

The impact of worldwide vs territorial taxation on the location of assets and the scale of investment: A survey of the empirical evidence

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Summary

Most countries have territorial corporate tax regimes and thus exempt repatriations of dividends from foreign subsidiaries from parent level taxation. In contrast, countries with a worldwide tax regime - the US, for example – include repatriations in the parent tax base, with a credit given for foreign taxes paid. This report summarizes the empirical literature on the impact of the difference between the two regimes on the location of assets of multinational companies between countries and also the scale of investment.

1. Introduction

There are two main alternatives for taxing parent companies on the profits earned by their foreign subsidiaries: worldwide and territorial taxation. In a worldwide country, the profits of foreign subsidiaries are taxed – typically when they are repatriated - at the national rate with a credit given for foreign taxes paid (usually capped at the level of taxes already paid). In a territorial country, repatriated dividends are broadly exempt from tax. By contrast, the taxation of profits of foreign branches is typically included in the tax base of the parent on accrual.

Today, most countries in the OECD have territorial tax regimes for corporate profits, and the number has been increasing. For example, Japan, New Zealand, and the United Kingdom moved to an exemption system in 2009. Further, even in the US, a regime change has never been more likely. On 26th of April 2017, US Treasury secretary Steven Mnuchin and US

National Economic Council Director Gary Cohn announced that the implementation of a territorial tax regime is one of the core principles for the governments' US tax reform proposal.

The aim of this policy report is to review the empirical literature on the impact of the tax disadvantage under worldwide taxation compared to territorial taxation on the location of assets and the scale of investment.¹ Section 2 provides a brief comparison of the two systems in practice. Section 3 reviews the empirical evidence of the impact of worldwide tax regimes on the location of multinational parent companies. Section 4 reviews how parent taxation affects the location of the assets of the multinational (MNE), and the scale of investment of both foreign subsidiaries and of the parent company. Section 5 discusses differences in the incentive of MNEs to engage in profit shifting activities under the two systems and how this in turn affects the location of assets and the scale of investment. Section 6 concludes.

2. Differences Between the Two Systems in Practice

Although worldwide and territorial tax regimes differ in principle, they may have similar effects in practice, depending for example on the corporation tax rate in the parent country, the rules of the worldwide system and the controlled foreign company rules.

First, for example, no additional tax burden may arise, even on repatriation, if MNEs are allowed to mix dividends from high tax and low tax affiliates.² Further, in some countries affiliates are allowed to lend their "profits" to the parent company (up-stream loans) without triggering tax consequences. From an economic perspective this has similar effects to repatriating profits. If upstream loans are not permitted, low tax affiliates can lend their profits to high tax affiliates which can then repatriate to the parent country (see Altshuler and Grubert 2002).

Second, the tax burden on foreign profits under a worldwide tax regime depends on the parent tax rate on corporate profits. Ireland, for example, has a worldwide tax regime but a corporate tax rate of only 12.5 %. Thus, there is likely to be little parent company taxation for repatriations from foreign subsidiaries to Irish parents.

Third, countries with a territorial tax regime may tax parts of foreign profits under controlled foreign company rules (CFC rules) or other anti-avoidance regulations. CFC rules

¹ An overview of the theoretical literature on the optimal taxation of foreign profits is, for example, provided in Devereux (2016).

² In some countries cross-crediting is allowed at the parent country level. However, even if it is not allowed at the parent level, MNEs in worldwide tax regime countries can easily mix dividends in a foreign holding company which then repatriates the mixed profits to the parent company.

are designed to prevent profit shifting and are usually targeted at passive income (e.g. royalties or interest). If affiliates' (passive) income is taxed at a rate sufficiently lower than the national rate, then under CFC rules, this passive income may be included in the domestic tax base (see e.g. Albertus (2017) and Clifford (2017)). In some countries, these rules apply not only to passive but to all types of income. For example, the income of a French affiliate located outside the EU is included in the French tax base if it is taxed at an effective rate that is at least 50 % lower than the tax rate in France.

3. Location Choice of Multinational Parent Companies

The additional taxation of the parent in a worldwide tax regime country should reduce the likelihood of a parent company choosing to locate in that country. Empirical evidence on this decision is provided in Voget (2011) and Huizinga and Voget (2009).

Voget (2011) investigates the relocation decisions of parent companies between 1997 and 2007 using a sample of 2,083 parent companies. Around 7% of the parent companies in his sample relocated across borders during this period. He finds that an increase in the tax on repatriated dividends by one percentage point raises the share of companies choosing to relocate elsewhere by 0.2 percentage points, or by approximately 3%.

Huizinga and Voget (2009) analyse the parent firm location decision after cross-border mergers between 1985 and 2004, focusing on firms located either in the EU 28 countries, Japan or the US. They find that the likelihood of a country being chosen to be the location of the new parent of the merged company is greatly reduced by high parent country taxation on repatriated profits. Perhaps surprisingly, they do not find evidence that the option of deferral (which is in some cases not available, for example in some worldwide tax regime countries for affiliates in very low tax jurisdictions) reduces the impact of the potential double taxation on the location choice of the parent firms. Quantitatively, the effect is substantial compared to the results by Voget (2011). In the case in which the two merged firms are of equal size, an increase in the double tax burden on repatriation to a particular country by one percentage point decreases the probability of that country being chosen to be the parent country after the cross-border merger by 9 percentage points. A likely explanation for the difference in these effects is that Voget (2011) estimates an unconditional effect, while the effect of Huizinga and Voget (2009) is conditional on the occurrence of a cross-border merger. Qualitatively similar results on the location choice of parent companies are reported by Desai and Hines (2002).

4. The Impact on the Location and Scale of Investment

In the academic literature, two main channels have been discussed as to how a worldwide tax regime affects firms' decisions on the location and scale of investment. The first channel focuses on the impact of parent country taxation on the allocation of the assets of a MNE across jurisdictions and the scale of investment in each jurisdiction by changing the tax burden on equity returns. The second channel focuses on the additional (and more indirect) impact of parent country taxation via the level of retained earnings at home and abroad which is influenced by the impact of parent country taxation on repatriations from foreign subsidiaries.

Direct Impact of Parent Taxation

The tax on repatriated profits of foreign subsidiaries under a worldwide system should imply that the choice of location of those subsidiaries is less likely to be influenced by tax rates between countries with a lower tax rate than the parent country. While the earlier literature found mixed results, more recent empirical evidence supports this hypothesis.³ One of the first studies to address this question is Hines (1996). He studies foreign direct investment from seven countries into the US in 1987 using variation in state tax rates and finds that investors from countries with worldwide systems (in his study UK and Japan) are more likely to locate in high tax states compared to investors from exemption countries.

Barrios et al (2012) use firm-level data to investigate the impact of host and parent country taxation on the location decision of MNE affiliates in 33 countries between 1999 and 2003. They report that both host and parent taxes have a negative impact on subsidiaries' location decision and that both effects are of equal size. This means that a subsidiary is more likely to locate in a low tax country than in a high tax country if the parent company is located in a country with a territorial tax regime. But if the parent company is located in a worldwide tax regime country the host tax rate does not matter for the location decision of the subsidiary as long as the host tax rate is below the parent tax rate. Conditional on the host tax rate exceeding the parent tax rate, the likelihood of a subsidiary being located in a particular jurisdiction is higher the lower the tax rate in that country. Quantitatively, however, the effects are small. An increase in the host country or additional parent country tax rate by one percentage point reduces the probability of the location of a subsidiary in that country by around 1%. Barrios et al (2012) investigate in a second step whether the possibility of non-deferral of parent taxation (which is as mentioned for example the case for affiliates in very low tax jurisdiction in some worldwide tax regime countries) influences these effects. They show that the tax sensitivity of subsidiaries' location decision is reduced by half if deferral is available. Thus, if deferral is possible host taxation is more important than parent

³ For a general overview of the impact of taxes on foreign direct investment see Voget (2014).

taxation. If deferral is not possible, parent taxation is more important than host country taxation under a worldwide system.

Feld et al (2016) analyse cross-border mergers between 2004 and 2013 and focus on the 20 most frequent locations of acquirers. They find that the switch to the exemption system in the UK and Japan in 2009 increased the probability of a successful bid from MNEs headquartered in these countries. Quantitatively, the effect differs by country. The number of acquisitions by Japanese MNEs increased by more than 15 %. However, the number of acquisitions by British MNEs rose by only 1.6 %. One possible reason is that the Japanese corporate tax rate was much higher than the UK rate (38 % vs 23% in 2013).

The impact of parent taxation on the scale of investment conditional on the location of the affiliate is more nuanced. A new affiliate must be financed with new equity rather than retained earnings, and this investment should be affected by the taxation of dividends subsequently paid to the parent. But for more mature subsidiaries, financing by retained earnings in effect saves the tax that would have been levied on a distribution to the parent. As a result, investment financed (at the margin) with retained earnings should in principle be not affected by parent country taxation (Hartmann 1985). Liu (2015) examines whether new equity is important for investment and thus whether parent country taxation affects the scale of investment using data on subsidiaries of MNEs located in the EU 27 member states between 2006 and 2012. Following the change in the UK regime in 2009, she finds that subsidiaries of UK MNEs in low tax countries increased their investment spending relative to subsidiaries of non-UK MNEs. By contrast, subsidiaries of UK MNEs in high tax jurisdictions did not do so. Quantitatively, the effect is substantial as the investment rate increases by 1.6 percentage points for a one percentage point decrease in the parent tax rate. The average investment rate of UK subsidiaries in her sample is around 15%.

Indirect Impact of Parent Taxation

A worldwide tax regime might also impact firms' investment through its influence on the repatriation behaviour of foreign subsidiaries. That is, if foreign subsidiaries defer repatriations to avoid an immediate liability to tax in the parent, then they may build up a considerable stock of retained earnings. This is especially true for subsidiaries of US MNEs. Faulkender et al (2017) report that cash holdings of US firms have risen by 2 trillion US Dollars between 1998 and 2014 or by more than 50 % relative to GDP.

Repatriations

With perfect capital markets, deferring repatriation of profit from foreign subsidiaries should affect neither investment in the parent country nor in the subsidiaries' countries. However, in the presence of asymmetric information, bankruptcy costs, and agency

conflicts, the availability of retained earnings may affect real activities because of a less efficient allocation of funds, either in the form of overinvestment by foreign subsidiaries or underinvestment by the parent.

Several studies have assessed the impact of parent country taxation on repatriations and cash holdings and confirm the theoretical expectations. For example, Desai et al (2007) compare the pay-out ratio of foreign incorporated affiliates and unincorporated affiliates of US MNEs. Only profits of foreign subsidiaries are taxed on repatriation; profits of branches are taxed irrespective of repatriation. They report that the pay-out ratio is decreasing in repatriation costs only for subsidiaries. Dharmapala et al (2011) and Faulkender and Peterson (2012) exploit the temporary reduction in repatriation costs (by roughly 85 %) due to the Homeland Investment Act in the US and report evidence that these tax holidays increased intra-firm dividends, in particular from affiliates with high repatriation costs before the tax holidays. Hasegawa and Kiyota (2013) study the introduction of a territorial tax regime in Japan and report evidence of a permanent increase of the ratio of repatriations to affiliate sales by 0.5 percentage points, which is a substantial effect given the mean of dividends to sales of 1.2% in their sample. However, the response was not different between low tax and high affiliates but seems to be driven by a small number of firms with a high level of retained earnings. Egger et al (2015) analyse the 2009 regime change in the UK and find that repatriations increased only in 2009. One possible reason suggested by the authors is that the regime change did not significantly change the medium-to long-run incentives for investment. A difficulty with the analysis, however, is that they do not observe dividend payments directly but infer them from retained earnings.

Underinvestment in the Parent Country

A potential underinvestment by parent companies at home is investigated by Dharmapala et al (2011) and Faulkender and Peterson (2012) using the temporary reduction in repatriation costs due to the Homeland Investment Act in the US. In general, the authors of the two studies agree that the average US MNE is unlikely to be financially constrained and hence unexpected cash increases should not affect investment spending. Accordingly, both studies investigate also a particular group of MNEs that are more likely to be financially constrained. Dharmapala et al (2011) do not find evidence that these firms increased investment spending when repatriations became more likely, but instead find that firms increased pay-outs to shareholders. In contrast, Faulkender and Peterson (2012) report that investment increased for a subsample of firms classified by them as financially constrained and that only firms classified as unconstrained increased pay-outs to shareholders. In addition to methodological differences between the two studies, two aspects are worth mentioning. First, both studies focus on a temporary change which clearly encouraged repatriations in the short run but may not affect investment spending if firms prefer stable investment rates. Second, Foley et al (2007) document that affiliates of parent companies that are

more likely to be financially constrained tend to hold less cash abroad. Further, their cash holdings are less sensitive to repatriation taxes. This suggests that financially constrained firms are more likely to repatriate as the benefit of the repatriations is larger. The tax holidays may thus have had only a limited effect on the repatriations behaviour of subsidiaries of parent companies that face financing constraints.

Two other studies that investigate underinvestment by parents but exploit the permanent regime change in the UK and Japan find no evidence for an increase in investment at the parent level, neither for the average parent company (Liu 2015, Arena and Kutner 2015) nor for a subsample of parent companies believed to be financially constrained (Arena and Kutner, 2015).

Overinvestment in (Low Tax) Affiliates

Evidence supporting overinvestment in low tax affiliates due to higher retained earnings are presented by Egger et al (2015) and Arena and Kutner (2015). Arena and Kutner (2015) use consolidated financial statements to find a reduction in the ratio of foreign assets to total assets of UK and Japanese MNEs by around 8% in response to the permanent regime change. Egger et al (2015) use unconsolidated financial statements data and document a negative investment effect for subsidiaries of UK MNEs in 2009 but not in 2010. Unfortunately, neither of these two studies reports the effect for low tax and high tax affiliates separately. Although both studies provide novel insights as they exploit the permanent regime change, the results should therefore be interpreted with caution. By contrast, Liu (2015) who analyses the regime change in the UK as well does not find evidence for a reduction but for a permanent increase in investment spending in low tax countries.

A different approach is followed by Hanlon et al (2016). They examine the impact of repatriation costs on the probability of domestic and foreign acquisitions by US foreign affiliates and also examine the stock market reaction to these acquisitions. They document that affiliates with high repatriation costs are more likely to acquire non-US companies. Further, they find that the stock price of the US parent company is lower around the acquisition the higher the repatriation costs of the affiliates, consistent with excessive acquisitions. The authors conclude that acquisitions of non-US firms represent overinvestment due to high cash holdings which reflect managerial empire building in cash-rich foreign affiliates of US MNEs. Similar results are reported by Edwards et al (2016).

5. Profit Shifting Behaviour of MNEs

It is well documented that MNEs engage in profit shifting activities to reduce their tax burden on profits.⁴ This raises two questions in the light of this report. First, is there empirical evidence that the degree of profit shifting differs under the two systems? Second, does the extent of profit shifting influence the impact of parent taxation on the location of assets and the scale of investment?

In principle, MNEs headquartered in worldwide countries have a lower incentive to engage in profit shifting as profits shifted to low tax affiliates that are then repatriated to the parent company are subject to parent taxation. Thus, the incentive to shift profits only exists if profits are re-invested abroad or if affiliates have a higher tax rate than the parent company.

Empirical evidence for differences in the extent of profit shifting activities under the two systems is scarce and relies on indirect evidence. The two most convincing studies are by Maffini (2012) and Markle (2016). Maffini (2012) focuses on the impact of tax haven subsidiaries for MNEs' global tax bills using financial statements data of MNEs located in 15 OECD countries for the years 2003 to 2007. She exploits variation in the number of tax haven subsidiaries over time and reports that a MNE headquartered in a territorial tax regime country with an average number of tax haven subsidiaries (of 2.5 in her sample) has a 1.7 percentage points lower marginal effective tax rate compared to an otherwise similar MNE but with no tax haven subsidiaries. In contrast, a MNE headquartered in a worldwide tax regime country with an average number of tax haven subsidiaries has only a 0.7 percentage points lower marginal tax rate. This is consistent with more profit shifting by MNEs located in territorial countries, but the effect seems small as Maffini (2012) reports that the average marginal effective tax rate of a US MNE is 36 %. Qualitatively similar results are reported by Dyreng and Lindsey (2009).

Markle (2016) uses a different approach; he constructs for MNEs in his sample the incentive to shift profits to other firms in the same group (assuming no repatriations thereafter). Then he investigates the response of affiliates' pre-tax profits to the constructed incentive to shift profits and compares affiliates of MNEs headquartered in worldwide and territorial tax regime countries. He shows that pre-tax profits of affiliates of parent companies in territorial tax regime countries are twice as sensitive to the incentive to shift profits to other firms in the same group. Markle's results suggest further that the incentive to shift profits between foreign affiliates is similar under the two systems but that only affiliates of MNEs located in territorial tax regime countries seem to engage in shifting with the parent company. Finally, Markle shows that re-investment opportunities (a lower likelihood of repatriations) increase the incentive to shift profits into low tax affiliates.

⁴ For a recent overview of the literature see Riedel (2016) and Dharmapala (2014).

The studies of Maffini (2012) and Markle (2016) provide some evidence that there is less profit shifting under a worldwide tax regime. Quantitatively, the results should, however, be interpreted with caution. First, neither study distinguishes between the incentives to shift profits out of countries versus into countries. Second, both studies assume that MNEs react to a marginal change in the number of tax haven subsidiaries (Maffini 2012) or the tax rate differential between the affiliate and the rest of the group (Markle 2016). Although, this approach has been used in many studies, recent evidence suggests that MNEs are able to report exactly zero profits, which suggests a different form of shifting costs (e.g. Johannesen et al 2017). Further, less profit shifting of US MNEs compared to other MNEs seems hard to believe given the empirical evidence on the extent of profit shifting of US MNEs (see for example Dowd et al 2017). One potential explanation is the particular design of the US tax regime (e.g. check the box regulations).

Differences in the profit shifting of MNEs located in worldwide and territorial tax regime countries have two implications for the impact of parent country taxation on the location of assets and the scale of investment. First, the tax sensitivity of the decisions as to the location and scale of investment of foreign subsidiaries of MNEs headquartered in worldwide tax regime countries should be higher if these MNEs engage less in profit shifting activities as suggested by Maffini (2012) and Markle (2016). This would be the case if more profit shifting is linked to more investment as the tax burden on investment is reduced (e.g. Hong and Smart 2010, Simmler 2014). Second, restricting profit shifting of MNEs headquartered in worldwide tax regime countries may not only level the playing field with domestic firms in the parent country but also reduce overinvestment in cash-rich low tax affiliates as fewer profits are shifted into these affiliates.

6. Conclusion

To conclude, there is clear evidence that multinational parent companies prefer to locate in countries with a territorial tax regime. Further, there is evidence that MNEs located in worldwide tax regime countries are less likely to locate subsidiaries in low tax jurisdictions and are less successful in acquiring firms when competing with other MNEs. Regarding the scale of investment conditional on the location of subsidiaries there is mixed evidence: One study reports an increase in investment while two others report a (temporary) reduction in investment. Further, there is evidence that repatriation taxes reduce dividends paid to the parent and thus cause a higher level of retained earnings in foreign affiliates. While there is almost no evidence that this hampers domestic investment of multinational parent companies, there is empirical support for overinvestment in cash-rich, low-tax affiliates of US MNEs. Finally, there is some evidence that MNEs headquartered in worldwide tax regime countries engage marginally less in profit shifting activities compared to MNEs

headquartered in territorial tax regime countries; their capital accumulation is thus more likely to be affected by tax policy. This finding should, however, be interpreted with caution given the evidence on the extent of profit shifting of US multinationals.

Taking the evidence together suggests that the taxation of the parent does affect the location of the assets of MNEs and the scale of investment. However, several questions remain to be addressed by further research. For example, it is surprising that the implementation of a territorial tax regime incentivises MNEs to locate affiliates in low tax jurisdiction but that this has almost no impact on high tax affiliates or domestic production. Further, accounting for MNE heterogeneity when studying parent and subsidiaries' location decision, for example with respect to the extent of profit shifting activities of MNEs, is a promising way for future research to deepen our knowledge about the differences between the two international tax systems.

References

- Arena, M.P., and G.W. Kutner, 2015, Territorial tax system reform and corporate financial policy, *Review of Financial Studies* 28(8): 2250-2280.
- Albertus, J.F., 2016, The real effects of U.S. tax arbitrage by foreign multinational firms, Mimeo.
- Altshuler, R., and H. Grubert, 2002, Repatriation taxes, repatriation strategies and multinationals' financial policy, *Journal of Public Economics* 87(1):73-107.
- Barrios, S., H. Huizinga, L. Laeven, and G. Nicodème, 2012, International taxation and multinational firm location decision, *Journal of Public Economics* 96(11-12): 946–958.
- Clifford, S., 2017, Taxation beyond borders: The effects of CFC legislation on the allocation of income within multinationals, Mimeo.
- Desai, M.A., and J.J.R. Hines, 2002, Expectations and expatriations: Tracing the causes and consequences of corporate inversions, *National Tax Journal* 55: 409–440.
- Desai, M.A., C.F. Foley, and J.J.R. Hines, 2007, Dividend policy inside the multinational firm, *Financial Management* 36 (1): 5–26.
- Dharmapala, D., C.F. Foley, and K. Forbes, 2011, Watch what I do, not what I say: The unintended consequences of the Homeland Investment Act, *Journal of Finance* 66: 753-787.
- Dharmapala, D., 2014, What do we know about base erosion and profit shifting? A review of the empirical literature, CESifo Working Paper No. 4612.
- Devereux, M., 2016, Economic theory of the optimal taxation of multinational profits, European Tax Policy Forum Policy Paper 4.
- Dyregang, S., and B. Lindsey, 2009, Using financial accounting data to examine the effect of foreign operations located in tax havens and other countries on US multinational firms' tax rates, *Journal of Accounting Research* 47(5): 1283-1316.
- Dowd, T., P. Landefeld, and A. Moore, 2017, Profit shifting of U.S. multinationals, *Journal of Public Economics* 148: 1-13.
- Edwards, A., T. Kravet, and R. Wilson, 2016, Trapped cash and the profitability of foreign cash acquisitions, *Contemporary Accounting Research* 33: 33-77

- Egger, P., V. Merlo, M. Ruf, and G. Wamser, 2015, Consequences of the new UK tax exemption system: Evidence from micro-level data, *The Economic Journal* 125: 1764-1789.
- Faulkender, M.W., and M.A. Petersen, 2012, Investment and capital constraints: Repatriation under the American jobs creation act, *Review of Financial Studies* 25:3351–3388.
- Faulkender, M.W., K.W. Hankins, and M.A. Petersen, 2017, Understanding precautionary cash at home and abroad, Mimeo.
- Feld, L., M. Ruf, U. Scheuering, U. Schreiber, and J. Voget, 2016, Repatriation taxes and outbound M&As, *Journal of Public Economics* 139: 13-27
- Foley, C.F., J. Hartzell, S. Titman, and G. Twite, 2007, Why do firms hold so much cash? A tax-based explanation, *Journal of Financial Economics* 86: 579-607.
- Hartman, D.G., 1985, Tax policy and foreign direct investment, *Journal of Public Economics* 26:107–121.
- Hanlon, M., R. Lester, and R. Verdi, 2016, The effect of repatriation tax costs on U.S. multinational investment, *Journal of Financial Economics* 116 (1): 179–196.
- Hasegawa, M., and K. Kiyota, 2013, The effect of moving to a territorial tax system on profit repatriations: Evidence from Japan, Research Institute of Economy, Trade and Industry. Discussion Paper Series 13-E-047.
- Hines, J. Jr., 1996, Altered States: Taxes and the location of foreign direct investment in America *American Economic Review* 86(5): 1076-1094.
- Hong, Q., and M. Smart, 2010, In praise of tax havens: International tax planning and foreign direct investment, *European Economic Review* 54: 82-95.
- Huizinga, H.P., and J. Voget, 2009, International taxation and the direction and volume of cross-border M&As, *The Journal of Finance* 64(3): 1217-1249.
- Johannessen, N., T. Torslov, and L. Wier, 2017, Are less developed countries more exposed to multinational tax avoidance – Method and evidence from micro-data, Mimeo.
- Liu, L., 2015, International taxation and MNE investment: evidence from the UK change to territoriality, Oxford University CBT Working Paper 15/25.
- Maffini, G., 2012, Territoriality, worldwide principle, and competitiveness of multinationals: A firm-level analysis of tax burdens, Oxford University CBT Working Paper 12/10.
- Markle, K., 2016, A comparison of the tax motivated income shifting of multinationals in territorial and worldwide countries, *Contemporary Accounting Research* 33(1): 7-43.
- Riedel, N., 2014, Quantifying international tax avoidance: A review of the academic literature. European Tax Policy Forum Policy Paper 2.
- Simmler, M., 2014, Do multinational firms invest more? On the impact of internal debt financing on capital accumulation, Oxford University CBT Working Paper 14/24.
- Voget, J., 2011, Relocation of headquarters and international taxation, *Journal of Public Economics* 95 (9-10): 1067–1081.
- Voget, J., 2014, The effect of taxes on foreign direct investment: a survey of the empirical evidence, European Tax Policy Forum Policy Paper 3.