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Article

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Vierteljahrshefte zur Wirtschaftsforschung

Provided in Cooperation with:
German Institute for Economic Research (DIW Berlin)

Suggested Citation: Bach, Stefan; Hubbert, Markus; Müller, Walter (2000) : Taxation of E-Commerce: Persistent Problems and Recent Developments, Vierteljahrshefte zur Wirtschaftsforschung, ISSN 1861-1559, Duncker & Humblot, Berlin, Vol. 69, Iss. 4, pp. 657-678, http://dx.doi.org/10.3790/vjh.69.4.657

This Version is available at:
http://hdl.handle.net/10419/99172
Taxation of E-Commerce: Persistent Problems and Recent Developments

By Stefan Bach*, Markus Hubbert** and Walter Müller**

Summary

E-commerce on the Internet will create new demands on taxation. In the field of income and business taxation there exists a large potential for profit-shifting into low-tax countries, especially concerning transfers of immaterial goods and transfer pricing. In the long run, this can lead to a severe revenue shortfall. Turnover taxation/VAT raise problems if foreign suppliers sell electronic products or services to final consumers online. VAT should be charged in the country where the consumption takes place, which is currently not the case. Otherwise, distortions of competition and unjust effects of taxation will become more comprehensive. This requires special technical solutions and closer international co-operation among taxation authorities. As a basic principle, e-commerce should not enjoy tax privileges. Rather, it should compete against the traditional economy on the basis of its specific advantages, which, on the other hand, should not be impeded by undue taxation procedures.

1. Introduction

The widespread diffusion of information and communication systems and the development of the Internet into a global “network of networks” are said to be the main drivers of the “new economy”. A level of reasonable access to electronic data networks has stimulated the emergence of “cyber business” and “electronic commerce” (e-commerce), in particular on the world wide web (www), which represents an entirely new channel for moving goods and services globally. This opens up additional opportunities for new products and production schemes, trade and the international division of labour in general, because distance plays a diminishing role.

While business goes global electronically, taxation remains physically local, at least to a large extent. Tax arrangements are basically suited to those businesses and transactions related to home markets or conventional foreign trade. Correspondingly, tax authorities are bound by national borders. Yet as the ongoing debate about globalisation shows, it becomes difficult to tax international mobile services or production factors such as capital and related services. Electronic business on the Internet may aggravate these problems as firms from all over the world may co-operate or even integrate to virtual enterprises. Problems in the field of indirect consumption taxation may arise when consumers go shopping abroad. This is particularly true if the production and distribution process including payments goes completely online. In the long run, the Internet promises to integrate separate media such as computer software, music, video and television into a comprehensive digital multimedia channel.

Against this economic background, e-commerce will create new demands on taxation, regarding the adaptation of tax regulations, as well as its enforcement. This paper gives an overview on these topics. After describing the basic economical and technical-institutional backgrounds (chapter 2) an overview on the crucial problems of e-commerce taxation is presented (chapter 3). Chapter 4 addresses issues of income taxation and chapter 5 deals with the problems on turnover taxation/VAT. For illustrating the problems the text often refers to examples from the German tax system and international tax law.

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The authors would like to thank Bert Kaminski, University of Hamburg, for his substantial and helpful comments. All remaining shortcomings are, of course, in our responsibility alone.
2. Economic Performance and Technical-Institutional Backgrounds

Since the establishment of the www in 1993, the Internet\(^1\) has developed into a global medium for telecommunication and information exchange within the space of just a few years. In contrast to long-established (proprietary) business-related networks, its non-proprietary character has proved to be a crucial competitive advantage: There is no centralised ownership selecting access by requiring licences and imposing charges for its use. The www permits digitalised data of all types — documents, pictures, video, music and language — to be transmitted in an interactive way. Increasingly, conventional electronic networks are adopting Internet standards. Users (suppliers and consumers) from all over the world can get access to the net.

E-commerce encompasses the following main areas:

— Electronic networks change the paths used to transmit information in the context of traditional trade in goods and services. Rather than using traditional communication channels (providing information through catalogues and ordering by letter, telephone or fax), interaction between supplier and purchaser occurs via the Internet, while the goods and services are delivered physically. This is expected to create a substantial potential for mail order business, mediation agencies and similar service-providers.

— Computer programmes, and increasingly also music/audio and pictures/videos, can be exchanged in digital form via the Internet, and downloaded to remote storage media. Conventional telecommunication medias such as telephone/fax, radio and television will increasingly be integrated into the Internet, and will be enlarged by new multimedia services, e.g. video conferences, Pay TV, music and video on-demand. New Internet-related products will be offered increasingly (for instance homepage designing). In so far, the whole distribution process is tied online as well as parts of the production process of the traditional economy. Another characteristic feature of such digital products is that they can be reproduced in unlimited numbers without loss of quality.

— In addition, the Internet offers a significant potential for services provided by financial intermediaries (electronic banking, trade in securities, electronic cash, insurance), for advisory services and consultants (auditors, management consultants, accountants, software programming, tele-medicine) and for transactions with public institutions.

The rapid diffusion of modern information and communication technologies, particularly in the most developed economic regions, North America, Western Europe and Japan, has established the pre-conditions required for a broad-based use of electronic commerce.\(^2\) The frontrunners in Internet penetration are the U.S.A. and Canada with the Scandinavian countries leading in Europe, where nearly half of the population have access to the Internet (table 1). Germany lags at present with only 20% of the population or 16 Mill. Internet users, but diffusion of Internet access is climbing strong upwards and increased by about 6 Mill. during the last year.\(^3\) Forecasts of e-commerce transactions show a dynamic rise in market volume, whereas the dominance of business to business (B2B) market is predicted to remain, while the business to consumer segment (B2C) will account for only a small proportion of total electronic commerce in the foreseeable future (figure 1). Private households mainly buy books, CDs, videos, computers, clothes, travel and financial services via the Internet.\(^4\)

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1 Originating in the 1960s in the U.S.A., the Internet was initially developed as a computer network between government offices, research laboratories and academic institutions. Its extremely decentralised network architecture reflected strategic military considerations: even if some important parts of the network were to be disabled, communication could continue automatically via the remaining components in use.


3 GfK (2000).

4 See Ernst & Young (2000).

Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of which:</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>91.8</td>
<td>12.8</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>2.2</td>
<td>49.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>4.2</td>
<td>46.0</td>
</tr>
<tr>
<td>Finland</td>
<td>2.3</td>
<td>43.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.1</td>
<td>37.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.6</td>
<td>29.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.8</td>
<td>25.0</td>
</tr>
<tr>
<td>Austria</td>
<td>1.9</td>
<td>22.7</td>
</tr>
<tr>
<td>Belgium</td>
<td>2.2</td>
<td>22.0</td>
</tr>
<tr>
<td>Germany</td>
<td>15.9</td>
<td>19.4</td>
</tr>
<tr>
<td>Italy</td>
<td>9.3</td>
<td>16.4</td>
</tr>
<tr>
<td>Greece</td>
<td>1.7</td>
<td>16.0</td>
</tr>
<tr>
<td>France</td>
<td>9.0</td>
<td>15.3</td>
</tr>
<tr>
<td>Spain</td>
<td>3.8</td>
<td>10.0</td>
</tr>
<tr>
<td>USA</td>
<td>126.0</td>
<td>46.0</td>
</tr>
<tr>
<td>Canada</td>
<td>13.6</td>
<td>43.0</td>
</tr>
<tr>
<td>Australia</td>
<td>6.9</td>
<td>36.4</td>
</tr>
<tr>
<td>South Korea</td>
<td>13.0</td>
<td>27.0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Japan</td>
<td>21.2</td>
<td>16.8</td>
</tr>
</tbody>
</table>

Sources: Nua Internet Surveys (2000 a)
Despite this dynamic development in Internet access, barriers to a broader diffusion of electronic commerce remain, although they will be overcome to a large extent within the next years:

— Currently the bandwidth available for private households or small enterprises only permits the limited use of multimedia forms (particularly audio/video). In this area the technical parameters can be improved in the medium term, however, by rapidly developing new standards (ADSL) or, in addition, by upgrading cable television and electricity networks as well as mobile telecommunication systems (WAP, GRPS, UMTS).

— The prices for local calls, the decisive area for the access to the Internet, are still relatively high in many European countries, in particular in Germany, compared to the U.S.A. However, as a result of the deregulation of telecom markets, competition will lead to lower tariffs and enhanced price differentiation related to user profiles, e.g. flat tariffs that are independent of the time spent online.

— Legally binding contracts are an essential precondition for electronic commerce to function without friction. In the case of transactions involving large sums, the risks concerning the creditworthiness of partners and, in the case of international business relations, differences in general property rights and other legal standards can be expected to play an important role. In the case of sales to private households, consumer protection standards must be maintained. International agreements will be required in this area or existing regulations will have to be reformed.

— Furthermore, questions relating to data security and measures to establish identity and authenticity still remain a significant obstacle to the development of e-commerce. In particular, secure and reasonable electronic mechanism for payments, especially for micro payments, are deemed to be an important pre-condition for the extensive use of e-commerce by private households. However, wide-range improvements had been made in terms of technical standards and public regulations. Trust centres are established, which issue digital signatures, monitored by public authorities. Advanced encryption technologies provide a high level of security when transmitting data, in particular if electronic payments are involved.

— Last but not least, empirical analysis have shown that the intensity of communication is largely determined by the regional and cultural closeness of the services offered. Linguistic barriers play an important role in this context. It can therefore be assumed that even in the longer run regional clusters will remain, in the face of the trend towards an ongoing globalisation of the economy. This will also apply to electronic commerce, unless differences in taxation systems and other legal and institutional parameters create incentives for spatial changes.

3. Relevance of E-Commerce for Taxation — an Overview

3.1 Problematic issues

Existing taxation systems have developed in an economic environment characterised by the exchange of tangible goods and personal services. As global electronic information and communication networks become ever more comprehensive, value added is shifting in favour of intangible goods and electronically provided services, in which suppliers need not be present at the point of sale.
This makes new demands on taxation systems. Firstly, taxation norms will have to be adapted to the new economic-technological environment of e-commerce. Secondly, the institutional and technical implications of cyber business have enormous repercussions for taxation procedures, for instance regarding the monitoring and control function of the tax authorities and the tax compliance including the obligation on taxpayers to co-operate with the authorities.

For an overview of the taxation problems connected with the electronic new economy, one can, in a first step, distinguish between legal and illegal courses of action of taxpayers. Because of the technical and institutional characteristics of the Internet, such as

— decentralisation, encoding and anonymity,
— commerce without receipts and disintermediation,
— infinite reproducibility of digital products, and the
— absence of public authorities in the net,

tax evasion becomes easy and bears low risk. The Treasury is frequently unable to enforce its tax claims or requires considerable expenses on staff and material to do so. The fiscal aim of a revenue-intensive tax collection and the aim of a just and equal taxation will therefore hardly be obtainable. Closely connected are distortions of competition between the old and the new economy, if considerable tax evasion in e-commerce leads to lower gross prices there, compared to traditional trade.

For the systematisation of the taxation problems in the Internet one can, in a second step, distinguish between national and international transactions. The network forces economic globalisation, while fiscal sovereignty mainly remains on the national level. This leads to internationally different tax systems, that, on the one hand, are in a competitive relationship as important location factors, but, on the other hand, need to be co-ordinated, in order to avoid an unwanted double-taxation in e-commerce as well as taxation shortfalls and competition distortions.

A third and last clustering aspect relevant for the taxation of e-commerce can be conducted with regard to the affected tax types. Among the taxes levied on the application of income (so-called indirect taxes) the tax enforcement of the special excise duties (on mineral oil, tobacco, coffee, alcohol and spirits, etc) seems to be less problematic within the European Union (EU), because of the system of connected tax stores and a rather small total number of producers or wholesalers. Against this the turnover tax is much more important. This is due to the very broad basis of assessment and the correspondingly extremely high number of taxable suppliers and chargeable transactions in the net. Looking beyond the EU border line, tax enforcement problems might arise even with the excise duties on tobacco, coffee or spirits, but only if the Internet will be used by smugglers as an instrument for direct marketing.

Besides the taxes on the use of income, there are the so-called direct taxes, that tax income generation. Among these are the income tax (in Germany consisting of the wages tax, assessed income tax and capital income tax), the corporation tax and other business taxes (in Germany the local business tax). For a regular collection of tax the legal status, the place of residence and the owners of a company or the identity and the place of residence of the taxable person must be known. Therefore, the anonymity of Internet transactions creates problems for tax collection. But there are problems specific to Internet taxation even when considering legal tax behaviour, especially with internationally operating legal tax payers. Here, the determination of taxable profits and their distribution among the involved states are challenging.

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5 For instance, German Fiscal Authorities and the Federal Audit Office estimate current revenue shortfalls of about DM 20 bill., which is more than 2% of total German tax revenue. Tax inspections showed that a remarkable amount of small-sized online suppliers (25%) were not registered for tax purposes. See Handelsblatt, 8.8.2000, 3.

6 Even within the European Union an EU tax competence is only discussed in academic circles. Compare for an overview Reding/Müller (1999), pp. 500–507.

7 Other taxes, e.g. taxes on property or property transfer (in Germany the real property tax, real property transfer tax, motor vehicle tax, inheritance (gift) tax etc. as well as their international counterparts) are not considered because the domestic tax authorities usually have a reliable access to the tax base of these levies. For example: Driving a car in Germany needs an official registration number. Nobody would get this registration without paying the tax.

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Figure 2

Three Perspectives to Structure the Taxation Problems in the Internet

![Diagram: Three Perspectives to Structure the Taxation Problems in the Internet]
When concentrating on the most interesting cases with regard to fiscal policy, international taxation must be at the centre of this study. In future, the arrangement of national taxes will have to orientate themselves on these international agreements. In the following, the structure is therefore orientated on the distinction of tax types and deals mainly with aspects of legal as well as illegal options of tax arrangement in international e-commerce (chapters 4 and 5). Firstly, however, the handling of the relevant taxes on traditional cross-border transactions or, respectively, internationally paid factor incomes, will be explained (chapter 3.2), in order to allow the discussion of the concrete problems of Internet taxation afterwards.

3.2 Traditional international taxation principles

3.2.1 Income taxation between country of residence and source country principle

Taxes on income generation are usually levied according to the world income principle. This means, that a taxable natural person or a taxable entity is to be assessed with its entire income, regardless of the place of generation. This at least holds true for unlimitedly taxable persons or entities, i.e. taxpayers with a domestic place of residence or company headquarters, respectively (place of residence principle). Simultaneously, foreigners or foreign companies are limitedly taxable for their domestic income (source country principle). Because of the co-existence of place of residence and source country principle the danger of international double taxation of income realised abroad arises, unless the involved states agree on a distribution of the tax competence. To this end, for example, the Federal Republic of Germany has agreements on the prevention of international double taxation of income and capital (DTA) with 75 states in force. Therein, either the country of residence renounces the taxation of domestic company income generated abroad (exemption procedure) or the taxes already paid abroad under the source country principle reduce the domestic tax burden (imputation method). Even in cases where no DTA exists, unilateral measures of the several national tax laws take effect and help to eventually prevent or reduce a double taxation. Despite bilateral agreements and unilateral measures, yet there are cases of double taxation of international income flows.

However, the major problems with Internet taxation are not the remaining cases of international double taxation, but the imminent taxation shortfalls. Again, the above mentioned characteristics of e-commerce, and – under certain circumstances – the spatial mobility of a server computer as a taxable permanent establishment, allow taxable persons to attain a taxation shortfall by legal and illegal measures. The results are distortions of competition, unfair tax impacts and loss of revenue as chapter 4 will show.

3.2.2 Turnover tax between country-of-destination and country-of-origin principle

As a consumer levy, turnover tax is so designed as to fall on final consumer expenditure. In Germany, the revenue of the turnover tax currently (2000) exceeds DM 275 billion per year. That's the second highest (behind the income tax) tax yield compared to other taxes.

Normally, the so-called country of destination principle is applied on transboundary transactions. This is to guarantee that the final consumer bears the same domestic turnover tax for all goods supplied and services rendered that he consumes in his country – regardless of the country by which the good or service was provided. The exporter gets a rebate for the input tax paid by him at the border of the exporting country, so that the export itself is not charged with turnover tax. The import is subject to import turnover tax of the importing country (country of destination). The country of destination principle also applies for international mail-order selling.

Within the EU, where check points at the internal EU borders no longer exist, the destination principle is realised through separate settlement. The intra-Community supply is not subject to turnover tax, but intra-Community acquisition is. Accordingly, the purchasing com-
pany has to pay turnover tax in the country of destination. For control purpose, monthly reports of the companies are obligatory. All companies participating in the intra-EU trade were assigned a turnover tax identification number, which they have to communicate to their business partners. The regular turnover reports must contain the number of the suppliers and the acquirers, as well as the total value of intra-EU turnover. All this information will, generally, be exchanged between the tax authorities of the Member States.

Exceptions from the country of destination principle exist within the EU for direct sales to travellers, who are charged the turnover tax valid in the respective country they are visiting (country of origin principle). This rule, in turn, does not apply to the sales of new vehicles (cars, boats, planes) to final consumers. They are charged the tax rate of their home country.

Besides, within the EU the origin-principle is applied to mail order delivery to consumers, if the sales of the selling company do not exceed Euro 100,000 per year in the country of destination (threshold amount). Exceeding this amount makes the selling company taxable in the destination country. The EU member states are allowed to lower that threshold to Euro 35,000. In Germany the threshold amount is DM 200,000.

Finally the country of origin principle is generally applied to "services" (Article 6 of 6th VAT Directive, Sec. 3 (9) German VAT Act). This is to take into account, that services usually are consumed right at the place of their production. However, in some cases of "services" (see Article 9 (2)(e) 6th VAT Directive, Sec. 3a (3), (4) German VAT Act) the destination principle is valid.

The dominance of the country of destination principle, compared to the country of origin principle, concerning the taxation of cross-border turnovers is necessary for tax system reason. The destination principle generates competition credibility since it guarantees that every product, regardless of its origin, is charged the same domestic tax rate in the country of destination. In other words, the relative prices of competing products are not distorted. At the same time, we speak of capital export efficiency — a property preventing internationally different turnover tax rates from seriously influencing the entrepreneurial locational decision (capital export, direct investment). Finally, and that's the crucial point, it is considered a merit of the country of destination principle, to best reflect the character of the turnover tax as an excise duty, that is to be paid by the final consumer, since the country of destination usually is the country of consumption too.

The criticism against the country of destination principle is that the administrative realisation within an integrated international market without border controls is very difficult. Additionally, purchases of travellers can not be taxed according to the destination principle. Besides, for "services" the place of consumption, i.e. the country of destination, is hard to determine or is identical with the country of origin. These three arguments in turn lead to the range of validity of the country of origin principle. With respect to the Internet, one have to face an increasing relevance of these three aspects:

- there are no national borders within the Internet,
- the net will foster the direct cross-border shopping of final consumers,
- and a wide range of new Internet products can be interpreted as services.

Regarding these aspects, the leading question for chapter 5 of this study is how to keep the economically preferable destination principle the dominant one for taxing international transactions.

4. Income Taxation of E-Commerce

4.1 Resident or non-resident taxation?

In principle, all seven types of income, i.e. income from business enterprise or income from renting and leasing (see Sec. 2 (1) German Income Tax Act — ITA) are subject to resident or non-resident taxation in Germany. Regarding taxes on income and profits in e-commerce, cross-border activities are, above all, of interest for internationally operating enterprises if they can be carried out via the Internet.

Referring to the cross-border activities mentioned above, a distinction must be made between outbound cases and inbound cases. The term inbound-investment means a foreign investor investing in Germany whereas the outbound case is defined as a German investor's activities in a foreign country. Concerning sub-cases of inbound and outbound activities, the question arises in which legal form these activities take place. Direct activities as well as alternative permanent establishments, subsidiaries or, in some cases, subsidiary-partnerships have to be taken into consideration, whereby the latter alternative, according its taxation assessment, will be taxed as a rule, either as a permanent establishment of the co-owner or as a legal entity and thus as a corporation.

In principle, an outbound case is subject to resident taxation (see Sec. 1 (1) ITA, Sec. 1 (2) Corporate Income Tax Act — CTA — combined with Sec. 2 (1) ITA) if the situs or the company's management is based or located in Germany. The terms situs and management of a corporation are defined in Sec. 10 and 11 German Fiscal Code (FC). As to situs in Germany the definition of residence is

15 For details on the normative theory of individual tax types compare Reding/Müller, especially chapters two, seven and eight.
possible even for purely virtual corporations. Attributing or assigning the actual location of the management — especially concerning exclusively virtual enterprises — is much more difficult. It is conceivable that such enterprises either dispense with a central place of the management or the duration of their residence is limited and therefore not assignable for the fiscal administration. In such cases, according to the German tax law, the fiscal authorities can refer to the place of residence in order to impose resident taxation. In cases involving tax treaties, e.g. Article 4 (3) OECD Model Tax Convention (OECD-MTC) it is mainly the place of management that is decisive and an unclearly defined location of the management may lead to a loophole in the law of the OECD-MTC, i.e. a condition not covered by a treaty or agreement of the OECD-MTC and thus subject to double or reduced taxation.

In the case of non-resident taxation of foreign enterprises (inbound case), the entire enterprise with its global income is not subject to non-resident taxation, except for the income obtained under Sec. 49 ITA with an objective and factual nexus to the home country (principle of source, see Sec. 1 (4) ITA, Sec. 1, 2 CTA). In order to provide the required relation to the home country and thus a separation of domestic and foreign income, the facts of the case must be ascertained under the special constituent facts regarding domestic income (Sec. 13–23 ITA). If such a factual relation to Germany exists, the foreign enterprise will be subject to non-resident taxation and will be faced with fiscal jurisdiction in at least two countries. To avoid international double taxation, the application of the international double taxation treaties, as far as available, will have to be examined. Types of income under Sec. 49 (1) ITA, concerning e-commerce, which may lead to non-resident taxation for foreign enterprises, will be analysed below.

4.2 Problems related to income qualification of enterprises subject to non-resident taxation

In particular the following types of income can result from Sec. 49 (1) ITA for enterprises developing cross-border activities in the Internet:

1) Income from business enterprise (Sec. 49 (1) 2 ITA);
2) Income from renting and leasing (Sec. 49 (1) 6 ITA);
3) Other income from the transfer of non-protectable know-how (Sec. 4 49 (1) 9 ITA).

The terms and conditions for one of these types of income will be examined as follows.

4.2.1 Income from business enterprise in case of a permanent establishment or a permanent representative

The terms and conditions for the income qualification of a foreign content provider as income from business enterprise as defined under Sec. 49 (1) 2 a ITA require maintaining a permanent establishment or the appointment of a permanent representative. If the foreign content provider resides or is located in a country with which a tax treaty has been concluded — normally the case — both the Fiscal Code and the particular tax treaty are applicable. Two basic questions are to be differentiated:

a) Does it qualify as a permanent establishment or a permanent representation according to national laws? If so, it is subject to taxation under German tax law.
b) Is this also applicable under treaty legislation? Resulting from the above, the question is whether taxation according to national tax legislation is also legal under treaty legislation.

In this case no contradictions are to be expected, as the international double taxation treaties concluded with Germany require the establishment of a permanent establishment in order to subject domestic profits of a foreign enterprise to non-resident taxation. However, attention must be paid to the fact that in practice German and international definition in many cases differ considerably from those of Sec. 5 OECD-MTC.

4.2.1.1 Server Computer as permanent establishment

The definition of a permanent establishment as a prerequisite of a location-dependent business is stated in Sec. 12 (1) FC and is identical with the definition of Art. 5 OECD-MTC, which a permanent establishment define as a place in which business is entirely or partially conducted. The following constituent facts have to be fulfilled for a permanent establishment:

— There will be a business place;
— It will be fixed spatially and temporarily;
— It will serve the business;
— The enterprise will hold disposing power.

The place of business is defined as an existing physical object and the sum of all items serving the business. Simple equipment will suffice, physical objects are of major importance. No special buildings are required for the place of business and need not necessarily be fit for persons. The Internet server suffices the criterion of phys-

18 See OECD-MA-Kommentar, Ziff. 2 zu Art. 5 (1); Vogel, DBA, 3. A., Art. 5 Rz 20.
20 See OECD-MA-Kommentar, Ziff. 4 zu Art. 5 Abs. 1.
21 See BFH vom 13.05.1958, Ib 49/58 — U; Federal Tax Gazette II 1958, 379.
cal presence, as well as the one of being the basis for business activities thus fulfilling the requirements of a place of business. Furthermore the place of business must be fixed as to location and period of time. Usually this is defined as a fixed location at a certain point of the surface on the earth, lasting for a certain period of time. A firm connection to the ground is not required since for instance transportable market stands occupying a certain place for a certain period of time at the weekly open-air markets are accepted as permanent establishments.

Concerning the Internet server this means that it has to be in a building, firmly wired, thus — as a rule — being firmly attached to the ground. The firmly installed Internet server thus also meets — as a rule — the requirements of durability and therefore possesses the characteristics of a fixed place of business.

Furthermore, the place of business will serve the operational activities of the enterprise in accordance with Sec. 12 FC. Here “serving” is defined as all operational activities performed for the enterprise, with the exception of preparatory or auxiliary activities according to Art. 5 (4) OECD-MTC which will not justify the term “permanent establishment”. Moreover, activities need not necessarily be performed by persons; it will suffice if they are carried out by machines or automatic vendors (vending machines). The Federal Tax Court, in the so-called Pipeline-verdict for the transportation of crude oil via a pipeline, even ruled that it was sufficient if an enterprise did completely without any person but became active only with its operational equipment. Whether the latter is in accordance with the OECD-MTC is to be doubted. A possible transferability of the Pipeline-verdict to an Internet server is treated with reservation in the literature. However, the circumstances regarding the automatic vending machine, selling goods completely automatically, is seen in the literature as transferable to the Internet server. Since the server — in analogy to the vending machine — is absolutely necessary for the transfer of the data on the homepage to the PC of the customer, it serves the enterprise. Thus the Internet server fulfills the constituent fact of “serving” as a permanent establishment.

Another constituent fact for a permanent establishment is that the fixed place of business is not subject to a transitory disposing power. The factual disposing capacity over the fixed place of business is intended to ensure that the enterprise to a large extent can decide independently as to the type, size and the duration of its activity. The disposing power can be based on its legal status i.e. ownership, right of use or with simply rented or leased objects. Utilisation need not necessarily be paid for. On the other hand, partial or temporary joint use of space belonging to other enterprises or customers does not justify a disposing power, as there exists no legal claim. However, it is not subject to sole disposing power regarding the fixed place of business. Joint right of disposal is found, e.g. in a jointly

Transferring the above-mentioned facts to an Internet server means that from the sole use of the server it follows that disposing power is solely exercised and therefore justifies a permanent establishment of the enterprise. Even if the server is only leased by the content provider, the prevailing opinion opts for a permanent establishment.

The situation is different when the content provider has his homepage and offered data stored and administered by an independent service provider. In this case the customer is not provided with a fixed storage space but only with access to the Internet. The decision as to which the server will finally store and administer the homepage is made by the service provider, i.e. the content provider has no disposing power over the location of the server or over the server itself or any joint disposing power. Consequently the existence of a permanent establishment has to be negated. Besides, the content provider has no disposing power over the PC of the user. The homepage of the content provider appears on the screen of the user PC, thus using the customers PC to carry out his activities, but this does not mean disposing power. The disposing power over the permanent establishment lies in the hands of the customer, who can simply switch it off. Regardless of the foreshaid, the homepage of the content provider does not justify a permanent establishment according to Sec. 12 FC, as it is non-substantial and not attached to a fixed and permanent point of earth. Moreover, it can appear at any time and place on the various customers computers and also be deleted.

References:

23 See OECD-MA Kommentar, Ziff. 5 zu Art. 5 Abs. 1; BFH vom 4.8. 1974, I R 128/73; Federal Tax Gazette II 1975, 203; see also Strock (1980), 134.
25 See also Flore (1998), 293.
26 See Günkels, DBA, Art. 5 OECD-MA Rz. 86.
29 See Bernütz (1997), 356; Strunk/Zöllkau (2000), 54; Tipke/Kruse (1996) AO-FGO, Rz 5 zu § 12 AO.
31 Schaumburg (1998), Tz 5,163.
34 Tipke/Kruse, AO-FGO, § 12 AO, Tz 5, 355; see also Powers (1997), 120.
4.2.1.2 Representation by a permanent agent

A basic constituent fact for a permanent representative or agent (Sec. 13 FC) is the fact that the person active in Germany is different from the taxpayer resident abroad. For this reason, a dependent employee of the enterprise or a subsidiary founded in Germany will serve as a representative or agent. However, neither the foreign enterprise itself nor the members of its board of directors can act as permanent representatives of the enterprise. The task of the permanent representative is to serve the enterprise and to promote its economic activities. This does not necessarily mean the conclusion of legal transactions (although the permanent representative must have the power of attorney to do so), but it means that the authority to instruct is required by tax law, but it can also be derived from other economic reasons or facts. In comparison with Sec. 13 FC the constituent facts concerning the convention according to Art. 5 (5) OECD-MTC are more restrictive. A permanent representative or agent and thus a permanent establishment is recognised if the following criteria are fulfilled:

- She will have to be a legal or natural person, not independent from the enterprise;
- She will have power of attorney to conclude contracts for the enterprise;
- She usually executes this power.

The activities must — as stated in the FC — serve the activities of the company — but are here limited to sales contracts or other agreements concerning obligations and have to be legally binding for the enterprise. With regard to the Internet it is understood that a permanent representative or agent by avoiding the managerial authority to instruct.

4.2.2 Income from renting and leasing

4.2.2.1 Qualification of income according to national law

A further nexus for subjecting a foreign enterprise to non-resident taxation could be derived from income gained by selling an aggregate of things and rights (Sec 49 (1) 2f ITA), by renting or leasing rights (Sec. 49 (1) 6 ITA), and other sources of income (Sec. 49 (1) 9 ITA). First the constituent facts of the national law will be investigated and then, based on these facts some aspects of the international double taxation treaty. In regard to the tax treaty, it will be investigated whether income e.g. from downloading software qualifies as royalties (Art. 12 OECD-MTC), profits (Art. 7 OECD-MTC) or capital gains (Art. 13 OECD-MTC). The prerequisite in both cases — national and international law — is that there is no permanent establishment in Germany, neither according to Sec. 12 FC nor to Art. 5 OECD-MTC. Furthermore, concerning an aggregate of things, the situs in Germany is decisive and, as to an aggregate of things and rights, the entry in a German public list or register or its utilisation in a German permanent establishment or branch, in which case the constituent facts have to be fulfilled at the time of alienation.

As a rule the assignment of aggregates of things is not possible via Internet and thus of no relevance. Of greater importance might be the assignment of rights for a limited period of time, e.g. literary or artistic copyrights or industrial patents according to Sec. 49 (1) 6 ITA. With regard to income according to Sec. 49 (1) 6, it is also required that the usufruct be limited to a certain period of time. A limited period of time is also presumed if upon concluding a contract it is unclear if and when the usufruct ends. In connection with e-commerce, the limitation of the usufruct to a certain period of time is conceivable e.g. the use of individual software against a licence fee or access to information from databases. Attention must be paid to the fact that in case of a full transfer or assignment of rights, as it is usually the case, e.g. transfer of standard software or the granting of exclusive distribution rights, the issue of time-limitation is excluded according to Sec. 49 (1) 6 ITA.

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39 An aggregate of things in the accepted view is a number of movable objects that match so as to form an entity, e.g. machinery, furnishings, etc.; see Kroppen, § 49 EStG Tz 620.
40 See Kessler (2000a).
Likewise the transfer of unprotected industrial know-how is not subject to time-limitation. This would mean an alienation of property and not simply a transfer of the latter, which then might lead to income according to Sec. 49 (1) 2 ITA.

Another criterion for qualifying as income according to Sec. 49 (1) 6 ITA is the fact that the exploitation of rights is taking place in a German permanent establishment or in another establishment. Exploitation in the sense of making economic profit from transferred objects, rights or know-how by using or exploiting them will have to lie in the hands of the customer. Thus the reversal conclusion can be drawn: a purely private utilisation of the contents, i.e. the user’s intending to have any economic benefits, is not subject to non-resident taxation of the provider. Even exploitation in a privately owned German establishment of the taxpayer does not justify non-resident taxation as in Sec. 49 (1) 6 and Sec. 49 (1) 9 ITA.

4.2.2.2 Income qualification according to double-taxation convention

In principle international double taxation treaties can only limit existing taxation power, but cannot create new tax liabilities. With regard to the transfer of software as a typical e-commerce product, the following types of income according to the Double Tax Convention will be considered: Corporation profits (Art. 7 OECD-MTC), royalties (Art. 12 OECD-MTC), capital gains (Art. 13 (4) OECD-MTC) or income from independent activities (Art. 14 OECD-MTC). The classification of software transfer as one of the income categories depends on the particular type or kind of use, i.e. it is temporally limited or unlimited transfer, a partial or full transfer of power, a transfer intended for further development and distribution for private use. The common constituent fact for the sole taxation right of a state of residence (foreign state) with regard to all types of income is that there be no permanent establishment in the state of source (Germany). Yet it has to be stated that it is not only the problem whether a permanent establishment can be assumed, but it is also decisive whether software is attributed to the permanent establishment.

The essence of this problem is the principle of the so-called lacking attractiveness of the permanent establishment stating that founding a permanent establishment in a country does not necessarily mean that all income earned by the taxpayer in this state is automatically attributed to the permanent establishment. Therefore it is taken for granted that besides founding a permanent establishment the software in question will have to be attributed to the permanent establishment.

In view of the definition of the term “royalties” according to the OECD-MTC Art. 12 (2) as remuneration for the utilisation of or right to copyrights of literary, artistic or scientific work, a subsumption of e-commerce falls especially under this article. According to the commentary on the OECD-MTC and the prevailing opinion, copyrights concerning software can be regarded as intellectual property according to Art. 12 OECD-MTC. The treatment of standard software poses a problem just as it does in national laws. The personal or professional use in the sense of a tool is regarded as prior to the copyright. Thus the use of a licensed article does not correspond to the economic value of standard software. The above-mentioned types of software use by transfer are differentiated in the commentary to Art. 12 OECD-MTC as follows:

— Concerning the so-called complete transfer of rights by which usufructuary and property rights of the software are transferred, the income cannot be qualified as royalties. Regularly, they are income according to Art. 7 or 14 OECD-MTC, i.e. enterprise profits or independent income, and, in some special cases, capital gains according to Art. 13 OECD-MTC.

— If the transferor as creator or by acquisition holds the rights to multiply or distribute the software, he is allowed to sell limited rights for industrial development or multiplication of said software. Since this means only a partial transfer of rights, textline 13 of the commentary on Art. 12 OECD-MTC qualifies the remuneration in this case as royalties. Whereas concerning individual software a licence fee is accepted, the MTC subsumes the transfer of standard software for simple industrial use under Art. 7 or 14 OECD-MTC, thus regarding it as equal to income from a sales contract. The decisive distinguishing criterion is the scope of rights granted as well as the kind of utilisation.

4.2.2.3 Draft for the amendment of the MTC

In September 1998 the Working Party No. 1 of the Committee of Fiscal Affairs presented a draft for the amendment of the MTC concerning the qualification of payments derived from the transfer of software. For the first time a distinction was made between intellectual property and the product resulting therefrom. According to this distinction, payments for the transfer of copyrights qualify as royalties. It is decisive that the original copyright is not transferred as it would then qualify as sale. An essential restriction compared with the present MTC is to be found in

42 The term „permanent establishment” was annotated in chapter 4.2.1.1.
44 See Debatin/Wassermeyer, DBA, Art. 12 OECD-MA, 63.
45 That applies to nearly all German tax treaties, see Vogel, DBA, Art. 7, Rz. 37; Art. 13, Rz. 98; Art. 14, Rz. 31.
47 See Kessler (2000b), 98.
48 See ibid.
49 See Debatin/Wassermeyer (1999), DBA, Art. 12 Rz 65.
textline 13.1. It says that in case of a partial transfer of rights payment may only qualify as royalties, if rights are settled which in case of a missing contract might be regarded as a violation of the copyright.

When copyrighted articles are transferred, as is for example the case with standard software, it is important that the economic property of the software is transferred but not the copyrights. In this case a sale of the article is assumed, regularly leading to income according to Art. 7 OECD-MTC. It makes no difference whether it is a permanent transfer against a single payment or a transfer for a short period of time with payment depending on the utilisation.50

It has to be considered that these principles are not yet commonly recognised and the contracting states will base their interpretation on their national copyright law. So the danger of being subject to international double taxation has by no means been eliminated.

4.3 Possibilities for structuring income tax
4.3.1 Outbound Business Activities

The business activities of domestic enterprises in a foreign country (outbound activities) can either be carried out from the home country directly or through a permanent establishment or a subsidiary in a foreign country. Business activities and thus profits may be transferred to a foreign country for numerous non-tax-reasons, i.e. acquisition of new employees or savings on production- and distribution costs, but it can also be in order to gain tax advantages. Difficulties arising from physical trade, e.g. with new employees or expensive business locations, are not relevant in e-commerce. The same applies to the distance between the Internet server and the customer. Thus e-commerce seems to be ideally suited for choosing the location of the enterprise mainly for the purpose of reducing the tax burden.51 Two cases are to be differentiated as follows:

**Case 1: Establishment of a corporation in a non-contracting state**

When relocating the enterprise to a non-contracting state, it is necessary to found a subsidiary corporation in order to obtain deferred taxation as well as to avoid domestic income in Germany.52 Then profits are taxed only in the low-tax country and retentioned on the foreign subsidiary. The retained profits can either be reinvested or — as liquid means — be put at the disposal of the parent company on the basis of a loan agreement. A final transfer of the retained profits to the parent company is possible by a — under certain circumstances tax-free — alienation of the shareholding. If the alienation occurs within the affiliated group itself, in order to guarantee a continuation of foreign activities, it will have to be on condition of the arm's length principle.

The arrangement of the foreign corporation will have to fulfil three criteria to be beneficial with regard to taxes on income and profit:

First there is the problem of taxation upon material or immaterial goods transferred from the domestic company to the permanent establishment abroad as well as the related problem of the transfer price. The financial authority will regularly tax the difference between asset value and market value. The company is obliged to realise hidden reserves and subject them to taxation (deemed capital gains, hidden profit distribution).53 As to new engagements, the taxation of deemed capital gains is irrelevant, yet in this case there is no possibility of a fiscal deduction of expenses. The tax effective realisation of hidden reserves might cause tax savings to be annulled especially concerning small or medium-sized sales volumes.

The second problem arises from special tax liability according to Sec. 7–14 German Foreign Transactions Tax Act (FTTA). If the subsidiary is effectively active, Sec. 8 (1) FTTA, tax avoidance is normally possible, but the term “harmful assistance”54 of the parent company in connection with e-commerce has not been sufficiently defined by the tax authorities, thus resulting in legal uncertainty.

A third problem arises from the abuse of the arrangement of legal relationships according to Sec. 42 FC. The desire to avoid taxes by installing a server in a low-tax country may be assumed. In order to counteract this situation the subsidiary must have a sound economic basis and must develop extensive economic activities.55

**Case 2: Founding of a permanent establishment by means of a server in a contracting state**

In order to be active for the native entrepreneur it will suffice to found a permanent establishment in a low-tax country if an international double taxation treaty exists. The aim is to profit from the lower tax-level abroad by tax exemption according to Art. 23 A (1) OECD-MTC. Here again the transfer of economic goods to a foreign permanent establishment is problematic, since it will lead to profit realisation and taxation of hidden reserves. The server will be qualified as a permanent establishment by fulfilling the following criteria: permanence, fixed attachment to the ground, serving the purpose of the enterprise and power of disposing. In addition to the problem of taxa-

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53 See Kaminski (1997), 53.
54 „Harmful assistance” relates to the activities of the parent company for its subsidiary, for example distribution or finance activities. See Flick/Wassermeyer/Becker, AStG, Rz 58 d zu § 8 AStG.
55 See Pinkernell (1999), 281.
tion of deemed capital gains, the question arises to which extent profit allocation can be attributed to the permanent establishment.56

The problem of separating income between the parent company and the permanent establishment, i.e. the question to which extent, regarding taxation, the income relation between parent company and subsidiary can be set off is one of the central points. The reason for this is that according to international interpretation the definition of payments between permanent establishments and the parent company as well as between closely related enterprises is to follow the regulations of the so-called arm's length principle. In this case a functional analysis is carried out which — to put it simply — requires that the distributive shares to be credited to each party involved in the performance have to correspond to the extent of their respective functions (including all risks). For the problems being discussed here, this would mean that a permanent-establishment-internet server, if it were to be set up, may only receive substantial distributive shares if this server carries out essential functions. Transferring profits simply by founding a permanent-establishment-internet server will not be possible. It has to be assumed that a server — just technically — will only in rare cases be in a position to provide an essential functional contribution. Insofar it can be stated that basically a permanent establishment can be founded, yet, the effects on the German tax income are very small. Possible doubts can be avoided by exact planning and documentation of the business activities in the low-tax country.57

4.3.2 Inbound Business Activities

The business activities of foreign firms at home (Germany) are called inbound activities. If the foreign enterprises maintain a permanent establishment or a subsidiary here to carry out their activities, Germany, as the state of source, can subject their profits to taxation. The permanent establishment is subject to non-resident income or corporation tax according to Sec. 49 (1) 2a ITA combined with Sec. 2 (1) CTA. In case of an existing tax treaty, the permanent establishment is subject to German taxation according to Art. 7 (1) OECD-MTC; a subsidiary corporation is always subject to resident taxation.58

Since Germany, compared with the international level, has relatively high tax rates, foreign enterprises try, for fiscal reasons, to avoid founding a permanent establishment or subsidiary corporation here. In the case of e-commerce, a permanent establishment and related non-resident taxation can be avoided by arranging the Internet server in such a way that it does not fulfill the criteria of a permanent establishment. The power of disposal over the server can be avoided if an online provider offers the homepage on his server, determines the location of the server and the content provider only rents storage capacity. Thus the criterion of a fixed place of business can be avoided at the same time. Moreover, care will have to be taken that none of the persons working for the foreign corporation in Germany qualify as permanent agents or representatives.59 This is relatively easy if the contracts are arranged appropriately and business activities are properly documented. The size of the chosen service provider itself, e.g. AOL, can express its independence from a foreign enterprise.60 Attention must also be paid to the fact that no non-resident tax will arise from rental income (Sec. 49 I 2f ITA).61 Instead, the business relation should be arranged in such a manner that there will be income from real property rents (Sec. 49 I 6 ITA) which will remain exempt from taxes, owing to the lack of a permanent establishment.

4.3.3 Combined Inbound/Outbound Business Activities

The arrangement of distribution from home via a foreign country and back home is intended to enable domestic enterprises to profit from the lower foreign tax level and the tax treaty exemption. In the contracting state, from which sales to Germany are to be carried out, the founding of a foreign permanent establishment or a subsidiary corporation is required. In the case of a foreign permanent establishment, its income — as far as it is regarded as enterprise profits — is fully subject to national German tax law following taxation on the basis of world-wide income. In contrast, the superior tax treaty provides for taxation in the country in which the permanent establishment is resident (Art. 7 (1) 2 OECD-MTC) which therefore, at the same time, leads to tax exemption in Germany (Art. 23 A (1) OECD-MTC). Upon foundation of a foreign subsidiary corporation its gained income is subject to taxation in its state of residence. With regard to cases in non-contracting states, the foundation of a subsidiary corporation is strictly required in order to obtain the lower foreign tax rates; a permanent establishment does not suffice. In every case it has to be observed that the subsidiary corporation will develop sufficient economic activities according to Sec. 8 (1) 4 FT TA in order to avoid abuse of law (Sec. 42 FC). According to the jurisdiction of the Federal Finance Court (BFH) abuse of law is the case if the business structure is inappropriate in relation to the intended goal, if it is only intended to gain tax reduction and cannot be justified for economic or other considerable non-fiscal reasons.62 Whether these measures will actually prove successful remains to be seen because there

56 See Prinz (1997), 517; Strunk (1998), 1824.
58 See Schaumburg (1998), Rz 5, 70.
59 See chapter 4.2.1.2.
60 See chapter 4.2.1.1.
61 See chapter 4.2.2.
are enough German rules and regulations concerning for example taxation of deemed capital gains to maintain — at least partially — German tax receipts.

4.4 Conclusions for tax policy

The above discourse has made it clear that in the field of e-commerce there exists a large potential for profit-shifting into low-tax countries, especially concerning sales of immaterial goods from foreign countries. At present substantial losses in taxes are to be realised, even if taxation of deemed capital gains and special tax liability still guarantee the major share of taxation potential. The question is whether this will be the case in future, since sale of digital goods know no boundaries and facilitates tax evasion by moving the enterprise to a tax haven. The enforcement of domestic tax claims seems no longer guaranteed by means of the usual administrative and technical equipment if services are offered online via foreign servers. Monitoring even the transactions of domestic providers is difficult. When the customers download computer software or music and videos, the provider is faced with practically no additional costs, neither concerning production nor distribution. The possibilities of camouflage increase. As physical presence is not required in the tax region, an important nexus is lacking for the internal tax authorities; there are considerable possibilities for tax evasion.

If the providers reside abroad, this means that they cannot be reached by the internal tax authorities. In order to clear up certain facts it is necessary to co-operate with the respective fiscal authorities. German fiscal authorities may obtain or grant administrative assistance on the basis of bilateral agreements; volunteering information without legal obligation is permitted (Sec. 117 (3) FC). The “extended-information clause” of the OECD-MTC provides for an exchange of information in order to avoid tax fraud and tax reduction. The constituent fact, however, is the mutual exchange of information whereby the legal status of the countries involved will be considered (e.g. business or professional secrets). Moreover, in some cases only a “limited information clause” has been agreed upon in double-taxation treaties; only such information may be exchanged that will serve the implementation of the treaty, i.e. implementing tie-breaker-rules; further information concerning the enforcement of tax claims of a contracting state need not be given. As far as non-contracting countries are concerned, especially tax havens, clearing up facts is practically impossible.

Another problem is that — in contrast to former possibilities — the danger arises that certain income will no longer be taxable because the necessary nexus is missing. At present all double-taxation agreements follow the rule to secure taxation of income at least in one country and considering those taxes by granting tax credit or tax exemption. Insofar there seems to be a consensus among those countries granting tax exemption because corresponding taxation by the respective foreign country is regarded as being sufficient. The new Internet technology may lead to non-taxation and therefore specially those countries following the tax-exemption method will have to react.

Furthermore enterprises increasingly transfer the work-intensive development of their products, e.g. software, owing to better communication structures abroad, thus distributing them without being subject to German taxation. As to distribution via Internet from a foreign country to Germany, the present slight effects on the German tax revenues will become stronger. Since at present there are no reasons, according to OECD-MTC, to endow the state of source with the power to tax, revenues are shifted to the state of supplier’s residence. Owing to its leading role in the field of digital products the U.S.A. profit from this provision. Although the states of the EU realised that playing their role as importers of digital products puts them at a disadvantage, owing to this distribution mechanism, they are in favour of leaving income tax provisions unchanged for the time being. Instead, e-commerce is to be subject to taxation according to the place-of-consumption principle in the framework of VAT. How to counteract shifting of revenues is at present controversial.

5. Turnover Taxation / Value-Added Taxation of E-Commerce

Outlining the impact on turnover taxation e-commerce should be differentiated into offline and online transactions:65

— In the case of offline transactions solely the communication between supplier and purchaser (information, entering into contract, payments) occurs via the Internet, whereas deliveries and services are physically provided further on.

— In the case of online transactions also the provision of products is handled electronically, e.g. electronic data such as music or videos are downloaded or financial services are rendered online.

While offline transactions are widely matched by the existing legal framework of taxation including administration procedures, several specific problems with regard to online transactions will arise. The following topics address these problems with respect to the European VAT-system.

64 See Schmitz (1998), 200.
65 See Vellen (1999), 53.
66 Kowallik (1999), 223; Pinkernell (1999), 281.
5.1 Offline transactions

Offline transactions are mainly pursued in the environment of traditional mail order business. Therefore, transboundary transactions of goods are treated according to the relevant provisions of the current law. If mail order business increases in the context of e-commerce, as has been predicted, problems might arise for the VAT on imports. Customs authorities have to enforce this via border controls. As far as distance selling within the EU is concerned, the supplier’s tax duties in the country of destination have to be controlled by his domestic tax authorities – who don’t benefit from the accounted tax revenue and therefore have little interest in doing so. Therefore, cooperation among taxation authorities must be refined in terms of incentives to enforcement.

5.2 Online transactions: current provisions

Online transactions pose larger problems to VAT, yet there is no final regulation. Taking the concept of VAT as a general tax on domestic private consumption as a yardstick, online transactions should also be treated according to the destination principle. In economic terms there is no difference if a consumer buys new computer software on a CD in a shop around the corner, by mail-order from a domestic or foreign supplier or from a domestic or foreign e-commerce supplier via download – in all cases domestic private consumption takes place, which should be equally charged with domestic VAT.

As a matter of fact, the tax arrangements referring to these transactions differ: Purchases on CD are considered as deliveries, insofar standard software is concerned. Electronic downloads, however, are deemed as supplies of services, according to the destination principle. In economic terms there is no difference if a consumer buys new computer software on a CD in a shop around the corner, by mail-order from a domestic or foreign supplier or from a domestic or foreign e-commerce supplier via download – in all cases domestic private consumption takes place, which should be equally charged with domestic VAT.

In general, the taxation of transboundary services according to the destination principle versus origin principle depends on their “place of supply”. Following the current provisions, the general principles of Article 9 of the 6th VAT Directive (respectively Sec. 3a German VAT Act) (see above, chapter 3.2.2) are to be applied to electronic services too. This implies the following effects:

- Online sales from non-EU suppliers (resident in third countries) to final consumers inside the EU are not subject to VAT inside the EU.
- If the customer is a taxable enterprise, then the place of supply is the destination country, provided that the tax authorities consider the relevant online transaction as “supplying of information” according to Article 9 (2)(e) of the 6th VAT Directive, which is considered to be a controversial practise. Most EU countries use the reverse charge procedure, which is a type of withholding tax in the context of VAT, where the recipient of the services accounts for tax on behalf of the supplier.

In the case of online sales from EU suppliers or EU-resident permanent establishments of non-EU firms to EU consumers, VAT is charged in the country of origin.

- Sales from suppliers inside EU to consumers outside the EU are not taxable within the EU – in this case, the destination principle is applied explicitly (see Article 9 (2)(e) 6th VAT Directive, Sec. 3a (3) German VAT Act), in contrast to purchases of European consumers from non-EU suppliers.

These arrangements are insufficient, regarding the predicted potentials of e-commerce sales to final consumers (business to consumers, B2C). This contradicts the principle of taxing consumption in the jurisdiction where the consumption takes place, i.e., the destination principle. Taxation in the country of origin – where the supplier is located – was still acceptable when transboundary B2C-transactions played no significant role, the more so as it is often difficult to enforce destination taxation, which is also true in the field of e-commerce (see below). The emergence of e-commerce, however, reduces transaction costs drastically. In the case of online sales transportation costs no longer play a role. Even if B2C-transactions only make up a small proportion of electronic commerce at present, if seen over the long run, a considerable potential for evading VAT is clearly being opened up. This will generate unjust effects of taxation and distort competition: Domestic suppliers will be discriminated against foreign competitors which can supply electronic services tax-free or tax-reduced. Using foreign distribution agencies, domestic suppliers as well may sell data to domestic customers via countries without VAT or with lower VAT rate.

Therefore, in the case of online transactions the destination principle should be applied to sales to final con-

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71 European Commission (1998); OECD (1998), Sec. 11.

sumers, as the final incidence of VAT occurs at this place. Changes are planned at an international level, however. The Council and Commission of the EU, as well as a OECD-ministerial conference on electronic commerce held in October 1998 agreed that, in the case of cross-border trade, consumer taxes should be levied in the country of consumption. However, up till now, due to far reaching enforcement problems addressed below neither the European Union nor the U.S.A. nor any other OECD members have included this in their national legislation.

5.3 The European Commission’s proposal

The European Commission specified its concept for an VAT-arrangement on e-commerce in June 2000, submitting a proposal for an amendment of the 6th VAT Directive. Substantially, this includes the following provisions.

As a basic rule for transactions between the EU and third countries, in the case of electronic services the place of supply should be defined as the location of the recipient – that means, in contrast to the current arrangements, the destination principle should be applied on e-commerce generally.

— Taxable persons (enterprises or fixed establishments to where the service is supplied) have to account for VAT on their purchases from abroad with the reverse charge procedure.

— In the case of electronic services rendered by a supplier within the EU to a customer outside the EU, the place of supply will be where the customer is located and therefore the transaction will not be subject to EU VAT.

— In the case of sales to EU-resident final consumers the place of supply is in the Member State where the supplier is identified for VAT:

— If the supplier is established within the EU (as an enterprise or fixed establishment) the current arrangements should be applied – that means, VAT is still charged in the country of origin.

— Suppliers from outside the EU whose annual level of sales within the EU exceeds Euro 100,000 have to register in one of the EU Member States to which they sell their products (single registration). For VAT purposes they are deemed to have a fixed establishment in the Member State of registration; accordingly they have to charge the VAT-rate of the country chose and also pay the country’s fiscal authorities.

In other words:

— Following this proposal, the taxation of online sales according to the destination principle will be applied merely to the EU in general towards countries outside the EU: Sales by EU suppliers to third countries will continue to be free of EU VAT, whilst suppliers from outside, whose sales to consumers in the EU were not yet subject to VAT, will in the future be obliged to register for tax purposes and pay VAT to their country of registration.

— Inside the EU, however, the applicable taxation in the supplier’s country should be continued and so the origin principle is to be followed, both for the established enterprises and the suppliers from outside the EU, which have to register in one Member State.

Though this arrangement may eliminate the disadvantage of EU suppliers competing against third countries, the continuation of the origin principle, however, leads to distortions inside the EU, if one takes into account the wide range of VAT-rates (table 2). This would discriminate against those Member States who apply relatively high rates such as Denmark, Sweden (25%), Finland (22%), Belgium or Ireland (21%) in comparison with the countries with lower rates such as Luxembourg (15%), Germany or Spain (16%):

— Since suppliers from third countries are allowed to register in a country of their choice, they almost certain do so in low rate-countries.

— Also the suppliers from the countries with high taxes will attempt to benefit by installing their server and carrying out their distribution in countries with low rates.

73 OECD (1998), Sec. 11.
74 The proposal concerns supplies of services by electronic means, i.e. software, data processing, computer services including web-hosting, web-design or similar services and the supplying of information. Within the explanatory memorandum supplies of sound, images and broadcasting are also explicitly mentioned. European Commission (2000), 13, 23–24.

Table 2

<table>
<thead>
<tr>
<th>Member State</th>
<th>Normal Rate in %</th>
</tr>
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<tbody>
<tr>
<td>Denmark</td>
<td>25</td>
</tr>
<tr>
<td>Sweden</td>
<td>25</td>
</tr>
<tr>
<td>Finland</td>
<td>22</td>
</tr>
<tr>
<td>Belgium</td>
<td>21</td>
</tr>
<tr>
<td>Ireland</td>
<td>21</td>
</tr>
<tr>
<td>Italy</td>
<td>20</td>
</tr>
<tr>
<td>Austria</td>
<td>20</td>
</tr>
<tr>
<td>France</td>
<td>19.6</td>
</tr>
<tr>
<td>Greece</td>
<td>18</td>
</tr>
<tr>
<td>Netherlands</td>
<td>17.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17.5</td>
</tr>
<tr>
<td>Portugal</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>16</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>15</td>
</tr>
</tbody>
</table>
Assuming that B2C e-commerce will significantly enhance in the future environment of diverse multimedia products, correspondingly the problem of tax avoidance is likely to be opened up. Stronger tax competition may lead to a reduction in differences of European VAT-rates, which may be welcomed with respect to the considerable administrative efforts to enforce the destination principle inside the European Single Market. However, this will imply heavy consequences for tax policy and fiscal balances of the Member States, in particular for those states which would be forced to reduce their high VAT rates significantly. Therefore, several reservations have been made against the proposal, that hint at the fact that judgement has not yet been passed on this case. Rather it should be analysed to determine whether there are alternatives in order to apply the destination principle consequently, i.e., on B2C e-commerce inside the EU too. This would clearly cause a lot of technical requirements to the taxation procedures to arise, which should be addressed in the following sections.

5.4 Technical aspects and requirements for a consistent VAT of online sales according to the destination principle

National VAT-systems often fail in the enforcement of indirect taxes according to the destination principle when their citizens go shopping abroad. This is true in the European Single Market, where border controls had been abolished from 1993 on, whereby direct purchases of consumers are taxed in the country of origin, which is also the case of U.S. sales taxes which are levied by the federal states and partly by the local authorities. It should be pointed out in this context that intra-Community transboundary mail order transactions are taxed in the destination country (see above), in contrast to the US federal states, which are not allowed to tax distant sellers resident outside their jurisdiction. At this point one can argue: If EU VAT applies the destination principle on mail order deliveries then, the more so, this might be applied to online sales. To a large extent, e-commerce could be interpreted as an advancement of mail order business, and conventional mail order business is now being increasingly organised on the Internet (offline transactions, see above).

Taxation procedures of online e-commerce, however, face the problem that – given the current institutional and technical framework of the Internet – it is hardly possible to clearly determine origin and destination as well as the identity of the sender and the recipient. Usually www domain names (URL – Uniform Resource Locator) and their corresponding Internet Protocol numbers (IP) give no reliable clue to the location or identity of their origins. Thus, practising the destination principle in online e-commerce VAT ultimately requires the obligatory use of certified digital signatures.

No problems will arise insofar as that the parties concerned have an interest in revealing their identity and location, since this will be favourable towards taxation purposes. This is true in the case of taxable enterprises who are allowed to deduct VAT paid at an earlier stage (input tax). They are not interested in avoiding import taxation (import-turnover tax, taxation of intra-Community acquisitions or taxation of imported services according the reverse charge procedure) because they levy VAT on their sales and therefore the burden on whole value-added catches up, at the same time they can deduct the input tax against accrued VAT.

The situation differs if the customer is a final consumer or a taxable enterprise which is not allowed to deduct input tax. Here, definitive VAT is charged and therefore this person takes stock in buying where VAT is low or at zero. These problems also arise in case of the Commission’s proposal for an VAT-arrangement on e-commerce (see above): A software supplier offering programmes for money and per download on the Internet may charge no VAT legally if his customer reveals himself to be a taxable enterprise (e.g. by indicating the VAT identification number). But how should a supplier assess that his customer is a final consumer and whether he is located inside or outside the EU? Even if he is willing to comply with the European tax rules, he is not able to check the customer’s credentials.

This is true for suppliers inside as well as outside the EU. Furthermore, if suppliers from outside are not willing to follow the European law, European tax authorities will hardly be able to ensure their tax claims. International law places a ban on investigations of national tax authorities in foreign countries. Therefore, domestic tax authorities have to rely on administrative assistance from their foreign counterparts, which often will not be provided, especially in the case of tax havens.

The European Commission addresses these problems but does not come to cogent solutions. It relies on the willingness of the related parties to co-operate, as well as upon technical solutions in the long run. The following sections deal with the important aspects of this issue.

In the short run, in default of alternative technical procedures, information might be acquired using the comple-
mentary payments transactions as a basis for taxation. The Commission suggests the use of the standard commercial practice of requesting a verifiable credit card billing address. For tax purposes only the country indicator would be needed. In addition, staff from the German ministry of finance proposed to assign banks and credit card organisations to a kind of withholding taxation. They should retain the tax on behalf of their customers and transfer it to the tax authorities. This has met with stiff opposition from the financial sector, which has argued that the administrative effort involved in distinguishing between conventional payments and electronic purchases subject to VAT and correctly applying the right tax rates would be huge; moreover, this would give rise to problems of data protection and banking secrecy. Furthermore, this could not be an everlasting solution. A new standard of credit card payments will be introduced soon, which hides the buyer’s identity from the seller. In the long run, when the use of electronic payment procedures becomes more widespread (“electronic cash”), the dominance of credit card payments will decrease anyway. Different systems of e-money which are yet to be introduced guarantee both the reasonable handling of micro payments and the anonymity of the contracting parties. Furthermore, payments could be settled at foreign banks to which the domestic fiscal authorities have no access.

In the long run a promising solution might be the introduction of special protocol standards for commercial communication on the Internet. Transfer protocols have already been developed especially for VAT that supposedly ensure both that the tax is paid in accordance with the country of destination principle and administrative simplicity for suppliers, which run automatically and in electronic form in the background whilst the transactions take place. However, this requires the use of digital signatures that permit the transaction participants to be reliably identified and the documents verified. It must be at least established in which country the partners are located in order for the appropriate taxation arrangements to be applied. The latter would be reconcilable with data protection requirements too, as it admits anonymous purchases.

5.5 Conclusions for tax policy

To sum up and returning at this point to the European Commission’s proposal for an VAT-arrangement on e-commerce: If in the case of sales to final consumers their location must be verified reliably and therefore consistent solutions have to be found in order to meet this point in the long run, then the destination country’s VAT might be applied anyway. This would also guarantee the destination principle inside the EU, avoid the distortions of competition mentioned above and render the tax revenue to the country where the consumption takes place. By using suitable transfer protocols and software platforms this might induce no unbearable effort for suppliers. In order to avoid registration in every EU Member State special tax authorities could be assigned the task of taxing e-commerce and transferring the tax revenue to the respective destination country. Then it might be sufficient for suppliers from outside the EU to register solely in one Member State of their choice.

The future development of e-commerce will show to what extent such arrangements will enable the authorities to prevent electronic “virtual black markets” and “cyber smuggling”. Suppliers who ignore taxation rules must be identified, excluded from trade or prosecuted. Certainly, one might suppose that firms of a large size and who operate internationally are willing to comply with foreign taxation schemes, provided that this would be possible with reasonable effort. E-commerce on the Internet, however, opens up the world market even to small firms and new companies starting-up, which do not necessarily follow the jurisdictions of foreign countries they have no relation to. In this case it might be possible to prevent or at least restrict the worst forms of malpractice and fraud by making online providers responsible for the enforcement of technical requirements for e-commerce. But problems will still arise if people use foreign providers which are not included in international regulation, and do so via communication systems or even satellites.

Clearly, such solutions will have to be agreed upon and enforced at the international level. This should be done not only within the framework of the EU, but also at OECD or WTO level. One possibility would be to reach a framework agreement and leave the actual design and certification of the required hardware and software components to the suppliers and users affected. Closer international co-operation between taxation authorities is also necessary.

6. Portrayal of International Developments and Conclusions

The recent proposal of the European Commission for an VAT-arrangement just mentioned is the latest of several international attempts regarding the several problems of e-commerce taxation:

In October 1998 the OECD conference “A Borderless World. Realising the potential of Electronic Commerce” took place in Ottawa. At that time, only general principles were passed with the remark: “On taxation, business continues to work with OECD to ensure that neutrality is the guiding principle, and that taxes are not imposed in a discriminatory manner”. In the following, the development

81 Bleuel/Steven (2000), 158–159.
of the discussion after Ottawa and some groups involved in it shall be presented. The OECD implemented so-called "Technical Advisory Groups" (TAGs) after Ottawa, that are concerned with questions of direct and indirect taxation. A first provisional result is a discussion paper on the supplementation of the commentary on OECD-MA. It is concerned with the question when, in connection with e-commerce, a taxable legal entity in the sense of Art. 5 OECD-MA can be assumed. According to it, the following criteria should be fulfilled: fixedly installed data processing facility; installed sufficiently long; maintenance and handling by personnel is neglectable; an Internet service provider does not constitute a taxable business entity and is also not an agent.

In autumn 1999 the "OECD-Forum on Electronic Commerce" took place in Paris, at which the work of the TAGs was presented. It was pointed out, that the above proposal on taxable legal entities does not yet reflect the agreed opinion of the OECD. There were not yet any other published provisional results of the TAGs.

The Trans Atlantic Business Dialogue is another organisation, consisting of European and American business enterprises and consulting companies, with its own study group on e-commerce. This circle provides the general recommendation, that no new or additional taxes should be levied and that every taxation should be neutral, effective, safe, simple, just and flexible; tariffs on electronic transmissions should not ever be levied.

Global Business Dialogue on Electronic Commerce is a pressure group of internationally operating firms like DaimlerChrysler, Deutsche Bank, Fujitsu, Toshiba, Telefónica and Walt Disney. In autumn 1999 they published the "Paris Recommendations" on taxes and tariffs. With regard to e-commerce they recommend: no tariffs; no new taxes; no disadvantaging compared to physical trade; adherence to the place of performance principle for indirect taxes; avoidance of local regulations, such as registrations, in favour of global regulations.

Recently the Finance Ministers of the G7 countries reported that "Conventional taxation principles such as neutrality, equity, and simplicity should underlie the taxation of electronic commerce." Where adaptation of the existing tax rules is required, "such adaptation should not discriminate among forms of commerce, be they electronic or traditional".

In view of these undifferentiated conference results, solutions to the taxation problems are not to be expected in the near future. However, expectations are high among the various organisations and interest groups, above all the OECD, concerning a flourishing world-wide e-commerce; as has been shown, this depends partly on the solution of the expected taxation problems.

In the field of income and business taxation the above discourse shows that e-commerce offers a substantial potential for transferring profits to low-tax countries. A strong erosion of the German tax revenue is to be feared although special tax arrangements like "taxation of deemed capital gains" and "special tax liability" try to counteract this erosion. The tax base will diminish even faster, if business transactions will be totally digitalised in the future. The distribution of digital or digitalised goods has no geographical boundaries; it is basically free, unrecorded and anonymous. Under these circumstances the danger of tax evasion is evident. Thus the enforcement of the domestic tax claim is no longer secured with the usual administrative and technical equipment.

With regard to turnover taxes/VAT, at present there is no immediate demand for reforms in the case of offline sales, in particular mail-order services. On the other hand, concerning online-sales accomplished completely electronically (software, music, video, financial and consulting services) the present legal situation is unsatisfactory in Germany as well as in the EU. As to the application of taxation in the country of origin on sales to final consumers, European suppliers are discriminated against suppliers from other countries, especially, if in those countries no taxes levied on these transactions (as for instance in the U.S.A.).

The European Commission’s proposed regulations concerning VAT-taxation of electronic services is a step in the right direction. According to this proposal, the so called country-of-destination principle is to be applied to online sales between the EU and non-member states. The problem is that the country-of-origin principle still remains to be applied within the EU. In the long run, this might distort competition which will be to the disadvantage of countries with a high VAT-rate.

This will be welcomed by all who are in favour of a stronger tax competition, or with respect to the long overdue final Single Market regulation concerning trade within the EU ("modified country-of-origin principle" with cross-border prior taxation) suggest a closer harmonisation of VAT-rates. However, this would mean that several countries with high VAT-rates would have to lower them, whereas in countries with low VAT-rates the governments might not be able to resist the temptation to raise them. Germany, as is commonly known, is one of the latter. On the other hand, the differences in the VAT-rates are regarded as legitimate result of fiscal sovereignty of the member countries; therefore it will have to be examined to what extent there are alternative possibilities for applying the country-of destina-

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84 On the development before Ottawa see Korf/Sovinz (1999), pp. 314.
85 See www.tabd.com/99contact.html [accessed August 2000].
86 See www.gbde.org/conference/recommendations [accessed August 2000].
88 See the explanations in chapter 4.3.1.
tion principle throughout, i.e. also to sales to the final customer. The evolving technical problems concerning the taxation proceedings seem to be soluble in the long term, since even the solution proposed by the European Commission requires a reliable localisation of customers, which at present cannot be achieved with justifiable efforts.

Last but not least, international agreements must be made and fiscal authorities have to co-operate. Agreements have been reached among the OECD-countries, as to taxation in the country of consumption (basically to the country-of-destination principle). Realising this by means of practical fiscal policy is yet another matter.

Presumably, Europe will lead the way in applying indirect taxation arrangement to e-commerce. If the U.S.A., as a leading nation in this field, is not willing to follow, a problem will arise. It remains to be seen whether U.S. enterprises or those from other countries will accept European tax laws. American interest groups have already voiced their criticism to the proposals of the European Commission, which they regard as a disadvantage.

Independent of the concrete conditions of national tax legislation and referring to direct as well as to indirect taxation, the following long-term demands must be made, taking fiscal and economic aspects into consideration: The New Economy, and above all the e-commerce, should not enjoy tax privileges. Rather, it should compete against the traditional economy on the basis of its specific advantages. Experience with national tax relief, subsidies as well as with tax havens have shown that regulations, once introduced, will be amendable only against strong resistance after the economy has become used to them. There are already signs in the U.S.A. approving this fears: According to studies, online-turnovers with final consumers are clearly going down if they are subject to sales taxes like traditional turnovers. Correspondingly, there is high pressure from IT business to maintain tax exemption. Abolishing turnover taxation can be under debate in the U.S.A, as it does not play a major part (sales tax-rates amount to around 6 per cent on average). However, this is not a sensible option for Europe in view of demonstrably higher tax rates and revenues.

Moreover, there are many aspects with regard to practicability clearly in favour of a balanced relation between direct income taxation and indirect excise taxation. On the other hand, e-commerce offers great chances to improve supra-regional and international division of labour, as well as to develop new products in the realm of telecommunication and media markets, thus giving important incentives to economic development. The closely related potentials for economic growth would be impeded if taxation should lead to measures which would cancel out the advantages of online transactions. Future technological development will show whether acceptable automatic and online taxation methods can be found in order to ensure a just and economic sound tax system.

References


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91 See Varian (1999).


Zusammenfassung
Besteuerung des E-Commerce:
Anhaltende Probleme und neuere Entwicklungen

E-Commerce über das Internet bedeutet neue Herausforderungen für die Besteuerung. Im Bereich der Einkommens- und Unternehmensbesteuerung entsteht ein großes Potential zur Verlagerung von Einkünften in Niedrigsteuerränder, insbesondere durch Gestaltung von Verrechnungspreisen und durch Übertragung von immateriellen Wirtschaftsgütern. Längerfristig sind dadurch erhebliche Steuerausfälle zu befürchten. Bei der Umsatzsteuer (Mehrwertsteuer) entstehen Probleme, wenn ausländische Anbieter an inländische Endverbraucher elektronische Produkte oder Dienstleistungen online verkaufen. Die Mehrwertsteuer sollte in dem Land erhoben werden, wo der Verbrauch stattfindet, was gegenwärtig nicht der Fall ist, andernfalls drohen Wettbewerbsverfälschungen und ungerechte Steuerbelastungen. Dies erfordert besondere technische Lösungen sowie eine verstärkte internationale Kooperation der Finanzbehörden. Grundsätzlich sollte der e-commerce nicht steuerlich privilegiert werden, sondern sich aufgrund seiner spezifischen Wettbewerbsvorteile durchsetzen, andererseits sollte er aber auch nicht durch aufwendige steuertechnische Anforderungen behindert werden.