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Congress has recently considered adopting a value-added tax with compensatory rate reductions in income and social security taxes. GAO studied the value-added tax systems in seven European Economic Community countries to obtain information that may be useful in considering such a tax for the United States.

Administration of and compliance with the value-added taxes differed among the countries. Primarily, problems arose from multiple rates for domestically distributed goods and partial exemptions. Compliance procedures in a number of countries caused businesses to experience reduced cash balances. All countries experienced tax fraud and evasion in connection with the tax.

The economic impact of the tax varied among countries. Generally, governments found it to be useful for generating revenue and implementing macroeconomic policy, but of little trade benefit. The value-added tax did not always result in significant price increases because its imposition was accompanied by offsetting reductions in other consumption taxes. Each country took measures to limit the tax's inherent regressivity.

# The Value-Added Tax in The European Economic Community

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BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

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# Report To The Congress

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To the President of the Senate and the  
Speaker of the House of Representatives

This is our report on the value-added tax in the European  
Economic Community. This report discusses the experiences of  
seven Community members with VAT, and related government poli-  
cies, programs, and procedures. We believe the information  
contained in this report will be of benefit to the Congress  
and the executive branch should there be further deliberations  
on adopting a value-added tax for the United States.

We did not obtain agency comments on this report because  
it does not discuss any ongoing U.S. Government programs or  
policies, and the information reported was obtained mostly  
from non-U.S. Government sources.

We are sending copies of this report to the Director,  
Office of Management and Budget; the Secretary of Commerce;  
the Secretary of the Treasury; the Office of the United States  
Trade Representative; the Internal Revenue Service; and inter-  
ested individuals and organizations in the public and private  
sectors.

*James R. Brink*  
Comptroller General  
of the United States



D I G E S T

The Congress has recently given consideration to introducing a value-added tax in the United States. The most recent proposal--the "Tax Restructuring Act of 1980" (H.R. 7015, 96th Congress)--includes the adoption of a value-added tax with compensatory rate reductions in corporate and personal income taxes and the social security taxes. The proposed tax changes are aimed at increasing domestic savings and capital investment, and thereby improving industrial productivity and the trade competitiveness of U.S. goods. (See pp. 1 and 2.)

GAO studied value-added tax systems and their administration in seven European Economic Community (EEC) countries--Belgium, Denmark, Ireland, Italy, the Netherlands, United Kingdom, and West Germany--to gather information that may be useful in considering such a tax for the United States. (See pp. 5 and 6.)

GOVERNMENT ADMINISTRATION  
AND BUSINESS COMPLIANCE

Experiences with government administration and business compliance differed among the countries, depending primarily upon the structure of the value-added tax systems and the provisions governing their administration. Government representatives generally agreed that the tax was not more costly to administer than the consumption taxes it replaced. (See p. 7.)

Each of the governments instituted special programs and procedures to ease business compliance with the tax. Most governments operated orientation programs prior to imposing the tax to minimize start-up problems. All of the governments also instituted exemptions or special procedures to simplify compliance for very small businesses, agriculture (and sometimes horticulture, forestry, and fishery), as well as

The economic impact of adopting the value-added tax depended not only on the tax system's structure and administrative regulations, but also on the tax it replaced and the domestic economic situation. Consequently, the economic impact in the EEC may not be relevant to the United States. In the EEC, for instance, the shift was from several forms of consumption

ECONOMIC IMPACT

Each of the countries reported tax evasion, particularly in the service sector, and tax fraud in connection with the tax. The full impact of evasion and fraud varies from country to country; however EEC officials felt it is considerable for the Community as a whole. (See pp. 14 to 16.)

Business representatives in some countries claimed that government filing and reimbursement procedures reduce business cash balances by requiring prompt payment of excess value-added tax receipts, while the government delays refunds. On the other hand, some countries have instituted systems which increase business cash balances by allowing firms to hold on to excess receipts for a few months, while requiring a prompt government refund. (See pp. 13 and 14.)

--the nonstandardization of invoices. (See pp. 9 to 13.)

--the absence of a separately stated value-added tax on retail invoices, and

--frequent rate changes,

Government and business representatives agreed that multiple rates for domestically distributed goods and services, and partial exemptions are the primary contributors to administrative and compliance difficulties. Other factors which were cited as causing difficulties include

business sectors for which determination of value added would be difficult, if not impossible. Such businesses are usually involved in the provision of services. (See pp. 7 to 9.)

taxes to a value-added tax whereas in the United States, such a tax would replace direct taxes-- e.g., income and payroll taxes. (See pp. 3 to 5, and p. 17.)

The governments used the value-added tax not only to generate revenue, but also to implement economic policy. It makes an important contribution to national revenues in each of the countries. Government officials in several countries commented that they prefer a value-added tax as a revenue generator to other forms of taxation. These governments have also found the tax to be a useful macro-economic tool for decreasing domestic economic activity. Increases in the tax rate, however, have caused short-term distortions in consumption patterns in several countries. (See pp. 17 to 23.)

The introduction of the value-added tax had a negligible effect on the countries' trade competitiveness. Since each country substituted it for other consumption taxes, there was no impact on exports from the changes. (See pp. 23 and 24.)

The adoption of the value-added tax did not always result in significant price increases because its imposition was accompanied by offsetting reductions in other consumption taxes. The greatest price impact resulted from the introduction of a value-added tax designed to more than compensate for the taxes replaced. Each government took measures to limit the tax's impact on prices, including

--delaying introduction of the value-added tax to a less-inflationary period,

--instituting price controls, and

--operating an education program to limit double taxation of goods. (See pp. 24 to 26.)

The value-added tax is regressive as are most consumption taxes. A regressive tax is one

which has a greater impact on lower income groups than on those at higher incomes. The countries attempted to mitigate the tax's regressivity through the use of multiple rates and/or exemptions, and by taking measures outside the value-added tax system. (See pp. 26 to 28.)

The GAO did not obtain agency comments on this report because it does not discuss any ongoing U.S. Government programs or policies. The information reported was obtained mostly from non-U.S. Government sources.



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DIGEST

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<u>ABBREVIATIONS</u>				
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As demonstrated on the chart on the following page, businesses are not expected to absorb the tax but add it to the prices of their products and services, market conditions permitting. Under the invoice method, the computation method

The value-added tax, as its name implies, is a tax on the value added to a product or service at each stage of the production/distribution process. It is similar to the retail sales tax in that the final amount will represent a fixed portion of the retail sales price of a product. The difference lies in the collection method; whereas the sales tax is collected only at the retail stage, VAT is collected incrementally throughout the production/distribution process.

Twenty-four countries including the member states of the European Economic Community (EEC) have adopted VAT. Its adoption in the United States has been discussed on numerous occasions. For instance, it was discussed in the early 1960s as a means of improving the U.S. trade position. During the Nixon administration, it was proposed to replace local property taxes as the primary means of financing the operation of public schools. The most recent proposal--the "Tax Restructuring Act of 1980" (H.R. 7015, 96th Congress)--was introduced to increase domestic savings and capital investment, and thereby accelerate industrial productivity growth and improve the trade competitiveness of U.S. goods. It proposes the introduction of a 10-percent VAT applicable to the commercial sale of virtually all goods and services, to be accompanied by reductions in the corporate and personal income tax rates and social security tax rates, as well as various capital formation tax incentives.

VAT: HOW DOES IT WORK?

The current U.S. tax system's heavy reliance on income and payroll taxation has come under criticism for inhibiting capital formation, and thereby slowing industrial productivity growth and decreasing U.S. trade competitiveness. One alternative is the value-added tax (VAT): a tax on consumption which is levied as a percentage of the value added to a good or service by each enterprise in the production/distribution process. A recent congressional proposal would shift part of the Federal tax burden from income and payroll taxation to VAT.

INTRODUCTION

CHAPTER 1

used in the EEC and proposed in the "Tax Restructuring Act of 1980," each business separately states the VAT it charges on its sales invoices. Businesses determine during each tax-ation period the VAT collected on sales, subtract VAT paid on purchases of inputs, and remit the remainder, if any, to the government. The remainder represents the tax on the value each business has added to its output. A business which paid more VAT than it collected during the period receives a refund or credit from the government. Each business down the line passes its VAT costs onto its customers until the product is sold to the retail customer, who ultimately bears the tax burden. VAT is therefore not a business tax, as it might appear at first, but a consumption tax which is collected by business from consumers and remitted to the government.

While value-added tax systems can be very simple, in practice they all include multiple tax rates and/or exemptions. In addition to the standard tax rate, VAT systems may include: (1) higher rates applicable usually to purchases of luxury items such as jewelry and furs, (2) a reduced rate applicable

TABLE I

HOW VAT WORKS (note a)

(10-percent rate)

	PURCHASE			SALE			Credit for VAT Net to Government
	Price paid for goods	VAT	Total	"Value Added"	Price charged	VAT collected	
Lumberjack chops the wood	-	-	\$100	\$100	\$100	\$10	\$110
Sawmill saws the wood	\$100	\$10	\$110	50	150	15	165
Furniture maker assembles the wood into a table	150	15	165	100	250	25	275
Distributor retails the table	250	25	275	50	300	30	330
Retail customer buys the table	300	30	330	-	-	-	-
<b>TOTAL</b>				<b>\$300</b>			

\*Table format appears in "Value Added Tax," Price Waterhouse & Co., Nov. 4, 1979, p. 4.

usually to purchases of necessities, and (3) a zero rate, applicable to exports and, in some countries, necessities. Although an exempt enterprise pays VAT on purchases, it cannot charge VAT as a separately stated tax to customers, and does not have the right to claim a refund of VAT paid on purchases. Such businesses need not maintain the records necessary for compliance. However, they must either absorb the additional tax costs or pass them on to customers in the form of higher prices.

Many VAT systems treat capital purchases like purchases of intermediate goods. Under the value-added tax system adopted by the Community and proposed in the "Tax Restructuring Act of 1980," any business making a capital purchase can deduct all or most VAT paid from its tax liability in the period of acquisition.

THE VALUE-ADDED TAX IN THE EUROPEAN ECONOMIC COMMUNITY

The EEC adopted VAT as a means of decreasing trade distortions among its members. On April 11, 1967, the EEC Council of Ministers instructed the member states to replace their existing national consumption tax systems with VAT by January 1, 1970. This was to be the first major step in EEC tax harmonization. Denmark became the first member to adopt a comprehensive value-added tax system on July 3, 1967. By 1973, all members of the Community had adopted VAT.

Prior to introducing the value-added tax, the present EEC members operated various consumption tax systems as shown in the chart on the following page.

This caused a potential distortion in trade competition. Under the General Agreement on Tariffs and Trade (GATT), governments can rebate the indirect (i.e., consumption) tax

Each of the original EEC members, with the exception of France, operated cascade tax systems prior to adopting VAT. The perceived drawbacks of cascade taxes in a common market environment were the most important impetus to the selection of VAT. The cascade tax is similar to VAT except that every time material or products change hands the tax is paid on the full value of the product, including taxes previously paid--hence the cascade effect. As a consequence, the effective tax rates could differ among similar products depending on the extent to which an industry or firm is vertically integrated. The result is a tax content which cannot be accurately measured in the final product price.

Source: Eric Schiff, "Value Added Taxation in Europe" (American Enterprise Institute for Public Policy Research, Washington, D.C.) p. 9.

a/Joined the Community during January 1973.  
b/France's prior VAT system did not include the retail stage.

<u>Country</u>	<u>Taxes replaced</u>	<u>Effective date of VAT</u>
Belgium	Cascade tax	1/1/71
Denmark (note a)	Wholesale sales tax	7/3/67
France	Value-added tax (note b) and various other taxes	1/1/68
Ireland (note a)	Purchase and retail sales taxes	11/1/72
Italy	Cascade and various other taxes	1/1/73
Luxembourg	Cascade tax	1/1/70
The Netherlands	Cascade tax	1/1/69
United Kingdom (note a)	Purchase and selective employment taxes	4/1/73
West Germany	Cascade tax	1/1/68

To acquire an understanding of VAT prior to seeking information in EC countries, we reviewed pertinent literature and discussed VAT with various U.S. experts. The materials reviewed included executive agency studies and reports, congressional

We studied the value-added tax systems in seven EC countries--Belgium, Denmark, Ireland, Italy, the Netherlands, the United Kingdom and West Germany--and gathered information concerning these countries' experiences with VAT and related government policies, programs and procedures. We believe this information will be of benefit to the Congress and the executive branch should there be further deliberations concerning adoption of a value-added tax in the United States. The scope of this study includes the areas of VAT administration and economic impact, including: the programs and procedures of government administration and business compliance, effects on business cash flow, tax fraud and evasion, government use of VAT as a revenue generator and fiscal tool, its effects on trade competitiveness, impact on prices, and regressivity.

#### OBJECTIVE, SCOPE, AND METHODOLOGY OF THE REVIEW

Although the Council imposed several guidelines concerning the structure and administration of the VAT systems, it did allow considerable latitude to accommodate national priorities and objectives, as well as economic, political, and social realities. Consequently, the VAT systems within the Community differ significantly from one another. For instance, the rate structures for domestically distributed goods range from a single rate applicable to all taxable goods and services to seven rates. Administration systems also differ from country to country. For example, some countries use monthly filing periods and others quarterly filing periods, with each country having a different set of exceptions to the rule.

content of their exports and impose all applicable indirect taxes on imports. GATT prohibits governments from making similar border adjustments for direct taxes (i.e., income and payroll taxes). Since governments were unable to determine the exact cascade-tax content of domestically produced products, they were forced to estimate the border tax adjustment. This resulted in a potential subsidy for domestic products from overestimating the rate of cascade tax to be rebated on exports and levied on imports. Consequently, after several years of study into alternative tax systems, the Council turned to the value-added tax, which in contrast to the cascade tax always represents a fixed proportion of a product's price.

1/The Treasury Department has recently issued a staff study, "Value-Added Tax: European Experience and Lessons for the United States," George N. Carlson, Office of Tax Analysis, Oct. 1980

In each EEC country visited, we met with officials from both government and the private sector as well as with American Embassy officials. For example, in the Netherlands we met with representatives from the Ministries of Finance and Economics, the Amsterdam-Rotterdam Bank, the Dutch Association of Industries, and the Dutch Trade Union Federation. To gain an overview of the EEC experience, we met with officials of the European Economic Community Commission in Brussels and the International Bureau of Fiscal Documentation in Amsterdam. We also reviewed numerous reports and studies concerning the operation of VAT in the various countries. The information obtained was, in most cases, not verified to country records.

We discussed the issues surrounding the adoption of VAT with U.S. Government officials, as well as with representatives from business, labor and academia. We met with congressional staff to discuss their concerns over the value-added tax. To gain the executive branch perspective, we met with representatives from the Departments of Commerce and the Treasury and the Office of the U.S. Trade Representative. We discussed VAT with AFL-CIO officials to gain organized labor's views. U.S. business community views were discussed with representatives from the U.S. Chamber of Commerce, the National Association of Manufacturers, Charis Walker Associates, the Export Managers Association of California and the California Council for International Trade.

hearings and testimony, as well as professional journal and media articles. We met with experts from Columbia University, Harvard University, and the Council on Foreign Relations.



Orientation programs implemented by the countries prior to imposition of the VAT were designed to inform the business community how to comply with the new tax. Some governments focused these programs on small businesses, assuming that large corporations would have sufficient outside assistance.

In every country, business representatives reported that start-up costs for the VAT were considerable, even for large corporations. For example, business representatives in the United Kingdom told us that when the tax was first imposed, businesses were forced to make a larger than normal investment of staff time and money. They found they needed to analyze corporate activities, determine whether or not the activities were taxable, and adjust their accounting systems accordingly.

Each of the governments operated extensive orientation programs prior to the tax's introduction to minimize start-up problems. They also adopted special procedures for very small businesses and agriculture, as well as for other industrial sectors for which compliance with VAT would have been extremely difficult.

Government representatives generally agreed that the value-added tax was not more costly to administer than the consumption taxes it replaced. With the exception of the United Kingdom, we did not learn of any instance where a government needed to hire additional personnel to administer VAT, despite the fact that adopting VAT resulted in increased tax roles. In Denmark, for instance, three times as many businesses are registered in the VAT system than were registered under the cascade tax system. The similarity between VAT and the taxes it replaced may have contributed to the ease of transition in many of these countries.

#### PROGRAMS AND PROCEDURES OF GOVERNMENT ADMINISTRATION AND BUSINESS COMPLIANCE

Experiences with administration and compliance with the VAT system and the provisions governing its administration. The primary factors contributing to administrative and compliance problems were multiple rates and partial exemptions of businesses. In addition, the compliance procedures in a number of countries caused businesses to experience cash flow problems. Regardless of the system, all the countries included in this study experienced tax evasion, especially in the service sectors, and fraud in connection with VAT.

#### GOVERNMENT ADMINISTRATION AND BUSINESS COMPLIANCE

The program instituted in the Netherlands and the United Kingdom. The Dutch program included

--lectures and discussions concerning VAT before various commercial groups,

--the distribution of a free booklet concerning VAT,

--personal visits to entrepreneurs,

--the provision of information to all chambers of commerce,

--special courses for tax consultants,

--a 13-segment television course on VAT, and

--the use of special telephone numbers for answering questions on VAT.

The government undertook a "system check" on entrepreneurs to see whether the system--judging by external impressions--was being properly implemented. Further, it did not strictly enforce penalties for improper compliance with VAT for approximately 1 year, particularly when the problems were due to a misunderstanding of the system.

Each of the governments also instituted exemptions or simplified procedures to assist (1) very small businesses, especially retail outlets and self-employed individuals; (2) agriculture; and (3) certain other business sectors for which compliance with VAT may have proven extremely difficult. Some countries exempted very small businesses because they believed the administrative burden outweighed their revenue-generating potential.

In Belgium, for example, self-employed individuals who qualify can determine their VAT obligation according to profit margins, unit prices or computed wage rates, as opposed to value added. The type of business activity determines the alternative method used. In addition, certain small retailers can elect to be exempt from the VAT filing and accounting requirements. Their sales are subject to VAT, but this tax is not paid to the government and VAT paid on purchases is not recoverable. In such cases, companies that supply goods to exempt retailers charge them the normal VAT rates plus a percentage stipulated by the government and remit the total to the government.

Government tax administrators and business representatives agreed that multiple rates for domestically distributed goods and partial exemptions are the main factors contributing to administrative difficulties. Those countries which used these to a great extent experienced significant difficulties with their VAT systems. For example, both government and business representatives in Italy stated that the use of seven rates has greatly complicated government administration and business compliance. In contrast, VAT administrators in Denmark indicated that their adoption of a single-rate system has greatly simplified administration and compliance.

Government and business representatives claimed that certain aspects of VAT systems can complicate administration and compliance. These include: multiple rates, partial exemptions, frequent rate changes, and, to a lesser extent, the absence of a separately stated VAT on retail sales invoices, and the nonstandardization of invoices. None of these are inherent to the value-added tax. Nevertheless, every country we studied had at least one of these complications.

#### FACTORS CONTRIBUTING TO ADMINISTRATIVE COMPLEXITY

In all the countries, similar procedures were provided for agriculture and, in a number of countries, for the horticulture, fishery and forestry industries. In the Netherlands, for instance, farmers can elect to be exempted from the system. In order to avoid the negative aspects of an exemption, which would require that farmers either absorb VAT costs or pass them onto business customers (i.e., food processors, wholesalers, etc.) in the form of higher prices, buyers of agricultural goods are granted a VAT credit of 4.5 percent of the price charged by the farmer. The result is that farmers need not concern themselves with VAT and the buyers' problems of recovering VAT paid are avoided by the use of credits. Lastly, governments often exempt business sectors for which determination of value added would be difficult, if not impossible. These businesses are usually service oriented and often provide social welfare services. They include: credit and lending institutions, lawyers, educational institutions, organizations providing medical services, state and local governments, and non-profit organizations. (See table II.)

Source: Compiled by GAO based on information provided by foreign officials.

The table shows general application for goods and services. Since there are numerous exceptions to the basic rules, the individual countries' tax laws should be consulted for a complete application of rates and exemptions.

	Belgium	Denmark	Ireland	Italy	The Netherlands	United Kingdom	West Germany
Land & buildings	X	X	X		X	X	X
Rentals & leases	X	X	X	X	X	X	X
Medical care, doctors & dentists	X	X	X	X	X	X	X
Hospitalization	X	X	X	X	X	X	X
Fuel, power & utilities, electricity		X					
Heating oil & gas		X					
Telephone services					X		
Water		X					
Credit/lending operations	X	X	X	X	X	X	X
Insurance	X	X	X	X	X	X	X
Local public transportation		X	X	X			
Accountants' services			X				
Lawyers' services	X		X				
Education/schools	X	X	X	X	X	X	X
Funeral services		X	X	X	X	X	
Lotteries, betting & gaming	X	X	X	X	X	X	X
Postal services	X	X	X	X	X	X	X
Art		X					
Non-profit organizations	X	X	X	X	X	X	X

EXEMPT GOODS AND SERVICES (note a)  
 (As of November 1, 1979)

TABLE II

The use of multiple rates can cause two types of problems: (1) the rate categories may not be sufficiently defined so that a product may fit into more than one category and (2) the categories themselves may be based on criteria for which information is not readily available. For instance, confusion resulted in the United Kingdom over whether a toaster-oven should be included with such items as ovens, ranges, stoves, etc., and taxed at the standard rate, or included with such items as food warmers and toasters and taxed at a higher rate. In Italy, objects of art are taxed at different rates depending upon whether the artist is alive or dead at the time of the sale.

Multiple rates cause particular problems for small businesses, especially retailers, dealing with goods covered by various rates. Business community representatives stated that it is extremely time consuming for such businesses to separately account for the various tax categories in the daily receipts. These enterprises rarely have the benefit of sophisticated, computer-assisted accounting techniques.

The Netherlands is one of several countries that has instituted procedures to alleviate some of the problems caused by multiple rates. Under its procedures, retail businesses need only determine the ratio of purchases in the various tax categories and can apply the same ratio to sales in determining VAT obligations. The Dutch government also instituted a consultation program whereby the Ministry of Finance will give a business an advance ruling as to the tax rate on a particular good.

We found that many of the countries were moving to simplify their VAT rate structures, as shown in table III on page 20. Belgium, Ireland, and the United Kingdom have decreased the number of rates they use. Denmark and the Netherlands have maintained VAT systems composed of one and two rates, respectively. Only Italy has increased the number of rates since the introduction of the tax.

Partial exemptions like multiple rates, can cause confusion and create difficulties. A business is considered to be partially exempt when it provides both taxable and exempt goods or services. Problems encountered by the banking community in the Netherlands in complying with VAT are illustrative of the administrative burdens placed on partially exempt organizations. The major proportion of banking services in the Netherlands are exempt from VAT. However, some bank services, such as guaranteeing loans and renting safe deposit boxes, are taxed at the standard rate. Because VAT regulations allow only the deduction of VAT paid on purchases of inputs used in providing taxable services, banks face the problem of distinguishing between those inputs used to provide

taxed services and those used in providing exempt services. Furthermore, whether a service is exempt depends not only on the nature of the service but on where the customer is located (i.e., in the Netherlands, within or outside the EEC). Gathering the information from customers necessary to make these distinctions has proven to be a significant administrative burden for banks.

At one time, the Dutch Government had instituted a procedure to assist partially exempt businesses. Under these procedures, such businesses were allowed to determine what percent of the value of their services was taxable, and apply the same percent to their purchases in determining their VAT liability. We were told that this program was overruled, however, by an EEC directive which requires that all exempt organizations determine exactly what costs are related to providing taxable services and which costs are related to exempt services.

Frequent rate changes were cited as causing administrative problems in both the United Kingdom and Denmark. In the United Kingdom, business representatives stated that frequent changes in the VAT rate structure greatly increased recordkeeping costs. Business representatives in Denmark stated that the government had, at first, not given them sufficient lead time to prepare for VAT rate changes. Danish Ministry of Finance representatives stated that the government presently gives the business community about 1 month to prepare for a rate change and normally waits for a new calendar quarter to put changes into effect.

In Ireland, business representatives discussed several administrative difficulties not mentioned in other countries. First, they claimed that the absence of VAT on retail sales invoices has resulted in financial loss for some firms. Retailers in Ireland are not required to state VAT separately on sales invoices so that most show VAT-inclusive prices. While this creates no problems for retail consumers, entrepreneurs purchasing items as business inputs are unable to claim credits because such credits must be documented on invoices. Thus, the VAT must be absorbed as cost of production or passed onto customers in the form of higher prices.

Secondly, representatives from the Irish business community discussed the need for standardization of invoices. At present, Ireland does not use a standardized sales invoice for all taxable transactions. Business community representatives stated that standardized invoices which include the VAT rate and amount listed separately (and in the same place on each invoice) would allow for more accurate and efficient compliance with VAT.

Value-added tax systems which result in reduced cash balances usually require the prompt payment of excess VAT receipts

For the most part, systems which improve business cash positions allow firms to hold excess VAT receipts for a period of time after the end of the taxation period, while requiring prompt government refund of excess VAT paid by firms. For example, we were told that the Danish system fully compensates businesses for recordkeeping costs incurred in complying with VAT. A business which owes VAT to the government need not file its return until 1 month and 20 days after the end of the calendar quarter. During the time between the collection of VAT and payment to the government, a business can place funds in interest-bearing accounts or otherwise use them to improve its liquidity position. In contrast, a business which has a refund due can file at the end of the quarter and receive it within 3 weeks. Businesses that continually receive refunds--primarily exporting firms--can file monthly returns. If the refund is regularly double or more the tax liability, the firm can file weekly returns. Businesses with export divisions can file separate returns for those divisions.

Because governments are the clearinghouse for excess VAT receipts and disbursements, their filing requirements and reimbursement practices can affect firms' cash flow positions. The EC experience with VAT demonstrates that government procedures can be designed to improve businesses' cash flow positions. The systems in most of the countries, however, result in reduced business cash balances.

#### THE EFFECTS OF VAT SYSTEMS ON BUSINESS CASH FLOW

A further difficulty in the administration of the Irish VAT involves exports to Northern Ireland. Under the Irish VAT system exports are zero rated as long as the buyer takes actual possession of the goods outside of Ireland. This regulation ensures that only items which are actually exported benefit from the zero rate. In most cases, this poses no problems for exporters. However, some difficulties have resulted in trade with Northern Ireland, which shares a relatively open border with Ireland. A firm selling goods to Northern Ireland and delivering them there (whether via the exporter's own transportation fleet or by common carriers) can claim a zero rate for those goods. However, the zero rating would not apply if the same purchaser takes delivery of goods in Ireland. They are instead taxed at their normal rate, which could be as high as 20 percent. Thus, firms conducting a large proportion of their business with Northern Ireland in the latter fashion may have a larger tax liability than firms which deliver to Northern Ireland.

Tax evasion has taken many forms. The most prominent form which appears in the service sector, involves businesses not charging VAT in order to avoid paying income taxes. Small businesses providing services directly to consumers, such as plumbers, beauticians and restaurants, would offer their services for a charge free of VAT and not record the sale. Customers benefit because they pay a considerably lower price for the services; and entrepreneurs benefit because they do not have to claim the earnings for income tax purposes. A variation of this sort of tax evasion occurs in Belgium where businesses would invoice customers for less than the full amount charged; the customer would then pay the full price for the service, but pay VAT only on the invoiced amount.

Since one firm's selling invoice is another firm's purchasing invoice, each business has an auditable document showing that the transaction should be taxed. In addition, governments can check compliance by comparing VAT forms with income tax forms. Despite this structural regulatory advance, VAT has not been a perfectly self-policing tax in the EEC. The governments reported tax evasion, particularly in the service sectors, and instances where the VAT system was used to defraud the government of money. The full impact of tax evasion and fraud varies from country to country; however EEC officials felt it was considerable for the Community as a whole.

#### TAX EVASION AND FRAUD

Cash flow problems can be particularly severe for businesses which continually pay more VAT on their purchases than they receive on their sales. These businesses include exporters and new firms making capital purchases and acquiring inventories. In addition, many VAT systems require that VAT be paid to the government during the taxation period when the invoice is issued, as opposed to when payment is received. This creates a cash flow problem for those firms which make a large proportion of their sales on credit because VAT is often owed to the government before payment is received from the customer.

By firms, while allowing the government to hold onto refunds owed. Business representatives stated that the Belgian VAT system requires firms to "prefinance" the government. Under this system, firms are generally required to file VAT returns with payment monthly, while rebates by the government are made quarterly. Consequently, a firm could report excess VAT costs for January, but the government would not determine that a refund was due until the end of March and the firm may not receive its refund until May.



Danish Government representatives admitted that detecting tax evasion involving misrepresentation of items purchased on sales invoices has proven to be very difficult. The tax inspectors are unable to check the authenticity of every invoice they come upon, especially since the VAT implementing

taxes on the earnings. Tax evasion also took the form of entrepreneurs buying items for personal use and then claiming a refund of VAT paid as if the purchase was meant to be used as a business input. The seller provides such entrepreneurs with sales invoices which misrepresent the item purchased or describe it only in general terms, e.g., describing a color television set as "electronic equipment." The seller colludes with the buyer realizing that he otherwise would not make the sale since the value-added tax represents a very large proportion of the retail selling price. The items purchased in this way usually are considered to be "luxuries" for purposes of the VAT system, and therefore heavily taxed. In one celebrated case, inhabitants of a fishing village in northern Denmark purchased color television sets and other items for personal use from a local department store, which provided them with invoices for business inputs such as fishing nets and rope which, as capital purchases, entitles these purchasers to refunds of VAT paid.

Another form of tax evasion involves barter arrangements between firms. Government officials in Denmark told us that businesses would circumvent the VAT system by barter trading without using invoices. In addition to pure barter arrangements, businesses are evading VAT by decreasing the price stated on sales invoices and receiving part compensation in kind. Once again, this arrangement is aimed at avoiding income taxes on the earnings.

Of the countries we visited, Belgium had instituted the most extensive program to limit such evasion of the value-added tax. Belgian authorities stated that tax evasion was particularly prevalent in the construction industry. To deal with this, the government requires that VAT be paid on the estimated value of a new house instead of the invoiced cost. This regulation has had the side-effect, however, of penalizing the do-it-yourselfer and forcing individuals who seek the lowest bidder to pay VAT which is sometimes out of proportion to actual costs. Belgium also requires hotels, restaurants, and cafes to use pre-numbered invoices, and automobile repair shops to register the license numbers of all cars they repair. These procedures are not foolproof, however. For instance, restaurants have been known to circumvent the procedures by giving customers unnumbered bills and later filling out pre-numbered invoices for reduced amounts. Indeed, the restaurant may not fill out any invoice at all.

Legislation does not require specific descriptions of items purchased on sales invoices.

In addition to tax evasion, government officials stated that their countries have experienced tax fraud in connection with VAT. We were told of instances where "paper" companies are established for the sole purpose of filing claims for substantial VAT refunds. Since it is common for new businesses to pay more VAT on purchases of business inputs than they receive in sales, governments normally pay the refunds without questioning the validity of the claim. After filing several claims and before governments can audit the companies' records, the "paper" businesses disappear. Officials in West Germany related a similar tax fraud where individuals would forge export documents and use them to claim unearned refunds from the government. The Dutch government has developed a spot-check system which, according to government representatives, has improved its ability to detect this type of fraud.

ECONOMIC IMPACT

The economic impact of adopting the value-added tax depended upon (1) the taxes replaced by VAT, (2) the domestic economic situation, and (3) the structure of the VAT system and the provisions governing its administration. Generally, these countries found VAT to be a useful government tool to generate revenue and implement macroeconomic policy. However, they experienced little, if any trade benefit from adopting VAT, primarily because it replaced other consumption taxes. Introduction of the tax resulted in price increases in most of the countries. Each of the governments took measures to mitigate the tax's inherent regressivity.

VAT AS AN ECONOMIC MECHANISM

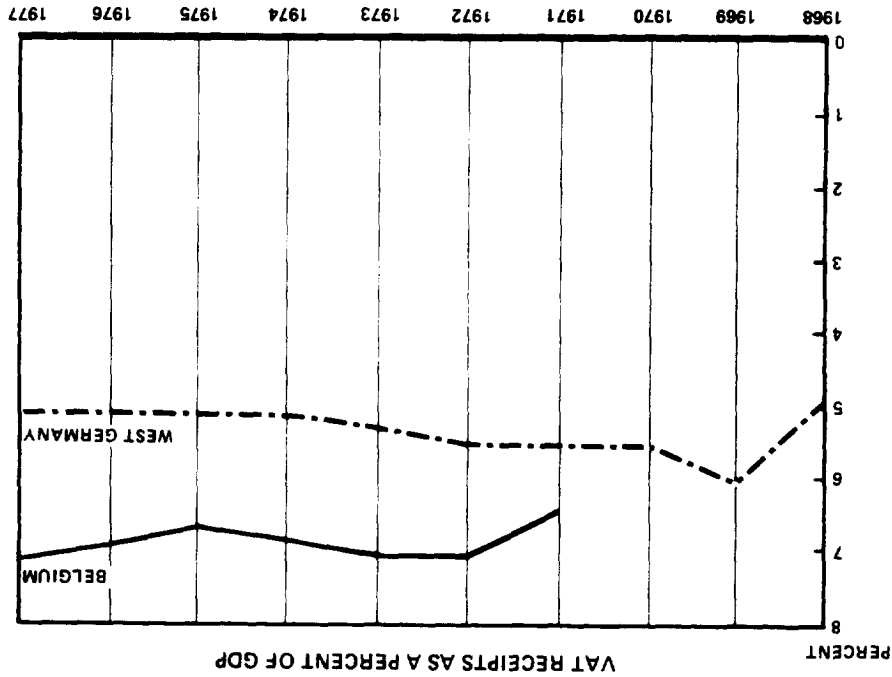
The governments used the value-added tax not only to generate revenue, but also as a fiscal tool to implement economic policy. European countries have traditionally relied more heavily than the United States on indirect as opposed to direct taxation. For the most part, these governments have found VAT to be a useful mechanism for raising revenue as well as a useful macroeconomic tool for decreasing domestic economic activity. However, business representatives claimed that the use of multiple rates and exemptions can cause distortions of competition and business decisions.

VAT as a revenue generator

For the most part, VAT in the EEC is a national tax collected by and for national governments. An exception is West Germany, where the federal government coordinates application of VAT law, and the state (Laender) governments administer the tax and collect revenue. Both the federal and the Laender governments share in the revenue collected according to percentages established by law. For 1978 and 1979, the revenue distribution was 67.5 percent federal and 32.5 percent Laender.

Government representatives stated that VAT is an important contributor to national tax revenues. In each country the value-added tax is significant in terms of total tax revenues and total economic activity. In 1977, VAT contributed as much as 19.1 percent of total tax revenues and represented as much as 8.1 percent of total gross domestic product (GDP) in these countries:

Source: OECD, "National Accounts Statistics".



Government officials stated that they found VAT to be a steady and predictable source of revenues because it is tied to consumption, which tends to remain relatively constant in relation to GDP over time. This is illustrated in the following chart which shows VAT revenues in Belgium and West Germany as a percent of GDP. Both of these countries had relatively few VAT rate changes during the period shown.

Source: Organization for Economic Cooperation and Development, "National Accounts Statistics"

a/Data given for 1976.

Country	VAT as a percent of all tax revenues	VAT as a percent of gross domestic product
Belgium	17.3	7.2
Denmark	19.1 (est.)	8.1 (est.)
Ireland	a/15.2	6.0
Italy	15.5	5.2
The Netherlands	15.9	7.4
United Kingdom	8.4	3.0
West Germany	13.0	5.2

VAT as a percent of all tax revenues  
 -----(percent)-----  
 VAT as a percent of gross domestic product

Government officials in several countries commented that VAT has advantages over other forms of taxation as a revenue generator. First, they claimed that VAT has less of a direct effect on business decisions than the income tax. The ease of shifting VAT onto customers enables firms to disregard it in making decisions affecting operations, investments and profits. Secondly, VAT is a broadbased tax and therefore can produce large increases in revenue with small increases in rates. Officials in Denmark explained that an increase in an excise tax, which in contrast to VAT is selective, usually results only in the decreased consumption of the product taxed, with no appreciable increase in revenues generated. As demonstrated on the following page, VAT rates have increased significantly in every country included in this study with the exception of Belgium.

We noted that in several countries the overwhelming majority of VAT revenues is paid by consumers and remitted to the governments through larger firms. In Belgium, for instance, purchases by individuals account for approximately 80 percent of the annual VAT yield. The remainder of the revenue is paid by businesses and local governments who are unable to claim a refund of VAT paid because they are acting as the final consumer or because they are exempted from the VAT system. In Ireland, government tax administrators informed us that 1.1 percent of the registered businesses remitted about 83 percent of VAT revenue collected. Hence about 99 percent of registered businesses (approximately 63,500 firms) remitted less than 20 percent of revenues. Similarly, about 20 percent of registered businesses in the United Kingdom remitted over 92 percent of VAT revenues in fiscal year 1977-1978.

In each of these countries, however, VAT revenues have been reduced by tax evasion, fraud and avoidance, as well as the use of zero rates and exemptions. No data was made available on this subject. However, one tax analyst estimated that the widespread use of exemptions and extensive tax evasion in Italy has reduced the estimated overall effective VAT rate from 9 percent to 2.3 percent. He further stated that the Italian Government loses an estimated 50 percent of potential tax revenues from all sources through tax fraud and evasion.

Consumers can minimize their VAT payments in two ways:

(1) they could make purchases abroad or (2) switch consumption from highly taxed items to goods that are exempted or taxed at lower rates. In Denmark, government officials commented that the practice of avoiding domestic taxes by making purchases abroad has become increasingly prevalent. This is a function of the overall high level of consumer taxation. The government has placed limits on the value of the goods that consumers

TABLE III

RATES SINCE INTRODUCTION OF VAT FOR DOMESTICALLY DISTRIBUTED GOODS AND SERVICES

COUNTRY	EFFECTIVE DATE	RATES (note a)				zero	Reduced	Standard	Intermediate	Increased
		(percent)								
Belgium	1/01/71	6.00	18.00	14.00	25.00					
	1/01/78	6.00	16.00		25.00					
Denmark	7/03/67	10.00								
	4/01/68	12.50								
	6/29/70	15.00								
	9/29/75	9.25								
	3/01/76	15.00								
Ireland	10/03/77	18.00								
	10/01/78	20.25								
	11/01/72	5.26	16.37	11.11	30.26					
Ireland	8/03/73	6.75	19.50	11.11	36.75					
	3/01/76	10.00	20.00		35.00					
	3/01/79	10.00	20.00		40.00					
	3/01/79	0								
Italy	1/01/73	1.00	12.00		18.00					
	1/01/75	1.00	12.00	18.00	30.00					
The Netherlands	1/01/69	4.00	12.00							
	1/01/71	4.00	14.00							
	1/01/73	4.00	16.00							
	10/01/76	4.00	18.00							
	2/08/77	1.00	14.00	18.00	35.00					
United Kingdom	4/01/73	10.00								
	7/29/74	8.00								
	11/18/74	8.00								
	4/12/75	8.00								
	7/18/79	15.00								
West Germany	1/01/68	5.00	10.00							
	7/01/68	5.50	11.00							
	1/01/78	6.00	12.00							
	7/01/79	6.50	13.00							

a/ All national rate structures also include a zero rate for exports.

Source: Compiled by GAO based on information provided by foreign officials.

The use of VAT as a  
macroeconomic policy tool

can bring into the country free of VAT, but the financial gain can be substantial even within the limits. Government officials in Ireland noted a change in consumption patterns to minimize VAT payments. Consumer purchases shifted from goods taxed at the standard and increased rates to goods taxed at the lower rate, causing 1977 VAT receipts to be nearly 4 percent less than was forecast.

Various EEC governments used VAT to influence domestic economic activity. Its use as a macroeconomic policy tool, however, has not always proven successful. In addition, increases in VAT rates have caused short-term economic distortions in several countries.

Instances where VAT was used successfully involved efforts to decrease economic activity. For example, the West German government in 1973 reduced the refund of VAT paid on purchases of capital equipment to discourage capital investment and thereby slow economic growth. We were told that this action was highly successful. In Denmark, economists were predicting a 4- to 5-percent increase in private consumption for 1978, which would have aggravated an already inflationary economic situation. Consequently, the government increased the VAT rate from 18.00 to 20.25 percent to dampen private consumption. We were told that this rate increase moderated the actual rise in private consumption to 2 percent.

We learned of one instance where VAT was used unsuccessfully. In 1975, Denmark attempted to take advantage of a predicted upswing in the world economic situation by decreasing the VAT rate from 15.0- to 9.5-percent for a 5-month period. This action was expected to increase consumption and thereby spur domestic capital formation. The rate decrease had the desired effect on consumption. However, domestic producers were unable, in the short run, to meet the resultant demand for nonessential, high-cost items. This caused consumers to turn to imports. Consequently, rather than spur domestic capital investment, the rate decrease only worsened the Danish trade deficit.

In several countries, anticipated increases in VAT rates caused a short-term increase in consumer spending. Consumers would increase expenditures before the change went into effect in order to avoid paying the higher tax rates. Government officials informed us that the resulting economic distortions were slight, however. Consumption tended to decrease after

On the other hand, a country which adopts VAT with reductions in direct taxes may gain a competitive advantage because the government can rebate a larger proportion of the tax content of exports and collect VAT on imports. Of the countries we

The introduction of VAT in the Community had little if any effect on the international price competitiveness of EEC goods because the governments adopted VAT as replacements for other consumption taxes. Under GATT, governments may rebate the indirect (i.e., consumption) tax content of their exports and impose all applicable indirect taxes on imports. GATT prohibits governments from making such border adjustments for direct (i.e., income and payroll) taxes. As a consequence, the substitution of VAT for other indirect taxes gave these countries no competitive advantage that they did not already have.

Government and business officials unanimously agreed that the introduction of the value-added tax had no more than a negligible effect on the trade competitiveness of their goods because VAT did not significantly change the tax treatment of exports and imports. Officials in those countries which substituted VAT for cascade taxes stated, however, that their countries may have experienced a slight change in trade competitiveness.

#### TRADE IMPACT

Business representatives generally agreed with the government position that the value-added tax is neutral with regard to business decisions. They explained, however, that the use of multiple rates and exemptions can cause distortions and affect business decisions. Multiple rates and exemptions can give certain products or services a competitive advantage over others. For instance, the Italian VAT system exempts farm cooperatives, providing them a competitive advantage over individual farmers, who are subject to VAT. In addition, the use of partial exemptions can cause businesses to emphasize the taxable portion of operations so as to maximize their reimbursement of VAT paid. Banking representatives in the Netherlands explained that the Dutch VAT system exempts a larger proportion of domestic banking services than international services. This has caused banks in the Netherlands to emphasize their international services over domestic services.

#### Distortions of tax neutrality

the rate change so that consumption over the long run remained unchanged. Government officials also stated that anticipated revenues lost were minimal.



Paul Wonnacott, "Tax Adjustments on Internationally Traded Goods," United States International Economic Policy in An Interdependent World, July 1971.

It was reported <sup>1/</sup> that West Germany, for instance, underestimated the border tax adjustment for the cascade tax and therefore may have benefited from the adoption of VAT. Prior to the changeover to the value-added tax in 1968, the West German Government imposed a cascade tax of 4 percent. Because of the cumulative nature of the tax, however, the government imposed border tax adjustments ranging from 4- to 10-percent. The government has since estimated that the cascade tax had an average effective rate of 12 percent of the value of the final product. Consequently, while the actual effect may have differed from product to product, there was on the average some tendency for undercompensation under the cascade tax system. Accordingly, the switch to VAT with full border tax adjustments may have constituted a modest trade advantage.

Government officials in countries which substituted VAT for cascade taxes explained that the change may have had a slight effect on trade competitiveness. This effect resulted from the greater precision permitted in determining border adjustments for VAT. As explained in chapter 1, it is impossible to determine the exact cascade-tax content of goods, so that governments had to estimate border tax adjustments. To the extent that they underestimated, the adoption of VAT improved the price competitiveness of their goods. However, the introduction of VAT may have decreased price competitiveness if the government had been overestimating the cascade-tax content.

visited, only the 1979 tax reform in the United Kingdom included an increase in the VAT rate with decreases in taxes on profits and incomes. At the time of our review, however, no reliable information was available concerning how this tax reform may have affected trade competitiveness.

IMPACT ON PRICES

The adoption of the value-added tax reform package increased prices in most of the countries according to officials in those countries. This effect was caused by various factors, including: the introduction of a VAT designed to generate increased revenues, and double taxation caused by businesses charging VAT and the prior tax on the sale of some goods. In addition, abolition of the cascade tax did not always result in the expected price decreases.

Country	Increase in prices attributable to introduction of VAT	Replacement of Cascade Tax	Double taxation	VAT designed to increase revenues
Belgium	18	X		
Denmark	approx. 10%		X	X
Ireland	approx. 2%		X	
Italy	2%	X		X
The Netherlands	2%	X		X
United Kingdom	negligible			
West Germany	negligible			

In each of these countries, the tax's price impact was to some extent offset by reductions in other consumption taxes. Of course, numerous other factors may have augmented or offset these price impacts.

By far the greatest impact occurred in Denmark. Government representatives explained that the Danish VAT was designed to more than compensate for revenues lost through abolition of the wholesale sales tax. The government had forecast that this tax reform would increase prices by about 10 percent. With the exception of Denmark, each of the countries designed its value-added tax system to only compensate for lost revenues from the superseded taxes.

Nevertheless, the imposition of VAT caused an increase in prices in most of these countries. Four of the countries we visited--Denmark, Ireland, Italy, and the Netherlands--explained price increases due to misunderstanding of the tax reform when VAT was introduced. This was the primary VAT-related cause of price increases in Ireland. Government officials explained that businesses sometimes overcompensated for VAT

In addition, Belgium, Denmark, and the Netherlands operated education programs to limit price increases caused by a

controls.

The governments of the countries instituted a number of programs and policies to limit VAT's impact on prices. Government officials in Belgium and West Germany realized that, whatever the impact, it would be magnified during a period of high inflation. Therefore, they delayed the introduction of their VAT systems so as to adopt them in less-inflationary periods. Belgium reinforced its efforts with strict price

The imposition of VAT and the attendant price increases hold out the danger of generating a wage-price spiral. Government and business representatives in Denmark and the Netherlands explained that they had been spared this effect by their national wage indexation programs. In Denmark, for example, organized labor, which is virtually all wage earners in the country, subscribes to a wage indexation program in lieu of periodic wage negotiations. Under this system, wages are automatically adjusted every 6 months based on a consumer price index which does not include indirect taxation. Consequently, wage increases subsequent to the adoption of VAT did not reflect price increases caused by VAT, thus forestalling a wage-price spiral. However, government representatives in the United Kingdom were fearful that the most recent tax reform, which includes a sharp increase in VAT rates, may result in a wage-price spiral.

In Belgium, Italy, and the Netherlands, the primary effect stemmed not from the VAT but from the nature of the cascade tax. As was explained earlier, the cascade tax affected the prices of products differently depending on how many times the products changed hands in the production/distribution process. As a result, products manufactured by vertically integrated firms tended to be more lightly taxed than those which changed hands often. The introduction of VAT had the effect of equalizing the tax burden among products. Those businesses whose products were undertaxed tended to increase prices to reflect the increased tax burden. However, those businesses whose products were overtaxed under the cascade tax system sometimes were able to maintain their prices despite the decreased tax burden. Hence, overall prices increased.

because they did not realize that VAT replaced the former consumption tax system. Consequently, they added VAT to prices which already included taxes under the former tax system. Government officials also claimed that some businesses may have taken the opportunity presented by a major tax reform to increase prices by more than was necessary in full understanding of the nature of the tax change.

As is the case with most consumption taxes, the value-added tax is considered to be regressive. A regressive tax is one which has a greater impact on lower income individuals than on those at higher incomes. Lower income individuals pay a greater proportion of their income in VAT because they spend a larger proportion of income on consumption. Higher income individuals, on the other hand, can save to a much greater degree and therefore pay proportionately less VAT. The countries attempted to mitigate regressivity through the use of exemptions and/or multiple rates, and by taking measures outside of the VAT system.

#### REGRESSIVITY

misunderstanding of the tax reform. These programs were similar to those instituted to alleviate start-up problems. The program instituted in Denmark, for instance, was in operation during the 3-month period before the tax was imposed. Information was disseminated through television, newspapers and trade magazines, a Customs Service pamphlet, and speeches made to groups of business representatives arranged by various trade unions.

Tables II and III demonstrate the extent to which the various countries used multiple rates and exemptions. Governments would exempt necessities or tax them at a reduced or zero rate to decrease the tax burden on lower income groups, and tax luxuries at an increased rate to increase the tax burden on higher income groups. Among the services provided exemptions for social reasons are: medical services and hospitals, home rentals, and education. Items taxed at a reduced or zero rate normally include food and clothing, in addition to housing and medical care. Those taxed at an increased rate include such items as yachts, private airplanes, jewelry, furs, etc.

Of the countries we visited, only Ireland and the United Kingdom made extensive use of zero rating to mitigate VAT's regressivity. Government representatives in Ireland explained that zero rating is the most effective means of reducing regressivity because it is the only means of providing full relief from the tax. Since a business dealing in zero-rated products can claim a refund of VAT paid, it does not pass VAT costs onto consumers. In contrast, an exempted business cannot claim a refund of VAT paid, so that it might pass VAT forward in the form of higher prices. As a result, an exemption may not provide full relief from VAT as does a zero rating. A business whose product is taxed at a reduced rate can, of course, pass its VAT costs forward.

On the other hand, the use of a zero rating will reduce revenue generated through VAT. Government officials in Italy explained that zero-rating had not been considered for necessities because of the anticipated loss of revenue. Taxes collected on necessities presently represent approximately 30 percent of annual VAT revenues. Similarly, West German Government officials explained that medicines are taxed under the standard rate, as opposed to the reduced or zero rate, because the tax on medicines annually generates 800-million to 1-billion Deutch marks (\$410 to \$515 million).

Of all the countries included in our study, Denmark made the least effort to address regressivity through the VAT structure. The government chose, instead, to impose a single-rate system with a relatively broad tax base, and make various adjustments to the social welfare and income tax systems to counter the tax's regressivity:

--Subsidies to farmers, food processors and others were increased to keep food prices down.

--The income tax system was made more progressive.

--Subsidies to pensioners, students, and others were increased to compensate for VAT-induced price increases.

At about the same time VAT was introduced, the government also increased the annual subsidy paid to families to offset the cost of raising children. The Government of Denmark also maintains mechanisms to fully compensate the poor for VAT rate increases. Under the Danish social security system, allotments paid to old age pensioners and others are adjusted to a price index which includes all taxation. Government officials indicated that the Danish VAT itself has been found to be regressive.

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