The Exorbitant Tax Privilege

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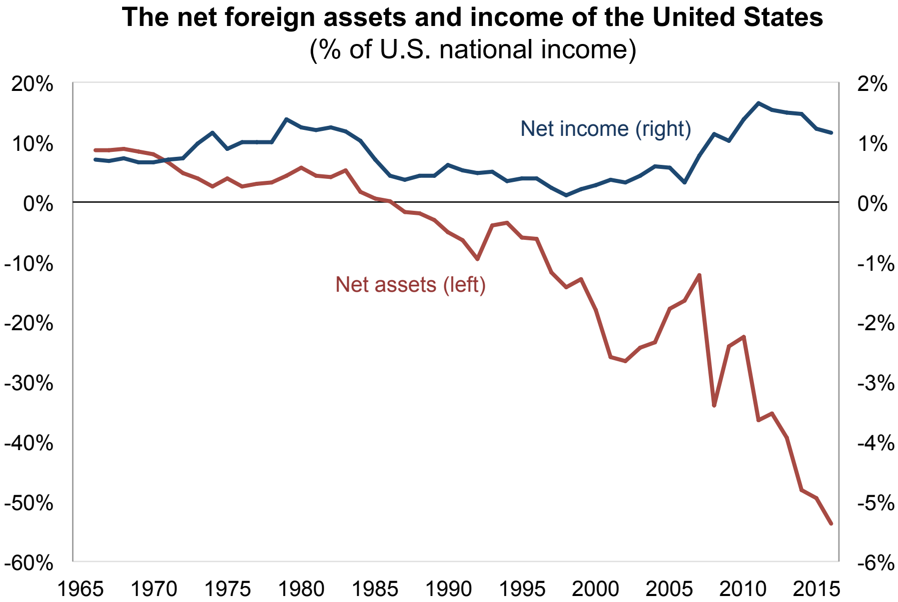
The income puzzle: Despite being a net debtor, US earns > 0 income from abroad



Explaining the income puzzle

Literature shows key driver of income puzzle: **direct investment yield differential:**

- 1966–2016 after-tax yield on US direct equity investment abroad: 9.1%
- Foreign direct equity investment in US: 4.6%

Why are U.S. multinationals so profitable?

- Standard explanat^{o}: bc they are older, take more risks
- This paper: because they make high profits in oil and **pay relatively little in taxes** abroad
- Can explain about half of the U.S. yield differential

Uncovering the role of oil

1^{st} driver of high post-tax yield earned by US: oil

- ▷ Oil: 1/3 of pre-tax profits of US multin'l since 1966
- ▷ Our paper: first study of foreign profits & taxes paid by US multinationals by sector since 1966
- ▷ For oil, key determinant of after-tax yield: taxes levied by oil-producing countries (rent sharing)
- ▷ Finding: wide variation over time in this tax rate; declined sharply in 1990s

$\rightarrow$ **High after-tax profits in 2000s when oil price $\uparrow$**

The role of tax havens

2^{nd} driver of high US post-tax yields: tax havens

- ▷ US multinationals shift profits to tax havens (ex: Google Alphabet in Bermuda)
- ▷ All multinationals do it: globally, 35–40% of multinationals' profits are shifted offshore
- ▷ But U.S. multinationals do it more than others (50% today) $\rightarrow$ large impact on after-tax yield
- ▷ They do now owe much tax in US post-2017 amnesty $\rightarrow$ **high post-tax return is not a stat. illusion**

Returns on Foreign Investments: The US in Interna'l Perspective

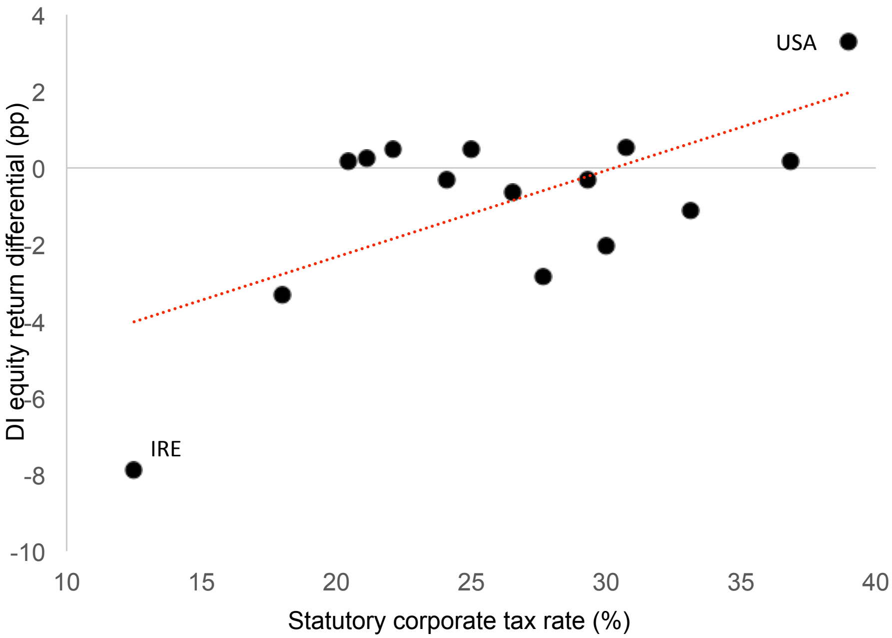
Comparing the US to other countries

We compute **comparable yields** on direct investment for OECD countries

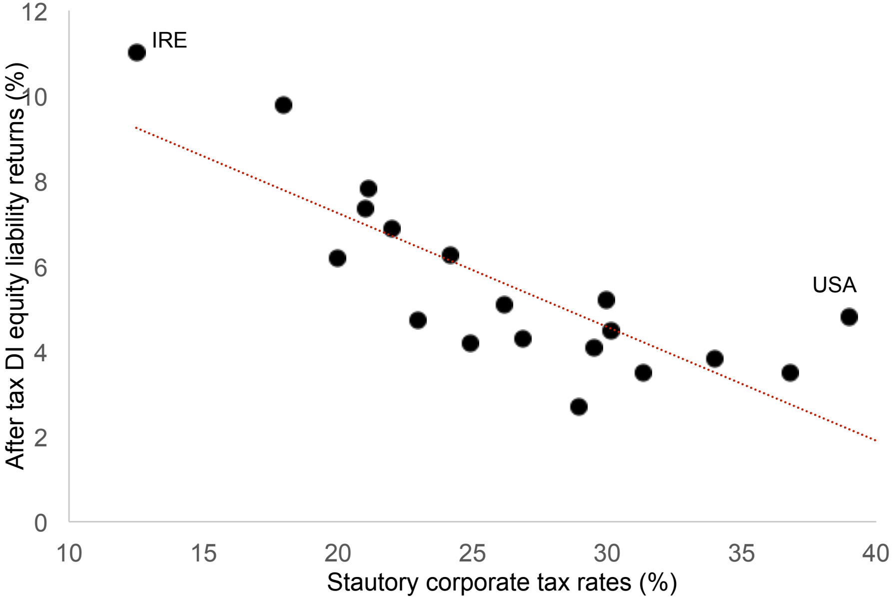
- ▷ Draw on harmonized balance of payments data (IMF BPM6 and OECD 4th benchmark definition of DI)
- ▷ Equity yield = equity income (divs. + retained) / positions at current cost [similar with market value]
- ▷ Harmonized data available for 2014–2016

→ **The direct investment equity yield differential is uniquely high in the United States**

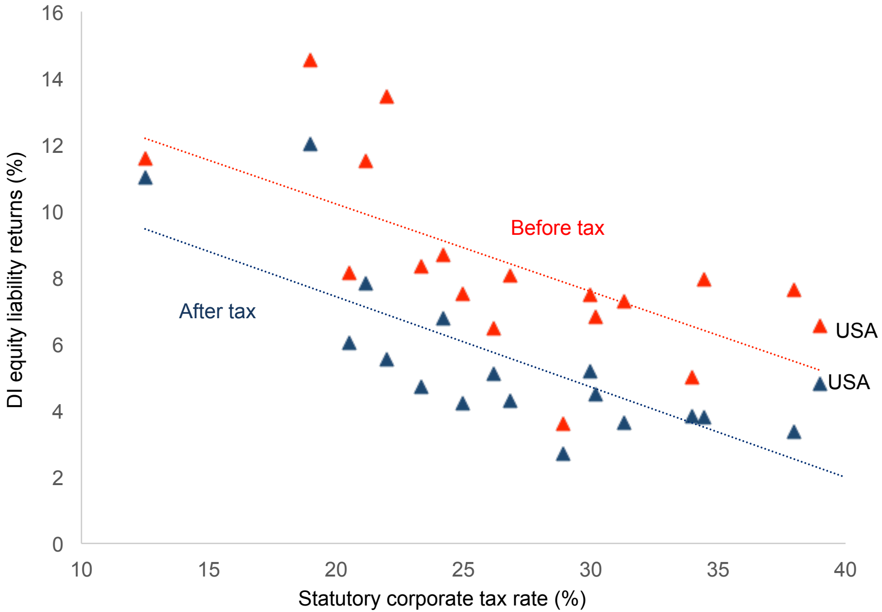
Asset–liability yield differential on direct equity investment (OECD, 2014-2016)



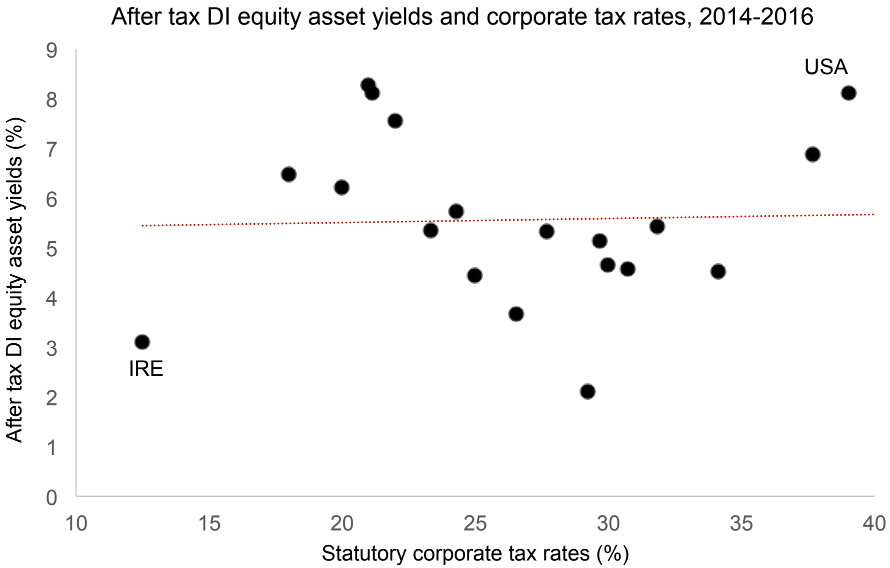
The US has low liability returns—but no lower than other high-tax countries



Liability returns before vs. after corporate income taxes



The U.S. has especially high returns on the asset side



Investigating the High Asset Yields of the US: Data and Methodology

Data on US multinationals

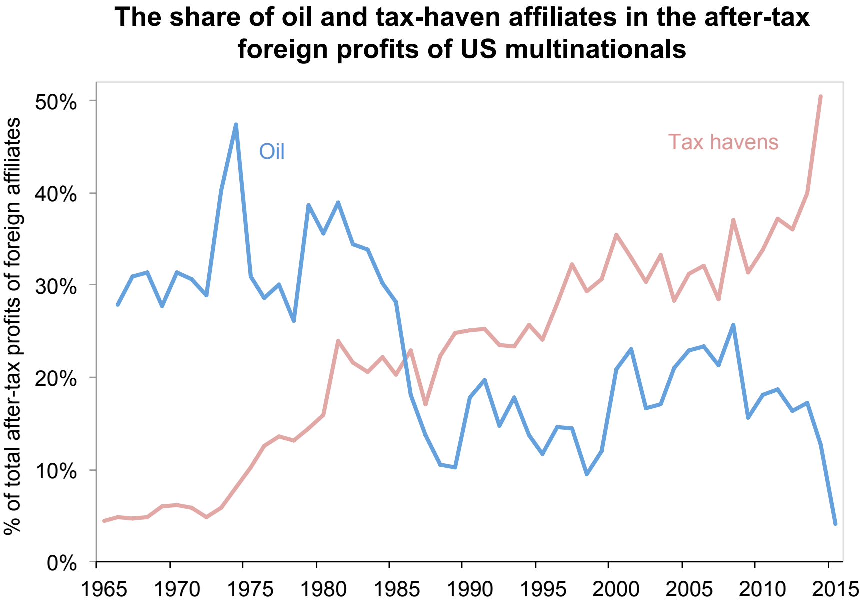
Main source used in lit.: inter'l macro accounts. 2 pbs:

- ▷ Lots of inv. through holdings $\rightarrow$ **oil almost invisible**
- ▷ After-tax profits only (no data on foreign taxes paid)

We **combine & reconcile macro accounts with:**

- ▷ BEA survey of foreign operations of US multinationals
  - ▷ Large sample annually; universe every 5 years back to 1966; includes taxes; correct sector allocation
- ▷ IRS tabulations of corporate income tax returns
  - ▷ Main advantage: annual back to 1913

US multinationals make >50% of their foreign profits in oil & tax haven countries



Methodology

We construct **new long-run series of profitability of US multinationals:**

- ▷ Pre- and post-tax (domestic and foreign)
- ▷ By country and industry

Consider two profitability statistics:

- ▷ $r =$ profits / assets (at current cost)
- ▷ $\pi =$ profits / wage
  - ▷ If $Y = Y_K + Y_L$, $\alpha = Y_K / Y$, $\pi = \alpha/(1-\alpha)$
  - ▷ Advantage: abstracts from valuation issues
- ▷ Profits: net of interest, after depreciation

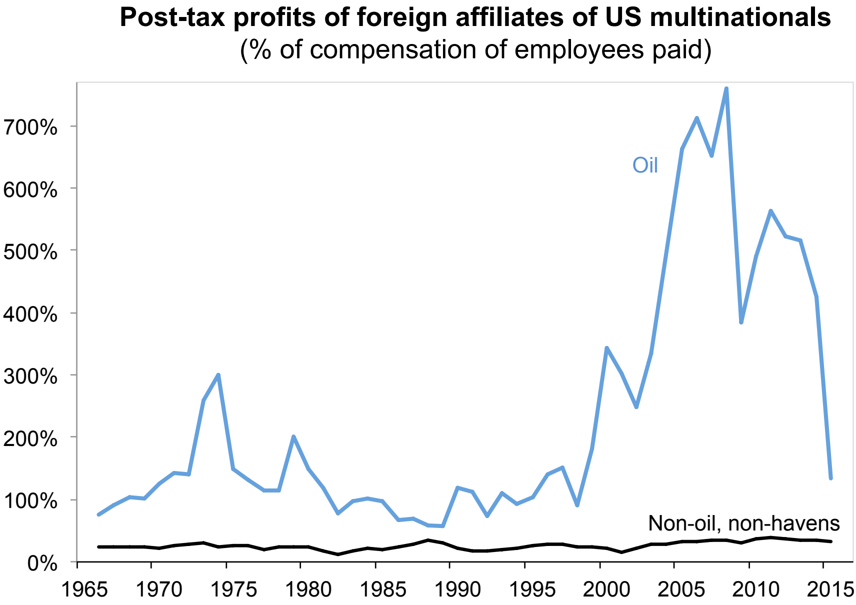
The Role of Oil

Oil has large effect on US yields abroad

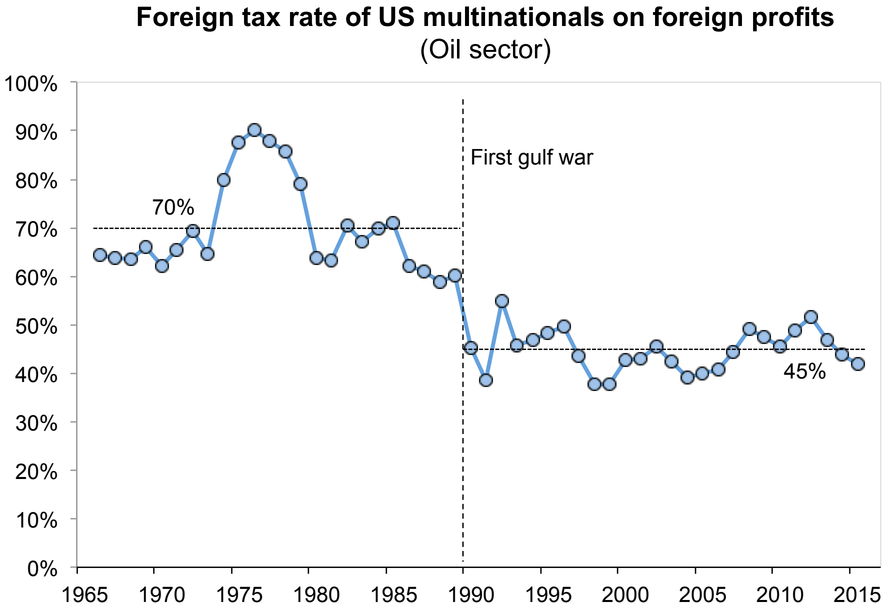
Effect of oil on the US yield differential:

- ▷ High pre- and post-tax profitability of oil affiliates over last half century
- ▷ Accounts for close to 1 point of excess yields of the US since 1966 (20% of the overall yields differential)
- ▷ Up to 1.5 point in 1970s and 2000s, less in 1980s, 1990s, and recent years (collapse in oil price in 2014)
- ▷ Oil effect may come back if prices $\uparrow$ back. Effect could be bigger than in 1970s due to lower tax

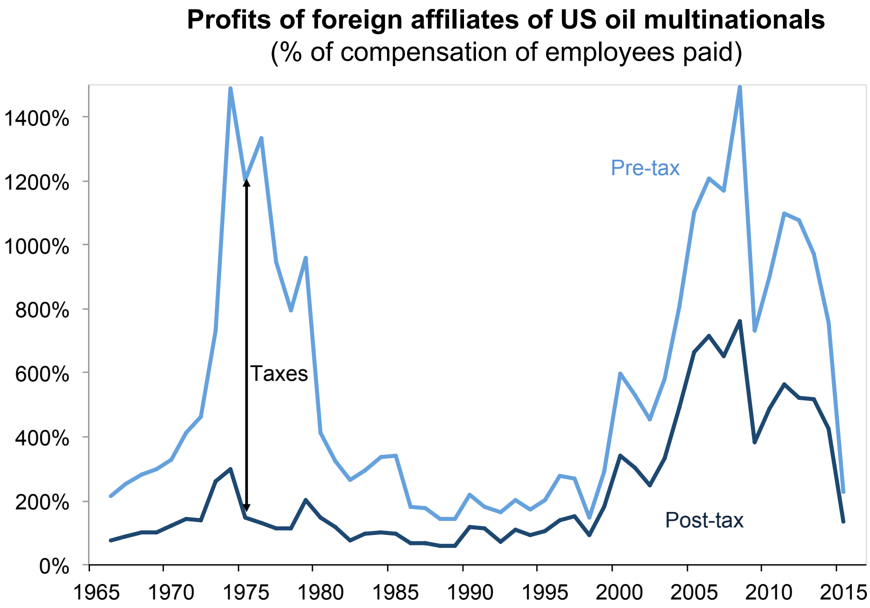
Affiliates in the oil sector are extremely profitable



Taxes levied by oil producers vary a lot over time and fell after the first Gulf War



As foreign tax rates fell, after-tax profitability in the oil sector surged



Why did the taxes paid by US oil multinationals abroad fall after 1990?

Several possible interpretations:

- ▷ Return on military protection granted by US to oil-producing states
- ▷ Effect of tax incentives in response to oil slump of mid-1980s (UK early 1990s)
- ▷ Tax competition among oil producing countries
- ▷ Investments in new countries (ex-USSR, esp. Kazakhstan)
- ▷ Profit shifting

Profit-Shifting to Tax Havens

Profit shifting and its impact on profitability statistics

Three ways to shift profits to low-tax countries:

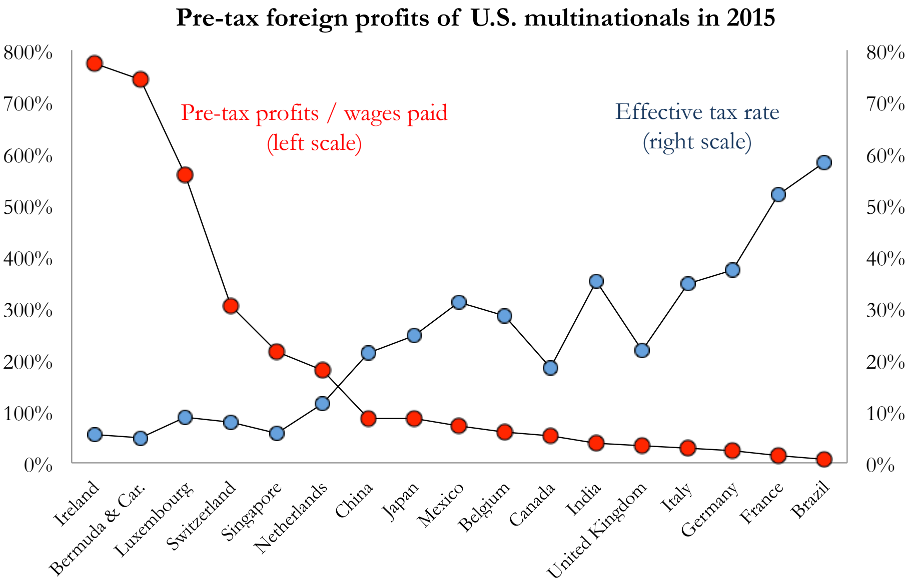
- ▷ Manipulation of intra-group export and import prices
- ▷ Intra-group interest payments (tax deductible)
- ▷ Strategic location of intangibles

Effect of profit shifting on measured yields:

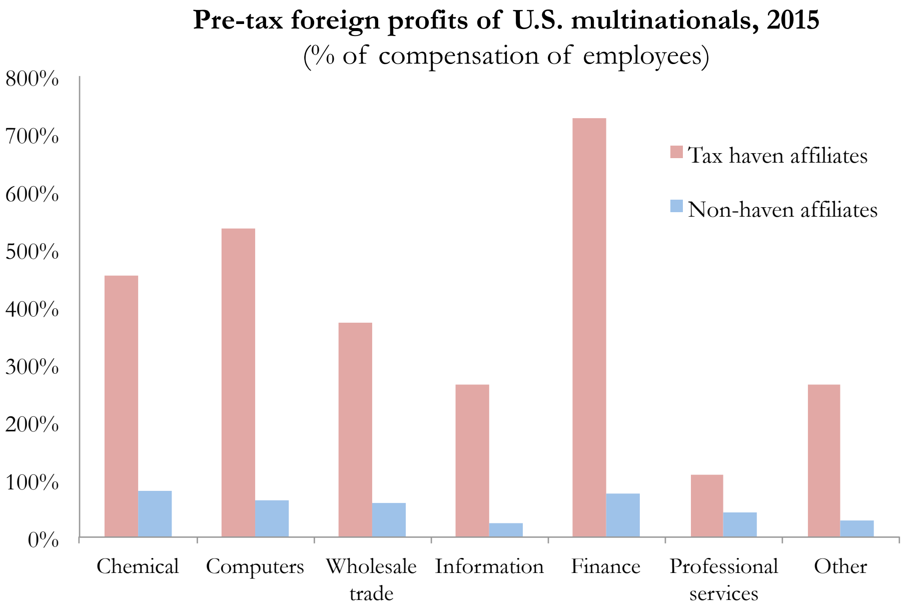
- ▷ Asset side: increases after-tax yields for given real pre-tax yield
- ▷ Liability side: artificially reduces reported yield

→ **Asset side effect particularly large in US case:** can explain 20% of US yield diff. (vs. 10% for liability)

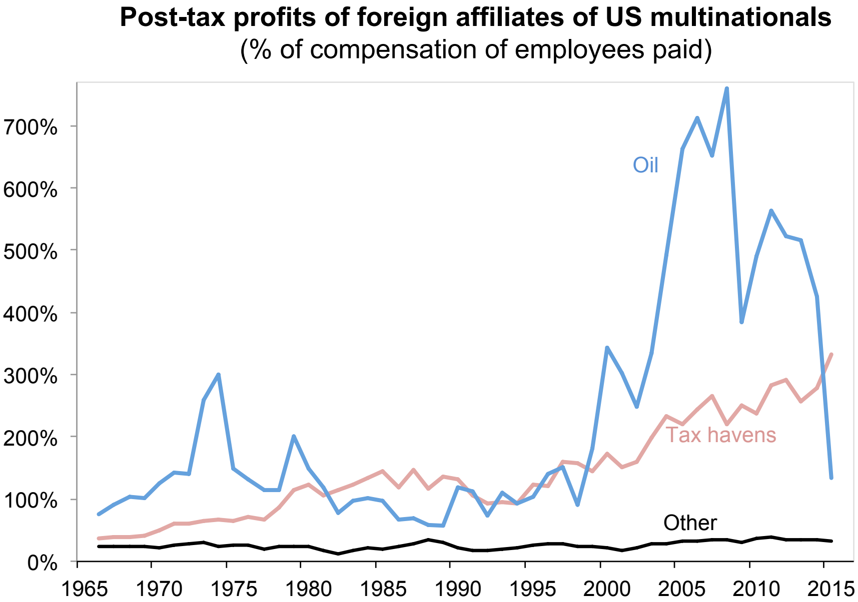
Where taxes are low, U.S. multinationals book huge pre-tax profits



Profit-shifting is an across-the-board phenomenon



Tax haven affiliates have become more profitable than oil affiliates



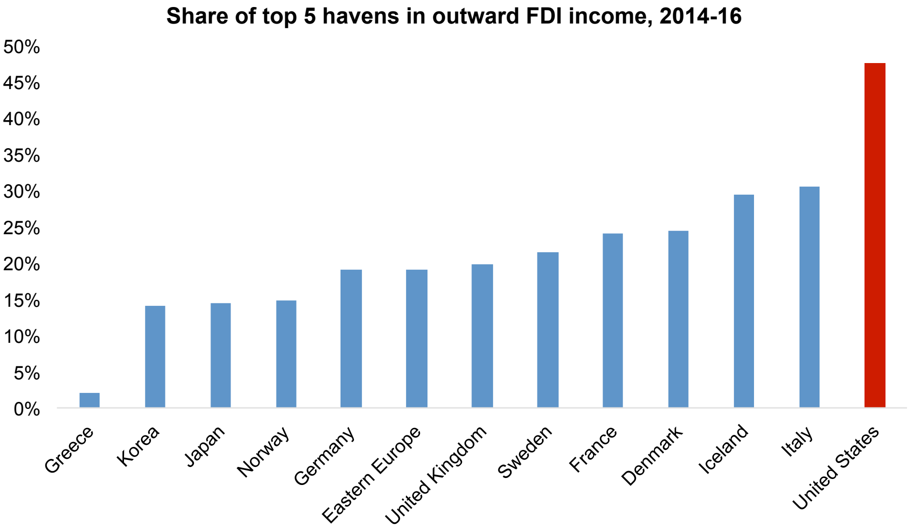
Why do US multinationals shift more profits?

Perceived national interest of the US: good to let US multinationals shift out of foreign high-tax countries

- ▷ Until 2017, US taxed worldwide profits, with credits given for foreign taxes paid
- ▷ If foreign profits booked in 0 tax places: no credits given → more tax revenue in US upon repatriation
- ▷ 1996: US Treasury facilitates shifting to tax havens (check-the-box regulations)

→ **U.S. multinationals shift more profits** than multinationals from other countries

US multinationals book a particularly high share of profits in tax havens



Did profit shifting enhance US tax collection?

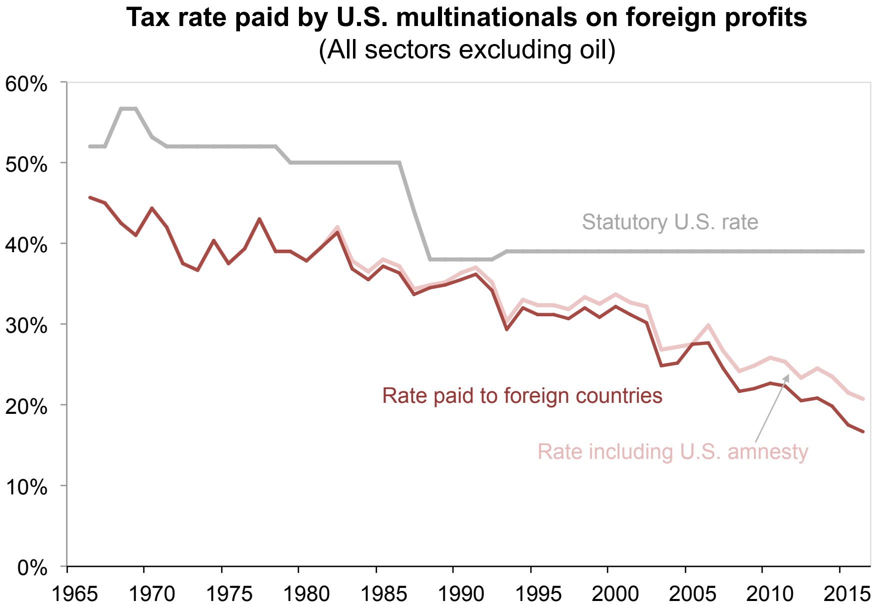
It did not:

- ▷ Haven profits perpetually retained $\rightarrow$ avoided U.S. tax
- ▷ Rising untaxed profits $\rightarrow$ rising lobbying for amnesty
- ▷ Dec. 2017 law: forced repatriation at low amnesty rate
- ▷ Shifting did not improve US tax revenue; instead it benefited the shareholders of US multinationals

$\downarrow$

2017 reform seals the exorbitant tax privilege of U.S. multinationals

The tax rate paid by US multinationals has collapsed in recent years



Letting its multinationals shift profits did not enhance US tax collection

How much taxes US multinationals would have paid to the US if…

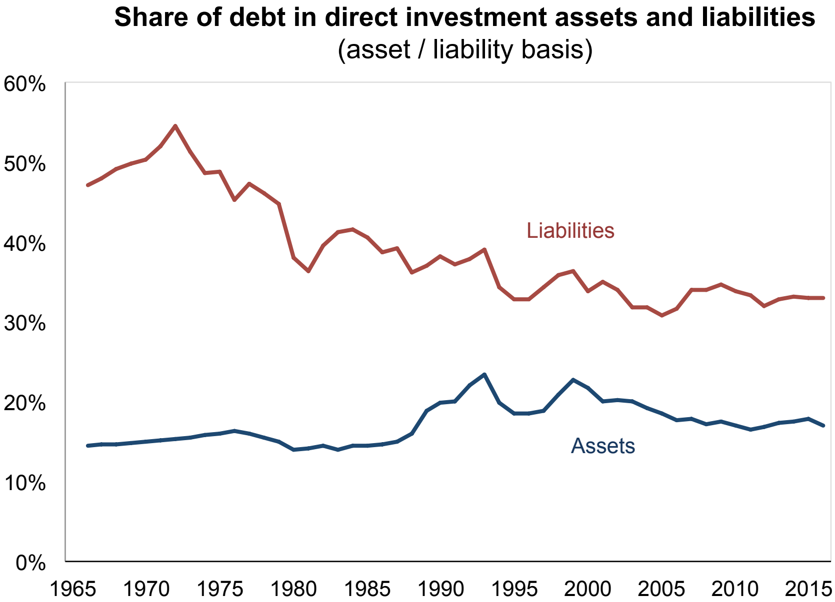
	Foreign tax rate	**No profit-shifting**			**50% shifted to havens 2017 amnesty**		
		Profits	US tax revenue	US + foreign tax paid	Profits	US tax revenue	US + foreign tax paid
High-tax countries	28%	100	7	35	50	3.5	17.5
Tax havens	8%	0	0	0	50	3.8	7.8
Total		100	**7.0**	**35**	100	**7.3**	**25**

Liability side shifting

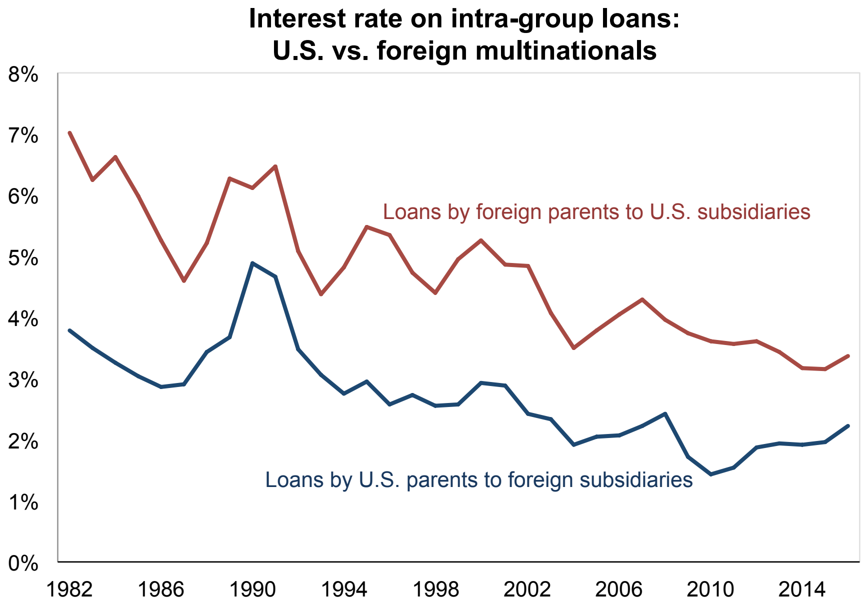
Foreign multinationals shift profits out of the United States too:

- ▷ Artificially reduces reported yields of foreign affiliates operating in the US
- ▷ Clear evidence of manipulation of capital structure (thin capitalization) & intra-group interest rate
- ▷ Can explain 10% of DI yield differential
- ▷ But quantitatively less important than asset-side shifting

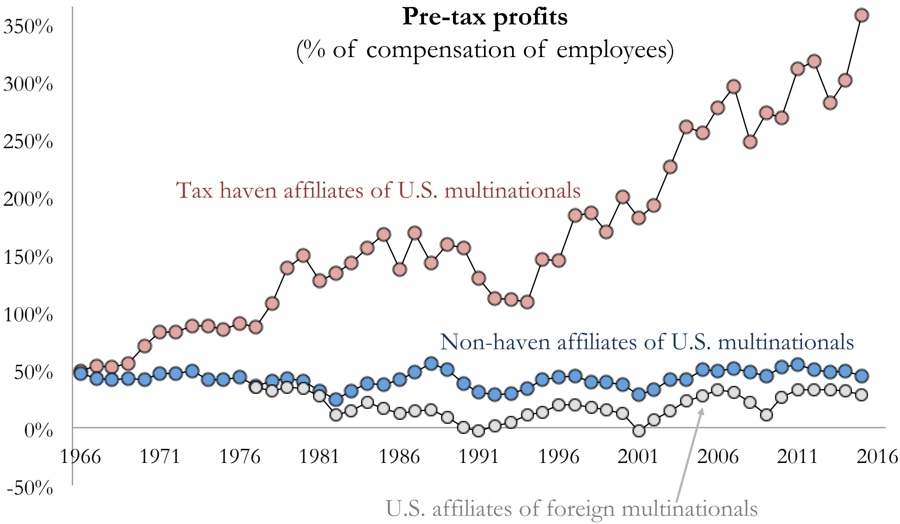
US affiliates of foreign multinationals are loaded with debt



Foreign parents charge very high interest rates to their US subsidiaries



Profits are offshore, losses onshore



Conclusion

Main findings

Half of the yield differential on US direct investment since 1966 can be explained by tax avoidance:

- ▷ Low taxes levied by oil-producing states: 20%
- ▷ Tax avoidance by US multinationals: 20%
- ▷ Tax avoidance by foreign multinationals in the US: 10%

$\rightarrow$ **Key role of taxes** in explaining “exorbitant privilege” of the US

The future of the exorbitant privilege

US ability to earn high returns will depend on:

1. Sharing of natural resources rents
   - ▷ Split not determined by natural economic forces
   - ▷ But by **politics and geopolitics**
2. Ability of US firms to keep avoiding foreign taxes
   - ▷ Everything is possible: from global disappearance of corporate income tax (race-to-the-bottom)...
   - ▷ ...to return to high corporate tax rate (better enforcement & tax design) $\rightarrow$ **policies are key**

Supplementary slides

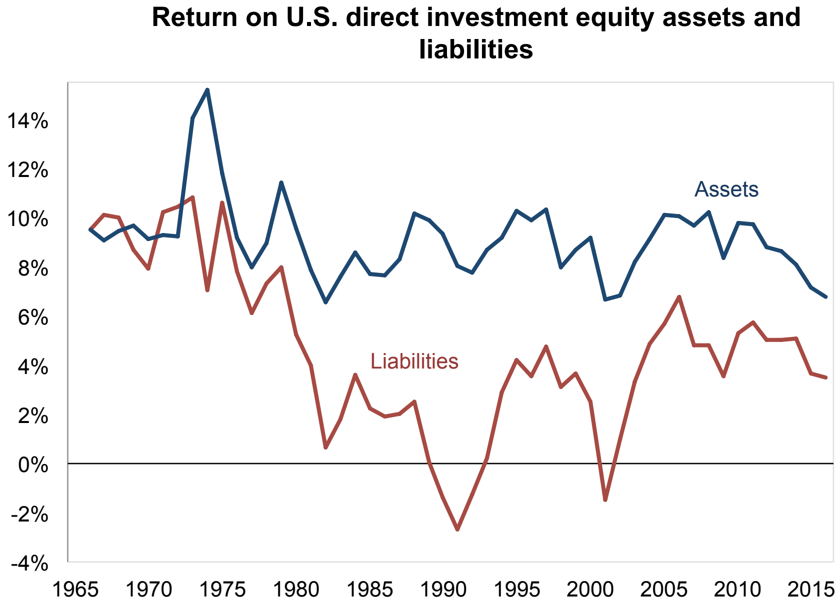
Accounting for the income puzzle

1986–2016 yields on US cross-border investments:

- $\triangleright$ Portfolio investments (bonds and equity with less than 10% ownership): $r_A = 4.0\%$, $r_L = 4.5\%$
- $\triangleright$ Other investment (loans, deposits, etc.): $r_A = 4.3\%$, $r_L = 3.8\%$
- $\triangleright$ Direct equity investment (more than 10% ownership) with positions at current cost: $r_A = 8.8\%$, $r_L = 3.0\%$

$\rightarrow$ The income puzzle is a **direct investment (DI) income puzzle: for DI,** $r_A >> r_L$

Starting with 1973 oil shock, US has enjoyed large yield differential on DI



The role of taxes in the oil sector

How US oil companies are taxed:

- Traditionally, oil producers levy royalties; any post-royalty profits taxable in the US
- 1950: royalties levied by Saudi Arabia become eligible for foreign tax credit (**“golden gimmick”**)
  - If royalties $<$ US tax rate, they don't reduce post-tax profits
  - Only royalties $>$ US rate reduce post-tax profits
  - Memo: US federal corporate tax rate: 46%–52% from 1951 to 1986 ($+$ State taxes)

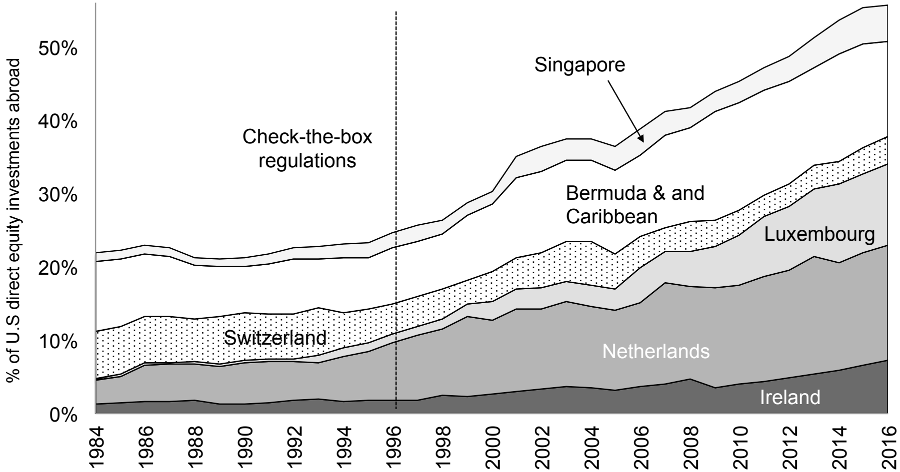
Profit shifting to tax havens has boosted profitability of US multinationals

How tax havens boost yields on US inv. abroad:

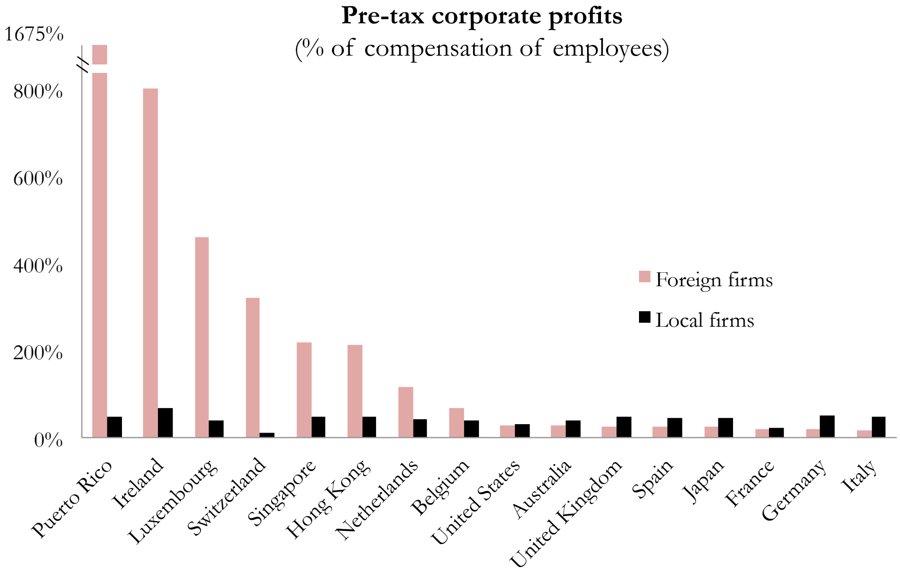
- ▷ Half of the foreign profits of US multin'l are shifted to tax havens, where taxed at low 0-10% rate
- ▷ Accounts for about 1 point of excess yields of the US in recent years (20% of the overall yields differential)
- ▷ US multinationals shift more than others, due to specific policies implemented in the mid-1990s
- ▷ 2017 tax reform mandates repatriation of previously untaxed earnings with low amnesty rates

$\rightarrow$ **Seals the exorbitant privilege of US multinat'ls**

The use of tax havens by US multinationals surged after 1996



Global profit shifting



Who shifts most? The US.
Who loses most? EU & developing ctries