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Tax Competition and E-Commerce

by Reuven S. Avi-Yonah

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This paper was first presented at a conference on World Tax Competition organized by the Office for Tax Policy Research at Michigan and the Institute for Fiscal Studies in London on May 24-25, 2001.

In the last four years, there has been increasing concern by developed countries about the potential erosion of the corporate income tax base by "harmful tax competition" (in the European Union since 1997, in the OECD since 1998). However, the data on tax competition available to date present a mixed and somewhat puzzling picture.

On the one hand, there is considerable evidence that effective corporate income tax rates in many countries have been declining, and that the worldwide effective tax rates on multinational enterprises (MNEs) have been going down as well. On the other hand, macroeconomic data from developed countries do not indicate a significant decline in corporate income tax revenues.

This article suggests that part of the explanation for this phenomenon is that despite the advent of e-commerce, MNEs find it harder than some commentators (Avi-Yonah, 1997)* have predicted to avoid having a permanent establishment (PE) in market jurisdictions. As a result, those jurisdictions are able to collect taxes from the MNEs and keep up their corporate tax revenues. The decline in effective corporate tax rates may therefore be attributable more to tax competition in jurisdictions where MNEs produce their goods, which are more likely

to be developing countries, whose revenue data are less available.

If this conjecture is correct, tax competition may be harming developing countries more than developed economies. However, developed economies may also face declining revenues from tax competition if methods are developed to use e-commerce to avoid a PE. The article concludes by exploring the implications of this hypothesis and what data are needed to confirm or disconfirm it.

I. The Puzzle: Declining Effective Tax Rates and Unchanged Corporate Tax Revenues

There is a considerable body of data suggesting that worldwide effective corporate tax rates are declining. For example, Altshuler, Grubert, and Newlon (2001) used U.S. Treasury data from corporate tax returns between 1984 and 1992 to calculate average effective tax rates for manufacturing affiliates of U.S. MNEs in about 60 countries. They find that average effective tax rates in manufacturing fell by more than 15 percent between 1984 and 1992. Similarly, Grubert (2001) calculated changes in effective corporate tax rates in a sample of 60 countries for the period from 1984 to 1992, supplemented by published financial data for the period after 1992. He found that average effective tax

rates fell from 32.9 percent in 1984 to 23 percent in 1992. The decline was largest in countries with populations of less than 15 million.

Chennells and Griffith (1997) calculated effective marginal tax rates (EMTR) and effective average tax rates (EATR) for 10 OECD countries for the period 1979-1994 on the basis of the Fullerton-King (1984) model. They also calculated average tax rates (ATR) based on published financial data for the same period. Chennells and Griffith find that domestic EMTRs declined from an average of 21.7 percent in 1979 to 20.5 percent in 1994, and that domestic EATRs (which may be more relevant to FDI) declined from 21.7 percent to 17.9 percent in the same period. ATRs based on accounting data for six countries (Australia, France, Germany, Japan, the United Kingdom, and the United States) declined from 40 percent in 1985 to 32.6 percent in 1994. Note that this last result is based on firm-level (Compustat) data and includes foreign affiliates of MNEs based in these countries.

All the data are consistent with the hypothesis that tax competition may be eroding the corporate income tax base. Grubert (2001) and Chennells and Griffith (1997) point out that the data do not indicate any tendency of tax rates to converge. However, as I have argued elsewhere (Avi-Yonah, 2000), tax competition may be driving tax rates down in all countries as they respond to each other, so that there need be no convergence until rates reach zero percent.

On the other hand, the available data on revenues from the corporate income tax in developed countries do not show any indication of significant erosion in the same period. Corporate income tax revenues as a percentage of total revenues in OECD members were

*See list of references on p. 1399.

8 percent in 1975, 1980, 1985, 1990, 1994, and 1995 (Owens and Sasseville, 1997). This average masks considerable variation.

For example, in New Zealand corporate tax revenues fell from 10.8 percent in 1975-1980 to 8.3 percent in 1986-1992. In the United States revenues fell from 14.7 percent to 9.8 percent during the same period (IMF, 1995). But it can hardly be said that corporate tax revenues for OECD member countries are eroding. Thus, it is hard to see what concerns are driving the European Union and the OECD in their anti-tax-competition crusades.

What can explain the phenomenon of declining effective corporate tax rates but stable corporate tax revenues? One possible explanation is that there has been a shift within the corporate tax from taxing MNEs to taxing purely domestic corporations, since most of the declining tax rate data reported above comes from tax returns and financial disclosures by MNEs, while the revenue data include all corporations. (The EMTR and EATR data reported by Chennells and Griffith apply to all corporations, but are based on theoretical models rather than actual tax returns.)

If that is the case, it would present an incentive for all corporations to become MNEs, which is interesting given the current U.S. debate on deferral and subpart F of the Internal Revenue Code (NFTC, 1999; U.S. Treasury, 2000). Given this incentive, one would have expected by now to see some decline in the overall revenue figures. In addition, given the political clout of small business in most countries, one would have expected to hear something had it experienced a significant increase in effective tax rates.

An alternative hypothesis is as follows: MNEs can be taxed in three types of jurisdictions under currently prevailing tax rules. The first type is their residence jurisdiction, where the parent company

is incorporated or managed and controlled. These jurisdictions typically do not tax their resident MNEs currently on active foreign-source income. The second type is jurisdictions in which the MNEs produce goods, which are to an increasing extent developing countries. These jurisdictions, whether developed or developing, typically do not tax MNEs either because they wish to attract real investment. Finally, the third type is jurisdictions into which MNEs sell their goods, typically developed countries. These jurisdictions typically want to tax MNEs but

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can do so only if the MNE has a PE within their borders.

I have previously argued that e-commerce makes it relatively easy for MNEs to avoid having a PE in market jurisdictions. If so, no jurisdiction can tax the MNE on a current basis. But if MNEs are not able to avoid having a PE, they will be taxed in the market jurisdiction. If that is the case, the data above can be explained as follows: The Altshuler, Grubert, and Newlon (2001) and Grubert (2001) data and the Chennells and Griffith (1997) ATR data all reflect worldwide operations of MNEs.

These data therefore show declining effective tax rates due primarily to tax competition for manufacturing activity, and the lack of residual residence-based taxation. Recall that the two studies based on U.S. Treasury data focused on manufacturing affiliates, and that Grubert (2001) found the greatest decline in small countries. However, MNEs are still taxed — and may be taxed more heavily — in countries where they sell their goods, assuming a PE exists. These countries are largely developed countries, so it is not surprising that their revenue data show no decline in corporate tax revenues.

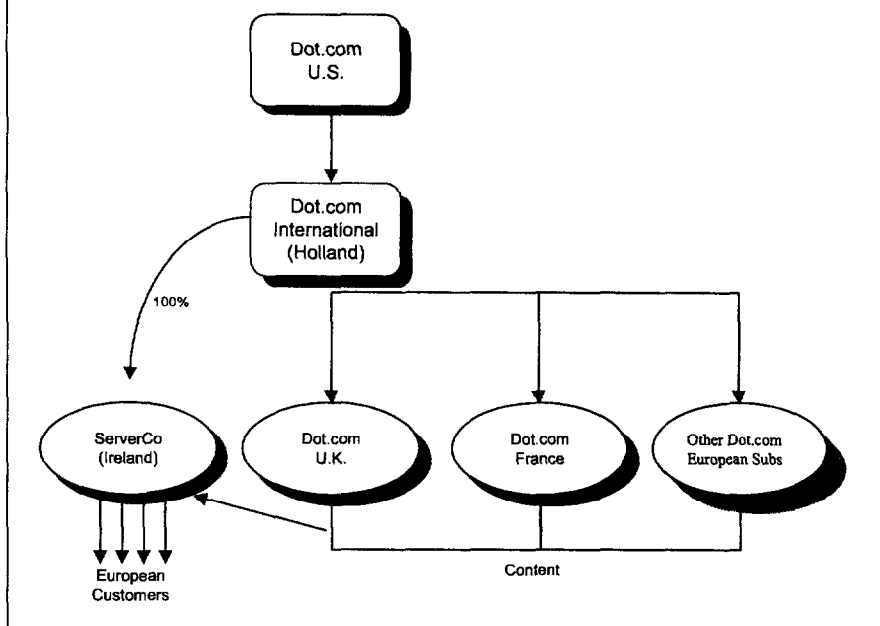
In effect, this hypothesis suggests that the corporate tax base has been shifted from exporters to importers, and that in countries which have market power and the ability to tax importers, the result has been no decline in overall corporate tax revenues. A similar phenomenon has been documented within the United States, where tax competition has led states to adjust their formulas for taxing corporate income from payroll and assets (production) to sales (consumption), thereby taxing importers more than exporters (Brunori, 2001).

In the international context, the key to this hypothesis is that MNEs are unsuccessful in avoiding having a PE in market jurisdictions. Given the rise of e-commerce, which on the face of things enables MNEs to sell into a jurisdiction and avoid a PE, why would this be the case?

II. Can MNEs Avoid Having a PE by Using E-Commerce?

The standard literature on international taxation of e-commerce routinely emphasizes that e-commerce makes it possible to avoid having a PE. As the U.S. Treasury noted in its path-breaking 1996 White Paper, a PE requires physical presence in a country and e-commerce can be conducted without physical

Option I
Irish Server Co



presence, that is to say, without a PE. Commentators have generally followed suit, some predicting the demise of source-based taxation (Horner and Owens, 1996; Tillinghast, 1996; Owens, 1997; *The Economist*, 1997; Avi-Yonah, 1997; Doernberg and Hinnekens, 1998; Kessler, 1999; Cockfield, 1999; Sawyer, 1999; Hardesty, 1999; Chan, 2000; Frieden, 2000; Cockfield, 2001).

But is this accurate under current conditions? A recent case study presented at an American Bar Association Section of Taxation meeting suggests that in practice it may not be so easy for MNEs to avoid having a PE in market jurisdictions, even if they sell in e-commerce (ABA, 2001). The case study is as follows:

The International Roll-Out of an E-Commerce Business

Option I — ServerCo

I. Basic Background

Dot.com-U.S. is a Delaware company that is engaged in

e-commerce by providing content to subscribers over the Internet. Dot.com-U.S. also provides banner advertising to third parties and is paid on a per “click-through” basis. Under Option I, Dot.com-U.S. would form a holding company in a tax-friendly jurisdiction known as Dot.com-International. (See diagram.) That company would be an international holding company that would at some point engage in an IPO. Dot.com-International would form ServerCo in a tax-friendly jurisdiction. ServerCo would be the owner of all foreign content and would serve that content to foreign users, subject to connectivity related limitations.

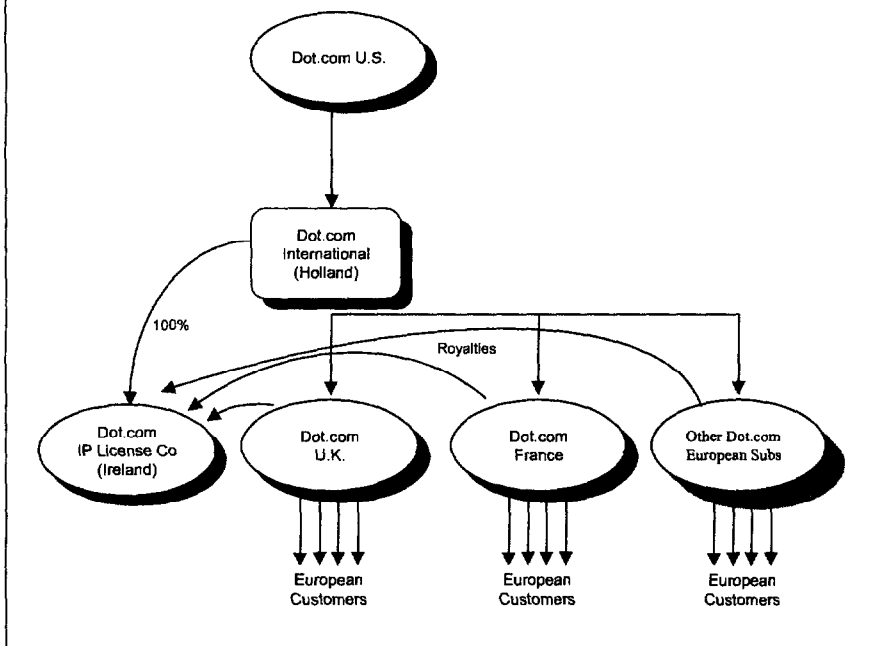
Dot.com-International would form local subsidiaries to act as an agent for ServerCo. The subsidiaries would enter into content agreements with local providers and enter into banner, sponsorship, e-commerce and other arrangements with local companies as agent. However, those arrangements would be entered into by the local Dot.com companies on behalf of ServerCo. Dot.com-U.S.

would license existing content to ServerCo on an arm’s-length basis. All new content and other intellectual property (IP) would be developed in the United States, but ServerCo would own the foreign rights to the IP pursuant to a cost-sharing agreement.

II. Tax Issues

- What is the appropriate jurisdiction for Dot.com-International and ServerCo?
- The primary disadvantage of this structure is that ServerCo would need to be managed in its country of residence and would need to take care that it does not have a taxable presence, or PE, in the operating countries. This may be difficult to achieve. There are also undesirable VAT implications of this structure.
- The taxation of the country of residence of Dot.com-International needs to be considered.
- The purpose of this structure is to migrate profits into a low-tax jurisdiction, away from the high tax nets of the Europe Union and the United States, where profits would be taxed at rates near 35 percent.
- How does ServerCo gain access to the U.S. created IP? Is it a transfer of IP, or a license agreement between Dot.com-U.S. and the ServerCo? What’s the difference?
- How does the cost-sharing agreement work into the transfer issues?
- What are the subpart F consequences of the operation of the group? Would the US. anti-deferral rules under subpart F apply to ServerCo?
- Could ServerCo and the operating companies “check-the-box” to be treated as transparent for U.S. tax purposes? Would this allow for free movement of dividends without subpart F consequences?

Option II Irish IP License Co



Option II — LicenseCo

I. Background

The basic structure of Option II is similar to Option I. (See diagram.) It is assumed that Dot.com-International would be formed as a Dutch company that would establish an Irish IP LicenseCo, which would own the content but would license the content to the individual operating companies owned by Dot.com-International. These companies would act as an agent to generate content on behalf of LicenseCo and would then license the content and other IP from LicenseCo. In contrast to Option I, the local operating companies would serve the content over the Internet to consumers and practices and would enter into alliances, sponsorships, etc. for their own account.

As in Option I, Dot.com-International would be treated as a corporation for U.S. tax purposes while the other entities would check-the-box to be treated as passthrough entities. As in Option I, Dot.com-U.S. would license any existing

content and IP to LicenseCo on an arm's-length basis.

II. Tax Issues

- The primary benefit of this structure is to allow the operating companies to act for their own account in their local jurisdictions. This avoids the risk that LicenseCo would have a PE in the local operating jurisdictions and is easier from a VAT standpoint. This would also provide the flexibility to manage the company from outside the country of incorporations.
- Does the structure achieve a deferral of tax in that the local operating companies would pay to LicenseCo royalties that would be deducted against local taxable income? Would this create subpart F income?
- What role would the check-the-box rules play in the structure?

What is striking about this example, developed by knowledgeable practitioners, is how difficult it is to avoid having a PE. The first

option is designed to do so, because all content is delivered via ServerCo. However, because content has to be developed locally, there needs to be local agents and, as the case study indicates, this means that avoiding a PE may be difficult to achieve. The second option abandons that attempt altogether. The local companies deliver the content and are clearly taxable, preferring to reduce taxation via royalties. But this more conservative structure is subject to transfer pricing review of the royalty rate, and may not significantly reduce taxes unless most of the value is inherent in the IP.

In general, if local agents are needed to develop content, a PE may be impossible to avoid — even when actual revenue comes from advertising. (In the classic *Piedras Negras* case, a radio station that broadcast in English from Mexico and derived all its revenues from advertising was held not to have a PE, but it developed its own content). The same result may occur if local agents are needed for marketing, distribution, or servicing of the goods.

There are some MNEs, like Intel or Microsoft, whose products “sell themselves” and do not need a PE. Intel boasted in full page advertisements of selling over a billion U.S. dollars worth of chips in e-commerce, and all its manufacturing operations outside the United States benefit from tax holidays. But for other MNEs the ability to avoid a PE is less clear. Those MNEs are much more likely to be taxed in market jurisdictions.

This reality may explain the relaxed attitude of the OECD toward modifying the PE concept in light of e-commerce, which contrasts sharply with the urgency characterizing the tax competition project. On 22 December 2000, after more than a year of deliberations, the OECD's Committee on Fiscal Affairs adopted a change to the commentary on article 5 of the OECD Model Tax Convention, the PE article. The change clarified

that in some circumstances, a server may constitute a PE, while a Web site by itself does not. The committee referred to five technical advisory groups (TAGs) that were considering whether any broader changes were needed in the application of the business profits article to e-commerce. So far the TAGs came up with rules to classify various sources of income from e-commerce. Of 28 categories of income, the TAGs classified 25 as business profits and only 3 as royalties (Schickli, 2001). This means that for most types of income from e-commerce, there will be no source-based tax unless a PE exists, and the TAGs made no changes in the PE definition itself. (For the categories classified as royalties, there is also no source-based taxation if a treaty based on the OECD model applies).

These recommendations fall far short of what is needed to adjust the PE concept to the reality of e-commerce. As the U.S. Treasury noted in 1996, declaring that a server constitutes a PE is nonsensical because a server can be located anywhere. Making a Web site a PE would have been much more radical, but would have eviscerated the PE concept because even a single sale into a jurisdiction via the Web would give rise to a PE. What is needed, as I have previously argued (Avi-Yonah 1997), is some *de minimis* threshold of sales, rather than the current focus on physical presence. But the OECD is in no hurry to follow this recommendation, which is understandable in light of the difficulties of avoiding a PE illustrated above.

III. Implications

If the hypothesis outlined above is even partially correct, it carries interesting implications. For developing countries, it means that tax competition is a very real and present danger, eroding their corporate tax revenues and resulting in significant windfalls for MNEs. This is particularly true

given that the corporate income tax has been a more important source of revenue in developing countries than in OECD members, amounting for 15 percent to 25 percent of total revenues (IMF 1995). Most of these revenues come from MNEs, since the domestic corporate tax base is typically meager.

In developed countries, the hypothesis means that, for the time being, tax competition does not pose an immediate danger of corporate revenue base erosion. This may be a temporary phenomenon, given the expected continued rise in e-commerce, the ingenuity of tax planners, and the reluctance of the OECD to change the PE threshold. In the long run, more MNEs may follow Intel's lead. This may explain the urgency of the OECD tax competition initiative (although even that initiative does not focus on real investment).

IV. Conclusion

This paper has attempted to advance one explanation for a seemingly puzzling incongruence in the available data on tax competition: effective corporate tax rates on MNEs are going down, but corporate tax revenues in OECD member countries are stable. One explanation may be that OECD members are successfully shifting their tax base from exporters to importers, and that importers are less able to avoid a PE (and therefore tax liability) than previous commentators have supposed.

If that is the case then tax competition may, *prima facie*, be most harmful to developing countries that generally export more goods produced by MNEs than they import. In the long run, tax competition may harm developed countries as well as MNEs find new ways of avoiding PEs through e-commerce. And even in the short run, a shift in the tax base from exporters to importers may have negative welfare implications (Slemrod, 1995).

It should be emphasized that the hypothesis advanced above is based on very limited data. To confirm or refute it, much additional work is needed. In particular, it would be helpful to know whether the data relied on by Altshuler, Grubert, and Newlon (2001) and Grubert (2001) show greater declines in effective tax rates in developing than in developed countries.

In addition, data for developing countries need to be explored to see whether those jurisdictions show a decline in revenues from the corporate income tax. Data from developed countries are needed to see whether there has been a shift in the corporate tax base from exporters to importers and what are the revenue trends from taxpayers engaged in electronic commerce. Hopefully, such data can become available in the near future.

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