

Heinemann, Friedrich et al.

Article — Published Version

Implications of the US Tax Reform for Transatlantic FDI

Intereconomics

Suggested Citation: Heinemann, Friedrich et al. (2018) : Implications of the US Tax Reform for Transatlantic FDI, Intereconomics, ISSN 1613-964X, Springer, Heidelberg, Vol. 53, Iss. 2, pp. 87-93, <https://doi.org/10.1007/s10272-018-0727-6>

This Version is available at:

<https://hdl.handle.net/10419/177427>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Friedrich Heinemann, Marcel Olbert, Olena Pfeiffer, Thomas Schwab, Christoph Spengel and Kathrin Stutzenberger

Implications of the US Tax Reform for Transatlantic FDI

On 22 December 2017 President Trump signed the Tax Cuts and Jobs Act. This corporate tax reform can be considered the most significant amendment of the US corporate tax code since 1986. Besides the reduction of the corporate income tax rate from 35% to 21%, the Tax Cuts and Jobs Act entails features like a switch from worldwide income taxation to territorial taxation, as well as immediate deductions for certain assets. This leads to a substantial improvement for the US in global tax competition. In this paper, we analyse the effects of the US tax reform on FDI flows between Europe and the US. We find that European high-tax countries in particular will suffer from a net outflow of FDI.

The US corporate tax system had remained unchanged since the major reform of 1986 under President Reagan. This passivity is remarkable, as most industrial countries have put forward corporate tax reforms including considerable tax rate cuts during the last few decades. The US corporate tax code thus became a unique system, applying the worldwide income principle with relatively high statutory tax rates and with numerous regulations that firms exploited to avoid paying taxes. Accordingly, reforming the corporate tax system had been a recurring issue in the US.

Since the beginning of the presidency of Donald Trump, multiple tax reform proposals have been discussed. The first prominent proposal put forward was the destination-based cash-flow tax (DBCFT). The DBCFT proposal suggested a radical tax reform based on cash-flow taxation combined with a border-adjustment component.¹ The implementation of the DBCFT proposal would have increased costs for imports substantially and would have potentially breached the World Trade Organization's free trade rules. Due to large political resistance from, inter alia, the retail sector, this far-reaching reform proposal was abandoned.

The tax reform proposal that was finally agreed upon was enacted on 22 December 2017. From 1 January 2018 onwards, this tax reform brings

- a reduction in the statutory federal corporate income tax rate from 35% to 21%
- immediate tax deductions for machinery and intangible assets
- a move from worldwide income taxation to territorial taxation.

Friedrich Heinemann, Centre for European Economic Research (ZEW), Mannheim, Germany; and University of Heidelberg, Germany.

Marcel Olbert, University of Mannheim, Germany.

Olena Pfeiffer, Centre for European Economic Research (ZEW), Mannheim, Germany; and University of Mannheim, Germany.

Thomas Schwab, University of Mannheim, Germany; and Centre for European Economic Research (ZEW), Mannheim, Germany.

Christoph Spengel, University of Mannheim, Germany; and Centre for European Economic Research (ZEW), Mannheim, Germany.

Kathrin Stutzenberger, University of Mannheim, Germany.

* This article is based on a study conducted by the Centre for European Economic Research (ZEW) and the University of Mannheim; see C. Spengel, F. Heinemann, M. Olbert, O. Pfeiffer, T. Schwab, K. Stutzenberger: Analysis of US Corporate Tax Reform Proposals and their Effects for Europe and Germany, Final Report – Update 2018, Mannheim 2018, ZEW.

¹ See C. Spengel, F. Heinemann: US-Steuerpläne bedrohen den globalen Handels- und Steuerfrieden, in: Der Betrieb, Vol. 70, No. 17, 2017, p. M5 for a detailed discussion of the DBCFT proposal.

For the transition from worldwide income taxation to territorial taxation, a one-time taxation of 15.5% for accumulated deferred foreign profit (eight per cent for reinvested earnings) will be levied.

Without doubt, the implementation of the tax reform in the world's largest economy improves its position in global tax competition significantly. This could ring in a new round of international tax competition, as the US has a leadership role in tax-rate setting,² and the reform will affect international investment decisions in the US's favour. At the same time, high-tax countries, most of which are located in Europe, will suffer from the increased attractiveness of the US as an investment location.

This study aims to shed light on the expected effects of the US tax reform on international investment decisions in the form of foreign direct investment (FDI). We apply a two-step approach. First, we calculate the reform-induced changes of effective tax burdens for cross-border investments between the US and European countries. Second, based on these changes, we estimate the impact on transatlantic FDI positions.

Our main findings point to an increase in total FDI activity as a result of the lowered tax burden in the US. This additional investment activity will not only take place in the US, since Europe will also benefit from the additional investment activity of US investors in European countries. However, European high-tax countries will benefit from additional investment activity to a lower degree. Overall, this implies a net outflow of FDI from Europe to the US, which will be particular pronounced for countries like Germany.

The article first presents a brief overview of the development of corporate tax systems in Europe and the US to highlight the importance of the recent US tax reform. It then provides the ranking of effective average tax burdens before and after the US tax reform. Finally, the effects on FDI flows are estimated.

Corporate tax systems in the US and Europe

While the American corporate income tax (CIT) rate was just one per cent at the time of its introduction in 1909, it steadily increased to over ten per cent in the 1920s and to over 40% in the 1940s. The corporate tax rate peaked in

1968 at 52.8% and declined slightly in the 1970s.³ With the major tax reform of 1986, the tax rate on business profits was reduced from 46% to 34%, which made the US tax system one of the most attractive regimes in the world.⁴ In the following years, the US tax system remained almost unchanged except for a slight rise in effective tax rates.

European countries introduced corporate income taxation at a later stage. Germany was one of the first European countries to implement a system of corporate income taxation in the 1920s. Since then, corporate tax systems have developed differently in Europe and the US. Especially in recent years, many European countries have implemented tax reforms which have led to a decline in the EU28 average of statutory tax rates on corporate income from 31.6% in 2000 to 22.2% in 2017 (see Figure 1). Most strikingly, after a major reform in Germany in 2008, the US corporate tax rate was higher than the rates in all EU28 member states. Compared to low-tax countries such as Ireland, the statutory tax rate of the US was more than three times as high.

Besides differences in the statutory rate, the US corporate tax code entailed further features which can be considered exclusive. Table 1 provides an overview of the key characteristics of the corporate tax systems in the US and Europe. Most importantly, before the reform, the US corporate tax system was based on worldwide taxation, whereby corporate income was taxed at an equal rate regardless of where it was earned. Thus, the income of foreign branches which are not legally separated from the parent was included in the taxable income of the US parent and therefore subject to the US corporate income tax rate.⁵ As a result, US corporations faced a competitive disadvantage compared to foreign companies, which were subject to lower tax rates in their respective countries. With the implementation of the US tax reform, the US has moved from worldwide income taxation to a territorial tax system.

Another noteworthy characteristic of the US and some European corporate tax systems is the fragmentation in tax collection. This means that both national and sub-

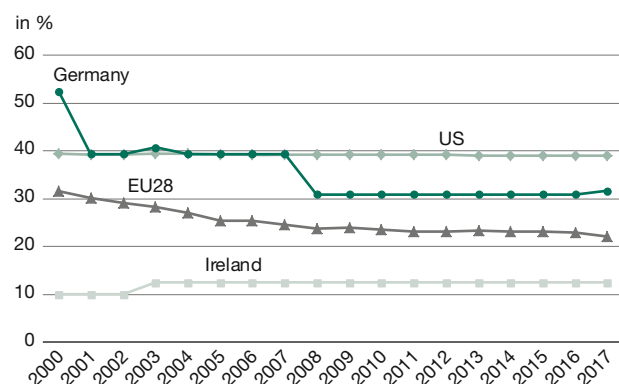
2 See R. Altshuler, T. Goodspeed: Follow the Leader? Evidence on European and US Tax Competition, in: Public Finance Review, Vol. 43, No. 4, 2014, pp. 485-504.

3 See Tax Policy Center: Statistics on Corporate Top Tax Rate and Bracket, available at <http://www.taxpolicycenter.org/statistics/corporate-top-tax-rate-and-bracket>.

4 See S.-E. Bärsch, M. Olbert, C. Spengel: US Tax Reform: The Implications in a Germany-US Context, in: Bulletin For International Taxation, Vol. 71, No. 6a, 2017, pp. 22-29.

5 However, in the case of a subsidiary constituting a separate legal entity, the foreign income was not directly included in the US tax base. American tax had to be paid upon repatriation, which created an incentive to defer repatriation of foreign earnings; see J. Hines: Credit and deferral as international investment incentives, in: Journal of Public Economics, Vol. 55, No. 2, 1994, pp. 323-347.

Figure 1
Development of statutory corporate income tax rates
in selected countries, 2000-2017



Note: The statutory corporate tax rates comprise federal and local taxes. EU28 stands for the EU average.

Source: ZEW; own illustration. Data for the US is taken from the OECD.

national entities have the power to set tax rates. In the US, states can set corporate taxes independently of the federal level. However, firms can in part offset the state tax burden by deducting the respective tax payments from their federal taxes. Regardless of deductibility, the total tax burden is determined by both national and sub-national profit taxes and thus varies within countries. For the US, this implies that the total tax burden exceeds the federal tax rate. This feature of the US tax code was not amended by the recently implemented tax reform. Hence, the effective tax rate of corporate income is still higher than the federal tax rate, which was reduced from 35% to 21%.

Change in effective tax burdens

The US corporate tax reform affects multiple dimensions of the corporate tax code. For a comprehensive assessment of the impact on the tax burden of firms, the change in the effective tax burden must be analysed. Apart from the statutory corporate income tax rate, the effective tax burden incorporates other institutional features such as tax deductions, tax exemptions and the risk-free alternative investment opportunity to provide information on the resulting tax liability of an investment.⁶ The effective tax burden can be measured using the effective average tax

⁶ See C. Spengel: Internationale Unternehmensbesteuerung in der Europäischen Union. Steuerwirkungsanalyse, Empirische Befunde, Reformüberlegungen, Düsseldorf 2003, IDW for a detailed explanation of concepts to measure the effective tax burden.

Table 1
US and European corporate tax systems, before and after US tax reform

Feature of tax system	US (before reform)	US (after reform)	Europe
Federal tax rate	35%	21%	On average 20.5% (in Germany, 15%)
Local profit taxes	State taxes, 3-12%, partially deductible from CIT	State taxes, 3-12%, partially deductible from CIT	Varying (in Germany, approximately 15%, non-deductible from CIT)
International taxation	Worldwide taxation of foreign profits (Credit system)	Territorial tax system (Exemption of foreign profits)	Territorial tax system (Exemption of foreign profits, except for Ireland)

Note: CIT stands for corporate income tax.

Source: Authors' description.

rate (EATR), which denotes the effective tax burden for a profitable investment. Hence, for investors, the EATR is crucial for the location decision of an investment.

The US corporate tax reform affects effective tax rates for both domestic investments in the US and international investments where investors or investees reside in the US. To assess the change in the effective average tax burden, we apply the well-known methodology of Devereux and Griffith,⁷ which incorporates various aspects of a tax system and therefore reflects the effective corporate tax burden of countries. The Devereux and Griffith model builds on neoclassical investment theory to calculate the tax burden for profitable investment projects. The key assumptions of the model comprise perfect capital mobility under certainty and a successful outcome of real investment.

Table 2 presents the ranking of corporate tax burdens for investments by domestic firms within the US and the EU28. Of all countries considered, the effective tax burden of a domestic investment in the pre-reform scenario was second-highest in the US, with only France having a higher tax burden (38.4%). The US effective tax burden of 36.5% was more than four times higher than the effec-

⁷ See M. Devereux, R. Griffith: The Taxation of Discrete Investment Choices, The Institute for Fiscal Studies Working Paper Series, No. W98/16 (Revision 2), 1999; and M. Devereux, R. Griffith: Evaluating Tax Policy for Location Decisions, in: International Tax and Public Finance, Vol. 10, No. 2, 2003, pp. 107-126 for a detailed outline of the model.

Table 2
Ranking of US and EU member states' corporate tax burdens for domestic investments, 2017
 in %

Country	EATR	CIT	Country	EATR	CIT
Bulgaria	9.0	10.0	EU28	20.9	23.0
Cyprus	13.1	12.5	United Kingdom	21.5	20.0
Lithuania	13.6	15.0	Netherlands	22.5	25.0
Ireland	14.1	12.5	Austria	23.1	25.0
Latvia	14.3	15.0	US (after reform)	23.3	26.3
Romania	14.7	16.0	Italy	23.6	31.3
Slovenia	15.5	17.0	Luxembourg	25.5	29.2
Estonia	15.7	20.0	Portugal	26.6	29.5
Croatia	16.5	20.0	Greece	27.6	29.0
Czech Republic	16.7	19.0	Germany	28.2	31.0
Poland	17.5	19.0	Belgium	28.3	34.0
Finland	18.9	20.0	Spain	30.3	30.6
Hungary	19.3	20.9	Malta	32.2	35.0
Sweden	19.4	22.0	US (before reform)	36.5	37.9
Slovakia	19.6	22.0	France	38.4	38.9
Denmark	20.0	22.0			

Notes: The effective average tax rate (EATR) reflects a country's effective tax burden on a profitable investment and comprises federal and local taxes as well as tax base regulations that apply to taxation of companies. CIT stands for corporate income tax and includes federal and local taxes on corporate profits. For the US, the state of California's local tax rate of 8.84% is considered.

Source: ZEW; authors' calculations.

tive tax burden of Bulgaria, which has the lowest EATR, at only nine per cent. With the implementation of the tax reform, the EATR of the US was lowered to 23.3%.

In the context of international tax competition, the change in the tax burden for FDI is of relevance. For each country, a differentiation between inbound and outbound FDI can be made. From the perspective of the US, outbound FDI is conducted by a US firm investing abroad, e.g. in the EU28. In contrast, US inbound FDI is conducted by a non-US firm within US territory.

For the effective tax burden for FDI, both the tax system of the country of the investor and the country where the investment is conducted are of relevance. Hence, each country pair exhibits different tax burdens, which again vary for inbound and outbound FDI. Tax burdens for FDI also vary by the financing option in place, i.e. new equity, retained earnings or debt. We consider the financing option with the lowest tax burden only. For the sake of sim-

Table 3
Effective tax burdens for FDI before and after tax reform

	Country	Before reform	After reform	Change
US outbound FDI to ...	Germany	29.5%	26.2%	-3.3%
	Ireland	25.3%	12.8%	-12.5%
	EU28	27.1%	21.6%	-5.5%
US inbound FDI from ...	Germany	36.1%	26.3%	-9.8%
	Ireland	37.2%	24.3%	-12.9%
	EU28	36.0%	23.8%	-12.2%

Notes: The effective average tax rate (EATR) is reported for the financing option (new equity, retained earnings, debt) with the lowest tax burden. The EATR reflects a country's effective tax burden on a profitable investment and comprises federal and local taxes as well as tax base regulations that apply to taxation of companies.

Source: ZEW; authors' calculations.

plicity, we limit our following assessments to the tax burdens for FDI between the US and Germany, Ireland and the EU28 average. We consider Ireland as a representative country with a relatively low corporate tax burden and Germany as a representative country with a relatively high tax burden.

Table 3 lists the effective tax burdens for US inbound and outbound FDI before and after the reform. Before the US tax reform, US outbound FDI to Germany exhibited an EATR of 29.5%. The US tax reform reduces the EATR by 3.3 percentage points to 26.2%. Regarding US inbound FDI from Germany, the EATR is reduced by 9.8 percentage points from 36.1% to 26.3%. This means that the tax burden for German FDI in the US outweighs the reduction of the tax burden for US outbound FDI in Germany by nearly a factor of three. Hence, although the EATR was lowered for both US inbound and outbound FDI with Germany, investing in the US has become substantially more attractive for German investors than investing in Germany for US investors.

In Ireland, the situation is quite different. US investors faced an EATR for FDI of 25.3% before the reform. The US tax reform cuts the EATR nearly in half to 12.8% (a reduction of 12.5 percentage points), as these investments are now only subject to tax in Ireland, where a low corporate tax rate is applicable. For Irish investors conducting FDI in the US, the EATR is 12.9 percentage points lower, having been reduced from 37.2% before the reform to 24.3%. Unlike for US investors, the reduction in the EATR is caused by the combination of the tax rate cut and immediate depreciation. However, the reduction of effective tax

rates on US outbound and inbound FDI with Ireland is of a similar size, which implies that the relative attractiveness for hosting investments between these countries has not been significantly altered.

For the EU28 average, the tax reform leads to a reduction of the effective tax burden for US FDI by 5.5 percentage points, from 27.1% to 21.6%, whereas for US inbound FDI from the EU28, the EATR is reduced by 12.2 percentage points from 36.0% to 23.8%. Thus, on average, this implies a relative loss of attractiveness for the EU28 area for hosting FDI as compared with the US.

Expected effects on FDI activity

The US tax reform will affect FDI activity between the US and European countries due to higher net-of-tax profitability of investments.⁸ In the following, we simulate the expected effects on FDI positions based on the calculations of changes in effective tax burdens in the previous subsection. In particular, we analyse the change in bilateral FDI stocks between the US and the EU28, together with Germany and Ireland, induced by the US corporate tax reform. Germany and Ireland again serve as illustrative examples in a separate analysis due to their status as high-tax and low-tax jurisdictions, respectively. The analysis focuses on both inbound and outbound FDI for the US and its European trading partners.

The information on the change in EATR from Table 3 is used to compute the changes in inbound and outbound FDI using estimated elasticities from the literature. For the computation of aggregated FDI, a semi-elasticity of -2.49 is employed. This semi-elasticity is the key finding of Feld and Heckemeyer, who analyse the results of 704 primary estimates of 45 empirical studies on the impact of taxation on FDI using a meta-regression design.⁹ Their key result implies that FDI positions in a country increase by 2.49% if the tax rate is reduced by one percentage point.¹⁰ For computing the effects on FDI flows by industries, the semi-elasticity results of Overesch and Wamser are used.¹¹ Overesch and Wamser analyse German FDI flows using administrative data and find a semi-elasticity for manu-

facturing FDI activity of -2.55 and for business services of -1.31, which implies an increase in manufacturing FDI and business services FDI of 2.55% and 1.31% respectively for each percentage point of tax rate reduction.¹²

Our analysis is based on Eurostat data. Data on FDI positions for the US and Europe is collected for the years 2008-2012.¹³ A potential limitation of FDI data is that it may be prone to fluctuations, which can be explained by the fact that sizeable foreign investments are conducted irregularly.¹⁴ To overcome this limitation, this analysis is based on the average of FDI positions.

The simulation relies on the assumption that investors do not adjust their principal investment strategy of conducting FDI directly without using intermediate jurisdictions. This may be a concern for the results of European high-tax jurisdictions, as US investors could channel investments in Germany through other jurisdictions (e.g. Ireland) to circumvent taxation. The implementation of the US corporate tax reform increases this incentive.

In Figure 2, the effects of the US tax reform on FDI between the US and the EU28 are illustrated. Receiving 37.14% of all EU28 FDI, the US is the most important destination country for EU28 outbound FDI. Currently, the value of investments made in the US by investors residing in the EU28 amounts to €1.353 trillion (see green bar, left panel). Assuming the average effects found in prior literature, the implementation of the US corporate tax reform is expected to increase US inbound investments originating from the EU28 by 30.4%, resulting in an FDI stock of €1.764 trillion (see grey bar, left panel).

FDI in the EU28 from US investors will also be fostered. While the current stock of FDI held by US investors is €1.278 trillion (see green bar, right panel), an increase of €175 billion to €1.453 trillion can be expected after the US tax reform (see grey bar, right panel), reflecting an increase of 13.7%.

EU member states are affected differently depending on their tax rates and their corporate income tax systems in

8 See e.g. C. Fuest, B. Huber, J. Mintz: Capital Mobility and Tax Competition, in: Foundations and Trends in Microeconomics, Vol. 1, No. 1, 2005, pp. 1-62 for a comprehensive analysis on how taxation affects FDI.

9 See L. Feld, J. Heckemeyer: FDI and Taxation: A Meta-Study, in: Journal of Economic Surveys, Vol. 25, No. 2, 2011, pp. 233-272.

10 The semi-elasticity of 2.49 is the average effect based on analyses of numerous countries. The usual caveats for employing an average effect estimate for predicting effects for single countries apply.

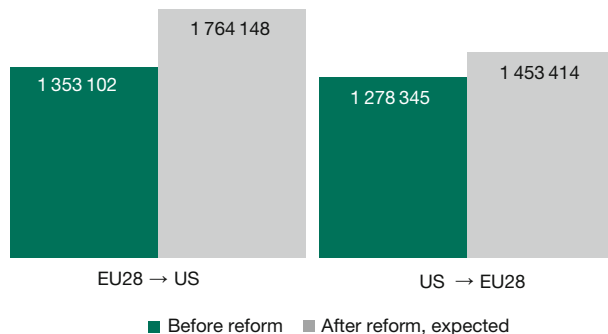
11 See M. Overesch, G. Wamser: Who Cares About Corporate Taxation? Asymmetric Tax Effects on Outbound FDI, in: The World Economy, Vol. 32, No. 12, 2009, pp. 1657-1684.

12 M. Overesch, G. Wamser, op. cit. analysed how the number of FDI flows is influenced by taxation, which captures the extensive decision margin, i.e. whether a firm decides to conduct a foreign investment or not. For this analysis, it is assumed that their derived elasticities also represent the intensive decision margin, meaning the volume of foreign direct investments.

13 The time span 2008-2012 was chosen due to data availability. From 2013 onwards, the systematics of FDI data change significantly, resulting in a structural break. FDI data after this structural break is only available for three years and is less detailed in terms of industries.

14 See e.g. F. Noorbakhsh, A. Paloni: Human Capital and FDI Inflows to Developing Countries: New Empirical Evidence, in: World Development, Vol. 29, No. 9, 2001, pp. 1593-1610.

Figure 2
Total FDI positions, US – EU28
 in million euros



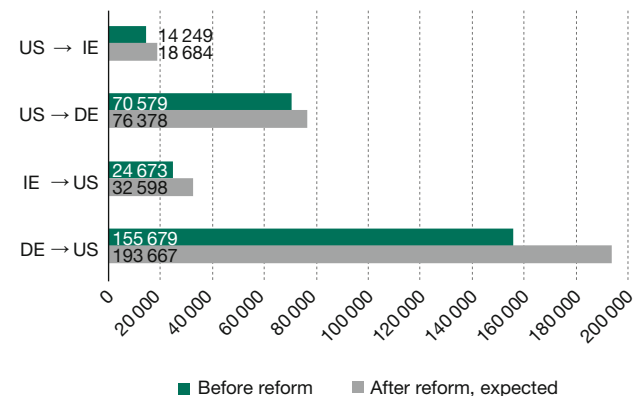
Source: Eurostat, own calculations. FDI positions before the reform are based on the average values for the years 2008-2012. For the EU28, national FDI figures of the 28 member states are aggregated.

general. As already seen in Table 3, the US tax reform reduces the effective cross-border tax burdens of low-tax jurisdictions such as Ireland largely symmetrically for inbound and outbound investments. Conversely, for high-tax jurisdictions such as Germany, effective cross-border tax burdens are affected asymmetrically, implying that the decrease in the effective tax burden of German foreign investments in the US outweighs the relative increase of US foreign investments in Germany. Hence, these jurisdictions will suffer from an outflow of investment capital to the US.

Figure 3 presents the results for total FDI positions between the US and Ireland, as well as between the US and Germany. Before the implementation of the tax reform, the US FDI position was €14.3 billion in Ireland and €70.6 billion in Germany. After the tax reform, US FDI will increase to €18.68 billion in Ireland and to €76.38 billion in Germany. This represents an increase of €4.4 billion in Ireland and €5.8 billion in Germany. For inbound investments in the US, the situation is different. Before the reform, Irish FDI stock in the US amounted to €24.7 billion, while German FDI in the US was €155.68 billion. After the implementation of the tax reform, Irish investors can be expected to increase FDI activity in the US by €7.9 billion and hold FDI positions in the US of €32.6 billion. This represents an increase of around 30%. The German FDI positions in the US are anticipated to expand by €38 billion (around 25%) to €193.7 billion.

When considering the changes in US outbound FDI and US inbound FDI that result from the US tax reform, total

Figure 3
Total bilateral FDI positions for US-Germany and US-Ireland
 in million euros



Source: Eurostat, own calculations. FDI positions before the tax reform are based on the average values for the years 2008-2012.

European investment into the US will increase more than total US investment into Europe. This means that despite the overall economic expansion after the US tax reform, which is expected to foster FDI in all countries, the US will benefit disproportionately from additional inward FDI. This comes especially at the cost of European high-tax countries, which will send increasing outbound FDI flows to the US that will not be equally compensated by inbound FDI flows from the US.

Previous studies have shown that there is substantial heterogeneity in the tax sensitivity of FDI across industries.¹⁵ Investments in the manufacturing sector exhibit a semi-elasticity of -2.55 and therefore react more strongly to changes in cross-border tax burdens than investments in the service sector, with its semi-elasticity of -1.31. Hence, the US tax reform can be expected to affect FDI in countries with relatively large manufacturing sectors to a greater extent.

Table 4 provides an overview of the expected effects of the US corporate tax reform on FDI in the service and manufacturing sectors. FDI in the service sector from Germany to the US is expected to be more than twice as high as the combined amount of outbound FDI in manufacturing and services from the US to Germany. In total, investors from European countries currently hold FDI in the US in service-related industries worth €921 billion and in the manufacturing sector worth €356 billion – figures that are expected to increase to €1.07 trillion and €467

¹⁵ Ibid.

Table 4

Impact of US tax reform on US FDI positions with Germany, Ireland and the EU28, by sectors

in million euros

Country	Sector	Outbound FDI			Inbound FDI		
		Before reform	After reform	Change	Before reform	After reform	Change
Germany	Manufacturing	7 758	8 412	654	16 106	20 136	4 030
	Service	62 658	65 362	2 704	138 362	156 098	17 736
Ireland	Manufacturing	3 564	4 700	1 128	8 592	11 421	2 829
	Service	10 684	12 431	1 136	13 965	16 320	2 448
EU28	Manufacturing	252 103	287 502	35 399	355 781	466 594	110 813
	Service	993 936	1 065 440	71 504	920 883	1 067 834	146 951

Source: Eurostat, own calculations. FDI positions before the US tax reform are based on the average values for the years 2008–2012. For the EU28, national FDI figures of the EU28 member states are aggregated. Industries are classified according to NACE (section C for manufacturing, sections G–U for service-related industries).

billion, respectively, with the tax reform. Conversely, US FDI in the European service sector is currently worth €994 billion, and in the manufacturing sector it amounts to approximately €252 billion. Our analysis indicates these figures will rise to €1.07 trillion and €288 billion, respectively.

Manufacturing FDI will presumably be particularly expanded as a result of the US tax reform. The US will attract additional inbound FDI of €110.8 billion from investors located in the EU28. In particular, inbound FDI from Germany is expected to increase by more than €4 billion and inbound FDI from Ireland by €2.8 billion. US manufacturing FDI can be expected to expand in the EU28 by only €35.4 billion, of which Ireland would receive €1.1 billion and Germany just €654 million. US FDI in the service sector in Europe will increase by €71.5 billion. Relative to the size of the economy, the increase in Ireland (€1.1 billion) is substantially larger than that in Germany (€2.7 billion). For the US, an overall increase of about €147 billion in service FDI stocks held by European investors is expected. A substantial share of this increase is contributed by German investors, who are expected to make €17.7 billion of additional investments in the US service sector. The additional contribution of Irish investors is calculated at €2.4 billion.

Conclusion

Our calculations show that the US tax reform lowers the effective tax burdens for US inbound as well as outbound FDI. Consequently, both the attractiveness for European investors to make investments within the US and for US investors to make investments abroad will rise. In the context of the EU28, low-tax countries such as Ireland will become relatively more attractive to US investors than high-tax countries such as Germany.

Drawing on findings from existing literature, results of a simulation on the effects on FDI activity in the US and the EU28 show an increase in both inbound and outbound FDI activity caused by the tax reform. The US can expect additional inbound FDI from the EU28 in the magnitude of approximately €411 billion, while the additional outbound investment to Europe is predicted to be around €175 billion. Thus, EU member states will also benefit from additional outbound FDI activity of US investors. However, this increase cannot compensate the capital outflow associated with additional FDI activity in the US by European investors. As a result, a greater share of global investments will be located within the US, and this will be accompanied by the positive effects of additional capital for the US economy.

The relative increase in attractiveness of the US as an investment location comes at the cost of European countries. Overall, the US will benefit from a substantial net inflow of European investment capital caused by the tax reform. In particular, European high-tax countries such as Germany will be confronted with a higher net outflow of investments than European low-tax countries such as Ireland.

Due to the move from worldwide income taxation to territorial taxation, the US tax reform will intensify not only US-European tax competition, but also intra-European tax competition. As opposed to the situation under its previous worldwide income taxation system, according to which all investments were subject to US corporate taxes, the varying national tax burdens of European countries will become relevant for US investors. Hence, as a result of the US tax reform, tax rate differentials within Europe have now gained in importance, which adds pressure on high-tax countries like Germany, which will likely lose ground in the competition for FDI.