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Johannes Becker\* and Clemens Fuest\*\*

# The Taxation of Foreign Profits – the Old View, the New View and a Pragmatic View

The increasing importance of multinational firms raises the question as to whether and how governments should tax repatriated profits, i.e. affiliate profits returned to the headquarters. The answer to this question is especially relevant for profit repatriations within the European Union where multinational firm investment is substantial and tax competition is supposed to be of rising intensity. This paper reviews the criticism of the standard view (the “old view”) of foreign profit taxation, which goes back to Peggy Musgrave. The “new view” of international taxation is based on recent empirical studies and favours a system in which foreign profits are exempt from tax. The debate between old view and new view proponents is critically discussed and, finally, the two are confronted with a “pragmatic view” on foreign profit taxation which crucially incorporates compliance and tax administration costs.

Forty-eight years ago, Peggy Brewer Musgrave (née Richman<sup>1</sup>) founded the modern theory of international taxation. There are few theories in public finance which have been as influential with regard to real world tax policy. Musgrave's book<sup>2</sup> and her ensuing article<sup>3</sup>, as well as contributions from Hamada<sup>4</sup> and Feldstein and Hartman<sup>5</sup>, provided an intellectual foundation for international taxation agreements such as the OECD convention on double taxation treaties.<sup>6</sup> According to Musgrave's theory, each country has an incentive to tax the foreign profits of its multinational firms even if these profits have already been taxed abroad. Since double taxation is inefficient from a global point of view, countries should agree to adopt a system of international taxation in which foreign tax payments are credited against domestic taxes. Accordingly, the OECD Tax Treaties let countries choose between the tax credit system and exempting foreign income from tax. In other words, countries choose between equal treatment for domestic and foreign profits and the beneficial tax treatment of foreign income (i.e. the exemption system).

In recent years, there has been a growing awareness that, due to changes in the economic environment, the existing rules for taxing foreign profits might be in need of reform. However, the direction of reform is controversial. Some authors, including Desai and Hines<sup>7</sup>, challenge Musgrave's tax policy recommendations. Based on new theoretical arguments and empirical findings, it is argued that the tax credit

system is inefficient from a national point of view. Instead, exemption is seen to be the best option. Both this criticism and Musgrave's policy recommendations are efficiency-oriented and concern the nationally or globally optimal allocation of capital across locations. They do not question the legitimacy of corporate taxation in general<sup>8</sup>, nor shall we in what follows.<sup>9</sup>

In 2008, the United Kingdom followed the arguments brought forward by proponents of the exemption system and abolished the tax credit system for the foreign source dividends of its domestic multinational firms.<sup>10</sup> In the United States, the tax credit system is still in force but, in 2004, a tax holiday was granted for the repatriation of foreign profits of US multinational firms. In contrast, during the 2008 presidential cam-

- 1 P.B. Richman: *Taxation of Foreign Investment Income – An Economic Analysis*, Baltimore 1963, The Johns Hopkins Press.
- 2 Ibid.
- 3 P.B. Musgrave: *United States Taxation of Foreign Investment Income: Issues and Arguments*, International Tax Program, Harvard Law School, Cambridge (MA) 1969.
- 4 K. Hamada: *Strategic Aspects of Taxation on Foreign Investment Income*, in: *Quarterly Journal of Economics*, Vol. 80, No. 3, 1966, pp. 361-375.
- 5 M. Feldstein, D. Hartman: *The Optimal Taxation of Foreign Source Investment Income*, in: *Quarterly Journal of Economics*, Vol. 93, No. 4, 1979, pp. 613-629.
- 6 For earlier justifications, see M.J. Graetz, M. O'Hear: *The “Original Intent” of U.S. International Taxation*, in: *Duke Law Journal*, Vol. 46, No. 5, 1997, pp. 1021-1109.
- 7 M.A. Desai, J.R. Hines: *Evaluating International Tax Reform*, in: *National Tax Journal*, Vol. 56, No. 3, 2003, pp. 487-502; M.A. Desai, J.R. Hines: *Old Rules and New Realities: Corporate Tax Policy in a Global Setting*, in: *National Tax Journal*, Vol. 57, No. 4, 2004, pp. 937-960.
- 8 See M.P. Devereux: *Proposals for Controlled Foreign Companies reform: a tale of two principles*, in: *British Tax Review*, No. 2, 2010, pp. 111-119, for a broader discussion of this issue.

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paign, even the deferral of domestic taxes on foreign profits was criticised as a subsidy for “sending US jobs offshore”.<sup>11</sup> In Germany, where foreign source dividends are (mostly) exempt from domestic taxation, some economists propose the introduction of the tax credit system, as exemption is thought to lead to inefficiently high investment levels abroad.<sup>12</sup>

In the following, we discuss and compare the old Musgrave view on foreign income taxation and the new view favouring exemption. Afterwards we confront these two arguments with a third, more pragmatic view which – interestingly – is mainly brought forward by scholars from the business administration branch and tax practitioners.

### The Old View

Considering Musgrave's theory, it is helpful to recall that, at this time in the 1960s, the United States was the world's largest capital exporter. Musgrave assumed that a representative multinational firm invests a fixed capital stock either in domestic projects or abroad. The firm maximises its profits and, consequently, invests so as to equalise the after-tax returns in both locations. However, such investment behaviour is not in the national interest, as taxes paid to the domestic government are, from a social point of view, income and not cost. Thus, nationally optimal investment equalises the pre-tax return at home with the after-tax return abroad. As Musgrave demonstrated, such investment behaviour requires a system with full domestic taxation of foreign income after deducting foreign tax payments. If global welfare is the policy goal, the picture changes again. Globally optimal investment equalises the pre-tax returns in both locations. This is in line

with actual firm investment behaviour if the effective tax rates are equal, which can be achieved by a tax credit system.

For the purpose of clarity, consider the following simple model. Let  $k$  and  $k^*$  denote the stocks of capital at home and abroad respectively, and  $f(k)$  and  $f^*(k^*)$  the output of production. Capital is rented at an interest rate of  $r$  from domestic savers who provide fixed savings of  $\bar{K}$ . Then, after-tax profits  $\pi$  are given by

$$\pi = f(k)(1 - \tau) + f^*(k^*)(1 - \tau^* - \tau^r) - r(k + k^*) \quad (1)$$

where  $\tau$  and  $\tau^*$  denote source-based corporate taxes at home and abroad respectively, and  $\tau^r$  the repatriation tax levied by the home country. Profit maximisation implies that the multinational firm sets

$$f' = \frac{r}{1 - \tau} \quad \text{and} \quad f^{*'} = \frac{r}{1 - \tau^* - \tau^r}$$

The interest rate adjusts until  $k + k^* = \bar{K}$ .

Is such investment behaviour efficient? Musgrave argued that the multinational firm does not account for the fact that taxes paid at home are part of national income, rather than costs. The same is true for interest paid to domestic savers. Seen from the national point of view, income is given by  $W^N = \pi + r\bar{K} + \tau f(k) + \tau^r f^*(k^*)$ . Musgrave then asks which kind of repatriation tax maximises national income:

$$\max_{\tau^r} W^N = f(k) + f^*(k^*)(1 - \tau^*) \quad \text{subject to } k + k^* \leq \bar{K} \quad (2)$$

Accounting for the multinational's investment behaviour, national optimality is reached if  $f' = f^{*'}(1 - \tau^*)$ . Choosing an adequate tax rate aligns the firm's incentives with national ones. The firm then invests so as to maximise national welfare:

$$f' = f^{*'} \frac{1 - \tau^* - \tau^r}{1 - \tau} = f^{*'}(1 - \tau^*) \quad \text{if } \tau^r = \tau(1 - \tau^*) \quad (3)$$

Thus, if foreign profits are fully taxed after deducting foreign tax payments, the firm's investment implicitly satisfies national optimality.

Of course nationally optimal tax policy does not take into account that foreign taxes are income, too. Therefore, national optimality does not equal global optimality. Seen from the global point of view, income is given by  $W^G = \pi + r\bar{K} + \tau f(k) + (\tau^* + \tau^r)f^*(k^*)$ . The optimal repatriation tax problem then reads

- 9 Recent contributions like W. Schön: International Tax Coordination for a Second-Best World, in: World Tax Journal, Part I: Vol. 1, No. 1, 2009, pp. 67-114; Part II: Vol. 1, No. 2, 2009, pp. 65-94; Part III: Vol. 1, No. 3, 2009, pp. 227-261; W. Schön: Persons and Territories - On the International Allocation of Taxing Rights, in: British Tax Review, No. 6, 2010, pp. 554 -562; and M.P. Devereux: Proposals for Controlled..., op. cit. choose a broader approach and ask for the justification of corporate taxation in general. Corporate taxes may act as a backstop to the personal income tax, which requires the tax credit system. However, as firm ownership is increasingly internationally diversified, this rationale for taxing foreign source income is losing plausibility. Moreover, the corporate income tax can be seen as a tax on domestic economic activity, which is justified as firms benefit from public services. This approach suggests that corporate income earned abroad should not be taxed domestically, so that the exemption system seems appropriate.
- 10 To be precise, the exemption system has been introduced for income repatriated from foreign subsidiaries (in contrast to foreign permanent establishments).
- 11 D. Lynch: Does tax code send U.S. jobs offshore?, in: USA Today, 21 March 2008, [http://www.usatoday.com/money/perfi/taxes/2008-03-20corporate-tax-offshoring\\_N.htm](http://www.usatoday.com/money/perfi/taxes/2008-03-20corporate-tax-offshoring_N.htm).
- 12 S. Homburg: Internationale Kapitaleinkommensbesteuerung nach dem Wohnsitzprinzip oder Quellenprinzip? in: D. Endres, A. Oestreicher, W. Scheffler, U. Schreiber, C. Spengel (eds.): Die internationale Unternehmensbesteuerung im Wandel, Munich 2005, C. H. Beck.

$$\max_{\tau^r} W^G = f(k) + f^*(k^*) \text{ subject to } k + k^* \leq \bar{K} \quad (4)$$

which implies optimal investment according to  $f' = f^{*'}.$  Again, it is feasible to align the firm's interests with global optimality objectives by choosing the adequate repatriation tax rate:

$$f' = f^{*'} \frac{1 - \tau^* - \tau^r}{1 - \tau} = f^{*'} \text{ if } \tau^r = \tau - \tau^* \quad (5)$$

Since its publication, Musgrave's theory has been extended and criticised many times. Important extensions concern the assumption of endogenous savings<sup>13</sup>, the implementation of double taxation agreements in a strategic multi-country setting<sup>14</sup>, taking into account shareholder and firm level taxation<sup>15</sup> and the focus on mergers and acquisitions<sup>16</sup>. Various attempts at criticism before the new view did not meet with success.<sup>17</sup>

### The New View

In Musgrave's model, the supply of capital available for investment in the domestic and foreign locations is limited. As a consequence, more foreign investment crowds out domestic investment. The new view starts from the observation that this model feature is at odds with the capital markets of today. Since capital controls have been removed in most countries, it seems adequate to assume a large world capital market instead of a limited capital supply by domestic savers. With a large world market for capital, the interest rate is no longer determined by domestic supply and the multinational's demand. Instead, the interest rate is taken as

given from the national point of view and there is a (virtually) infinite supply of capital at this rate. In such a setting, an increase in foreign investment leaves the interest rate and, thus, domestic investment unaffected. A tax on repatriated profits no longer increases domestic investment; it just reduces foreign investment by domestic firms. If national income maximisation is the policy goal, a tax on foreign profits effectively reduces income and should therefore be abandoned. In other words, tax exemption is the best policy option from a national point of view.

In the context of the model described above, the multinational has the same profit function as in (1). Again, the firm sets

$$f' = \frac{r}{1 - \tau} \text{ and } f^{*'} = \frac{r}{1 - \tau^* - \tau^r}$$

However, its investment does not lead to any (or only negligible) interest rate adjustments. The optimisation problem from the national point of view is now given by

$$\max_{\tau^r} W^N = f(k) + f^*(k^*)(1 - \tau^*) - r(k + k^*) + r\bar{K} \quad (6)$$

where the multinational's capital stock,  $k + k^*$ , may well be smaller or larger than the domestic supply of savings  $\bar{K}$ . Nationally optimal investment abroad implies

$$f^{*'} = \frac{r}{1 - \tau^*}$$

and, thus, the optimality of exempting foreign profits from tax,  $\tau^r = 0$ . The reason is that a tax-induced reduction of foreign investment does not lead to an increase in domestic investment (as in the old view model); rather, the tax implies that the investor abandons some projects. As a consequence, the whole national economy foregoes some income.

With regard to global optimality, exemption proponents do not deny that the tax credit system maximises global income. Of course, if policy changes are evaluated on a global scale (and not from the viewpoint of a small country), there is no such thing as a given interest rate. In terms of the model described above, the issue of global optimality simply cannot be investigated in this setup because the model is not closed: the supply of capital to the world capital market is not modelled explicitly.

There are, however, some drawbacks to the claim that tax exemption of foreign profits is nationally optimal. In the old

- 13 T. Horst: A Note on the Optimal Taxation of International Investment Income, in: *Quarterly Journal of Economics*, Vol. 94, No. 4, 1980, pp. 793-798; M. Keen, H. Piekola: Simple Rules for the Optimal Taxation of International Capital Income, in: *Scandinavian Journal of Economics*, Vol. 99, No. 3, 1997, pp. 447-461.
- 14 E.g. E. Janeba: Corporate Income Tax Competition, Double Taxation Treaties, and Foreign Direct Investment, in: *Journal of Public Economics*, Vol. 56, No. 2, 1995, pp. 311-326; J. Mintz, H. Tulkens: Optimality Properties of Alternative Systems of Taxation of Foreign Capital Income, in: *Journal of Public Economics*, Vol. 60, No. 3, 1996, pp. 373-399; R.B. Davies: Tax Treaties and Foreign Direct Investment: Potential versus Performance, in: *International Tax and Public Finance*, Vol. 11, No. 6, 2004, pp. 775-802.
- 15 C. Fuest, B. Huber: Why do countries combine the exemption system for the taxation of foreign profits with domestic double taxation relief?, in: *Journal of International Economics*, Vol. 62, No. 1, 2004, pp. 219-231.
- 16 See M.A. Desai, J.R. Hines: Evaluating International..., op. cit. and M.A. Desai, J.R. Hines: Old Rules..., op. cit.; J. Becker, C. Fuest: Taxing Foreign Profits with International Mergers and Acquisitions, in: *International Economic Review*, Vol. 51, No. 1, 2010, pp. 171-186.
- 17 H. Grubert, J. Mutti: Taxing Multinationals in a World with Portfolio Flows and R&D – Is Capital Export Neutrality Obsolete?, in: *International Tax and Public Finance*, Vol. 2, No. 3, 1995, pp. 439-457.

view model, both domestic and foreign investment reach efficient levels if the adequate tax system is applied. In the new view model, nationally optimal investment at home would imply  $f' = r$ , but firms only invest until

$$f' = \frac{r}{1 - \tau}$$

Therefore, one might argue that, given the government's spending needs, it may be worthwhile to slightly cut domestic corporate tax rates and increase the tax on foreign investment. Indeed, as Devereux<sup>18</sup> shows, the optimal tax rates on domestic and foreign capital depend on the elasticity of capital demand in both locations. Furthermore, introducing diseconomies of scale which effectively limit the size of the multinational firm implies that the old Musgrave result is restored. Finally, the fact that the marginal investment unit needs to remain untaxed (at least from the national point of view) does not require exemption of all foreign profits. A cross-border cash-flow system<sup>19</sup> may generate tax revenue without distorting foreign investment decisions (the same may apply for domestic investment, of course, which raises the question why cash-flow taxes are not used more in real world tax systems).<sup>20</sup>

### Old View versus New View – What's the Score?

Clearly there are limitations to both the old and the new view. However, countries have to decide which system of international taxation to adopt and, thus, which view to favour. One might argue that the debate boils down to a single empirically testable question: what happens to domestic investment if foreign investment is increased? The old view's answer is that domestic investment decreases, therefore foreign investment should be taxed. The new view's answer is that nothing happens, therefore foreign investment should not be taxed.

The question of whether domestic and foreign investment are substitutes, not linked at all or even complements has been the focus of many recent empirical studies.<sup>21</sup> Using data from

multinational firms, these studies almost unanimously find that an increase in foreign activity does not lead to a reduction in the domestic activity of this firm. As some new view advocates<sup>22</sup> have argued, this may prove the case of the new view. However, a look at aggregate data as in Feldstein<sup>23</sup> shows that, across all firms, foreign investment crowds out domestic investment "dollar for dollar".<sup>24</sup> This finding is confirmed by proponents of exemption.<sup>25</sup>

Moreover, exemption is no adequate option for a world which tries to coordinate on efficiency-enhancing tax systems. Exemption proponents stress the national interest but do not deny that the tax credit system might be more suitable in promoting global efficiency. Thus, one may translate the new view into something like the following approach: given that we cannot coordinate with all countries implementing the tax credit system, tax policy should focus on national optimality and abolish the tax credit system.

The new view argument based on the assumption of a perfectly elastic capital supply is perhaps the most important one in favour of tax exemption, but the debate does not stop there. In tax credit countries like the USA and – until 2008 – the UK, a number of somewhat different arguments were brought forward which can be summarised as follows. Firstly, a tax on foreign profits creates incentives to move headquarters to other countries. There have been some widely discussed examples in the UK, and headquarter mobility in the form of corporate inversions, in which US parent companies of foreign subsidiaries transformed into subsidiaries of foreign firms, is an important policy issue in the USA.<sup>26</sup> Empirical studies like Voget<sup>27</sup> which try to systematically capture the extent of headquarter mobility show that it is observable but only to a limited extent.

Secondly, a tax on repatriated profits increases the cost of capital and therefore deteriorates the competitiveness of domestic firms. As many countries already employ the ex-

18 M.P. Devereux: Some Optimal Tax Rules for International Portfolio and Direct Investment, in: *Finanzarchiv*, Vol. 60, No. 1, 2004, pp. 1-23.

19 See J. Becker, C. Fuest: *Taxing Foreign Profits...*, op. cit.

20 Ibid., also show that, in a world with international M&A investment, global optimality is achieved neither by the tax credit system nor by the exemption system.

21 See e.g. P. Egger, M. Pfaffermayr: *The Counterfactual to Investing Abroad: An Endogenous Treatment Approach of Foreign Affiliate Activity*, University of Innsbruck, Working Papers in Economics, No. 2, 2003; H. Simpson: *Investment Abroad and Adjustment at Home: Evidence from UK Multinational Firms*, CMPO working paper, No. 207, 2008; M. Desai, C.F. Foley, J.R. Hines: *Domestic Effects of the Foreign Activities of U.S. Multinationals*, in: *American Economic Journal: Economic Policy*, Vol. 1, No. 1, 2009, pp. 181-203; J. Kleiner, F. Toubal: *The Impact of Locating Production Abroad on Activities at Home: Evidence from German Firm-Level Data*, in: *Review of World Economics*, forthcoming.

22 See e.g. M.A. Desai, J.R. Hines: *Evaluating International...*, op. cit. and M.A. Desai, J.R. Hines: *Old Rules...*, op. cit.; J.R. Hines: *Reconsidering the Taxation of Foreign Income*, in: *Tax Law Review*, Vol. 62, No. 2, 2009, pp. 269-298; M.A. Desai: *Securing Jobs or the New Protectionism?: Taxing the Overseas Activities of Multinational Firms*, Harvard Business School Working Paper, No. 09-107, 2009.

23 M.S. Feldstein: *The Effects of Outbound Foreign Direct Investment on the Domestic Capital Stock*, in: M. Feldstein, J.R. Hines Jr., R.G. Hubbard (eds.): *The effects of taxation on multinational corporations*, University of Chicago Press, Chicago 1995, pp. 43-66.

24 Ibid.

25 See M.A. Desai, C.F. Foley, J.R. Hines: *Foreign Direct Investment and the Domestic Capital Stock*, in: *American Economic Review, Papers and Proceedings* 95, No. 2, 2005, pp. 33-38.

26 See e.g. United States Department of the Treasury, Office of Tax Policy: *Corporate Inversion Transactions: Tax Policy Implications*, May 2002.

27 J. Voget: *Impact of Taxation on the Location of Corporate Headquarters*, in: *Journal of Public Economics*, forthcoming.



emption system, firms from tax credit countries have a competitive disadvantage. Therefore, countries should switch to the exemption system. This argument is very similar to the strategic trade arguments made in the 1980s<sup>28</sup> and is therefore subject to the same sort of criticism. The argument can, however, be restated in the framework discussed above: a tax on repatriated profits leads to a reduction in foreign activity without increasing domestic activity. Under imperfect competition, the situation gets even worse, as the oligopoly rents are reduced. From this perspective, it becomes clear that the exemption proponents implicitly assume that negative tax rates are ruled out. If they are allowed for, a case for subsidies for foreign activity can be made. Moreover, if transfer prices for intra-firm trade are taken into account, the case for exemption becomes less obvious.<sup>29</sup>

A third important argument builds on the difference between greenfield investment and mergers and acquisitions (i.e. mere changes in ownership). Desai and Hines<sup>30</sup> argue that ownership changes do not affect the allocation of real capital in the first place but may have real efficiency effects. Repatriation taxes, however, distort the allocation of ownership across countries.<sup>31</sup> As we show in Becker and Fuest<sup>32</sup>, this consideration is correct but incomplete. An efficient ownership allocation does not require zero taxation of all repatriated profits. A cross-border cash-flow tax system may generate tax revenues without distorting the decision to merge with or to acquire foreign firms.<sup>33</sup>

Fourthly and finally, there is the argument that deferral of profit repatriation and other avoidance techniques imply

large efficiency costs under the tax credit system. As many empirical studies have shown, deferral<sup>34</sup> and tax avoidance activities<sup>35</sup> play an important role. It is, however, less clear whether tax avoidance incentives are stronger under the tax credit system or under the exemption system. Whereas the incentive to defer profit repatriations is higher under the tax credit system, the effective tax differentials and, thus, the incentive to shift profits across locations, are higher under the exemption system. It is an open question which of these two margins implies the larger efficiency cost.

In total, the old view seems to be more robust than initially expected by the new view advocates. So it might be surprising that international tax policy seems to be decidedly inclined towards the new view. As mentioned in the introduction, the United Kingdom recently abandoned the tax credit system and adopted an exemption system (accompanied, though, by a range of tax law provisions designated to avoid profit shifting activities of multinational firms). Currently, the United States is the last large country holding on to the tax credit system. And, despite the concern about excessive investment abroad mentioned in the introduction, there are strong political forces favouring a switch to exemption.

Given the state of the debate, the question arises why there is such a strong movement towards exemption. It may be the case that there is another argument, a third view in favour of exemption that is persuasive enough to make people accept the potential investment distortions implied by the exemption system. We call this view the pragmatic view.

### The Pragmatic View

The debate between the old view and the new view focuses on the efficiency of capital allocation and is led mainly by economists. In recent years, some tax policy practitioners and tax lawyers have brought forward the simple but compelling argument that a tax credit system might just be too expensive to implement. Whereas a tax exemption system only builds on the difference between foreign and domestic profits, a tax credit system needs to allocate profits to each location within a multinational firm. The complexity of firm structures typical for modern multinationals makes it hard and expensive to trace income through all layers of the firm, for both the reporting firm and the auditing authority. Complex ownership arrangements add to these difficulties. For instance, a discussion document by the HM Treasury and HM Revenue and Customs states that the exemption system

28 See e.g. J.A. Brander, B.J. Spencer: Export subsidies and international market share rivalry, in: *Journal of International Economics* No. 18, 1985, pp. 83-100.

29 J. Becker: Strategic trade policy through the tax system, CESifo Working Paper No. 3066, 2010.

30 M.A. Desai, J.R. Hines: Evaluating International..., op. cit. and M.A. Desai, J.R. Hines: Old Rules..., op. cit.

31 See also M.P. Devereux: Taxation of Outbound Direct Investment: Economic Principles and Tax Policy Considerations, in: *Oxford Review of Economic Policy*, Vol. 24, No. 4, 2008, pp. 698-719. For a simple example see C. Fuest: Volkswirtschaftliche Aspekte der Besteuerung von Auslandsgewinnen multinationaler Unternehmen, in: W. Kessler, G. Förster, C. Watrin (eds.): *Unternehmensbesteuerung, Festschrift für Norbert Herzig zum 65. Geburtstag*, Munich 2010, C.H. Beck, pp. 867-877. The efficiency implications of residence based taxes in a world with M&A investment are explored systematically in J. Becker, C. Fuest: Source versus residence based taxation with international mergers and acquisitions, in: *Journal of Public Economics*, forthcoming.

32 J. Becker, C. Fuest: Taxing Foreign Profits..., op. cit.

33 See also M. Ruf: Determining Taxable Income to Ensure Capital Ownership Neutrality, 2009, mimeo. Moreover, there has been the presumption that exemption is the best policy response in the presence of heterogeneous multinational firms that seek market access in foreign markets, see M.A. Desai: Securing Jobs..., op. cit. However, it can be formally shown that the Richman results prove to be robust even in such a setting, see J. Becker: Taxation of Foreign Profits with Heterogeneous Multinational Firms, CESifo Working Paper No. 2899, 2009.

34 D. Dharmapala, C.F. Foley, K.J. Forbes: Watch what I Do, not what I Say: The Unintended Consequences of the Homeland Investment Act, NBER Working Paper No. 15023, 2009.

35 H. Huizinga, L. Laeven: International Profit Shifting Within European Multinationals, in: *Journal of Public Economics*, Vol. 92, No. 5/6, 2008, pp. 1164-1182.

is supposed “to provide important benefits in terms of reduced compliance costs (particularly in relation to foreign dividends)”.<sup>36</sup> Similarly, a policy paper issued by the International Chamber of Commerce, which compares the tax credit system and the exemption system, concludes: “On balance, ... the ICC favours an exemption system on foreign dividends primarily because ... the costs of compliance for foreign dividends are considerably reduced as compared to a tax credit system.”<sup>37</sup>

The compliance and administration costs of corporate taxation are significant. The European Commission<sup>38</sup> estimates that large firms on average bear a compliance cost of more than €1.4 million or 1.9% of their total tax payments, which is in line with the results found by Slemrod and Blumenthal<sup>39</sup> for large US firms. For small firms, average compliance costs are estimated to equal €200,000 or 30.9% of their tax payments.<sup>40</sup> Most importantly for the purpose of this paper, the European Commission<sup>41</sup> finds that compliance costs increase by more than 400% when the firm is active in more than one jurisdiction.<sup>42</sup> There is less evidence for tax administration costs. Some studies suggest that administration costs are somewhat lower than compliance costs,<sup>43</sup> but estimates of differences in these costs between auditing a purely national firm and a multinational firm are not available. Also, no comparisons between compliance costs under tax credits and under exemption are available.<sup>44</sup>

The pragmatic argument that the tax credit system is just too costly to implement is potentially a strong one. Its simplicity and bluntness have probably prevented public finance theorists from dealing with it more closely, but this does not reduce its relevance. There is, however, a se-

vere lack of thorough empirical studies which clarify the relative cost of compliance and tax administration of the tax credit system and the exemption system. From the old view perspective, the cost difference would have to be substantial in order to justify a switch to the exemption system.

## Conclusions

For decades, the theory and practice of international taxation have been strongly influenced by what we have called the “old view” of foreign profit taxation. According to this view, the application of the tax credit system is globally optimal, while nationally optimal tax policy would imply a double taxation of border-crossing capital income flows. Recently, however, this view has been challenged both in the academic debate and in real world tax policy, where the exemption system has gained support. In a world where capital markets are more and more integrated and multinational firms find it easier to shift their headquarters across countries, the case for the tax credit system is called into question. The “new view” seems to suggest that exemption is at least nationally optimal. Nevertheless, while the new view has introduced new and relevant aspects into the debate, it is not clear whether these arguments are sufficient to establish the superiority of exemption so convincingly that abolishing the domestic taxation of foreign source dividends is justified. We therefore point to a third, more pragmatic approach to the taxation of foreign source income. While both the old and the new view focus on the implications of taxation for the international allocation of capital, the “pragmatic view” emphasises the compliance and administration costs of taxing foreign source income. According to this view, these costs are rising as multinational firms become larger and increasingly complex. Given that there are many ways of avoiding taxes on repatriated profits, this view suggests that the balance between the benefits of raising tax revenue from foreign investment and the costs, in particular the compliance and administration costs, has changed and made the taxation of foreign source income unattractive. Clearly, more empirical research on compliance and administration costs related to the taxation of border-crossing economic activity is needed to investigate whether this is true.

36 HM Treasury and HM Revenue and Customs: Taxation of Companies' Foreign Profits, Discussion Document, 2007, p. 34.

37 International Chamber of Commerce: Tax Exemption versus Tax Credit Systems for Foreign Dividends: Comparison and International Trends, ICC Policy Statements, 2003, <http://www.iccwbo.org/policy/taxation/id556/index.html>. In the context of the debate on reforming rules for the taxation of foreign source income in Germany, aspects of compliance and administration costs are also emphasised by J. Lüdike: Überlegungen zur deutschen DBA-Politik, 2008, Nomos.

38 European Commission: European Tax Survey, Directorate-General Taxation & Customs Union, Working Paper, No. 3, 2004.

39 J.B. Slemrod, M. Blumenthal: The Income Tax Compliance Cost of Big Business, in: Public Finance Quarterly, Vol. 24, No. 4, 1996, pp. 411-438.

40 Large firms are those with more than 250 employees; small firms are those with fewer employees.

41 European Commission, op. cit.

42 It should be noted, though, that the European Commission may be biased on this issue as it promotes the proposal for a common consolidated corporate tax base of which the main objective is to reduce compliance costs.

43 J.B. Slemrod, M. Blumenthal, op. cit; C. Evans: Studying the Studies: An Overview of Recent Research into Taxation Operating Costs, in: eJournal of Tax Research, Vol. 1, No. 1, 2003, pp. 64-92.

44 Ibid. summarises a survey on studies measuring compliance and tax administration costs as follows: “Compliance costs are highly significant for the main central government taxes (...). They are high however measured – whether in absolute money terms or relative to tax yield, GDP or administrative costs. For example, the studies suggest that compliance costs of such taxes are typically anywhere between 2% and 10% of the revenue yield from those taxes; up to 2.5% of GDP; and usually a multiple (of between two and six) of administrative costs.”