Tax Avoidance through Cross-Border Mergers and Acquisitions

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Abstract

We document a novel tax avoidance strategy: Cross-border, tax-haven mergers and acquisitions (M&A). Tax havens have $2.4 trillion in M&A deal value beyond what is predicted based on economic fundamentals. Cross-border, tax-haven M&As result in $24.7 billion in recurring annual tax avoidance, and cross-border, non-haven M&As result in an additional $31.3 billion in recurring annual tax avoidance. This is the first paper to document that tax havens affect real investment on a large scale, and not just capital flows on paper. Moreover, we create an algorithm, which is available to others, to derive the tax residence of any company given data on the firm's country of incorporation and headquarters.

How Can Tax-Haven M&A Lead to Tax Savings?

Haven Purchases (haven target)
- Buying firm in tax haven facilitates an inversion into that tax haven
- Buying firm in tax haven enables profit shifting, even if no inversion takes place

Asset Building (haven acquiror and non-haven target)
- Scaling up once located in tax haven grows asset base subject to lower taxes

Data and Definitions

Tax havens
We divide the list of tax havens into small and large havens based on the size of their economies (independent of their tax rates). This allows for a more meaningful interpretation of the results.
- *Large Havens* (GDP > $330 billion): Hong Kong, Ireland, the Netherlands, Singapore, and Switzerland
- *Small Havens* (GDP < $70 billion): All other tax havens (see paper for complete list)

Tax residence data
- We create an algorithm based on novel, hand-collected data on tax residence laws to derive the tax residence of any company in 182 countries given the firm's country of incorporation and headquarters.
- Had we not used our algorithm, total and abnormal deal value in tax havens would be $400 billion lower over the sample period.
    - Example 1: total deal value in Ireland would be $151 billion lower
    - Example 2: total deal value in Switzerland would be $56 billion higher

Abnormal Deal Value in Tax Havens

To assess whether the amount of deal value in tax havens can be explained by the size of their economies and other observables, we run a gravity model on a country-pair panel.

Regression Details
- Dep. variable: log of bilateral M&A deal value
- Key variables: dummies that equal 1 if the target or acquiror are in a large or small haven
- Controls: GDP, GDP per capita, bilateral geographic distance, same country dummy, colonial relation dummy
- Fixed effects: year
- Clustering: acquiror- and target-country level

Results (listed below on the left)
- 483% (107%) more deal value on the acquiror side in small (large) havens than in similar non-havens
- 341% (62%) more deal value on the target side in small (large) havens than in similar non-havens

Abnormal Deal Value (listed by country below on the right)
- The regression estimates correspond to a total abnormal deal value in tax havens of $2.4 trillion over the sample period from 1990-2017.

	ln(M&A Value)
$\mathbb{1}$(Sm Haven Acquiror)	1.76***
	(0.29)
$\mathbb{1}$(Lg Haven Acquiror)	0.73***
	(0.20)
$\mathbb{1}$(Sm Haven Target)	1.48***
	(0.46)
$\mathbb{1}$(Lg Haven Target)	0.49**
	(0.23)
Year FE	Yes
N	805,500
Pseudo R^2	0.765

Standard errors in parenthesis

	Abnormal Deal Value
Netherlands	715.4
Ireland	297.1
Bermuda	286.1
Switzerland	247.8
Luxembourg	171.7
Cayman Islands	168.9
Hong Kong	157.7
Singapore	129.9
All Other Havens	230.1
Total	2,405

Deal value in billions of USD

Tax Savings from Haven Purchases

We estimate the tax savings from haven purchases using OLS on a firm-year panel.

Regression Details
- Dep. variable: cash effective tax rate (ETR), defined as cash taxes paid over pre-tax income measured over 2 years
- Key variables: measures of prior small- and large-haven purchases
- Controls: overall amount of prior M&A activity, firm size, leverage, profitability, cash
- Fixed effects: firm and year
- Clustering: firm level

Results
- Small- and large-haven purchases result in future reductions in the cash ETR
- Non-haven purchases also result in tax savings (likely due to the fact that acquiring a non-haven firm in a cross-border deal gives the acquiror a more complex, global organization, thereby permitting additional tax planning)

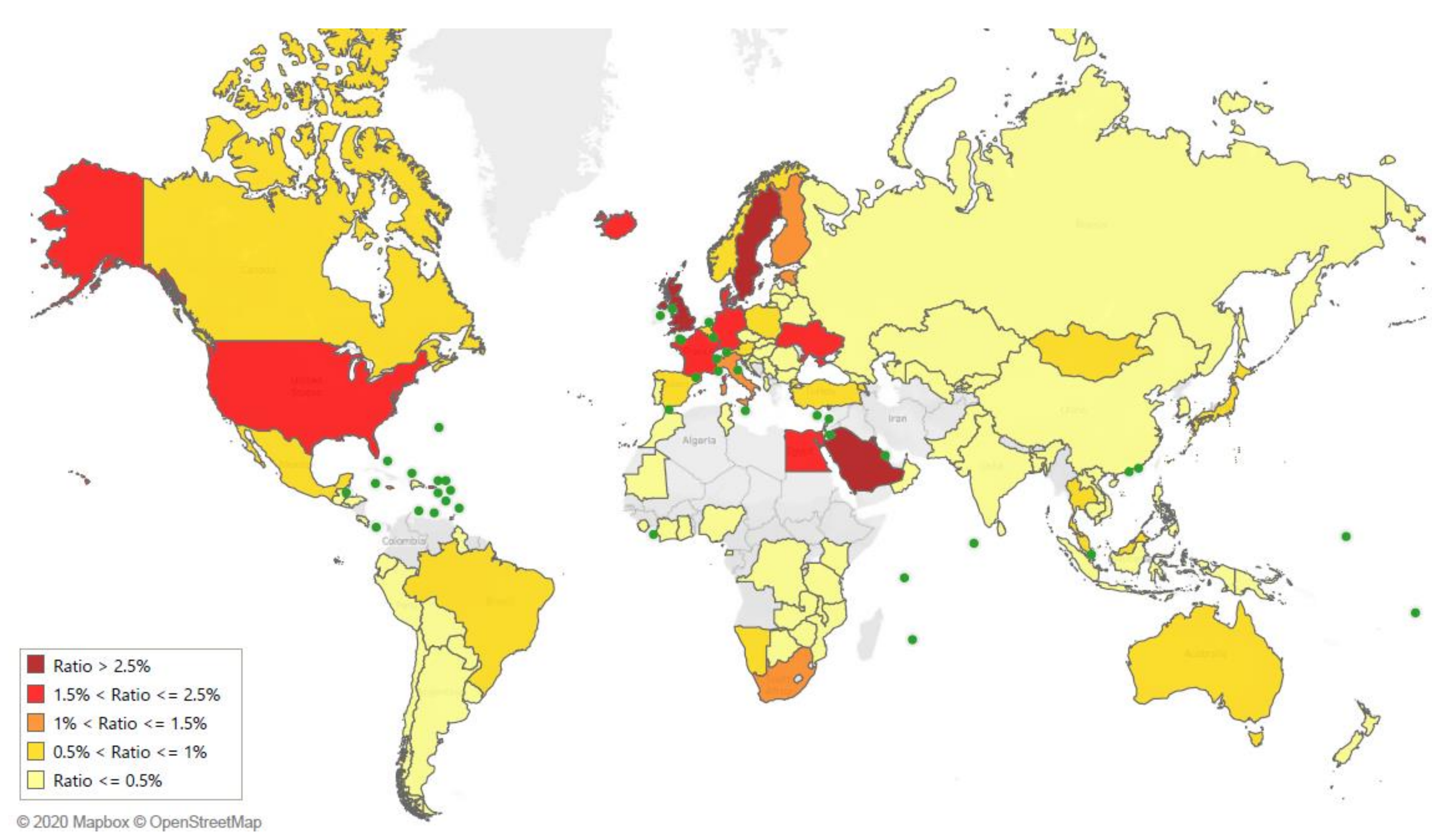
Aggregate Annual Tax Avoidance

Aggregate annual tax avoidance using regression estimates and the most recently reported financials:
- Haven purchases: $20.2 billion per year
- Non-haven purchases: $31.3 billion per year
- Asset building: $4.5 billion per year

Which Countries Lose?

- For asset building deals, the target non-haven loses
- For haven purchases, the non-haven acquiror loses

We plot the ratio of taxes lost from cross-border, tax haven M&A to corporate income tax revenue for each country in the figure below. The green dots are tax havens.



Identification Using US Tax Law Change

Prior to 2004, a US firm could invert to a tax haven without having any significant operations there. Starting in 2004, as part of the American Jobs Creation Act, US firms can only relocate their tax residence if they have substantial operations in the foreign country or merge with a sufficiently sized foreign firm.
- **Prediction**: The value of M&A deals between US acquirors and large-haven targets should increase after the law change.
- **Results**: Using a triple differences-in-differences methodology, we find evidence consistent with our prediction, supporting our interpretation that cross-border M&A involving tax havens is pursued for tax avoidance purposes.

Alternative Explanations for Tax-Haven M&A

In the paper, we address the following alternative explanations that cross-border, tax-haven M&A is done to…
- Take advantage of the secrecy and anonymity provided by havens
- Defraud shareholders
- Weaken corporate governance, allowing managers to enjoy the "quiet life"
- Avoid politically or economically unstable countries
- Avoid capital controls or other regulatory restrictions

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