FIN 325 Corporate Finance

L17 (Applications): Multinational Topics — Global Taxation

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Overview

- How do the World's governments tax their multinational firms?
  - Differential tax treatment of domestic v.s. foreign earnings?
- How does the U.S. Government tax its multinationals?
- This particular topic is an area in which I'm **writing my dissertation**.
  - I'll give you background on the issue and details regarding my research.
- **My research question:** how does the U.S.'s current system affect the investment/borrowing decisions of U.S. multinationals?

Types of tax systems (1)

- A country will generally have a rate at which it taxes **domestic** earnings.
  - E.g. corporate earnings made in the U.S. are taxed at 35%.
- How does the country tax the **foreign** earnings of firms **incorporated domestically**?
  - E.g. how does a firm incorporated in New York get taxed on its earnings in London?

Types of tax systems (2)

- Consider a country called MULand.
- MULand can broadly follow one of two systems for taxing the earnings of its multinationals:
  - **Worldwide system**
  - **Territorial system**.
- **Difference:** are the **foreign** earnings of a firm incorporated in MULand taxable by the government **of MULand**?
  - Worldwide system: yes.
  - Territorial system: no.

Types of tax systems (3)

System	OECD Countries
Worldwide (8)	Chile, Greece, Ireland, Israel Korea, Mexico, Poland, **United States**
Territorial (26)	Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia Finland, France, Germany, Hungary, Iceland, Italy, Japan*, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom*

- * Switched from worldwide to territorial in 2009.
- **Specific research question**: how would borrowing and investment decisions of U.S. firms be affected by the U.S. switching to a territorial tax system?

Current U.S. system (1)

- **When** do U.S. firms need to pay taxes on their foreign earnings to the U.S. Government?
- Timing of tax payment **differs** based on the **type** of earnings that were made.
- Around **90%** of the foreign earnings that U.S. companies make attract taxes to the U.S. Government that are **deferrable** until repatriation.

Current U.S. system (2)

- What tax rates do these U.S. firms pay on their overseas earnings?
- They receive **tax credits** on taxes paid to the overseas government.
- If the tax rate in the foreign country is F%, then a U.S. firm making money in that country will owe the U.S. Government 35-F% of those earnings.
- Idea is such that the U.S. firm will **pay 35% on all its earnings**, regardless of where they were made.

Current U.S. system (3)

If Apple didn't hold $181B overseas, it would owe $59B in US taxes

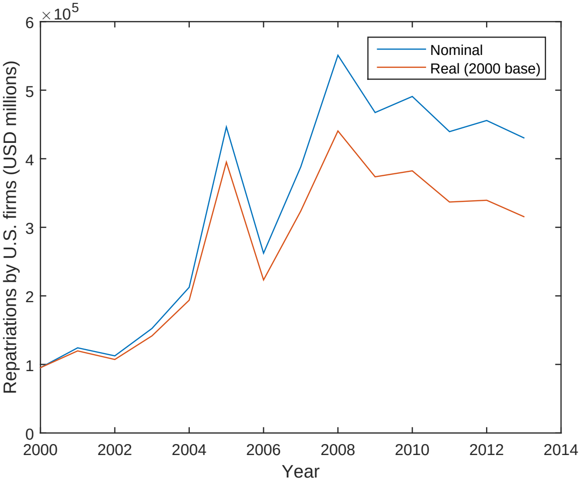
"The effect on the average US taxpayer is that the US government is deprived of revenue."

by Cyrus Farivar - Oct 7, 2015 6:00am CDT

Share Tweet Email 559

Current U.S. system (4)

Current U.S. system (5)



- **2005 spike**: one time repatriation tax holiday.
- **Hypothesis**: repatriations will be higher under territorial system.

Relevant literature and my contribution

- **Most similar paper to mine** is Arena & Kutner (Review of Financial Studies, 2015)
    - They look at **British** and **Japanese** switch from worldwide to territorial system.
    - After policy change, firms accumulate less cash, pay more as dividends to shareholders, repurchase more shares, invest less abroad and domestic investment is unaffected.
- **Contributions of my paper**:
    - Specifically looks at impact of policy change on **U.S.** firms.
    - Examines **long run** impact of the policy change.
    - Analyses the impact on **domestic borrowings**.
    - Studies the impact on **firm size distribution** and number of multinationals.

Example A (1)

- Macrosoft, (a U.S.-incorporated company), is faced with a potential overseas investment opportunity.
- There are two periods, ($t = 0$ and $t = 1$).
- The opportunity arises in Gatesland, whose currency trades at 1 for 1 with the USD.
- Gatesland has a zero domestic corporate tax rate.
- The investment has an upfront cost of \$66m at $t = 0$ and generates \$100m at $t = 1$.
- Assume there is no discounting.
- Find the NPV of the project under the current worldwide U.S. system and contrast it with that under a territorial alternative.

Example A (2)

- Given that this is a two period problem, Macrosoft will bring **all the earnings at** $t = 1$ back to the U.S. at $t = 1$ if they take the project.
- Under the current worldwide system

$$NPV_{WW} = -\$66m + (1 - 0.35) \times \$100m = -\$1m$$

- Under the territorial system

$$NPV_T = -\$66m + (1 - 0.0) \times \$100m = \$44m$$

- Overseas investment appears to be more attractive under the territorial system.

My preliminary quantitative results (1)

- I develop a model of U.S. firm behaviour and run a counterfactual of moving from the current worldwide to a territorial regime.
- These results are preliminary and subject to change!
- Moving from a worldwide to a territorial system in the U.S. causes the following long-run changes to aggregate U.S. firm variables.

Variable	**Long-run percentage change**
Repatriations	110.44%
Domestic investment	32.45%
Overseas investment	20.15%
Borrowings	22.60%
Dividends to shareholders	5.97%
U.S. tax collections	1.85%

My preliminary quantitative results (2)

- What's the intuition behind these results? Use **cost-benefit** analysis to discern the impacts of the policy change.
- **Repatriations**: lower marginal cost associated with repatriating earnings to the U.S. parent.
- **Home investment**: repatriations are now a cheaper source of funding; lowers the cost of investing in U.S..
- **Overseas investment**: firms lose less of their future overseas earnings to taxes — higher marginal future benefit.
- **Domestic borrowings**: higher investment means firms have more collateral to borrow against; increase leverage to take advantage of tax shields.
- **Shareholder dividends**: lower marginal cost of paying dividends now due to larger pool of repatriations.
- **U.S. tax revenues**: rise in collections from home production, investment and dividends are enough to offset lost repatriation taxes.

Takeaways

- Currently the U.S. Government taxes the **overseas** earnings of its multinational corporations.
- My study looks at how **changing** this tax law would affect the decisions of U.S. firms.
- Preliminary results show the policy change would come to the **benefit** of U.S. firms and investors.
- Positive effects need not necessarily come at the expense of tax collections!