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The "Missing Profits of Nations" Mistakes Tax Competition for Tax Evasion

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Key Findings:

- A new study, "The Missing Profits of Nations," by a trio of authors (Zucman et al.), has received attention for quantifying the popular belief that multinational corporations are shifting large amounts of profits to tax havens. The study estimates the amount of global profit shifting at more than $600 billion, thus depriving governments of roughly $180 billion, or 10 percent, of corporate tax revenues (which total $2 trillion). The U.S. and European governments are said to be among the biggest victims of this profit shifting.

- These results should be viewed cautiously. The study is built on a circular argument, thus predetermining the results. The authors premised the study on the belief that intangible assets, such as patents and intellectual property, are not "real capital." They maintain that intangible assets either generate "paper profits" or simply are paper profits. Therefore, wherever intangible assets are located is *prima facia* evidence of corporate tax avoidance, and the profits they generate must be the result of profit shifting. The study's findings are calculated based on comparing the total amount of wages in a country to the amount of profits generated by the capital stock located in that country. However, the authors include only physical capital in their estimates of a company's capital stock and explicitly do not include intangible capital in their measure, thus exaggerating the ratio of wages to capital.

- The study also fails to account for structural differences in tax systems across countries, such as the use of "patent boxes" to attract highly mobile capital such as patents and copyrights. The existence of patent boxes in the study's base year (2015) explains much of the results, suggesting that some countries appear to be attracting profits but not research and development (R&D) facilities or workers. The patent box issue was addressed in the Organisation for Economic Co-operation and Development's (OECD) Base-Erosion and Profit-Shifting (BEPS) project, making the study's results out of date with today's tax environment.

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- European countries were found to lose just 3 percent of corporate tax revenues to traditional tax havens such as Bermuda, the Cayman Islands, and the Isle of Mann. The vast majority of European corporate tax losses were to fellow European countries such as Ireland, Belgium, Luxembourg, and the Netherlands—not "tax havens," but developed countries with conventional but competitive tax systems.

- The bottom line is that this study greatly confuses the tax competition that occurs among developed nations and actual tax evasion facilitated by rogue countries—much like equating the actions of rich New Yorkers moving to Florida with sheltering income in the Cayman Islands.

Introduction

"The Missing Profits of Nations,"[1] a new study by a trio of authors (Zucman et al.)[2], has received attention for quantifying what most people are predisposed to believe: that multinational companies are shifting massive amounts of profits into tax havens, thus depriving countries of the revenue they need for essential services.

The study estimates that 40 percent of multinational profits are shifted to "tax havens" in any given year. U.S. multinationals are said to be the main "shifters," contributing a large share of the more than $600 billion in global profits that are shifted to tax havens. As a result, global governments are found to be losing 10 percent of corporate tax revenues. The loss is estimated at 18 percent of corporate tax revenues in the European Union (EU), and roughly 14 percent of corporate revenues in the U.S.

Zucman contends that this profit shifting is not the result of actual tax competition, where low-tax countries attract capital investment from multinationals, resulting in more jobs or higher wages for workers. Instead, he maintains that multinationals are simply shifting "paper profits" into these countries in the form of patents, trademarks, and other intellectual property, which results in no residual benefit to workers.

It is here that the study's assumptions predetermine the results. Zucman seems to view physical capital, such as factories and facilities, as the only true capital worth measuring. His view of intangible assets and intellectual capital is that they are merely paper assets, or simply vehicles for generating "paper profits." Thus, the study is built upon a circular argument in which Zucman views the mere location of intangibles as *prima facia* evidence of multinational tax avoidance schemes and, consequently, any profits booked in a low-tax country that is home to intangibles must be the result of profit shifting.

Other assumptions are also questionable. Zucman uses a very broad brush to define which countries he considers "tax havens," misleadingly comparing European countries with traditional but competitive tax systems with rogue nations known for their role in facilitating tax avoidance. In this way, he failed to account for structural differences in tax systems across countries, specifically

1 Thomas Torslov, Ludvig Wier, and Gabriel Zucman, "The Missing Profits of Nations," July 2018. The working paper and accompanying data sources can be found here: http://gabriel-zucman.eu/missingprofits/.

2 We've chosen Zucman to represent the authors since the study and supporting data and Appendixes are hosted on Zucman's website, and he has been the lead spokesman in media interviews in the U.S.

the "patent box" provisions that a handful of countries adopted in order to attract highly mobile intellectual capital such as patents, licenses, and trademarks. Indeed, the existence of patent boxes likely explains much of the results Zucman finds for countries such as Ireland, Belgium, Luxembourg, and the Netherlands.

In many respects, Zucman's study is really a story of tax competition between developed countries mistaken for a story about multinationals hiding profits in rogue jurisdictions. The evidence is buried in a table in the study's Appendix figures.[3] It shows that European countries lose an average of 12.2 percent of corporate income taxes due to profit shifting. But, they lose an average of just 3 percent of corporate revenues to so-called non-EU tax havens. Thus, the overwhelming majority of profits are shifted between European countries. What Zucman calls tax avoidance looks a lot more like legitimate tax competition between neighboring countries.

Assumptions predetermine results

Over the past three decades, countries across the globe have slashed their corporate tax rates in an intense competition to attract capital investment and jobs. According to Zucman, however, our traditional notions of tax competition are no longer valid in today's global economy because "machines don't move to low-tax places; paper profits do."[4]

The traditional view is that corporate capital is largely comprised of physical things such as brick-and-mortar buildings and heavy equipment. Zucman, however, seems surprised by the trends in today's digital era in which companies can produce highly valuable intellectual capital, yet have no physical capital to speak of.

At the outset of his study, Zucman states, "It is apparent to many observers that the textbook model of tax competition doesn't capture the behavior of today's largest multinational companies well. These firms don't seem to move much tangible capital to low-tax places—*they don't even have much tangible capital to start with*"[5] (emphasis added).

Rather than accept that many companies today can produce tremendous value and profits with little or no physical capital, Zucman instead views highly mobile intellectual capital, or intangibles, such as patents and algorithms, as vehicles for tax avoidance and profit shifting, not "real" capital. This view biases Zucman's study from the beginning, from the way he defines the problem he is investigating to the way he interprets his findings.

3 See file TWZ2018AppendixFigures, tab "DataFC1," http://gabriel-zucman.eu/files/TWZ2018AppendixFigures.xlsx.

4 Zucman, 1.

5 Ibid.

He frames the study this way: "We are interested in identifying which fraction of the high profits booked by multinationals in their tax haven affiliates are due to real capital vs. paper profits."[6] This activity, in Zucman's view, does not benefit workers, it only benefits shareholders. "Instead of increasing capital stocks in low-tax countries, boosting wages along the way, profit shifting merely reduces the taxes paid by multinationals, which mostly benefits their shareholders, who tend to be wealthy."

Zucman's method for determining how much "paper profits" companies have booked in low-tax jurisdictions is based on comparing the amount of wages a company pays in a location to the amount of profits it generates from the capital located in that jurisdiction. This seems like a reasonable metric, yet Zucman narrows the capital base in which the profits are compared to by omitting intangible assets from the calculation due to a lack of data. Even if the data was available, he maintains, it would not matter because intangibles are, by definition, a vehicle for profit shifting anyway.

Zucman's predispositions are evident in this statement:

> Conceptually, the high rates of return of haven affiliates can be seen as the product of two effects. First, multinationals book intangible assets such as patents, logos, algorithms, etc., in low-tax affiliates. *These intangibles are not included in our measure of corporations' capital stocks, for lack of data about their market value*—which in many case [sic] is impossible to assess, given that many of these intangibles are firm-specific and never exchanged on markets between unrelated parties. Second, for a given stock of total capital (tangible plus intangible), haven affiliates report high profits because of intra-group transfer price manipulations. With the macro data at our disposal, *we cannot separate the role of intangibles vs. intra-group transfer prices in explaining the high rates of returns recorded by haven affiliates. However, this distinction is not relevant for our purposes: both of these techniques effectively shift profits out of high-tax places without any tangible assets moving across borders*[7] (emphasis added).

By explicitly omitting intangible capital from the basis of the study, Zucman engages in a form of one-column accounting—counting the profits but ignoring the human capital or the tremendous cost in research and development (R&D) that often goes into creating intellectual property (IP). Instead, he seems to view the profits earned on IP as almost "unearned" because they are derived from "a piece of paper."

The reality is quite different. Companies often spend billions of dollars on R&D to design a technology or develop a drug. The patent is the culmination of that effort plus all of the R&D that was not successful. As we'll discuss below, IP tends to depreciate very quickly, unlike a factory or piece of industrial equipment. Companies have a very short time to recoup their large up-front investment before the IP becomes obsolete. Thus, it is extremely sensitive to tax rates in order to maximize the returns on that investment.

6 Ibid., 13.
7 Ibid., 18.

Omitting intangibles undermines the results

The metric Zucman uses to determine when a country is the beneficiary of paper profits rather than physical capital investments is based on a Cobb-Douglas production function[8] in which capital contributes one-third of net value-added within a corporation and labor contributes the other two-thirds.

This ratio tends to hold across economies as well as corporations, so Zucman proposes a simple benchmark that all countries–tax havens and non-tax havens–have a ratio of pretax profits to wages of 33 percent. But his specific focus is on the ratio of profits to wages for foreign-controlled firms in a country. For example, if the subsidiaries of multinationals exhibit a higher share of capital relative to net profits than 33 percent, then the excess must be the result of inbound profit shifting. If foreign subsidiaries exhibit a lower share of profits relative to wages, then it must be the result of outbound profit shifting.

Zucman's results would seem to bear out this metric. For example, Ireland's ratio of profits to wages is 800 percent, Luxembourg's is 461 percent, Switzerland's is 319 percent, and the Netherlands' is 115 percent. The ratio is even more extreme in the traditional tax havens. In Bermuda the ratio of profits to wages is 1,980 percent, and in the Cayman Islands the ratio is 3,974 percent.

By contrast, most countries that are "victims" of profit shifting are shown to have a profit-to-wage ratio below 33 percent. In the U.S., for example, the ratio of profits to wages for foreign subsidiaries is 28 percent. In other high-tax nations the findings are similar. In Germany it is 18 percent. In France, the ratio is 21 percent. In Japan, it is 24 percent. And in the U.K., (not a high-tax country) the ratio is 26 percent.

However, what we are likely seeing is the effects of Zucman's decision to remove intangible capital from his measurements. The benchmark ratio of 33 percent to capital is "net" of depreciation. So Zucman is counting the profits of intangibles, but excluding the costs associated with it. So these ratios are likely overstated, not because they are intangibles per se, but because he chose not to include intangibles in his capital stock measure.

We can see the differences in the depreciation rates for tangible and intangible assets in figures derived from the Bureau of Economic Analysis (BEA) national accounts. According to BEA data, intellectual property (IP) in general depreciates at 24 percent per year.[9] So IP needs to earn a return of at least 24 percent, before taxes, to cover just the replacement of IP. It then needs to earn even more to satisfy investors and cover taxes. That is significantly more than other assets. By contrast, equipment and software depreciate at 13 percent per year, while nonresidential structures depreciate at 2.6 percent per year.

8 A Cobb-Douglas production function is a simple formula that says the amount of output is a function of two variables: the amount of labor and the amount of capital. In other words, the amount of output that a company or economy can produce is dependent on the amount of capital it uses and the amount of labor it has to run the machines. See http://learneconomicsonline.com/blog/archives/399.

9 The rates cited here are derived from the national accounts within the Tax Foundation's Taxes and Growth (TAG) Macroeconomic Tax Model. For a more extensive treatment of the issue see Wendy C.Y. Li and Bronwyn H. Hall, "Depreciation of Business R&D Capital," November 2017, https://eml.berkeley.edu/~bhhall/papers/LiHall17_revision_November.pdf.

Zucman's metric may make sense in a world comprised mostly of manufacturing and heavy industry. However, it does not necessarily hold in today's economy, which is increasingly driven by services, digital technology, and intellectual property. These sectors prove every day that a huge amount of value can be created by very few people.

Silicon Valley is a good example. There are very few actual factories in Silicon Valley; it is a land of office buildings and highly skilled computer programmers and engineers. Those skilled workers are producing a tremendous amount of highly profitable intangibles relative to the amount of physical capital in the Valley. Were we to measure it, it is likely that capital's share of net profits to labor in Silicon Valley would be well above 33 percent. Indeed, one study estimated that the GDP of Silicon Valley was higher than that of Ireland.[10] A Brookings Institution study ranked the per-capital GDP of San Jose, California, as the third highest in the world, with a per-capita income of over $77,440 in 2014.[11]

The same would be true for countries such as Switzerland, where banking and high-value sectors such as insurance are concentrated. Interestingly, Zurich, Switzerland, had the highest GDP per-capita in the Brookings study.

Similarly, an R&D facility or semiconductor factory may employ a relatively small number of workers compared to an automobile assembly plant but produce many times the added-value per worker. For example, the Congressional Research Service reports that the U.S. semiconductor industry employed about 180,000 workers in 2015, just 1.5 percent of total manufacturing employment in the U.S. However, these employees earned an average wage of $138,100, more than twice the average for all manufacturing workers.[12]

Another illustration of this phenomenon is comparing the market capitalization of tech companies versus old-line industries. The most recent market capitalization for Facebook was over $500 billion. By comparison, the market capitalization for General Motors is just over $50 billion. Facebook has around 25,000 employees, General Motors has roughly 180,000. If these two companies were countries, Zucman's metric would say that Facebook is robbing General Motors of profits.

More and more countries have tailored their tax codes to be more attractive to these high-value, high-income sectors by promoting patent boxes, generous R&D tax credits, and other incentives. This is especially true for smaller countries that cannot necessarily compete for heavy industry but do have a more homogenous, well-educated workforce more suited to "brain jobs." What Zucman's metric identifies as profit shifting is most likely the result of tax codes designed to give small countries a comparative advantage against industrial giants such as the United States, France, and Germany.

10 Koko Canal, "The Silicon Valley Economy Surpasses the GDP of Many Nations," *City Scene*, Oct. 25, 2016, http://cityscene.org/the-silicon-valley-economy-surpasses-the-gdp-of-many-nations/.

11 Gina Hall, "San Jose area has the world's third-highest GDP per capital, Brookings says," *Silicon Valley Business Journal*, Jan. 23, 2015, https://bizjournals.com/sanjose/news/2015/01/23/san-jose-has-worlds-third-highest-gdp-per-capita.html.

12 Michaela D. Platzer and John F. Sargent Jr., "U.S. Semiconductor Manufacturing: Industry Trends, Global Competition, Federal Policy," Congressional Research Service, CRS Report R44544, June 27, 2016, 8, https://fas.org/sgp/crs/misc/R44544.pdf.

Patent boxes likely explain much of the results

Zucman's failure to account for the structural differences in countries' tax systems is a major methodological mistake. For example, in 2015, the base year of the study, the tax systems of a dozen or so countries included "patent boxes," which are special low-tax regimes created to attract highly mobile capital such as patents, copyrights, trade secrets, and know-how. These countries included "tax havens," such as Belgium, Cyprus, Luxembourg, the Netherlands, and Switzerland, along with "non-tax haven" countries such as China, France, Hungary, Spain, and the United Kingdom.

Ireland created the first patent box in 1973 but repealed that regime in 2010. Even without a formal patent box regime, Ireland was still attractive to e-commerce and pharmaceutical companies because of the country's 12.5 corporate tax rate, a generous research and development credit, and other provisions that dramatically lowered the effective tax rate on IP.[13] Even with these advantages, Ireland felt the need in 2015 to launch a new "knowledge box" system in order to remain competitive with countries with similar regimes.

In 2015, the EU published an extensive statistical analysis of patent boxes that looked at what impact these regimes had on attracting patents, R&D spending, and workers. The study found that the regimes of Belgium, Luxembourg, the Netherlands, and Cyprus were the most generous of the various systems.[14] For example, the regime in Belgium system lowered the effective rate on IP to 6.798 percent, the regime in Luxembourg lowered it to 5.84 percent, the Dutch system lowered it to 5.0 percent, and the regime in Cyprus lowered the effective rate to just 2.5 percent. In all these cases, the effective tax rates on IP were many times lower than the statutory corporate tax rate.

The EU's study concluded "that in the majority of cases, the existence of a patent box regime incentivizes multinationals to shift the location of their patents without a corresponding growth in the number of inventors or a relocation of R&D activities. We find that the size of the tax advantage is negatively correlated with the local R&D. This suggests that the effects of patent boxes are mainly of a tax nature."[15]

Such a finding would seem to explain much of the results Zucman found for the profits booked in European "tax haven" countries.[16] It also likely explains Zucman's results suggesting that these countries appeared to be attracting profits but not R&D facilities or workers. However, the EU study did determine that these effects could be reversed when the tax benefits of patent boxes were conditional on actual R&D activity. In response to concerns about such paper transactions, the OECD's Base-Erosion and Profit-Shifting (BEPS) project established rules requiring a physical nexus between actual R&D activity and the benefits of patent boxes.

13 "Ireland as a location for IP," Mason Hayes & Curran, May 1, 2013, https://www.lexology.com/library/detail.aspx?g=1de3382b-06de-4911-993a-669b35c297d4.

14 Annette Alstadsaeter, Salvador Barrios, Gaetan Nicodeme, Agnieszka Maria Skonieczna, and Antonio Vezzani, "Patent Boxes Design, Patents Location and Local R&D," JRC Technical Reports, European Commission, 2015, Tables 1 and 2, 22, https://ec.europa.eu/jrc/sites/jrcsh/files/JRC96080_Patent_boxes.pdf.

15 Ibid., 18.

16 Zucman's Appendix tables sporadically include/exclude Cyprus and Malta among the EU "tax havens." Of the $291 billion in profits that Appendix Table C4 shows are shifted to the EU tax havens, Cyprus and Malta account for just 2 percent. However, these figures are not consistent with the figures shown on Table 2 in Zucman's working paper.

The EU's study raises another question. If patent boxes seem to explain the location of paper profits in so-called European tax havens such as Belgium, Luxembourg, the Netherlands, (and even Ireland), then why are other "non-haven" countries with patent boxes, such as France, Hungary, Spain, and the U.K., shown as victims of profit shifting in Zucman's study? Zucman should have controlled for incentive programs, or at least considered this issue in his study.

The study lacks a coherent definition of "tax haven"

While Zucman compiled an impressive amount of data in an attempt to trace the flows of corporate profits among countries, he failed to do the most basic thing—define in clear and objective terms what is meant by "tax haven" and why some countries were labeled as havens and others not. Indeed, Zucman reveals his bias by using the terms "tax haven" and "low-tax" interchangeably throughout the study even though there are vast substantive differences between the two.

For example, Zucman considers Ireland, Luxembourg, the Netherlands, Belgium, and Switzerland as "prominent corporate tax havens" alongside jurisdictions such as the Cayman Islands, Bermuda, and the Isle of Mann—jurisdictions that often advertise themselves as such. The tax systems of these countries could not be more different.

For starters, Ireland, Luxembourg, the Netherlands, and Belgium all have conventional corporate tax systems, all are members of the EU, and none are on the EU's list of tax havens.[17] Meanwhile, the Cayman Islands, Bermuda, and the Isle of Mann have no corporate income taxes, are known for their secrecy, and were identified by the EU as having "tax regimes that facilitate offshore structures which attract profits without real economic activity."[18]

Switzerland also has a conventional corporate tax system, but it is on the EU's "gray list" for having preferences the EU labels "harmful tax practices." Switzerland is not a member of the EU but is a member of the OECD. In contrast to the EU, the OECD reports that "no harmful [tax practices] regime exists" in Switzerland and that it is largely compliant with the OECD's exchange of information standards.[19]

Zucman seems to have compiled his list of tax havens in a rather *ad hoc* manner based on old and obsolete lists of tax havens created by others. Rather than base his research on a well-established list of rogue jurisdictions, such as the EU's so-called Black List, Zucman chose instead to "include in our list of tax havens all the countries considered as havens by Hines and Rice (1993), as well as Belgium and the Netherlands."[20]

17 "Evolution of the EU list of tax havens," European Commission, https://ec.europa.eu/taxation_customs/sites/taxation/files/eu_list_update_25_05_2018_en.pdf.

18 Council of the European Union, Outcome of Proceedings, "The EU list of non-cooperative jurisdictions for tax purposes," Dec. 5, 2017, 16, http://www.consilium.europa.eu/media/31945/st15429en17.pdf.

19 CompareYourCountry.org, "Tax co-operation," https://compareyourcountry.org/tax-cooperation.

20 Zucman, 12.

The list that Hines and Rice[21] used for their study 25 years ago was first drafted by the U.S. Treasury in 1981.[22] Much has changed in the tax world over the past 37 years. For example, Ireland made Treasury's first list because it engaged in "ring-fencing," a practice by which it offered foreign manufacturing firms a special 10 percent tax rate while maintaining a higher tax rate–as high as 50 percent–for domestic firms. Ireland scrapped its multi-rate system in 2003 and established a "classical" corporate tax system with a 12.5 percent rate for all firms.[23]

Hines and Rice dropped the Netherlands from their list because U.S. companies had an effective tax rate in that country above 20 percent, which at the time seemed like a reasonable ceiling for what constituted a "low-tax" country. "Low-tax" is ultimately a matter of context. In 1982, the base year for Hines and Rice's data, the simple average corporate tax rate of OECD countries was 48 percent. Today, the average corporate tax rate is 24 percent and falling, so the bar for what constitutes "low-tax" has been lowered considerably. The new 21 percent U.S. federal corporate tax rate could be considered low by 1982 standards.

Hines and Rice cautioned that "tax rates do not constitute the only criterion of tax haven status." They pointed out that countries were included on the original Treasury list "not because of low tax rates, but for other characteristics, such as bank or commercial secrecy, an absence of exchange controls, or low personal income tax rates."[24]

Despite this caution, Zucman decided to include the Netherlands in the study because "the tax rate paid by affiliates of U.S. multinationals in the Netherlands was 12% in 2015."[25] This seems like an arbitrary distinction since his own estimates show that the average effective tax rate (ETR) for U.S. multinationals in Europe as a whole is 17 percent, just a few percentage points higher. Indeed, his estimate for the ETR for U.S. multinationals in the Czech Republic is 14 percent; in Finland the ETR is minus-3 percent; and in Austria it is minus-1,747 percent.[26] What distinguished the Netherlands from these "low-tax" countries Zucman doesn't say.

In Table 2 of Zucman's study, many European countries are shown to have uncommonly low overall effective corporate tax rates, not just for U.S. companies. In Estonia the ETR is 12 percent, in Germany it is 11 percent, Hungary 11 percent, Latvia 10 percent, and Poland 10 percent. Again, if "low-tax" is the determinant of what is a tax haven, then the reader is left to wonder why some European countries were targeted as tax havens and others were not.

Belgium is the opposite extreme. In 2015, Belgium had one of the highest statutory corporate tax rates in the OECD at 33.99 percent and, according to Zucman's calculations, an effective corporate tax rate of 19 percent. Zucman considered Belgium a "borderline case that is sometimes considered a

21 James R. Hines Jr. and Eric M. Rice, "Fiscal Paradise: Foreign Tax Havens and American Business," National Bureau of Economic Research, Working Paper No. 3477, October 1990, Appendix A, http://www.nber.org/papers/w3477.pdf.

22 Richard A. Gordon, "Tax Havens and Their Use by United States Taxpayers - An Overview: A report to the Commissioner of the Internal Revenue, the Assistant Attorney General (Tax Division) and the Assistant Secretary of the Treasury (Tax Policy)," Jan. 12, 1981. https://ia802604.us.archive.org/23/items/taxhavenstheirus01gord/taxhavenstheirus01gord.pdf.

23 Aidan Walsh and Chris Sanger, "The historical development and international context of the Irish corporate tax system," Irish Department of Finance, 2014, 7. http://www.budget.gov.ie/Budgets/2015/Documents/EY_Historical_Dev_International_Context_Irish_%20Corporation_Tax.pdf.

24 Hines Jr. and Rice, Appendix A.

25 Zucman, 12.

26 Zucman, Appendix Tables, Table A11.

tax haven in the literature (e.g., because of the deductibility of notional interest on equity)."[27] Zucman does not cite his source for this charge but it shows a clear lack of understanding about Belgium's notional interest policy.

The Belgian notional interest deduction was intended as a competitive way to equalize the tax treatment of debt and equity financing of capital purchases.[28] Whereas some countries, such as Germany and the U.S., have scaled back the deductibility of interest costs as a means to both broaden the tax base and reduce the tax incentive to over-leverage, Belgium offers firms a deduction for the "notional" interest costs on an equity-financed capital investment as if the firm had borrowed money to make the purchase.

Discounting the EU "tax havens" reduces the results substantially

Zucman estimates that OECD countries lost $140 billion in corporate tax revenues due to profit shifting in 2015, amounting to 12 percent of corporate tax collections. Of this total, about $72 billion is lost to "non-EU tax havens" and $68 billion is lost to "EU havens."[29] In other words, roughly half of all the corporate tax revenues OECD countries "lost" to profit shifting in 2015 was lost to other OECD countries, not rogue tax havens.

The U.S. is shown to be the biggest loser among all OECD countries, with an estimated tax loss of nearly $57 billion, or 14 percent of corporate tax revenues. In fact, the U.S. tax losses comprised about 40 percent of all purported tax losses in the OECD. The majority of U.S. tax losses were shown to flow to "non-EU tax havens."

But the competition among European countries is the real story here. Zucman estimates that European countries lost an estimated $58 billion in corporate tax revenues to profit shifting in 2015, roughly 18 percent of corporate collections. However, nearly 78 percent of these losses, or $45 billion, were to neighboring European countries such as Belgium, Ireland, Luxembourg, and the Netherlands. In other words, whatever revenues are supposedly lost by some European countries are being lost to other European countries, much in the same way New York or California might lose tax revenues to Texas or Florida. Thus, Zucman is exaggerating his case considerably to suggest that "Europe" is losing nearly 20 percent of its corporate tax revenues to tax avoidance when those "lost" profits never leave the EU.

27 Ibid.

28 Bernard Peeters and Thomas Hermie, "Notional Interest Deduction: The Belgian Experience," Tiberghien Lawyers, https://www.tiberghien.com/media/Notional_Interest_Deduction.pdf.

29 Zucman, Appendix Tables, Table C4d.

Conclusion

The results of "The Missing Profits of Nations" would seem to validate the popular belief that multinational companies are shifting massive amount of profits into tax havens, thus depriving governments of needed revenues to pay for public services. These results, however, were effectively predetermined by the way the authors framed their study and the assumptions they made.

In their own words, they set out to identify "which fraction of the high profits booked by multinationals in their tax haven affiliates are due to real capital vs. paper profits." To Zucman, "real capital" is only physical capital, such as buildings and machinery. Intangible capital, such as patents and intellectual property, are not considered real capital; they are swept into the pejorative category of "paper profits." Thus, when Zucman calculates the ratio of the wages a company pays in a country to the amount of capital it has in that country, he deliberately shrinks the base in which that comparison is made by omitting intangible capital—thus exaggerating the ratio of wages to capital.

Moreover, to Zucman, intangibles are the vehicles by which multinationals engage in tax avoidance. Thus, in his view, any country or jurisdiction that is home to large amounts of intangibles must be a tax haven. As a result of this bias, Zucman misleadingly groups European member countries such as Belgium, Ireland, Luxembourg, and the Netherlands–who have conventional, but competitive tax systems–with known "Black List" jurisdictions such as Bermuda, the Cayman Islands, and the Isle of Mann.

These "European tax havens," as Zucman calls them, used incentive programs such as patent boxes to attract highly mobile intellectual property. Zucman failed to account for these structural differences among countries and, thus, greatly confuses the tax competition that occurs among developed nations with actual tax evasion facilitated by rogue countries—much like equating the actions of rich New Yorkers moving to Florida with sheltering income in the Cayman Islands.

Competition is as healthy for tax systems as it is for markets. The only opponents to tax competition tend to be large nations with uncompetitive tax systems and activists who believe that low taxes deprive governments of revenues. Zucman's study will, no doubt, be cited extensively by such activists, but it deserves much more skepticism from the media and serious scholars.