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E-COMMERCE AND TAXATION

TAXATION OF ELECTRONIC COMMERCE – A U.S. VIEW

HAL R. VARIAN*¹

One of the apparent attractions of Internet shopping is the absence of sales tax collection. According to a recent U.S. survey, 46 percent of online buyers said they have never paid sales tax on an Internet purchase and 75 percent said they would buy less on the Internet if a sales tax were imposed.² State officials, alarmed by the rapid growth of Internet commerce and the potential of lost sales tax revenue, have called for the legislation allowing them to collect sales taxes on Internet transactions.

Others have argued that the de facto tax-free status of online shopping has provided an important stimulus to electronic commerce. In 1998, Congress passed the Internet Tax Freedom Act, which placed a three-year moratorium on new Internet taxes. In 1999 Congress created the Advisory Commission on Electronic Commerce, a 19-member panel of representatives from government and the high-tech industry to study online taxation and related issues. The Commission is scheduled to release its report in April 2000.

The purpose of this briefing is to lay out the relevant issues and consider some of the proposed solutions. My conclusion: *The current system of U.S. state taxes is overly complex and poorly designed. No matter what one thinks will happen with online purchases, it stands in need of serious reform.*

Policy Background

Sales taxes and use taxes

In 1998 state sales taxes in the United States generated about \$192 billion dollars, roughly 25% of

state and local tax revenues. This amounts to about 5 percent of household income, and is equivalent to \$2,000 per household or about \$770 per capita.³ The only states that do not have a sales tax are Alaska, Delaware, New Hampshire, Montana, and Oregon, which together comprise about 3% of the U.S. population.⁴

Sales taxes are typically collected by the seller, at the point of sale, and thus apply only to purchases made in a given state. However, all 45 states that have sales taxes also have “use taxes,” which apply the same sales tax rate to out-of-state purchases made by state residents. The problem is that there is no easy way to enforce the collection of use taxes, since states do not have tax jurisdiction over out-of-state companies, and thus cannot require them to collect use taxes at the point of sale.

Collecting use taxes from consumers

Experiments in collecting use taxes directly from consumers have not been successful. Michigan and Wisconsin, for example, have asked taxpayers to report their out-of-state purchases on their state income tax forms, but very few taxpayers responded.⁵ Nevertheless, several states have indicated that they intend to pursue educational campaigns and other efforts to get consumers to pay use taxes. Few observers hold out much hope for these efforts.

Because use taxes are so difficult to enforce, most people regard out-of-state purchases as being effectively tax free, making mail order and online purchases more attractive than if they were taxed the same as local purchases. Economist Austan Goolsbee analyzed a survey of the purchase behavior of 15,000 consumers and estimated that online



Tax-free internet shopping costs billions in lost tax revenue

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http://www.internetpolicy.org/briefing/April_00.html.

² From an online survey of 7,000 online buyers at point of sale, conducted by Bizrate.com in September 1999.

³ Note that these figures include sales taxes paid by both businesses and consumers.

⁴ See <http://www.census.gov:80/govs/www/qtax.html>; <http://www.census.gov:80/population/projections/nation/hh-fam/tableIn.txt>;

<http://www.census.gov:80/hhes/income/income98/inc98hi.html>.

⁵ See <http://www.treas.state.mi.us/mitax/suw/useindex.htm>, for example.

sales could drop by almost 25% if online purchases were taxed the same as local purchases.⁶

Collecting use taxes from firms

The situation is quite different for businesses. Businesses are subject to tax audits by state authorities which gives states a relatively easy way to enforce payment of use taxes. Although estimates of use tax compliance by businesses vary widely, everyone agrees that it is much higher than for consumers.

The higher compliance rate by businesses is important since only about 60 percent of state tax revenues come directly from consumers; the remaining 40 percent comes from business and non-profit purchases.⁷

Economists argue that taxing business purchases is not wise since these taxes end up being passed along to consumers in the form of higher prices, which distorts both consumer purchases and business structure. Suppose that firm A sells a product to firm B for \$1 plus a 5 percent sales tax. Firm B then sells the same product to a consumer for \$2 plus another 5 percent sales tax. If these taxes are fully passed along to the consumer, he or she ends up paying 15 cents tax on a \$2 purchase. The increase in the final tax paid by the consumer due to the taxation of business inputs is known as “pyramiding” or “cascading.” This pyramiding of taxes will cause consumers to consume less of the good than they would have otherwise and may cause firms to change their behavior simply to reduce their tax burden. For example, firms may choose to vertically integrate solely to avoid taxation on purchases of intermediate products.

The situation isn’t quite as simple as this example suggests since all states exclude goods that are directly intended for resale from sales tax and many states exclude component parts of taxable goods. However, goods such as office furniture, yellow pads, computer equipment, and so on are often sub-

ject to state sales and use tax. The cost of these goods goes into overhead, but these overhead costs generally end up being reflected in the final price that consumers pay, which can make the *effective* tax on consumer purchases far higher than intended.

This pyramiding effect of U.S.-style sales taxes should be contrasted with the widely-used Value Added Tax (VAT), where each business receives a credit for the taxes paid to its suppliers, so that only final consumption ends up being taxed. In the example given above, firm B could deduct the 5 cent sales tax paid to firm A, making the tax burden on the end consumer only 5 percent. The U.S. treatment of out-of-state purchases is particularly perverse since, in practice, it exempts final consumption but taxes business production, exactly the opposite of what should happen.

Difficulties with enforcement

It is important to understand that collecting a sales tax, or more properly, a use tax, on out-of-state purchases, is not a “new” tax. Use taxes have been on the books for years in most states. The issue is simply one of enforcement. States are able to collect use taxes on businesses located within the state since businesses are regularly audited and are required to prove that they have paid the taxes levied on them. Individual consumers, however, are rarely audited by state tax authorities and therefore generally escape payment of use taxes.⁸

It might be thought that a state could simply require out-of-state businesses to collect sales taxes on items shipped to its residents. In 1987 North Dakota tried to do just this by passing a law defining a “retailer” to include “every person who engages in regular or systematic solicitation of a consumer market in th[e] state.” Lawyers use the term “nexus” to describe the degree of business activity or presence required before a tax jurisdiction can require collection of a tax by a remote vendor. The North Dakota law was asserting that mere solicitation of a consumer market in a state was enough to create nexus. Subsequently the state attempted to collect taxes from mail order companies located in other states.

⁶ See “In a World Without Borders: The Impact of Taxes on Internet Commerce,” forthcoming, *Quarterly Journal of Economics*. See also “Evaluating the Costs and Benefits of Taxing Internet Commerce” (with Jonathan Zittrain, Harvard Law School), *National Tax Journal*, 52(3), September 1999, pp. 413–428. It is worth noting that the estimated decline in mail order purchases is of similar magnitude.

⁷ See Raymond J. Ring, “Consumer’s Share and Producer’s Share of the General Sales Tax,” *National Tax Journal*, 52(1), March 1999, 79–90.

⁸ There are exceptions. Automobiles are required to be registered in the state where they are operated, so authorities can collect use taxes at that point.

Collecting use taxes on out-of-state or online purchases is very difficult

Quill Corporation⁹, a mail order vendor of office equipment and supplies located in Illinois, took the position that since the company did not have a physical presence in North Dakota it should not be required to collect sales tax from its customers and remit the tax to the state. The trial court ruled in favor of Quill, noting previous rulings that supported the physical presence requirement for nexus. The North Dakota State Supreme Court reversed this ruling, but in 1992, the U.S. Supreme Court overturned the state court's decision and ruled that North Dakota's enforcement of its use tax against Quill was a violation of the Commerce Clause of the U.S. Constitution.¹⁰

According to the Supreme Court, North Dakota could not unilaterally make its own jurisdictional definition. However, the Court noted that the Commerce Clause gives Congress the power to regulate interstate commerce, and that Congress could choose to establish new requirements for nexus if it wished. Some attempts were subsequently introduced in Congress to establish conditions under which out-of-state commerce could be taxed, but they were never enacted. Taxation of out-of-state purchases was subsequently relegated to the back burner until the rapid growth of Internet commerce again brought this issue to the fore.

Note that companies that do have a physical presence in a state are required to collect sales tax on purchases made by state residents, and this requirement is widely enforced. E-commerce vendors that also have physical presence in several states argue that they are at a competitive disadvantage relative to "pure" e-commerce vendors. Some companies, such as Barnes & Noble and Gateway Computer have created separate subsidiaries to avoid the requirement of collecting sales tax. Such a policy precludes the subsidiary from offering any services (such as returns) through the local outlets.

Policy Options

There are four broad policy options. The first is to maintain the status quo, which requires consumers to pay taxes on in-state purchases but, effectively, allows them to avoid taxes on most out-of-state

purchases. A second option is to regularize the status quo by banning sales taxes for all Internet purchases. The third option is to set up a system that will allow states to collect use taxes on out-of-state purchases. The fourth is to eliminate the sales tax for all purchases, online and offline, and use other forms of taxation to make up for the lost revenue.

Maintain the status quo

There are many forecasts for the growth of e-commerce. However, these forecasts often lump together "business to consumer (B2C)" with "business to business (B2B)" transactions. Since businesses generally pay use tax, the appropriate number to consider is online shopping by consumers. Jupiter Communications estimates that online shopping (excluding cars and real estate) was about \$5.8 billion in 1998 and will grow to \$37 billion in 2002. Total retail sales in 1998 were about \$2.75 trillion¹¹, implying online shopping was about 0.2% of total retail sales in 1998. In the fourth quarter of 1999, online shopping was \$5.3 billion, which was 0.64 percent of total retail sales during that period.

Even using very optimistic forecasts, online sales to consumers in 2002 will comprise only about 1% of 1998 retail sales. By way of comparison, catalog sales were at least \$60 billion in 1995, roughly 4% of total retail sales in that year and perhaps much larger.¹²

It is also important to recognize that not all online sales are of taxable goods. The "big ticket" item currently sold on the World Wide Web is, in fact, airline tickets, which are not subject to state sales tax. Hence, only a fraction of online sales represent lost state tax revenue. It may well happen that online sales peak out at some point in the future, just as catalog sales and home shopping have peaked out. If online sales do peak out at a relatively low level, they may just be regarded as a nuisance and the issue of taxing online commerce may recede into the background, just as the issue of mail order sales did several years ago.

University of Tennessee economists Donald Bruce and William F. Fox estimate that by 2002 the lost

Maintain the status quo because online shopping is a very small share of total retail sales

⁹ See <http://www.quillcorp.com/>.

¹⁰ *Quill Corp. v. North Dakota*, 505 US 298 (1992).

¹¹ See <http://www.census.gov:80/svsd/www/adseries.html>.

¹² Jared Sanders. "At Last, Main Street.com Is Opening for Business," *Wall Street Journal*, June 17, 1996.

state tax revenue due to Internet commerce will be on the order of \$10.8 billion.¹³ Though this sounds like a lot, it is less than 2 percent of their forecast state and local tax revenues for 2002.

Ban Internet taxation

Senator John McCain has introduced Senate Bill 1611, which broadens the scope of the Internet Tax Freedom Act and makes the current moratorium permanent. There are many unanswered questions about how such a ban would work. Would businesses not be required to pay use tax on items purchased over the Internet? It is widely expected that businesses will move much of their procurement to the Internet; they would likely accelerate this movement if it allowed them to avoid sales tax entirely, and this would result in substantial revenue loss for state and local governments.

Would a sales tax ban for Internet purchases apply to companies selling to in-state purchasers? If so, we might expect to see many Main Street merchants move to an Internet-based ordering system. An extreme example might be a computer terminal in a local drugstore that allowed a user to place an order “over the Internet” and pick up the goods on the way out the door.

A permanent ban on Internet taxation gives favorable tax treatment to one form of purchase. The Internet Tax Freedom Act argued that this practice was justified due to the “infant industry” nature of the Internet. However, as the Internet matures, this argument becomes less tenable.

Collect taxes on out-of-state sales

At the urging of the states, Congress could decide to pass a law eliminating the physical presence requirement for nexus, which would allow states to compel out-of-state vendors to collect use taxes. However, it must be noted that such a law would be politically unpopular in some quarters. Congress may well be reluctant to act since it is being asked to enable the collection of a tax, but would receive none of the revenues from that tax.

¹³ Donald Bruce and William F. Fox, “E-Commerce in the Context of Declining State Sales Tax Bases,” February 2000. <http://cber.bus.utk.edu/e-comm.pdf>.

Alternatively, states could form coalitions that would allow them to collect taxes for each other. The trouble with this plan is that the more states join such a coalition, the more attractive it would be for other states to stay out of it. Suppose, for example, that California and Arizona form such a coalition. If Nevada refused to join, e-businesses would likely find Nevada a very attractive place to locate their servers, warehouses, and employment.

A third option would be to create a central tax collection agency (a “trusted third party”) to collect taxes on remote purchases and distribute them to the states. Such a collection agency could be created by a coalition of states or by the federal government, but would undoubtedly also be politically unpopular.

But let us suppose that these obstacles could be overcome and states were able to enforce use tax collection. There would still be a problem of how to do it. It has been suggested that credit card companies could collect the tax, but the most likely outcome is that the tax would be charged when the order is processed by the vendor.

One complication is that there are thousands of sales tax jurisdictions in the United States, since many localities charge their own sales taxes on top of the state sales tax. In fact, sales taxes represent about 15% of local tax revenues in the United States.¹⁴ The boundaries of these tax jurisdictions do not typically coincide with zip code boundaries, making exact calculation particularly difficult. To avoid detailed calculation of sales taxes, mail order firms that are required to collect taxes in states where they have a physical presence sometimes follow the “capital city rule” in which the sales tax collected is equal to the rate that prevails in the capital city of the state.

However, there are software programs that will estimate appropriate sales tax rates (see, e.g., <http://theSTC.com>, which features a demonstration of a sales tax calculator). Programs like this sell for \$50-\$1,000, depending on their sophistication. Because of this, determining the appropriate jurisdictions and looking up the rates is a nuisance, but not a huge one. A more significant issue is the

¹⁴ United States Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism 1989, Vol. II, Table 25, as cited in Oldman, Oliver, and R. D. Pomp. *State and Local Taxation*. 3rd ed. Hartford, Conn.: R. D. Pomp, 1998.

way the tax base differs across states: books are taxable in California, but not in Massachusetts. There are plenty of more bizarre examples: at one time New York counted large marshmallows as taxable snacks, while small marshmallows were designated tax-exempt food.¹⁵

Even this issue is not as significant as it first appears since remote vendors of a single category of consumption goods, such as clothes or books, would not find it particularly onerous to track which states exempted those items from sales tax. On the other hand, a vendor such as Wal-Mart would find it hard to track all the sales tax rules for all the jurisdictions to which it might ship items. Getting sales tax calculations 100% right would be quite costly; but getting them 95% right would not be terribly difficult.

If sales taxes are to be collected on out-of-state purchases, it would be highly desirable to harmonize the definitions of what is taxable in various states and to simplify the local variation in tax rates. In *Quill* the Supreme Court explicitly noted the compliance burden due to the complexity of state sales tax treatment. Various state organizations, such as the National Governor's Association, recognize that tax simplification is an important aspect of e-commerce taxation.¹⁶

Eliminate the sales tax

A fourth option, that has not received much attention, would be to eliminate the sales tax entirely for both online and offline purchases.

State sales taxes have not been around forever; they were created in the 1930s as temporary emergency measures, enacted to deal with the drop in tax revenue due to the Great Depression. As one observer puts it "... rejected by economists as medieval anachronisms, the taxes were drawn up hastily, with little thought to their exact aims beyond raising money."¹⁷

As this quote illustrates, sales taxes are not regarded as a particularly "good" or "well-designed" tax by most economists. I have already mentioned the

tax pyramiding problem. Another difficulty is that sales taxes apply primarily to physical goods. Since the 1930s, services have risen significantly as a share of consumption, and these often escape taxation.¹⁸ Groceries, as well as many other goods, are almost entirely tax-exempt as well, with the result that only about 40% of consumption in the United States is actually subject to the sales tax.¹⁹

Economists generally argue that a low tax rate on a large base is better than a higher tax rate on a narrow range of consumption goods. A 5% tax rate on 40% of consumption raises approximately the same revenue as a 2% tax rate on all consumption, but the 2% tax distorts consumer purchase decisions less.

Forty out of the fifty states have an income tax, so eliminating the sales tax and increasing the income tax would have almost no incremental administrative cost. Sales tax, by comparison, has to be collected at every point of sale, which is a substantial cost to businesses. Even states that don't currently have a sales tax wouldn't face much of a new *administrative* burden since almost all state income taxes are tied to the Federal Adjusted Gross Income, and putting a simple 2% income tax in place to replace sales tax revenues would require no measurements or audits. In fact, most states devote few resources to audits of individual state income tax returns, anyway. Instead they let the Internal Revenue Service (IRS) do the auditing, and base their own charges on the outcome of that audit.

Some have argued that the sales tax system is attractive since it is a tax on consumption rather than income. However, the sales tax is a particularly poorly designed consumption tax. A much better way to tax consumption is to make savings tax deductible.²⁰ This is not as big a change in taxation policy as is commonly thought since substantial portion of the U.S. population already faces something close to a consumption tax, due the availability of IRAs, 401(k) plans, Keough plans, and other tax-deferral plans. If one wanted to move more towards a consumption tax, the easiest way to accomplish it would be to relax constraints on

Collecting sales taxes on out-of-state purchases raises the question of what is taxable

Replace the sales tax by an income or consumption tax

¹⁵ Howard Gleckman, "The Tempest Over Taxes," *Business Week*, Feb 7, 2000, EB32.

¹⁶ See <http://www.nga.org>.

¹⁷ John F. Due, "Retail Sales Taxation in Theory and Practice," *National Tax Journal*, 3, 314-315, 1950.

¹⁸ Hawaii, New Mexico and South Dakota tax several services; in other states, only a few services are taxed.

¹⁹ Bruce and Fox, op. cit.

²⁰ Since consumption equals income minus savings, this is equivalent to a very broad-based consumption tax. See Murray Weidenbaum, "Taxing e-sales without hindering the 'Net'," *The Christian Science Monitor*, Thursday, March 2, 2000.

these tax-deferred savings vehicles rather than expand the sales tax.

Some research would be necessary to see how closely one could approximate the current incidence of the sales tax with an income or consumption tax, but this problem is solvable, given the right data. Indeed, up until 1986 the IRS allowed taxpayers to deduct sales taxes and provided tables illustrating average sales tax paid by income level in each state.²¹

However, there are drawbacks to replacing the sales tax with an income or consumption tax. This is a big change from what we are doing now, and there would certainly be transition costs.²² Taxpayers would find loopholes to avoid paying income tax, just as they have found a loophole to avoid paying sales tax. The total tax burden on taxpayers in each state would be much more explicit, which can be viewed as either a benefit or a cost, depending on one's point of view.

Eliminating the patchwork of state sales taxes in favor of state income or consumption taxes should certainly be given serious consideration, however, as it eliminates the differential impact of remote purchases via the Internet or any other means, as well as being attractive in its own right since it would result in a lower tax rate on a broader base than the current system.

International Issues

Since online commerce is global, its tax treatment is also global. For example, Canada and most European countries rely on Value Added Taxes, which are built into the price that the end consumer pays. When goods are exported from these countries, the VAT is refunded to the exporter.²³

²¹ If sales taxes were rolled into state income tax, some adjustment in the federal income tax would be necessary since state income taxes are currently deductible, while sales taxes are not. Some way would have to be found to allow local taxing jurisdictions, which currently receive about 15 percent of the sales tax revenue, to receive a similar amount from such an income tax surcharge.

²² Noted tax economist Charles McLure argues that substituting an income tax for a sales tax has much to recommend it, but concludes "The primary reason for not favoring substitution of state and local income taxes for the sales and use tax is the tyranny of the status quo; such a wholesale switch in tax policy would cause wrenching adjustments." "Rethinking State and Local Reliance on the Retail Sales Tax: Should we Fix the Sales Tax or Discard It?," *Brigham Young Law Journal*, forthcoming.

²³ See http://dir.yahoo.com/Business_and_Economy/Companies/Financial_Services/Taxes/Value_Added_Tax_VAT/ for some companies that specialize in these refunds.

If a CD is shipped from the United States to, say, the Netherlands, as a matter of practice it generally escapes both U.S. sales tax and the Netherlands VAT since small-value imports are exempted from the VAT. However, if a dozen CDs are shipped to an address in the Netherlands, the custom officials will hold the shipment until the purchaser pays the appropriate VAT. It is likely that VAT countries will push for a tax treaty requiring U.S. companies to collect VAT taxes for shipments to their residents. The United States could, in turn, require collection of state use taxes for foreign shippers, if Congress and the states relax nexus requirements. Such negotiations would have to be part of international tax treaties.

The situation will become even more complicated when there is no physical good such as a CD that is transferred, but rather just a stream of "bits," or pieces of computer code, traveling over the Internet. Detection of "taxable bitstreams" could be very difficult and may be more trouble than it is worth, especially if competition pushes the price of such digital goods to very low levels.

Summary

- Even optimistic forecasts of online shopping indicate that it will be several years, if ever, before lost sales tax revenue becomes a serious problem.
- If it does become a serious problem, Congress could easily pass a law relaxing nexus standards thereby allowing states to collect taxes from out-of-state vendors.
- State and local sales taxes are overly complex and confusing with a variety of rates, bases, exemptions, and practices. Simplification should be part of any plan allowing taxation of remote purchases.
- Ideally businesses should not have to pay sales tax on purchases of any intermediate products and only final consumption should be taxed.
- It is generally better to have a low tax rate on a broad base rather than a high tax rate on a narrow base. Due to the growth of the services sector, a relatively small part of consumption is actually subject to the sales tax, resulting in potentially significant economic distortions.
- Even if we come up with a more coherent scheme for the United States, several of the same issues will arise for international purchases.

For global commerce tax treatment should also be global. VAT?

We have plenty of time for careful study of the issue of online sales tax. Whatever one thinks about the eventual magnitude of sales tax losses due to online purchases, it is clear that the current state and local sales tax systems in the United States are in need of serious reform. Instead of adding another patch to a poorly-designed and inefficient system, it would make more sense to use the current attention being paid to sales taxes as an opportunity to make some fundamental changes.



ALTERNATIVES TO THE CONCEPT OF PERMANENT ESTABLISHMENT**

CHARLES E. MCLURE, JR.*

Introduction

The question, “What are the alternatives to the concept of permanent establishment?” could be interpreted in a variety of ways, among them:

- What are the alternatives to source-based income taxation, in which the concept of permanent establishment (PE) plays a central role?
- What are the alternatives to the concept of PE, if the objective is to implement source-based income taxation?
- What are the alternatives to the definition of a PE found in the OECD Model Tax Treaty?

I limit my discussion to the first two or these.¹

It is not at all clear how electronic commerce should be defined for the purpose of this discussion. The Organisation for Economic Co-operation and Development (OECD) has defined electronic commerce as “business occurring over networks which use non-proprietary protocols that are established through an open standard setting process such as the Internet.”² Virtually all international commerce involving business-to-business

transactions – the vast majority of all international trade – will soon fall within this definition. Yet limiting the definition to sales of tangible products and digital content downloaded from the Internet is too narrow. Fortunately, for present purposes a precise definition is not needed.

Why it matters

The advent of electronic commerce has caused some to question the continued viability of source-based taxation. The U. S. Treasury, in its 1996 report entitled *Selected Tax Policy Implications of Global Electronic Commerce*, suggested:

The growth of new communications technologies and electronic commerce will likely require that principles of residence-based taxation assume even greater importance. In the world of cyberspace, it is often difficult, if not impossible, to apply traditional concepts to link an item of income with a specific geographical location. Therefore, source-based taxation could lose its rationale and be rendered obsolete by electronic commerce.³

This proposal is not likely to be popular with other countries, which are much less active in electronic commerce than the United States. Besides, residence-based taxation is not free of problems in a world of electronic commerce.

Even if this fear – or is it a hope? – that continued source-based taxation is not a viable alternative turns out to be exaggerated, electronic commerce raises the spectre of increasing amounts of sales being made by firms that lack a permanent establishment in market nations, as indicated by the traditional tests. The problem may be described as follows:

“The growth of electronic commerce may signal an economic realignment of the role of source and resident countries compared to their role in tradi-

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¹ This discussion draws heavily on Reuven S. Avi-Yonah, “International Taxation of Electronic Commerce (1997),” *Tax Law Review*, vol. 52, no. 3, 507–55.

² Organisation for Economic Co-operation and Development, *The Economic and Social Impact of Electronic Commerce: Preliminary Findings and Research Agenda* (Paris: OECD, 1999) p. 28.

³ U. S. Department of the Treasury, *Selected Tax Policy Implications of Global Electronic Commerce* (1996), available at <http://www.ustreas.gov/taxpolicy/internet.html>.

Source-based taxation could be rendered obsolete by e-commerce

tional commerce. A typical traditional commercial transaction might involve R Corp., a country R company, producing goods in country R and marketing and selling goods through a country S permanent establishment or subsidiary. In this scenario, country S might tax income attributable to the permanent establishment or subsidiary, and country R might tax any income attributable to the production process. Countries have relied on this basic division of tax jurisdiction for most of the 20th century. To the extent that electronic commerce replaces traditional commercial patterns, the tax balance between countries is threatened. Through the use of the Internet, R Corp., which still may produce its goods in country R, now can market and execute sales in country S without the need for a presence in country S. Even if R Corp. must maintain a presence in country S, it is likely that the presence will be much more limited and that the income attributable to such a presence will likewise be limited.”

Furthermore:

“Any change in the balance of taxing authority between country R and country S under existing international tax principles may lead countries – particularly those likely to be source countries (i.e., country S) – to call for new international tax principles or at least for a reinterpretation of existing tax principles in a manner that will restore the pre-existing tax equilibrium.”⁴

The rule that source countries could tax only business income attributed to a permanent establishment was intended to limit the amount of income that source countries could tax. In a sense, then, the traditional debate is being turned on its head: reliance on the concept of permanent establishment may need to be rethought to protect the revenue of source (market) nations.

Source vs. residence-based taxation

To assess whether the position of the U.S. Treasury would represent good policy, it is useful to start with first principles – to ask what are the conceptual and theoretical underpinnings for taxation based on source and on residence. Given the pro-

posal to shift from source-based taxation, it makes sense to focus primarily on the case for source-based taxation. With this conceptual discussion as background, we can then ask whether pragmatism forces compromise with those principles. It is useful to distinguish between the taxation of individuals and the taxation of corporations in applying the principles.

The case for residence-based taxation

The case for residence-based taxation is relatively clear. Residence-based taxation is implied by the desire to tax individuals on the basis of *ability to pay*. Taxation would be levied on the total world-wide income of individuals, presumably at graduated rates. Note several points. First, a tax on total world-wide income must be imposed by countries of residence; it makes no sense even to contemplate source-based taxation of total income. Second, ability-to-pay taxation is meaningful only in the context of taxation of individuals. Ability-to-pay cannot be used to justify residence-based taxation of corporations.

Residence-based taxation achieves *capital-export neutrality* – neutrality toward the choice of where to invest, which in turn produces world-wide efficiency in the allocation of capital. To the extent that the benefit principle is used to justify taxation by the country of residence, it is also relevant primarily for individuals, who consume far more public services than do corporations. Benefit-related taxation of corporations should be primarily source-based, as corporate residence, *per se*, probably involves few governmental costs for the home country.

Residence-based taxation achieves capital-export neutrality

The case for source-based taxation

The case for source-based taxation is less obvious, but may be just as compelling. One justification for source-based taxation relies loosely on the *benefit principle* of taxation: the view that the country where income originates should be compensated for the cost of providing public services. Besides such obvious services as defence and police and fire protection, there is the legal infrastructure that is necessary for the functioning of business. T.S. Adams, the U.S. Treasury official most directly responsible for the U.S. position that is reflected in the forerunner of the OECD Model Treaty, said, “A large part of the cost of government is traceable to the neces-

⁴ Richard L. Doernberg and Luc Hinnekens, *Electronic Commerce and International Commerce* (The Hague: Kluwer Law International for the International Fiscal Association, 1999), pp. 300 and 301.

sity of maintaining a suitable business environment.”⁵ More generally, business is seen to benefit from the existence of a civilised society and thus should help pay the “price we pay for a civilised society.” As noted above, this type of benefit to corporations is likely to be greatest in source countries.

A tax justified by the benefit principle would generally only cover the cost of providing public services for corporations, which would be relatively small. A second rationale for source-based taxation, and one that might justify greater taxation of corporate income, is based on the somewhat squishy concept of “*entitlement*” – the view that the source country is entitled to share in income created within its borders.⁶ The entitlement theory seems most persuasive in the case of taxes on natural resources, especially in countries where resources are privately owned and their exploitation results in economic rents (profits that are extraordinary, in the sense of exceeding the normal return to capital). One commonly finds words such as “heritage” and “patrimony” being used to justify taxation of natural resources.

The entitlement theory may be equally applicable in industries where profits are extraordinary for other reasons, as when there is market power. (Thus extraordinary profits and the right to tax them may exist in the case of Coca Cola, but not in the case of commodities such as wheat.) But, since the base of the corporate income tax commonly resembles accounting profits, rather than economic profits (that is, it includes the normal return to capital), one can argue that entitlement to corporate tax revenue exists any time a firm avails itself of the productive resources or the market of a nation – that is, if it has an economic presence in the nation. Of course, common sense requires that the economic presence be significant before a firm is subjected to income taxation.

It is useful to compare and contrast the benefit and entitlement theories. The benefit argument concentrates on benefits of services the government of the taxing nation provides to business. Under the enti-

tlement theory, public services are more-or-less irrelevant, as entitlement is based on economic benefits, for example, the benefits of exploiting a market. Limiting taxation to profitable corporations and using profits as the tax base thus seems more sensible under the entitlement theory. Moreover, the entitlement theory seems to support a higher level of corporate taxation than does the benefit principle.

The final argument for source-based taxation is pragmatic: source countries are not likely to want to forego taxation of income earned within their boundaries, regardless how outsiders feel about their entitlement to tax it.

Source-based taxation assures that all those who invest in a given country compete on an equal footing. The result, capital import neutrality, has considerable appeal to business, but little to economists, who instead endorse capital-export neutrality.⁷

Reconciling source and residence-based taxation

Taxation of a given flow of income by both source and residence countries generally produces double taxation, in the absence of steps to prevent double taxation. Two methods are commonly used to avoid international double taxation of business income: exemption of foreign-source income and foreign tax credits (FTCs).⁸ Both are implemented by residence countries and accord priority to source-based taxation; that is, they reduce residence-based taxation, while leaving source-based taxation intact. Both require measurement of foreign-source income, and thus the attribution of income to its geographic source and nexus rules, the former because only foreign-source income is exempt and the latter because FTCs are generally limited to the amount of tax that would be due on the foreign-source income in the residence country.

The administrative dimension

Whether source-based taxation is administratively feasible trumps conceptual arguments. Countries may simply not be able to implement taxes on

⁵ Thomas S. Adams, “The Taxation of Business,” (1917) vol. 11 *Proceedings of the National Tax Association*, p. 186, quoted in Michael J. Graetz and Michael M. O’Hear, “The ‘Original Intent’ of U.S. International Taxation,” *Duke Law Journal*, vol. 46, no.5, 1036.

⁶ The entitlement view is commonly associated with Peggy Musgrave; see, for example, Peggy Musgrave, “Principles for Dividing the State Corporate Tax Base,” in Charles E. McLure, Jr., editor, *The State Corporation Income Tax: Issues in Worldwide Unitary Combination* (Stanford, Calif.: Hoover Institution Press, 1984), pp. 228–46, and references provided there.

⁷ In general capital-export neutrality and capital-import neutrality are mutually compatible only if tax rates (and the definition of income) are identical in source and residence countries.

⁸ Deduction for source-based taxes does not eliminate double taxation; it only reduces it.

income originating within their boundaries, no matter how compelling the arguments for doing so. But administrative concerns do not cut only one way; under certain conditions implementing residence-based taxation is also problematical. (See the discussion of problems of residence-based taxation below.)

The role of physical presence in source-based taxation

Assuming that the objective is to implement source-based taxation of corporate income, should source countries be allowed to tax income of foreign multinationals only if they have a physical presence in the country? In attempting to answer this question, it is useful to distinguish three types of products (tangible products, intangibles, and services) and two (partially sequential) states of the world:

- The “pre-digital world,” in which virtually all international economic relations involve local vendors, physical assets, tangible products, and services that require a physical presence for their delivery, and
- The “digital world,” in which there are remote vendors, important intangible assets, intangible products, and digitised services that can be provided at a distance, as well as the attributes of the pre-digital world.

Benefit principle. In the pre-digital world the argument for source-based taxation based on the benefit principle suggests that a physical presence should probably be required to establish nexus for source-based income taxation. It seems that in this world most of the public services that benefit business firms providing tangible products and services do so only if the firm has a physical presence in the country. Consider, for example, police and fire protection. Do they benefit firms that lack a physical presence in the taxing nation? Probably not.

The situation seems to be different in the digital world. Most obviously, protection of intellectual property is crucial to vendors of intangible products and digitised services and does not depend on whether the seller has a physical presence in the taxing nation. Also, mail-order sales of tangible products may place demands on public services. Thus, in the digital world perhaps a physical pres-

ence should not be required to justify source-based taxation under the benefit principle.

Entitlement. The entitlement theory seems to be somewhat more conducive than the benefit principle to taxation of corporations that lack a physical presence. If entitlement is based on economic presence, the case for taxation of income of remote vendors seems strong, even though the vendor does not have a physical presence in the taxing nation. This is true whether the vendor is selling tangible products delivered by conventional means or intangible products or services provided over the Internet. These statements should, however, be qualified; liability for income tax should be subject to a *de minimis* test; because of the compliance costs involved, it would not make sense to levy income tax on all vendors that have an economic presence, no matter how small their sales.

Administrative considerations. Administration and compliance are simpler if the taxpayer has a physical presence in the taxing nation than if it does not.

“[S]ource countries that are seeking to tax income from electronic commerce have to consider how they might enforce any taxing authority they claim. In many cases, an enterprise may not have any physical presence in the country seeking to tax. In such a case, enforcement of any taxing authority by the source state may be virtually impossible. There may be no assets to seize in the case of non-payment and no way of preventing access to the entrepreneur’s web site. Moreover, the use of anonymous payment systems may make it even more difficult to trace how much commercial activity is taking place in a source state.”⁹

Synthesis

The Table summarises the above discussion. In the pre-digital world it makes sense under the benefit theory of taxation to predicate source-based taxation on the existence of a physical presence in the taxing nation. The entitlement theory suggests that source-based taxation may be appropriate, even in the absence of a physical presence. In the digital world both principles justify source-based taxation, even if there is no physical presence.

⁹ Doernberg and Hinnekens, *op. cit.*, p. 341.

In the digital world a physical presence is not required under the benefit principle and the entitlement theory

Implications of Taxing Theories for the Role of Physical Presence

Theory of Taxation	Pre-digital World	Digital World
Benefit principle	Generally required	Perhaps not required
Entitlement	Perhaps not required	Probably not required

Conceptual arguments notwithstanding, the practical difficulty of taxing the income of firms that lack a physical presence remains; taxation may be difficult to implement (“be rendered obsolete,” in the words of the U.S. Treasury Department) where there is no physical presence. As noted earlier, the latter consideration has led some, including the U.S. Treasury Department, to conclude that continued heavy reliance on source-based taxation is not appropriate – that there should be a multinational shift to greater reliance on residence-based taxation.

Problems of residence-based taxation

The suggestion that there should be a shift to greater reliance on residence-based taxation seems to be technically naive, as well as self-serving and perhaps politically unrealistic. That it is self-serving and perhaps politically unrealistic is obvious. The United States is, by far, the world’s largest exporter of electronic commerce. Other nations can be expected to resist an explicit shift to residence-based taxation, which would run against the tide of historical development in this area, as well as international opinion.

What, then, are the difficulties of implementing residence-based taxation? First, in a world of rapid and inexpensive interactive communication, the place of effective management, the test of residence employed in much of the world, can easily be divorced from the place where production occurs. The place of residence can be manipulated to place residence in a tax haven, where there will be little or no taxation. Strengthened CFC legislation (laws dealing with the taxation of controlled foreign corporations) may be able to combat shifting of operations to subsidiaries located in tax havens, but it will not affect newly created enterprises operating from tax havens.

Nor does the problem end with tax havens. Some “real” countries (e.g., Belgium and the Netherlands) have enacted legislation that is intended to attract home offices. CFC legislation probably would not even affect the transfer of residence to those countries.

Second, unless all nations abandon source-based taxation, there will remain a need to determine the source of income, in order to implement exemptions for foreign income or limitations on foreign tax credits, which ordinarily are available only to the extent of domestic taxation of foreign-source income for which credit is sought.

Salvaging source-based taxation

The U.S. Treasury Department’s position takes as given and immutable the existing international rules for determining the source of income. In addition to the use of a PE to determine jurisdiction to tax, it accepts the current distinctions between types of income (income from sales, income from the provision of services, and royalties) and difference in the taxation of each. A more flexible attitude might have revealed less need to abandon source-based rules.

Continued reliance on source-based taxation requires attention to at least three questions: a supplement to the PE test of nexus, distinctions between types of income, and rules for dividing income among nations. In addition, it may be appropriate to consider the use of withholding taxes by source countries. The discussion of the first and last of these issues (supplementing the PE test and withholding tax) concentrates on electronic commerce where the seller does not have a PE in the taxing nation; the discussion of the other two is more generally applicable.¹⁰

A supplement to the PE test. The discussion of the entitlement view suggests that earning more than a de minimis amount of income in the taxing nation should be enough to subject a firm to the nation’s income tax, even if there is no PE. Although this test would ideally be based on net income, administrative considerations suggest that the test must be based on gross income or gross receipts; basing

¹⁰ This discussion draws heavily on the substantially more comprehensive discussion in Avi-Yonah, *op. cit.*, pp. 531–550.

A shift to residence-based taxation would be self-serving and politically unrealistic

the test on net income would make the de minimis rule pointless, as it would theoretically force all firms making sales in the nation to calculate income attributable to the nation to determine whether they have taxable nexus.

Characterization of income. Electronic commerce blurs the distinctions between types of income: income from sales, income from the provision of services, and royalties from the licensing of intangibles. It thus makes sense to eliminate these distinctions, which have no economic foundation. “In an economic sense, income is income. ... Distinctions between different types of income are artificial.”¹¹

Division of income. Traditionally the division of income among countries has relied on separate accounting and arm’s length prices. The growing importance of intangible assets, which often have no market price, has made application of the traditional methods of determining arm’s length prices (comparable uncontrolled prices, cost plus, and resale value) more and more difficult.¹² Electronic commerce will aggravate this tendency, by increasing the degree of economic integration between related entities, increasing the number of transactions that need to be valued, and reducing the availability of comparable market prices.

“The speed, frequency, and integration of exchanges over the Internet and the development of private networks within MNEs will require an innovative approach in applying a separate transaction analysis. In terms of comparability, it becomes more difficult to determine what the transaction actually is, and even greater difficulties apply to finding a third party transaction about which enough is known to conclude that it is comparable. And transactions can be hard to discover and trace, particularly those which take place in private networks. The OECD guidelines direct a functional analysis to assess comparability, but with electronic commerce and private networks, it can be difficult to know who is doing what. Transfer pricing will increase in complexity, particularly if the MNE is purposefully attempting to shift income among related parties.”¹³

It may thus be desirable – or inevitable, even if not desirable, in principle – to turn to increased use of formulas to divide income of multinational enterprises (MNEs).

The use of formulas is not without problems, however.¹⁴

A withholding tax on international payments. The possibility of an expanded use of withholding taxes raises important questions, like that of the appropriate rate. The use of the corporate tax rate could subject sales to enormous withholding taxes that could not be credited in the country of residence. The problem is not that the withholding tax would not be non-creditable, *per se*; this proposal makes sense only if there is agreement (ideally multilateral, but more likely bilateral, as is the practice in this area) that residence countries will allow foreign tax credits for it. The problem is that if the withholding tax on gross income is levied at the corporate rate, it will almost always exceed the tax that is due on net income in the residence country.

Where the withholding tax exceeds income tax that would be due under the normal income tax of the source country, it should be possible for a firm to complete an ordinary income tax declaration in the source country, even if it lacks a permanent establishment there, in order to obtain refund of excess taxes withheld. This would alleviate the problem of excess foreign tax credits, but at the cost of forcing many firms with a de minimis presence in the source country to file tax returns. As always in choosing withholding rates to be levied on gross income, there must be a compromise between the risk of collecting too little revenue and the risk of forcing filing by those who should not file – in this case, because they earn little net income in the taxing nation.

Concluding remarks

If it is thought desirable to change international standards for jurisdiction to levy income tax, it would be most efficient to make the changes in a multilateral context; besides being enormously

Source-based taxation would require: a supplement to the PE test, distinction between types of income, rules for dividing income among countries

¹¹ *Ibid.*, p. 335.

¹² See Charles E. McLure, Jr., “U.S. Federal Use of Formula Apportionment to Tax Income from Intangibles” (1997), *Tax Notes International*, vol. 14, no. 10, 859–71, and literature cited there.

¹³ Frances M. Horner and Jeffrey Owens, “Tax and the Web: New Technology, Old Problems,” (1996), *Bulletin for International Fiscal Documentation*, vol. 50, no. 11/12, 520.

¹⁴ For an analysis of the pros and cons of formula apportionment see Charles McLure, Jr. and Joann m. Weiner, “Deciding Whether the European Union Should Adopt Formula Apportionment of Company Income,” in Sibren Cnossen, ed., *Taxing Capital Income in the European Union: Issues and Options for Reform* (Oxford University Press, 2000), pp. 243–92.

time-consuming, re-negotiation of bilateral tax treaties would leave gaps and overlaps in taxation during the period when the rules are in flux. While the reforms discussed above (supplementing the PE concept, eliminating distinctions between types of income, use of formulas, and withholding) could be introduced unilaterally or bilaterally, multilateral introduction would be more likely to avoid inconsistencies. Moreover, solution to the administrative problems created by electronic commerce is likely to require international co-operation, both to prevent tax evasion and to prevent harmful tax competition (for example, from tax havens) that facilitates legal tax avoidance.

Desired are multilateral negotiations of an international tax treaty to deal with e-commerce

Unlike the situation in the case of trade and tariffs, no international agency is charged with responsibility for multilateral negotiation of international tax treaties; there is no “GATT for taxes” and no World Tax Organisation. Although many double taxation treaties are patterned after the OECD Model Treaty, virtually all are bilateral agreements.¹⁵

The OECD is at the centre of international discussions of the changes needed to deal with the tax implications of electronic commerce. It will be interesting to watch the progress of discussions at the OECD on the need to revise the OECD Model Treaty to deal with fundamental changes in commercial relationships brought about by e-commerce. It may be even more interesting to see whether it is concluded that there is a need for a more comprehensive and formal forum for discussion of these and similar matters — that is, whether something like a World Tax Organisation is needed.

¹⁵ The relatively few multilateral agreements between members of the European Union are the only significant exception to this generalisation.

ELECTRONIC COMMERCE AND VAT BURDENS

PATRICK WILLE*

Introduction

Increasingly, services are supplied via the Internet to individuals as well as to businesses. The supply of these services is in principle subject to value-added tax (VAT). This raises the questions: In which country is the VAT due and who has to pay for it?

To get an answer to these questions, one has to verify what kind of service is provided and where the service provider and the recipient of the service are established.¹

Besides services which are provided via the Internet, common goods are nowadays also frequently ordered via the Internet as are services which are not provided via the Internet. In this case no fundamental changes occur. However, as a consequence of the Internet more and more orders are received from abroad and placed with suppliers established abroad.

The supply will not only take place in the country of the supplier.

It should be taken into account that, when setting prices, goods have to be transported to customers and that VAT rates differ from country to country. Moreover, the existing complex VAT legislation is in general a burden for electronic commerce.

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¹ The Dutch tax authorities have published their point of view in the Decision of 14 August 1998, no. VB 98/1785 regarding services provided by means of the Internet. This decision is based on the results of the 38th of the Committee of Value Added Tax within the EC. One may conclude that these results are valid in all Member States.

Supply of goods vs. supply of services

For a correct application of VAT it is of utmost importance to differentiate clearly between the supply of goods and the supply of services since the rules to determine where the supply takes place are totally different in the two cases.

“Supply of goods” shall mean the transfer of the right to dispose of tangible property as owner.² Electric current, gas, heat, refrigeration and the like shall be considered tangible property.

“Supply of services” shall mean any transaction which does not constitute a supply of goods within the meaning of Article 5 of the Sixth VAT Directive.³ The sale of software is basically a supply of services. However, the sale of standard software (e.g. on CD-ROM) is usually considered a supply of goods.

Services provided via the Internet

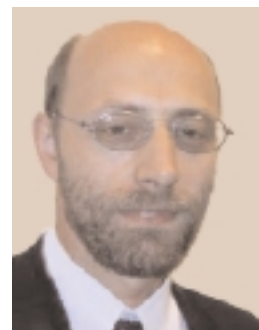
Several different kinds of services may be distinguished:

1. Standard software

Standard software, as opposed to tailor-made software, is a product which is produced on a large scale, available for everyone. Moreover, everybody can use it after a simple installation procedure and a small training effort to carry out certain applications and functions. Mostly, standard products consist of a package of programmes, including an installation service, training and maintenance. Application software for personal computers and game software fall basically within the category of standard products. Standard software which is completed by the supplier with security measures is also considered a standard product.

² Article 10, § 1 Belgian VAT Code; Article 5 (1) Sixth VAT Directive.

³ Article 18, § 1 of the Belgian VAT Code; Article 6 (1) Sixth VAT Directive.



How to levy VAT on internet services depends on the kind of service provided

The transfer of standard software is not considered a supply of goods but a supply of a service when

- there is no transfer of the right to dispose of property as owner;
- the goods are not tangible because of there is no data carrier or when there is only a transfer of a copyright (license).

2. Tailor-made software

Tailor-made software is software which is developed for an individual customer. For the purpose of VAT, standard software which is transferred other than by means of a data carrier, is also considered tailor-made software.

When tailor-made software is imported on a data carrier, the import of a data carrier (without content) should be distinguished from the supply of a service (transfer of software/data).

When the customer is a taxable person, the transfer of the data carrier is considered inferior to the transfer of the software and will be taxed as one single supply of a service in the Member State of the customer. To avoid double taxation, the import of the data carrier is VAT exempted.

3. Downloading of files, virtual goods

The difference between standard software and tailor-made software has been raised above in the context of importing these products. Standard software is considered a good, and when importing it, VAT is due on the purchase price. When downloading such software via the Internet, no import VAT can be levied when the software comes from outside the EC.

4. Consulting files on the Internet

If files are available on a website but not downloaded and if these files can be consulted or viewed on payment (without considering the possibility of downloading an individual page as “still image”), one can make the following distinctions:

- They are regarded a service of entertainment if
 - according to objective rules – viewing or using these files may be considered entertainment e.g. looking, whether interactive or non-interactive, at (erotic) pictures or live-shows and participating in (multi-player) games.

- They are regarded an educational service if the customer is taking a course via the Internet. Activities which, whatever the medium, are comparable with correspondence courses, fall within the scope of educational services. There should be interaction between lecturer and student.
- They are a service of supplying information if the Internet is used for gathering information. The same is applicable to the provision of tailor-made information (consultancy) via the Internet.

5. Telecommunication services

Telecommunication services shall be deemed to be services relating to the transmission, emission or reception of signals, writing, images and sounds or information of any nature by wire, radio, optical or other electromagnetic systems, including the related transfer or assignment of the right to use capacity for such transmission, emission or reception. Telecommunication services within the meaning of this provision shall also include provision of access to global information networks.⁴

The place of service depends on the kind of service provided

1. Entertainment and educational services

The place of the supply of services relating to entertainment and education shall be the place where those services are physically carried out, i.e. the place where the customer buys the service is considered the place where the service is provided.

Viewing files or pictures via the Internet for consideration is mainly concentrated within the pornographic industry. These services are considered entertainment services.

When supplier and customer do not meet physically in one spot or in one country, as is the case of services via the Internet, the place of supply of the entertainment services is, according to Dutch court cases (Court Den Haag, 23 June 1993, confirmed by the High Court), the place where the service is bought.

If somebody in France is viewing Internet pictures or is taking a course via the Internet or is playing

⁴ Directive 1999/59/EC of 17 June 1999 amending Article 9 (2) (e) of the Sixth VAT Directive.

The place of service also depends on the kind of service provided

games via the Internet, then in principle, French VAT is due.

2. Information

Downloading games, magazines, music, movies and other files via the Internet is a service of supplying information.

The place of service when performed for customers established outside the EC or for taxable persons established in the EC but not in the same country as the supplier, shall be the place where the customer has established his business or has a fixed establishment to which the service is supplied or, in the absence of such a place, the place where he has his permanent address or usually resides.

For EC-individuals and non-taxable persons established in the EC this rule has the following consequence. When buying software or information (via the Internet) in another Member State, it is not taxed in the Member State of the customer, but in the Member State of the supplier, e.g. a Belgian individual who buys software via the Internet from a French supplier will, in principle, be charged 19.6% French VAT.

The supply from outside the EC of tailor-made software to individuals can be treated as a service where the effective use and enjoyment takes place within the territory of a country and therefore will be taxed in that country.⁵ This rule applies e.g. in the Netherlands. Consequently, when a Dutch individual buys software via the Internet from a supplier outside the EC, Dutch VAT will be due at the rate of 17.5%.

Belgium has adopted this rule. A Belgian individual or public body who buys software via the Internet from a non-EC supplier, pays no VAT.

Companies established in Belgium which provide services via the Internet to individuals or public bodies established in Belgium or in other Member States have to charge these customers Belgian VAT. Individuals or non-taxable legal persons from outside the EC will receive an invoice without VAT.

3. Telecommunication services

The place of service is where the recipient of the service is established when the supplier is estab-

lished in another country than the country of the recipient (cf. the supply of information).

As regards individuals or non-taxable persons established within the EC, the place of service depends on the establishment of the supplier. When the supplier is established within the EC, VAT is due in the Member State of establishment of the supplier.

When the supplier is established outside the EC, VAT is due in the Member State of effective use and enjoyment of the telecommunication services.

Charging VAT

When individuals, established in another Member State, buy entertainment or educational services, then in principle, the supplier is liable to pay the VAT due in that Member State. Consequently, such a supplier should be registered for VAT purposes in all Member States where those services are supplied to individuals via the Internet.

Some Member States, e.g. the Netherlands, also demand a registration for VAT purposes for the non-EC supplier who supplies information to individuals.

Belgian VAT legislation states that, except for counter-evidence, the place of the supply of a service is deemed to be in Belgium as far as one of the contracting parties is established in Belgium (economic activity, fixed establishment, permanent address, usual residence).

As regards the counter-evidence, no general rules exist. Methods of providing counter-evidence depend on the way the service has been provided en payment has been settled. Also the technical possibilities to register website visitors have to be taken into account. In this respect, the Dutch tax authorities suggest:

- address of the customer;
- e-mail address of the customer;
- bank or credit card company used for settlement of the payment (using data from the bank of the supplier);
- registering the Internet provider (ISP) used by the customer (to minimise telecommunication costs, customers will call locally).

VAT on foreign suppliers demands registration

⁵ Article 9 (3) of the Sixth VAT Directive.

Payment of the VAT

VATable persons receiving services via the Internet from suppliers established outside Belgium have to charge for Belgian VAT in their VAT return via the reverse charge mechanism. To exercise the right to deduct, the recipient must have a regular invoice at his disposal. For invoices boxes 82 (taxable amount), 87 (taxable amount), 56 (VAT due) and 59 (deductible VAT) of the VAT return are used. For credit notes boxes 82, 87, 84, 61 and 62 of the VAT return are used.

Also VATable persons without a right to deduct have to pay the VAT due, e.g. doctors, lawyers, hospitals, schools, insurance companies. When receiving such a service for the first time, they have to inform their local VAT inspector. If they fail to do so, in the case of Belgium a fine of 20,000 BEF will be imposed. The VAT due must be paid by means of a special VAT return to be filed quarterly in case those services have been provided to them. This special VAT return is also used for paying the VAT due on intra-Community acquisitions. The VAT due on Internet services bought is mentioned in box 80 of the special VAT return. The taxable amount in box 74.

Individuals have to pay the VAT due by putting tax stamps on the invoice received for Internet services received from suppliers abroad which have not appointed a tax representative in Belgium. The tax stamp has to bear the date and signature of the customer.⁶

The question immediately arises of how many individuals may be aware of these regulations. Moreover, a payment with tax stamps is not adapted to survive the 21st century.

The Dutch Minister of Finance declared on 27 March 2000 that the tax authorities are forced to forego levying VAT on digital products sold via the Internet. In his opinion, an effective taxation of music, videos or texts that customers download via their computers from the Internet is not feasible.⁷

The supply of goods

The Internet makes it possible to provide goods and services at low cost to a large number of poten-

tial customers. Still, it is difficult to decide on the geographic area in which one wants to offer one's goods or services to potential customers.

When setting the price, transport costs and taxes need to be taken into account.

When selling in the local market, regulation is usually no problem. As soon as cross-border supplies take place, however, then in most cases one also has to know the regulation of the country of destination.

Place of the supply of goods sent from one EC Member State to another

In principle, when goods are supplied to a taxable person with the right to deduct VAT in another Member State, no VAT will be charged when goods are sent or transported from one Member State to another. The VAT related to the intra-Community purchase will be paid by the buyer in the Member State of destination. The product catalogues will contain prices exclusive of VAT.

If the purchaser is a private person, a taxable person without right to deduct VAT of a non-taxable legal person, then it is less evident how to fulfil VAT obligations.

As soon as the goods are transported from one Member State to another by the supplier or on his account, then it is possible that this is a distance sale. This implies that the VAT should be charged which is applicable in the Member State where the goods arrive. Moreover, in case of distance sales an invoice must be issued.

Certain rules must be obeyed concerning the particular VAT that is due:

No VAT will be due on an invoice if the purchaser is a taxable person without right to deduct. Or a non-taxable legal person which has a VAT identification number attributed in another Member State than where the goods are shipped from.

VAT will be due in the Member State of departure if the supplier does not exceed the threshold for distance sales and does not opt and the purchaser does not provide a VAT identification number attributed in another Member state.

Regulations around regarding VAT payment. Is effective taxation feasible?

⁶ Royal Decree no. 31, Article 5, § 3.

⁷ "BTW bulletin", April 2000, no. 4, p. 15.

VAT of the Member State of destination shall be charged if the supplier exceeds the threshold for distance sales or opts, and if the purchasers are a private person or a taxable person without the right to deduct or a non-taxable legal person, or persons who do not exceed the threshold for intra-Community acquisitions and have not opted to charge all their acquisitions with VAT of their Member State.

Moreover, new means of transport are excluded from this regulation. Specific rules exist for excise goods.

Distance sales

In case goods are sent to another Member State by the supplier or on his account, to a person who is not liable to pay VAT on intra-Community acquisitions in that Member State (e.g. individuals), the place of the supply is determined as the place where the goods arrive. This implies that the supplier will have to charge the VAT of the Member State of the customer.

This derogation has been introduced to avoid that private persons and taxable persons who can not deduct VAT, as non-taxable legal persons (e.g. public bodies) can order goods which are sent departing from a Member State with a low VAT rate by specialised companies (mail order houses).

1. Thresholds

Taxable persons who cannot deduct VAT and non-taxable legal persons can only purchase in other Member States with the application of the local VAT rate for an amount of, in principle, 10,000 EUR.⁸ As soon as they purchase more than the threshold amount during the current or previous calendar year, they are obliged to pay VAT in the Member State where the goods arrive and they have to perform an intra-Community acquisition.

As long as the thresholds of 100,000 EUR⁹ or 35,000 EUR¹⁰ are not exceeded, the supplier can apply the common rules regarding the place of supply.

⁸ Germany, Austria, Ireland and the United Kingdom allow higher amounts.

⁹ Germany, France, Luxembourg, The Netherlands, Austria and the United Kingdom.

¹⁰ Belgium, Denmark, Finland, Greece, Ireland, Italy, Portugal, Spain, Sweden.

2. Option

Both the supplier and purchaser, except for private persons, can opt to apply the VAT of the Member State where the goods arrive.

This choice needs to be made by the supplier in the Member State from which the goods are sent or transported by the latter.

A Belgian supplier who effects distance sales to Luxembourg and intends to apply Luxembourg VAT to these distance sales as from the first distance sale to Luxembourg, will need to opt therefore with the appropriate Belgian tax authorities. In this case opting can be advantageous as the standard VAT rate in Luxembourg amounts to 15% instead of Belgium's 21%.

The choice of the purchaser is made in the Member State where the goods arrive.

A Belgian taxable person without right to deduct VAT who receives goods sent from another Member State will have to inform the appropriate Belgian tax authorities in case he wants to buy these goods with the application of Belgian VAT.

Opting can be advantageous if the VAT rate is higher in the Member State where the goods are sent from than in the country of destination, e.g. in Denmark where the VAT rate amounts to 25%.

3. Shipment or transport to Belgium, for example

When goods are sent to Belgium by the supplier or on his account from another Member State, the place of supply is deemed to be in Belgium when the following conditions are fulfilled in a cumulative way¹¹:

If the supply of goods is made to:

- 1a. – a taxable person, subject to the common flat-rate scheme for farmers;
- a taxable person subject to the special scheme for small undertakings;
- a taxable person who only supplies goods or renders services for which he does not have the right to deduct;
- a non-taxable legal person.

For distance sales across borders, VAT is normally charged in the country of destination

¹¹ Article 15, § 4 of the Belgian VAT Code.

1b. a private person.

If the goods are

2a. no new means of transport;

2b. not assembled or installed by or for the account of the supplier;

If

3a. the persons as mentioned under 1a. may not have purchased for more than 450,000 BEF (11,155.21 EUR) during the current or previous calendar year in another Member State, and may not have opted to have their intra-Community acquisitions taxed in Belgium;

3b. the supplies of the foreign supplier under the conditions mentioned above amount more than 1,500,000 BEF (37,184.03 EUR) during the current or previous calendar year;

3c. as far as for such supplies the amount of 1,500,000 BEF (37,184.03 EUR) has not been exceeded, the foreign supplier should, in his own Member State, have chosen for Belgium as the place of supply.

Under certain conditions when goods are sent from another Member State the place of supply is deemed to be the country of destination

In case the supplied goods are excise goods, the place of supply will always be Belgium, whether the threshold of 1,500,000 BEF (37,184.03 EUR) has been exceeded or not, regardless of the choice of the supplier.

Examples

a. A Dutch company “A” sells a portable computer to a Belgian hospital “B”, which has ordered this computer via the Internet, for an amount of 8,000 EUR. “A” requests “V”, a Dutch transporter, to ship the computer from Amsterdam (The Netherlands) to “B” in Ghent (Belgium). The Dutch company “A” has already sold goods for more than 500,000 EUR under the form of distance sales in Belgium. The hospital “B” has not yet purchased anything in another Member State during the current and previous calendar year. Nor has the hospital “B” opted to have all its intra-Community acquisitions taxed in Belgium. In this situation, the place of supply of goods from “A” to “B” will be deemed to be in Belgium.

b. Consider the same situation, but the computer costs 12,500 EUR. In this case “B” is obliged to

pay the VAT related to the intra-Community acquisition in Belgium, which is due because the threshold of 10,000 EUR¹² was exceeded. The place of the supply from “A” to “B” will be in the Netherlands. In case “B” does not provide a VAT identification number to “A”, then “A” will have to charge Dutch VAT.

c. Consider the same situation as under a. But now “B” asks a Dutch transport company “V” to collect the goods on her account in Amsterdam. In this case there is no distance sale because the transport has not been effected by or on account of the supplier. This supply will take place in the Netherlands. “B” will not have to acquire the goods in Belgium and will pay Dutch VAT.

4. Shipment or transport departing from Belgium

When goods are shipped by or on account of a supplier from Belgium to another Member State, the place of supply is the place where the goods arrive, when the following conditions are fulfilled¹³:

1. The supply must be effectuated for either

- a. – a taxable person, subject to the common flat-rate scheme for farmers;
- a taxable person subject to the special scheme for small undertakings;
- a taxable person who only does supplies of goods or renders services for which he does not have right to deduct;
- a non-taxable legal person

on condition that:

these persons did not opt to pay VAT of their Member State for their intra-Community acquisitions at that moment;

or

at that moment, the amount of their intra-Community acquisitions in the current calendar year does not yet exceed the threshold under which these acquisitions are not subject to VAT in their own Member State;

or

¹² Belgium has translated this amount into 450,000 BEF.

¹³ Article 15, § 5 of the Belgian VAT Code.

at that moment, the threshold had been exceeded in the previous calendar year;

and

- the goods are no new means of transport;
- the goods are not assembled or installed by or on account of the supplier;
- the goods are no excise goods;

or

b. a private person;

and

- the goods are no new means of transport;
- the goods are not assembled or installed by or on account of the supplier.

2. The amount of the supplies effectuated by the supplier to this Member State, at the moment of supply, exceeds the threshold or was exceeded during the previous calendar year, as determined by this Member State (100,000 EUR or 35,000 EUR).

This condition regarding the threshold does not apply

- to sales of excise goods to private persons;
- when the supplier has opted that the place of his supplies is in the Member State where the goods arrive.

This option is valid for a period of at least two calendar years.

Examples

A Belgian company "A" sells books to a school "B" in Luxembourg for 50,000 EUR. "A" sends the goods by train to Luxembourg. "A" did not effectuate any distance sales in Luxembourg. During the current calendar year the distance sales of "A" in Luxembourg already amount to 60,000 EUR. Neither "A" nor "B" have opted and for "B" this is the first purchase from another Member State. The place of supply will be Luxembourg, as due to this supply the threshold of 100,000 EUR will be exceeded.

Or consider the same situation as above, but the goods are transported to a bookshop in Luxem-

bourg. The place of supply is Belgium because the purchaser is a taxable person with a right to deduct.

5. Goods sent from a third country (i.e. a non-EC Member State)

When, in case of distance sales, the supplied goods, transported or dispatched from outside the EC and imported by the supplier into a Member State other than the Member State where the goods arrived, the goods are deemed to be sent from the Member State where the goods have been imported.¹⁴

Example

A French company "A" performs distance sales in Belgium. "A" itself purchased the goods in Switzerland and imports them to Germany. These goods sold by "A" to its Belgian customer will be deemed to be sent from Germany.

Conclusion

There are still many uncertainties regarding the interpretation of the current VAT legislation in the fifteen EC Member States and outside the EC in view of the increased use of new technologies such as the Internet. As always, legislation is way behind the technological evolution. Yet, the gap is becoming bigger and bigger because of the exponentially growing developments in today's society.

The proposal of a directive on e-commerce and VAT, which was approved by the European Commission on 7 June 2000 will hopefully clarify the issue. It is of utmost importance that the VAT-taxable person has legal security, that there is simplicity for both companies and tax authorities and that there is tax-neutrality.

Legislation is urgently needed to simplify VAT rules for e-commerce

¹⁴ Art. 15, § 6 Belgian VATCode.

FOREIGN EXCHANGE INTERVENTION



PRO: THE ECB SHOULD INTERVENE TO SUPPORT THE EURO

NIELS THYGESEN*

Over the first 22 months since the launch of the euro the currency has depreciated by about 30% against the US dollar and by more than 20% in effective rate terms. This contrasts sharply with the perception in Europe two years ago that the currency was then at a broadly appropriate level – and even more with the expectations of many European academics and officials at the time that it was likely to appreciate, because of lower inflation than in the United States and significant improvements in financial competitiveness of the euro-area relative to that of fragmented national financial markets prior to 1999.

Market participants have disagreed and popular explanations of the divergence are not in short supply. Growth surprises in the United States have been almost continuous until recently, overshadowing those in the euro-area. The expectation that a slowdown in relative US growth would lead to lower real interest rates in the United States was accordingly sharply revised soon after the launch of the euro. Surprisingly strong productivity growth relative to the euro has inspired large inflows of long-term capital into US markets, financing an important part of what had looked like an unsustainable current account deficit. When these explanations seemed to fade away, the blame was put on poor communication skills in the ECB and on the ambiguities in the Treaty as to the division of responsibility for the external value of the euro between the monetary and the political authorities. The continuing search for new fundamentals to explain the steady depreciation of the

euro may itself have injected negative dynamics to the evolution of the exchange rate, as recently argued by de Grauwe, making the fall of the euro still harder to explain.

European policy makers have become increasingly concerned for both economic and political reasons. The euro-area trades some 16–17% of its GDP with countries outside, a higher degree of openness than observed in either the United States or Japan. Depreciation therefore adds considerably to inflation. Furthermore, exchange rate uncertainty dampens investment and employment, probably by more than in the United States because employment practices are more rigid in the euro-area. Euro depreciation initially offered the attraction of stimulating activity which was welcome in helping European exports at a time of slow recovery. But it has since become very difficult to argue that such help remains essential. The artificially comfortable external environment may well have slowed some of the more structural reforms that the euro needs. Politically euro depreciation has become an embarrassment vis-à-vis an increasingly critical domestic public and because of the inevitable *schadenfreude* which it has triggered in the United States where major reservations about the whole project had survived the launching of the euro. Finally, excessive depreciation has hardly engendered a positive attitude in the three EU countries outside the euro-area to adopting the new currency.

In view of these considerations it is surprising that it took the authorities of the euro-area so long to announce exchange-market interventions in favour of the euro. One major reason was that it was seen as essential to the success of the intervention that it was a joint initiative by the G7 countries, or at least with the United States. It proved difficult to bring about co-ordination at a time when the strength of the dollar was seen in Washington as economically useful to dampen overheating and as politically helpful in providing a sign of external confidence in the US economy. Available research suggests that intervention is more likely to have a significant impact when the action is joint, but it

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does not conclude that unilateral intervention is effective. Recent studies by Ramaswamy and Samici and by Fatum find a number of examples of effective unilateral intervention in both the USD/JPY and USD/DEM markets over the past decade and a half.

The G7 countries did announce on 22 September that they were intervening jointly to support the euro. But the amounts were small. The weekly consolidated statement of the Eurosystem published on 28 September suggests a sum of just over EUR 3 billion, while Federal Reserve data of the same date put US intervention at \$ 1.5 billion. The Bank of England also intervened, but reportedly reversed its transaction later the same day. Altogether the effort appears to merit the label of half-hearted, and it is not surprising that markets were unimpressed, pushing the euro below the level at which intervention had taken place.

Both before and after 22 September the ECB has sold dollars on a number of occasions as can be inferred from the weekly statements. At one point, earlier in September, the ECB pointed out that it was making “routine sales of foreign exchange income”, a technique often used by central banks without drawing attention to it. Around 1 November the ECB indicated over a couple of days that it had intervened, again without any major impact on exchange rates. There is no way of knowing where the rate would have been in the absence of published and unpublished intervention efforts, but the experience has been taken as confirmation that intervention is not, even in the short term, a reliable tool. But that seems a premature judgement.

The Eurosystem has at its disposal foreign-exchange resources of more than EUR 250 billion. 50 billion is pooled in the ECB with the rest remaining with the participating central banks. However, in May the Finance Ministers authorised the ECB to call up more reserves centrally if necessary. Having seen that using a very small fraction of these resources did not significantly affect the exchange rate, the obvious conclusion would have been to announce gradual sales of a substantial part of the dollars held by the Eurosystem. When the euro was launched, concern was voiced that the central banks in the euro-area would wish to dispose of what now had become excess reserves, putting pressure on the euro to appreciate. If the European authorities are not prepared to dispose

of these now when they rightly say they consider the euro to be significantly undervalued, there is an understandable perception in the financial markets of a lack of credibility.

Much has been made in the public debate of the argument that the euro-area is faced with long-term outflows of equity and portfolio capital rather than short-term outflows, the containment of which is the normal purpose of interventions. But in 2000 long-term outflows have slowed to EUR 8-10 billion a month. Even if they were to continue at that rate (which looks unlikely) it would be well within the resources of the euro-area authorities to sustain such an outflow by dollar sales out of their reserves for a couple of years. Announcing such a strategy would – as argued recently by Gros – send a strong signal to private investors and third-country monetary authorities that the downward pressure on the euro has come to an end.



CONTRA: THERE'S NO POINT IN INTERVENTION TO SUPPORT THE EURO

ADAM POSEN*

Intervention in support of a floating currency always means sterilized intervention. If it did not, the central bank in question would simply move domestic interest rates in the desired direction. Yet, if a central bank does not move interest rates, exchange rate intervention is likely pointless (as shown in numerous empirical studies). There are two channels through which intervention theoretically could have an effect: via supply of currency in the market; and via exchange rate expectations.

On the first count, that of supply, for major currencies like the euro and the dollar, there simply is too much currency in play everyday for even massive (relative to reserves) central bank intervention to move the markets. As one senior participant in such operations has observed, "By the time the market commentary is speculating whether the intervention was large enough, you have already lost the battle."

On the second count, that of expectations, the claim is often made that intervention provides information to the foreign exchange markets – but what kind of information? If it is supposed to be information about the state of the economy, that means that the central bank has already failed to be persuasive through data release and communication. Since communication is more specifically to the point of where the central bank believes the markets are wrong in their assessment, and commits the central bank to its assessment more explicitly than vaguely motivated intervention, there is no reason to think that intervention will be more persuasive.

If the intervention is supposed to convey information about central bank intentions, that information is only credible if it is backed up by monetary policy moves. Otherwise, the markets can correctly assume that the central bank is unwilling to give up domestic policy goals for the sake of a particular value of the exchange rate. If the exchange rate movement is likely to have significant pass-through effects on inflation, it is consistent for the central bank to offset how that would lead inflation to deviate from its inflation goal. If the exchange rate move is a one-time or temporary shift which is likely to have minimal pass-through, the central bank should be able to anchor inflation expectations and publicly state that it will ignore that fluctuation.

This is why the last concerted intervention in support of the euro in September 2000 failed, and the previous concerted intervention in support of the Japanese yen in June 1998 succeeded. In the case of the euro, there was no credible belief that the ECB would be truly concerned with the inflationary effects of the euro's fall if it was only intervening; meanwhile, any tightening of policy would widen the gap between U.S. and euro-11 growth rates, putting further pressure downwards on the euro. In the case of the yen, the intervention with U.S. agreement was seen as a signal that the Japanese government was about to change mistaken macroeconomic policy, which it did in July 1998, and that such policy would reduce the growth gap, which it did by year's end.

The only way for the ECB to support the euro is either to reduce uncertainty about its policies, or to somehow avoid shutting off euro-zone recovery before the growth gap with the U.S. shrinks (as it has and will). Both of these would best be served by discarding intervention. The euro-zone national governments confuse ECB communications when it comes to exchange rate policy. The inflationary effect on the euro-zone economies of a declining euro is smaller than before EMU, so it is a less sustainable and credible monetary policy to respond to any temporary price effect.

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THE ACCIDENTAL REDISTRIBUTION OF SEIGNORAGE WEALTH IN THE EUROSISTEM

HANS-WERNER SINN*
AND HOLGER FEIST**

The European Monetary Union (EMU) socialises not only the good will and esteem that the national currencies have acquired but also the seignorage profit which the central banks earn by lending their money to the private sector at the market rate of interest. Throughout their histories central banks have accumulated interest-bearing assets step by step with the expansion of their respective monetary bases which has followed the growth of the economies. These assets, which total EUR 352 billion in the euro-11 countries, are stocks of “historic” seignorage wealth which will generate an eternal, annual stream of returns that will help finance government budgets. By 1 January 2002, the seignorage wealth of participating countries will be brought into, and socialised by, the currency union. The basic mechanism of this redistribution was noted in Remsperger (1996), and it was studied extensively in Sinn and Feist (1997, 2000) as well as in Gros (1998). Here, final calculation results for the case of a Eurosystem containing Greece are presented for the first time.

Country Size and Seignorage Wealth

It is not easy to understand why central bank money is seignorage wealth, because accounting practices blur the picture. The currency issued by a central bank is listed on the liability side of its balance sheet, and the assets obtained in exchange for the currency are listed on the asset side. From an accounting perspective, money creation does not generate wealth at a central bank because both sides of the bank’s balance sheet grow simultaneously without generating any differential equity capital.¹

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¹ Indeed, this accounting custom may be the reason why the signing parties did not really understand that they were redistributing existing wealth when they founded the currency union.

However, while the central bank does not pay interest on the currency it issued, it collects interest on the assets obtained in exchange. The return on the assets backing the outstanding stock of currency is seignorage profit, and these assets constitute seignorage wealth. Seignorage wealth is net wealth of the central bank because the stock of outstanding currency will never have to be serviced with interest or redemption payments. Under EMU, the socialisation of historic seignorage wealth accumulated in the process of money creation over time will not occur in a legal sense. Only the future interest income generated by this wealth will be pooled within the Eurosystem, and the national central banks remain the legal owners of the assets backing the monetary base. However, from an economic point of view, the eternal socialisation of an asset’s return is the same as the socialisation of the asset itself. Thus, in economic terms, there will indeed be a once and for all socialisation of current central bank assets worth EUR 352 billion in about a year from now.

The socialisation involves an effective net redistribution among the participating countries because the interest income received by a country may differ from what this country contributes. A country’s share in the interest contribution to the pool depends on its share in the joint currency. However, the share in the interest which a country receives from the pool depends on its share in the capital contributed to the European Central Bank (ECB), which in turn is given by the average of this country’s population and GDP shares. Apart from establishing a stake in the seignorage profit, a country’s contribution to the ECB equity capital has little more than a symbolic function. At just EUR 5 billion, the total capital endowment is tiny relative to the EUR 352 billion stock of interest-bearing assets contributed in the form of seignorage wealth. It does not involve any resource cost for the contributing countries because the interest it generates for the ECB will be distributed in proportion to the capital endowment. The share in the equity capital does not really present a contribution, but rather the right to participate in the profit distribution of the ECB.

Redistribution of Seignorage Wealth through EMU

If the capital keys happened to match the pre-euro distribution of seignorage wealth across the European countries, there would be no effective redistribution of seignorage wealth. However, this



Winners and Losers from the Redistribution of Seignorage Wealth

	Seignorage wealth				Gain or loss	
	contributed		received		total	per capita
	EUR bn [1]	share % [2]	EUR bn [3]	share % [4]	EUR bn [5]	EUR [6]
Austria	12.3	3.4	10.5	2.9	- 1.9	- 230
Belgium	12.5	3.5	12.7	3.5	+ 0.2	+ 16
Finland	3.0	0.8	6.2	1.7	+ 3.2	+ 627
France	43.8	12.2	74.6	20.8	+ 30.9	+ 527
Germany	138.6	38.6	108.6	30.2	- 30.0	- 366
Greece	6.9	1.9	9.1	2.5	+ 2.2	+ 209
Ireland	3.4	1.0	3.8	1.0	+ 0.3	+ 91
Italy	64.5	18.0	66.0	18.4	+ 1.5	+ 26
Luxembourg	0.1	0.0	0.7	0.2	+ 0.5	+ 1 309
Netherlands	18.6	5.2	19.0	5.3	+ 0.4	+ 26
Portugal	4.6	1.3	8.5	2.4	+ 3.9	+ 396
Spain	50.7	14.1	39.4	11.0	- 11.3	- 287
Total	359.0	100.0	359.0	100.0	0.0	-

Note: Share of ECB capital as of 1 January 1999; monetary, exchange rate and population data as of 31 December 1998.

Sources: European Central Bank (1998): Key for the ECB's Capital, Press Release, 1 December, Frankfurt; International Monetary Fund (2000): International Financial Statistics, March, Washington, D.C., Statistisches Bundesamt (2000): Statistisches Jahrbuch für das Ausland, Metzler-Poeschel: Stuttgart, p. 40.

is not the case. In fact, a unit of capital carries very different amounts of seignorage wealth depending on where it comes from. The implications for the redistribution of seignorage wealth are summarised in the table which refers to the situation of 1 January 1999.

Columns [1] and [2] show the absolute and relative amounts of seignorage wealth contributed to the pool, and columns [3] and [4] show the absolute and relative amounts received from the pool. A comparison of columns [2] and [4] reveals that some countries contribute more and receive less than others. Germany, for example, contributes 39% and receives 31% of seignorage wealth, whereas France contributes 12% and receives 21%.

The most interesting information is contained in columns [5] and [6]. They show the different countries' absolute gains and losses and the respective per capita amounts. Obviously, France is the big winner and Germany the big loser of the redistribution of seignorage wealth. While the French contributions amount to EUR 43.8 billion and the payments received to EUR 74.6 billion, resulting in a gain of EUR 30.9 billion, the German loss is EUR 30.0 billion. In per capita terms, the average French citizen will gain EUR 527 or FF 3,460, and the average German will lose EUR 366 or DEM 716.

Next to Germany, Spain loses most with EUR 11.3 billion in total which is EUR 287 or ESP 47,867 per

capita. Austria is the only further loser with EUR 1.9 billion in total and EUR 230 or ATS 3,158 per capita. The majority of countries are winners: Portugal, Finland, Greece, Italy, Luxembourg, the Netherlands, Ireland, and Belgium, in the order of their absolute gains. A citizen of Luxembourg gains most, with EUR 1,309 or BEF 52,811, followed by a Finn with EUR 627 or FIM 3,726.

There are a number of reasons for the imbalance between country size and seignorage wealth, and the resulting redistribution. First of all, the German figure is so high not only because Germany is the largest country, but also because the deutschmark is an important international transactions and reserve currency, taking second place only to the dollar.² The fall of the Iron Curtain, the traditional strength of the German export industries, and the conservative monetary policy of the Bundesbank have all contributed to the dominant role of the deutschmark. The high figures for the Spanish seignorage wealth can partly be explained by the importance of the Spanish overseas connections, and partly by the large share of the Spanish shadow economy, where cash rather than bank transfers are used as a means of payment.³ The low share of seignorage wealth contributed by France may be attributed to the fact that the French franc is not used much outside that country, and possibly also to a well-developed banking sector and advanced payment habits.

Understanding the Results

The figures refer to the wealth equivalents of the redistribution of that part of the seignorage profit which can be attributed to the assets that the central banks had accumulated before 1 January 1999. There are a few things to bear in mind for a proper understanding of the results.

² See Rogoff (1998).

³ According to Schneider and Ernste (2000), the Spanish share in GDP of black market activities is about 23%, while the figure for Germany is only 14%.

Firstly, the figures measure the once-and-for-all redistribution effect and do not refer to annual gains and losses. In principle, the annual gains and losses can be calculated by multiplying the figures given in column five of the table with a market rate of interest, but since it is not clear what the future rate will be, such a calculation would involve a good deal of guesswork. A wealth-based calculation is free from such arbitrariness. We realise that the Maastricht Treaty does not formally socialise the assets backing the monetary base, but only their interest, but we maintain that, from an economic perspective, this is the same as a socialisation of the assets themselves.

Secondly, we equate seignorage wealth with a country's monetary base with the exception of minimum reserves which private banks hold with the ECB. As the ECB pays interest on these reserves, they do not constitute a net wealth for the ECB, and are therefore not included in our calculations. We neglect the role of coins, which represent a very small fraction of a country's monetary base, because we do not have a comprehensive data set that would allow a comparison to be made. The interest generated by assets backing the coins is not subject to redistribution under the Maastricht rules.

Thirdly, the figures do not include the present value of future increments in seignorage wealth which would have occurred in the course of a continued growth process, had the euro not been introduced. They neither include the present value of additional future increments in seignorage wealth, if any, which might result from a particular attractiveness of the euro as an international transactions and reserve currency. The proper distribution of gains or losses through these increments is a different question not addressed here. The above calculations relate to historic seignorage wealth only, and raise the question of whether the countries adopting the euro really wanted to effect the gigantic redistribution of claims on existing assets.

How to Resolve the Problem

The redistribution of historic seignorage wealth is implied, though not openly spelled out, by Article 32 of the Protocol No. 18 (ex No. 3) on the Statute of the European System of Central Banks and of the ECB of the Maastricht Treaty. It seems fair to

say that it was not understood and foreseen by the parties signing the Treaty. Politicians realised what they had signed only after the above-mentioned studies were published. The reaction was to postpone the start of the redistribution process by three years to clarify the matter, using transitional provisions as specified in Article 32.3. Redistribution of seignorage will only take place on a large scale from 1 January 2002 onwards, when the so-called "ear-marking method," which is reflected in the calculations presented here, will become effective. There is no agreement yet on the exact and final provisions concerning the redistribution process.⁴

Sinn and Feist (1997) as well as Gros (1998) suggested a grandfathering solution to the redistribution problem. The essence of this solution is to allocate the *initial* equity contributions in proportion to the magnitudes of the respective monetary bases as of 1 January 1999 and the *additional* contributions necessitated by the future growth in the joint monetary base in proportion to country size. This suggestion implies that historic seignorage wealth is exempt from redistribution, but that the increments in seignorage wealth due to the normal growth of the European economies and due to any extraordinary success of the euro are shared equally according to country size. Such a rule would probably require an amendment to the Maastricht Treaty. Given that the redistribution clauses in the Treaty were probably not understood by the signing parties, this amendment should be agreeable to the member countries.

⁴ The Governing Council could still decide on a second transition period which is foreseen in Article 51 of the Statute. According to this article, the ECB Council has the right to exempt certain fractions of national seignorage income from redistribution for a period of five years. In the first year, at least 40% of the seignorage has to be redistributed according to the capital keys, and with each consecutive year this percentage has to increase by at least 12 percentage points so that the full socialisation of historic seignorage wealth would be completed by the end of the fifth year at the latest. If the Council sticks to its current timetable and then makes use of this provision, this would be 1 January 2007.

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THE EURO, INTEREST RATES AND EUROPEAN ECONOMIC GROWTH

In the euro area, long-term interest rates have converged considerably since mid-1995. In May 1995 the interest rate gap between Italy and Germany was 6.3 percentage points; between Spain and Germany the gap was a good 5 percentage points in April of the same year. Today the maximum difference (Portugal) is no more than 0.4 percentage points. Even for Greece, which will join the euro-area on 1 January 2001, the interest rate gap to Germany has been reduced from 6 percentage points in March 1998 to 0.8 percentage points. During this entire period, the interest rates in the Netherlands and Austria have been practically identical to those in Germany.

Figure 1

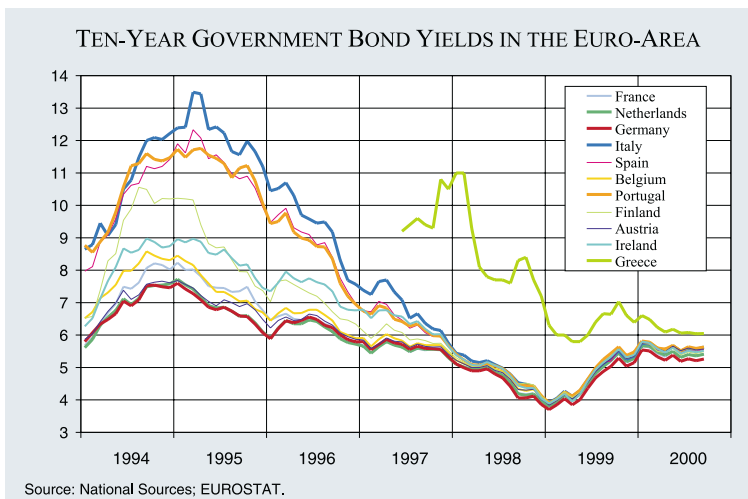
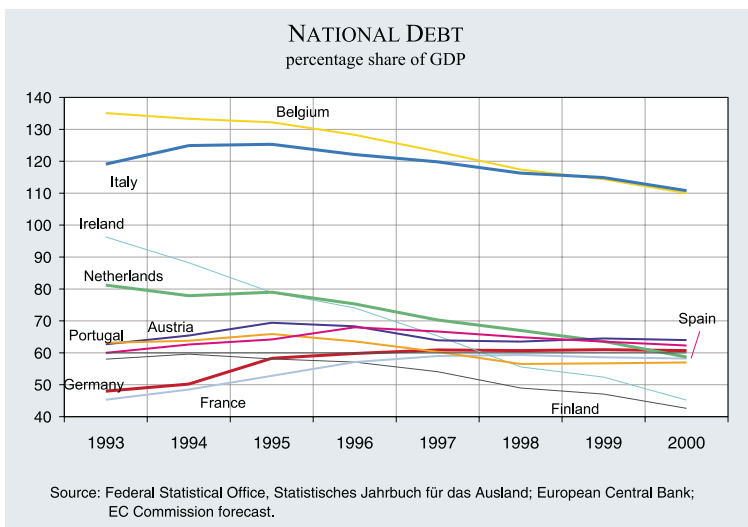


Figure 2



Even though long-term interest rates have risen by about 1.5 percentage points since January 1999, most of the eleven euro countries are currently enjoying unusually low rates since the risk premia that international investors demanded have disappeared. As a result, real investment demand is expected to revive. Without doubt, the countries that have been liberated from the risk premia will enjoy dynamic economic growth in coming years.

The growth of investment demand will probably drive interest rates higher than had been customary in Germany, Holland and Austria. In this respect, these countries could face more difficult years ahead.

It is often maintained that the convergence of long-term interest rates is primarily attributable to the budget consolidation in countries with poor budgetary performance in the past. Figure 2 shows that the facts do not substantiate this interpretation. Countries like France and Finland, which have always met the EU debt criteria, or countries like Spain and Portugal, that have only fallen slightly short, experienced the same convergence of interest rates as Italy and Belgium which – despite considerable consolidation – still have very high debt levels. Evidently the general interest-rate convergence in the years up to 1998 was independent of the debt levels of the countries involved. The reduction of risk premia had very little to do with the growing solidity of national budgetary policies.

The real explanation of the decline in risk premia lies in the constant reduction of the exchange rate risks as the deadline for the final establishment of currency parities approached. Today the exchange rate risk has disappeared entirely, and only the country-specific bankruptcy risks remain. Investors do not seem to regard these

risks as particularly serious, however, as the closely converged interest rates show.

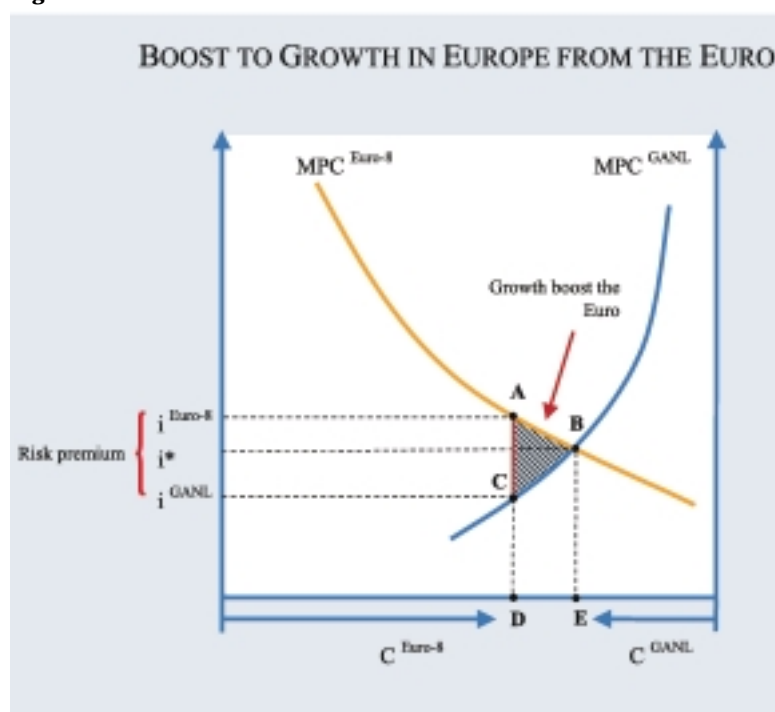
For the European economy, the interest rate convergence will bring a considerable boost to growth because available savings will now no longer be prevented by uncertain exchange rates from flowing into the most profitable uses. Growth in European productive capacity, which results from a given investment volume, will reach its maximum extent when the marginal return of real capital of different countries is brought into equilibrium, and precisely this can be expected, apart from the distorting influence of national taxation systems, when the terms of financing are the same everywhere. The following figure illustrates this argument.

The diagram, which is based on alternative scenarios that pertain to Europe in 2010, shows the distribution of a given amount of investment capital to the previous low interest-rate group consisting of Germany, the Netherlands and Austria, as well as the other eight euro countries that formerly had to pay

risk premia. The capital demand of these eight euro countries is measured from left to right, the capital demand of the three other countries from right to left. The associated curves mark the corresponding values of the marginal productivity of capital and, because firms invest to the point at which the marginal productivity corresponds to the interest rate, also the demand curve for capital. Without the introduction of the euro, the risk premia would have remained, and a capital market equilibrium would have arisen to the left of the intersection point of the marginal productivity curves at which the interest rates of the countries would have differed by the risk premium AC. With the introduction of the euro, the risk premium disappears, however, and the interest rates converge at the level of i^* , which implies an increase in the German, Dutch and Austrian interest rates and a decline of the rates of the eight other euro countries. To the extent of DE, capital that otherwise would have been invested in Germany, Holland and Austria is diverted to the other countries. GDP in these countries is therefore higher by the area ABED, and GDP in Germany, Holland and Austria is lower by the area CBED than would have been the case without the euro. On balance, therefore, the introduction of the euro increases total European GDP by the triangle ABC.¹ This explains the boost to growth. The fact that Germany, Holland and Austria have lost the financing privileges that they enjoyed as a result of the D-Mark or exchange rates fixed to the D-Mark may be regrettable, but it is the reason for the expected surge in growth in Europe as a whole.

H.-W.S./R.K.

Figure 3



- MPC_{GANL} Marginal productivity of capital in Germany, Austria and the Netherlands
- MPC_{Euro-8} Marginal productivity of capital in the other eight euro countries
- i_{GANL} Interest rates in Germany, Austria and the Netherlands if the euro hadn't been introduced
- i_{Euro-8} Interest rates in the other euro countries if the euro hadn't been introduced
- i^* Uniform interest rate in all euro countries after the introduction of the euro

¹ As the Balassa Effect implies higher national inflation rates in most of the countries that previously had to pay higher interest rates, it can also be argued that the low real interest rates in these countries are the reason for the high capital demand. This is the same argument though, since, when relative prices change, a welfare optimum is defined by the international equality of the overall rates of return to capital where these rates are defined as the sums of the marginal value products and the rates of national price increase. If the national rates of price increase differ, the curves denoted MPC must be interpreted in terms of these overall rates of return.

ACTIVE LABOUR MARKET POLICIES RUNNING INTO TROUBLE

In its 1994 White Book, the European Commission assigned active labour market policies a leading role in combating unemployment. The same year, the OECD Jobs Study recommended a stronger emphasis on active instead of passive labour market policies. Employment services should be strengthened and reformed, their measures should concentrate largely on the long-term unemployed and problem groups, and their design should be improved.

However, demands for a stronger role for active labour market policies in battling unemployment were not heeded by governments in the OECD

countries. Between 1990 and 1999 spending on active labour market policies as a share of GDP only rose slightly. An increase in this share in several continental European countries such as Austria, Denmark, France, the Netherlands and Switzerland was offset by a decline in Italy, the United Kingdom, the United States and other countries (Figure 1).

There was also no shift in funding from passive to active labour market policies in the OECD as a whole. The number of countries with a shift in one direction were offset by countries where the opposite shift occurred (Figure 2). The majority of OECD countries still spend more on passive labour market policies. This spending is for unemployment compensation and labour-market-induced early retirement. The commitment of OECD countries to passive labour market policies is of course not only an expression of an unwilling-

ness to reform but also reflects the increase of unemployment in these countries which has led to an automatic increase in support payments to the unemployed.

Another recommendation of the Jobs Study deals with the restructuring of active labour market policies in terms of job placement. Such a shift occurred in the United Kingdom, Australia, and Japan and to a lesser extent in Ireland and Portugal in the 1990s. On the other hand, Austria, Spain, and Switzerland cut spending on job placement and spent the money in other areas. The OECD countries also differ with regard to the importance assigned to further training, the granting of employment subsidies, job-creation schemes and other labour-market policy measures. Some countries have cut back on these policies, others have expanded them (see Table).

At the end of the 1990s the following structure was characteristic of active labour market

Figure 1

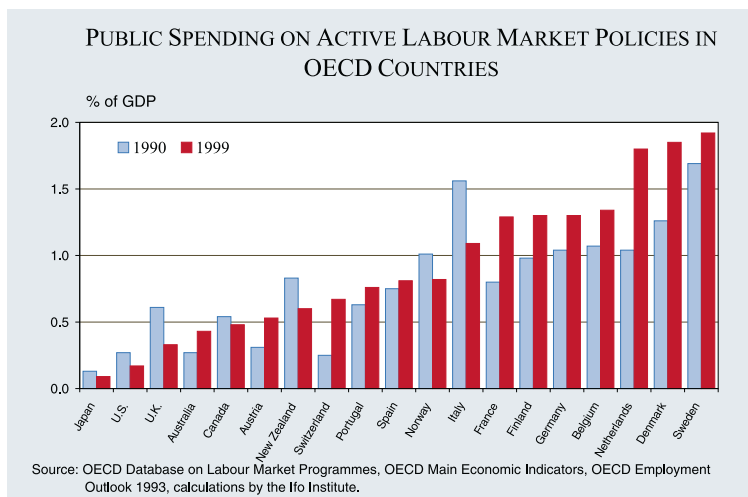
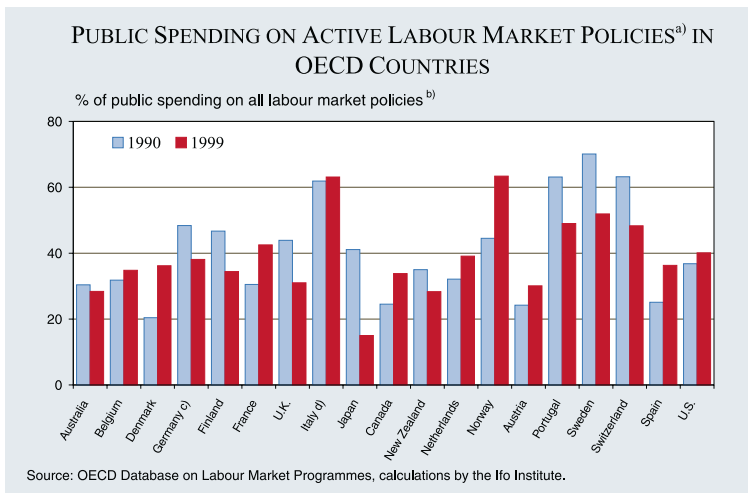


Figure 2



Public expenditure on active labour market policies in OECD countries
in %, 1990 and 1999

	Public employment services		Occupational training		Employment ^{a)} subsidies		Public job-creation		Other measures ^{b)}	
	1990	1999	1990	1999	1990	1999	1990	1999	1990	1999
Austria	34	26	31	36	5	9	11	6	19	23
Belgium ^{c)}	15	14	17	20	6	22	48	35	14	9
Denmark	8	6	24	56	4	1	17	11	47	26
Finland	11	12	25	31	5	13	40	15	19	29
France ^{c)}	16	12	41	23	6	20	2	14	35	31
Germany ^{d)}	21	18	37	27	6	2	10	25	26	28
Ireland ^{e)}	9	15	32	13	1	14	16	38	42	20
Italy ^{f)}	4	4	1	23	57	41	-	6	38	26
Netherlands	20	21	22	19	2	4	1	24	55	32
Portugal ^{c)}	15	22	20	59	-	2	5	10	60	7
Spain	15	7	19	28	16	39	14	11	36	15
Sweden ^{g)}	12	15	32	27	1	10	6	11	49	37
U.K. ^{h)}	29	43	34	19	0	0	-	0	37	38
Norway	13	19	36	6	3	1	15	0	33	74
Switzerland	83	27	13	22	1	16	3	32	-	3
Australia ⁱ⁾	33	46	25	6	11	2	-	15	31	31
Canada ^{j)}	43	39	50	35	-	2	3	10	4	14
Japan ^{j)}	20	37	21	34	54	26	4	2	1	1
Newzealand ^{j)}	18	20	49	38	8	6	9	4	16	32
U.S. ^{j)}	32	34	34	22	2	2	3	5	29	37

a) Subsidies to regular employment in the private sector. - b) Youth measures, support of unemployed persons starting enterprises, measures for the disabled. - c) 1998. - d) 1990: West Germany. - e) 1996. - f) 1991. - g) 1990/91. - h) 1990/91 and 1997/98. - i) 1990/91 and 1998/99.

Source: OECD Database on Labour Market Programmes, calculations by the Ifo Institute.

policy spending. The U.K., Australia, Canada, Japan and the U.S. assigned great importance to employment services. Denmark and Portugal clearly focused on labour market training. Italy, Spain and Japan made strong use of employment subsidies. Public job-creation schemes were popular in Belgium, Ireland and Switzerland, whereas the Anglo-Saxon countries, with the exception of Ireland, placed little stock in employment subsidies and job-creation schemes. In Norway, labour market policies were clearly focused on “other measures”, which here primarily included assistance to the disabled.

The structure of spending gives no indication of the qualitative changes that labour market policies have undergone. Obvious changes are the end to public employment services monopolies in Austria, Denmark, Finland, Germany, and Spain and the more further-reaching measures in Australia for the establishment of a job network, which consists of 300 private and public job placement agencies. Worthy of mention is also the direct counselling of job searching unemployed in the U.K., the U.S., and other countries (linked to additional support measures and sanctions). Also important are the successes achieved in targeting job-creation schemes. Of note is also the limitation on meeting eligibility criteria for future unemployment bene-

fits by participation in job-creation schemes in Finland, Germany, Denmark, and Norway.

Even though the efficiency of labour market policies has been increased in some areas, there has been no consistent, full-scale implementation of the recommendations of the OECD and the European Commission by their member countries. Changes in the emphasis and design of labour market policies differ from country to country. This indicates that there is no one generally accepted concept for labour market policy. W.O.

EUROPEAN PAYMENT HABITS COMPARED: GERMAN FIRMS PAY THE FASTEST

A survey of 11.8 million payment experiences of 1.3 million companies in six European countries revealed that German firms did better than their neighbours, although they also include a high percentage of extremely late payers. Around 78% of German firms pay their bills within the agreed time or at the latest two weeks after. With 60%, Italy takes second place right after Germany, followed by the United Kingdom and France (57%), and Belgium (49.0%). In Holland fewer than half of the firms pay within a two-week payment period.

At the same time the survey also showed that 4% of all German firms are very tardy, exceeding the payment period by more than 90 days. Within Europe only Italy has a worse record, at 4.2%, whereas in the Netherlands the figure is 1.8%, in France 2%, in the UK 2.2%, and in Belgium 2.9%.

These figures must be qualified, however, by the specific periods allowed for payment in the various countries. Thus in the Netherlands the payment

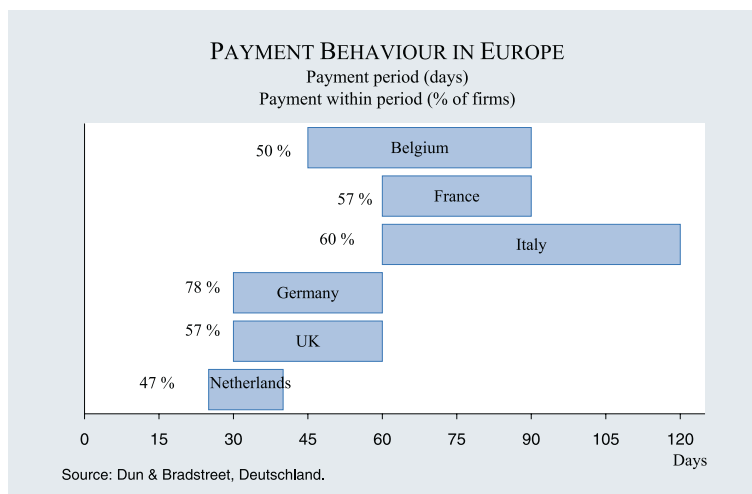
period is shortest, ranging from 25 to 40 days, while it is longest in Italy, spanning 60 to 120 days.

The study conducted by Dun & Bradstreet from April to June 2000 showed that companies' payment habits deteriorated over the past ten years, although they have improved again more recently. Findings like those of the latest survey are of great importance to companies doing business internationally. In times of intensified international competition and narrowing margins, firms increasingly use payment periods strategically. Furthermore, fluctuating payment patterns are an important indicator of the probability of a firm's insolvency, as financial problems lead to the fullest utilisation of trade credit and thus to irregular payment habits.

On average, financial institutions and public utilities pay the fastest, firms in communication and transportation take the longest. As a rule, large firms pay faster than small firms.

In country-specific terms, in Germany the financial sector has the best record, whereas the construction industry takes its time with paying its bills. The same trend is observable in the Netherlands. In the United Kingdom agricultural firms delay payment by only one day beyond the agreed period, whereas telecommunication firms are the slowest with 14 days beyond the target date. In France and Italy the construction industry has a positive payment record, whereas French transportation firms exceed the agreed payment period by an average of 17 days, Italian telecommunications firms by 15 days. The Italian public sector has the worst payment record by far. In Belgium the financial sector pays within the agreed period, whereas the communications industry exceeds the allowed period by as much as 18 days.

H.C.S.



DICE REPORTS¹

EMPLOYMENT-CONDITIONAL TAX CREDIT AND BENEFIT SYSTEMS

In light of high unemployment among less skilled workers and the relatively low pay in the low-wage sector, several Anglo-Saxon countries (and Finland) give tax credits and wage-related transfers to workers in this labour segment. Currently the following systems are in force: Australia's Employment Entry Payment and Special Employment Advance, Finland's Earned Income Tax Credit, the U.K.'s Working Families' Tax Credit, Ireland's multifaceted programme, Canada's Child Tax Benefit, New Zealand's Family Tax Credit, and the Earned Income Tax Credit of the United States (OECD 1999a; OECD 1999b).

In all of these systems there is no guarantee of a minimum standard of living. Rather, a current job is required to claim these benefits. Only low-wage earners generally qualify for the benefits, and here, too, eligibility is primarily limited to families with children. The limitation to the low-wage sector means that, from a particular level of income, net transfers are diminished and ultimately reduced to zero. In this range the marginal charges on gross income are very high. Benefits are usually for an unlimited period.

The Earned Income Tax Credit in the United States

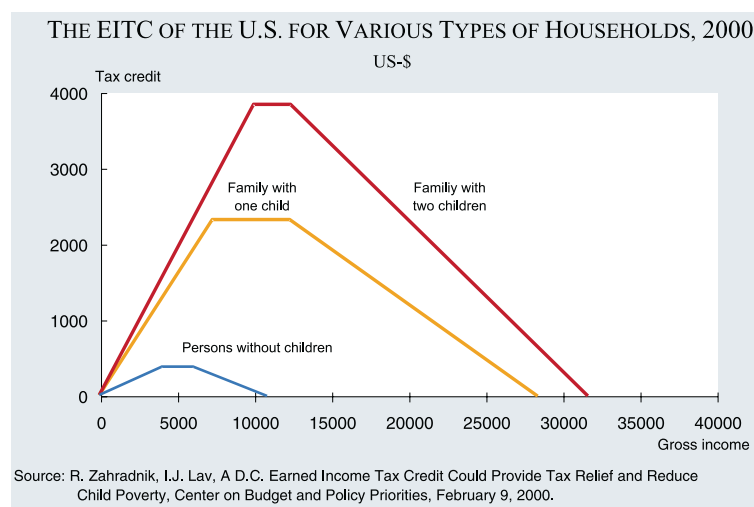
Probably the best known programme to assist low-income groups is the Earned Income Tax Credit (EITC) introduced in the U.S. in 1975.² Its goal is to

create financial incentives for low-wage earners and boost their incomes. The programme was modified and considerably expanded in 1986, 1990 and 1993. Today, it is the most important measure for combating poverty in the U.S.

The EITC is a tax credit that is granted under certain conditions to low-income households. The beneficiaries are subject to federal income tax. If the tax credit is higher than the income tax owed, the difference is paid out to the eligible families. Otherwise it is deducted from their income tax liability. EITC is administered by the Internal Revenue Service.

Employment is required for eligibility, and the programme is primarily aimed at working people with children. The amount of tax credit is based on gross earnings. Figure 1 illustrates the three phases of the EITC. Initially the tax credit rises in linear fashion with increasing income (phase I), then it remains constant (phase II) and declines again from a particular income level (phase III). The amount of tax credit and the income levels differ according to household type. Distinctions are made as to families with two and more children, families with one child, and people without children. The highest benefit is given to families with two or more children.

Figure 1



¹ DICE = Database of Institutional Comparison in Europe (www.cesifo.de).

² The following is a description of the programme at the federal level.

The parameters of the EITC in 2000 are shown in the table. For example, a family with two or more children and an income between USD 1 and 9,720 receives a tax credit of 40 cents on every dollar earned. With a gross income of USD 9,720 the maximum credit of \$3,888 is reached. This remains constant until gross income reaches USD 12,690. For every dollar earned above USD 12,690, the tax credit is reduced by 21 cents. When gross income reaches USD 31,152, the tax credit is reduced to 0. In the third phase in which the tax credit is reduced, the marginal charge on income is higher than the marginal rate of income tax. In this phase of tax credit reduction the former amounts to about 50%, as a rule (Gern 1996, p. 292; Eissa and Liebman 1995, p. 34).

In 1998, 19.8 million workers (including 16.4 million families with children) took advantage of EITC. The tax credit amounted to an average of USD 1,584 or USD 1870 for families with children (Economic Report of the President 1999, Box 3.-3).

The Working Families' Tax Credit in the United Kingdom

The U.K. along with the U.S. has a long tradition of assisting working people with low incomes. As far back as 1971 a Family Income Supplement was introduced. This was replaced in 1988 by the Family Credit (FC). This in turn was replaced at the end of 1999 by the Working Families' Tax Credit (WFTC).

Families with at least one child can claim the WFTC as long as one adult works at least 16 hours a week. The financial rules are quite similar to those of the FC, but the benefits are more generous:

- The standard rate for adults is GBP 53.15 a week (or GBP 2,763.80 a year) and for children, depending on age, either GBP 25.60 or GBP 26.35 a week (or GBP 1,331.20 and GBP 1,370.20 a year). For work of 30 hours or more per week, the benefits increase by GBP 11.25 a week.
- Although child care costs can no longer be deducted in calculating net income, as was the case for the Family Credit, up to 70% of child care costs (up to certain upper levels) can be used to increase the tax credit.
- In calculating net income for the WFTC, a standard deduction of GBP 91.45 a week (or GBP 4,755.40 a year) is allowed, and
- the withdrawal rate has been reduced from 70% to 55% in comparison to the FC (Blundell,

Duncan, McCrae and Meghir 2000, pp. 77ff.; Gregg, Johnson and Reed 1999, pp. 99f.; Blundell 2000, pp. 27ff.

The more generous design of the WFTC is reflected in budget expenditures of GBP 5 billion a year or GBP 1.5 billion more than was spent on the Family Credit programme.

The Earned Income Tax Credit in Finland

The only non-Anglo Saxon country to introduce an Earned Income Tax Credit is Finland. The Finnish EITC is less generous than similar programmes in the U.S. and the U.K. The Finnish programme is administered by the 450 municipalities. They levy their own income tax, the proportional tax rate of which averages 18%. (In individual cases it ranges from 15% to 20%.) The EITC has the following features: With a labour income of FIM 15,000–49,000, 20% of income can be deducted from the tax base of the municipal income tax. At FIM 49,000 the maximum deduction of FIM 9,800 is reached. This remains constant up to an income of FIM 75,000 (= 50% of average income). Between FIM 75,000 and 355,000, the deduction declines. From every finmark earned in excess of FIM 75,000 3.5% is deducted from the maximum tax deduction. When income reaches FIM 355,000, the deduction from the tax base is zero. At a proportional tax rate of 18%, taxes saved amount to 18% of the deduction from the tax base. Taxes saved reach a maximum of FIM 1,764 (see Table and Figure 2).

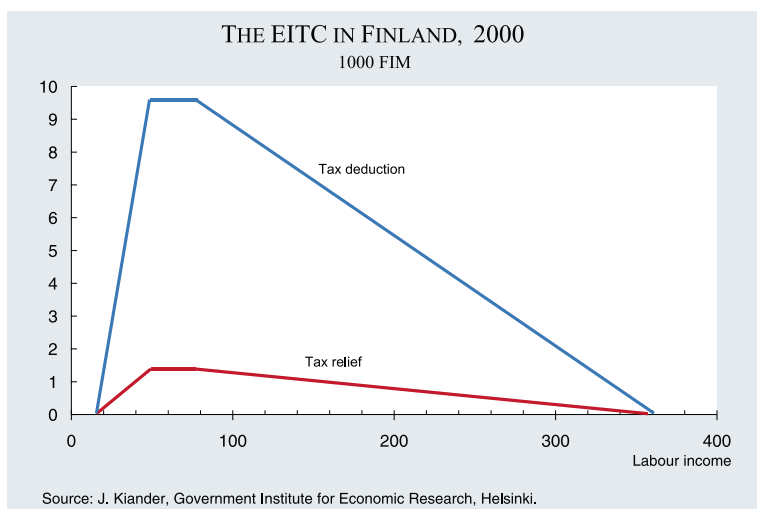
Assisting low-income workers in Ireland

There are several programmes to assist low-income workers in Ireland:

- the Back to Work Allowance (BTWA)
- the Family Income Supplement (FIS)
- the Continued Child Dependent Payment (CCDP) and
- the Part Time Job Incentive (PTJI)

The objective of the Back to Work Allowance is to create incentives to take on a job (Department of Social Community and Family Affairs 1999). Unemployed people who take on jobs can keep part of the previous unemployment compensation for a limited period of time. To claim BTWA bene-

Figure 2



fits, the person must be older than twenty-two, unemployed for twelve months, and must have received unemployment benefits amounting to at least IRP 40 (singles) or IRP 62 (couples); additionally, a single parent who has received assistance for twelve months also qualifies. Furthermore, by hiring these people the employer's total number of jobs must have increased. Qualifying people receive:

- 75% of their unemployment benefits during their first year on the job,
- 50% in the second year,
- 25% in the third year (see Table).

The Family Income Supplement provides a benefit to families that are employed in low-paying jobs (Callan, O'Neill and O'Donoghue 1995). To qualify, employment must be for at least nineteen hours a week and for a projected three months or more. The working hours of a married couple or partners may be combined. The transfer payments amount to 60% of the difference between the net income of the family (gross income minus taxes and minus social insurance contributions) and the relevant income limit. This increases to IRP 233 a week for one child, IRP 253 for two children, and up to a limit of IRP 355 for seven and more children. The minimum benefit is IRP 10 a week. At the end of 1999, 37,600 families claimed benefits under BTWA and 14,500 under FSI.³

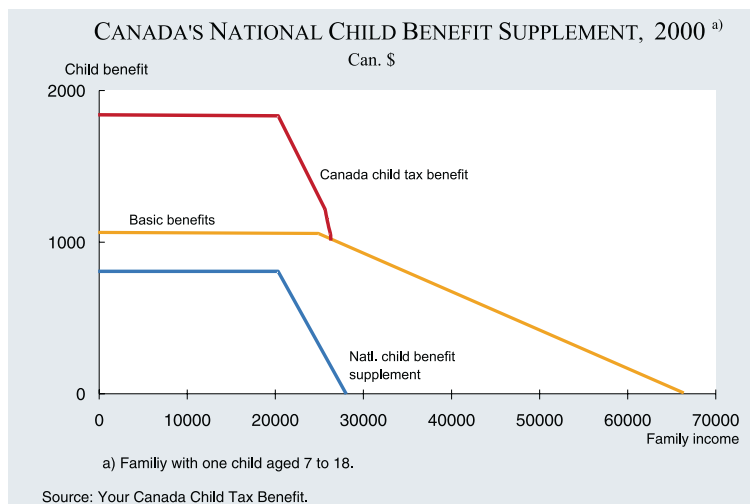
The Canada Child Tax Benefit

The assistance of working families with children has a long tradition in Canada. In 1993 the Family Allowance was replaced by the Child Tax Benefit which was later supplemented by a Working Income Supplement for families with low incomes. At the end of the 1990s both were incorporated into the Canada Child Tax Benefit (CCTB) (Battle 1997, pp. 89ff.).

The CCTB contains the payment of child allowances. It consists of basic benefits and the National Child Benefit Supplement (NCBS) for low-income families. The NCBS supplements the basic benefits. It grants low-income families CAD 785 per year for the first child, CAD 585 for the second child and CAD 510 for each additional child. Above a net income of CAD 20,921, the child allowance is reduced for each additionally earned dollar by 11.5% for families with one child, 20.1% (two children) and 27.5% (three children). At an income level of about CAD 27,750, entitlement for child allowances within the NCBS ends (see Table). Figure 3 shows that a family with one child and a low income receives CAD 1,805 in child allowances a year. Above a net income of CAD 25,921, child allowances first decline rapidly and

³ For an explanation of CCDP and PTJI, see Department of Social and Community Affairs.

Figure 3



Employment-conditional Tax Credits and Benefits, ^{a)} 2000

	Responsible department	Minimum earnings (conditions)	Phase-in rate	Earnings where phasing-in stops	Maximum benefit	Earnings where phasing-out begins	Withdrawal rate	Minimum hours worked	Family type
Finland Earned Income Tax Credit	Tax administration	FIM 15,000	20% (reduction of tax base)	FIM 49,000	FIM 9,800 (reduction of tax base) FIM 1,764 (tax saving)	FIM 75,000	3.5% of income above FIM 75,000	No limit	All families
Ireland ^{b)} Back to Work Allowance	Social security	For long term unemployed now in employment			75% of unemployment assistance (first year) 50% (second year) 25% (third year)	Limit: 3 years		20 hours per week	Individual based
Ireland Family Income Supplement	Social security	For families with low income			60% x (family income - income limit)	Duration: 1 year (renewable without limit)		19 hours per week (for at least 3 months)	Families with children (and low income)
United Kingdom Working Families' Tax Credit	Tax administration	None	None		GBP 2,763.80 adults GBP 1,331.20 children (0-15 years) GBP 1,370.20 children (16-18 years)	Threshold of GBP 4,755.40	55% of net income above GBP 4,775.40	16 hours, supplement for 30 hours or more	Families with children
Australia Employment Entry Payment	Social security	Paid to people entering into full-time employment			AUD 100 (once)			No limit	Individual based
Australia Special Employment Advance	Social security	Payment when a particular expense is associated with starting a job			AUD 50 - 500			No limit	Individual based

continued Table:

	Responsible department	Minimum earnings (conditions)	Phase-in rate	Earnings where phasing-in stops	Maximum benefit	Earnings where phasing-out begins	Withdrawal rate	Minimum hours worked	Family type
Canada ^{a)} National Child Benefit Supplement	Tax administration	None	None		CAD 785 first child CAD 585 second child CAD 510 each additional child	CAD 20,921	11.5% (1 child) 20.1% (2 children) 27.5% (3 and more children) of family net income above CAD 20,291	No limit	Low-income families with children
New Zealand Family Tax Credit	Tax administration	None			NZD 14,872 family income (after tax) per year			20 hours per week (single-parent family) 30 hours per week (two-parent family combined)	Low-income families with children
United States ^{d)} Federal Earned Income Tax Credit	Tax administration	None	34% 40% 7.65% of gross income	USD 6,920 USD 9,720 USD 4,610	USD 2,353 USD 3,888 USD 353	USD 12,690 USD 12,690 USD 5,770	15.98% 21.06% 7.65% of gross income above income where phasing out begins	No limit	

(a) 100 FIM = 15.93 USD; 1 GBP = 1.58 USD; 1 AUD = 0.60 USD; 1 CAD = 0.68 USD; 1 NZD = 0.5 USD (April 2000); - (b) There are two other schemes: The Continued Child Dependent Payment and the Part-time Job Incentive; - (c) At the provincial level (British Columbia, New Brunswick) there is a further program: the self-sufficiency project; - (d) First figure is for one child families, second for two and more children, third for no children.

Source: CESifo.

later, after the NCBS runs out, at a slower pace. The CCTB is claimed by 3.2 million Canadian families accounting for 80% of all children (Department of Finance 2000).

Australia's Employment Entry Payment and Special Employment Advance; New Zealand's Family Tax Credit

In contrast to the aforementioned systems, Australia focuses on the transition from joblessness to employment. When an unemployed person takes on a job, he receives AUD 100 under the Employment Entry Payment scheme. As an alternative, a Special Employment Advance can also be claimed. It includes the payment of expenses involved in assuming work up to a maximum of AUD 500.⁴

With its Family Tax Credit, New Zealand supplements the net income of low-income families. For family incomes that are less than NZD 286 a week or NZD 14,872 a year after taxes, the difference is transferred by the tax authorities. To claim the Family Tax Credit, one parent must work. Single parents must work twenty hours a week. Partners must work a total of at least thirty hours a week. Each partner receives 50% of the transfer payments (see Table).⁵

Effect on income and employment

The objective of granting tax credits and job-linked transfers is to increase the net incomes in the low-income range and the labour supply. The income objective is largely met by these systems. In the United States half of all EITC payments go to families with incomes below the poverty level. It is estimated that EITC lifted 4.3 million people above the poverty level and made an important contribution to preventing child poverty (Economic Report of the President 2000). The WFTC in the United Kingdom and the NCBS in Canada especially help families at the bottom of the income pyramid. Only the FSI in Ireland and the EITC in Finland appear to help other groups besides low-income recipients. The income-related withdrawal rates as well as a cut-off income level

assure that the benefits go to the deserving. This also constrains budget expenditures.

In contrast to the income effects, the impact of the employment subsidies on labour supply and (given sufficient demand) on employment in the low-wage sector is not straightforward. To be sure, the increase in net incomes and the accompanying increase in the wage differential create work incentives. On the other hand, the high marginal charges on income in the transfer withdrawal range cause those with jobs to work fewer hours (effect on hours worked). There is thus a trade-off between the likelihood of participation and the effect on hours worked. Both effects appear to offset each other in terms of the total number of man-hours supplied.

Empirical studies show that the effects on the labour supply differ according to the design of the assistance system and the family situation of the beneficiaries. In the United States, the EITC has given single mothers a strong incentive to work. There has been little impact on the labour-market participation of married men, whereas the participation of married women has declined slightly. The latter effect may be the result of the fact that the EITC is linked not to individual incomes but to the labour income of the family, so that it becomes unattractive for married women (with employed husbands) to take on jobs because of the high marginal charges on income in the withdrawal phase. The working behaviour of those with jobs is also affected in various ways. Whereas the hours worked by married women, and also by married men, have declined, the hours of single mothers have remained stable. In conclusion, the employment/workforce ratio has been raised by the EITC, working hours supplied have been reduced, and the total number of man-hours worked have increased slightly.

The WFTC in the United Kingdom provides a strong work incentive. The only contrary effect concerns married women with a working partner. Labour participation is estimated to have increased by 30,000 as a result of the WFTC. On the other hand, the high marginal charges on income for weekly working times in excess of 16 hours provides a strong incentive to work only 16 hours a week.

In assessing these results, it must be kept in mind that the negative indirect employment effects that

⁴ See <http://www.centrelink.gov.au>.

⁵ See <http://www.ird.govt.nz/famiasst/famiasst.htm>.

have been caused by the financing of these programmes from general tax revenues have not been included. If these were taken into consideration, the small increase in employment would be reduced further.⁶ Wolfgang Ochel

⁶ In addition to the effects on income and employment, the impact of the transfer systems on education and further training, on savings and marriage patterns, etc. is also important. See the papers presented at the conference of the Joint Center for Poverty Research at Northwestern University, Evanston, on 7–8 October 1999 (<http://www.jcpr.org>).

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ECONOMIC SURVEY INTERNATIONAL

In July/August 2000, more than 750 economic experts in 82 countries were polled by the Ifo Institute's 69th Economic Survey International.

The world economy is showing first signs of a cyclical downswing. The overall economic indicator dipped in July, after having risen continuously since early 1999 and showing stagnation in April of this year. Whereas the current situation was said to have improved further, expectations of future economic activity were less optimistic than before.

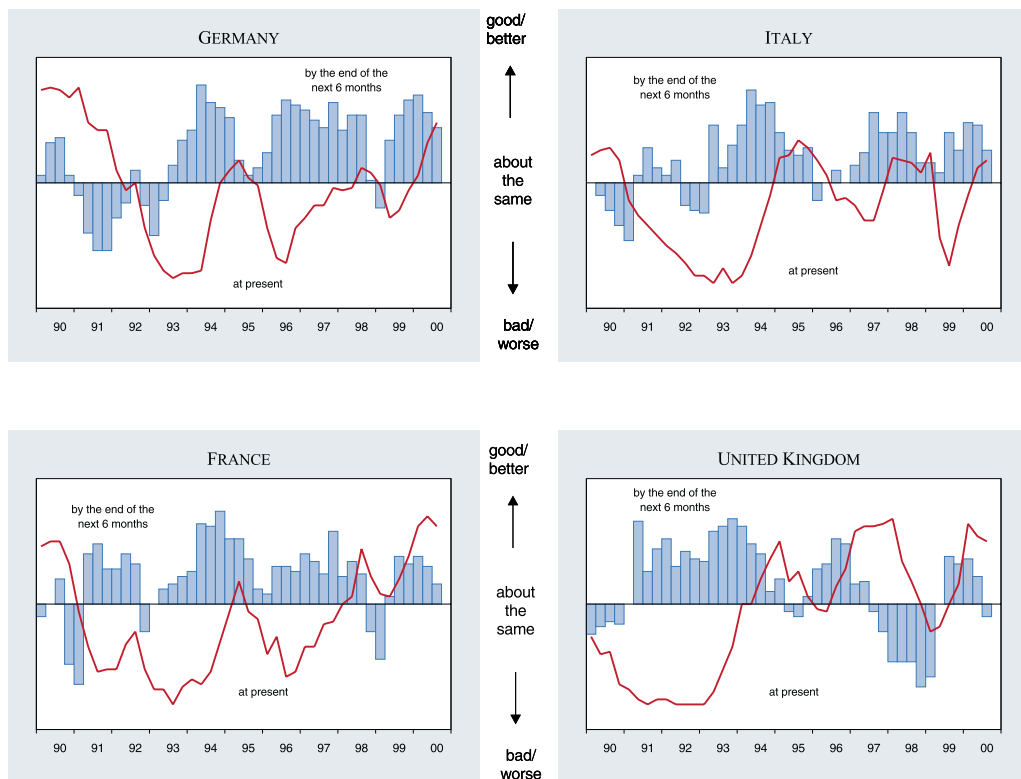
In Western Europe, the upswing will continue, but lose some momentum. The current situation in most Western European countries has further improved. Expectations for the second half of the year are less buoyant, however, than in the previous survey, signalling some slowdown in the pace of the upswing. Whereas government demand will continue to expand and private consumption will remain robust, private investment will slow down as a result of less

favourable expectations regarding sales and profits. Export demand will weaken markedly, and residential construction will lose momentum.

In the United Kingdom the slowdown is more pronounced than in continental Europe, but signs of a lessening momentum are also visible in countries like the Netherlands and Portugal, which have experienced above-average growth in the current cycle. In Germany and Italy the current situation is still improving, while the outlook for the next six months has deteriorated. In France, however, not only have expectations become even more pessimistic, the assessment of the present situation has also dipped.

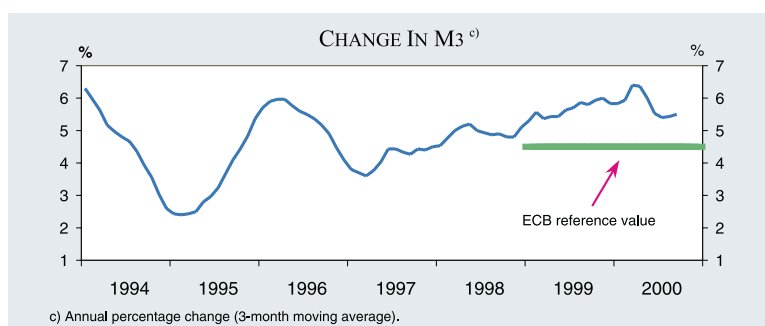
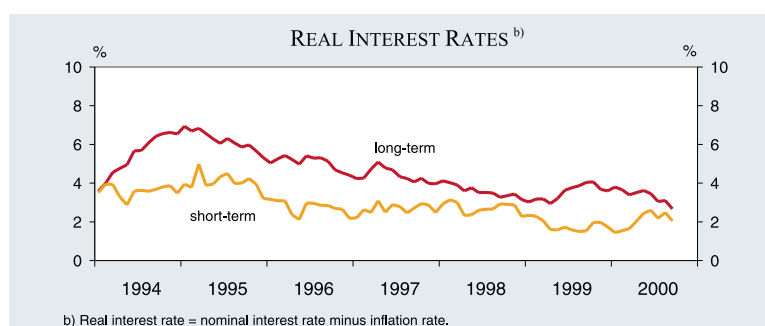
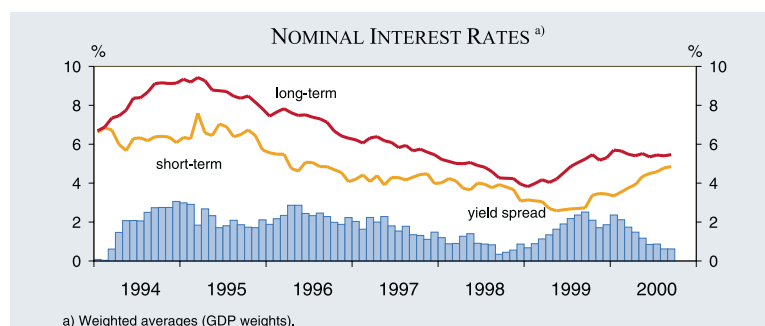
In Western Europe as a whole and the euro-area as well, inflation is expected to reach 2.2% in 2000, with France (1.6%) at the lower end and Ireland (4.8%) at the top of the scale. As in the previous survey the euro is considered markedly undervalued against practically all currencies.

Present and Expected Economic Situation



Source: ESI 69, 3/2000.

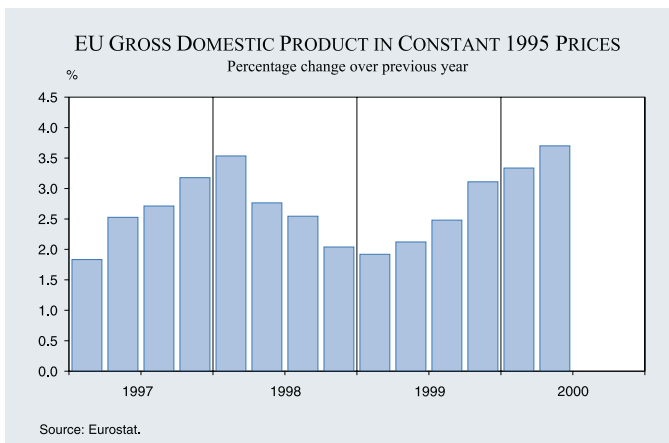
MONETARY CONDITIONS IN THE EURO-REGION



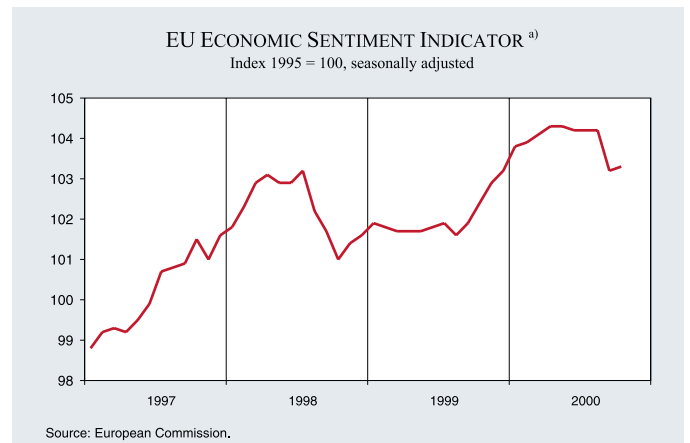
Source: European Central Bank.

At present monetary conditions are largely neutral. At its most recent meetings, the European Central Bank left its key interest rates unchanged after having raised them by a total of 1¼ percentage points since last spring to 5% in October 2000. With 10-year government bond yields remaining roughly constant over the same period, the yield spread has narrowed considerably. Money supply growth has shown signs of moderation in recent months, remaining at 5.4% in the period from July to September 2000, unchanged from the previous three-month period. It thus still exceeded the ECB's target growth rate for M3 of 4.5%.

EU SURVEY RESULTS

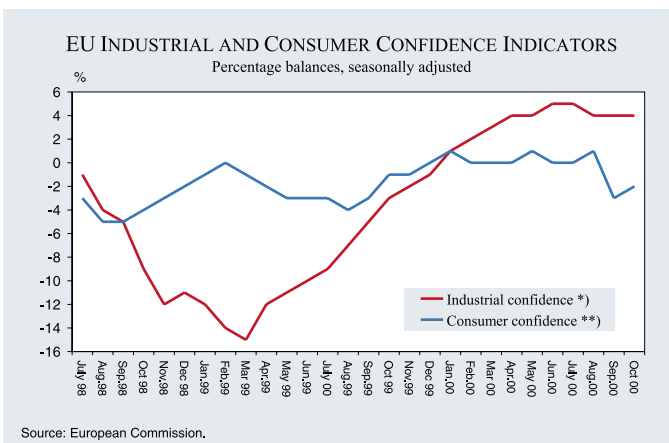


Gross domestic product expanded briskly during the first half of 2000, at an annualised rate of 3.5%. Growth was primarily driven by exports which benefited from the continuing strong activity in the United States, recovery in Asia and Central Eastern Europe, and a weakening euro. Domestic demand also rose due to employment gains and tax cuts.



* The indicator of economic sentiment is a weighted average of the industrial confidence indicator, the construction confidence indicator, the consumer confidence indicator and the share-price index. 1995 = 100.

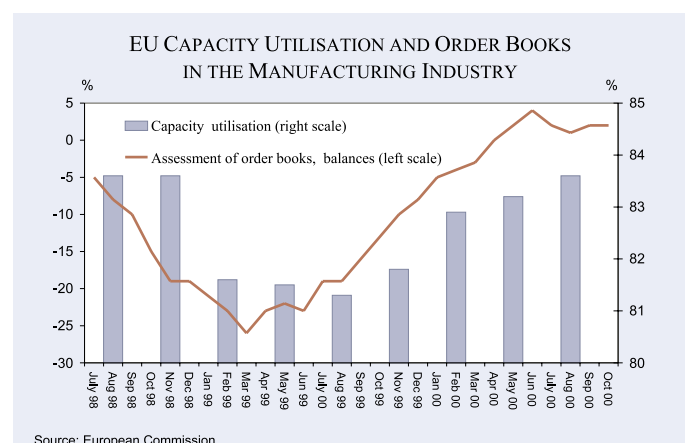
In October, the economic sentiment indicator reversed and increased by 0.1 points. Among its components only the construction confidence indicator increased, by 2 points. Denmark and Spain displayed the highest gains in economic sentiment, at 0.4 points each, while the U.K. and France had increases of 0.3 and 0.1 points respectively.



* The industrial confidence indicator is an average of responses (balances) to the questions on production expectations, order-books and stocks (the latter with inverted sign).

** The consumer confidence indicator is an average of responses to the questions on the financial situation of households and their assessment of the general economic conditions, both in the past and future twelve months, and the question on big-ticket purchases.

While the industrial confidence indicator remained unchanged (at +4) in October because industrialists were optimistic about export orders, the consumer confidence indicator improved from -3 to -2. This was due in large measure to the increases in Denmark and the United Kingdom.



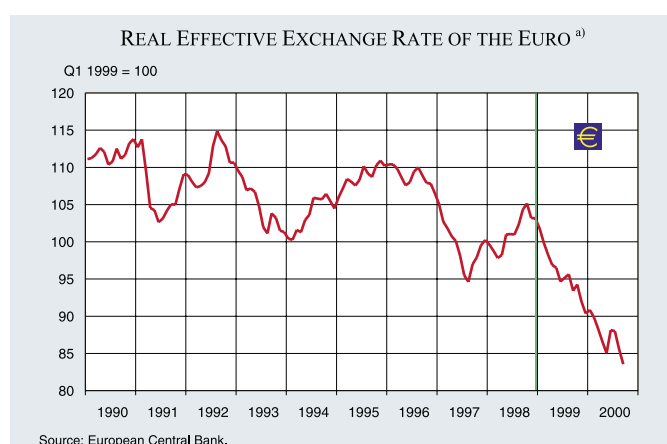
Capacity utilisation in the EU rose from 83.2% in the second quarter to 83.6% in the third quarter. Utilisation rates increased most in France, the UK, Portugal and Spain. The assessment of new orders in the manufacturing industry in terms of balances has remained largely unchanged since June.

EURO AREA INDICATORS



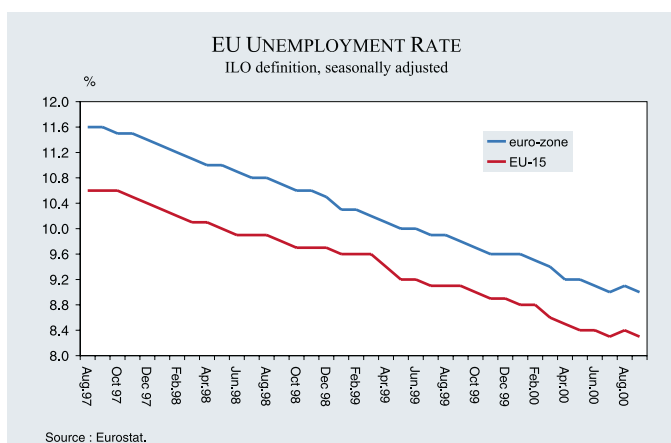
The general financial balance of the euro area has steadily declined as countries have pursued a course of fiscal consolidation to fulfil the Maastricht criteria.

The deficit amounted to 1.3% of GDP in 1999. The OECD estimates a slight surplus in 2000, but projects small deficits again for 2001 and 2002. The structural deficit is estimated to remain unchanged at 0.6% in 2000 and the two years beyond.

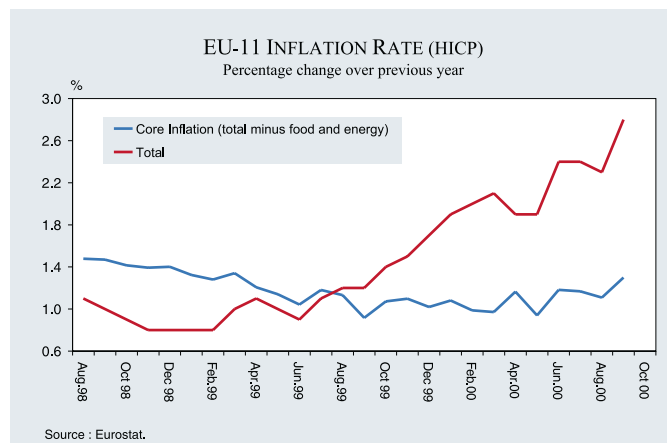


^{a)} BIS calculations; to December 1998, based on weighted averages of the euro area countries' effective exchange rates; from January 1999, based on weighted averages of bilateral euro exchange rates. Weights are based on 1990 manufactured goods trade with the trading partners United States, Japan, Switzerland, United Kingdom, Sweden, Denmark, Greece, Norway, Canada, Australia, Hong Kong, South Korea and Singapore and capture third market effects. Real rates are calculated using national CPIs. Where CPI data are not yet available, estimates are used.

The real effective exchange rate of the euro continued to decline after a brief respite in June and July of this year. It has lost 12% versus October 1999.



The unemployment rate continued to decline in both, the euro area and the entire EU. In September it stood at 9.0% in the euro area and at 8.3% in the EU-15. While the decline in unemployment occurred across all countries, especially noteworthy was the progress achieved in France and Germany, albeit from high levels.



Consumer price inflation accelerated to 2.8% in September, having averaged 2.1% in the year to August. While food prices have also increased faster in the second half of the year, energy prices have been the major contributor to the rise. Core inflation (i.e. deducting food and energy) remained relatively stable at 1.3%.

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European Accounting Association	18-Apr-01 - 20. Apr 01	Athens, Greece	11.06.2000	Prof. George Venieris, 2001 EAA Congress, Athens University of Economics and Business, 76, Patission Street, Athens 104 34, Greece
European Association of Labour Economists	13-Sep-01 - 16. Sep 01	Jyväskylä, Finland	01. Mrz 01	Margo Romans, EALE secretariat, ROA Maastricht University, PO Box 616, NL-6200 MD Maastricht, The Netherlands m.romans@roa.unimaas.nl
European Economic Association	30-Aug-01 - 01. Sep 01	Lausanne, Switzerland	01. Mrz 01	
European Financial Management Assoc.	27-Jun-01 - 30. Jun 01	Lugano, Switzerland	14. Jan 01	Giovanni Barone-Adesi, Faculta di Economia Univerista della Svizzera Italiana, Via Ospedale 13, 6900 Lugano, Switzerland
European Public Choice Society	18-Apr-01 - 22. Apr 01	Paris, France		
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Society of Labor Economists	20-Apr-01 - 21. Apr 01	Austin USA		

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