U.S. Firms on Foreign (tax) Holidays

Travis Chow, Jeff Hoopes, and Edward Maydew

2018 ABFER Conference

Discussion by Alexander Edwards

University of Toronto - Rotman School of Management

Rotman

Overall Thoughts

- Interesting paper that I enjoyed reading
- Examination of a important topic, foreign tax holidays, that has not previously been investigated in the literature
- Great data set

Rotman

Agenda

- The ETR literature
- What we learn from Chow, Hoopes, and Maydew
- What is a tax holiday?
- Data
- Empirics
- Other Comments

Rotman

Tax Avoidance/Aggressiveness/Planning

- Building on earlier literature on ETRs from the 1990s, Dyreng, Hanlon, Maydew (2008) attach label "tax avoidance" and refine measure
  - Document that there is considerable cross-sectional variation in tax avoidance with some firms able to maintain ETRs below 20%
  - Authors have used several labels to describe tax reducing behavior of firms
    - "Tax avoidance" capturing the reduction of a firm's taxes relative to its pre-tax income, with no connotation of anything improper
    - "Tax aggressiveness" refering to the legality of tax strategies undertaken by a firm with strategies that may fall into the grey area of the law being referred to as "tax aggressive"
    - More recently, the term "tax planning" has been used synonymously with both/either tax avoidance and tax aggressiveness

Lots of Research Examining Determinants

- Firm characteristics
    - Financial reporting (Frank, Lynch, Rego 2009)
    - Managers (Dyreng, Hanlon, Maydew 2010)
    - Owners (Chen, Chen, Cheng, Shevlin 2010)
    - Compensation (Armstrong, Blouin, Larker 2012)
    - Employees (Chyz, Leung, Li, Rui 2013)
    - Board Members (Brown 2011; Brown and Drake 2014)
- External forces
    - Auditors (Macguire, Omer, Wang 2012)
    - Macroeconomic forces (Edwards, Schwab, Shevlin 2015)

Lots More Examining Consequences

- Consequences
  - Investor valuation (Hanlon and Slemrod 2009)
  - Crash risk (Kim, Li , Zhang 2011)
  - Earnings quality (Ayers, Jiang, Laplante 2009)
  - Credit ratings (Ayers, Laplante, Macguire 2010)
  - Merger Premiums (Chow, Klassen, Liu 2017)

More Recently, How

- Mechanisms
  - Customers/Suppliers (Cen, Maydew, Zhang, Zuo 2017)
  - Chen, Cheng, Chow, Liu (2018)

  - *Tax holidays (Chow, Hoopes, Maydew 2018)*

Rotman

What we learn from Chow, Hoopes, Maydew (2018)

- Foreign tax holidays for US MNCs are widespread
  - Puerto Rico, Isreal, Ireland, China, Singapore, India, Malaysia,…
  - Participation has been growing over time, reaching approximately 10% of US MNCs by the end of the sample period (2013)
- Effect of foreign tax holidays are economically large
  - Participating in a tax holiday lowers cash ETR by 2.4 percentage points (GAAP ETR by 4.5 percentage points)

Rotman

What is a Tax Holiday?

- Wikipedia
  - A tax holiday is **a temporary reduction or elimination of a tax**. It is synonymous with tax abatement, tax subsidy or tax reduction. Governments usually create tax holidays as **incentives for business investment**. Tax holidays have been **granted by governments at national, sub-national, and local levels**, and have included **income, property, sales, VAT, and other taxes**. Some tax holidays are extra-statutory concessions, where governing bodies grant a reduction in tax that is not necessarily authorized within the law. In **developing countries,** governments sometimes reduce or eliminate corporate taxes for **the purpose of attracting foreign direct investment or stimulating growth** in selected industries.

What is a Tax Holiday?

- Investopedia
  - A government incentive program that offers a tax reduction or elimination to businesses. Tax holidays are often used to reduce sales taxes by local governments, but they are also commonly used by governments in developing countries to help stimulate foreign investment.
- BusinessDictionary.com
  - A temporary period, during which time the government removes certain taxes (usually sales tax) on certain items, in order to encourage the consumption or purchase of these items.

CHM Definition

- “Tax holidays are **temporary tax reductions** that governments grant to firms, **conditional on** the firm satisfying **some investment criteria**”
- “Some tax holidays are privately negotiated between the firm and the host country, but the income tax holidays that we focus on in this study are **available to any firm** that meets the required investment or employment criteria”
- “**discard non-income tax holidays, holidays offered by states or provinces**, and false positives”

Rotman

CHM Definition - Questions

- Do tax holidays need to be targeted a foreign firms?
- Why only focus on federal taxes? Subnational taxes can be a substantial portion of the tax bill in a country (e.g., approximately 1/3 in Canada)
- Why exclude holidays that are not available to all firms?
  - Can you verify the above from the public disclosures?

- What is the relationship between tax holidays and patent boxes?

Rotman

Example Disclosure

- The Company has been granted tax holidays in several **jurisdictions including China, Thailand and Bangladesh**. The tax holidays expire between 2008 and 2015. These tax holidays **reduced** the Company's consolidated **effective tax rate** on continuing operations **by less than 1%** in both 2007 and 2006.

Rotman

Example Disclosure

- The **tax incentives that we have negotiated** in Malaysia and other jurisdictions are also subject to our compliance with various operating and other conditions. If we cannot, or elect not to, comply with the operating conditions included in any particular tax incentive, we will lose the related tax benefits. In such event, we could be required to refund material tax benefits previously realized by us with respect to that incentive and, depending on the incentive at issue, could likely be required to modify our operational structure and tax strategy. Any such modified structure or strategy may not be as beneficial to us from an income tax expense or operational perspective as the benefits provided under the present tax concession arrangements. For fiscal years 2014, 2013 and 2012, the effect of all these tax incentives, in the aggregate, was **to reduce the overall provision for income taxes by approximately $99 million**, $77 million, and $81 million, respectively, and increase diluted net income per share by $0.37, $0.31 and $0.33, respectively.

The Data – U.S. firms on Holidays

- Data collection
  - Read lots of disclosures and create a dictionary, extract matching text from 10Ks, read and code data (start, finish, size)
  - Create an indicator variable *HOLIDAYYEAR*
  - Great, rich data set

Data – Potential Issues

- Data collection identifies firms that voluntarily disclosed tax holidays
  - Possible selection issues associated with voluntary disclosure
    - Performance?
      - Variants of income is either the denominator of the dependent variable or part of the interaction term test variable in most tests
    - ETR drop?
      - If GAAP ETRs fall, an explanation is needed in the rate reconciliation

Data – Potential Issues

- Alternative ways to identify holidays and/or validate data
  - Big 4 or Law firm tax guides
    - Quick online search revealed “Tax holidays, rulings and incentives around the world” - DLA Piper
  - Combine with exhibit 21 disclosures?

Rotman

Data – Potential Issues

- Some firms voluntarily disclose immaterial tax holidays
  - Overstock's 2013 disclosure of a $3,000 benefit
  - Robustness test excluding immaterial holidays
    - Threshold
    - Exhibit 21

ETR Analyses

$$ETR_{it} = \beta_0 + \boxed{\beta_1\, HOLIDAYYEAR_{it}} + \beta_2\, HOLIDAYFIRM_i + \Sigma_k \beta_k\, Control_{it}^k + \varepsilon_{it}$$

- Examine both cash and GAAP ETRs
  - Find a coefficients of 2.4 and 4.5 respectively
- Why the larger effect for GAAP rates?

Example

- $100 income in US (35% rate) and $100 income in Singapore (17% rate)
- Assume no PRE
  - With no holiday, $52 ($35 + $17) tax payment and $70 tax expense
  - With a tax holiday that reduces the Singapore rate to 5% tax payment drops to $40 ($35 + $5) but tax expense remains $70
- Assume all income in Singapore designated as PRE
  - With no holiday, $52 ($35 + $17) tax payment and $52 tax expense
  - With a tax holiday that reduces the Singapore rate to 5% tax payment and expense drops to $40 ($35 + $5)

Rotman

Tax Payments Analyses

$$TAX_{it} = \alpha_0 + \alpha_1\ PIDOM_{it} + \beta_1\ PIFO_{it}$$
$$+ \alpha_2\ PIDOM_{it} \times HOLIDAYYEAR_{it} + \boxed{\beta_2\ PIFO_{it} \times HOLIDAYYEAR_{it}}$$
$$+ \alpha_3\ PIDOM_{it} \times HOLIDAYFIRM_i + \beta_3\ PIFO_{it} \times HOLIDAYFIRM_i + \mu_{it} \qquad (2)$$

- Examine Foreign, US, and Total taxes
  - Find -, +, and – coefficient on *PIFOxHOLIDAYYEAR* respectively

- Main effect for *HOLIDAYYEAR and HOLIDAYFIRM*?

Other comments

- Tax Cuts and Jobs Act of 2017
  - Paper has a fair bit of discussion and analysis around repatriation taxes (and PRE disclosure) and states findings should be of interest around discussions of moving to a territorial system
    - What are the implications?

- Motivation for the analysis around tax havens?

Rotman

Other comments

- Use more of the details you have had collcected
  - Are effects different for tax holidays based on duration, type, and size?
  - Univariate pre/during/post analysis was interesting, consider adding multivariate tests

Thank you and good luck with the paper!