



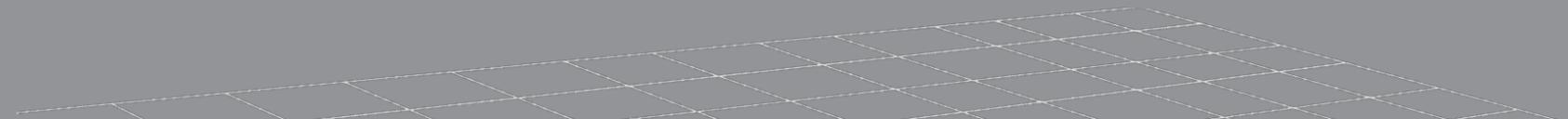
International Taxation in a Digital World

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Richard Musgrave

- Allocation Efficiency
- Redistribution Fairness
- Stabilization Resilience

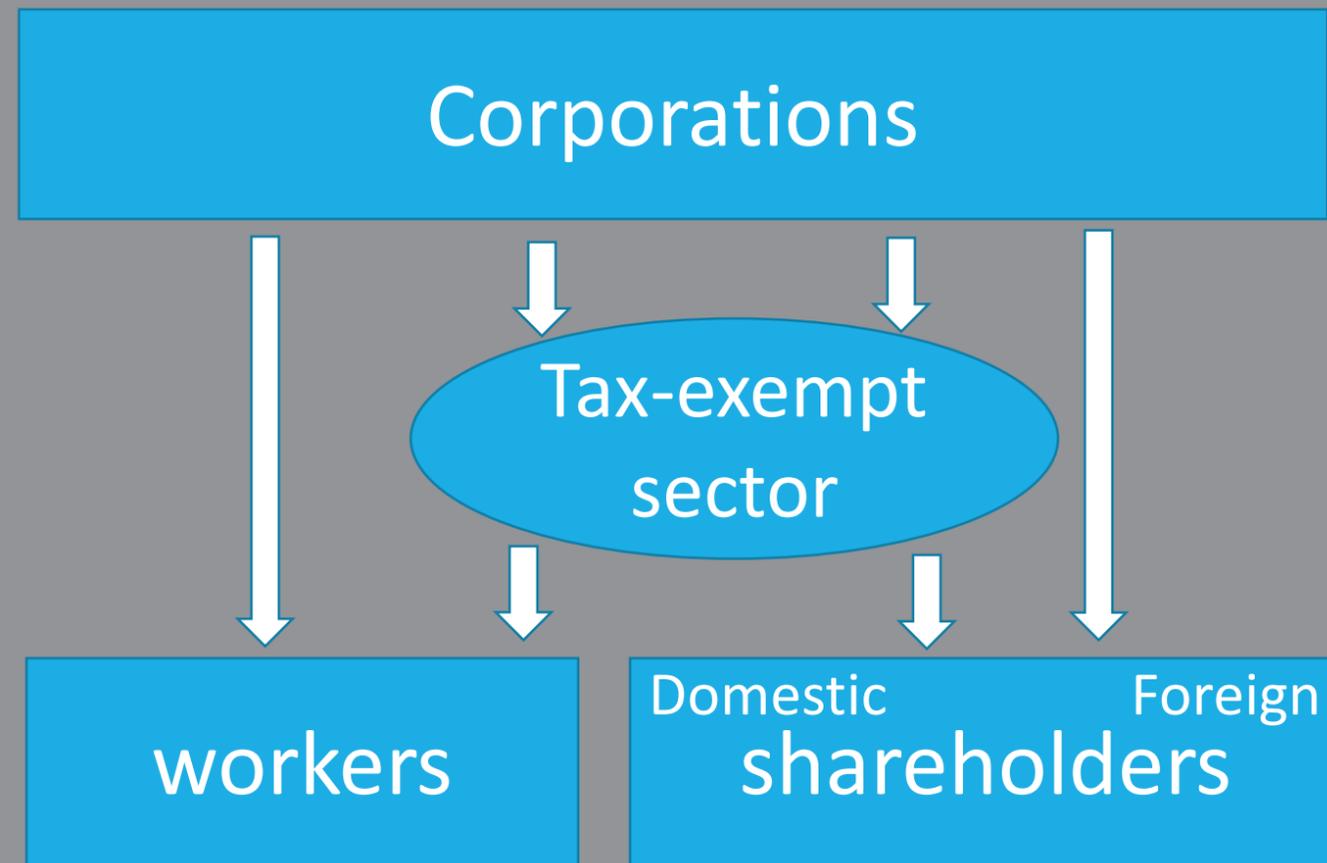
- Administrative costs
- International aspects

- Land
 - Labor
 - Capital
 - Tangible
 - Intangible, IP
 - The “superrich”

 - **Tony Atkinson’s proposal**
 - Club of countries negotiate a tax for the superrich
 - Split across countries according to GDP
 - Tax
 - As a charge for enforcing intellectual property rights
- Henry George Tax more what is less substitutable/mobile less distortionary
- across factors
 - across time
- Except for BADs (environmental taxes, ...)
- extend to corporations
- Accrual –based minimum tax

Corporate tax – a way to tax the tax-exempt sector

- “ultimately people pay taxes” Michael Devereux



- + international dimension

International Taxation and Tax Competition

- Shareholder residence
- Headquarter residence
- Source/origin
 - “where value is created” – global value chains, data?
- Destination
 - Sales and VAT
 - DBCFT: Destination-Based Cash Flow Tax
- GILTI: Global Intangible Low-Taxed Income
- Border Adjustment Tax (Climate change)
 - Correcting distortions or
 - Hidden protectionism

Digital Service Tax (DST)

- Google Double-Dutch, Irish, ... and other “tax tricks”
 - Fix loopholes or redesign global tax architecture?
- “money grab hypothesis” ... revenue estimates are small
 - Get part of tax from cash rich US Tech companies
- Tax excessive rents + concentration of power +
+ Politically very popular
- Tax innovation (sector with positive R&D externalities)
 - Reinvest in innovation
 - Are government better investors than private firms?

Poll Questions

1. Given international taxes, the preferred US corporate tax rate (from a US national perspective) would be
 - a. At or near its current level (21%)
 - b. Substantially lower
 - c. Substantially higher

 2. Given its need for additional tax revenue and the pressures of international tax competition, the US should adopt a value added tax (VAT)
 - a. Agree
 - b. Disagree
 - c. Not Sure

 3. International tax cooperation is likely to lead to a stable, coordinated international tax system that deals with new challenges, including the taxation of digital services.
 - a. Agree
 - b. Disagree
 - c. Not sure
- 

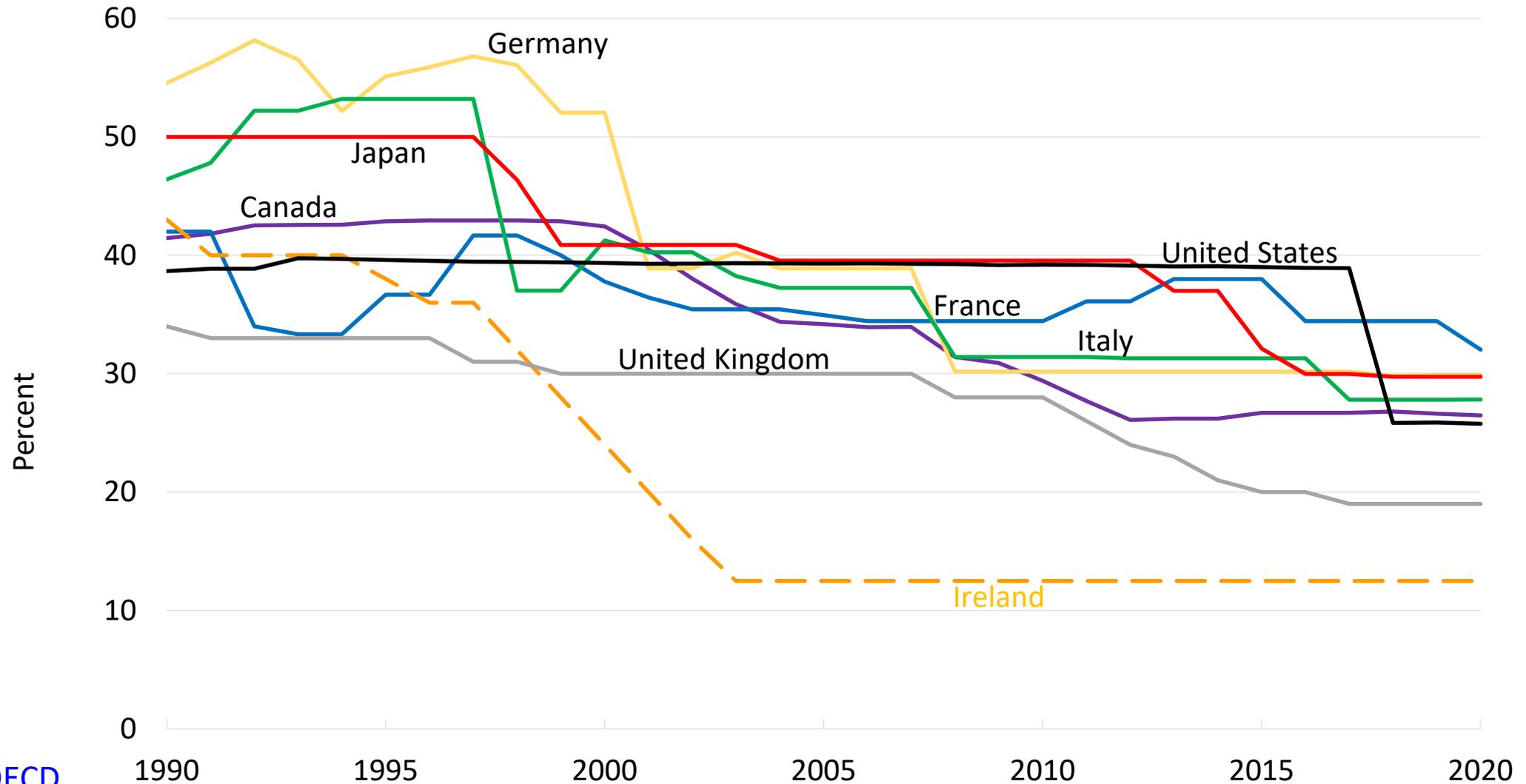


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G-7 Corporate Tax Rates



Source: [OECD](https://www.oecd.org/)

A Changing Economic Setting

Top Five US Companies



1966:

1. AT&T
2. IBM
3. GENERAL MOTORS
4. EXXON MOBIL
5. EASTMAN-KODAK

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2016:

1. APPLE
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3. MICROSOFT
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Top Five US Companies



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2016:

1. APPLE
2. ALPHABET
3. MICROSOFT
4. ~~EXXON MOBIL~~
5. AMAZON

Facebook

A blue arrow originates from the word "Facebook" and points to the crossed-out "EXXON MOBIL" in the 2016 list, indicating its replacement.

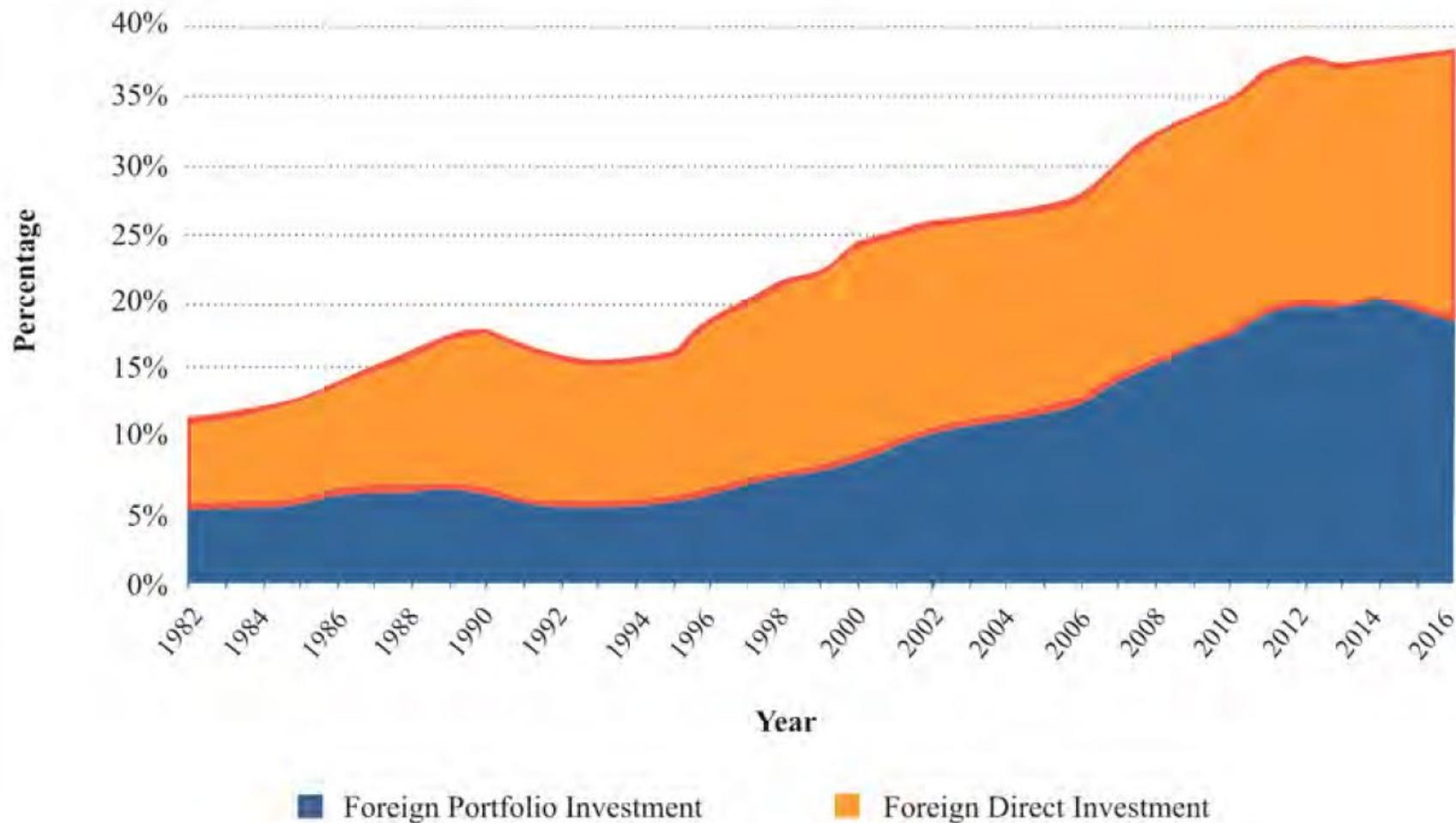
A Changing Economic Setting



In half century ending in 2016 (see Auerbach [BPEA 2017](#)),

- Share of IP in US nonresidential assets doubled (BEA, Fed FOF)
- Share of before-tax corporate profits of US resident companies coming from overseas operations nearly quintupled (BEA)
- Share of cross-border ownership of equity has steadily increased (Rosenthal, [Tax Notes 2017](#))

Figure 2. Foreigners' Holdings of U.S. Corporate Stock as a Share of Total C Corporation Equity and Foreign Direct Investment, 1982-2016 (market value in 2017 dollars)



Source: Board of Governors of the Federal Reserve System, "Financial Accounts of the United States," Tables L.230 and L.223, and author's calculations.

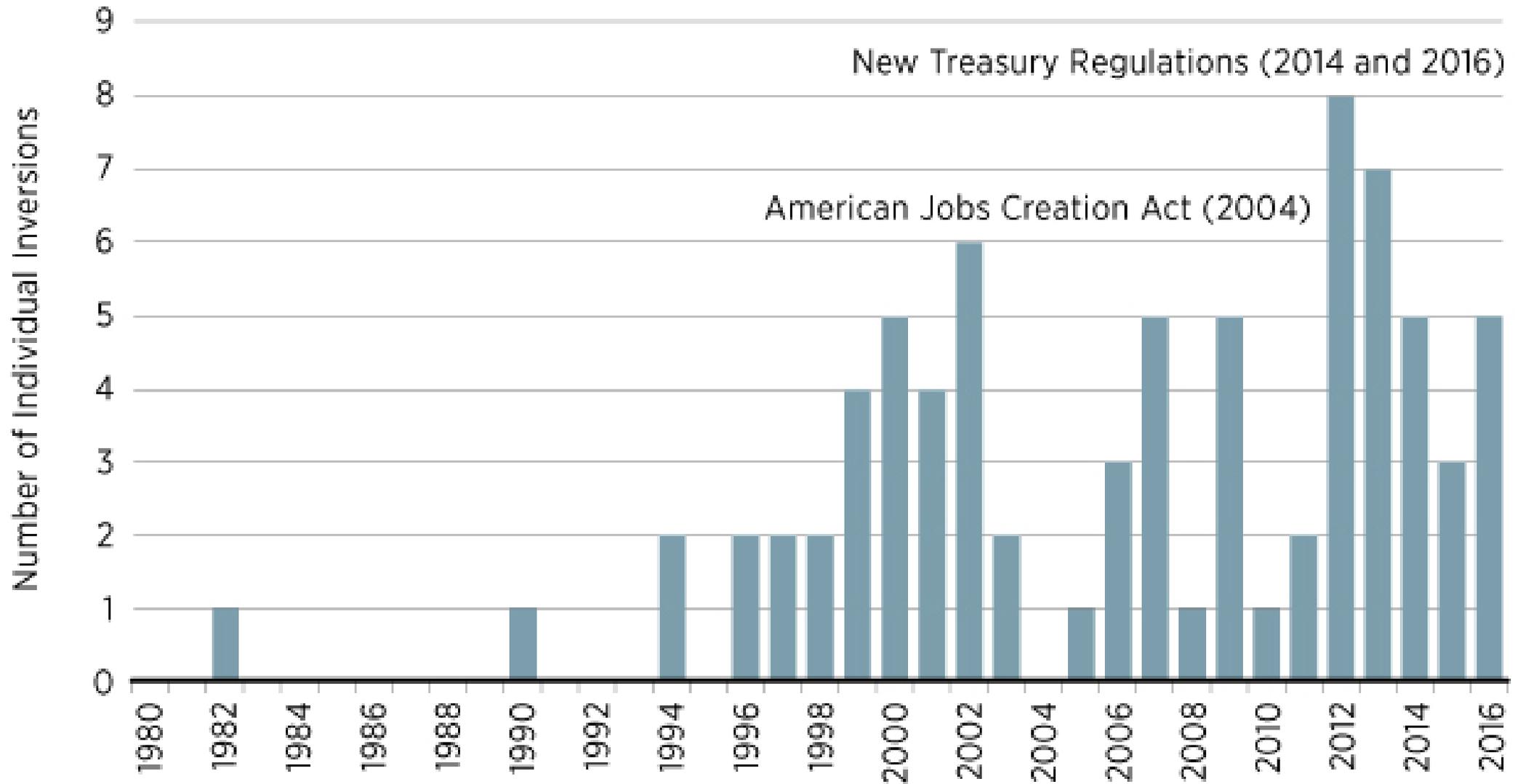
Implications



Increased pressure on tax systems based on where companies have residence

- With greater multinational activity and foreign ownership, easier to engage in inversion (change in corporate residence resulting from corporate reorganization)

Corporate Inversions Per Year



Source: Neely and Sherrer, "A Look at Corporate Inversions, Inside and Out," [FRB St. Louis, 2017](#)

Implications



Increased pressure on tax systems based on where companies have residence

- With greater multinational activity and foreign ownership, easier to engage in inversion (change in corporate residence resulting from corporate reorganization)
- Also, incentive for US firms to keep profits offshore (“lock-out” effect)
 - US companies were estimated to have \$2.6 trillion (or more) offshore as of 2016

Implications



Increased pressure on tax systems based on where companies produce

- Location of production easier to change because of multinational activity and lower costs of transportation (e.g., chips vs. autos)
 - Stronger incentive for firms to move activities to countries with lower tax rates

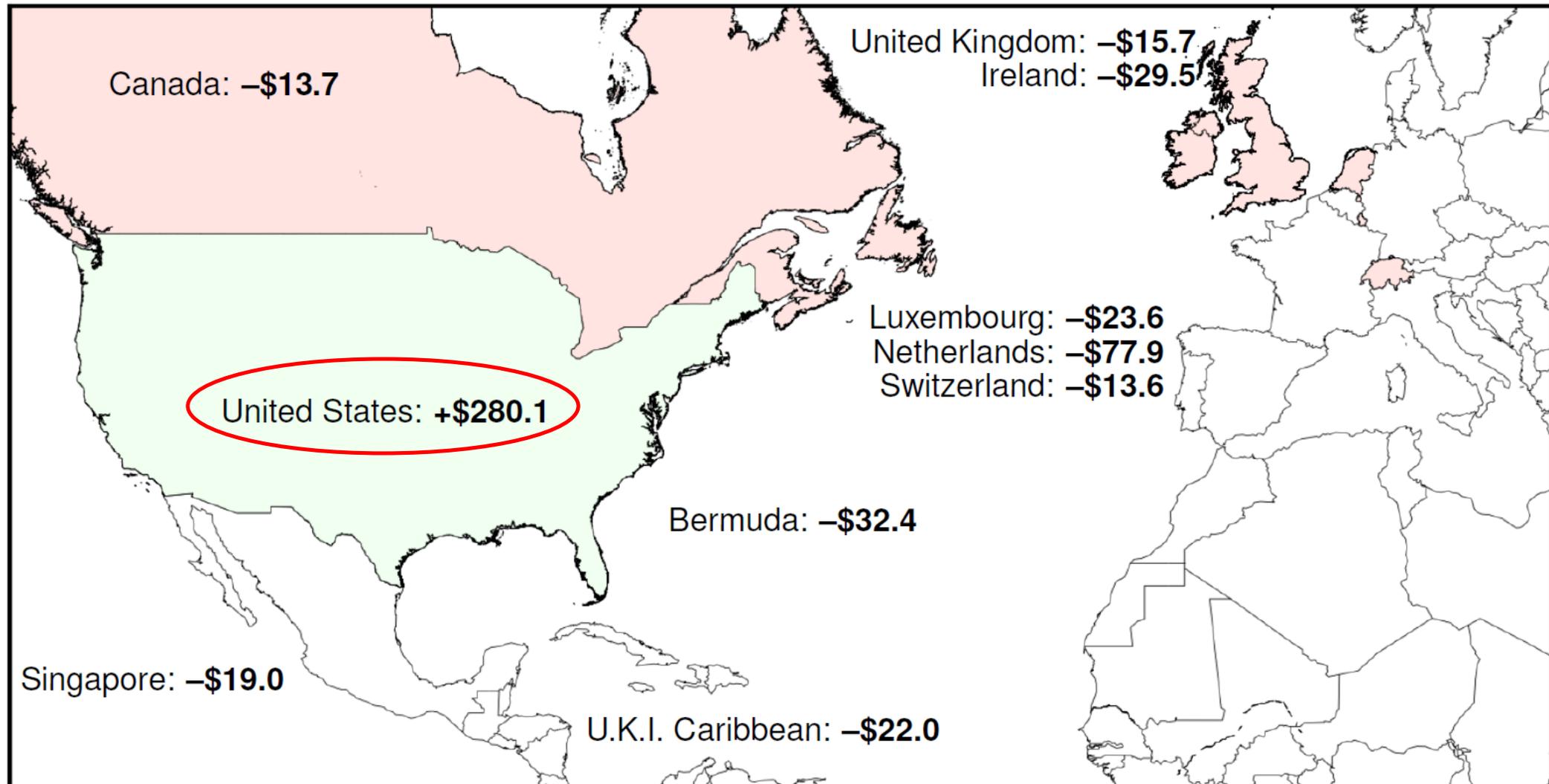
Implications



Increased pressure on tax systems based on where companies report profits

- Profit-shifting easier (via related-party transactions) when companies already have foreign operations and are locating and valuing IP

Estimated Profit Shifting, 2012



Source: Guvenen et al., “Offshore Profit Shifting and Domestic Productivity Measurement,” [FRBM, 2018](#); also Tørsløv, Wier and Zucman, [NBER 2018](#); but also see Blouin and Robinson, [2020](#)

The Newest Frontier: Digital Taxation



- Big, primarily US companies (e.g., Google, Facebook) provide substantial benefits to users in countries where they pay no corporate income tax
 - Revenues come from advertising purchases from subsidiaries, typically located in tax havens
- Some individual countries (e.g., France, India) have adopted or are considering special digital taxes (excise taxes on revenues based on location of targets of advertising, location of users, etc.)

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

1. Try to limit tax competition to more mobile income, e.g., through the enactment of patent boxes
 - A lower tax rate on intellectual property income
 - But still promotes profit-shifting and has had no noticeable impact on overall tax competition

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

2. Tighten tax rules to limit profit shifting

- Works to reduce tax avoidance
- But has adverse effects on other margins (e.g., investment)

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

3. Try a hybrid approach: a territorial system plus a worldwide accrual-based minimum tax
 - This is the new US (GILTI) approach
 - Also being recommended by the OECD (“Pillar 2”)

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

3. Try a hybrid approach: a territorial system plus a worldwide accrual-based minimum tax
 - May lessen but does not eliminate the problems of existing systems, including the incentives for tax competition (for residence, production, and profits)
 - Potential for stability hinges on ability to enforce cooperation

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

4. Focus tax base on destination, i.e., location of final consumers

- Since base is relatively immobile, less susceptible to competition over tax rates
- E.g., main existing tax based on location of final consumption – VAT – shows little susceptibility to tax-rate competition

The Need for Reform



Traditional approach to taxing multinationals based on location of production and corporate residence appears to be unstable. What are the options for reform?

4. Focus tax base on destination, i.e., location of final consumers

- Because of reduced focus on residence or location of production, unilateral adoption may induce adoption by other countries
- A form of tax competition, but over tax systems, not tax rates
- Reflects an additional objective of tax design (efficiency, equity, administrability, etc.): incentive compatibility

Two Approaches to Reform



1. Residual Profit Allocation by Income (RPAI) – Incremental
2. Destination-Based Cash Flow Taxation (DBCFT) – Big

RPAI



- Allocate earnings on “routine” operations as under current system, based on location of production
- Allocate residual earnings (including earnings attributable to intellectual property) based on the location of net sales revenue
- US states have moved over time toward the use of apportionment based on sales (rather than payroll or assets), confirming the incentives to shift toward destination-based taxation

RPAI



- Allocate earnings on “routine” operations as under current system, based on location of production
- Allocate residual earnings (including earnings attributable to intellectual property) based on the location of net sales revenue
- RPAI reduces incentives to shift profits and production, although not completely impervious to tax avoidance strategies

RPAI



- Allocate earnings on “routine” operations as under current system, based on location of production
- Allocate residual earnings (including earnings attributable to intellectual property) based on the location of net sales revenue
- Closely related to an approach being put forward by the OECD (“Pillar 1”), but simpler and more coherent

DBCFT



- Would impose
 - a cash flow tax on domestic operations
 - border adjustments to eliminate tax deduction for imports & tax on exports
- Border adjustment would
 - Shift location of tax from production to consumption
 - Eliminate profit shifting opportunities
- Equivalent to a VAT, but with wage component excluded, so just a tax on profits

DBCFT



- Considered seriously by US in 2016-7; not implemented because of concerns including
 - Nature of required exchange rate adjustment
 - Possible WTO reaction
 - General lack of understanding of the plan's operation and incidence

DBCFT



- However, 2017 US legislation (TCJA) did include provisions that moved in this direction
 - Expensing of some investment
 - Partial tax on some imports (BEAT)
 - Tax reduction on exports (FDII)

Conclusions