

Buying and Selling: Cross-border mergers and acquisitions and the US corporate income tax

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Executive summary

The United States has the highest statutory corporate income tax rate among developed nations and is the only developed country with both a high statutory corporate income tax rate and a worldwide system of taxation. These features of the US corporate income tax have disadvantaged US businesses in the global market for cross-border M&A.

Most developed countries impose little or no additional tax on the active foreign income of multinational companies. Today the United States is the only developed country with a worldwide system and a corporate income tax rate above 30%. Consequently, foreign companies can afford to bid more for acquisitions in the United States and abroad as compared to US companies.

This report analyzes the cross-border M&A market and how the US corporate income tax has disadvantaged US companies in this market. Differences in statutory corporate income tax rates and the over 25,000 cross-border M&A transactions among the 34 OECD countries are examined in a statistical model over the 2004-2013 period. Transactions with both US and non-US targets and US or non-US acquirers are included.

The EY report finds that a US corporate income tax rate of 25% would have significantly reduced the disadvantages of US companies and would likely have resulted in the United States being a net acquirer in the cross-border M&A market.

With a 25% tax rate, US companies would have acquired \$590 billion in cross-border assets over the past 10-years instead of losing \$179 billion in assets (a net shift of \$769 billion in assets from foreign countries to the United States). The report also estimates that a 25% tax rate (the OECD average) would have kept 1300 companies in the U.S. over the last 10 years.

- ▶ The \$24.5 trillion global cross-border M&A market over the past decade was characterized by a large number of small transactions.
- ▶ The United States is regularly losing business assets through relatively small-scale, daily transactions. One half of the cross-border transactions were valued at \$29 million or less.
- ▶ The economic benefits created by innovative start-ups are more likely to stay in the United States when these businesses are acquired by domestic companies, rather than foreign companies, because they are more likely to conduct more of their R&D activities in the United States.

M&A plays an important role in both the US and global economies by allowing companies to reshape themselves in response to a changing economy. Divesting some lines of business and acquiring others allows companies to enter new markets, access distribution channels, develop new technologies, and release capital for reinvestment. For small, innovative companies in particular, M&A is a way to match their new ideas with the resources needed to bring them to market. As an indication of the importance of this market for start-ups, this report finds that the cross-border M&A market is dominated by small transactions with 50% less than \$29 million.

The impact of the US corporate income tax on the cross-border M&A market is a complex but crucial component of the ongoing US tax reform debate. Corporate income tax rates affect not only

the competitiveness of global US companies, but also the ownership and management of global capital. If the disadvantages in our system persist, they could have long-lasting effects on productivity, wages, and living standards.

In the last 10 years, the US statutory corporate income tax rate has remained steady while rates in many other countries have fallen. As a result, the gap between the US statutory corporate income tax rate and the simple-average OECD rate has increased from 2 percentage points to 10 percentage points, heightening the disadvantage in the M&A market for US companies.

In a hyper-competitive global marketplace, America's outdated tax structure has made US companies a net target in the cross-border M&A market.

Contents

Executive summary.....	i
I. Introduction	1
II. The role of cross-border M&A in the US economy	3
A) Size and scope of the market for cross-border M&A	4
B) The cross-border M&A market is made up of many small deals	6
C) US companies – net targets, largest participants	8
III. How the US corporate income tax disadvantages US corporate acquirers	10
A) Current US income tax treatment of US corporate foreign earnings	10
B) The role of deferral in quantifying the repatriation tax	12
C) Illustrative examples of how the US corporate income tax affects cross-border M&A	14
IV. Estimating the impact of corporate income taxes on cross-border M&A.....	18
Box 1: Tax Reform – base broadening and territorial.....	20
V. The economic value of US-headquartered companies	22
VI. Limitations and caveats	24
VII. Summary	25
Endnotes.....	26

Buying and Selling: Cross-border mergers and acquisitions and the US corporate income tax system

I. Introduction

The United States has the highest US statutory corporate income tax rate among developed nations and is the only developed country with both a high statutory corporate income tax rate and a worldwide system. These features of the US corporate income tax disadvantage US companies in the global market for cross-border M&A by placing a higher tax on repatriated income (a “repatriation tax”) than any other major developed country.

Most developed countries impose little or no additional tax on the active foreign income of multinational companies. Today the United States is the only developed country with a worldwide system and a corporate income tax rate above 30%. Consequently, foreign companies can afford to bid more for acquisitions in the United States and abroad as compared to US companies because the income repatriated from those targets will face little additional tax.

M&A and other business reconfigurations play an important role in the economy. Such transactions – mergers, acquisitions, divestitures and spin-offs – provide a means for companies to reshape themselves and are some of the ways companies respond to market and technological change. These transactions can alter the scope and focus of a company’s business. Divesting some lines of business and acquiring others allow companies to enter new markets, access distribution channels, develop new technologies, and release capital for reinvestment.

A robust M&A market is also conducive to a well-functioning economy. It allows capital to be reallocated more freely to its highest use in economic terms. Reducing impediments for companies to transform and adjust to changing markets can be expected to result in capital being allocated more efficiently from an economic perspective and a more productive capital stock.

This report analyzes the cross-border M&A market and how the US corporate income tax disadvantages US companies in this market. Differences in statutory corporate income tax rates and the over 25,000 cross-border M&A transactions among the 34 OECD countries are examined in a statistical model over the 2004-2013 period. Transactions with both US and non-US targets and US or non-US acquirers are included.

The report first presents data on the global cross-border M&A market and then presents results from a statistical analysis of cross-border M&A and corporate income tax rates for OECD countries.¹ This report finds that a lower US statutory corporate income tax rate would significantly reduce the disadvantages US companies face in the market for cross-border M&A. This report also suggests that moving to a territorial tax system would have similar impacts.

The estimates presented in this report are for a reduction in the US statutory corporate income tax rate without any other changes. The estimated impacts could vary depending on the extent to which broadening the corporate income tax base applied to the operations of target companies.

The impact of the US corporate income tax on the cross-border M&A market is a complex but crucial component of the ongoing US tax reform debate. Corporate income tax rates affect not only the competitiveness of global US companies, but also the ownership and management of global capital. If the disadvantages in our system persist, they could have long-lasting effects on productivity, wages, and living standards.²

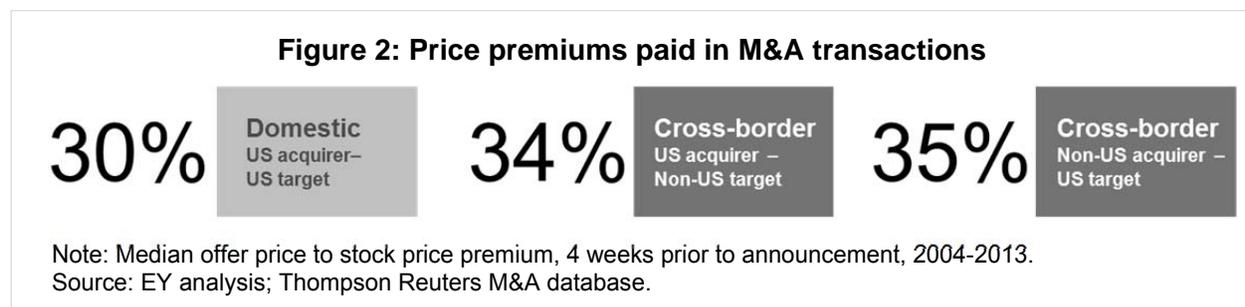
II. The role of cross-border M&A in the US economy

- ▶ *Cross-border M&A typically produce larger synergies because of the greater “gains from trade” available for companies from different countries. Companies from different countries may have access to different stocks of local know-how, product types, specialized suppliers, workforces, and capital markets, all of which can have an important influence on companies’ competitive capabilities.*
- ▶ *The economic benefits created by innovative start-ups are more likely to stay in the United States when they are acquired by US-incorporated companies because they conduct more of their R&D and other activities in the United States.*
- ▶ *Globally, US companies are the acquirer in 20% of cross-border M&A by value and the target in 23% by value.*

In a dynamic economy, companies must frequently adjust their operations in response to the changing market place to better serve customers, respond to technological change, and compete. One way companies do this is by divesting some business units and acquiring others. Mergers, acquisitions, divestitures, spin-offs, and other activities that change the scope and focus of a company’s business are all examples of business reconfigurations. These business reconfigurations are an important tool, particularly for companies in innovative, high-growth sectors, because they may need to adjust to rapidly changing markets. Being able to divest some business units and acquire others allows companies to more quickly gain access to newly developing technologies and markets. Like other business reconfigurations, M&A may produce many economic benefits including: creating business synergies that may increase the value of the combined companies, providing financial gains to both the acquirer and target, releasing capital for reinvestment, and helping ensure that capital is more efficiently allocated throughout the economy.

M&A creates economic value when it combines two companies that are worth more together than they are apart. This additional value comes from the “synergies” created by the reconfiguration. Synergies can come from many sources. One clear example of synergy is a start-up company with innovative proto-type products being sold to a mature company with the manufacturing and distribution capabilities needed to make those proto-types commercially successful. Neither company would be as valuable alone as the two are together.

Companies may create synergies through sharing technologies or business processes. For example, a company that developed a system for improving the efficiency of an energy-intensive industrial process could spread the benefits of this new system by buying companies in other geographic markets and raising the productivity of their operations. Companies may create synergies through sharing tangible assets like factories, research labs, or distribution systems and enjoying greater “economies of scale.” For example, two companies with distribution networks that reach retailers in overlapping areas might find they could reduce costs by swapping certain warehouses in the overlapping areas and increase revenues by agreeing to distribute each other’s products in the non-overlapping areas.



The benefits of M&A are typically shared by both acquirer and target. The acquirer gains valuable assets and the seller of the target shares in the profit from the synergies through the price premium it receives from the acquirer over the target's standalone market value.

Cross-border M&A typically produces larger synergies because of the greater "gains from trade" available for companies from different countries.³ Companies from different countries may have access to different stocks of local know-how, product types, specialized suppliers, workforces, and capital markets, all of which can have an important influence on companies' competitive capabilities.⁴

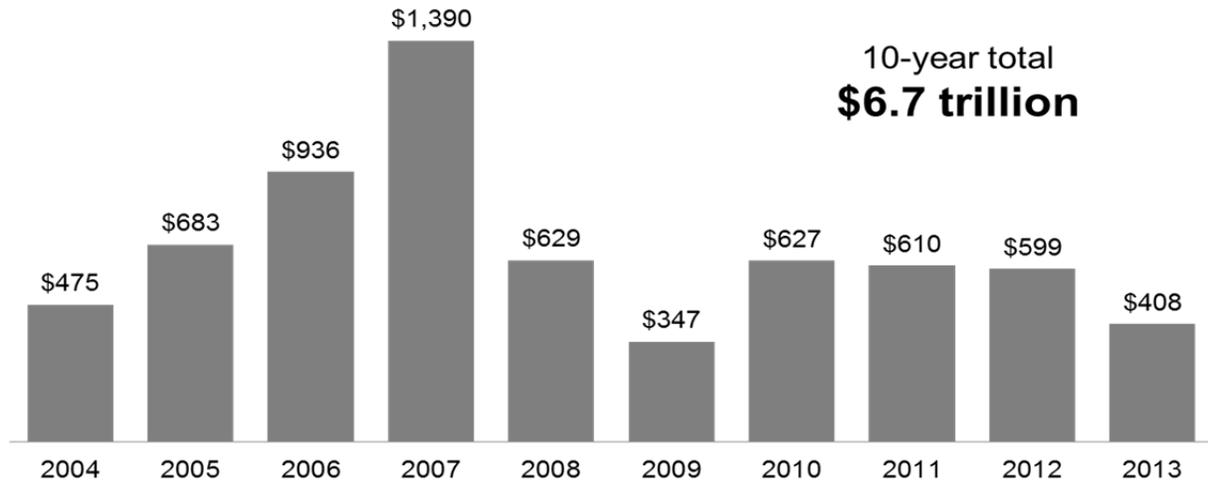
The greater synergies in cross-border acquisitions are reflected in larger price premiums paid to shareholders of the target. While a US acquirer typically pays a 30% price premium to acquire a US company, non-US acquirers typically pay a 35% premium to acquire a US company. It is important to note that the higher price premiums paid in cross-border M&A are not primarily driven by tax considerations.⁵ This can be seen by the fact that cross-border transactions in which the US company is the acquirer also involve considerably larger premiums than domestic transactions. US acquirers typically paid 34% more than market value of the companies they purchased in other countries versus 30% more when buying US companies.

M&A also releases capital for reinvestment. When a company is sold, investors can reinvest their capital in the next growth opportunity. A company's owners choose to sell it when they believe that the company's future growth prospects are less attractive than other investment opportunities. This is true whether the investor is selling the entire company or a single share. M&A allows investors in the target company to shift their investments to higher growth opportunities. In this way, flexible capital markets facilitate economic growth by reallocating capital to its most productive use.

A) Size and scope of the market for cross-border M&A

The market for M&A is a global one. Most transactions do not involve companies in the United States as either acquirer or target. Globally, M&A transactions totaled \$24.5 trillion from 2004-2013. Of these, \$8.7 trillion worth were cross-border transactions, meaning the ultimate parent of the acquirer was headquartered in a different country than the target company, and \$6.7 trillion were deals in which majority control of the target company changed hands.⁶ As seen in Figure 3, M&A activity is often cyclical. Global transaction volume has recovered from its recession-era depths but in 2013 was still far below its 2007 peak and below the level during the pre-recession period.

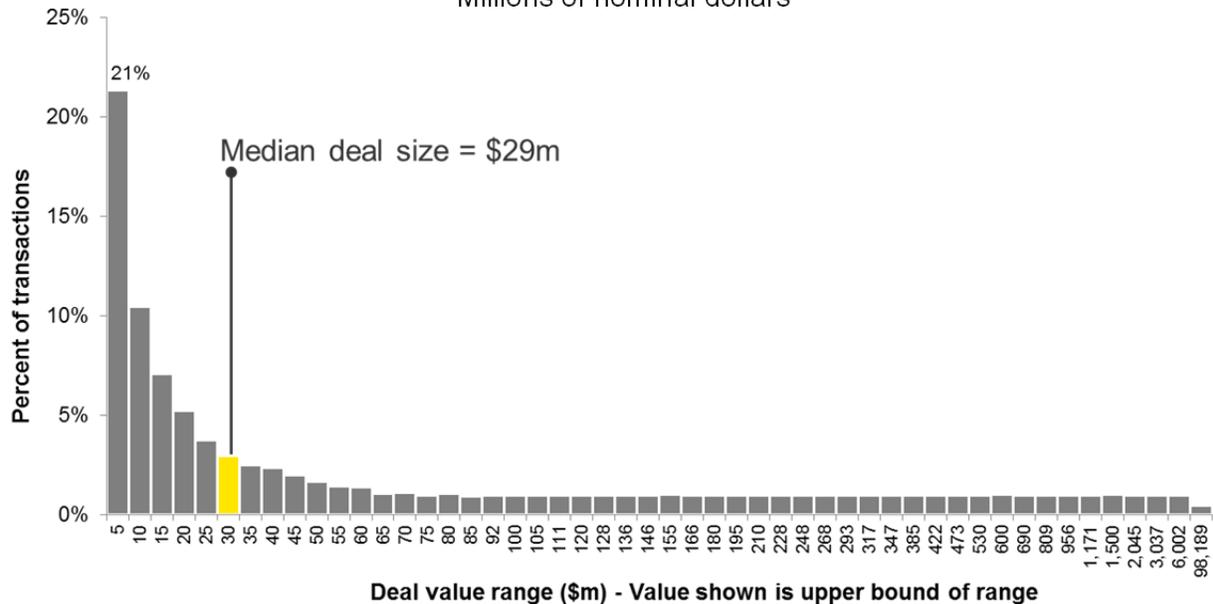
Figure 3: Global volume for cross-border acquisitions, 2004-2013
Billions of nominal dollars



Note: Distribution of transactions with deal value available.
Source: EY analysis; Thompson Reuters M&A database.

Figure 4: Distribution of M&A transactions by deal size, 2004-2013

Millions of nominal dollars



Note: Total deal value for transactions with deal value available. Of the total 64,305 cross-border, majority acquisition transactions completed between 2004 through 2013, 39% (25,123 transactions) have deal value information. Beyond \$85 million, the size range represented by each vertical bar is set to be as wide as necessary to capture an incremental one percent of the transaction volume. The distribution of deals by size is highly skewed and a small number of very large deals results in an average transaction size of \$267 million.
Source: EY analysis; Thompson Reuters M&A database.

B) The cross-border M&A market is made up of many small deals

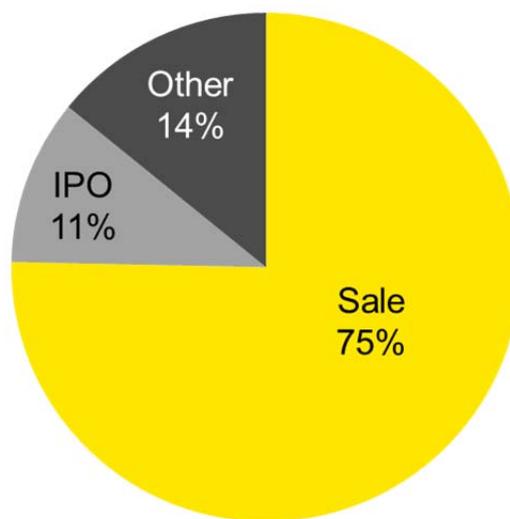
While the dollar values involved in cross-border M&A are quite large in aggregate terms, the typical deal size is relatively small; 50% of all transactions are \$29 million or less and 25% of transactions are \$7 million or less (Figure 4).

Smaller transactions can play an important role in the economy. A good example is the role they play in the life cycle of venture capital-backed start-up companies. Venture capitalists (VCs) invest in many early-stage start-up companies in the hope that enough of them succeed to compensate for some inevitable failures. VCs typically cannot invest in the next round of start-ups until they recover their investment in the previous round of companies. They “exit” their investments through an initial public offering (IPO) on the stock market or by selling the company in an M&A transaction. Despite the public attention given to IPOs, Figure 5 shows most start-ups are sold to larger companies that have the capital and capabilities needed to fully commercialize their innovations. VCs and other early-stage investors are then free to reinvest their profits from successful start-ups into the next generation of new start-ups. The economic benefits created by innovative start-ups are more likely to stay in the United States when they are acquired by US-incorporated companies because they conduct more of their R&D and other activities in the United States.⁷

The sale of small US companies and business units with few growth prospects also plays a vital role in the US economy. When a company or business unit that is failing or has failed is sold to a new owner, it can be an opportunity for a fresh start. Factories can be converted to new uses, brands can be revitalized with new products, and facilities can be refurbished and modernized. These investments can put those business assets back into productive use.

Smaller transactions can also have an outsized value when a US company buys a foreign company. Smaller companies can play a role in allowing US companies to gain access to overseas markets. Buying a smaller local company with valuable manufacturing, distribution or marketing assets is a frequent first step for a US multinational expanding into a new market. The acquired foreign firm may not be large, but it may be the key to unlocking a much larger growth opportunity for the acquiring company.

Figure 5: VC-backed US start-up exits



Note: “Other” includes secondary sales, write-offs, reverse take-overs, and buybacks.

Source: EY analysis, Thompson Reuters venture capital database.

Figure 6: Distribution of US transactions, by sector, 2004-2013
Billions of nominal dollars

2004-2013

	US target		US acquirer	
	\$billions	% value	\$billions	% value
Healthcare	\$267	17%	\$108	8%
Energy and power	219	14%	72	5%
Materials	163	11%	74	6%
Financial services	158	10%	156	12%
Consumer staples	146	10%	86	7%
High technology	144	9%	121	9%
Industrials	137	9%	138	10%
Telecommunications	89	6%	24	2%
Real estate	71	5%	34	3%
Media and entertainment	56	4%	49	4%
Consumer products and services	54	4%	29	2%
Retail	21	1%	26	2%
Investors/holding companies	6	0%	405	31%
Total, US	\$1,529	100%	\$1,322	100%

Note: Total deal value for transactions where a US company in a given industry is the acquirer or target. Deal value for transactions with deal value available and completed from 2004 to 2013. Data are for transactions with all countries

Source: EY analysis; Thompson Reuters M&A database.

Figure 7: Largest target and acquirer countries, 2004-2013
Billions of nominal dollars

2004-2013

Country	Target		Acquirer	
	\$ billions	% value	\$ billions	% value
United States	\$1,529	23%	\$1,322	20%
United Kingdom	1,038	15%	935	14%
Canada	398	6%	370	6%
Germany	391	6%	331	5%
Netherlands	361	5%	336	5%
Australia	264	4%	206	3%
France	214	3%	508	8%
Spain	177	3%	233	3%
Switzerland	113	2%	253	4%
China	86	1%	183	3%
Japan	74	1%	269	4%
Rest of world	2,058	31%	1,758	26%
Total, worldwide	\$6,704	100%	\$6,704	100%

Note: Total deal value for cross-border, majority acquisition transactions completed from 2004 through 2013 with deal value available. Sales are classified by country of the target company. Purchases are classified by country of the ultimate parent of the acquirer. Data are for transactions with all countries

Source: EY analysis; Thompson Reuters M&A database.

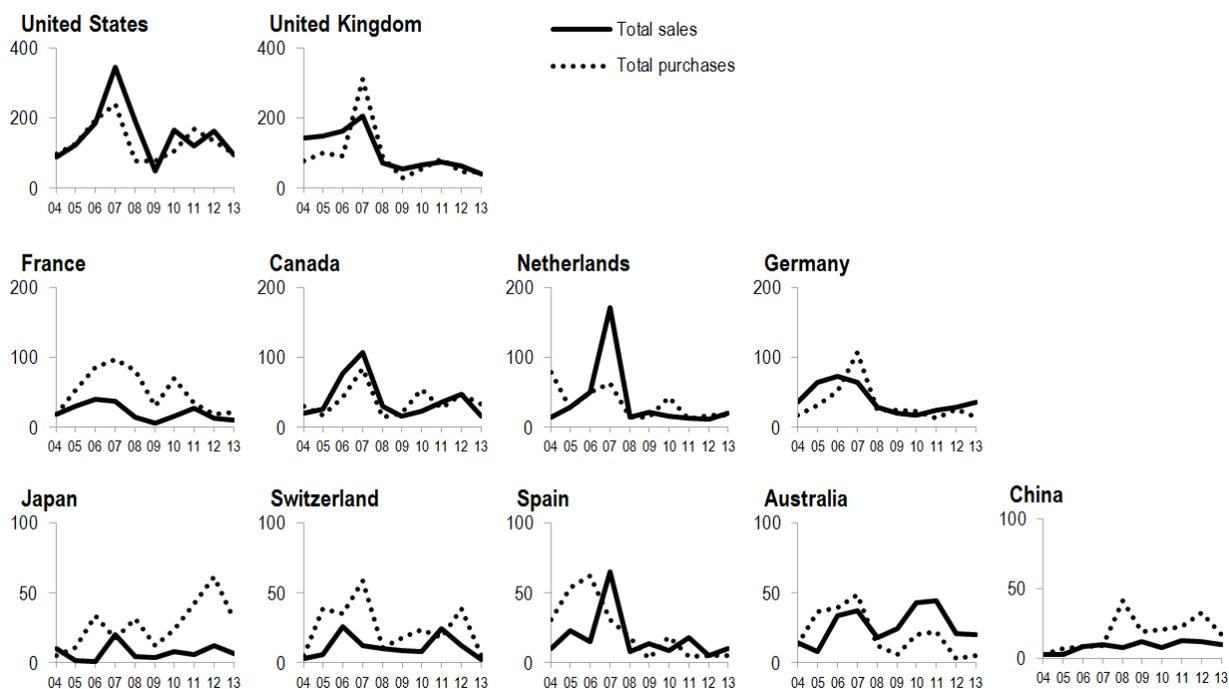
C) US companies – net targets, largest participants

In the period analyzed, of the US targets sold to non-US acquirers, 62% were independent companies and 38% were subsidiaries of larger companies. During the same time period, every major US sector participated in cross-border business M&A as both an acquirer and target (Figure 6). Technology-intensive sectors account for a significant fraction of transaction value but less technology-oriented sectors like consumer staples and real estate are also well represented.

US companies are both the largest acquirers and the largest targets in cross-border M&A (Figure 7). Based in the largest, most developed economy and home to sophisticated financial markets, US companies are the acquirer in 20% of cross-border M&A by value and the target in 23% by value. Companies based in other developed countries such as the United Kingdom, France, Canada and the Netherlands, are also highly active in this market. Chinese companies, based in the world’s second-largest economy, are not yet a dominant player in this market, though their role is rapidly increasing.

The pattern of sales and purchases across countries shows significant year to year variation but also reveals that some countries’ companies are consistently net purchasers while others are net sellers (Figure 8).

Figure 8: Sales versus purchases by country, 2004-2013
Billions of nominal dollars



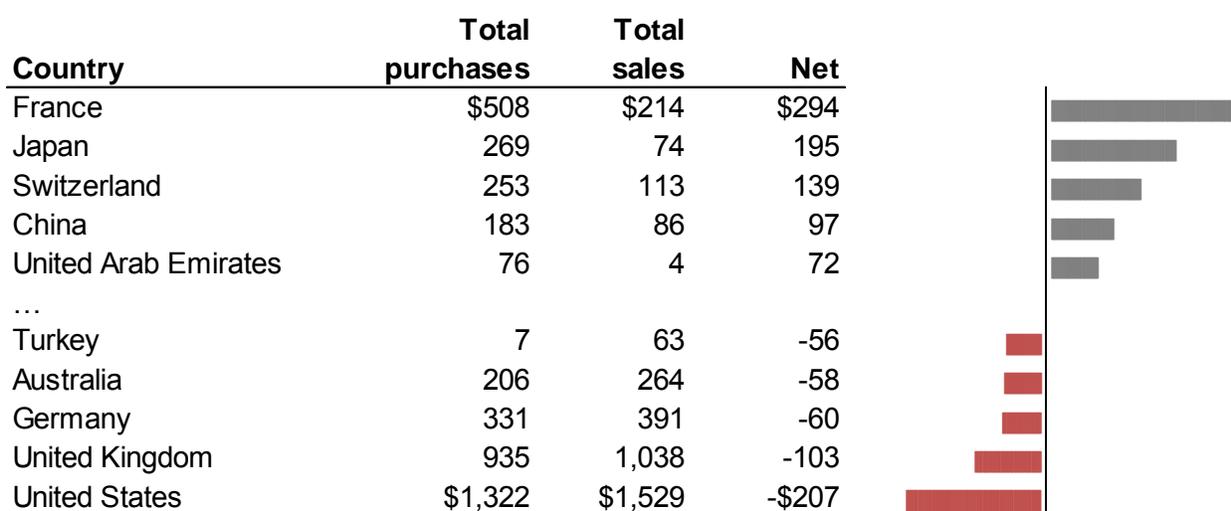
Note: Sales are classified by country of the target company. Purchases are classified by country of the ultimate parent of the acquirer. Note that the scale varies between rows. Data are for transactions with all countries. Source: EY analysis; Thompson Reuters M&A database.

US companies were net targets over the ten year period from 2004-2013, while French companies were net acquirers. Chinese companies have begun to build a growing profile as purchasers.

Data for Japanese companies show a large increase in purchases after 2010, the same year Japan reduced corporate income taxes on some foreign earnings, which lifted Japan's M&A surplus from an average of \$11.5 billion per-year pre-reform to an average of \$31.4 billion per-year post-reform. Similarly, the UK experienced a significant reduction in its M&A deficit after tax reforms it also implemented in 2010, from an average of -\$14.9 billion per-year pre-reform to an average of -\$3.5 billion per-year post-reform.⁸ Many factors affect cross-border M&A flows and no conclusions can be drawn from a simple comparison of averages, but the experiences of Japan and the UK appear to be broadly consistent with the estimates for the US discussed later in this report.

The countries with the largest M&A surpluses and deficits are shown in Figure 9. The US deficit is large as an absolute number in part because the total transaction volume of US companies is larger than that of the companies from any other country. Sales of US companies to foreign purchasers exceeded US companies' purchases of foreign targets by a smaller percentage than in the other deficit countries shown in Figure 9, with the exception of the United Kingdom.

Figure 9: Largest net purchaser and seller countries, 2004-2013
Billions of nominal dollars



Note: Total deal value for transactions with deal value available. Sales are classified by country of the target company. Purchases are classified by country of the ultimate parent of the acquirer. Data are for transactions with all countries.

Source: EY analysis; Thompson Reuters M&A database.

III. How the US corporate income tax disadvantages US corporate acquirers

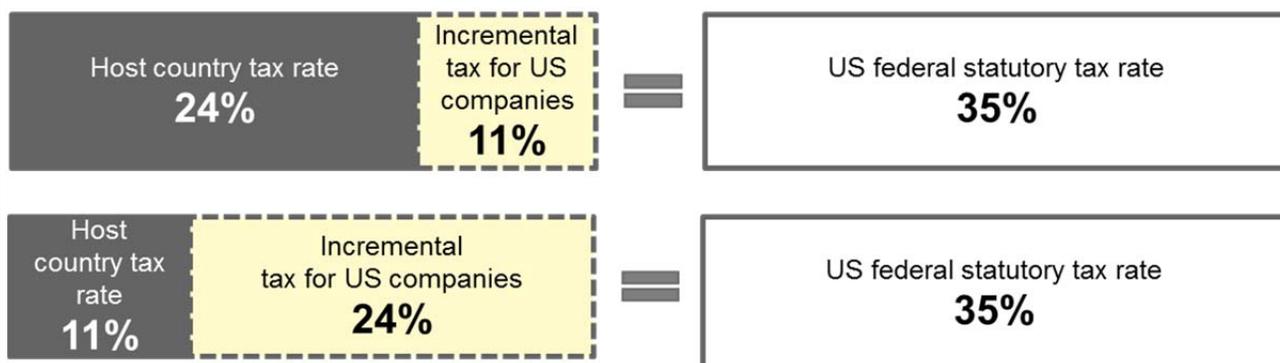
- ▶ *The US corporate income tax, through its high statutory tax rate and worldwide tax system, puts US companies at a competitive disadvantage in the cross-border M&A market, allowing non-US companies to outbid US companies.*
- ▶ *The US is the only OECD country with both a worldwide system and a statutory corporate income tax rate above 30%.*
- ▶ *The gap between the US corporate income tax rate and the OECD average rate has increased from 2% to 10% since 2004, increasing the disadvantage in the M&A market for US companies.*

A) Current US income tax treatment of US corporate foreign earnings

The combination of a high corporate income tax rate and a worldwide system puts US companies at a competitive disadvantage in the market for cross border M&A in both the United States and abroad. Businesses incorporated in countries with a territorial tax system face host country tax rates on their activity located around the world but almost no additional tax in their home country. If those businesses were instead incorporated in the US they would pay additional tax on repatriated foreign earnings. The result is an economic disincentive for US ownership of corporate assets either in the United States or abroad.⁹

The United States taxes the income of a US-incorporated corporation on a worldwide basis – regardless of where it is earned – with a credit for income taxes paid to foreign governments. This means that if the US tax liability on income earned in a given host country is higher than the host country tax liability on that income, the US company will eventually owe the difference to the US Treasury. The difference between the US corporate income tax rate and the foreign host country tax rate can be thought of as a “repatriation tax” – the additional tax a US-incorporated company would pay on its taxable foreign earnings upon repatriation.

Figure 10: Repatriation tax on foreign earnings of US companies



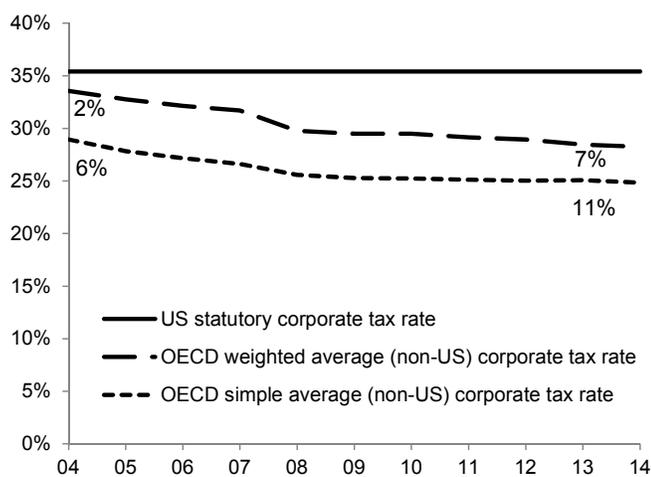
Note: US corporations are subject to US tax on their foreign income. A tax credit is allowed for foreign income taxes paid by US corporations to offset US tax on their foreign source income. In general, US corporations are not taxed on the active foreign source income of foreign subsidiaries until the subsidiaries repatriate the income to their US parents. US corporations can defer US tax liability on their foreign subsidiaries' foreign source income by reinvesting profits in non-US countries or otherwise not repatriating such profits.

This report illustrates ways in which differences between the United States' and other countries' corporate income taxes affect cross-border M&A transactions. The repatriation tax rate on foreign earnings – the difference between the US statutory corporate income tax rate and the local statutory corporate income tax rate in a host country – is used to gauge the additional tax burden on a companies foreign source income as a result of differences between countries' corporate income tax rates.

On average, US companies are generally at a disadvantage relative to companies operating in other developed economies in the cross-border M&A market. The 35% US corporate income tax rate, for example, far exceeds the the 25% simple average among non-US OECD countries in 2014 (Figures 11).¹⁰ Based on this comparison, US companies would, on average, pay a repatriation tax of more than 10% on their foreign earnings from an acquisition (Figure 12).

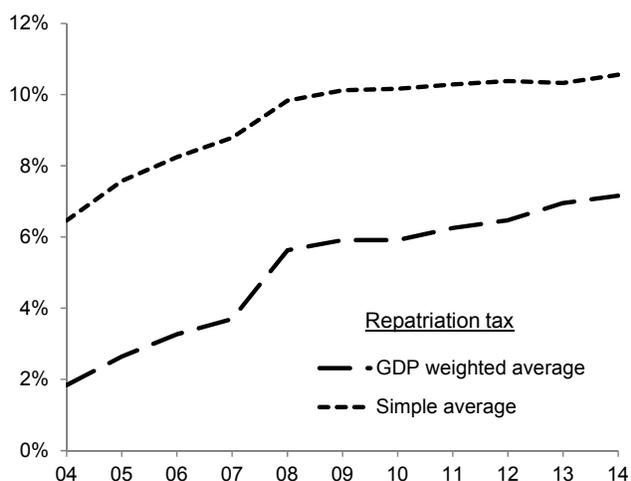
There are, of course, many factors that can affect the actual tax a company pays in a host country and under the US corporate income tax. Deferral of US tax on active foreign source income of foreign subsidiaries, for example, may lower the present value of taxes and US tax on repatriated income. Changes in leverage or reorganization of business segments after an acquisition can also impact the total tax paid by companies.

Figure 11: US and OECD average tax rates used to calculate the repatriation tax



Note: The OECD weighted average tax rate is weighted by GDP. The United States is excluded from the averages. Tax rates include both national and subnational rates to the extent they apply to foreign earnings. Most US states impose little or no tax on foreign earnings.
Source: EY analysis; OECD tax data.

Figure 12: Average OECD repatriation tax rate faced by US companies on foreign earnings



Note: The US repatriation tax rate for each country is the difference between the US statutory corporate income tax rate and the statutory corporate income tax rate in that host country.
Source: EY analysis; OECD tax data.

A comparison of the US corporate income tax rate to the weighted average non-US OECD corporate tax rate indicates a similar trend declining from 34% in 2004 to 28% in 2014 (Figure 11).¹¹ While these lower corporate income tax rates served as an additional investment incentive for non-US companies, companies incorporated in the United States faced higher tax rates on repatriated foreign earnings as a result of lower host country tax rates enacted abroad. (Figure 12).

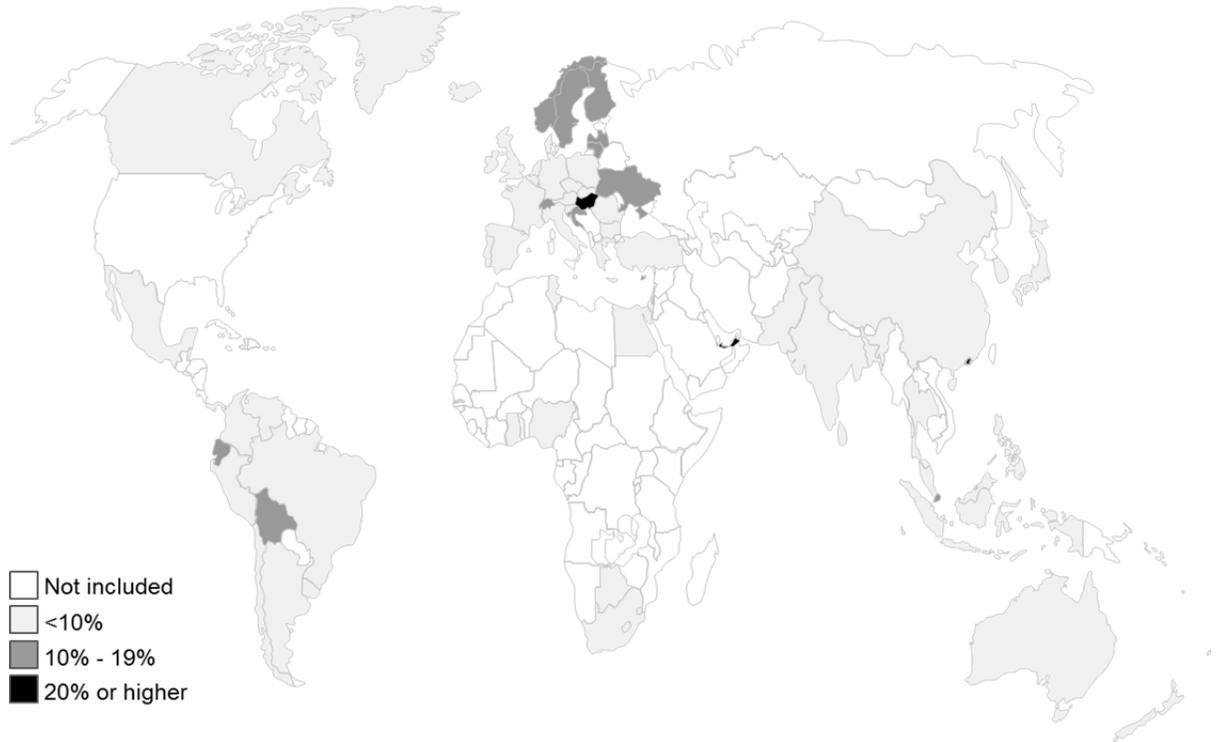
While the repatriation tax burden on US companies has grown, the number of countries that assess significant repatriation taxes on their own companies has fallen. As recently as 2000, half of OECD countries taxed the worldwide income of their companies, as the US does.¹² Today, only 6 out of 34 OECD countries, or 18%, have worldwide corporate income tax systems. The US is the only OECD country with both a worldwide system and a statutory rate greater than 30%.

Another way to visualize the growing repatriation tax disadvantage of US companies is with the maps shown in Figures 13, 14 and 15. Each country is shaded to indicate the degree of repatriation tax faced by US companies doing business there, if they were to repatriate foreign earnings. In 1995, US companies faced potential repatriation tax rates greater than 10% in only a handful of countries (Figure 13). By 2013, repatriation tax rates exceeded 10% in many of the United States' largest trading partners, including Canada, Mexico, China, Germany, South Korea, and the United Kingdom (Figure 14). A 10-percentage point reduction in the corporate income tax rate would be large enough to lower the repatriation tax to less than 10% in all but a handful of countries (Figure 15).

B) The role of deferral in quantifying the repatriation tax

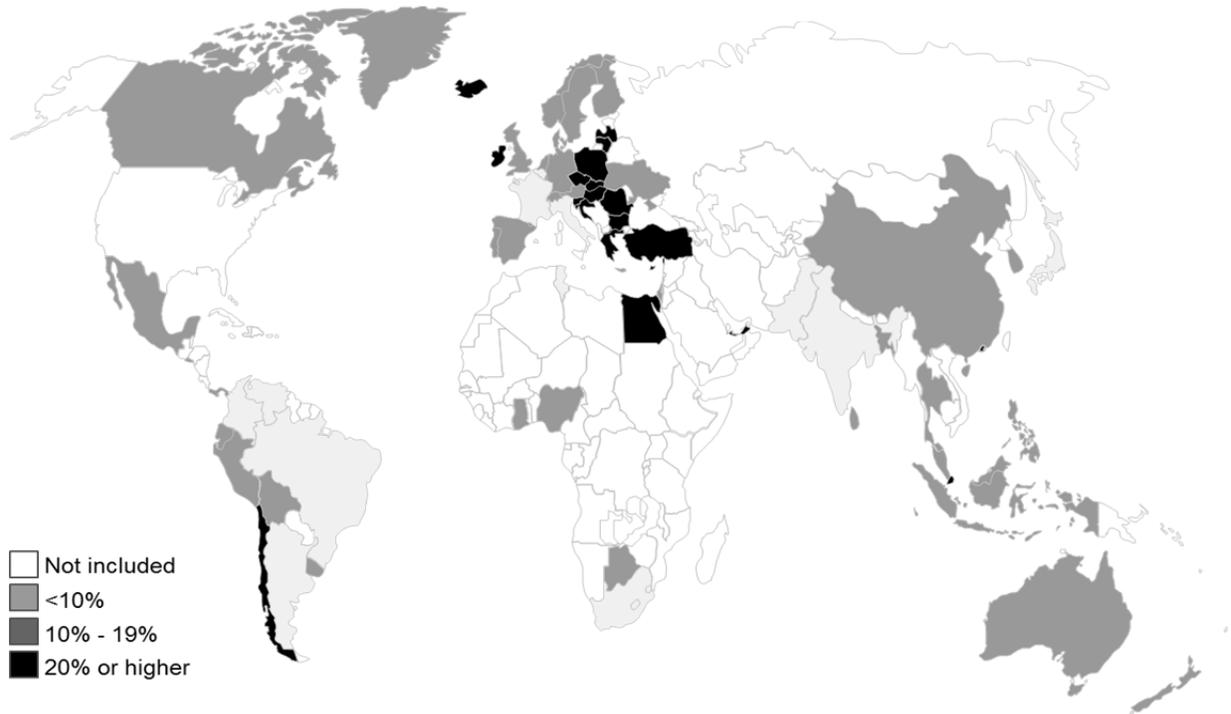
The repatriation tax on the foreign earnings of US corporations is not necessarily due immediately. US corporations generally pay taxes on the income of their controlled foreign corporations (CFCs) only when that income is repatriated to the United States or when it is considered by the tax code to be "passive" or "mobile" income and subject to immediate US tax under the "Subpart F" rules. Foreign income earned through CFCs that is not repatriated or covered by Subpart F is said to be "deferred" because it is not subject to immediate US tax. US-incorporated companies also earn foreign income through foreign branches. Income earned through foreign branches is income of the US corporation and subject to immediate US tax.

Figure 13: Potential repatriation tax rate faced by US companies under worldwide tax, 1995



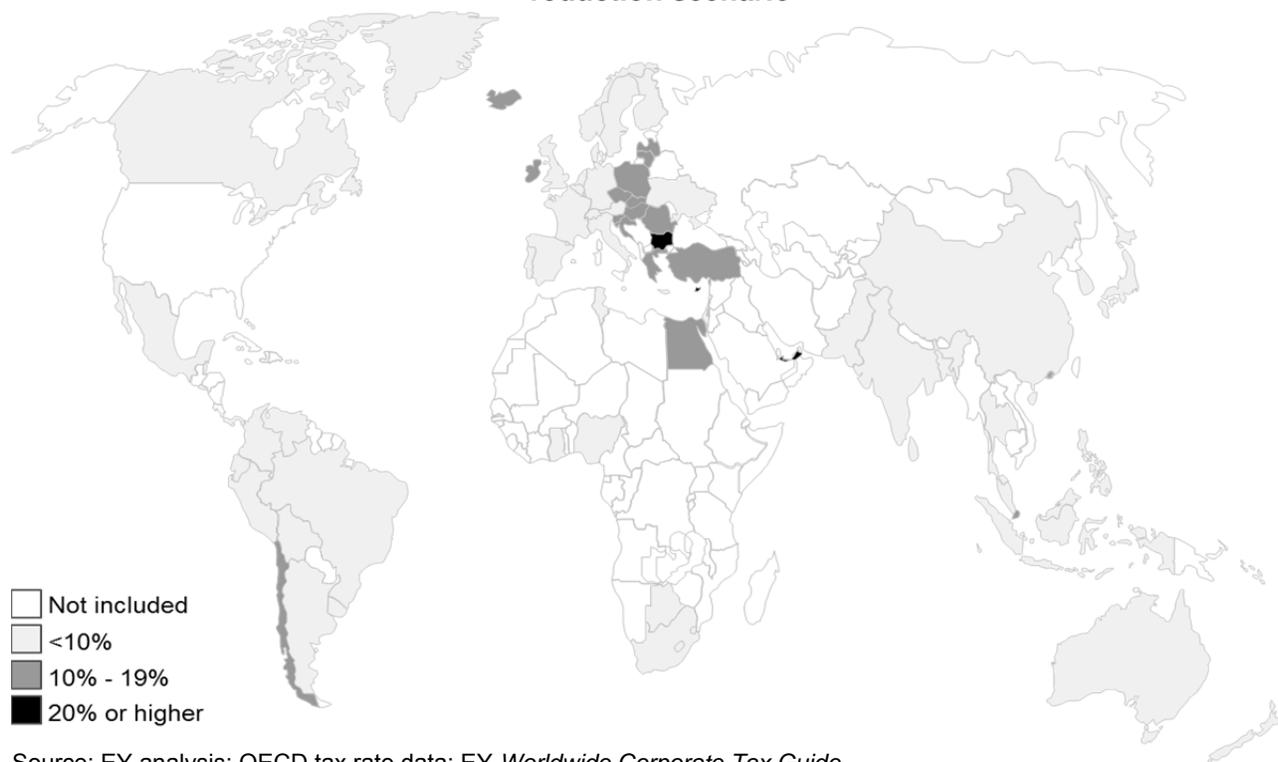
Source: EY analysis; OECD tax rate data; EY *Worldwide Corporate Tax Guide*.

Figure 14: Potential repatriation tax rate faced by US companies under worldwide tax, 2013



Source: EY analysis; OECD tax rate data; EY *Worldwide Corporate Tax Guide*.

Figure 15: Potential repatriation tax rate faced by US companies, 10-percentage point rate reduction scenario



Source: EY analysis; OECD tax rate data; EY *Worldwide Corporate Tax Guide*.

Although deferral postpones and reduces the present value of taxes it also reduces the present value to shareholders of the repatriated earnings themselves. Further, it generally does not eliminate the repatriation tax on the earnings of foreign subsidiaries of US companies. Companies may repatriate their foreign subsidiaries' earnings to provide a return to shareholders in the form of a dividend or share buyback. For example, investors expect a return on funds the company invests outside the United States. Borrowing in the United States may be an approach to finance dividend payments, at least in the near-term.

C) Illustrative examples of how the US corporate income tax affects cross-border M&A

As highlighted above, the high corporate income tax rate in the United States places US-incorporated companies at a competitive disadvantage versus companies resident in jurisdictions with a territorial tax system or lower worldwide corporate income tax rate. As many of the United States' largest trading partners have lowered their corporate income tax rates in recent years, US companies face a growing disadvantage in the global marketplace for cross-border acquisitions. In some cases, US companies themselves have become targets of non-US competitors.

Example: Purchasing a foreign company

The US worldwide tax system disadvantages US multinationals when entering new markets

A US-incorporated multinational seeks to enter a rapid growth emerging market. The US multinational has found a local foreign company that, if acquired, would give it an ideal foothold in the market. A non-US multinational in another foreign country is competing to acquire the local company and both potential acquirers believe it will produce net income totaling \$50 million pre-tax. The corporate income tax rate in the emerging market is 15% but since the United States has a worldwide tax system the US-incorporated multinational is unable to take

advantage of the lower rate since it must pay the host country tax plus the US repatriation tax, resulting in an after-tax value of \$32.5 million. Under current law, the US-incorporated multinational could reinvest the target's earnings in the host country rather than repatriating those earnings to the US and would not be subject to US tax on such earnings on a current basis, but still must account for the repatriation tax when evaluating the deal.

The non-US multinational is domiciled in a country with a territorial tax system and, thus, would only have to pay the host country tax, leaving it \$42.5 million post-tax. The non-US multinational is able to offer \$33 million, which is more than all the post-tax income (assuming repatriation) the US company could expect to earn, but still low enough that the non-US multinational can expect to book nearly a 30% profit of \$9.5 million.

Purchasing a foreign company

US multinational

Pre-tax value	\$50.0m
Host country tax (15%)	-\$7.5m
<u>US repatriation tax (20%)</u>	<u>-\$10.0m</u>
After-tax value	\$32.5m

Non-US multinational

Pre-tax value	\$50.0m
Host country tax (15%)	-\$7.5m
<u>Domestic tax (0%)</u>	<u>-\$0.0m</u>
After-tax value	\$42.5m

In this example, the worldwide tax system puts the US multinational at a competitive disadvantage when bidding to enter this rapid growth market. The advantage enjoyed by the non-US multinational is due to the territorial tax system in its home country and not the tax rate in its resident jurisdiction. The foreign country's territorial system enables resident companies to be more competitive when pursuing their business strategies globally. In this example, if the United States had a territorial tax system the US multinational would not have been at a disadvantage and could have bid competitively in the emerging market. As noted above, the US-incorporated multinational could choose to reinvest in the target company, which would defer the cost of its US tax.

Example: Purchasing a US subsidiary

The United States' high statutory corporate income tax rate and worldwide system creates incentives for foreign companies to acquire US exporters

A US multinational wants to reconfigure its business to focus on fewer industries and is selling a US subsidiary that does not fit this plan. The US subsidiary does all of its manufacturing in the United States and does 60% of its distribution in the United States and 40% outside the United States from exports around the world. A US acquirer would pay US tax on income from domestic sales, host country tax on income from foreign distribution activity, plus the US repatriation tax on income from foreign sales, resulting in post-tax valuation of \$162.5 million for the US manufacturer.

The non-US acquirer would pay US tax on income from domestic sales and host country tax on

Purchasing a US subsidiary

US multinational

Pre-tax value	\$250.0m
US tax on domestic sales (35%)	-\$52.5m
Host country tax on foreign sales (24%)	-\$24.0m
Repatriation tax on foreign sales (11%)	-\$11.0m
After-tax value	\$162.5m

Non-US multinational

Pre-tax value	\$250.0m
US tax on domestic sales (35%)	-\$52.5m
Host country tax on foreign sales (24%)	-\$24.0m
Repatriation tax on foreign sales (0%)	-\$0.0m
After-tax value	\$173.5m

income from foreign distribution activity, but is resident in a country with a territorial tax regime and therefore has the potential to restructure the business so that future foreign activity is done outside the acquired US subsidiary and therefore outside the US tax system.¹³ The after-tax value for the non-US acquirer would be up to \$173.5 million. In this case, the non-US acquirer could outbid a US acquirer and still book up to an \$11 million profit.

The difference in after-tax valuation between a US and non-US acquirer is created by a combination of the United States' high corporate income tax rate and its worldwide tax system. For example, if the United States lowered its corporate tax rate to 24% a US acquirer would face the same level of taxes as the non-US acquirer.

Example: Purchasing a US technology start-up

The high US statutory corporate income tax rate puts US companies at a disadvantage even when bidding against non-US companies that are also domiciled in countries with worldwide tax systems

A US multinational is bidding to acquire a promising technology-intensive start-up located in the United States, with the intention of commercializing its proto-types (currently worth \$25 million) and marketing them globally. The US multinational expects that with further investment the start-up's intellectual property (IP) would eventually produce \$150 million of future income from

global sales. A similar non-US multinational resident in a country that also has a worldwide tax system decides to compete against the US multinational to acquire the start-up with the intention of doing all future IP development in its home country.

The US acquirer would pay US tax on both the value of the proto-type and the value of any IP developed in the future, resulting in an after-tax valuation of \$113.75 million. The competing non-US acquirer would be required to pay US tax on the value of the prototype but would not

pay US tax on income from future IP development from R&D done outside the United States, resulting in an after-tax valuation of up to \$130.25 million.¹⁴ Note that, in this example, the non-US acquirer would pay a 24% home country tax on income from future IP.

Purchasing a US technology start-up

US multinational

Pre-tax prototype value	\$25.00m
Pre-tax value of future IP	\$150.00m
US tax on prototype (35%)	-\$8.75m
US tax on future IP (35%)	-\$52.50m
After-tax value	\$113.75m

Non-US multinational

Pre-tax prototype value	\$25.00m
Pre-tax value of future IP	\$150.00m
US tax on prototype (35%)	-\$8.75m
US tax on future IP (0%)	-\$0.00m
Home country tax on future IP (24%)	-\$36.00m
After-tax value	\$130.25m

The non-US multinational's up to \$16.5 million higher after-tax valuation of the start-up is created by the high US tax rate and not by different international tax rules. The result is that the non-US multinational has an advantage when bidding for the start-up against a US based company.

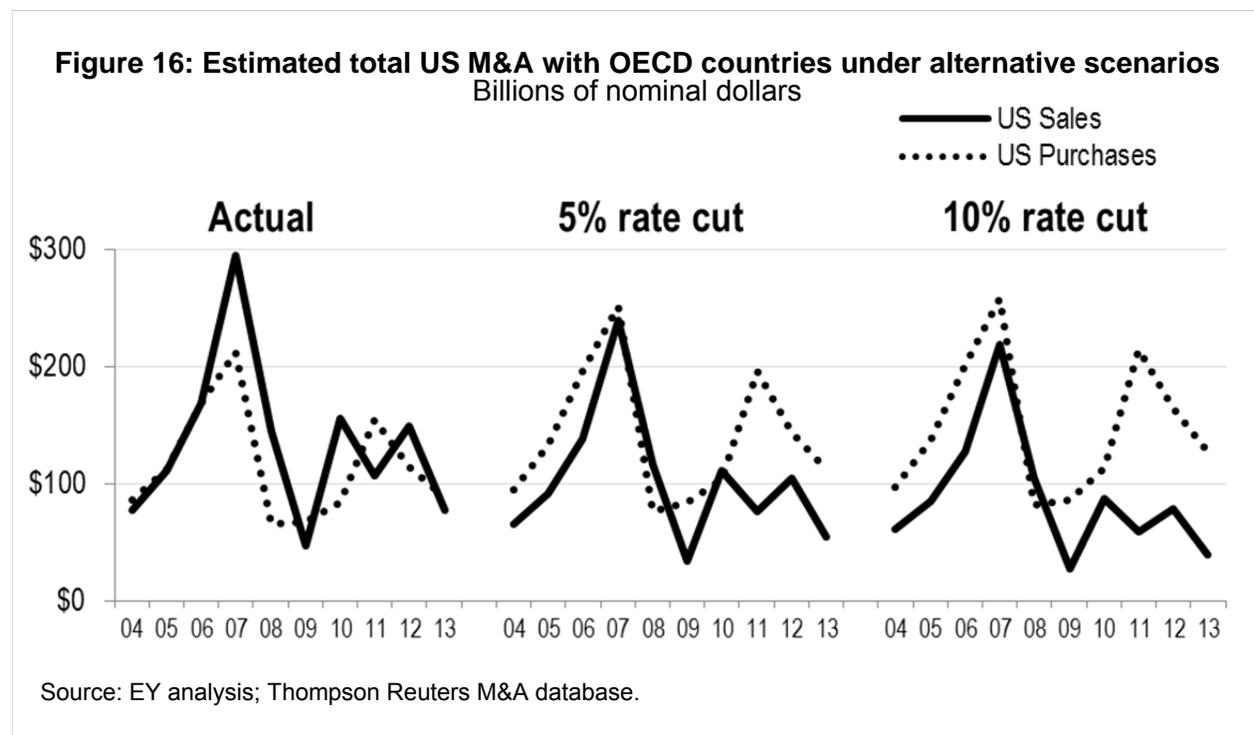
In this example, both the foreign and US multinational are resident in countries with worldwide tax systems, which demonstrates how a high tax rate alone can create a competitive disadvantage for US companies. Lowering the US tax on repatriated foreign income would make US businesses a less attractive target for acquisition by non-US companies.

IV. Estimating the impact of corporate income taxes on cross-border M&A

- ▶ *If the United States had enacted a 10-percentage point reduction in its statutory corporate income tax rate 10 years ago, it is estimated that the number of US companies and subsidiaries sold to foreign acquirers from OECD countries would have fallen from approximately 9,100 to approximately 7,800, a reduction of approximately 1,300 companies and subsidiaries.*
- ▶ *If such a rate reduction had taken place, it is estimated that the United States would have shifted from a \$179 billion deficit with OECD countries to a \$590 billion surplus, a \$769 billion shift.*

This report considered the potential impact of lower repatriation tax rates by analyzing data on over 25,000 M&A transactions among the 34 OECD countries from 2004 through 2013. A standard economic model for measuring cross-border trade and investment flows between countries was used to estimate the relationship between differences in tax policy and cross-border M&A activity between countries. The focus on repatriation tax rates by this report provides an indication of the likely impact notwithstanding the many other considerations that might come into play.

The model specification used for this analysis links the repatriation tax rate in both the country of the acquirer and the country of the target to the value of cross-border M&A flows for each country pair, while controlling for other factors. In this way, the analysis attempts to both capture and isolate the impact of the repatriation tax rate on the value of cross-border M&A. A more detailed description of the model and methodology is available as a technical Appendix to this report.



The following tax policy variables were included in the analysis: the effective average tax rate (EATR) in the target’s country, the repatriation tax rate between the acquirer’s country and target’s country, and the weighted average repatriation tax rate for the target’s country. To help isolate the tax impacts; common language, physical distance and shared borders were included to capture further pairwise country relationships, as well as other control variables. Data sources included the Thompson Reuters M&A database, the OECD, CEPII (a French research institute), the World Bank, and the EY *Worldwide Corporate Tax Guide*.

The results of the analysis can be understood with reference to alternative scenarios under which the US corporate income tax rate was 5-percentage points or 10-percentage points lower during the 10 years from 2004 to 2013 (Figure 16). Changes in annual US sales and purchases of cross-border M&A with OECD countries for these two tax policy scenarios were estimated based on the model’s estimate of the size of the relationship found in the historical data during this 10-year period. These estimates are for a reduction in the US statutory corporate income tax rate without any other changes. The estimated impacts could vary depending on the extent to which broadening the corporate income tax base applied to the operations of target companies.

Under the 5-percentage point rate reduction scenario, it is estimated that sales of US companies to foreign acquirers from OECD countries would have fallen from \$1.3 trillion to \$1.0 trillion over 10 years, a 22% decline (Figure 17). It is estimated that purchases of foreign companies in OECD countries by US acquirers would have risen from \$1.2 trillion to \$1.4 trillion, a 21% increase. Overall, it is estimated that the United States would have shifted from a \$179 billion deficit with OECD countries to a \$358 billion surplus, a \$537 billion shift.

Under the 10-percentage point rate reduction scenario, it is estimated that sales of US companies to foreign acquirers from OECD countries would have fallen from \$1.3 trillion to \$0.9 trillion over 10 years, a 33% decline (Figure 17). It is estimated that purchases of foreign companies in OECD countries by US acquirers would have risen from \$1.2 trillion to \$1.5 trillion, a 28% increase. Overall, it is estimated that the United States would have shifted from a \$179 billion deficit with OECD countries to a \$590 billion surplus, a \$769 billion shift.¹⁵

Figure 17: Estimated US M&A deficit/surplus under alternative scenarios
Billions of nominal dollars

	Total purchases	Total sales	Net
Actual	\$1,154	\$1,333	-\$179
5% rate cut	\$1,392	\$1,034	\$358
10% rate cut	\$1,481	\$891	\$590

Note: Total deal value for transactions with deal value available. Sales are classified by country of the target company. Purchases are classified by country of the ultimate parent of the acquiring company. Data are for transactions with OECD countries only.

Source: EY analysis; Thompson Reuters M&A database.

Box 1: Tax Reform – base broadening and territorial

The effects of the US corporate income tax system on cross-border M&A are illustrated in this report with scenarios involving simple reduction in the US statutory corporate income tax rate with no changes to the tax base. Any actual reduction in the corporate income tax rate is likely to be part of a larger tax reform package that may include base broadening measures. Tax reform could also encompass a shift from a worldwide to a territorial system for the taxation of foreign source income by US multinational corporations.

It is important to understand how base broadening as part of tax reform would affect the estimates presented in this report. Four considerations may suggest that base broadening is not likely to have a significant impact on the results presented by this report:

- One-time transition taxes, such as on unrepatriated earnings, have little effect on companies' forward-looking incentives and therefore would not affect cross-border M&A behavior.
- In recent tax reform plans, such as the "Tax Reform Act of 2014," put forward by former Chairman of the House Ways & Means Committee Dave Camp (R-MI), most of the largest base broadening measures have little effect on foreign earnings. For example, the proposals to limit or repeal accelerated depreciation and/or the domestic production activities deduction have little effect on foreign source.
- Base broadening that affects foreign earnings is most relevant to the cross-border M&A market because it affects the repatriation taxes that disadvantage US companies. Base broadening that affects only domestic income would influence the overall attractiveness of the United States as an investment location.
- In the context of the US worldwide corporate income tax system, expanding Subpart F affects the timing but not the amount of the repatriation tax. This is because foreign earnings that would have paid US corporate income tax upon repatriation would instead be taxed currently if included in Subpart F. Similar logic applies to minimum taxes, though they may offer a lower rate than Subpart F. In both cases the loss of deferral increases the present value of the tax but also increases the present value of the repatriated income.

However, it should be noted that a reduction in the US corporate income tax rate without base broadening may reduce the benefit that foreign acquirers obtain by reducing the US tax base. A reduction in the US corporate income tax rate with base broadening might leave unchanged the benefit foreign acquirers obtain by reducing the US tax base.

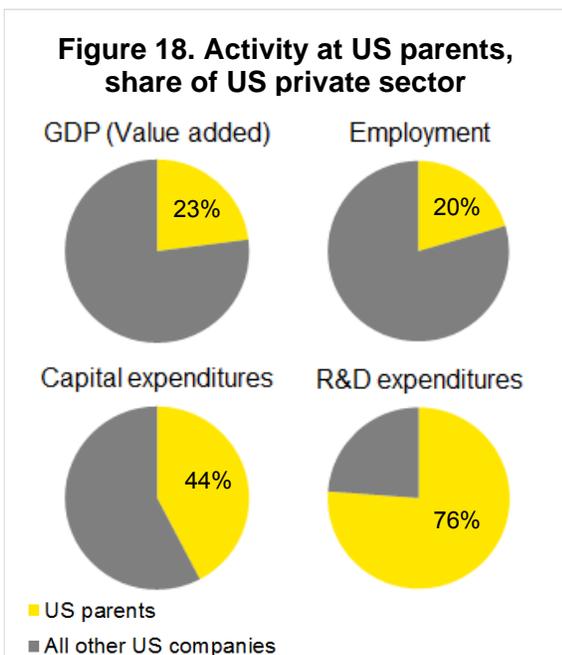
While this report does not present estimates of the impact on cross-border M&A of the United States moving to a territorial system, such a shift is likely to have a significant impact. In the repatriation tax framework used in this report, a shift to a territorial system of taxation can be thought of as setting all US repatriation taxes on active income to zero. A dividend exemption by itself would produce an effect on cross-border M&A volumes at least as large as the 10 percent tax rate reduction scenario (Figure 17). For many partner countries, the effective repatriation tax would already be zero under the 10 percent rate reduction scenario because their corporate income tax rate is greater than the 25 percent US corporate income tax rate assumed in that scenario. The additional effect of a dividend exemption would come from eliminating the US repatriation tax on profits repatriated from those countries with corporate income tax rates below 25 percent. The effect of other tax changes that increase the tax on foreign source income (e.g., thin capitalization provisions, a minimum tax, foreign tax credit limitations, etc.) would likely dampen the impact of moving to a dividend exemption on the cross-border M&A market.

It is estimated that adopting a 10-percentage point rate reduction would have also reduced the number of US companies and subsidiaries sold to foreign acquirers from OECD countries over 10 years from approximately 9,100 to approximately 7,800, a reduction of approximately 1,300 companies and subsidiaries. The estimated number is based on the estimated \$443 billion decrease in US M&A sales to foreign OECD acquirers under the 10-percentage point rate reduction scenario and the average M&A deal value of \$334 million for US companies and business units sold to foreign OECD acquirers over the 10 years. Under this estimation method, a 5-percentage point rate reduction scenario would have reduced by 800 the number of US companies and subsidiaries sold to OECD acquirers over 10 years.¹⁶

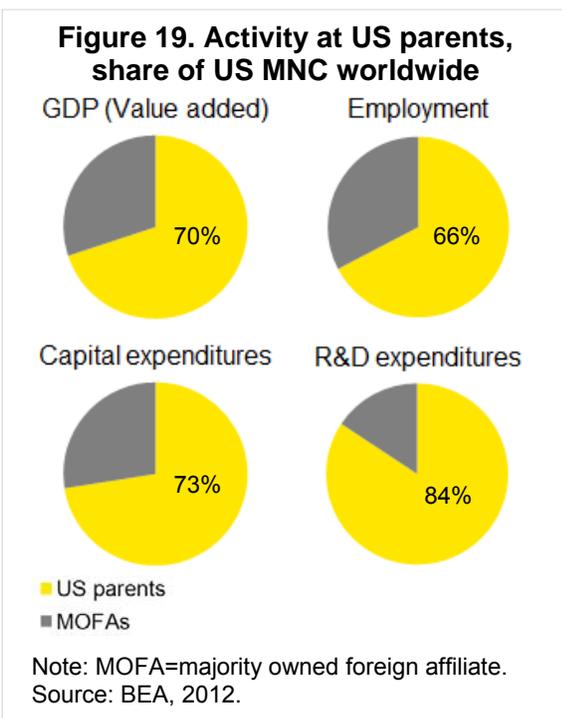
V. The economic value of US-headquartered companies

- ▶ *US parent companies maintain strong US supply chains – purchasing nearly 90% of their inputs from other US firms and employing one out of every 5 private sector workers.*

The US Bureau of Economic Analysis conducts periodic surveys of the operations of US multinationals. In 2012, one in five people working in the United States were employed by US-based multinational companies (MNCs), generating 23% of US GDP (more than \$3.2 trillion).¹⁷ Data show that worldwide investment, employment, and value added are concentrated in the US parents of US multinationals. The BEA defines the US parent company of a US MNC to include all domestic operations. In 2012, more than two-thirds of US MNC value added, employment, and capital expenditures were from domestic operations. Further, 84% of worldwide R&D expenditures by US MNCs occurred at home.



GDP (value added). In 2012, US parents generated more than \$3.2 trillion of US GDP. Overall, GDP generated by US parents grew 2.7% in 2012, driven by growth in the manufacturing and finance and insurance sectors. In 2007, US MNCs comprised more than half of US manufacturing sector GDP.¹⁸



Employment & wages. US MNCs employed one out of every 5 private sector workers in 2012. These more than 23 million employees earned a total of \$1.8 trillion in compensation, averaging \$76,538 per worker – 29% higher than the US average for all private sector companies of \$59,555.

In 2012, US MNCs and their majority-owned foreign affiliates (MOFAs) employed 35 million workers worldwide, of which 66% were employed in the United States. Since 2009, US MNC worldwide employment has remained fairly stable, averaging 34.5 million workers. During this period, the US share averaged 66%.

Capital expenditures. In 2012, US parents made \$584 billion of capital investments in new US property, plant, and equipment, averaging \$25,288

\$584 billion of capital investments in new US property, plant, and equipment, averaging \$25,288

per worker, more than double the US private sector average and representing 44% of all private, non-residential tangible investment.

R&D expenditures. In 2012, US-based MNCs invested a total of nearly \$275 billion worldwide in research and development – with the vast majority (\$230 billion; 84%) occurring in the United States. Further, MNCs were responsible for more than three-quarters of all R&D expenditures in the United States in 2012.¹⁹ This commitment to domestic investment increases the value of intellectual property registered in the United States. A 10% increase in sales by overseas affiliates is estimated to increase US R&D by their US parents by nearly 5%.

Trade. Trade associated with US parents or their foreign affiliates accounted for nearly half of US goods exports in 2012. It is estimated that a 10% increase in sales by overseas affiliates increase exports by US parents to their overseas affiliates by 6.5%.²⁰

Indirect & induced economic impact. The economic contribution of US-based companies extends beyond the office doors to include their US supply chain and the local businesses that sell to parent company employees.

In 2010, US parents maintained a strong US supply chain – purchasing nearly 90% of their inputs from other US firms, totaling \$6.1 trillion in supplier purchases that year.²¹ Suppliers to US MNCs and spending by their employees created an additional 41.2 million jobs in 2007. Total employment generated by US MNCs, both directly and indirectly, is 42% of total US private employment.²²

US-based firms also support domestic economic activity through employee compensation and dividends paid to US shareholders. In its 2010 study, the McKinsey Global Institute found that workers employed by US-based parent firms in 2007 earned wages 13% to 37% higher than the national average, depending on occupation. These high-wage jobs support additional US GDP, jobs, and income as employees spend their incomes at local restaurants, retailers, and other businesses – the induced economic impact.

US MNCs increase US income through dividends paid to US shareholders. In 2007, US residents directly or indirectly (through pension, retirement, or insurance accounts) held 86% of the total market value of US companies.²³ The portion of these earnings that are spent in the United States supports additional GDP, jobs and, income as well as tax revenue through federal and state individual income taxes.

Domestic impact of US MNC foreign affiliates. As US MNCs grow to meet global demand, they may also increase their headquarters activity in the United States. As the typical US MNC expands operations in its foreign affiliates, it is estimated that for each dollar of additional wages paid in the foreign affiliate, US wages increase by \$1.84 as US parent operations expand. Each dollar of foreign investment by US MNCs leads to \$3.50 of additional investment in the United States.²⁴

VI. Limitations and caveats

The discussion of the impact of the US income tax on cross-border M&A in this report is based on standard methodologies and publicly available data. However, the reader should be aware of certain limitations with respect to the analysis:

- ▶ The corporate income tax rate reduction scenarios in this report are being used as a sensitivity analysis to illustrate the magnitude of the estimated tax effects on M&A transactions. They do not represent an evaluation of any particular tax reform plan.
- ▶ The estimates presented in this report are for a reduction in the US statutory corporate income tax rate without any other changes. The estimated impacts could vary depending on the extent to which broadening the corporate income tax base applied to the operations of target companies.
- ▶ The analysis does not reflect or incorporate the potential impact of changes in US M&A activity on US revenues or related budgetary and fiscal impacts.
- ▶ Estimates of the number of companies and business units that would not have been sold to foreign OECD acquirers are based on the outputs of a statistical model and the average size of US M&A transactions and do not represent a claim that any particular company would or would not have been sold.
- ▶ Values reported in the rate reduction scenarios represent standard point estimates generated by regression analysis. Standard errors have been omitted for ease of presentation but do not alter the findings presented. A description of the methodology and estimation results for the regression analysis is available separately in a technical appendix.
- ▶ The analysis of the size distribution of cross-border, majority acquisition transactions completed between 2004 and 2013 is based on deals with value information, approximately 39% of relevant transactions in the Thompson Reuters M&A database.
- ▶ This study relies on publically available data sources, including Thompson Reuters M&A database, the OECD, CEPII (a French research institute), the World Bank, and the EY *Worldwide Corporate Tax Guide* and its conclusions are only as reliable as the available data.
- ▶ The repatriation tax on companies' foreign earnings reflects the statutory corporate income tax rate, not their tax paid. This measure provides an easy to understand metric to highlight the role of the corporate income tax, but other factors, such as deferral of tax on unrepatriated earnings, and changes in leverage and business structure could affect companies' tax liability. Also, the analysis does not include withholding taxes paid to host country governments. Withholding tax is often reduced by tax treaties between countries.
- ▶ Statutory corporate income tax rates were used because they are available on a consistent and comparable basis for all countries in the analysis. Effective tax rates on corporate income are likely lower than the statutory corporate income tax rates in many countries.

VII. Summary

The United States has the highest statutory corporate income tax rate among developed nations and is the only developed country with both a worldwide tax system and a corporate income tax rate above 30%. The combination of a high rate and a worldwide system creates a substantial “repatriation tax” when US companies repatriate income from their foreign subsidiaries. As a result, foreign companies can afford to bid more for acquisitions in the United States and abroad as compared to US companies.

With \$24.5 trillion in cross-border M&A transactions over the past decade, this market plays an important role in helping companies reshape themselves in response to a changing economy. Divesting some lines of business and acquiring others allows companies to enter new markets, access distribution channels, develop new technologies, and release capital for reinvestment. For small, innovative companies in particular, M&A is a way to match their new ideas with the resources needed to bring them to market. As an indication of the importance of this market for start-ups, this report finds that the cross-border M&A market is dominated by small transactions with 50% less than \$29 million.

M&A is also important because it provides a vehicle for capital to continually be reallocated to its best and highest use from an economic perspective. Buying and selling business units or companies naturally unleashes capital to those economic participants most well-suited to deploy the capital in global markets. As capital is reallocated across the economy, it raises the productive capacity of the overall capital stock.

This report analyzes the cross-border M&A market and how the US corporate income tax disadvantages US companies in this market. Over the past decade, US companies had a deficit with OECD countries in the market for cross-border M&A transactions of \$179 billion. Differences in statutory corporate income tax rates and the over 25,000 cross-border M&A transactions among the 34 OECD countries were examined in a statistical model over the 2004-2013 period.

This report estimates that a 5-percentage point reduction in the US corporate income tax rate would have turned US companies in the aggregate from a net target to a net acquirer of \$358 billion in cross-border M&As and that over 800 US companies and subsidiaries would not have been bought by foreign companies from 2004 to 2013. A 10-percentage point reduction is estimated to result in larger impacts with US companies moving to a surplus of \$590 billion with 1,300 US companies and subsidiaries not having been bought by foreign companies over the same period. This report also suggests that moving to a territorial tax system would have similar impacts.

The impact of the US corporate income tax on the cross-border M&A market is a complex but crucial component of the ongoing US tax reform debate. Corporate income tax rates affect not only the competitiveness of global US companies, but also the ownership and management of global capital. If the disadvantages in our system persist, they could have long-lasting effects on productivity, wages, and living standards.

Endnotes

¹ The statistical analysis was also conducted for a broader sample of 71 countries in the Thompson Reuters M&A database. Despite the incomplete data for some of the countries, the analysis for the broader group of countries yielded similar results as compared to the analysis for the OECD countries.

² A growing body of research indicates that workers bear a significant share of the corporate income tax in the form of reduced employment opportunities and lower wages. For example, see Mihir A. Desai, C. Fritz Foley and James R. Hines, "Labor and Capital Shares of the Corporate Tax Burden: International Evidence," Prepared for International Tax Policy Forum Conference, Who Pays the Corporate Tax in an Open Economy, December 18, 2007; Alison R. Felix, "Passing the Burden: Corporate Tax Incidence in an Open Economy," Federal Reserve Bank of Kansas City, October 2007; Alison R. Felix and James R. Hines, "Corporate Taxes and Union Wages in the United States," NBER Working Paper No. 15263, August 2009; Robert Carroll and Gerald Prante, "Corporate Income Taxes and Wages: Evidence from the 50 States," Tax Foundation Working Paper, 2010; Kevin Hassett and Aparna Mathur, "Spacial Tax Competition and Domestic Wages," American Enterprise Institute Working Paper, November 2010; Li Liu and Rosanne Altshuler, "Measuring the Burden of the Corporate Income Tax Under Imperfect Competition," Oxford University Center for Business Taxation, WP 11/05, April 27, 2011; and Arulampalam, Michael P. Devereux and Georgia Maffini, "The Direct Incidence of Corporate Income Tax on Wages," Oxford University Centre for Business Taxation, WP 07/07, May 2011. For a recent review of these studies, see Jennifer C. Gravelle, "Corporate Tax Incidence: A Review of Empirical Estimates and Analysis," Congressional Budget Office Working Paper 2011-01, June 2011.

³ John Doukas and Nickolaos Travlos, "The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions," *Journal of Finance*, vol. 43, no. 5, December 1988.

⁴ Michael Porter, *The Competitive Advantage of Nations*, Free Press, 1990.

⁵ Research finds that cross-border M&A produces a broad range of economic benefits. For example, see John Doukas and Nickolaos Travlos, "The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions," *Journal of Finance*, vol. 43, no. 5, December 1988; and Randall Morck and Bernard Yeung, "Why Investors Value Multinationality," *Journal of Business*, vol. 64, no. 2, April 1991.

⁶ Although the Thompson Reuters M&A database clearly defines acquirers and targets, there are a relatively small number of transactions that are organized as a merger of equals, which are excluded from this analysis. The companies included in the database comprise all business forms and are not necessarily limited to C corporations.

⁷ Kevin Barefoot, *US Multinational Companies; Operations of U.S. Parents and their Foreign Affiliates in 2010*, BEA, November 2012.

⁸ Pre-reform averages were computed over the 2004-2009 period and post-reform averages were computed over the 2010-2013 period. The overall 2004-2013 time period was selected for consistency with the M&A data presented in Figure 8 and elsewhere in this report. Research using an econometric model to control for other factors that might have influenced the level of M&A activity estimated that Japan's reform of repatriation taxes led to a 31.9% increase in the number (not value) of acquisitions by Japanese companies and that the UK's tax reforms led to a 3.9% increase in acquisitions. See Lars P. Feld, Martin Ruf, Uwe Scheuering, Ulrich Schreiber, and Johannes Voget, "Effects of Territorial and Worldwide Corporation Tax Systems on Outbound M&As," Center for European Economic Research, Discussion paper no. 13-088, 2013.

⁹ The transfer of ownership of US assets out of the United States generally has US tax consequences. A US company that is acquired by a non-US company will still be subject to US tax as it was before the acquisition. The potential tax advantage for a non-US company acquiring a US company relates in large part to the tax treatment of future growth that can occur outside of the US company.

¹⁰ The difference between the US corporate income tax rate and the rate among OECD countries is smaller when weighting other countries corporate income tax rates by their GDP to account for differences in their size. Moreover, the combined federal-state corporate income tax rate on foreign source income was about 35.4% in 2014, as compared to 39.1% as reported by the OECD, when taking into account that foreign earnings of US incorporated corporations are lightly taxed if at all at the state level (e.g., have territorial-like tax systems). Comparing the 35.4% US corporate income tax rate to the GDP weighted average (non-US) corporate income tax rate of 28.2% results in a repatriation tax of 7.2% in 2014.

¹¹ In the United States, foreign earnings of US-incorporated corporations are lightly taxed if at all at the state level; therefore the federal statutory rate is used in the illustrations rather than the combined federal and state statutory rate of 39%.

¹² Phillip Dittmer, "A Global Perspective on Territorial Taxation." Tax Foundation, August 10, 2012.

¹³ Such a restructuring would have US tax consequences.

¹⁴ A move of existing IP out of the United States would have tax consequences. Moreover, some of the value of future IP likely would be attributable to the original IP.

¹⁵ The statistical analysis was also conducted for a broader sample of 71 countries in the Thompson Reuters M&A database. Despite the incomplete data for some of the countries, the analysis for the broader group of countries yielded similar results as compared to the analysis for the OECD countries. Other research using different methods also came to similar conclusions. See Lars P. Feld, Martin Ruf, Uwe Scheuering, Ulrich Schreiber, and Johannes Voget, "Effects of Territorial and Worldwide Corporation Tax Systems on Outbound M&As," Center for European Economic Research, Discussion paper no. 13-088, 2013.

¹⁶ The average deal value for US M&A sales to foreign OECD acquirers are based on M&A transactions for which deal values are reported. Of all the US targets sold to foreign OECD acquirers from 2004 to 2013, only about 44% have reported deal values. If the transactions with missing deal values are also accounted for, the estimated number of US companies and business units that likely would not have been sold to foreign OECD acquirers could be greater than the estimated presented in this report.

¹⁷ Unless otherwise noted, data on the operations of US parents and their majority-owned foreign affiliates are based on the most recent information published by the US Bureau of Economic Analysis (BEA) in their survey of US direct investment abroad. US parent companies are defined by the BEA to include the ultimate parent and any US corporation whose voting securities are more than 50% owned by the US corporation above it. See Kevin Barefoot, *US Multinational Companies; Operations of US Parents and their Foreign Affiliates in 2010*, BEA, November 2012.

¹⁸ Jonathan Cummings et al., *Growth and Competitiveness in the United States: The role of its multinational companies*, McKinsey Global Institute, June 2010.

¹⁹ NSF reported that US companies invested nearly \$302 billion in research and development in 2012 and \$294 billion in 2011. See Raymond M. Wolfe, *Business R&D Performance in the United States Tops \$300 Billion in 2012*, October 2014.

²⁰ Bureau of Economic Analysis, 2012 and McKinsey Global Institute, 2010.

²¹ Slaughter, Matthew. *American Companies and Global Supply Networks; Driving US Economic Growth and Jobs by Connecting with the World*. Prepared for the Business Roundtable, January 2013.

²² Business Roundtable. *Globally Engaged American Companies Provide Many Benefits for American Workers and the American Economy*, March 2013.

²³ Data from the US Federal Reserve Flow of Funds not reported separately for US MNCs. See: McKinsey, 2010.

²⁴ Business Roundtable, March 2013.