

How U.S. International Tax Policy Impacts American Workers, Jobs, and Investment
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I. EXECUTIVE SUMMARY. As financial accounting experts working on tax policy issues, we provide our insights on the effect of accounting standards on U.S. national statistics that measure country-level U.S. multinational company (“MNC”) activity. We emphasize that these statistics, which are commonly used in empirical studies that inform international tax policy, are frequently misinterpreted by the research community.¹ These misinterpretations generate overstated estimates of U.S. MNC income in tax havens as well as the loss of U.S. corporate tax revenue from profit shifting. When the financial data are interpreted correctly, a commonly cited estimate of the U.S. tax revenue loss drops from 30-45% to 4-8% of U.S. corporate tax revenue.²

Based on our concerns, we have three recommendations for policymakers:

- 1) **Do not rely on existing estimates** of the U.S. corporate tax revenue loss from profit shifting, or on estimates of changes in profit shifting after the 2017 tax reform, to make important tax policy decisions without considering the measurement issues we raise;
- 2) **Involve financial accounting experts** in the design, collection and analysis of cross-country operating and financial data to inform tax policy;
- 3) Before making important policy decisions, **reconcile measures of economic activity across U.S. national statistics data and Treasury data.**³ Be skeptical when two data sources that purport to measure the same constructs indicate widely different levels of MNC business activity within and across countries.

II. WHAT INFORMS TAX POLICY? Empirical research plays two key roles in policy settings. First, the research informs policy makers of the **salience** of the issue being considered. In the context of tax policy, this would include insights into the tax revenue raised or lost from an existing policy in a representative population of taxpayers. Second, the research should provide **feedback** about actual or contemplated changes in a policy. This type of research should

¹ E.g., see Clausing 2009, 2011, 2016, 2020. Multinational Firm Tax Avoidance and Tax Policy, 62(4) *National Tax Journal* 703-725 (2009); The Revenue Effects of Multinational Firm Income Shifting, *Tax Notes* (March 28, 2011) 1580-1586; The Effect of Profit Shifting on the Corporate Tax Base in the United States and Beyond, 68(4) *National Tax Journal* 905-934 (2016); Profit Shifting Before and After the Tax Cuts and Jobs Act, 73(4) *National Tax Journal* 1233-1266 (2020). Note that these measurement issues are not isolated to U.S. national statistics. Any data source that attempts to measure MNC income (and assets) by country is impacted by accounting standards.

² See Blouin and Robinson (2020), Double Counting Accounting: How Much Profit of Multinational Enterprises Is Really in Tax Havens?, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3491451

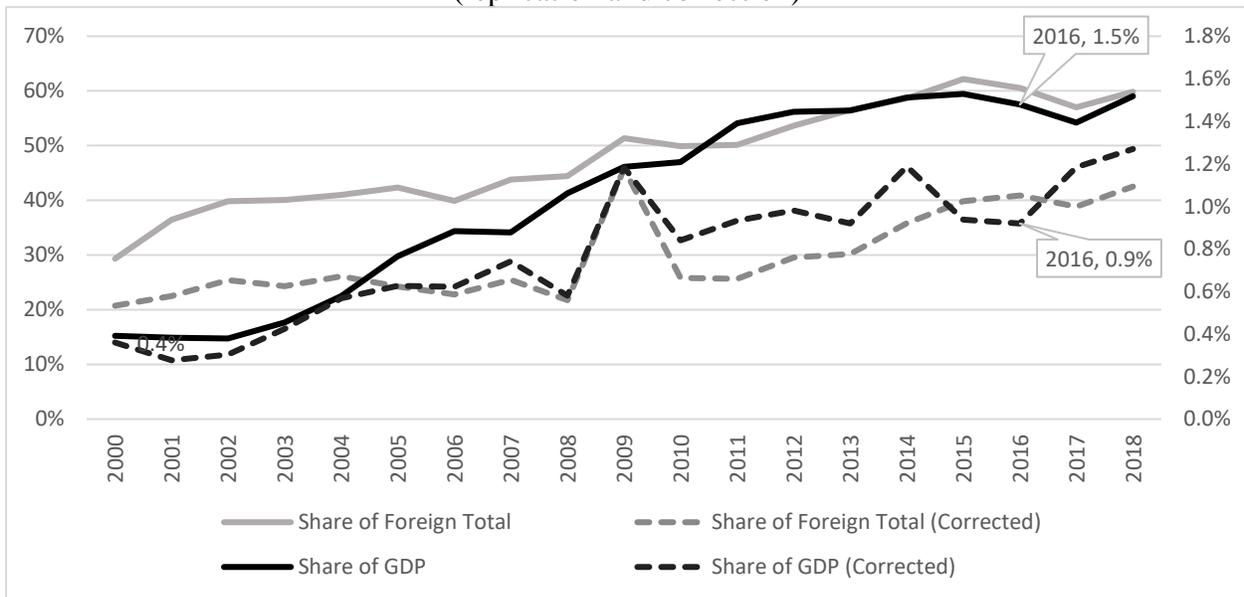
³ The Bureau of Economic Analysis or BEA collects and disseminates U.S. national statistics.

inform policy makers of the consequences of reform, whether it be implications for tax revenue or changes in behavior. This empirical work is difficult because it must isolate the effects of tax policy on behavior in the presence of many confounding factors.

To guide international tax policy decisions, researchers must measure three key constructs. First, we need the aggregate amount of worldwide activity (e.g., income, assets, employment). Second, we need the amount of activity occurring in each individual country (domestic and foreign), paying particular attention to tax haven countries. Third, we need the tax rates faced by MNCs in the U.S. and in each foreign country. With these measures, a researcher can plausibly assess the role of tax policy on the location of MNCs’ employment, income and investment. In a carefully constructed analysis, a researcher may also estimate the effects of tax policy changes on revenue.

Unfortunately, several prominent economic studies fail to understand how accounting standards affect the data used to measure MNCs’ activities. We describe how researchers’ misunderstanding influences the measurement of the income and tax rates of U.S. MNCs’ foreign affiliates. We begin by reproducing the figure from Dr. Clausing’s testimony in **Fig 1**.

Fig 1. The Share of U.S. Multinational Corporation Income in Seven Big Havens, 2000-2019 (replication and correction)



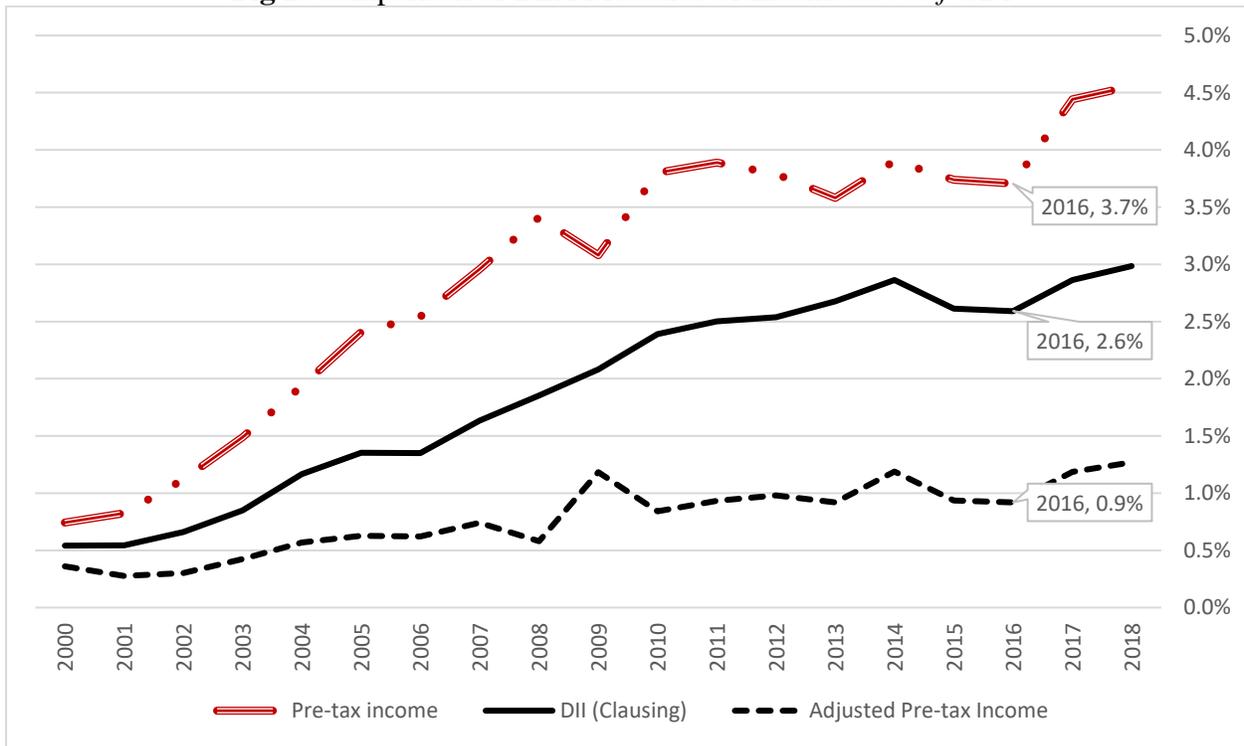
The solid lines indicate the share of U.S. outward direct investment income (DII) reported by the Bureau of Economic Analysis (BEA) in Bermuda, Caymans, Ireland, Luxembourg, Netherlands, Singapore and Switzerland.⁴ Many researchers mistakenly rely on DII as a measure of U.S.

⁴ Note that 2018 and 2019 are preliminary data. Also, Clausing (2020) uses preliminary data from 2017 to estimate U.S. revenue loss. There are frequent and sometimes significant revisions to preliminary BEA data. For example, preliminary DII in 2017 was reported as \$471 billion while revised data was reported as \$519 billion. Another example is that the estimate of U.S. revenue loss in Clausing (2016) of \$111 billion using preliminary data for 2012 is \$102 billion using revised data for 2012. The BEA posts regular updates on its website to alert researchers when preliminary data is replaced with revised data: https://apps.bea.gov/iTable/index_MNC.cfm Dr. Clausing frequently uses preliminary BEA data in her research.

MNC income generated solely within the BEA-reported jurisdiction. However, as explained in Section III below, DII often captures U.S. MNC income in more than one country. To **Fig. 1**, we add dashed lines using the correct measure of U.S. MNCs’ jurisdiction-specific income, adjusted pre-tax income. Note that DII overstates income earned in those seven tax haven countries as a share of GDP in the year just prior to the 2017 tax reform by 67%.

In **Fig. 2** we contrast three measures of income taken from BEA data, as a share of GDP: 1) pre-tax income, 2) DII, and 3) adjusted pre-tax income.⁵ The latter measure, indicated by the bottom dashed line in **Fig. 2** corresponds to the ‘Share of GDP (Corrected)’ line shown in **Fig. 1**. In Dr. Clausing’s work on profit shifting published in 2009, 2011, 2016, and 2020, she fails to recognize that adjusted pre-tax income correctly captures the amount and location of U.S. MNCs’ foreign affiliate income.⁶ **Fig. 2** reveals that the income measures used by Dr. Clausing significantly overstate income in tax havens. For example, in 2016, a period preceding tax reform, one of Dr. Clausing’s preferred measures overstates income as a share of GDP by 310%.

Fig. 2. Comparison of BEA Measures of Income *as % of GDP*



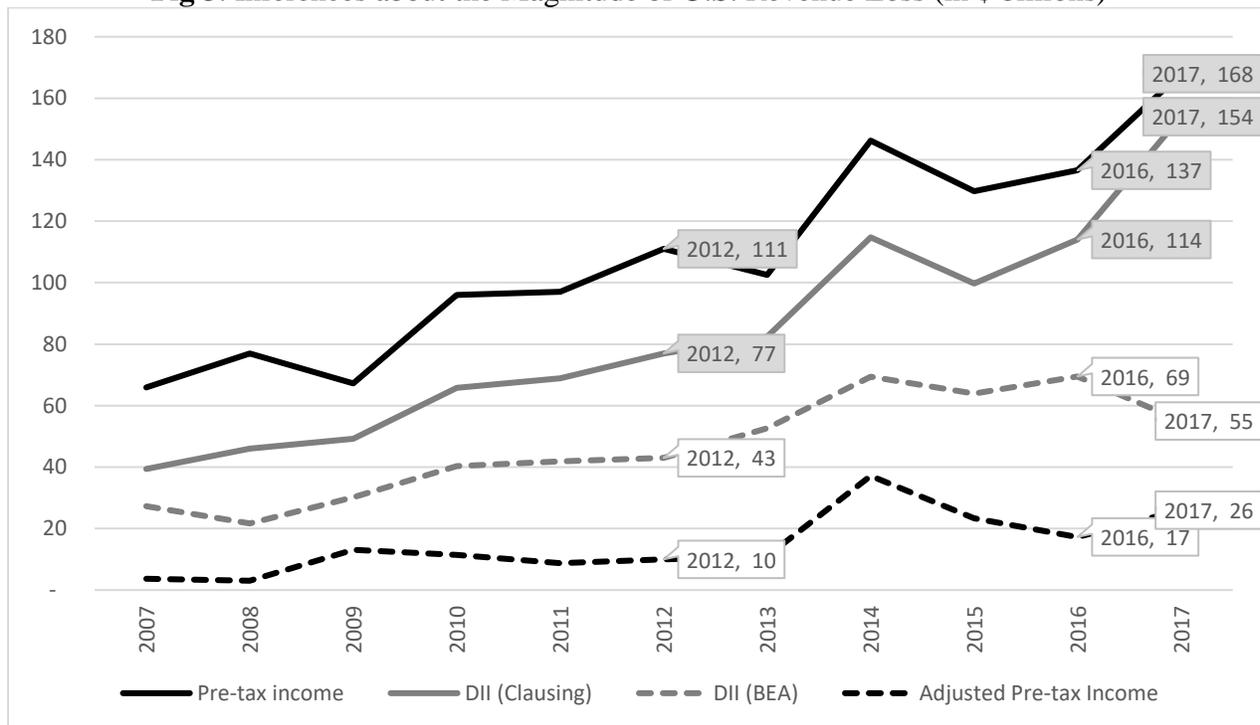
Misunderstanding the data not only leads researchers to overstate the amount of MNC income in tax havens, it mechanically leads to greatly exaggerated estimates of the effects of profit shifting. Following Dr. Clausing’s methodology from Clausing (2016) but incorporating the correct measure of income, **Fig 3.** shows that her estimates are extremely sensitive to the BEA measure

⁵ We provide the details of these three measures of income using an example in Section III.

⁶ It is important to note that DII used to produce **Fig. 1** from her testimony is DII reported by the BEA – ‘DII (BEA)’. In all of Dr. Clausing’s research prior to the 2017 tax reform, she mistakenly used the inflated measure of DII shown in **Fig. 2** - ‘DII (Clausing)’. Although she notes this mistake in Clausing (2020) she does not share the effect of this faulty adjustment on the magnitude on her previous estimates of U.S. revenue loss.

of income that she chooses. Our replication of Clausing (2016) confirms a U.S. revenue loss in 2012 between \$77 and \$111 billion using her preferred income measures – pre-tax income and her inflated DII (the top two lines showing in **Fig 2**). When we use DII without making Dr. Clausing’s adjustment, or the correct income measure to study profit shifting, the estimate drops to \$43 and \$10 billion, respectively. Despite recognizing the faulty adjustment to DII, she continues to reference the inflated \$77 billion estimate from Clausing (2016) in her current work.

Fig 3. Inferences about the Magnitude of U.S. Revenue Loss (in \$ billions)



In **Fig. 3**, we also extend our replication analysis for 2012 to show the (hypothetical) trajectory of Dr. Clausing’s estimates through 2017 (the top two bold lines in **Fig 3**). Note that if she had continued to use her preferred income measures and methods from Clausing (2016), she would estimate a U.S. revenue loss in 2017 of between \$154 billion and \$168 billion. We note that this amount is more than half of U.S. corporate tax revenue collected in 2017. The estimate using the correct income measure, adjusted pre-tax income, would be \$26 billion.⁷

It is very difficult for a casual reader of Dr. Clausing’s work to reconcile **Fig. 3** to her “preferred estimate” of “over \$100 billion” of 2017 corporate tax revenue lost to profit shifting described in

⁷ Note that estimates using adjusted pre-tax income and DII will become more similar over time if U.S. MNCs change their ownership structures to become ‘flatter’ – i.e., with more foreign affiliates directly owned by the U.S. parent (you can see this in our examples in Section III). Anecdotally, this is already happening in U.S. MNCs. This is important because estimates of profit shifting over time using DII data will decline as MNCs alter their ownership structures to become flatter, not because they decrease their profit shifting per se. Adjusted pre-tax income data, in contrast, is not influenced by ownership structure decisions.

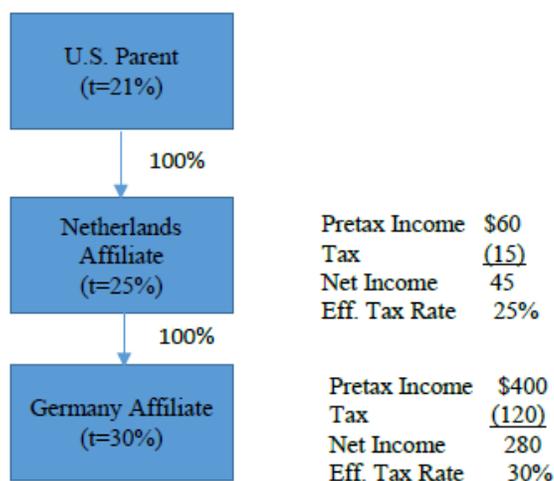
Clausing (2020) and in her Senate testimony.⁸ Unfortunately, the headline results from Clausing (2016) and Clausing (2020) are not comparable because they are each generated using different data and methods.⁹

III. MEASURING U.S. MNC ACTIVITY BY COUNTRY. This section provides a simple example to illustrate why *adjusted* pre-tax income is the correct BEA measure of income to study profit shifting. At the same time, this example will make clear why pre-tax income and DII are not appropriate for studies on profit shifting.

Consider a hypothetical MNC as shown in **Fig. 4**.

The U.S. parent directly owns the stock of a subsidiary in the Netherlands that generates \$60 of pre-tax income from its Dutch operation. After-tax income is \$45 with an effective tax rate of 25% (15 tax /60 pre-tax income). This Dutch entity in turn directly owns the stock of a German subsidiary. The German entity generates \$400 of pre-tax income from its German operation. After-tax income is \$280 with an effective tax rate of 30% (120 tax /400 pre-tax income). The German entity pays a \$10 dividend to its parent company in the Netherlands.

Fig. 4. Organization and Activity of a Hypothetical U.S. MNC



In aggregate, the foreign pre-tax income of this U.S.-based MNC is \$460, tax is \$135, and after-tax income is \$325. Due to the direct ownership of the German affiliate by the Dutch affiliate, accounting rules require the Dutch entity to account for the German entity's operations in its books and records.¹⁰

⁸ At least one other paper cited in Dr. Clausing's testimony as supporting the \$100 billion amount has also misinterpreted the role of accounting standards in the estimate of revenue lost to profit shifting. The other two papers cited by Dr. Clausing provide an estimate of the revenue lost across all 34 OECD nations not just the U.S.

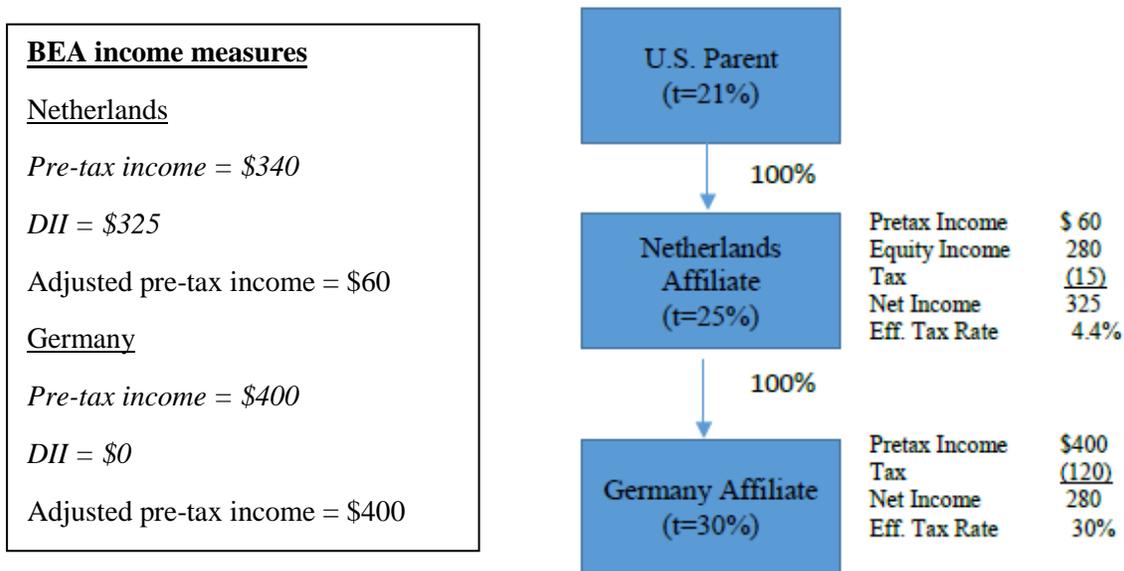
⁹ Interested readers can request an Excel file from the authors that reconciles the data and methods used in Clausing (2016) and Clausing (2020). The \$100 billion estimate is obtained under a precise combination of data and methods in 2017 that do not correspond to any combination of data or methods she used previously.

¹⁰ This is analogous to individual investors including the change in value of the stocks that they hold in their net worth calculations.

In **Figs. 5a** and **5b** we illustrate the two primary methods for accounting for subsidiary earnings that influence countries' measures of MNC activity.¹¹ In this example, the primary difference between these two methods will focus on the financial statements of the Dutch entity. The BEA requires U.S. MNCs to use the *Equity Method* and publishes aggregate foreign income, income taxes and equity income.

Under the equity method, the Dutch entity includes the Germany entity's \$280 of after-tax income in its pre-tax income in the year it is earned by the German entity. The BEA labels this income statement line item as 'equity income'. Equity income is not a cash flow or other movement of assets from Germany to the Netherlands.¹² The \$280 of after-tax German income is simply being duplicated in the financial statements of the Dutch entity. Notice that the pre-tax income (see **Fig. 2**) double counts German income: aggregate after-tax income is \$605, which is comprised of \$325 in Netherlands and \$280 in Germany.

Fig 5a. How do Accounting Standards Affect MNC Data? – “Equity Method”



Dr. Clausing recognized the double counting issue but did not correct for it despite the simplicity of the adjustment.¹³ Rather than removing the BEA-provided measure of equity income from the Dutch entity's income¹⁴, Dr. Clausing turns to using the BEA-provided DII (with her adjustment) because she believes that DII “excludes all equity income”. Unfortunately, this is not true. Although DII does not duplicate the income of lower tier subsidiaries, the measure does include equity income (thereby attributing the income to the wrong jurisdiction).

¹¹ There is a third method referred to as Consolidation is commonly used in MNCs' publicly available financial statements. This method is not permitted by the BEA in U.S. national statistics' surveys.

¹² Under the equity method used by the BEA, the \$10 dividend is not reported as income by the Dutch entity because the entire after-tax income of the Germany entity is included in the Dutch entity's income statement when earned. The dividend would increase cash (increase an asset) in the Netherlands and decrease the Dutch entity's investment in its German subsidiary (reduce an asset). This differs from the cost method which we explain next.

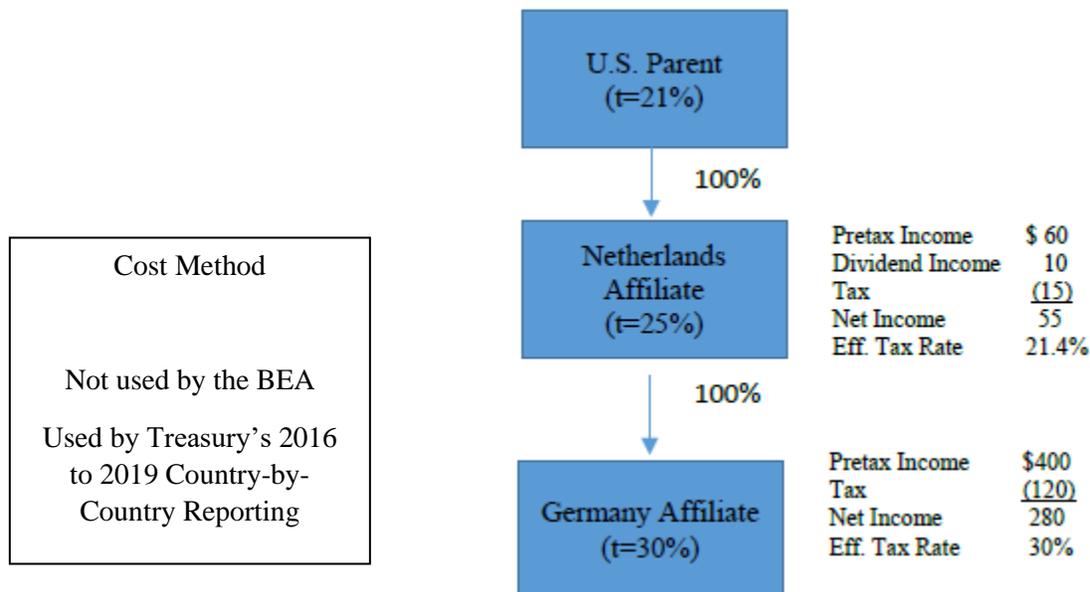
¹³ See Clausing (2016), pg. 911.

¹⁴ The BEA describes this adjustment here: <https://www.bea.gov/help/faq/1402>

Referring again to the example in **Fig 5a**, DII considers only the income of entities that are owned directly by the U.S. parent. When Dr. Clausing uses DII to study profit shifting, she sees only the \$325 of after-tax income in the Netherlands and nothing in Germany. Importantly, DII includes \$280 of equity income. Aggregate foreign after-tax income is \$325, which is correct, but \$280 of it – the equity income - is attributed to the wrong country. Note that she would also fail to recognize that \$120 of German taxes were paid on the German income using DII. Since U.S. MNCs often use haven affiliates as holding companies for other foreign affiliates, DII systematically overstates the amount of income generated in tax havens. As such, DII is a biased measure to study the effects of tax policy on income shifting.

The other accounting method used to measure MNCs’ foreign activity is the *Cost Method*. In contrast to the equity method, the cost method requires the Dutch entity to include the German entity’s income in its financial statements *only when it receives a dividend from Germany*. **Fig 5b** illustrates that under the cost method, only \$10 of German income would be duplicated, or attributed to the wrong location. The measurement issue arises precisely when the Germany entity pays a dividend. If there were no dividend, the cost method provides accurate information about the amount and location of income. Even if there were residual tax due on the dividend in the Netherlands the operating income was earned and taxed in Germany.

Fig 5b. How do Accounting Standards Affect MNC Data? – “Cost Method”



Finally, it is worth noting that the double counting and misattribution of income to the wrong location will also produce biased effective tax rates. For example, in **Fig 5a**, not removing equity income from the Netherlands will generate an effective tax rate of 4.4% rather than the actual 25% tax rate (see **Fig. 4**). **Fig 5b** also reveals that the cost method can result in an understated

tax rate for the Dutch entity.¹⁵ Notice that the tax rate becomes more understated as dividend income increases.¹⁶

IV. TREASURY COUNTRY-BY-COUNTRY REPORTING DATA. Although our comments have focused on the BEA data, we also want to comment on the data used in the JCT’s “U.S. International Tax Policy: Overview and Analysis” and in Dr. Clausing’s most recent publication in the *National Tax Journal* that she references in her testimony. Dr. Clausing states: “these data are new, but they may provide a more accurate measure of where U.S. companies are booking their income”.¹⁷

Unfortunately, we are unaware of any empirical evidence that supports the notion that Treasury’s Country by Country Reporting (CbyCR) data reported on Form 8975 does not suffer from measurement concerns. OECD commentary on the CbyCR data has revealed that these data are affected by concerns with the duplication of earnings and the resulting misattribution of earnings that we highlight above. In particular, until 2020, CbyCR data was being filed using the cost method we highlight in **Fig. 5b**. Notice that the cost method results in intercompany dividends duplicating income within the MNC’s foreign affiliates.¹⁸

Because of the duplication of income, intercompany dividends will also unduly influence the tax rates that are estimated from the CbyCR data. This is illustrated in **Fig 5b**. While the true tax rate on the earnings generated in the Netherlands is 25%, the inclusion of the German dividend in the income reported in the Netherlands results in a decline in the estimated tax rate to 21.4%. This 21.4% is analogous to the average tax rates reporting in the JCT report.

As the TCJA required that U.S. MNCs pay tax on their entire balance of unremitted foreign earnings, it seems likely that these firms saw increased intercompany dividend activity in 2018. Higher dividends will result in tax rates estimated from the CbyCR data to be biased downwards.

¹⁵ Due to the predominant use of source-based taxation, intercompany dividends typically are not taxed in the jurisdiction to which they are paid. In our example, Netherlands will not tax dividends paid to the Dutch affiliate by the German affiliate as the income underlying the dividend has already been taxed in Germany.

¹⁶ Moreover, while our public statement focuses on how accounting impacts measures of income and tax rates, the amount of assets in havens will also be overstated by failing to consider the accounting standards that produce the data. For example, in the example in Fig 5a, the assets of the Dutch entity will increase by \$280 but this increase is attributed entirely to its equity investment in the Germany subsidiary rather than an increase in cash or other assets in the Netherlands. As tax havens often serve as holding companies, their total assets too will appear oversized relative to employees or other measures of economic activity, relative to entities in other countries.

¹⁷ See Clausing (2020), pg. 3 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3503091

¹⁸ Using 2017 CbyCR data, Horst and Curatolo (2020) suggest that the duplication of income through intercompany dividends only results in CbyCR overstating income by approximately 14.4%. See, Assessing the Double Count of Pretax Profit in the IRS Summary of CbC Data for Fiscal 2017, *Tax Notes* (April 27, 2020), 427. However, we believe that U.S. MNCs’ intercompany dividends were relatively low before 2018 due to the U.S.’s worldwide tax regime. In a report issued by the Board of Governors of the Federal Reserve System (<https://www.federalreserve.gov/econres/notes/feds-notes/us-corporations-repatriation-of-offshore-profits-20190806.htm>), intercompany dividend paid from MNCs’ foreign affiliates to their U.S. parent increased from 2017 to 2018 by roughly 400% (from \$155 billion to \$777 billion). Additionally, preliminary data by the BEA for 2018 indicate a 111% dividend payout ratio in foreign affiliates of U.S. MNCs relative to 2017 of 49% (note that these are dividends paid by affiliates up an ownership chain that may or may not have been ultimately received by the U.S. parent). Thus, the Horst and Curatolo analysis of CbyCR in a low dividend paying year does not provide evidence that CbyCR data do not double count income.

Referring back to the example in **Fig 5b**, if the dividend paid by the German affiliate to the Dutch affiliate was \$280 instead of \$10 (a 100% payout ratio) then income measures that use the cost method would look identical to the income measures that use the equity method. The tax rate would be 4.4%. The OECD is aware of the issue concerning intercompany dividends and issued guidance in late 2019 that stipulated that intercompany dividend should not be included in income measures. Until CbyCR omits intercompany dividends from its income measures, policy makers and researchers should be refrain from relying on these data to infer the implications of the TCJA on U.S. MNCs' tax burdens.

V. CONCLUDING REMARKS. We wrote this comment to inform policymakers of an important source of mismeasurement that currently underlies many profit shifting studies that are referenced and presumably relied upon in policy debates. Accounting standards impact MNC data in very important ways that, if not understood, can inaccurately shape our perceptions about the level of business activity of MNCs' abroad.

The current international tax proposals are predicated, in part, on the presumption that there is a significant amount of tax revenue to be collected by limiting profit shifting. We do not dispute that the U.S. does lose revenue due to profit shifting. But given the data limitations we address above, we suggest that revenue actually lost is far lower than suggested by Dr. Clausing's work.

With existing proposals to aggressively tax the foreign income of U.S.-based multinationals, it is imperative that these measurement issues be considered when evaluating both the behavioral and revenue consequences of policy changes. We believe that it would be prudent to evaluate the merits of international tax policy reforms without regard to the suspect estimates of revenue consequences. For example, estimates of revenues to be raised from current proposals such as the reforms to the Global Intangible Low-Tax Income are likely to be overstated.