The Exorbitant Tax Privilege

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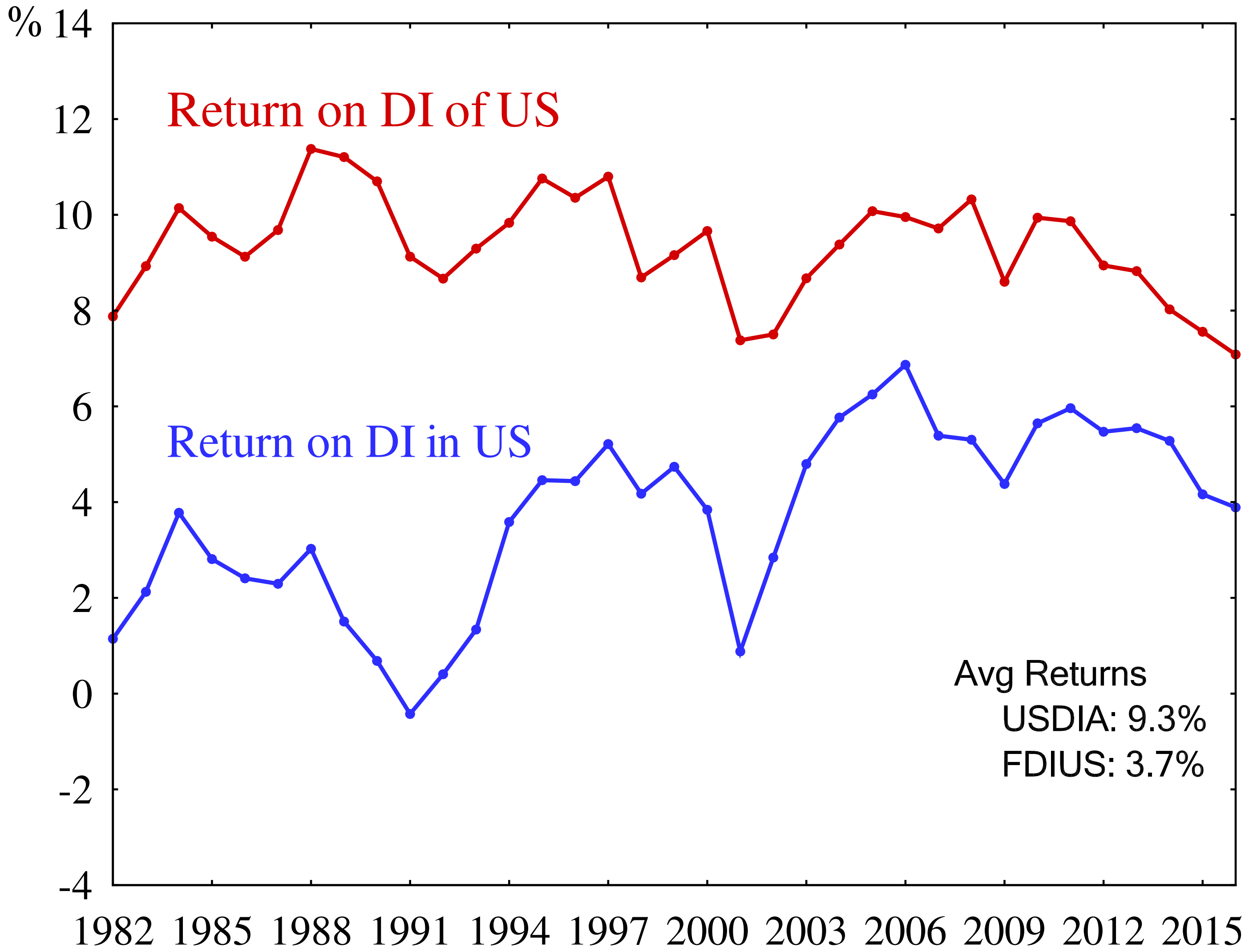
Discussion by E. McGrattan, July 2018

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



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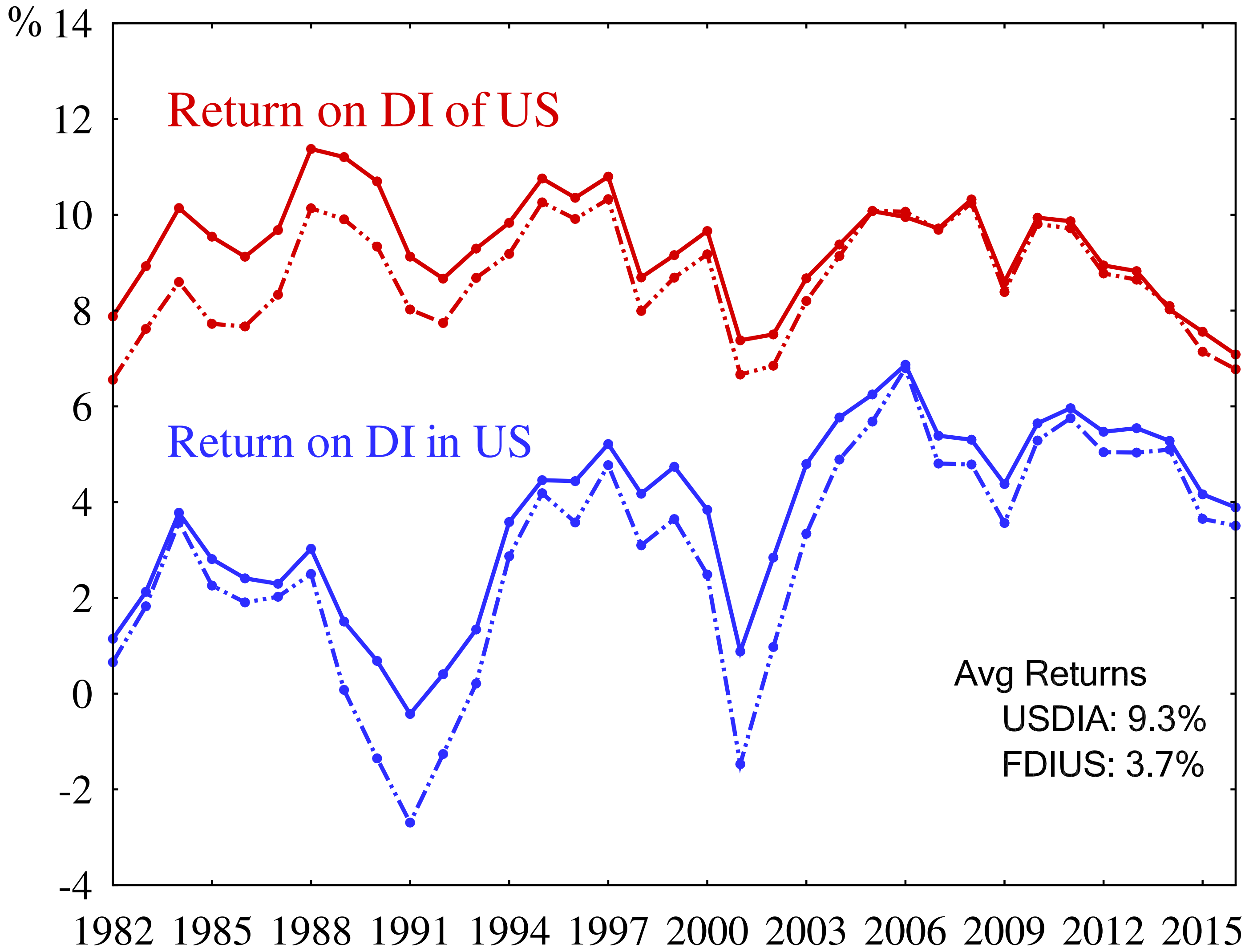

A Direct Investment (DI) Puzzle

- 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

$\Rightarrow$ 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:

$$(1-\tau^{us})\left(\frac{\alpha Y^{us}}{K^{us}}-\delta\right)=(1-\tau^{irl})\left(\frac{\alpha Y^{irl}}{K^{irl}}-\delta\right)$$

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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 $1/(1-\tau^{irl})$, τ^{irl}= rate of tax haven
  - Multiply by $(1-\tau^{nth})$, τ^{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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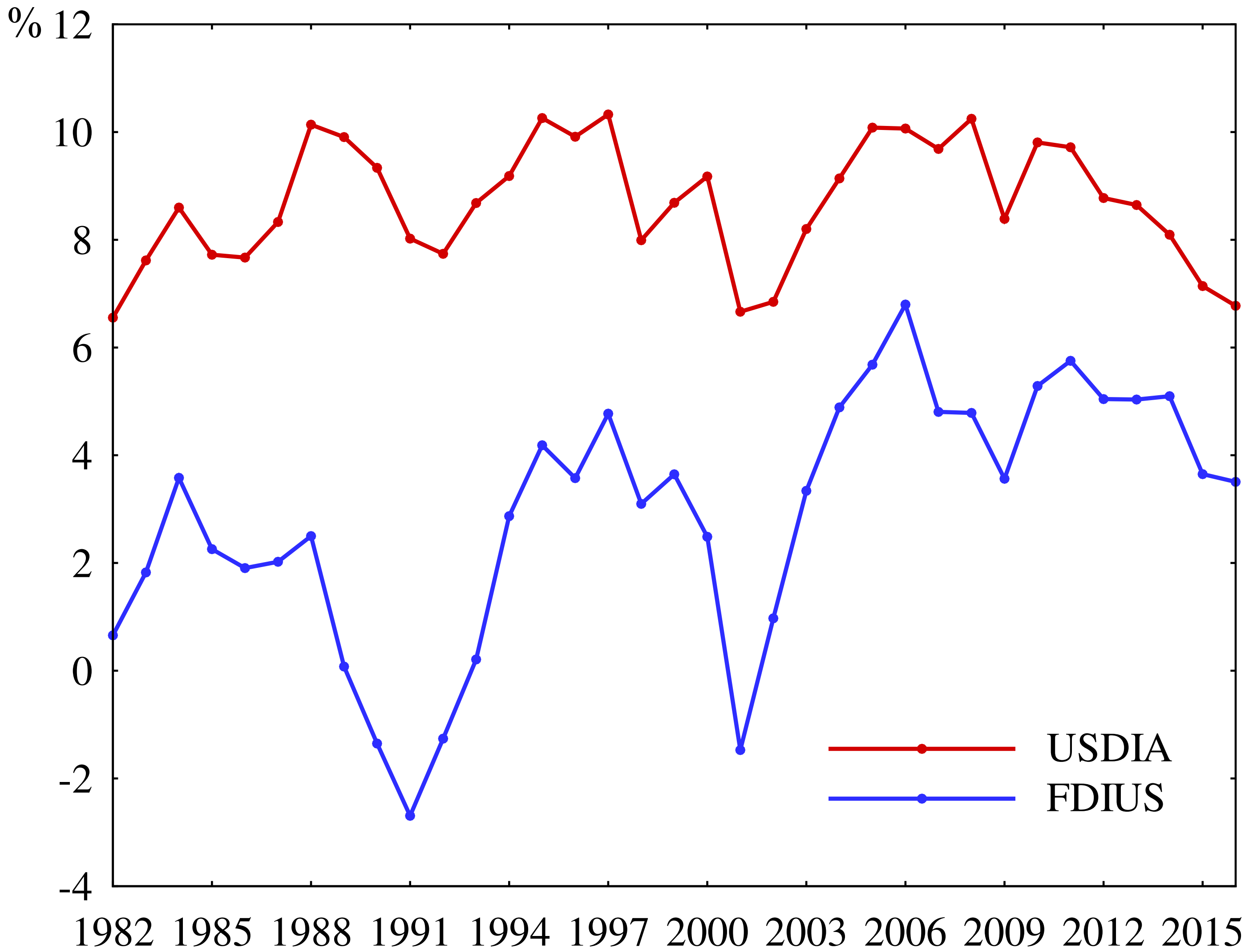
- WZ consider 5 such "adjustments" to BEA returns

All Adjustments



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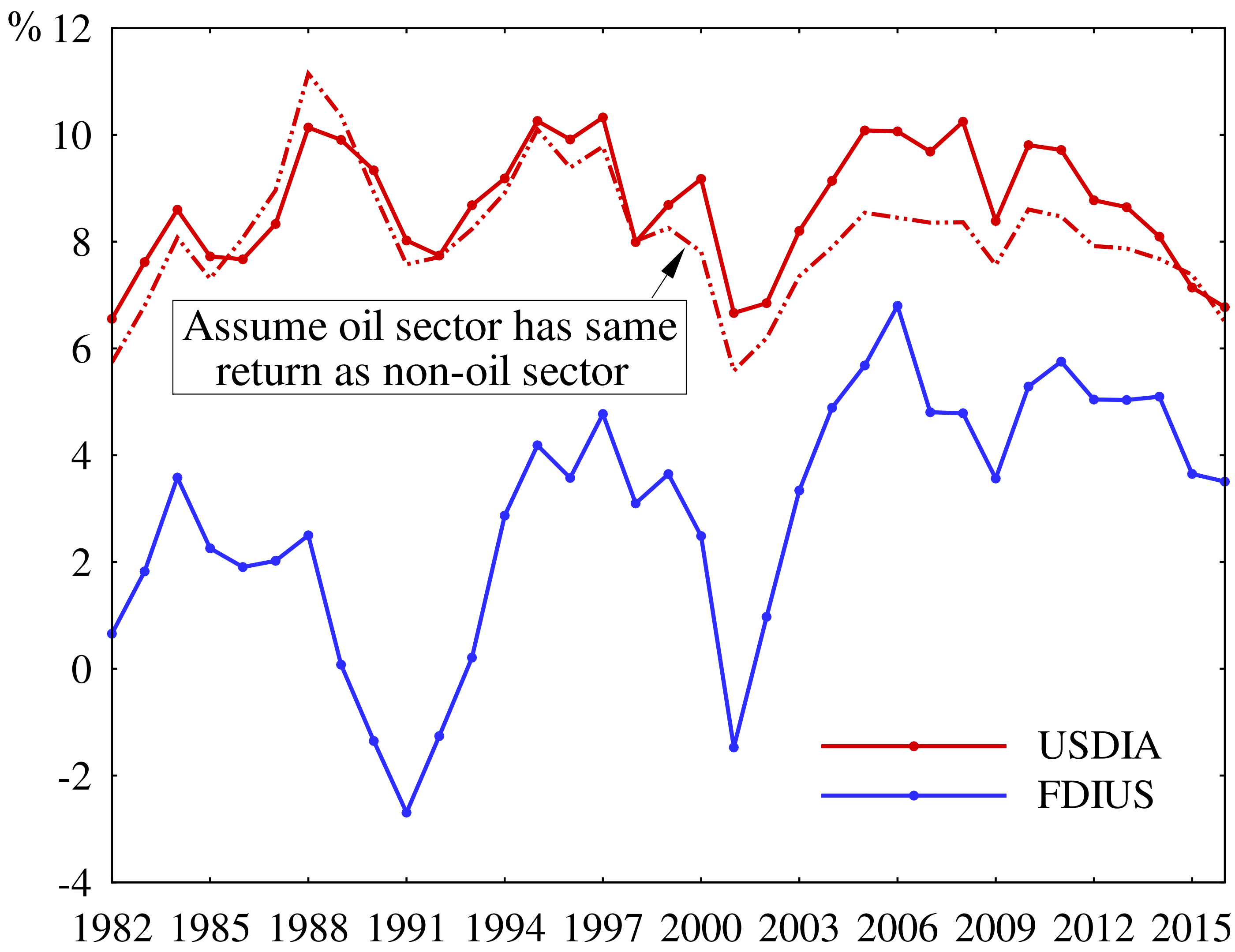

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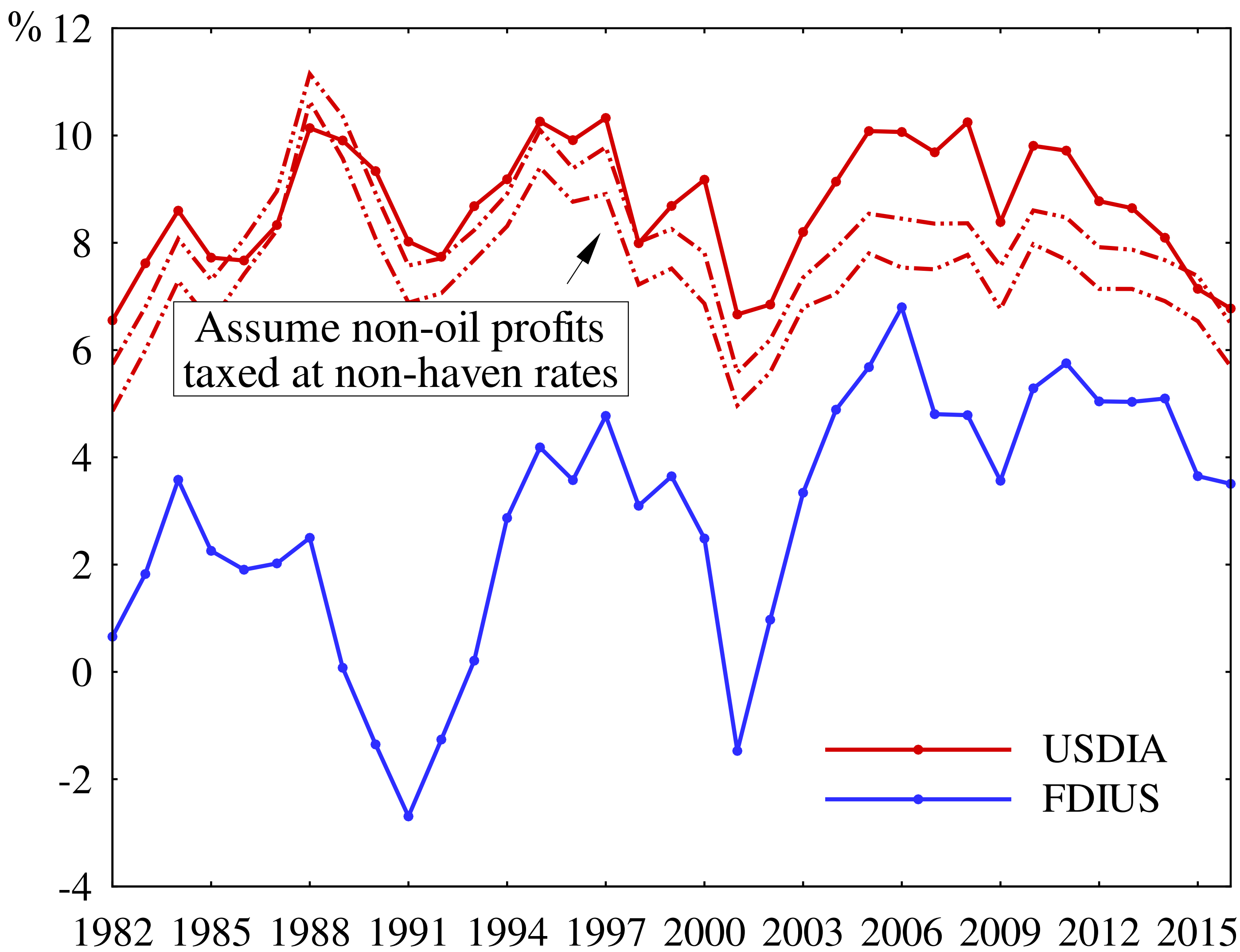

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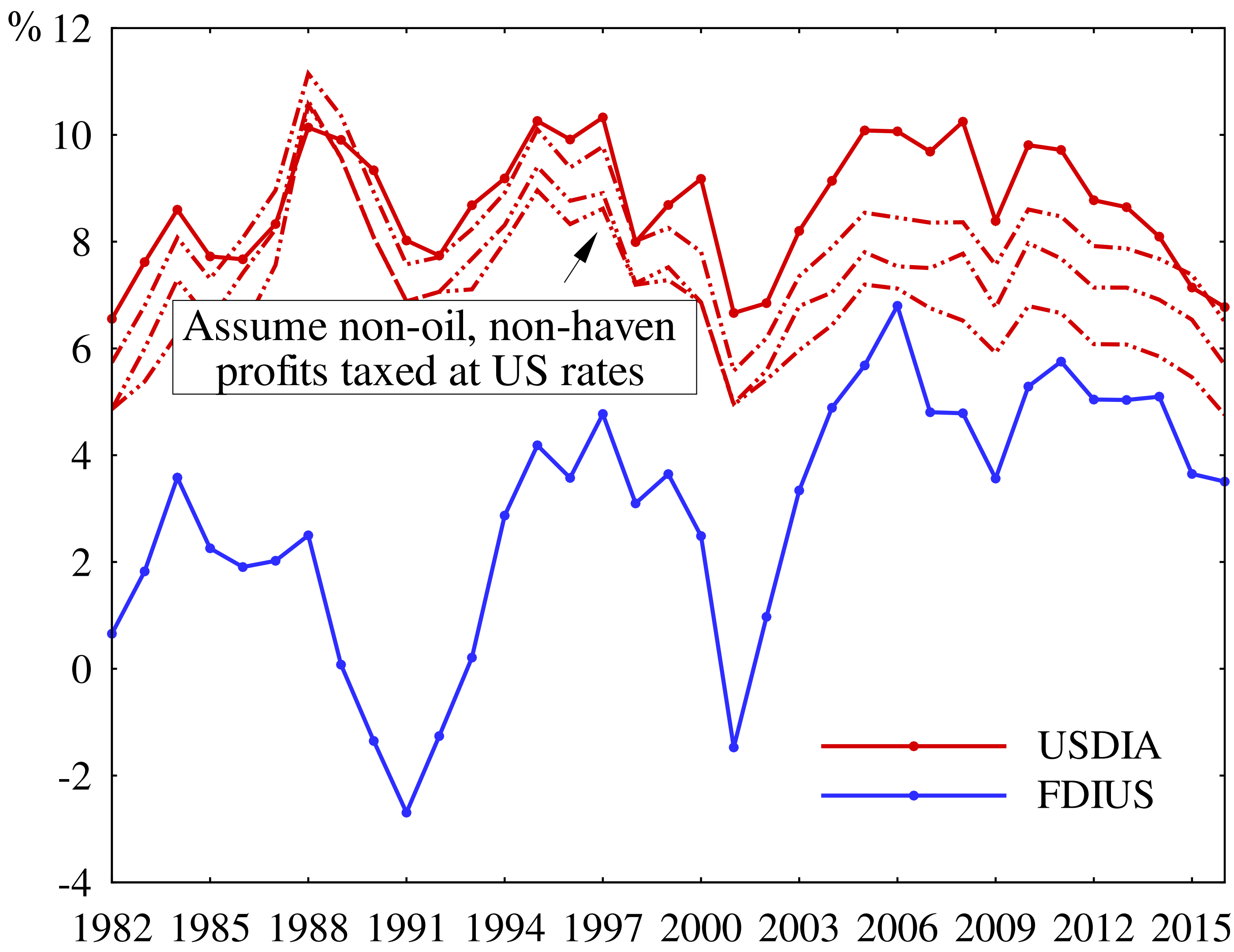

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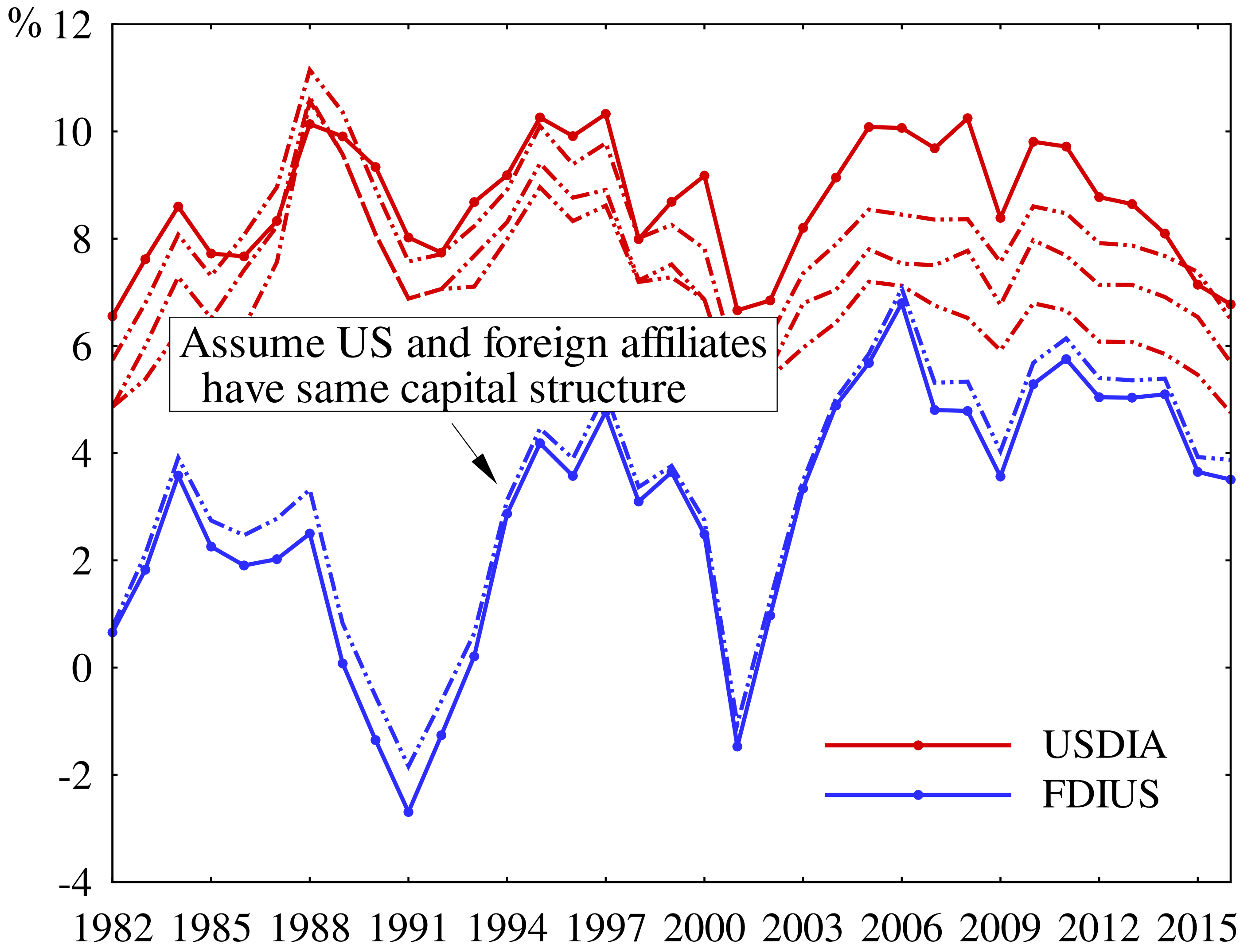

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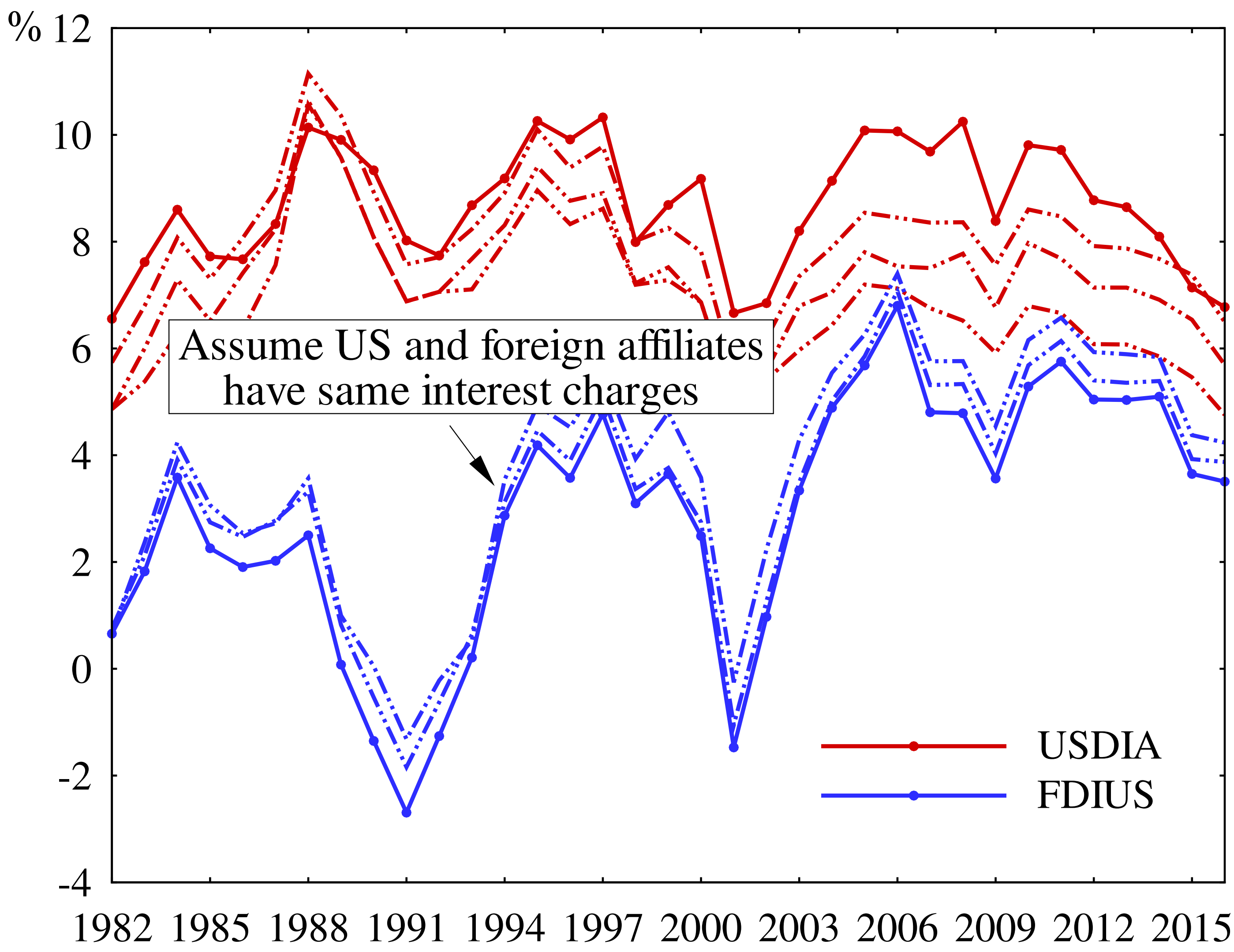

Take-Aways

- WZ:
  - Barely any differential since mid-2000s
    $\Rightarrow$ Taxes important contributor to return gap
- EM:
  - Need evidence of capital adjustment costs/frictions
    $\Rightarrow$ 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 <u>any</u> 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?