The Exorbitant Tax Privilege

by T. Wright and G. Zucman

Discussion by E. McGrattan, July 2018
A Direct Investment (DI) Puzzle

• BEA average returns for 1982–2016:
  ○ US companies abroad earned 9.3% (USDIA)
  ○ Foreign companies in US earned 3.7% (FDIUS)

• Where return is DI income/DI current cost of capital
A Direct Investment (DI) Puzzle

- Return on DI of US
- Return on DI in US

Avg Returns
USDIA: 9.3%
FDIUS: 3.7%

A Direct Investment (DI) Puzzle

Return on DI of US

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Avg Returns
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A Direct Investment (DI) Puzzle

• BEA average returns for 1982–2016:
  ○ US companies abroad earned 9.3% (USDIA)
  ○ Foreign companies in US earned 3.7% (FDIUS)

• Why such a large difference?
Why Return Differences?

- Some explanations:
  - USDIA, FDIUS have different characteristics
  - Accounting returns mismeasure intangibles
  - Firms shift profits for tax purposes

- WZ focus on taxes
Profit Shifting for Tax Purposes

- Multinationals can:
  - Manipulate intra-group export and import prices
  - Manipulate interest rates on intra-group loans
  - Locate intangibles in low-tax countries

⇒ Distorts rates of return to tangible capital
WZ’s Challenge

- Want to quantify tax contribution to return gap
- Need to distinguish
  - Tax avoidance
  - Tax evasion
Tax Avoidance

- Tax rate differences *don’t imply* return differences

- Suppose,
  - No intangibles to distort accounting returns
  - Capital fully mobile between US, IRL (tax haven)

- Then,
  - No discrepancy between actual and accounting returns
  - After-tax returns to capital are equated:

\[
(1 - \tau^{us}) \left( \frac{\alpha Y^{us}}{K^{us}} - \delta \right) = (1 - \tau^{irl}) \left( \frac{\alpha Y^{irl}}{K^{irl}} - \delta \right)
\]
Tax Avoidance

- Tax rate differences don’t imply return differences
- Suppose,
  - No intangibles to distort accounting returns
  - Capital adjustment costs huge
Tax Avoidance

- Tax rate differences *don’t imply* return differences
- Suppose,
  - No intangibles to distort accounting returns
  - Capital adjustment costs huge
- Then,
  - If tax rates change, will have return differences
  - After-tax returns to capital are not equated:

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(1 - \tau^{us}) \left( \frac{\alpha Y^{us}}{K^{us}} - \delta \right) \neq (1 - \tau^{irl}) \left( \frac{\alpha Y^{irl}}{K^{irl}} - \delta \right)
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- An implicit assumption of WZ?
WZ’s Estimate of Gap with No Tax Havens

- Start with after-tax USDIA returns
- Then,
  - Divide by $1/(1 - \tau^{irl})$, $\tau^{irl} =$ rate of tax haven
  - Multiply by $(1 - \tau^{nth})$, $\tau^{nth} =$ rate of non-havens

$\Rightarrow$ WZ’s estimate for USDIA return with no tax haven
$\Rightarrow$ 0.6 %age points of 6% return gap
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$\Rightarrow$ WZ’s estimate for USDIA return with no tax haven

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• WZ consider 5 such “adjustments” to BEA returns
All Adjustments

Assume oil sector has same return as non-oil sector
All Adjustments

Assume non-oil profits taxed at non-haven rates
Assume non-oil, non-haven profits taxed at US rates
All Adjustments

Assume US and foreign affiliates have same capital structure.
All Adjustments

Assume US and foreign affiliates have same interest charges
Take-Aways

• WZ:
  
  ○ Barely any differential since mid-2000s
    ⇒ Taxes important contributor to return gap

• EM:
  
  ○ Need evidence of capital adjustment costs/frictions
    ⇒ Puzzle isn’t resolved
Back to WZ’s Challenge

- Want to quantify tax contribution to return gap
- Need to distinguish
  - Tax avoidance
  - Tax evasion

Next, consider tax evasion
Tax Evasion

• WZ’s rhetoric more indicative of evasion

• USDIA returns *artificially* high because
  
  ○ Expenses in US

  ○ Revenues abroad

  \[
  (1 - \tau^{us}) \left( \frac{\alpha Y^{us} - x}{K^{us}} - \delta \right) < (1 - \tau^{irl}) \left( \frac{\alpha Y^{irl} + x}{K^{irl}} - \delta \right)
  \]

• Main challenge: pin down *x* or any gap is possible
Recommendation

• Use BEA firm-level data to explore tax-evasion hypothesis

• Are returns higher for multinationals with more
  ○ Intangible-intensive products?
  ○ Intra-firm trade?
  ○ Intra-firm borrowing?
  ○ Tax accountants?