspectorate; 20 days	Yes; 20 days
Poland	Yes; 14 days	Treasury Chamber; 1 month	National Administrative Court; 1 month
Romania	Yes; 30 days	Ministry of Finance; 40 days	Yes; 1 month
Slovak Rep.	Yes; 15 days	Ministry of Finance; 30 days	Yes; 60 days
Slovenia	Yes; 15 days	Head Tax Administration; 15 days	Yes; 30 days

Source: Country legislation.

Little information is available on the number of objections and appeals. While the number of objections to local tax offices is believed to be large, the number of objections to higher tax authorities is much smaller, and rarely is an appeal lodged with a general court. Prompt resolution of objections seems to be the exception rather than the rule. Yet, such resolution is important in view of the difficulties in ascertaining the facts on taxable transactions that took place some time ago. Basically, the VAT is a voluntary tax in that the tax office cannot enforce it if a large percentage of taxable persons refuses to comply. Accordingly, grievances must be dealt with equitably and expeditiously if the public good of voluntary compliance is not to wither away.

D. Coordination with business income taxes

In most Central and Eastern European countries, the administration of the taxes levied by the central government is divided between two departments (organisations with completely separate administrative structures): *a)* the income tax department, often called the department of direct taxes, which assesses and collects the personal income tax (including the pay-as-you-earn scheme), the corporation tax and, usually, various income-based social security

levies; and *b*) the customs and excise department, sometimes referred to as the department of indirect taxes, which computes and collects the import duties as well as the excises on drinking, smoking, and driving. It is readily apparent that there are fundamental differences in administrative techniques and approaches between these two departments. Compliance with and enforcement of the income taxes rely nearly exclusively on audits of financial statements. Customs and excise duties, on the other hand, are enforced largely by means of physical controls.

The collection and enforcement of the VAT straddles both departments. Usually, the VAT on goods coming into the country is collected by the customs and excise department. The VAT on domestic transactions, however, generally is closely linked with or placed in the income tax department. Moreover, the latter department exercises overall management over the collection and enforcement of the VAT. Accordingly, as shown in table 11.4, in seven of the ten Central and Eastern European countries under review, the same department administers both the income tax and the VAT. In other words, the administration of these taxes is integrated at the central level. In five of these countries, moreover, the same tax inspector deals with both taxes. Where the same inspector deals with both taxes, joint audits are the rule, but, usually, such audits are also possible in countries with different inspectors.

Table 11.4 Administrative links between VAT and business income tax

Country	Same department	Same tax inspector	Possibility for joint audits
Bulgaria	No	No	No
Czech Rep.	Yes	Yes	Yes
Estonia	Yes	Yes ^a	Yes
Hungary	Yes	Usually	Yes
Latvia	Yes	Yes	Yes
Lithuania	Yes	No	Yes
Poland	No	No	Yes
Romania	Yes	Yes	Yes
Slovak Rep.	Yes	No	Yes
Slovenia	...	...	...

^a Special audit group has been set up.

Source: Information provided by the authorities.

Bulgaria is the only country that has no administrative links between the income tax and the VAT, resembling the situation in the United Kingdom and Luxembourg. Experience in the other EU member states and elsewhere suggests, however, that the VAT should be closely integrated with the business income tax. Unlike a customs official, who keeps a close watch on goods that enter the country or leave bonded warehouses and who, therefore, may be described as a police officer, a VAT inspector may more appropriately be compared to an accountant or an auditor (a well-designed VAT entails little legal work), who is at home with balance sheets and profit-and-loss statements. To ascertain taxable turnover and verify compliance with the law, VAT administrators examine books of account and other documentary evidence. They are concerned with financial flows and transactions, with accounts payable and receivable, and with cash and bank statements, but not with physical properties and quantities. A VAT auditor is an expert in analysing the flow of funds and detecting the underreporting of sales, but is not acquainted with the characteristics of products or the technicalities of production processes and warehouses. In terms of ensuring compliance, therefore, a VAT is similar to a business income tax, under which the proper computation of turnover is also the key to the examination of a taxpayer's return.

E. Administrative and compliance costs

The VAT, like other taxes, involves costs, both for the tax department to operate and enforce it (administrative costs) and for businesses to carry out the obligations of calculating and paying the tax (compliance costs). Administrative costs are a function of the number of taxable persons, the complexity of the tax, base and rate structure, attitudes towards tax compliance, and various administrative features, such as the extent to which the VAT is integrated with the business income tax. Compliance costs also vary with the administrative and technical features of the VAT. These include the detail with which supporting records have to be kept, the complexity of returns and the frequency with which they have to be filed. Presumably, compliance costs should be measured on a net basis, *i.e.* allowance should be made for the improved cash flow of the business resulting from the delay between taxable transactions occurring and the payment of the net VAT liability to the tax office. While this is not a real resource gain to the economy, it is a benefit to businesses at the expense of consumers. Of course, businesses may also suffer a cash flow disadvantage if they are in a refund position or if they sell (buy) on credit terms that are more (less) lenient than the delay permitted by the VAT.

Administrative and compliance costs cannot be seen in isolation from each other. There is a significant element of transferability between them. Compliance costs can be reduced, for instance, by less frequent filing and payment periods, but this might result in a higher rate of collection delinquencies and, more generally, greater enforcement problems. Administrative and compliance costs can also rise *in tandem* by placing undue emphasis on procedural and accounting purity in VAT operation. In short, administrative and compliance costs should be considered in combination -- the focus should be on total operating costs. Minimisation of these costs should be the objective.³

1. Administrative costs

Administrative costs of the VAT may be assumed to vary with the complexity of the tax and the number of registered businesses. One measure of complexity is the number of rates. Multiple rates give rise to interpretation issues and should increase enforcement costs. More intensive audit oversight needs to be exercised because taxpayers will attempt to misclassify goods and are prone to make mistakes in accounting for the VAT revenue from differentially rated products.

Another measure of administrative complexity is the small business exemption. The larger the exemption, the smaller the number of registered businesses and the lower the absolute level of administrative costs may be assumed to be. Usually, small businesses require special audit programs, demand more extensive taxpayer services, and show a higher degree of tax delinquency than large businesses. Moreover, the loss of revenue from a generous small business exemption should be small. In Central and Eastern European countries, most taxable value added is created by large businesses. Even if exempt, small businesses still pay VAT on their purchases.

Furthermore, the level of administrative costs should be influenced by the extent to which the control of the VAT is integrated with that of the business income tax, since many aspects that enter into the control of the income tax are relevant to the control of the VAT and vice versa. Thus, the sales receipts and cost of purchases figures in the profit and loss account submitted for income tax purposes should provide a useful cross-check on gross and net VAT liability for the year under review. Similarly, a check on cash receipts as part of a VAT audit may uncover undeclared sales and hence income that should have been reported for income tax purposes. Clearly, since

VAT is an accounts-based tax, VAT enforcement should benefit from joint control and audits with the income tax.

Some dated statistics, collected by the OECD, indicate that in the EU, the administrative costs per registered business vary from US\$ 68 in Sweden to US\$ 175 in Belgium.⁴ Administrative costs per registered business depend, of course, on the level of total absolute costs as well as on the number of registered businesses. That number should be large if a country has a low small business exemption. In other words, if, as is likely, the level of total costs does not rise *pari passu* with the number of registered businesses, costs per registered business should be relatively lower in countries with a low small business exemption than in countries with a high exemption. Another way of evaluating the relative level of administrative costs is by expressing them as a percentage of VAT revenue (or GDP). It was found that this percentage ranged from 0.35 per cent (0.02 per cent of GDP) in Sweden to 1.09 per cent (0.08 per cent of GDP) in Belgium. This approach, however, has the disadvantage that the result is influenced by the level of the rate, which should bear little relationship to absolute administrative costs *per se*.

In assessing the findings of its own study, the OECD states that “...it remains impossible to make any judgements on the relative efficiency of the administration of value-added taxes amongst Member countries only on the basis of the information available. By way of illustration, a relatively high level of administrative costs per registered trader may indicate either a relatively inefficient administration or one of relatively higher quality (manifesting itself in less evasion and avoidance, better taxpayer services, faster return and payment processing, etc.). Further, relatively high administrative costs may simply be the result of a tax authority having to cope with a tax that is by its nature complex, and conversely relative low administrative costs may be due to the tax in question being simple to control.”

Although there is much truth in the OECD’s caveat, it should be noted that if all the information were available, it would probably show that countries such as Sweden seem to administer the VAT efficiently at relatively low cost. The obvious reasons are simplicity in VAT design and close integration with the business income tax for purposes of compliance control.

2. Compliance costs

It is widely believed that the compliance costs of the VAT are high. The obligations of registration, recordkeeping, tax calculation, filing, and

payment are considered an onerous burden on business. Questionnaire surveys indicate, however, that the compliance costs of the VAT are difficult to measure and interpret properly. People who respond are not necessarily a random sample of the VAT-paying population. Antagonisms towards the tax or a general aversion to paperwork may affect the response, either positively or negatively. On top of this comes the problem of measurement. If records have to be kept for commercial and income tax purposes, how should the incremental costs for complying with VAT requirements be ascertained and what should be the valuation basis of the taxpayer's own time (often the most important item)?

Whatever these difficulties, all studies emphasise that the compliance costs of the VAT, as a percentage of sales, fall with exceptional severity on small businesses. When size of business is measured by taxable turnover, the smallest businesses in the United Kingdom, for instance, have compliance costs that are proportionately 20 times those of the largest businesses. Another study for New Zealand found that the compliance costs of very large businesses, as a percentage of turnover, were over 300 times smaller than the compliance costs of small businesses.⁵ Often compliance costs of small businesses were not much lower than their net VAT payments. Overall, the revenue contribution might be negative if administrative costs would also be taken into account. Clearly, in these situations, measures should be taken to reduce the compliance costs of small businesses.

The time-consuming effort of small businesses to account for the VAT on individual purchases, for instance, can be solved by introducing a scheme, currently used in Germany, that would permit them to calculate net VAT liabilities by deducting a trade-specific percentage of sales (as a proxy for the tax on purchases) from the gross tax on sales. Furthermore, the option of accounting for VAT on a cash basis might be introduced. In the Netherlands, for instance, supermarkets and department stores, regardless of size, are permitted to use this basis. Moreover, to ease cash-flow problems, small businesses can be allowed to claim an immediate refund of the VAT on expensive capital goods purchased for the business. To reduce the number of VAT postings, the "election for nil consideration" between members of a closely related group, whereby transactions between such members are effectively ignored for VAT purposes, could also be made available to entities other than corporations. Furthermore, as in Sweden, small businesses might be permitted to report their annual net VAT liability on their income tax return

and make quarterly advance payments throughout the year based on the previous year's VAT liability.

More generally, compliance costs of the VAT interact heavily with peculiar design features, such as the zero rate on essentials (Poland, Romania), or the adoption of a very low threshold (Romania). Overall, compliance costs, like administrative costs, can be reduced by broadening the base of the VAT, by limiting the number of rates, and by increasing the threshold for registration. Furthermore, as much as possible, VAT reporting should be based on existing accounting information. Generally, countries should guard against pursuing legal, procedural and accounting purity, which increases compliance costs instead of revenue. In VAT, as in other matters, the best often turns out to be the enemy of the good.

Notes

1. For a review of administrative aspects, see Milka Casanegra de Jantscher and Carlos Silvani, "Guidelines for Administering a VAT," in *Value-Added Tax: Administrative and Policy Issues*, ed. by Alan Tait, IMF Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
2. Similarly, in Poland, taxable persons have to list the product code of goods sold on the invoice, and in Slovenia taxable persons have to place their signature and official stamp on the invoice. Again, these obligations represent an unwarranted, onerous burden on businesses.
3. The most thorough analysis of operating costs is Cedric Sandford, Michael Godwin, and Peter Hardwick, *Administrative and Compliance Costs of Taxation* (Bath: Fiscal Publications, 1989). For a comparison, see Sijbren Cnossen, "Administrative and Compliance Costs of the VAT: A Review of the Evidence", *Tax Notes International*, vol. 8 (20 June 1994).
4. See OECD, *Taxing Consumption* (Paris: 1988).
5. See Cedric Sandford and J. Hasseldine, *The Compliance Costs of Business Taxes in New Zealand* (Wellington: Institute of Policy Studies, Victoria University, 1992).

Appendix I Departures from standard exemptions

("Standard Exemptions" are the following: postal services; medical care; dental care; charitable work; education; non-commercial activities of non-profit making organisations; cultural services; radio and TV broadcasting; insurance and reinsurance; letting of immovable property; financial services; lotteries and gambling; supply of land and buildings)

Country	Exemptions other than "standard exemptions"	Taxation of "standard exemptions"
Bulgaria	Basic foodstuffs: wheat and rye bread, fresh cow milk, Bulgarian yoghurt, white feta cheese Subsidized meals and recreation for employees Water Medicines, specified medical products Heating wood Approved textbooks Admissions to theatres, libraries, museums, art galleries, circuses, zoos, botanical gardens Legal services under the Bar Act Services rendered by cooperatives	Cosmetic surgery, non-traditional forms of health care Conferences and seminars, holiday schools Financial, legal and management advice, brokerage services, factoring, safekeeping
Czech Rep.	Medicines Health care products	Cultural services Telecommunications Radio and TV commercials; sponsored programs
Estonia	Medicines, medical equipment Municipal public saunas Funeral requisites and services Treatment of dangerous waste	Most admissions, except to theatres and state concerts Radio and TV broadcasting Safekeeping
Hungary	Specified legal services Organisation of scientific events	Financial leasing, safekeeping Competitive and professional sports Admissions to zoos and botanical gardens Radio and TV commercials Extermination of rodents and parasites
Latvia	Baby food Catering to penitentiaries Public bathhouses Medicines, medical equipment Educational, children's and scientific publications Newspapers, periodicals, books Admissions, movie production Agricultural processing and extension services Funeral services Fire prevention	

Appendix I **Departures from standard exemptions** (continued)

Country	Exemptions other than "standard exemptions"	Taxation of "standard exemptions"
Lithuania	Food sold in canteens Housing and recreation services for employees Medicines, medical equipment Newspapers, periodicals, books Public passenger transportation Social housing, historical properties Traditional fine art handicrafts Funerals, coffins, tombstones, wreaths Production units employing disabled persons or prisoners	Letting of houses and apartments for periods less than two months Non-profit organisations Postal parcels, telecommunications
Poland	Semi-processed agricultural products: dairy products, honey, eggs, poultry, meat, fish, forestry and hunting products Water Meals sold in canteens and snack bars (not open to the general public) Regenerative and preventive meals Incidental fringe benefits Cultural services, films Agricultural and forestry services Horticultural products Returnable packaging materials Specified legal services R&D activities Artistic handicrafts, collectors' items Coffins Municipal services	Leasing, brokerage TV commercials Selected betting services Telecommunications
Romania	Food sold in canteens Periodicals, books Admissions to museums, fairs, libraries, castles, zoos, shows Printing and selling stamps Spas Funeral services Individually owned and operated farms, leasing of agricultural equipment Construction of cemeteries and funeral monuments Economic activities by the handicapped Sale of original art work by artists	Radio and TV commercials Postal services Telecommunications
Slovak Rep.	Medicines sold in pharmacies, orthopaedic and prosthetic products	Telecommunications Radio and TV commercials; sponsored programs
Slovenia	-	Telecommunications Commercial TV

Source: Country legislation.

Appendix II Coverage of different VAT rates

Country	Standard rate (%)	Zero rate	Lower rate
Bulgaria	22	-	-
Czech Rep.	22	-	5 percent Most food products, except caviar, crustaceans, molluscs, fruit and vegetable juices, retail sale of cat and dog food Animals Water, mineral water (but not coffee) Pharmaceutical products, medical supplies, baby diapers Accessories for the blind, deaf or other handicapped persons; orthopaedic footwear, lenses Thermal energy, electricity, coal, gas Paper products, newspapers, periodicals, books Construction, except electric stoves, heaters and boilers Recreation, cultural and sports activities Seed, feed, agricultural services Transportation, except road haulage Telecommunications Funerals Catalytic converters Street cleaning, refuse collection, waste treatment
Estonia	18	Estonian subscribed periodicals, approved textbooks (a) Admissions to theatres and state concerts Supplies to non-profit organisations by foreign donors	-

Appendix II Coverage of different VAT rates (continued)

Country	Standard rate (%)	Zero rate	Lower rate
Hungary	25	Medicines for human use	12 per cent Most food products, except confectionary and specified juices Catering Water, mineral water Washing, dry-cleaning, public baths Pharmaceutical products (except if zero rated), selected medical supplies Accessories for the blind, deaf or other handicapped persons, orthopaedic footwear, lenses Mineral oil, coke, electricity, wood, gas, heat Newspapers, periodicals, books Social housing Hotels, motels, boarding houses Transportation Agricultural services, fishing Performing arts, film making, circuses Competitive and professional sports Funerals Garbage collection, waste treatment Catalytic converters, heating from waste
Latvia	18	-	-
Lithuania	18	-	-

Appendix II Coverage of different VAT rates (continued)

Country	Standard rate (%)	Zero rate	Lower rate
Poland	22	Basic and supplementary medicines Surgical appliances, hearing aids, braille products Newspapers, periodicals, books, printing Housing units Feed, fertilisers, pesticides Domestically produced agricultural machinery, equipment, tractors, trailers and spare parts Fishing nets Domestic air services Fire protection equipment	7 per cent Food products (unless exempted) Food services, except tea, coffee, alcohol Children's goods: clothing, shoes, cosmetics, school stationery, skis, bicycles Medicines, medical supplies, lenses, hearing aids Essential building materials and basic appliances Passenger transportation, except taxis Musical instruments and accessories Telecommunications Notary and attorney services 17 per cent Electricity, fuel, gas, heating oil
Romania	18	Bread, wheat, barley Water Prosthetic and orthopaedic products Electricity, thermal energy, fuel, coal, firewood, gas for household use Newspapers Waste disposal	9 per cent Basic foodstuffs: milk, meat, fish, poultry, edible oil, fresh fruit and vegetables Animals Medicines for human and veterinary use Clothes and shoes for newborn, school uniforms Urban public passenger transportation Agricultural works, fertilisers Advertising in newspapers
Slovak Rep.	23	-	6 per cent Most food products, except caviar, crustaceans, molluscs, confectionery, cat and dog food Animals Water, soft drinks Washing, dry-cleaning Pharmaceutical products, lenses, medical supplies and specified equipment, orthopaedic supplies, aids for the disabled, electric automobiles

Appendix II. Coverage of different VAT rates (continued)

Country	Standard rate (%)	Zero rate	Lower rate
Slovak Rep. (cont.)			Thermal power, electricity, gas, heating oil Hotels, boarding houses, camping facilities Newspapers, periodicals, books, stationery, products made from recycled paper Building activities Sale and rental of movable property, car leasing Transportation, except road haulage Telecommunications Feed, seed, fertilisers Recreation, cultural and sports activities Legal and tax consultancy services R&D activities Funeral services
Slovenia	..	-	Foodstuffs for human or animal consumption Pharmaceutical products, medical equipment Newspapers, periodicals, books Children's clothing Authors, composers, artists

a Exempt as of January 1, 1998

Source: Country legislation.

Appendix III

SELECTED BIBLIOGRAPHY

Aaron, Henry J., ed., *The Value-Added Tax: Lessons from Europe* (Washington, DC: Brookings Institution, 1981).

Aujean, Michel, "Value Added Tax in the Internal Market, a First Assessment," *EC Tax Review*, vol. 4/1(1995).

Ballard, Charles L., John Karl Scholz, and John B. Shoven, "The Value-Added Tax: A General Equilibrium Look at Its Efficiency and Incidence," in *The Effects of Taxation on Capital Accumulation*, ed. by Martin Feldstein (Chicago: University of Chicago Press, 1987).

Ballard, Charles L., and John B. Shoven, "The Value-Added Tax: The Efficiency Cost of Achieving Progressivity by Using Exemptions," in *Modern Developments in Public Finance: Essays in Honor of Arnold Harberger*, ed. by Michael J. Boskin (New York: Blackwell, 1987).

Barham, Vicky, S.N. Poddar, and John Whalley, "The Tax Treatment of Insurance Under a Consumption Type, Destination Basis VAT," *National Tax Journal*, vol. 40/2 (June 1987).

Bird, Richard M., "A New Look at Indirect Taxation in Developing Countries," *World Development*, vol. 15 (September 1987).

Bird, Richard M., "Dual VATs and Cross-Border Trade: Two Problems, One Solution?" Paper Presented at the 53rd Congress of the International Institute of Public Finance (Kyoto: August 25-28, 1997).

Bolderson, Sarah, and Theodoor Huiskes, "Meeting Tax Obligations in Central and Eastern Europe," *Bulletin for International Fiscal Documentation*, vol. 48/12 (December 1994).

- Boskin, Michael J., ed., *Frontiers of Tax Reform* (Stanford University: Hoover Institution Press, 1996).
- Bovenberg, A. Lans, "Destination- and Origin-Based Taxation Under International Capital Mobility," *International Tax and Public Finance*, vol. 1/3 (1994).
- Bradford, David F., "On the Incidence of Consumption Taxes," in *The Consumption Tax: A Better Alternative?* ed. by Mark A. Bloomfield and Charles E. Walker (Cambridge, Mass.: Ballinger, 1987).
- Brashares, Edith, Janet F. Speyrer, and George N. Carlson, "Distributional Aspects of a Federal Value-Added Tax," *National Tax Journal*, vol. 41/2 (June 1988).
- Carlson, George N., and Melanie K. Patrick, "Addressing the Regressivity of a Value-Added Tax," *National Tax Journal*, vol. 42/3 (September 1989).
- Casanegra de Jantscher, Milka, and Carlos Silvani, "Guidelines for Administering a VAT," in *Value-Added Tax: Administrative and Policy Issues*, ed by Alan Tait, IMF Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
- Cnossen, Sijbren, "Harmonization of Indirect Taxes in the EEC," in *Tax Assignment in Federal Countries*, ed. by Charles E. McLure, Jr. (Canberra: ANU Press, 1983). Reprinted in *British Tax Review*, no. 4 (June 1983).
- Cnossen, Sijbren, "Administrative and Compliance Costs of the VAT: A Review of the Evidence," *Tax Notes International*, vol. 8 (20 June 1994).
- Cnossen, Sijbren, "VAT and RST: A Comparison," *Canadian Tax Journal*, vol. 35/3 (May/June 1987).
- Cnossen, Sijbren, and Carl S. Shoup, "Coordination of Value-Added Taxes," in *Tax Coordination in the European Community*, ed. by Sijbren Cnossen (Deventer, Netherlands: Kluwer, 1987).
- Cnossen, Sijbren, "What Rate Structure for a Goods and Services Tax? The European Experience," *Canadian Tax Journal*, vol. 37 (September/October 1989).

- Cnossen, Sijbren, "Interjurisdictional Coordination of Sales Taxes," in *Value Added Taxation in Developing Countries*, ed. by Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat (Washington, DC: World Bank, 1990).
- Cnossen, Sijbren, "Consumption Taxes and Global Competitiveness," *Tax Notes International*, vol. 6 (September 2, 1991).
- Cnossen, Sijbren, "Key Questions in Considering a Value-Added Tax for Central and Eastern European Countries, IMF *Staff Papers* , vol. 39/2 (June 1992). Reprinted in *Key Issues in Tax Reform*, ed. by Cedric Sandford (Bath, UK: Fiscal Publications, 1993).
- Cnossen, Sijbren, "VAT Treatment of Immovable Property," *Tax Notes and Tax Notes International*, vols. 66 and 10 (March 20, 1995). Reprinted as chapter 7 in *Tax Law Design and Drafting*, ed. by Victor Thuronyi (Washington, DC: International Monetary Fund, 1996).
- Commission of the European Communities, *Completing the Internal Market*, White Paper from the Commission to the European Council, COM(85)310 (Brussels, June 1985).
- Commission of the European Communities, *Commission Communication on Completion of the Internal Market: Approximation of Indirect Tax Rates and Harmonisation of Indirect Tax Structures*, COM (87)320 (Brussels, 1987).
- Commission of the European Communities, *A Common System of VAT: A Programme for the Single Market*, COM 328(96) Final (Brussels, 1996).
- Due, John F., "The Implications for Australia of the Experience in the United States, Canada and Other Countries with Retail Sales Tax," chapter 11 in *Changing the Tax Mix*, ed. by John G. Head (Sydney: Australian Tax Research Foundation, 1986).
- Due, John F., "Some Unresolved Issues in Design and Implementation of Value-Added Taxes," *National Tax Journal*, vol. 43/4 (December 1990).
- Due, John F., "The Development of a Value Added Tax in Bulgaria," *VAT Monitor*, vol. 4 (December 1993).

- Easson, Alex, "Consumption Tax Reform in Central and Eastern Europe," *VAT Monitor*, vol. 4 (January 1993).
- Frenkel, Jacob A., Assaf Razin, and Steven Symansky, "International VAT Harmonization: Macroeconomic Effects," *IMF Staff Papers*, vol. 38/4 (December 1991).
- Genser, Bernd, Andreas Haufler, and Peter B. Sørensen, "Indirect Taxation in an Integrated Europe: Is There a Way of Avoiding Trade Distortions Without Sacrificing National Tax Autonomy?" *Journal of Political Economy*, vol. 10 (1995).
- Georgakapoulos, T., and T. Hitiris, "On the Superiority of the Destination over the Origin Principle of Taxation for Intra-Union Trade," *The Economic Journal*, vol. 102 (1992).
- Gillis, Malcolm, "Worldwide Experience in Sales Taxation: Lessons for North America," *Policy Sciences*, vol. 19/2 (1986).
- Hall, Robert E., and Alvin Rabushka, *The Flat Tax* (Stanford University: Hoover Institution Press, 2nd ed., 1995).
- Heady, Christopher, Mark Pearson, Najma Rajah, and Stephen Smith, "Czechoslovakia's Taxes on Goods and Services," *VAT Monitor*, vol. 4 (March 1993).
- Heady, Christopher, Najma Rajah, and Stephen Smith, "Tax Reform and Economic Transition in the Czech Republic," *Fiscal Studies*, vol. 5/1 (February 1994).
- Henderson, Yolanda K., "Financial Intermediaries under Value-Added Taxation," *New England Economic Review* (July/August 1988).
- Holland, Graham, "VAT Organization Issues," in *Value-Added Tax: Administrative and Policy Issues*, IMF Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
- Ireland, Commission on Taxation, *Third Report: Indirect Taxation* (Dublin: Stationery Office, 1984).

- Jenkins, Glenn, "The Evolution of Sales Tax Reform in Canada," in *Policy Forum on the Business Transfer Tax*, ed. by Robin W. Boadway and Jack M. Mintz (Kingston, Ontario: John Deutsch Institute for the Study of Economic Policy, Queens University, 1986).
- Johnstone, Dorothy, *A Tax Shall be Charged* (London: H.M. Stationery Office, 1975).
- Kay, J. A., and M.A. King, *The British Tax System* (Oxford University Press, 1990).
- Keen, Michael, "The Welfare Economics of Tax Coordination in the European Community: A Survey," *Fiscal Studies*, vol. 14/2 (1993).
- Keen, Michael, and Stephen Smith, "The Future of Value-Added Tax in the European Union," *Economic Policy*, vol. 23 (October, 1996).
- Kolinski, Andrzej, and Clare Templeman, "Indirect Taxes in a Cross-Border Context," *European Taxation*, vol. 35/9 (September 1995).
- Krause-Junk, Gerold, "Die europäische Mehrwertsteuer und das Ursprungslandprinzip," *Finanzarchiv*, vol. 49 (1992).
- Kronbergs, Zigurds G., "Survey of Latvia's VAT Legislation," *VAT Monitor*, vol. 6 (November/December 1995).
- Lee, Catherine, Mark Pearson, and Stephen Smith, *Fiscal Harmonisation: An Analysis of the European Commission's Proposals* (London: Institute for Fiscal Studies, 1988).
- Lockwood, Ben, David de Meza, and Gareth D. Myles, "On the European Union VAT Proposals: The Superiority of Origin over Destination Taxation," *Fiscal Studies*, vol. 16 (1995).
- McLure, Charles E. Jr., "Income Distribution and Tax Incidence under the VAT," chapter 3 in *Value-Added Taxation in Developing Countries*, ed. by Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat (Washington, DC: World Bank, 1990).
- McLure, Charles E. Jr., *State and Local Implications of a Federal Value-Added Tax* (Washington, DC: Academy for State and Local Government, 1987).

- McLure, Charles E. Jr., *The Value-Added tax: Key to Deficit Reduction?* (Washington, DC: American Enterprise Institute for Public Policy Research, 1987).
- McLure, Charles E. Jr., "Economic, Administrative, and Political Factors in Choosing a General Consumption Tax," *National Tax Journal*, vol. 46/3 (September 1993).
- Messere, Ken, "A Defence of Present Border Tax Adjustment Practices," *National Tax Journal*, vol. 32/4 (December, 1979).
- Messere, Ken, "Consumption Tax Rules," *Bulletin for International Fiscal Documentation*, vol. 48/12 (1984).
- Metcalf, Gilbert, E., "Value-Added Taxation: A Tax Whose Time Has Come?" *Journal of Economic Perspectives*, vol. 9/1 (1995).
- Metcalf, Gilbert E., "The Role of a Value-Added Tax in Fundamental Tax Reform," chapter 6 in *Frontiers of Tax Reform*, ed. by Michael J. Boskin (Stanford University: Hoover Institution Press, 1996).
- Musgrave, Richard A., and Peggy B. Musgrave, *Public Finance in Theory and Practice*, 4th ed. (New York: McGraw-Hill, 1984).
- Oldman, Oliver, and LaVerne Woods, "Would a Value-Added tax System Relieve Tax Compliance Problems?" in *Income Tax Compliance*, a Report of the American Bar Association Taxation Conference (Reston, Virginia, March 16-19, 1983).
- Organisation for Economic Cooperation and Development, *Taxing Consumption* (Paris: OECD, 1988).
- Organisation for Economic Cooperation and Development, *The Role of Tax Reform in Central and Eastern European Countries* (Paris: OECD, 1991).
- Organisation for Economic Cooperation and Development, *Consumption Tax Trends* (Paris: OECD, 1995).

Organisation for Economic Cooperation and Development, *Consumption Tax Trends*, Second Edition (Paris: OECD, 1997).

Organisation for Economic Cooperation and Development, *Revenue Statistics of OECD Member Countries 1965-1996* (Paris: OECD, 1997a).

Poddar, Satya, "Value-Added Tax at the State Level," in *Value-Added Taxation in Developing Countries*, ed. by Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat (Washington, DC: World Bank, 1990).

Poddar, Satya, and Morley English, "The Taxation of Financial Services under a Value-Added Tax: Applying the Cash-Flow Approach," *National Tax Journal*, vol. 50/1 (March 1997).

Rosen, Harvey, *Public Finance* (Homewood, III: Irwin, 1991).

Sandford, Cedric, Michael R. Godwin, Peter J.W. Hardwick, and M.I. Butterworth, *Costs and Benefits of VAT* (London: Heinemann Educational Books, 1981).

Sandford, Cedric, Michael R. Godwin, and Peter J.W. Hardwick, *Administrative and Compliance Costs of Taxation* (Bath, UK: Fiscal Publications, 1989).

Sandford, Cedric, and John Hasseldine, *The Compliance Costs of Business Taxes in New Zealand* (Wellington: Institute of Policy Studies, Victoria University, 1992).

Shoup, Carl S. and Others, *Report on Japanese Taxation*, 4 vols. (Tokyo: General Headquarters, Supreme Commander for the Allied Powers, 1949).

Shoup, Carl S., "Taxation in France," *National Tax Journal*, vol. 8/4 (December 1955)

Shoup, Carl S., *Public Finance* (Chicago: Aldine, 1969).

Shoup, Carl S., "Choosing Among Types of VATs," in *Value-Added Taxation in Developing Countries*, ed. by Malcolm Gillis, Carl S. Shoup, and Gerardo P. Sicat (Washington, DC: World Bank, 1990).

- Silvani, Carlos, and Charles L. Vehorn, "Invoices, Books of Account, and Tax Return Forms for VAT," in *Value-Added Tax: Administrative and Policy Issues*, IMF Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
- Smith, Stephen, "Subsidiarity and Coordination of Indirect Tax Rates in the European Community," *Oxford Review of Economic Policy*, vol. 9 (1993).
- Smith, Stephen, *The Definitive Regime for VAT*, Commentary 63 (London: Institute for Fiscal Studies, 1997).
- Summers, Victoria P., and Emil M. Sunley, "An Analysis of Value Added Taxes in Russia and Other Countries of the Former Soviet Union," *Tax Notes International* (June 19, 1995).
- Tait, Alan A., *Value-Added Tax: International Practice and Problems*, (Washington, DC: International Monetary Fund 1988).
- Tait, Alan A., ed., *Value-Added Tax: Administrative and Policy Issues*, Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
- Tait, Alan A., "VAT Policy Issues: Structure, Regressivity, Inflation, and Exports," in *Value-Added Tax: Administrative and Policy Issues*, IMF Occasional Paper 88 (Washington, DC: International Monetary Fund, 1991).
- Tanzi, Vito, ed., *Fiscal Policy in Economies in Transition* (Washington, DC: International Monetary Fund, 1992).
- Tanzi, Vito, ed., *Transition to Market: Studies in Fiscal Reform*, (Washington, DC: International Monetary Fund, 1993).
- Terra, B.J.M. and Julie Kajus, *A Guide to the Sixth VAT Directive: Commentary to the Value-Added Tax of the European Community*, vols. A and B (IBFD Publications for Moret Ernst & Young, 1991).
- Thuronyi, Victor, ed., *Tax Law Design and Drafting* (Washington, DC: International Monetary Fund, 1996).

- U.S. Congressional Budget Office, *Effects of Adopting a Value-Added Tax* (Washington, DC: Government Printing Office, 1992).
- U.S. Department of the Treasury, *Tax Reform for Fairness, Simplicity, and Economic Growth: The Treasury Department Report to the President*, vol. 3: Value-Added Tax (Washington, DC: Department of the Treasury, November 1984).
- U.S. General Accounting Office, *Tax Policy: Choosing Among Consumption Taxes* (Washington, DC: General Accounting Office, 1986).
- Vanistendael, F., "A Proposal for a Definitive VAT System: Taxation in the Country of Origin at the Rate of the Country of Destination, Without Clearing," *EC Tax Review*, vol. 4/1 (1995).
- Walker, Charls E., and Mark A. Bloomfield, eds., *The Consumption Tax: A Better Alternative?* (Cambridge, Mass.: Ballinger, 1987).

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OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16

PRINTED IN FRANCE

(14 98 02 1 P) ISBN 92-64-16053-1 – No. 50226 1998