Responding to Income Shifting by Multinational Corporations

# IncomeShifting
How Big Is Profit Shifting?

• Abundant evidence of a very large problem.

• Magnitude depends on data source.

• Havens are the vast majority of the problem.

• $3 trillion of $4.2 trillion of reported accumulated foreign earnings in US country-by-country data (2017) are in havens, ignoring stateless numbers.
Popular Data Sources

Orbis / Compustat = Company level data yet...
- Misses almost all haven income
- Nonlinearities are important => havens key
- Big companies do most shifting; don’t treat all companies the same; the tail is different (Wier and Reynolds)
- Many companies report positive accounting profits and zero tax profits (Bilicka) => accounting data underestimates

Don’t look under the lamppost for your keys if you dropped them in the dark.
Other Data Sources

• BEA
  – Direct investment earnings series (preferred)
  – Net income (but double counting)
    • Subtracting equity income loses some profit shifting (among foreign countries); PTR has same problem
    • There are large amounts of untaxed foreign profit; foreign to foreign shifting is important.
  – In aggregate data, companies w/ losses make effective tax rates look too high.

• IRS Tax Form Data
  – Form 5471; one can omit dividends (but long lag)
  – Country by Country Data (form 8975; preferred)
## A Comparison of US Data Sources in 2017

<table>
<thead>
<tr>
<th></th>
<th>Adjusted Method (BR)</th>
<th>BEA Balance of Payments Direct Investment Income</th>
<th>IRS Country-by-country Data (income series are before tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net inc.+ for. tax-equity inc.</td>
<td>after tax (reported)</td>
<td>before tax (calculated)</td>
</tr>
<tr>
<td><strong>All countries</strong>⁵⁸</td>
<td>571,007</td>
<td>470,933</td>
<td>574,958</td>
</tr>
<tr>
<td><strong>Stateless (omitted from totals and subtotals)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto Rico</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>82,519</td>
<td>51,804</td>
<td>55,930</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6,484</td>
<td>36,825</td>
<td>38,734</td>
</tr>
<tr>
<td>Netherlands</td>
<td>58,676</td>
<td>76,083</td>
<td>81,120</td>
</tr>
<tr>
<td>Switzerland</td>
<td>37,696</td>
<td>30,474</td>
<td>34,332</td>
</tr>
<tr>
<td><strong>Bermuda</strong></td>
<td>-10,431</td>
<td>32,341</td>
<td>33,215</td>
</tr>
<tr>
<td>UK Caymans⁵⁹</td>
<td>20,675</td>
<td>33,235</td>
<td>33,888</td>
</tr>
<tr>
<td>Singapore</td>
<td>35,270</td>
<td>24,496</td>
<td>27,529</td>
</tr>
<tr>
<td><strong>Big Haven Total</strong></td>
<td>230,889</td>
<td>285,258</td>
<td>304,748</td>
</tr>
<tr>
<td><strong>Big Haven Share</strong></td>
<td>40%</td>
<td>53%</td>
<td>51%</td>
</tr>
</tbody>
</table>
## Possible Scale of Revenue Loss from Profit Shifting in 2017

<table>
<thead>
<tr>
<th></th>
<th>BEA Direct Investment Income Series (balance of payments data; adjusted pre-tax)</th>
<th>BEA Adjusted Income Series (removes equity income from income, using BEA survey data)</th>
<th>IRS Full Country-by-Country Sample (without stateless income)</th>
<th>IRS Average of Full and Positive Profit Country-by-Country Sample (without stateless income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign all havens(^{19}) the world average profit/employee ratio</td>
<td>$79 billion</td>
<td>$61 billion</td>
<td>$96 billion</td>
<td>$118 billion</td>
</tr>
<tr>
<td>Remove tax elasticity; reallocate profits, linear elasticity</td>
<td>$75 billion</td>
<td>$67 billion</td>
<td>$96 billion</td>
<td>$122 billion</td>
</tr>
<tr>
<td>Remove tax elasticity; reallocate profits, nonlinear elasticity</td>
<td><strong>$89 billion</strong></td>
<td><strong>$76 billion</strong></td>
<td><strong>$109 billion</strong></td>
<td><strong>$141 billion</strong></td>
</tr>
</tbody>
</table>
Where are the profits (and the shifted profits)?

- Big havens: Billions of Dollars
- Small havens: Billions of Dollars
- 10% to 21%: Billions of Dollars
- 21% to 30%: Billions of Dollars

Total Income
Shifted, NL elasticity
What is the net effect so far of TCJA?

Figure 2: Share of US MNC Income in Seven Big Havens, 2000-2019

[Graph showing the share of US MNC income in seven big havens from 2000 to 2019, with lines representing the share of foreign total and GDP.]
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# IncomeShifting
How Big a Problem is Income Shifting

Scott D. Dyreng
Duke University
$628 billion is an upper bound of income shifting for this sample.

$628 billion is likely too high because $126 billion was paid in tax to foreign governments (about 20%).

The sample is all U.S. incorporated firms on Compustat with non-missing values for pretax foreign earnings, pretax worldwide earnings, total assets, and sales.
Aggregate Pretax Foreign Income as a Fraction of Aggregate Worldwide Pretax Income

The sample is all U.S. incorporated firms on Compustat with non-missing values for pretax foreign earnings, pretax worldwide earnings, total assets, and sales.

Using the *highest possible upper bound*, if all foreign earnings were recorded in tax havens, this would mean that a maximum of 54% of corporate earnings were recorded in tax havens in 2018 for this sample.
Foreign Taxes Paid

The sample is all U.S. incorporated firms on Compustat with non-missing values for pretax foreign earnings, pretax worldwide earnings, total assets, and sales.

Note: the aggregate foreign effective tax rate is not that different from the OECD average statutory tax rate, suggesting a fairly large fraction of earnings for this sample is taxed by foreign governments.
# Undertaxed Pretax Foreign Earnings (UPIFO)

see Dyreng Hills Markle (2020)

<table>
<thead>
<tr>
<th>1-year measure</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate UPIFO</td>
<td>$167 B</td>
<td>$162 B</td>
<td>$137 B</td>
</tr>
<tr>
<td>% of Foreign Income</td>
<td>19%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>% in Top 10 firms</td>
<td>56%</td>
<td>49%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Caveats

• Publicly traded firms only
  • Likely not a huge problem because most profitable large private firms do not have extensive multinational operations based on intangible property. But is a weakness of this data.

• US firms only
  • Income shifting is a worldwide problem. U.S. firms might behave differently than other firms.

• Not capturing “shifted income” but instead capturing boundaries of how much could possibly be shifted.

• Financial Accounting vs Tax Accounting
  • Current foreign tax not exactly equal to foreign taxes paid in cash (but very close)
  • Pretax financial income not exactly equal to taxable income (but research suggests financial accounting income is usually higher than taxable income)
  • Lack of jurisdiction specific information (only have U.S vs Foreign)
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# IncomeShifting
DISTRIBUTION OF CORPORATE PROFITS ACROSS COUNTRIES

Leslie Robinson
Remarks for Panel Discussion

Urban-Brookings Tax Policy Center and University of North Carolina Kenan-Flagler Business School
WHICH DATA SOURCE AND INCOME MEASURE SHOULD I USE TO STUDY INCOME SHIFTING?

- “the U.S. has a sophisticated system to monitor its multinationals: the BEA survey…Reporting is mandatory; the BEA has decades of experience with this survey, which has been used by many researchers” (Tørsløv et al. 2020)
- “U.S. tax data, the best possible data for studying [BEPS]” (Clausing (2020); “perhaps even more promising in terms of accuracy is the use of confidential tax returns” (Garcia-Bernardo et al. 2019)
- “Compustat and Orbis are nearly useless for examining profit shifting” (Clausing 2020)
- CbyCR data, released for the first time in December 2018, has been immediately declared as “the most reliable country-level information about [MNEs’] tax payments and profits to date” (Garcia-Bernardo et al. 2019)
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,219 (BEA pre-tax income)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$438 (BEA direct investment income – after-tax)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$919 (BEA adjusted direct investment income – pre-tax)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$543 (BEA adjusted pre-tax income; see Blouin and Robinson 2020 &amp; [<a href="https://www.bea.gov/help/faq/1402">https://www.bea.gov/help/faq/1402</a>]) &amp; [$152.7 foreign taxes]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$537 (BEA profit-type return)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$670 (Treasury – CFC pre-tax E&amp;P excluding related party dividends) &amp; [$130.8 foreign taxes]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$523 (Compustat – foreign pre-tax income) &amp; [$153.7 foreign taxes]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HOW MUCH FOREIGN INCOME WAS EARNED IN AGGREGATE ACROSS ALL U.S. MNES IN 2012 IN THE NETHERLANDS? (IN BILLIONS)

• $172 (BEA pre-tax income)
• $75 (BEA direct investment income – after-tax)
• $132 (BEA adjusted direct investment income – pre-tax)
• $10 (BEA adjusted pre-tax income; see Blouin and Robinson 2020 & https://www.bea.gov/help/faq/1402)
• $16 (BEA profit-type return)
• $71 (Treasury – CFC pre-tax E&P excluding related party dividends)
• $??? (Compustat – not disaggregated by country)
WHAT PROPORTION OF FOREIGN INCOME WAS EARNED ACROSS ALL U.S. MNES IN 2016 IN BERMUDA, CAYMAN ISLANDS, SINGAPORE, SWITZERLAND, LUXEMBOURG, NETHERLANDS, IRELAND?

- **62%** (BEA pre-tax income)
- **66%** (BEA direct investment income – after-tax)
- **41%** (BEA adjusted pre-tax income; see Blouin and Robinson 2020 & https://www.bea.gov/help/faq/1402)
- **66%** (Treasury – CFC pre-tax E&P excluding related party dividends)
- **33%** (Treasury – CbyCR pre-tax profit - 2016)
- **45%** (Treasury – CbyCR pre-tax profit - 2017)
**TIERED OWNERSHIP STRUCTURES AND THE DISTRIBUTION OF CORPORATE PROFITS (BEA)**

Direct investment income = Net income

- **Netherlands**
  - after-tax income = $100
  - tax expense = $20
  - $100 DII & NI

- **France**
  - after-tax income = $230
  - tax expense = $58
  - $230 DII & NI

- **Foreign**
  - after-tax income = $330
  - tax expense = $491
  - $330 DII & NI

Direct investment income ≠ Net income

- **Netherlands**
  - after-tax income = $261
  - tax expense = $20
  - $261 DII vs. $261 NI

- **France**
  - after-tax income = $230
  - tax expense = $58
  - $69 DII vs. $230 NI

- **Foreign**
  - after-tax income = $330
  - tax expense = $560
  - $330 DII vs. $560 NI
Table 3
Comparisons of BEA Data, CFC Data, and CbyCR Data

<table>
<thead>
<tr>
<th>Year 2016</th>
<th>BEA Reporting-Based Measures</th>
<th>IRS Form 5471 Dividends Received from Related Parties</th>
<th>IRS Form 8975 Pre-Tax Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DII</td>
<td>PTI</td>
<td>Adj. PTI</td>
</tr>
<tr>
<td>Ireland</td>
<td>52,366</td>
<td>153,615</td>
<td>77,369</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>34,819</td>
<td>102,212</td>
<td>(963)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>72,130</td>
<td>182,552</td>
<td>14,675</td>
</tr>
<tr>
<td>Caribbean</td>
<td>26,279</td>
<td>59,317</td>
<td>11,850</td>
</tr>
<tr>
<td>Bermuda</td>
<td>41,554</td>
<td>79,532</td>
<td>(1,602)</td>
</tr>
<tr>
<td>Singapore</td>
<td>25,002</td>
<td>43,809</td>
<td>27,573</td>
</tr>
<tr>
<td>Switzerland</td>
<td>30,321</td>
<td>71,951</td>
<td>43,098</td>
</tr>
<tr>
<td>Foreign income</td>
<td>427,542</td>
<td>1,110,164</td>
<td>420,065</td>
</tr>
<tr>
<td>All countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% in Tax Havens</td>
<td>66%</td>
<td>62%</td>
<td>41%</td>
</tr>
</tbody>
</table>
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