



# Taxing the foreign profits of multinational firms

Michael P. Devereux, Clemens Fuest, Ben Lockwood

*Tax avoidance by multinational firms is a complex challenge for national governments and the global tax system. Increasingly, high-income countries have been moving from foreign tax credit systems, to exempting foreign source income from domestic taxation. This column investigates how foreign profits should be taxed, taking into account the economic role of capital ownership. Domestic tax rates should ensure optimal allocation between domestic and foreign assets, while the tax base should be set to ensure asset purchases are undistorted. Countries may be forced to change their tax systems in more fundamental ways, however, as the mobility and flexibility of multinational corporations continues to grow.*

The recent debate about tax avoidance by multinational firms like Amazon or Starbucks has brought corporate taxation to the top of the international policy agenda. The taxation of multinational companies is a challenging and complex issue – countries want to make sure that corporations bear a fair part of the overall tax burden, but they also want to attract investment and jobs. From a global perspective, firms should invest where the capital is most productive, not where taxes are lowest.

So how should multinational companies be taxed? A key aspect of the international tax system is how countries tax foreign profits of domestic multinational firms. For instance, if General Motors makes a profit of €100 million by selling cars in the UK, should these profits be subject to tax in the US and if so should profit taxes paid in the UK be taken into account in determining the US tax burden? One option is to use the foreign tax credit system; i.e. credit taxes paid in the UK against taxes due in the US. For example, if the profit tax paid in the UK is €20 million, the tax due in the US – where the tax rate is approximately 35% – would be €15 million; €35 million minus a €20 million credit for taxes paid in the UK. Another option is to exempt foreign profits from domestic taxation. In this case General Motors would only pay UK corporate income tax on profits generated in the UK.

For many years tax policy in the US as well as the UK used variants of the foreign tax credit system. Other countries like Germany and France, however, chose to exempt foreign source income fully or almost fully from domestic taxation. But in one of the most striking trends in corporate taxation in recent years, there has been a significant switch to exempting foreign-source income from taxation. According to PwC Worldwide Tax Summaries, out of 37 high-income countries, 19 had an exemption system in 1998, rising to 27 in 2008. None of these 37 countries switched from exemption to a credit or other system during this period.

## Conflict with classical theory

This trend appears to conflict with two key results in the classical theory of international taxation. The first result states that countries should tax the foreign source income of multinational firms according to the foreign tax credit system to make sure that the allocation of capital in the world economy is undistorted (Richman 1963). This result is based on the idea that, under the foreign tax credit

system, firms will ultimately pay the same tax, irrespective of the investment location, so that their location choices are not distorted if corporate tax rates differ across countries, achieving so-called capital export neutrality (CEN).

The second result focuses on national welfare and states that it is optimal to tax foreign source income according to the full taxation after deduction principle (Feldstein and Hartman 1979). This system treats taxes paid abroad as any other deductible cost, rather than crediting them against domestic tax. Thus, according to the classical theory, neither global nor national welfare maximisation is achieved through the exemption system.

## Capital movement vs. change of capital ownership

However, this 'old' view of the optimal taxation of foreign profits has been challenged by Desai and Hines (2003, 2004) who argue that a large part of international investment nowadays takes the form of mergers and acquisitions, a type of investment largely neglected by the 'old' view. They emphasise the fact that merger and acquisition investment implies a change in the ownership rather than the location of physical capital. But the ownership of assets is distorted if different potential owners, who are located in different countries, are taxed differently. Desai and Hines argue that capital ownership neutrality (CON)<sup>1</sup> requires that all potential owners of an asset face the same tax burden, irrespective of their country of residence, and that this requires an exemption of foreign source income.

Taking mergers, acquisitions, and the economic role of ownership into account is an important step forward in international tax theory. But real world foreign investment by multinational companies typically includes both purchases of existing assets like land or existing companies, and the relocation of capital, know-how or employees.

## How should foreign profits be taxed in the presence of these different forms of foreign investment?

We investigate this issue in a model where foreign investment by a domestic multinational firm occurs in two steps. The first is the purchase of an immobile asset like a piece of land or an existing company, in the foreign country. The second step is to combine the immobile asset with a continuously variable, internationally mobile, factor of production, which could be capital or managerial capacity. The recent literature on the taxation of foreign profits has shown that it is of central importance whether foreign investment affects domestic economic activity (Becker and Fuest 2010). We allow for this by means of introducing a cost of adjustment for the mobile factor. In addition, we allow governments to set tax rates and tax bases while the earlier literature takes the tax base as given.

Our main findings are as follows. The government has two kinds of instrument; the statutory tax rate on foreign-source income, and allowances on domestic and foreign asset purchase. It turns out that for both national and global optimality, there is a simple assignment of instruments to targets. First, the domestic tax rate on foreign-source income should be set to ensure the optimal allocation of the mobile factor between domestic and foreign assets. The setting of the tax rate follows the classical rules in the literature; national optimality requires the deduction rule, and global optimality requires the credit rule. Second, the tax base should be set so as to ensure that domestic and foreign asset purchases are undistorted by the tax system. This requires a cash-flow tax on domestic investment. A qualification is that in the acquisitions case, no allowance should be granted as the acquisition price is already adjusted by the corporate tax rate.

## Implementation

Implementing such a cash flow tax is straightforward – all real expenditure would be deductible from the tax base, and the corresponding income would be taxed at the same rate. However, there is a difference in the required tax rate. For national optimality, the deduction rule implies that the cross-border cash flow tax should be set at the same rate as the domestic tax. But global optimality requires the rate of the cross-border cash flow tax to depend on the tax rate of the foreign country - that is, on the destination of the outbound investment. In practice this would give an incentive for firms to route investment through a high tax country, and governments would need anti-avoidance rules to prevent this.

It may be objected that, according to our model, all countries should levy some positive tax on foreign source income. Does this mean the observed trend towards exemption systems is inefficient? One reason why that may not be the case is the cost of tax administration; it seems reasonable to suppose that an exemption system has a lower cost of administration. If the cost of moving skilled labour or capital between different subsidiaries of a multinational is also falling over time, our model predicts that the efficiency loss from choosing exemption would also fall, explaining an increasing use of the exemption system.

A second possible explanation for the increasing use of exemption systems is that parent companies of multinational corporations may move their residence for tax purposes, although they may face a tax charge in doing so. With this additional feature, it is intuitively clear that the greater the mobility of the parent, the lower would be the optimal tax rate on foreign source income. Further, if this mobility is increasing over time, then this could also help explain the trend towards exemption.

## Concluding remarks

One needs to be aware that the exemption of foreign source income does make the tax system more vulnerable to certain types of tax avoidance by multinational firms. So if targeted anti-tax avoidance measures like thin capitalisation rules or transfer pricing regulations lose their effectiveness, the trend towards the exemption system might be reversed. Of course, while positive taxes on foreign source income may crowd back certain types of tax avoidance, as we show in the paper, others, including the relocation of corporate headquarters, may increase.

The growing mobility and flexibility of multinational corporations may force countries to change their tax systems in a more fundamental way. One option would be to levy corporate tax according to the destination principle; i.e. in the location of sales. The reason is that customers are likely to be less mobile than factories or corporate headquarters (Auerbach and Devereux 2013).

## References

Auerbach, A J and M P Devereux (2013) "Consumption and cash-flow taxes in an international setting", Oxford University Centre for Business Taxation Working Paper 13/11.

Becker, J and Fuest, C (2010) "Taxing foreign profits with international mergers and acquisitions", *International Economic Review*, 51(1): 171-186.

Desai, M A and J R Hines (2003) "Evaluating international tax reform", *National Tax Journal*, 56(3): 487-502.

Desai, M A and J R Hines (2004) "Old rules and new realities: Corporate tax policy in a global setting", *National Tax Journal*, 57(4): 937-60.

Devereux, M P (1990) "Capital export neutrality, capital import neutrality, capital ownership neutrality and all that", Unpublished Working Paper.

Richman, P B (1963) *Taxation of foreign investment income – an economic analysis*, The Johns Hopkins Press, Baltimore.

### Footnote

1 The term capital ownership neutrality was introduced by Devereux (1990) in a slightly different context.

## About CAGE

Established in January 2010, CAGE is a research centre in the Department of Economics at the University of Warwick. Funded by the Economic and Social Research Council (ESRC), CAGE is carrying out a five year programme of innovative research.

The Centre's research programme is focused on how countries succeed in achieving key economic objectives, such as improving living standards, raising productivity and maintaining international competitiveness, which are central to the economic well-being of their citizens.

CAGE's research analyses the reasons for economic outcomes both in developed economies such as the UK and emerging economies such as China and India. The Centre aims to develop a better understanding of how to promote institutions and policies that are conducive to successful economic performance and endeavours to draw lessons for policy-makers from economic history as well as the contemporary world.



This piece first appeared on Voxeu on 12 June 2015  
<http://voxeu.org/article/taxing-foreign-profits-multinational-firms>

**VOX**

Research-based policy analysis and commentary from leading economists

© 2016 The University of Warwick

Published by the Centre for Competitive Advantage in the Global Economy  
Department of Economics, University of Warwick, Coventry CV4 7AL  
[www.warwick.ac.uk/cage](http://www.warwick.ac.uk/cage)

Artwork by Mustard, [www.mustardhot.com](http://www.mustardhot.com)