

The Missing Profits of Nations: 2016 Figures *

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Abstract

We update the main figures from "The Missing Profits of Nations" from 2015 to 2016 values. Our main finding is that not much have changed. The absolute amount of profits shifted to tax havens increases from \$616 Billion to \$667 Billion. As a share of foreign profits and total corporate profits, profit shifting remains completely constant.

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1 Introduction

In the "Missing Profits of Nations" (Tørsløv, Wier and Zucman, 2018) we exploit national accounts and foreign affiliate statistics (FATS) to estimate global profit shifting. We do this by computing the profitability of local (domestically head-quartered) and foreign-owned firms. We find that foreign-owned firms in tax havens are always far more profitable than their domestic counterparts. Contrary, foreign-owned firms are always less profitable than local firms in high-tax countries. We show this pattern in the upper panel of Figure 1. As a simple and transparent estimate of profit shifting we assume that absent profit shifting local and foreign firms would be equally profitable in tax havens. We hence compute the artificial excess profits in tax havens as the difference in local and foreign firm profitability. Using 2015 data we estimate that \$616Bn. in profits were artificially shifted to tax havens — corresponding to 36% of foreign profits.

By using detailed bilateral balance of payments data we are further able to understand the origin of the excess profits in tax havens. We show that excessive transfers from high-tax countries to tax havens in the form of royalty payments, management fees and internal interest payments can fully explain the excess profitability of tax havens. Based on these payments we allocate the excess profits in tax havens to their origin country. This allows us to estimate the taxes lost due to profit shifting. We find that high-tax countries globally lose 9% of their corporate tax receipts as a consequence of profit shifting.

Using the newest available data (2016) we update these figures. In Figure 1 and 2 we see that the overall pattern of excess profitability in tax havens remains. Ireland now tops the list with 1573% in foreign firm profitability and thereby solidifies its status as the world's largest tax haven (now both in absolute and relative terms). Using these update figures we estimate that \$667Bn. were artificially shifted to tax havens in 2016 — this corresponds to 36% of foreign profits (Table 1). In Table 2 and Figure 3 we show the updated loss figures for high-tax countries — while there are some national differences in the estimated tax loss, the global tax loss remains constant at 9%.

The fact that profit shifting remains constant is surprising, as 2016 was the first year of implementation for the OECD BEPS project¹ — a global effort aimed at carving profit shifting (OECD 2015). Our estimates hence suggests that the first year of implementation had no measurable effect on global profit shifting .

We additionally add eight new countries to our database in this new update: Argentina, Egypt, Indonesia, Malaysia, Nigeria, Thailand, Venezuela and Uruguay (see Table 3). These

¹<https://www.oecd.org/tax/beps/background-brief-inclusive-framework-for-beps-implementation.pdf>

countries lose from 4-18% of their corporate tax revenue. With the addition of these countries our database now covers 92% of the world economy and 70% of world population.

2 Technical notes

The full research with all computations and data sources can be found online at <http://missingprofits.world>. To ease the updating process we have moved many of the computations from the original paper from Excel to Stata. 16% of the profits measured in tax havens are simply extrapolated based on the 2015 values and GDP growth as no new data was available.

References

- Organization for Economic Co-operation and Development..** 2015. “Base Erosion and Profit Shifting, Final Report”,
- Tørsløv, T.R., Wier, L.S. and Zucman, G.** 2018. “The missing profits of nations (No. w24701)”. National Bureau of Economic Research.

Table 1: Global profit shifting: Comparison 2015 vs 2016 estimates

| | 2015 | 2016 | ('16 -'15) |
|--|------|------|-------------------|
| Profits shifted (\$Bn.) | 616 | 667 | 50 |
| Profits shifted (% of foreign profits) | 36% | 36% | 0% |
| Tax loss (\$Bn.) | 188 | 195 | 7 |
| Tax loss (% of corp. tax rev.) | 9% | 9% | 0% |

Source: 2015 figures: Tørsløv et al. (2018) appendix table A7 and C4D / 2016 figures: TWZ2019.xls backup table U1 and C4D

Table 2: Country estimates: Comparison 2015 vs 2016 estimates

| | Shifted profits (\$Bn.) | | | Corp. tax revenue loss/gain (% of collected) | | |
|----------------------------------|-------------------------|------|---|---|------|---|
| | 2015 | 2016 | Difference (¹⁶ - ¹⁵) | 2015 | 2016 | Difference (¹⁶ - ¹⁵) |
| OECD countries | | | | | | |
| Australia | 12 | 15 | 3 | 7% | 7% | 1% |
| Austria | 4 | 5 | 1 | 11% | 13% | 2% |
| Canada | 17 | 15 | -2 | 9% | 8% | -2% |
| Chile | 5 | 5 | 1 | 11% | 12% | 2% |
| Czech Republic | 2 | 2 | 0 | 5% | 6% | 1% |
| Denmark | 3 | 5 | 2 | 8% | 12% | 4% |
| Estonia | 0 | 0 | 0 | 10% | 16% | 5% |
| Finland | 3 | 3 | 1 | 11% | 13% | 2% |
| France | 32 | 36 | 4 | 21% | 24% | 3% |
| Germany | 55 | 67 | 12 | 28% | 29% | 1% |
| Greece | 1 | 1 | 0 | 7% | 9% | 2% |
| Hungary | 2 | 4 | 1 | 21% | 24% | 3% |
| Iceland | 0 | 0 | 0 | 22% | 15% | -7% |
| Israel | 1 | 3 | 2 | 2% | 7% | 6% |
| Italy | 23 | 24 | 1 | 19% | 19% | 0% |
| Japan | 9 | 11 | 2 | 2% | 2% | 0% |
| Korea | 4 | 5 | 0 | 2% | 2% | 0% |
| Latvia | 0 | 0 | 0 | 7% | 8% | 1% |
| Mexico | 12 | 11 | -1 | 10% | 9% | -1% |
| New Zealand | 1 | 2 | 0 | 5% | 5% | 0% |
| Norway | 5 | 6 | 1 | 8% | 10% | 2% |
| Poland | 4 | 5 | 1 | 8% | 11% | 3% |
| Portugal | 3 | 3 | 1 | 9% | 11% | 2% |
| Slovakia | 1 | 1 | 0 | 5% | 6% | 1% |
| Slovenia | 0 | 0 | 0 | 6% | 6% | 0% |
| Spain | 14 | 15 | 1 | 14% | 13% | -1% |
| Sweden | 9 | 10 | 2 | 13% | 16% | 3% |
| Turkey | 5 | 4 | -1 | 8% | 5% | -3% |
| United Kingdom | 61 | 76 | 14 | 18% | 21% | 4% |
| United States | 142 | 152 | 10 | 14% | 17% | 2% |
| Main developing countries | | | | | | |
| Brazil | 13 | 17 | 4 | 8% | 10% | 2% |
| China | 55 | 52 | -3 | 3% | 3% | 0% |
| Colombia | 1 | 1 | 0 | 2% | 2% | 0% |
| Costa Rica | 1 | 1 | 0 | 19% | 18% | -1% |
| India | 9 | 10 | 1 | 8% | 5% | -3% |
| Russia | 11 | 12 | 1 | 5% | 6% | 1% |
| South Africa | 4 | 4 | 0 | 6% | 7% | 1% |
| Tax havens | | | | | | |
| Belgium | -13 | -15 | -2 | 16% | 16% | 0% |
| Ireland | -106 | -117 | -11 | 58% | 65% | 7% |
| Luxembourg | -47 | -50 | -3 | 50% | 54% | 4% |
| Malta | -12 | -11 | 2 | 90% | 88% | -2% |
| Netherlands | -57 | -90 | -33 | 32% | 30% | -2% |
| Caribbean | -97 | -93 | 4 | 100% | 100% | 0% |
| Bermuda | -24 | -17 | 7 | | | |
| Singapore | -70 | -78 | -7 | 41% | 42% | 1% |
| Puerto Rico | -42 | -38 | 3 | 79% | 25% | -54% |
| Hong Kong | -39 | -18 | 21 | 33% | 24% | -9% |
| Switzerland | -58 | -73 | -15 | 20% | 28% | 8% |
| Other | -51 | -66 | -15 | | | |

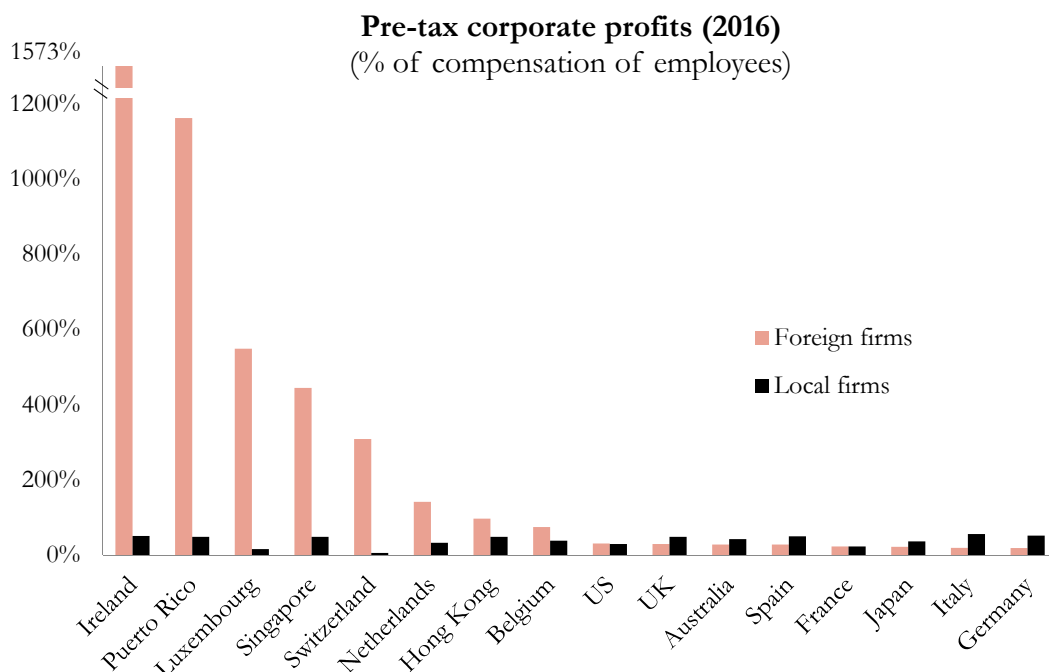
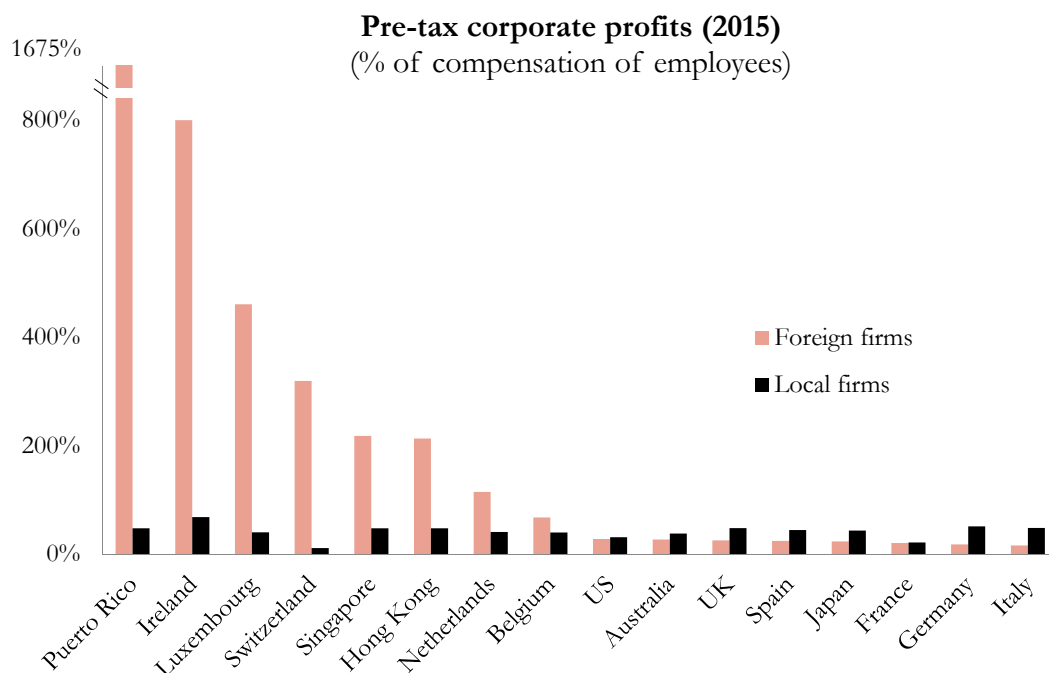
Source: 2015 figures: Tørsløv et al. (2018) appendix table A7 and C4D / 2016 figures: TWZ2019.xls backup table U1 and C4D

Table 3: Global profit shifting: Comparison 2015 vs 2016 estimates

| | Shifted profits (\$Bn.) | Corp. tax revenue loss/gain (% of collected) |
|-----------|--------------------------------|---|
| Argentina | 2.5 | 5% |
| Egypt | 3.0 | 4% |
| Indonesia | 7.0 | 8% |
| Malaysia | 3.8 | 5% |
| Nigeria | 3.1 | 24% |
| Thailand | 4.7 | 5% |
| Uruguay | 1.0 | 16% |
| Venezuela | 0.9 | 15% |

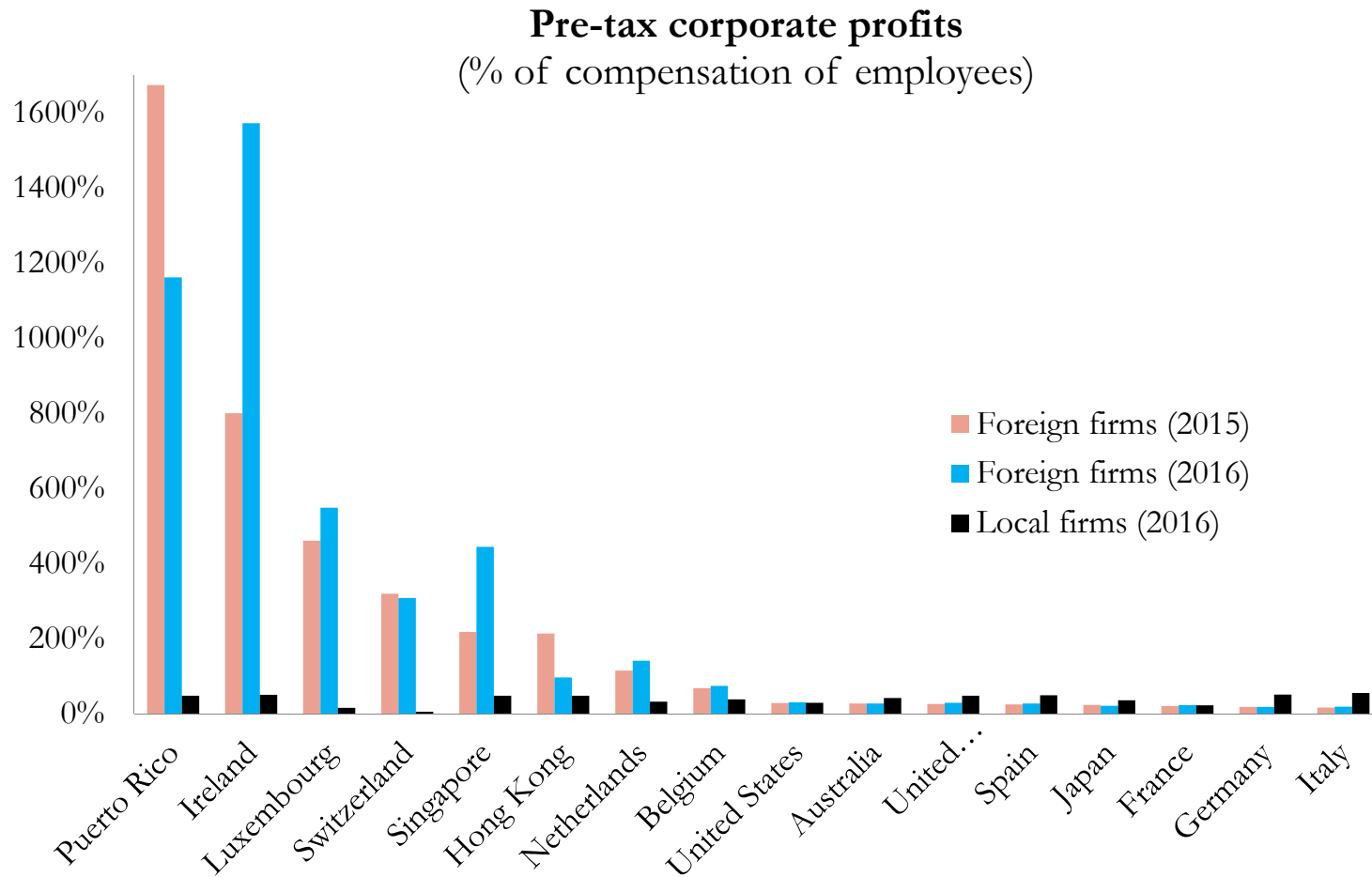
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Figure 1: Profitability in Foreign vs. Local Firms in 2015 and 2016



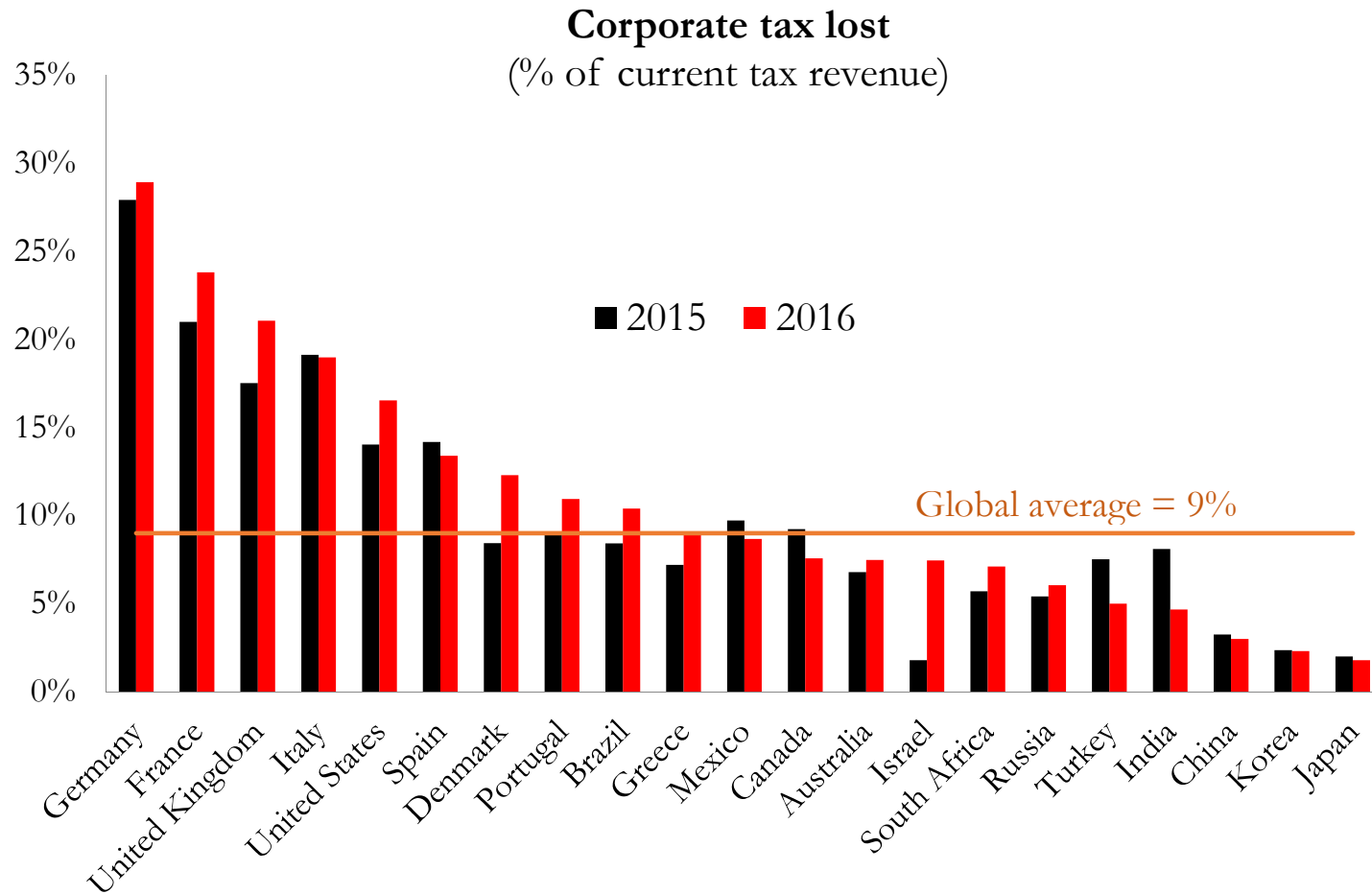
Notes: the bar shows the ratio of pre-tax corporate profits (net of interest and depreciation) to compensation of employees. The black bar shows the ratio for local firms only—defined as firms that are less than 50% owned by foreigners—and the pink bar for foreign firms only. Source: 2015 figures: Tørsløv et al. (2018) appendix table A7 and C4D / 2016 figures: TWZ2019.xls backup table U1 and C4D

Figure 2: Profitability in Foreign Firms 2015 vs 2016



Notes: the bar shows the ratio of pre-tax corporate profits (net of interest and depreciation) to compensation of employees. The black bar shows the ratio for local firms only—defined as firms that are less than 50% owned by foreigners in 2016. The pink bar for foreign firms only in 2015. The light blue bar for foreign firms only in 2016. Source: 2015 figures: Tørsløv et al. (2018) appendix table A7 / 2016 figures: TWZ2019.xls backup table U1

Figure 3: Taxes lost in non-havens 2015 vs 2016



Notes: the bar shows the corporate taxes lost as a share of current corporate tax revenue The black bar shows the estimated loss in 2015 and the red bar shows the loss in 2016. The light blue bar for foreign firms only in 2016. Source: 2015 figures: Tørsløv et al. (2018) appendix table C4D / 2016 figures: TWZ2019.xls backup table C4D