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THE EFFECTIVE TAX RATES OF THE LARGEST US AND EU MULTINATIONALS

Reuven Avi-Yonah¹ and Yaron Lahav²

1. Introduction

The United States has the second highest statutory corporate tax rate in the OECD (after Japan). This has not always been the case: After the 1986 tax reform act lowered the US rate from 46% to 34%, the US had one of the lowest statutory corporate tax rates in the OECD. However, in the past 25 years, the US rate has remained essentially unchanged (it was raised to 35% in 1993), while most other OECD countries reduced their statutory rate so that the OECD average statutory corporate tax rate is 25.5%.³

Not surprisingly, this situation has led to numerous calls for lowering the US statutory corporate tax rate, on the grounds that it is making US-based multinationals uncompetitive vis-a-vis their counterparts in other OECD countries. Recently, even the Obama Administration, following the lead of some Democrats in Congress, has supported lowering the corporate tax rate.⁴ The current debate is less about whether the corporate rate should be lowered and more about whether such a reform should be revenue neutral, i.e., paid for by eliminating corporate tax expenditures such as deferral, accelerated depreciation, and the tax credit for domestic production.

At the same time, however, there have been a plethora of conflicting claims about the effective tax rate borne by US-based multinationals. Some have stated that like the statutory rate, it is among the highest in the OECD, while others have claimed that it is among the lowest.⁵ This debate is important because it is the effective corporate tax rate

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³ This is the unweighted average of the OECD excluding the US. The weighted OECD average excluding the US, which takes into account the relative size of various economies, is 29.6%.

⁴ Obama Backs Corporate Rate Cut Along With Tax Simplification, Bloomberg, Jan. 26, 2011.

⁵ See, e.g., Amy S. Elliott, *Large U.S. Firms' Effective Tax Rates Surpass OECD Average, Survey Says*, 2011 TNT 73-3 (April 15, 2011); Kevin A. Hassett and Aparna Mathur, *Report Card on Effective Corporate Tax Rates: United States Gets an F*, 1 TAX POLICY OUTLOOK, AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH (February, 2011); but cf. David Kocieniewski, *U.S. Business Has High Tax Rates but Pays Less*, NEW YORK TIMES (May 2, 2011); Chuck Marr and Brian Highsmith, *Six Test for Corporate Tax Reform*, CENTER ON BUDGET AND POLICY PRIORITIES (February 28, 2011); *U.S. is One of the Least Taxed Developed Countries*, CITIZENS FOR TAX JUSTICE (June 30, 2011); *Analysis: 12 Corporations Pay Effective Tax Rate of Negative 1.5% on \$171 Billion in Profits: Reap \$62.4 Billion in Tax Subsidies*, CITIZENS FOR TAX JUSTICE (June 1, 2011).

and not the statutory rate that most directly affects the competitiveness of US-based multinationals against multinationals based in other OECD jurisdictions.

However, neither side has data to support its claims. Almost all existing studies of the effective tax rate on US-based multinationals focus only on those companies, and do not attempt to compare them with multinationals based in other countries.⁶ The only exception is a recent study commissioned by the Business Roundtable and executed by PricewaterhouseCoopers.⁷ However, as discussed below, this study suffers from numerous flaws, the most important of which is that it includes 2000 companies from 58 foreign countries and therefore has many companies that are not serious competitors of large US-based multinationals (e.g., companies based in Morocco, Kazakhstan, Nigeria, Jordan, Lebanon and Oman).

The competitiveness issue is primarily about the ability of the largest US multinationals to compete with their counterparts based in other countries, and especially those based in the EU (since Japanese multinationals are known to be subject to higher statutory and effective tax rates than US ones, and therefore they are less relevant to this debate).⁸ We have therefore decided to study the overall effective tax rates of the largest 100 US-based multinationals over the past decade, and compare them with the effective tax rates of the largest 100 EU-based multinationals.⁹ In our opinion, this is the comparison that is most relevant to resolving the competitiveness issue, because (a) it focuses only on large multinationals in the most relevant jurisdictions¹⁰, (b) it focuses on the overall effective tax rate borne by each group of multinationals, and not on other issues such as the statutory tax rate, the effective tax rate on foreign source income, or whether dividends from active income can be repatriated tax free. Those issues, while important for other

⁶ See, e.g., Scott D. Dryeng and Bradley P. Lindsey, *Using Financial Accounting Data to Examine the Effect of Foreign Operations Located in Tax Havens and Other Countries on US Multinational Firms' Tax Rates* (2009); Harry Grubert, *Foreign Taxes, Domestic Income, and the Jump in the Share of Multinational Income Abroad: Sales Aren't Being Globalized, Only Profits* (2009); Rosanne Altshuler and Harry Grubert, *The Three Parties in the Race to the Bottom: Host Governments, Home Governments and Multinational Companies*, 7 Fla. Tax Rev. 153 (2005); George K. Yin, *How Much Tax Do Large Public Corporations Pay? Estimating the Effective Tax Rates of the S&P 500*, 89 Va. L. Rev 1793 (2003). The Swenson and Lee and Markle and Shackelford studies discussed below focus on ETRs of countries, although they base that on studying the financial data of MNEs from those countries.

⁷ http://businessroundtable.org/uploads/studies-reports/downloads/Effective_Tax_Rate_Study.pdf.

⁸ Charles Swenson and Namryoung Lee, *The Jury is In: US Companies are Overtaxed Relative to Their International Competitors*, at www.cpa2biz.com/Content/media/Producer_Content.Newsletters/Articles_2008/Tax/Jurinin.jsp. (Japanese median ETR for 2006-7 was 41%); Kevin S. Markle and Douglas Shackelford, *Cross-Country Comparisons of Corporate Income Tax Rates*, NBER Working Paper 16839 (Feb. 2011) (in a study of 11,602 public corporations from 82 countries for 1988-2009, Japanese firms always faced the highest ETRs).

⁹ We also calculated AETRs for the 150 largest multinationals listed in the most recent UN World Investment Report, for US, EU and Asian multinationals. Over the last 10 years (2001-2010), effective tax rate for American, EU and Asian companies was 33, 37 and 38 percent respectively. For FYE2010, the rates for American, EU and Asian companies are 31, 31 and 35 percent respectively. For FYE2009, the rates for American, EU and Asian companies are 26, 33 and 39 percent respectively. Thus, in no case was the AETR for the US companies higher than that of the EU or Asian based companies. Note, however, that this list only includes the 23 largest US-based multinationals (as ranked by the UN).

¹⁰ For the US, the Forbes 2000 list for 2011 includes 536 companies. The top 100 (19%) account for 57% of the revenues and 77% of the profits of those companies, suggesting that to study competitiveness we should focus on these companies.

purposes (e.g., transfer pricing or the “lock out” effect), are in our view irrelevant to the competitiveness issue.

2. Methodology

To find the 100 biggest U.S. companies and the 100 biggest European companies, we used the list of Forbes 2000 biggest public companies for 2011, as published in Forbes magazine’s website¹¹. We then constructed our database by choosing the most highly ranked U.S. and European companies respectively. The list of the 200 chosen companies is presented in Table 1.

We then searched the COMPUSTAT database (both North America and Global) to find financial data of the chosen companies. For every company in our list of chosen companies, we found the pretax income, net income and current income tax for the fiscal years 2001 – 2010.

If, for some reason, a certain company did not have any financial data available on the COMPUSTAT database for all fiscal years mentioned, we did not include it in our database and replaced it by the next highest ranked company on the Forbes 2000 list. We then translated all financial data into U.S. dollars using annual exchange rates taken from OANDA website¹². At the end of this process, we obtained a database of 200 companies (100 U.S. companies and 100 European companies) with at least one year of financial data between 2001 and 2010. Table 2 describes the distribution of companies by country of residence.

Comparing the effective tax rates in each region (Europe and the U.S.), we calculated aggregate effective tax rate as follows:

$$AETR_{i,t} = \frac{\sum_j T_{j,t}}{\sum_j PI_{j,t}}$$

where $AETR_{i,t}$ is the aggregate effective tax rate of region i during period t . The numerator is the sum of all current income taxes paid by the companies residing in region i (indexed j) during period t and the denominator is the sum of all pretax income paid by the companies residing in region i during the same period. Naturally, the COMPUSTAT database may not have the relevant data to calculate this measure for all companies during all fiscal years. For this reason, we only used available data that can be found either directly (i.e. both pretax income and current income tax are available) or indirectly (i.e. either pretax income or current income tax can be found by adding current and deferred income tax to net income or subtracting deferred income tax and net income from pretax income respectively).

¹¹ See www.forbes.com/global2000.

¹² See www.oanda.com/currency/converter.

The *AETR* is therefore a measure of effective tax rate paid by the business sector in every region. Our decision to use aggregate measures in our study is a result of (what we see as) a bias that can occur when using some kind of average (either weighted or not) of effective tax rates of individual companies. This bias is more significant when companies have a relatively low (or even negative) pretax income. When this is the case, all deviation from the current (say, 35% in the case of U.S. companies) tax provision may strongly affect the effective tax rate. To illustrate this, consider the following example with two companies, A and B. Both companies' revenues in a given year equal \$1,000,000. The pretax profits, however, are different and equal \$100,000 and \$10,000 respectively. If both pay 35% of pretax income as income tax, then the *AETR* is 35%. Assume now that there is a tax credit to company A on the amount of \$2,000. This adjustment will decrease the effective tax rate of company A by approximately 6% (from 35% to 33%). However, if the same adjustment was made to company B, the effective tax rate would decrease by approximately 57% (from 35% to 15%). This difference would also affect the average effective tax rate if weighted by revenues. If the tax adjustment was made to company A, the new average effective tax rate would be 34%. If, on the other hand, the adjustment was made to company B, the new average effective tax rate would be 25%. A similar example can show biased calculations when the average effective tax rate is weighted by any variables other than pretax profit.

Several ways are used in the literature to avoid this bias. One way (used in the PwC study mentioned above) is to eliminate outliers. It is reasonable to assume that relatively low (or negative) pretax income generates either too high or too low (or negative) effective tax rates. For this reason, in cases where either too high or too low effective tax rate is detected, the observation is eliminated. However, it is our view that outliers in this context are part of the data. Furthermore, when the aggregate effective tax rate is calculated the way we do, relatively low pretax income and relatively low income tax will have relatively low effect on the measure. A tax credit to a company with low or negative pretax income is not an outlier. It should therefore be treated the way it is: part of the total income tax collected by the tax authority during the tested period.

In other cases, it is possible that such elimination will result with keeping the outliers. To illustrate this, consider the above example and assume that the researcher chooses to exclude companies with non-positive effective tax rates. Assume now that company A received a tax credit of \$20,000 and company B received a tax credit of \$3,500. The researcher will exclude company B because of a relatively small tax adjustment, where company A will still be part of the data with a much larger tax adjustment. To sum, excluding outliers does not ensure the isolation of companies with reasonable effective tax rate on one hand, and does not provide accurate results on the other hand.

Another way is to aggregate data across periods. If a certain company showed an abnormal tax rate in a certain year, then aggregating income taxes over several years should dismiss small or insignificant deviations from standard tax rate levels. For this reason, in addition to annual analysis, we also provide results across ten years of study.

3. Results

AETR values of each region are presented in Table 3 for different fiscal years and for the last decade. The table shows that in eight out of ten years, the European *AETR* is higher than the U.S. *AETR*. In addition, the European *AETR* is also higher for the period 2001 – 2010.

As can be seen in table 3, results for the fiscal year 2008 show abnormally high *AETRs*. We believe that it is somehow connected to the economic downturn that stroke at the beginning of that year. For this reason, and in order to maintain the comparability of the results, we excluded this year from the calculated *AETR* for the decade and present in the second row from the bottom the *AETR* for the fiscal years 2001 – 2007, 2009 and 2010. Lastly, in case abnormality persisted to later year, we present in the bottom row aggregated results for the fiscal years 2001 – 2007 only. Overall, these adjustments resulted in minor modifications to the initial results presented for the decade (third row from the bottom). We can therefore conclude that according to the analysis, US companies pay, on average, effective tax rate of approximately 30%, and European companies pay, on average, effective tax rate of approximately 34%.

Figure 1 describes the distribution of companies from each region by industry. The figure shows that the distribution is relatively similar across regions. We can also learn from the figure that in both regions, about half the companies are defined as manufacturers. Table 4 shows the *AETRs* of each region for the years 2001 – 2011 for each industry segment separately. According to the table, The US *AETRs* are lower in the manufacturing, transportation, services and public administration segment, while the European *AETRs* are lower in the mining, trade and finance segments.

4. Discussion

Our results are the opposite from those found in the PwC study, even though the PwC study used the same methodology (i.e. calculated *AETR* as aggregate income tax divided by aggregate pretax income). However, in our opinion the PwC study is flawed, and should not be taken as an indication that US based multinationals are subject to a higher *AETR* than their counterparts from other countries. The reasons for this conclusion are as follows:

1. PwC used all 2000 companies in the Forbes Global database, while we used only the largest 200 (100 U.S. and 100 EU). As explained above, in our opinion focusing on the largest companies is more closely related to competitiveness.
2. PwC calculated results only for the years 2006-2009, while we calculated between 2001 and 2010. Including a longer time frame improves the reliability of our results.
3. PwC compared U.S. companies to those from 58 other countries, not to European companies as a group (although they did compare U.S. to OECD countries). We used the

biggest 100 U.S and biggest 100 European companies. In our opinion this method is more relevant to the competitiveness question because the PwC includes many companies from small countries that do not provide serious competition to large US multinationals (e.g., Morocco).

4. PwC eliminated outliers, while we did not. As explained above, outliers can have an important impact on the results and there is no reason to assume they are irrelevant in this context. By eliminating outliers, PwC limited themselves to conventional cases only (i.e. only to those companies with effective tax rate in the 20%-40% range). In our opinion, this analysis is all about the outliers. We are looking for the special cases that make the difference. This is why we only include the top 100 companies from each group. In such a small number, any tax holiday should make the difference, so it is important to include outliers.

5. For income tax, PwC used current income tax and changes in deferred tax, while we used only current income tax. While over a ten year period one might expect that most deferred taxes will become current taxes, in our opinion using deferred taxes can be misleading because they just represent one accounting firm's best guess as to whether taxes will have to be paid. For example, under FIN 48 deferred taxes have to be booked if a transaction that avoids taxation has a 50% chance of being upheld by the courts if challenged by the IRS, but not if it has a 51% chance (in the opinion of the accounting firm). In addition, deferred taxes may or may not include the tax on repatriations, depending on the company's assertion that the earnings are or are not permanently reinvested overseas, which in turn assumes that the tax law relating to repatriations will remain unchanged. In our opinion these determinations are too flimsy a basis to calculate AETRs reliably. Using only current taxes insures that the AETR reflects taxes that have actually been paid or accrued.

6. Table 1 of the PwC study provides a list of 59 countries that were included in the analysis. But from tables A1 to A4 of the appendix to the PwC study, only 13 countries have more than 30 observations in each year. This means that for all the rest, it cannot be assumed (statistically) that the results properly represent the real populations. Among these 13, the U.S. ranked number 7 (right in the middle). In addition, the AETRs of some countries from the 59 are based on one observation, which cannot be representative.

In contrast with the PwC study, our results are consistent with previous studies that have focused on comparing the ETRs of various jurisdictions.¹³ For example, Markle and Shackleford compared the US effective corporate tax rate in 2005-2009 with the ETRs of Canada, France, Germany, Japan and the UK and found that the US ETR was 23% while the average weighted ETR of the other six countries was 24.5%.¹⁴ Swenson and Lee compared ETRs in 2006 and found that the US ETR was 29.5% while the OECD weighted average ETR was 28.4%.¹⁵ For the 15 largest countries, Swenson and Lee concluded that

¹³ For a summary of the literature see Jane G. Gravelle, *International Corporate Tax Rate Comparisons and Policy Implications* (CRS, March 31, 2011).

¹⁴ Kevin S. Markle and Douglas A. Shackleford, *Cross Country Comparisons of Corporate Income Taxes*, working paper (February 2011). This study compared ETRs of 11,602 public corporations from 82 countries from 1988 to 2009, so it is hard to draw conclusions from it in regard to competitiveness because it includes so many companies from small countries that do not pose serious competition to US MNEs.

¹⁵ Charles Swenson and Namyoung Lee, *The Jury is In: US Companies are Overtaxed Relative to Their International Competitors*, AICPA, July 17, 2008.

the weighted average ETR in 2006 was 28.7% (compared to the US 29.5%).¹⁶ A PwC study from 2008 concluded that the US ETR was 27.1% while the weighted average for the OECD excluding the US was 27.7%; for the fifteen largest countries outside the US, the weighted average ETR was 27.2%.¹⁷ As Gravelle concluded, these studies all confirm that “effective tax rates in the United States and in other countries are similar.”¹⁸

6. Conclusion

We believe that this study indicates that US-based multinationals do not face a tax induced competitive disadvantage in competing against EU-based multinationals. Even though the US **statutory** rate is ten percentage points higher than the average corporate statutory rate in the EU, the **effective** US corporate tax rate is the same or lower than the effective EU corporate tax rate for the largest US and EU multinationals.

Presumably, the reason for this result is that while the EU countries have a lower statutory rate, their tax base is larger because it has fewer exceptions. In fact, a comparison of the CFC rules of the US (Subpart F) and the major EU jurisdictions (UK, Germany, Italy, France) indicates that the EU CFC rules tend to be tougher than Subpart F because (a) they take into account the effective tax rate in the source country in deciding whether to tax income from a CFC, and (b) they take into account whether the CFC has a real presence in the source country. Under the EU rules, for example, a bank earning interest income in a tax haven is likely to be subject to current tax because the effective tax rate in the haven is low and the bank does not have a real presence in the haven. Under Subpart F the income will likely qualify for the active financing exception. In addition, the EU does not have anything like the US rules that enable US multinationals to shift profits from high tax to low tax CFCs without incurring a US tax cost (check the box and IRC 954(c)(6)).

This conclusion suggests that the US can in fact reduce its corporate tax rate to the EU average in a revenue neutral fashion without affecting the competitiveness of US-based multinationals, since such a move would simply result in a tax regime that is more similar to that faced by EU companies. Specifically, as many observers have recommended, it should be possible to abolish deferral altogether if the US rate were reduced sufficiently. Such a move would have tremendous simplification potential since it would be possible to get rid of both Subpart F and outbound transfer pricing enforcement, and it would eliminate the “lock out” problem as well (since repatriations would not be taxed). Alternatively, it should be possible to amend Subpart F to take the source country rate into account, so that an effective source rate that is below 90% of the US statutory rate would result in a Subpart F inclusion, while reducing the US statutory rate. Such a move, while not as radically simplifying as abolishing deferral, will significantly reduce the pressure on outbound transfer pricing while not resulting in a competitive disadvantage to US-based multinationals or inducing more profit shifting from the US to low taxed offshore locations, like the current rules do.

¹⁶ Ibid.

¹⁷ PricewaterhouseCoopers, *Global Effective Tax Rate Comparisons- Methodology and Results* (2008).

¹⁸ Gravelle, *supra*, 5. Gravelle also reports comparisons of marginal effective tax rates, but those are more suspect because they rely on a hypothetical firm, rather than actual taxes paid by real firms.

Table 1: The 200 chosen companies. The companies are ordered by their rank, sales, profits, assets and market value are as published by the Forbes 2000 website.

Rank	Company	Country	Sales	Profits	Assets	Market Value
1	JPMorgan Chase	United States	\$115.5 B	\$17.4 B	\$2,117.6 B	\$182.2 B
2	HSBC Holdings	United Kingdom	\$103.3 B	\$13.3 B	\$2,467.9 B	\$186.5 B
3	General Electric	United States	\$150.2 B	\$11.6 B	\$751.2 B	\$216.2 B
4	ExxonMobil	United States	\$341.6 B	\$30.5 B	\$302.5 B	\$407.2 B
5	Royal Dutch Shell	Netherlands	\$369.1 B	\$20.1 B	\$317.2 B	\$212.9 B
8	Berkshire Hathaway	United States	\$136.2 B	\$13 B	\$372.2 B	\$211 B
10	Citigroup	United States	\$111.5 B	\$10.6 B	\$1,913.9 B	\$132.8 B
11	Wells Fargo	United States	\$93.2 B	\$12.4 B	\$1,258.1 B	\$170.6 B
11	BNP Paribas	France	\$130.4 B	\$10.5 B	\$2,680.7 B	\$88 B
13	Banco Santander	Spain	\$109.7 B	\$12.8 B	\$1,570.6 B	\$94.7 B
14	AT&T	United States	\$124.3 B	\$19.9 B	\$268.5 B	\$168.2 B
16	Chevron	United States	\$189.6 B	\$19 B	\$184.8 B	\$200.6 B
18	Wal-Mart Stores	United States	\$421.8 B	\$16.4 B	\$180.7 B	\$187.3 B
19	Total	France	\$188.1 B	\$14.2 B	\$192.8 B	\$138 B
20	Allianz	Germany	\$142.9 B	\$6.7 B	\$838.4 B	\$62.7 B
22	ConocoPhillips	United States	\$175.8 B	\$11.4 B	\$156.3 B	\$109.1 B
24	Volkswagen Group	Germany	\$168.3 B	\$9.1 B	\$267.5 B	\$70.3 B
26	Nestlé	Switzerland	\$112 B	\$36.7 B	\$117.7 B	\$181.1 B
27	Vodafone	United Kingdom	\$67.5 B	\$13.1 B	\$236.6 B	\$148.2 B
28	ENI	Italy	\$130.5 B	\$8.4 B	\$176.1 B	\$96.8 B
29	American Intl Group	United States	\$77.3 B	\$7.8 B	\$683.4 B	\$67.1 B
29	GDF Suez	France	\$113.1 B	\$6.2 B	\$245.5 B	\$85.2 B
31	IBM	United States	\$99.9 B	\$14.8 B	\$113.4 B	\$198.1 B
31	Telefónica	Spain	\$81.3 B	\$13.6 B	\$166.5 B	\$113.3 B
35	Procter & Gamble	United States	\$79.6 B	\$11.2 B	\$134.3 B	\$172.2 B
36	Pfizer	United States	\$67.8 B	\$8.3 B	\$195 B	\$155.7 B
37	Goldman Sachs Group	United States	\$46 B	\$8.4 B	\$911.3 B	\$90 B
38	E.ON	Germany	\$124.6 B	\$7.9 B	\$205.1 B	\$64 B
39	ING Group	Netherlands	\$149.2 B	\$4.3 B	\$1,665.3 B	\$46.8 B
40	UBS	Switzerland	\$49.8 B	\$7.7 B	\$1,403 B	\$70.8 B
41	Barclays	United Kingdom	\$63.9 B	\$5.6 B	\$2,328.3 B	\$58.3 B
42	Hewlett-Packard	United States	\$127.2 B	\$9.1 B	\$119.9 B	\$90.3 B
43	Daimler	Germany	\$130.9 B	\$6 B	\$178.7 B	\$70.5 B
44	Société Générale	France	\$85.4 B	\$5.3 B	\$1,518.7 B	\$46.9 B
45	Siemens	Germany	\$103.5 B	\$5.3 B	\$135 B	\$110.2 B
47	Apple	United States	\$76.3 B	\$16.6 B	\$86.7 B	\$324.3 B
48	AXA Group	France	\$162.4 B	\$3.7 B	\$981.8 B	\$46.4 B
50	Microsoft	United States	\$66.7 B	\$20.6 B	\$92.3 B	\$215.8 B
54	Ford Motor	United States	\$129 B	\$6.6 B	\$164.7 B	\$54.3 B
55	ENEL	Italy	\$96.5 B	\$5.9 B	\$217.4 B	\$54 B
57	Johnson & Johnson	United States	\$61.6 B	\$13.3 B	\$102.9 B	\$163.3 B
58	Rio Tinto	United Kingdom	\$56.6 B	\$14.3 B	\$112.4 B	\$131.6 B
59	Credit Suisse Group	Switzerland	\$53.9 B	\$5.2 B	\$1,097.1 B	\$50.7 B
60	Statoil	Norway	\$90.4 B	\$6.5 B	\$110.3 B	\$83.8 B

Rank	Company	Country	Sales	Profits	Assets	Market Value
62	Deutsche Bank	Germany	\$61.2 B	\$3.1 B	\$2,556.5 B	\$59.6 B
62	Novartis	Switzerland	\$50.6 B	\$9.8 B	\$123.3 B	\$125.2 B
64	Verizon Communications	United States	\$106.6 B	\$2.5 B	\$220 B	\$101.3 B
66	BBVA-Banco Bilbao Vizcaya	Spain	\$43.4 B	\$6.3 B	\$734.1 B	\$52.3 B
72	BMW Group	Germany	\$80.2 B	\$4.3 B	\$146.1 B	\$51 B
73	BASF	Germany	\$85.5 B	\$6.1 B	\$78.2 B	\$74.2 B
74	France Telecom	France	\$60.9 B	\$6.5 B	\$120.5 B	\$56.7 B
81	Morgan Stanley	United States	\$38 B	\$4.7 B	\$807.7 B	\$43.8 B
81	Sanofi-aventis	France	\$40.7 B	\$7.3 B	\$110.3 B	\$89.2 B
83	MetLife	United States	\$52.7 B	\$2.8 B	\$730.9 B	\$48.4 B
86	PepsiCo	United States	\$57.8 B	\$6.3 B	\$68.2 B	\$102.6 B
87	Cisco Systems	United States	\$42.4 B	\$7.6 B	\$82 B	\$99.2 B
89	Roche Holding	Switzerland	\$50.8 B	\$9.3 B	\$62.9 B	\$120.9 B
90	ArcelorMittal	Luxembourg	\$78 B	\$2.9 B	\$130.9 B	\$53.6 B
91	Coca-Cola	United States	\$35.1 B	\$11.8 B	\$72.9 B	\$148.7 B
92	Deutsche Telekom	Germany	\$83.6 B	\$2.3 B	\$164.6 B	\$60.7 B
93	Intel	United States	\$43.6 B	\$11.5 B	\$63.2 B	\$114.5 B
96	Anheuser-Busch	Belgium	\$36.8 B	\$4.1 B	\$113.8 B	\$90.6 B
100	EDF Group	France	\$87.2 B	\$1.4 B	\$319.9 B	\$78.2 B
101	Repsol YPF	Spain	\$62.2 B	\$6.2 B	\$90.4 B	\$39.6 B
101	RWE Group	Germany	\$67.9 B	\$4.4 B	\$121.7 B	\$35.4 B
103	Unilever	Netherlands	\$59.3 B	\$5.7 B	\$54.8 B	\$91.9 B
104	Comcast	United States	\$37.9 B	\$3.6 B	\$118.5 B	\$68.7 B
105	Kraft Foods	United States	\$49.2 B	\$4.1 B	\$95.3 B	\$55.4 B
106	UnitedHealth Group	United States	\$94.2 B	\$4.6 B	\$63.1 B	\$47.7 B
107	Oracle	United States	\$32 B	\$6.8 B	\$67.2 B	\$161.2 B
108	Tesco	United Kingdom	\$79.6 B	\$3.5 B	\$70.1 B	\$50.5 B
110	Walt Disney	United States	\$39 B	\$4.4 B	\$71 B	\$81.5 B
112	United Technologies	United States	\$54.3 B	\$4.4 B	\$58.5 B	\$74.8 B
113	Iberdrola	Spain	\$40.7 B	\$3.8 B	\$121 B	\$45 B
114	American Express	United States	\$30.2 B	\$4.1 B	\$147 B	\$53.2 B
116	Prudential Financial	United States	\$38.4 B	\$3.2 B	\$539.9 B	\$30.7 B
117	Prudential	United Kingdom	\$75.6 B	\$2.2 B	\$408.3 B	\$29.4 B
118	Boeing	United States	\$64.3 B	\$3.3 B	\$68.6 B	\$52.7 B
119	CVS Caremark	United States	\$96.4 B	\$3.4 B	\$62.2 B	\$46.5 B
120	Google	United States	\$29.3 B	\$8.5 B	\$57.9 B	\$185.8 B
125	Møller-Maersk	Denmark	\$56.6 B	\$4.7 B	\$66.5 B	\$40.5 B
127	Abbott Laboratories	United States	\$35.2 B	\$4.6 B	\$59.5 B	\$75 B
129	AstraZeneca	United Kingdom	\$33.6 B	\$8.1 B	\$54.8 B	\$65.6 B
131	US Bancorp	United States	\$20.5 B	\$3.3 B	\$307.8 B	\$52.2 B
133	Anglo American	United Kingdom	\$28.4 B	\$6.6 B	\$66.4 B	\$66.2 B
134	GlaxoSmithKline	United Kingdom	\$44.3 B	\$2.5 B	\$62.1 B	\$99.2 B
135	Aviva	United Kingdom	\$90.7 B	\$2.3 B	\$567.9 B	\$20.5 B
138	Caterpillar	United States	\$42.6 B	\$2.7 B	\$64 B	\$63.9 B
140	Dow Chemical	United States	\$53.7 B	\$2.3 B	\$69.6 B	\$43 B

Rank	Company	Country	Sales	Profits	Assets	Market Value
142	Home Depot	United States	\$68 B	\$3.3 B	\$40.1 B	\$60.9 B
146	Vivendi	France	\$38.7 B	\$2.9 B	\$76.7 B	\$33.8 B
147	Bayer Group	Germany	\$47 B	\$1.7 B	\$67.5 B	\$62.5 B
149	News Corp	United States	\$33.1 B	\$3.1 B	\$56.7 B	\$45.5 B
150	Vinci	France	\$45.5 B	\$2.4 B	\$75.5 B	\$32.9 B
151	Marathon Oil	United States	\$67.1 B	\$2.6 B	\$50 B	\$35.6 B
152	PNC Financial Services	United States	\$17.1 B	\$3.4 B	\$264.3 B	\$33.1 B
153	Philip Morris International	United States	\$27.2 B	\$7.3 B	\$35 B	\$114.6 B
154	United Parcel Service	United States	\$49.5 B	\$3.5 B	\$33.6 B	\$73.1 B
155	Target	United States	\$67.4 B	\$2.9 B	\$43.7 B	\$35.7 B
158	Occidental Petroleum	United States	\$19.2 B	\$4.5 B	\$52.4 B	\$80.3 B
159	British Amer Tobacco	United Kingdom	\$23.2 B	\$4.5 B	\$43 B	\$76.6 B
161	Nokia	Finland	\$56.8 B	\$2.5 B	\$50.3 B	\$31.2 B
162	Renault	France	\$52.2 B	\$4.6 B	\$93.1 B	\$16.7 B
163	Time Warner	United States	\$26.9 B	\$2.6 B	\$66.5 B	\$39.7 B
166	Travelers Cos	United States	\$25.1 B	\$3.2 B	\$105.2 B	\$25.4 B
167	WellPoint	United States	\$58.8 B	\$2.9 B	\$50.2 B	\$25.5 B
168	Deutsche Post	Germany	\$68.3 B	\$3.4 B	\$50.5 B	\$21.7 B
170	Merck & Co	United States	\$46 B	\$861 M	\$105.8 B	\$100.9 B
173	EI du Pont de Nemours	United States	\$32.7 B	\$3 B	\$40.4 B	\$48.8 B
174	BG Group	United Kingdom	\$17.4 B	\$3.4 B	\$50 B	\$79.2 B
176	Bank of New York Mellon	United States	\$14.5 B	\$2.5 B	\$247.3 B	\$36 B
181	McDonald's	United States	\$24.1 B	\$4.9 B	\$32 B	\$80.1 B
182	Dell	United States	\$61.5 B	\$2.6 B	\$38.6 B	\$29.5 B
183	Aegon	Netherlands	\$42.4 B	\$2.4 B	\$445.8 B	\$14.2 B
184	Capital One Financial	United States	\$19.1 B	\$2.7 B	\$197.5 B	\$22.7 B
188	Aflac	United States	\$20.7 B	\$2.3 B	\$101 B	\$26.1 B
190	3M	United States	\$26.7 B	\$4.1 B	\$30.2 B	\$65.2 B
192	Lockheed Martin	United States	\$45.8 B	\$2.9 B	\$35.1 B	\$28.2 B
193	L'Oréal Group	France	\$26.1 B	\$3 B	\$31.4 B	\$67.9 B
194	Honeywell International	United States	\$33.4 B	\$2 B	\$37.8 B	\$44.1 B
195	Volvo Group	Sweden	\$39.4 B	\$1.6 B	\$45.5 B	\$34.8 B
196	Schneider Electric	France	\$26.2 B	\$2.3 B	\$40.3 B	\$43.3 B
196	National Grid	United Kingdom	\$20.7 B	\$2.1 B	\$66.1 B	\$32 B
198	Archer Daniels	United States	\$68.6 B	\$1.9 B	\$42.6 B	\$23 B
199	Lowe's Cos	United States	\$48.8 B	\$2 B	\$33.7 B	\$36.5 B
200	Deere & Co	United States	\$27.3 B	\$2.1 B	\$42.9 B	\$37 B
201	Amgen	United States	\$15.1 B	\$4.6 B	\$43.5 B	\$49.9 B
204	Imperial Tobacco Group	United Kingdom	\$23.6 B	\$2.4 B	\$48 B	\$32.2 B
206	Walgreen	United States	\$68.4 B	\$2.2 B	\$27 B	\$38.7 B
207	Eli Lilly & Co	United States	\$23.1 B	\$5.1 B	\$31 B	\$40.4 B
208	Altria Group	United States	\$16.9 B	\$3.9 B	\$37.4 B	\$52.4 B
210	Philips	Netherlands	\$34 B	\$1.9 B	\$41.5 B	\$30.4 B
211	Union Pacific	United States	\$17 B	\$2.8 B	\$43.1 B	\$46.5 B
215	Ericsson	Sweden	\$30.3 B	\$1.7 B	\$40 B	\$40 B

Rank	Company	Country	Sales	Profits	Assets	Market Value
216	Exelon	United States	\$18.6 B	\$2.6 B	\$52.2 B	\$28.6 B
216	Christian Dior	France	\$28.3 B	\$1.7 B	\$55.3 B	\$25.7 B
218	Danone	France	\$22.8 B	\$2.5 B	\$35.9 B	\$39.7 B
222	Freeport Copper	United States	\$19 B	\$4.3 B	\$29.4 B	\$46.8 B
222	ACE	Switzerland	\$16 B	\$3.1 B	\$83.4 B	\$20.6 B
224	General Dynamics	United States	\$32.5 B	\$2.6 B	\$32.5 B	\$28.4 B
225	Southern Co	United States	\$17.5 B	\$2 B	\$55 B	\$32.4 B
225	Metro AG	Germany	\$90.2 B	\$1.1 B	\$47 B	\$23 B
227	Centrica	United Kingdom	\$35 B	\$3 B	\$29.8 B	\$27.4 B
229	Hess	United States	\$33.9 B	\$2.1 B	\$35.4 B	\$27.1 B
231	Bristol-Myers Squibb	United States	\$19.5 B	\$3.1 B	\$31.1 B	\$45 B
235	ThyssenKrupp Group	Germany	\$58.1 B	\$1.1 B	\$58.9 B	\$20 B
238	TeliaSonera	Sweden	\$15.9 B	\$3.2 B	\$35.9 B	\$38.2 B
241	EADS	Netherlands	\$60.7 B	\$733.6 M	\$111.2 B	\$22 B
242	Apache	United States	\$12.1 B	\$3 B	\$43.4 B	\$45.5 B
245	Carrefour Group	France	\$120.6 B	\$579.7 M	\$70.9 B	\$31.2 B
246	Costco Wholesale	United States	\$82 B	\$1.4 B	\$25.7 B	\$31.7 B
247	Medtronic	United States	\$15.8 B	\$3.3 B	\$30.6 B	\$40.7 B
248	SAP	Germany	\$16.7 B	\$2.4 B	\$27.8 B	\$71.9 B
250	BT Group	United Kingdom	\$31.7 B	\$1.6 B	\$40.2 B	\$23.4 B
252	Qualcomm	United States	\$11.7 B	\$3.6 B	\$31.3 B	\$88.1 B
254	Dominion Resources	United States	\$15.2 B	\$2.8 B	\$42.8 B	\$26.4 B
255	EMC	United States	\$17 B	\$1.9 B	\$30.8 B	\$55 B
258	Hartford Finl Svcs	United States	\$22.4 B	\$1.7 B	\$318.3 B	\$12.3 B
260	Bouygues	France	\$41.8 B	\$1.4 B	\$47.4 B	\$16.5 B
264	Allstate	United States	\$31.4 B	\$928 M	\$130.9 B	\$16.9 B
267	NextEra Energy	United States	\$15.3 B	\$2 B	\$53 B	\$23.4 B
269	Gas Natural Group	Spain	\$26.3 B	\$1.6 B	\$59.5 B	\$15.4 B
271	Holcim	Switzerland	\$23.2 B	\$1.3 B	\$47.1 B	\$23.4 B
272	Northrop Grumman	United States	\$34.8 B	\$2.1 B	\$31.4 B	\$19.3 B
275	Air Liquide	France	\$18.1 B	\$1.9 B	\$30.2 B	\$36.1 B
276	Diageo	United Kingdom	\$14.6 B	\$2.4 B	\$28.3 B	\$47.3 B
278	Emerson Electric	United States	\$21.7 B	\$2.2 B	\$22.7 B	\$44.8 B
279	McKesson	United States	\$109.9 B	\$1.1 B	\$30.4 B	\$19.8 B
281	Johnson Controls	United States	\$35.4 B	\$1.5 B	\$26 B	\$27.6 B
282	FedEx	United States	\$38.2 B	\$1.3 B	\$26.2 B	\$28.6 B
282	BlackRock	United States	\$8.6 B	\$2.1 B	\$178.5 B	\$25 B
284	BAE Systems	United Kingdom	\$32.9 B	\$1.6 B	\$35.8 B	\$17.5 B
286	Time Warner Cable	United States	\$18.9 B	\$1.3 B	\$45.8 B	\$23.6 B
290	Duke Energy	United States	\$14.3 B	\$1.3 B	\$59.1 B	\$24.5 B
291	Telenor	Norway	\$16.3 B	\$2.5 B	\$29.4 B	\$26.7 B
292	Devon Energy	United States	\$9.9 B	\$4.6 B	\$32.9 B	\$37.6 B
298	State Street	United States	\$9.7 B	\$1.6 B	\$160.5 B	\$21.8 B
302	Amazon.com	United States	\$34.2 B	\$1.2 B	\$18.8 B	\$75.8 B
303	Aetna	United States	\$34.2 B	\$1.8 B	\$37.7 B	\$14 B

Rank	Company	Country	Sales	Profits	Assets	Market Value
304	Scottish & Southern	United Kingdom	\$32.7 B	\$1.9 B	\$27.3 B	\$17.9 B
305	Linde	Germany	\$17.3 B	\$1.3 B	\$36.1 B	\$25.8 B
307	Peugeot	France	\$75 B	\$1.5 B	\$91.2 B	\$8.7 B
307	Veolia Environnement	France	\$46.6 B	\$777.9 M	\$66.7 B	\$15 B
309	EnBW-Energie Baden	Germany	\$23.4 B	\$1.6 B	\$47.2 B	\$14.4 B
312	Chubb	United States	\$13.3 B	\$2.2 B	\$50.2 B	\$17.4 B
313	Loews	United States	\$14.6 B	\$1.3 B	\$76.3 B	\$17.4 B
314	Lafarge	France	\$21.6 B	\$1.1 B	\$56.4 B	\$16.7 B
319	Danske Bank Group	Denmark	\$21.7 B	\$657 M	\$578.3 B	\$15.6 B
320	Alstom	France	\$26.6 B	\$1.6 B	\$33.8 B	\$15.9 B
326	EDP-Energias de Portugal	Portugal	\$19 B	\$1.4 B	\$53.7 B	\$13.9 B
336	PPR	France	\$19.6 B	\$1.3 B	\$32.4 B	\$19 B
341	Reckitt Benckiser Group	United Kingdom	\$13.2 B	\$2.4 B	\$20.7 B	\$36.2 B
343	Koç Holding	Turkey	\$35.9 B	\$1.2 B	\$52.5 B	\$10.8 B
346	Henkel Group	Germany	\$20.2 B	\$1.5 B	\$23 B	\$24.4 B
352	CEZ	Czech Republic	\$10.6 B	\$2.5 B	\$29 B	\$24.6 B
358	Fiat Group	Italy	\$48 B	\$696.1 M	\$96.3 B	\$10.9 B
363	OMV Group	Austria	\$31.2 B	\$1.2 B	\$35.2 B	\$12.5 B
376	Ferrovial	Spain	\$16.1 B	\$2.9 B	\$55.3 B	\$9.2 B
378	Continental	Germany	\$34.9 B	\$771.1 M	\$31.8 B	\$16.8 B
381	Areva	France	\$12.2 B	\$1.2 B	\$46.3 B	\$17.1 B

Table 2: The number of companies by country of residence.

Row Labels	Count of Company
Austria	1
Belgium	1
Czech Republic	1
Denmark	2
Finland	1
France	24
Germany	19
Italy	3
Luxembourg	1
Netherlands	6
Norway	2
Portugal	1
Spain	7
Sweden	3
Switzerland	7
Turkey	1
United Kingdom	20
United States	100
Total	200

Table 3: Effective tax rates for each region by year. Revenue Ratio is the ratio of total U.S. revenues to total European revenues. It can be regarded as a measure of business volume.

Year	Europe	US	Revenue Ratio (US/EU)
2001	39%	33%	1.19
2002	49%	32%	1.06
2003	34%	24%	0.99
2004	31%	27%	1.02
2005	34%	30%	1.20
2006	32%	31%	1.16
2007	31%	32%	1.25
2008	46%	56%	1.22
2009	37%	30%	1.21
2010	31%	24%	1.25
2001 – 2010	35%	31%	1.16
Excluding 2008	34%	29%	1.15
2001 – 2007	34%	30%	1.13

Table 4: Effective tax rates of each region, by industry, for 2001 – 2010. Numbers in bold represent lower AETR.

Industry	Europe	US
Mining	28%	40%
Manufacturing	39%	28%
Transportation	32%	23%
Trade	28%	34%
Finance	25%	37%
Service	35%	25%
Public Administration	29%	20%
Total	35%	31%

Figure 1: Distribution of companies by industry segment for US and Europe separately.

