

Zucman on tax evasion and the U.S. trade deficit

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Abstract

Economist Gabriel Zucman's paper "The Missing Wealth of Nations" proposes that a substantial part of the large U.S. net debt of the last 15 years is actually accounted for by U.S. tax evaders who have opened accounts in foreign tax havens, and then have reinvested their money in the United States. To make his finding consistent with balance of payments data, he speculates that U.S. export data are underestimated (and thus the U.S. trade deficit is not as large as thought). My paper explores this assumption, and provides evidence that the U.S. trade deficit is not substantially less than reported by the U.S. government. I then discuss theoretical reasons why Zucman's estimates might not mean the U.S. trade deficit is underestimated.

Introduction

Economist Gabriel Zucman's paper "The Missing Wealth of Nations" proposes that a substantial part of the large U.S. net debt of the last 15 years is actually accounted for by U.S. tax evaders who have opened accounts in foreign tax havens, and then have reinvested their money in the United States. Such investments would look like foreign investments in the United States, but would actually be U.S. domestic investments. Zucman concludes that as a result, the U.S. capital account surplus must be lower than reported.

The capital and current accounts must always balance. Thus, if Zucman is correct in his estimates of tax evasion, these misidentified investments would also make the U.S. current account deficit smaller than is currently reported, because the current account must match the capital account² in magnitude.

However, for the U.S. current account deficit to be smaller, the U.S. trade deficit (the largest component of the U.S. current account deficit) almost certainly must be smaller as well. Zucman speculates that the U.S. trade deficit is actually smaller than reported. The U.S. trade deficit would have to be substantially wrong, though, in order to be consistent with Zucman's analysis. My paper points out that such an outcome is highly unlikely.

Nonetheless, while Zucman is likely mistaken in asserting that the U.S. trade deficit is much smaller than reported, he raises the interesting issue of how the U.S. current account deficit (and its trade deficit) might be affected by tax evasion and other ways of hiding capital flows, which may be large problems internationally. My paper will discuss potential issues of both fact and interpretation that might arise from hidden capital flows in terms of how they might fit with U.S. trade deficit data.

¹ Economist with the U.S. International Trade Commission. The views and conclusions expressed in this article are solely those of the author, in his personal capacity. They are not necessarily the views of the United States, the U.S. International Trade Commission, or any individual Commissioner. The author thanks Andre Barbe and Wendy Willis for their contributions. All errors are the author's.

² The International Monetary Fund (IMF) and U.S. Bureau of Economic Analysis (BEA) use the term "financial account" to describe most of what is called the "capital account" (the traditional term in economics) in this paper.

To be clear, the primary point of Zucman's paper is not that the U.S. trade deficit is smaller than thought. Nonetheless, given the attention his paper is receiving, the fact that his paper does connect tax evasion to an assumption of underestimated U.S. exports, and the worldwide concern over tax evasion, his paper may leave the impression that U.S. tax evasion implies a smaller U.S. trade deficit. Thus, the issue deserves careful examination.

My paper is organized as follows. First, I provide background on Zucman's paper and on how his assumptions about the true state of the U.S. current account deficit depend on the U.S. trade deficit being smaller than reported. Second, I use U.S. and foreign government data to explore what kind of change in the value of U.S. exports would be needed for Zucman to be correct about the U.S. trade deficit, and whether such a difference is believable. Third, I look at Zucman's statements about U.S. exports, and suggest that either his scenarios for the United States are wrong or that there are additional, countervailing issues that would allow Zucman's estimated level of U.S. tax evasion to be consistent with the level of the U.S. trade deficit as reported by the U.S. government. In other words, even if Zucman is correct about the approximate scale of U.S. tax evasion, the U.S. trade deficit data can still be correct.

Zucman's "Missing Wealth of Nations" and the U.S. trade deficit

Background

Gabriel Zucman is a professor at the London School of Economics who studies the accumulation and distribution of global wealth. He has written papers with economist Thomas Piketty, famous for his recent work on inequality. Zucman's 2013 paper "The Missing Wealth of Nations" was followed by a book on tax evasion in 2015.³ The paper received two favorable discussions in the *New York Times*, including one from Paul Krugman.⁴ Piketty has publicly endorsed the paper's findings.⁵ It has also received accolades from influential economic blogs such as *Global Policy Journal* and widely read columnists such as Yves Smith of *Naked Capitalism*.⁶ The paper is clearly receiving significant attention.

Zucman's paper claims that the "negative net foreign asset position of the rich world" (by which Zucman means the United States and the European Union, or EU) "is an illusion caused by tax havens."⁷ That is, a large portion of "foreign" investment in the United States and the EU is actually U.S. and EU domestic funds hidden in foreign (offshore) accounts.

Zucman's conclusion stems from his analysis of global capital flows. He notes anomalies in different countries' financial flow data that occur (he concludes) because of tax havens.⁸ That

³ Zucman, *The Hidden Wealth of Nations*, 2015. This book does not contain any claims about the U.S. trade deficit.

⁴ See Krugman, "Offshore and Underground," April 11, 2014, and Leslie, "The True Cost of Hidden Money," June 15, 2014.

⁵ Stewart, "Wealth Doesn't Trickle Down," July 21, 2012. Piketty is quoted as endorsing a finding similar to that of Zucman's paper and attributing the finding to colleagues. To this author's knowledge, Krugman and Piketty have not specifically addressed the data issues of the U.S. trade deficit as raised by Zucman.

⁶ Oman, "Mr. Draghi, Mr. Arnault, and Europe's Gordian Knot," September 13, 2012, and Smith, "Tax Havens Make US and Europe Look Poorer," March 6, 2014.

⁷ Zucman, "The Missing Wealth of Nations," 2013.

⁸ This paper deals with the issue of tax evasion (i.e., hiding one's income to avoid paying income taxes), as opposed to legal tax avoidance (i.e., legally sheltering one's income in lower-tax jurisdictions). While Zucman's paper does not mention tax avoidance, his argument centers on bank secrecy not allowing statisticians to observe the correct origin of a holding in "private banking" activity. Presumably, statisticians can observe the activities of legal tax avoiders.

is, there are more cross-border liabilities than assets globally, because when a tax evader from one country hides his/her wealth in another country, his/her assets from his/her native country are not recorded (as they are hidden). But those liabilities *are* recorded by the country in which he or she invests.⁹ In theory, the investment of a U.S. national through a custodian in another country should be recorded as a U.S. investment, with the country of the custodian being irrelevant. In practice, the U.S. tax evader's investment in the country of the custodian will be missed, and the custodian's investment back into the United States will be picked up as an investment of the country of the custodian.¹⁰

Zucman then conducts a detailed and complex estimate of the total amount of these unrecorded assets. Once he has a total, he evaluates several possible scenarios for the United States. He concludes that if U.S. residents own 20 percent of all the unrecorded wealth he has estimated, then the net international investment position (net IIP)¹¹ of the United States is "significantly better than in the official data: -12% of GDP on average over 2001–2008 as opposed to -18% in the data," or a change of about 33 percent.¹²

Zucman also describes some of the consequences of his findings. First, Zucman notes that his findings would mitigate an interesting empirical violation of traditional economic theory. Theory states that more advanced economies (like that of the United States) should run current account surpluses with less advanced economies (such as that of China) while U.S. investment money flows into the developing world. In reality, the opposite has happened; the United States has run a huge current account deficit (primarily a trade deficit) with developing economies (like China), and so on net, some developing economies have invested more in the United States than vice versa. If Zucman's findings are correct, however, some of the observed net investment flows into the United States would reflect U.S. funds disguised as foreign funds. Zucman concludes that, with the adjustments he suggests, the U.S. net IIP would look more like what traditional economic theory forecasts than what the observed data show¹³ (although still not reflecting the sign of net flows that economic theory would predict).¹⁴

Second, as Zucman also notes, if his findings are correct, then some of the U.S. public's concern over U.S. indebtedness to foreigners is misplaced. In his own words, the policy-making implications would be "far-reaching": the United States would be far less indebted to foreigners than the data show; and the indebtedness would be to other Americans, albeit Americans who were hiding their funds in foreign countries.¹⁵

Thus, one can see that Zucman's findings are potentially important, because they would mean that both the U.S. capital account surplus and the corresponding current account deficit

⁹ Ibid.

¹⁰ Ibid, although I have used a U.S. investor in the example. (Zucman's example focuses on a French investor.)

¹¹ The net IIP is the value of accumulated stocks of U.S.-owned assets abroad net of foreign-owned assets in the United States. See USDOC, BEA, "U.S. Net International Investment Position," updated August 14, 2015.

¹² Zucman, "The Missing Wealth of Nations," 2013.

¹³ Ibid.

¹⁴ In his paper, Zucman uses the example of rhetoric that he describes as saying "China owns the world." He presents his paper as refuting this rhetoric (of which he cites no examples) because he identifies tax evasion from the developed world as having hidden developed world investment. However, he never identifies why or if China's known investments in the rest of the world should be reduced. See also "Zucman's estimated tax evasion requires a very large degree of unmeasured U.S. exports to balance" below.

¹⁵ Ibid.

are much smaller than thought. The capital account surplus would have been overstated by counting investments that are actually U.S.-controlled investments as foreign investments. As a matter of accounting, though, this also means that there would need to have been an offsetting error in the current account deficit (discussed more below). Zucman implies that this error could come in part from the United States underestimating its exports and thus overestimating its trade and current account deficits.

The idea that the United States is running a smaller trade deficit than reported would also affect debates over whether persistent U.S. trade deficits are a problem, and what causes them.¹⁶ As my paper will show below, there are several reasons to believe that the U.S. government trade and export data are correct, meaning that Zucman's assumptions about the U.S. trade deficit are incorrect.¹⁷ However, there could still be some other countervailing effect that explains the magnitude of the tax evasion levels he estimates. In addition, my paper does not conduct any analysis of nor draw any conclusions on Zucman's similar contentions about the EU.

To understand Zucman's assumption that the U.S. trade deficit should be reduced to compensate for U.S. tax evasion, my paper will now briefly discuss the general relationship between the capital and the current accounts.

Balance of payments terms

U.S. trade data have important implications for Zucman's theory as it applies to the United States. To understand why, a quick review of some U.S. balance of payment terms is important.

The *capital account* of the United States (or any country) is its change in net ownership of assets vis-à-vis the rest of the world. For example, when a foreign citizen invests \$1,000 in the United States, that investment would be recorded as adding \$1,000 to the capital account surplus of the United States. (As noted earlier, the BEA and IMF use the term "financial account" to refer to what my paper, and many economics textbooks, call the capital account.) The *current account*, on the other hand, is the change in net income of the United States vis-à-vis the rest of the world. At the risk of oversimplification, the U.S. current account is the United States' earnings less its spending, while the capital account is how the United States pays for its excess spending, i.e., by selling assets or borrowing.

More specifically, the *current account balance* of the United States (or any country) is measured as its trade balance (exports minus imports) with the rest of the world plus the income that its investments in other countries receive, net of income that foreigners make by investing in the United States.

As an accounting identity, then, the capital account must be negative 1 times the current account; if a nation runs a current account deficit (for example, by running a trade deficit with the rest of the world), then it must be running a capital account surplus (that is, paying for its trade deficit by selling assets on net) of equal magnitude.¹⁸ Importantly, this accounting

¹⁶ For a further discussion of these debates, see Benedetto, "Who Financed Recent U.S. Trade Deficits?" May 2014.

¹⁷ This paper is not a comprehensive survey of the literature on measuring the U.S. trade deficit, but provides some evidence that supports the U.S. government's measurements.

¹⁸ In practice, there is usually a statistical discrepancy.

means that any change in the capital account must be reflected by a change of exactly the same magnitude in the current account.

For the period studied by Zucman, 2000–2010, the U.S. current account was in deficit (meaning the U.S. capital account was in surplus by an equal amount). Moreover, the bulk of the U.S. current account deficit was the U.S. trade deficit. Since 2010, the U.S. current account has remained in deficit, and that deficit has remained mostly due to the U.S. merchandise trade deficit.¹⁹

Zucman’s argument has ramifications for the capital account. If Zucman is correct, then U.S. tax evaders investing back in the United States should really have their investments counted as U.S. domestic investments. For example, if a successful U.S. dentist makes money from his U.S. practice, hides the money in an offshore account (i.e., in another country), and then reinvests the money in the United States, the investment looks like an investment in the United States by someone from another country, but is really a U.S.-origin investment. In other words, U.S. tax evaders would incorrectly count as foreign investors in the capital account data, making the U.S. capital account surplus look larger than it really is.

However, because the capital account is equal in magnitude to the current account, if the U.S. capital account surplus is smaller than reported, then so too the U.S. current account deficit must be smaller (in magnitude) than reported. Thus, alleging that U.S. tax evaders are making the U.S. capital account surplus substantially smaller means that one also needs to explain how the U.S. current account deficit is equally smaller (in magnitude) as well. This analysis is summarized in table 1 below.

Table 1 Effects of investment flows on the U.S. capital and current accounts

| Scenario | Effect on U.S. capital account | Implied effect on U.S. current account |
|--------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------|
| 1. Foreign citizen invests \$1 in United States | U.S. capital account surplus gets larger by \$1 | U.S. current account deficit must get larger by \$1 |
| 2. U.S. citizen invests \$1 in a foreign country | U.S. capital account surplus gets smaller by \$1 | U.S. current account deficit must get smaller by \$1 |
| 3. U.S. citizen invests \$1 in the United States | None | None |
| 4. Foreign citizen invests \$1 in any foreign country, either his/her own or another | None | None |

Source: author

Using table 1 for analysis, Zucman’s point is that tax evasion by U.S. investors investing in the United States from tax havens looks like row 1 because the investment in the United States has been incorrectly measured as a foreign investment. This mismeasurement misses that the foreign investment is actually offset by an equal U.S. investment into the tax haven nation. Thus, tax evasion as described by Zucman is actually row 3. Under Zucman’s hypothesis, when we move from row 1 to row 3, the apparent foreign investment in the United

¹⁹ However, since 2010, the fact that U.S. investors overseas have realized a larger net income than have foreign investors in the United States has mitigated the U.S. trade deficit more than it did over 2000–2010. Additionally, the U.S. services trade surplus has grown somewhat, although still nowhere near enough to offset the U.S. merchandise deficit. Data from BEA, U.S. International Transactions, table 1.1, lines 30–35, December 17, 2015, and author’s analysis.

States goes away, meaning that the real effect on the U.S. capital account should be 0, so we need to take \$1 away from both the capital account surplus and the current account deficit.²⁰

Zucman notes this accounting relationship in a discussion of world trade data, stating that the U.S. current account and trade deficits may be smaller than reported. As part of his justification, he cites a 1997²¹ U.S. Census paper (hereafter referred to as Census 1997) that states that U.S. exports might be underestimated by as much as 10 percent. This citation deserves more attention.

Evidence for the accuracy of the U.S. trade deficit

Measurement accuracy has increased since 1997

Zucman's paper leaves a one-sided impression about Census 1997. Census 1997 states that measured U.S. merchandise exports might be too low, because very small exports might not be counted if they fall under a reporting limit of \$2,500, and because Census' estimates for low-valued exports might be underestimates. It then states that U.S. exports might be underestimated by "3 to 7 percent of the published export value."²² Census adds that the mismeasurement might be as high as 10 percent. However, this statement, made in 1997, is unlikely to have held for long, if it even were true in 1997, due to changes in Census's measurement methodology.²³

One of the solutions that Census 1997 proposes is greater use of the Automated Export System (AES), which eliminates many of the errors incurred through paper filings. When Census 1997 was written, Census compiled export data using both exporters' AES reports and exporters' paper filings.²⁴ Since then, Census has published several descriptions of several updates to its methodology. By 2003, the AES covered about 85.9 percent of U.S. exports.²⁵ By late 2008, when only 1–2 percent of all exports were still filed by paper, Census

²⁰ Another possibility is that a holding hidden in a tax haven earns income, and that income is not correctly recorded. In this instance, the hidden income is purely a current account issue. Such a possibility will be discussed later.

²¹ Zucman describes the paper as a 1998 paper, but the link in his bibliography is to a January 1997 paper of the same name. Zucman also claims that there is "substantial evidence" that the developing world underestimates its imports, citing one 2004 paper on the China-Hong Kong trade statistics. Other researchers have found that the China-Hong Kong trade data account for some of the discrepancy between China's reported trade with the world and other countries' reported trade with China, because China does not always correctly count products transshipped through Hong Kong as exports to other nations. (For example, see Ferrantino and Wang, "Accounting for Discrepancies in Bilateral Trade," and Scott, "Value-added Analysis of Trade with China.") However, this problem is relatively simply resolved by using China's trading partners' data, and is an issue with China's exports, not its imports. Additionally, in 2008, Ferrantino, Liu, and Wang found strong evidence that Chinese exports are actually being underestimated for tax avoidance reasons, contrary to Zucman's assertion. (They also found weaker evidence that U.S. imports may be being underinvoiced.) See Ferrantino, Liu, and Wang, "Avoidance Behaviors of Exporters and Importers," September 2008.

²² Census, "Understatement of Export Merchandise Trade Data," January 1997. The Census document refers to issues with exports of merchandise (goods), but not services exports.

²³ Moreover, as noted, according to the Census document, one major cause of any mismeasurement is small exports that fall below a reporting limit (set in 1989) of \$2,500 dollars. Most U.S. exports are actually from large exporters, as shown in USITC, *Small and Medium-Sized Enterprises: Overview*, January 2010. Of course, it is possible that large enterprises also have small exports, but this seems less likely. Under a reasonable assumption that most large enterprises that export have large exports, then any mismeasurement must come from the much smaller pool of small exports by smaller enterprises. It seems unlikely any such error would be large, especially as time passes and the \$2,500 limit has become smaller in real terms.

²⁴ Census, "Effect of Mandatory Electronic Filing," March 2015.

²⁵ See Cantwell, "Several Approaches to Estimating Low-Valued Exports," 2007.

regulations made it mandatory to file export data electronically, further improving export data quality.²⁶

Similarly, on the issue of estimating remaining low-value exports, there were even more improvements to the estimation methodology for low-value trade (both imports and exports) in 2010.²⁷ Thus, it is highly likely that even if there were significant export underestimation in 1997 or 1998, the problem was likely mitigated soon after and eliminated by 2010.

U.S. export data match up with foreign import data

The idea that U.S. exports are substantially underestimated, whether by 3, 7, or 10 percent, can also be tested by examining whether other governments are reporting substantially different import values from the United States than the export values the United States reports to those countries. One might reasonably surmise that most countries keep a closer eye on products being imported (on which they may be charging tariffs) than products being exported. Certainly, even if U.S. exports were consistently underestimated by the U.S. government, one would not expect U.S. trading partners to consistently underestimate U.S. exports (on which they may be charging tariffs).

Table 2 compares U.S. export values (as reported by the United States) to the value of imports from the United States as reported by the U.S. exporters' top export destinations. A negative number indicates that the U.S. export values reported by the U.S. government were lower than the value of a trading partner's reported imports from the United States, consistent with Zucman's assumption that U.S. exports may be underestimated. A positive number indicates that U.S. export values were higher than the value of a trading partner's reported imports from the United States, which would be inconsistent with Zucman's assumption that U.S. exports are being underestimated.²⁸ There are numerous additional reasons why U.S. export and foreign import data may not match exactly, including the timing of sales and differences in the destination reporting. The point of the table is to see if there is any consistent pattern in which U.S. trading partners show higher U.S. imports than the United States reports exports.

As can be seen from the table, for the United States' largest trading partners, the discrepancy is usually positive. This indicates that, if anything, the U.S. government reports higher values for U.S. exports than the governments of U.S. trading partners do. This result implies that, if one prefers the foreign-country data, perhaps the U.S. trade deficit is larger (not smaller) than the U.S. government reports. Importantly, at no point over 2000–2013 is the sum of the discrepancies anything like the 10 percent underestimate that Zucman mentions.

²⁶ Census, "Effect of Mandatory Electronic Filing," March 2015.

²⁷ Census, "Import and Export Low Value Estimation," March, 2015.

²⁸ Zucman also posits that developing countries may underestimate their imports, citing a 2004 paper on China. Fisman, R., and S.-J. Wei, "Tax Rates and Tax Evasion," 2004. However, if this were true, it still may not explain the results in table 2. As can be seen in table 2, the Chinese government reports larger imports from the United States than the United States reports exports to China, even counting the Hong Kong import data with those of China.

Table 2 Discrepancies between U.S.-reported exports and trading partners' reported imports from the United States for the 15 largest U.S. trading partners, 2000–2013

| Trading partner | U.S. reported exports minus foreign reported U.S. imports, billions of U.S. dollars | | | | | | | | | | | | | | |
|-----------------------------------------------|-------------------------------------------------------------------------------------|-------|------|------|-------|------|------|------|-------|------|------|-------|-------|-------|---------|
| | Year | | | | | | | | | | | | | | |
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Average |
| Canada | 21.8 | 22.5 | 21.8 | 24.3 | 29.0 | 34.3 | 38.5 | 42.7 | 46.8 | 40.3 | 51.8 | 57.3 | 58.6 | 61.0 | 39.3 |
| Mexico | -15.8 | -12.5 | -9.1 | -8.0 | -0.1 | 1.7 | 3.4 | -3.6 | -0.1 | 16.5 | 18.7 | 23.9 | 30.8 | 38.8 | 6.0 |
| China | -6.1 | -7.0 | -5.1 | -5.5 | -10.2 | -7.5 | -5.5 | -6.9 | -11.8 | -7.9 | -9.4 | -14.0 | -17.2 | -24.2 | -9.9 |
| Japan | -6.9 | -5.7 | -6.4 | -6.9 | -9.0 | -9.5 | -9.6 | -9.8 | -12.5 | -7.8 | -7.0 | -8.7 | -6.3 | -4.6 | -7.9 |
| Germany | -5.6 | -3.5 | -3.2 | -5.6 | -7.4 | -5.4 | -1.1 | 1.9 | 4.0 | 4.3 | 5.0 | -0.5 | -0.3 | -1.2 | -1.3 |
| United Kingdom | -2.4 | -2.7 | -6.7 | -5.7 | -6.0 | -2.9 | -4.2 | -6.7 | -6.9 | -4.1 | -5.6 | -3.7 | -6.3 | -7.1 | -5.1 |
| Brazil | 2.5 | 3.0 | 2.1 | 1.6 | 2.5 | 2.7 | 4.2 | 5.5 | 6.7 | 6.1 | 8.4 | 9.1 | 11.5 | 8.1 | 5.3 |
| Netherlands | 0.7 | -0.4 | -1.1 | -0.1 | -1.1 | -0.9 | -1.0 | -3.0 | 1.1 | 3.8 | 3.1 | 6.8 | 4.4 | 5.2 | 1.3 |
| Hong Kong | 0.2 | 0.5 | 1.1 | 1.3 | 3.1 | 2.7 | 3.5 | 4.2 | 3.8 | 4.2 | 6.0 | 8.4 | 6.9 | 5.4 | 3.7 |
| KoreaSouth | -1.1 | 0.1 | -0.1 | -0.7 | -2.6 | -3.0 | -1.4 | -2.8 | -3.7 | -0.4 | -1.6 | -1.1 | -1.1 | 0.2 | -1.4 |
| Belgium | 0.7 | 1.0 | 0.3 | 1.3 | 0.5 | 1.6 | 2.1 | 2.4 | 3.0 | 1.2 | 2.9 | 3.2 | 1.4 | 0.4 | 1.6 |
| France | -4.3 | -4.3 | -3.3 | -4.0 | -2.8 | -3.2 | -1.2 | -0.7 | -1.4 | 0.0 | -0.2 | -3.6 | -2.9 | -3.4 | -2.5 |
| Singapore | -2.3 | -1.4 | -0.3 | -1.3 | -1.1 | -2.8 | -6.1 | -6.7 | -9.6 | -6.3 | -5.9 | -7.7 | -8.1 | -7.9 | -4.8 |
| Switzerland | 3.9 | 4.9 | 2.7 | 3.7 | 4.0 | 4.0 | 5.6 | 7.7 | 11.4 | 8.5 | 11.3 | 14.2 | 15.2 | 14.6 | 8.0 |
| Australia | -1.0 | -0.1 | 0.5 | -0.3 | -1.1 | -0.7 | -1.0 | -0.6 | -0.4 | 2.0 | 0.9 | 1.4 | 2.4 | 2.3 | 0.3 |
| Total | -15.7 | -5.7 | -6.8 | -5.9 | -2.2 | 10.9 | 26.1 | 23.6 | 30.5 | 60.3 | 78.4 | 85.1 | 89.1 | 87.6 | 32.5 |
| Total as percent of all U.S. exports to world | -2.0 | -0.8 | -1.0 | -0.8 | -0.3 | 1.2 | 2.5 | 2.1 | 2.4 | 5.7 | 6.1 | 5.7 | 5.8 | 5.5 | 2.3 |

Note: Global Trade Atlas (GTA) uses total exports and general imports as its measures of exports and imports. GTA reports exports on a FAS (free alongside ship) basis, and for most of these countries, imports on a c.i.f. (cost, insurance, and freight basis), except for Canada, which reports on a FOB (freight on board) basis.

Source: Global Trade Atlas database, accessed August 6, 2015, and author's calculations.

Zucman's estimated tax evasion requires a very large degree of unmeasured U.S. exports to balance

The above issues are not the only reasons why it is unlikely that the U.S. trade deficit data are different than reported. In addition, Zucman's estimated tax evasion effect would require a large degree of unmeasured U.S. merchandise exports to balance the current and capital accounts.

Recall that Zucman finds that his estimates of U.S. tax evasion improve the net international investment position (net IIP) of the United States from -18 percent of U.S. GDP over 2000–2008 to -12 percent of U.S. GDP, an improvement of about 33 percent. The net IIP is a stock, while the current and capital accounts are flows. However, in the long run, the sum of current account deficits (annual flows) should equal the net IIP (a total stock). Thus, an improvement of 33 percent in a stock (the net IIP) would mean that one should also observe a cumulative improvement, over the long run, of about 33 percent in the flow (the current account and its mirror, the capital account).²⁹

Thus, if Zucman is correct, the U.S. current account deficit, over the long run, must also shrink by about 33 percent. Given Zucman's use of Census 1997, how much would the U.S. current account deficit actually change if U.S. exports were underestimated substantially, either by the 1997 Census's estimated likely range of 3 to 7 percent, or by Zucman's chosen estimate of 10 percent?

Table 3 summarizes the results of a simple calculation on the U.S. international transaction data. It considers four scenarios with different degrees of U.S. export underestimation. In scenario 1 (considered most likely by this author), the U.S. trade data are basically accurate. Scenarios 2 and 3 consider the range of possibilities considered likely in January 1997 by the Census, i.e., that U.S. goods exports are underestimated by 3 to 7 percent. Scenario 4 is the one considered by Zucman, based on the additional comment in Census 1997, that the likely ceiling for the effect could be as high as 10 percent.

²⁹ This is a theoretical point. In practice, the U.S. net IIP shows a much smaller deterioration over time than cumulated U.S. net current account balances. See Gros, "Why the U.S. Current Account Deficit," 2006, discussed later.

Table 3 Effect on the U.S. current account deficit if U.S. merchandise exports were underestimated, by hypothetical underestimates, 1999-2014

| Year | U.S. current account deficit as a percent of U.S. GDP | | | | Percent change scenario 1 to scenario 4 |
|-------------------|-------------------------------------------------------|-----------------|--------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------|
| | Scenario 1 Actual reported | Scenario 2 * | Scenario 3 If goods exports were underestimated 7 percent | Scenario 4 If goods exports were underestimated 10 percent | |
| | | | <i>Percent</i> | | |
| 1999 | 3.1 | 2.8 | 2.6 | 2.3 | 23.6 |
| 2000 | 4.0 | 3.8 | 3.5 | 3.2 | 19.1 |
| 2001 | 3.7 | 3.5 | 3.2 | 3.0 | 18.5 |
| 2002 | 4.2 | 4.0 | 3.7 | 3.5 | 15.2 |
| 2003 | 4.5 | 4.3 | 4.1 | 3.9 | 14.0 |
| 2004 | 5.2 | 5.0 | 4.7 | 4.5 | 13.0 |
| 2005 | 5.7 | 5.5 | 5.2 | 5.0 | 12.2 |
| 2006 | 5.8 | 5.6 | 5.3 | 5.1 | 12.9 |
| 2007 | 5.0 | 4.7 | 4.4 | 4.2 | 16.2 |
| 2008 | 4.7 | 4.4 | 4.1 | 3.8 | 18.9 |
| 2009 | 2.7 | 2.4 | 2.1 | 1.9 | 27.9 |
| 2010 | 3.0 | 2.7 | 2.3 | 2.1 | 29.2 |
| 2011 | 3.0 | 2.7 | 2.3 | 2.0 | 32.6 |
| 2012 | 2.8 | 2.5 | 2.1 | 1.8 | 34.7 |
| 2013 | 2.2 | 2.0 | 1.6 | 1.3 | 42.3 |
| 2014 | 2.2 | 2.0 | 1.6 | 1.3 | 41.9 |
| Average 1999-2008 | 4.6 | 4.4 | 4.1 | 3.9 | 15.2 |
| Average 2009-2014 | 2.6 | 2.4 | 2.0 | 1.7 | 37.0 |

Source: Data from the Bureau of Economic Analysis (BEA), December 17, 2015, and author's calculations.

As can be seen in the table, all the hypothetical scenarios (2, 3, and 4) do reduce the U.S. current account deficit somewhat, but still leave it very high, especially in the mid-2000s. Even if U.S. goods exports are underestimated by 10 percent, the U.S. current account deficit remains over 3 percent of GDP during 2000–2008.

The far-right column in table 3 compares scenario 4 to scenario 1 to see how often the most extreme estimate of U.S. export underestimation would result in the 33 percent reduction needed (cumulatively) to make the U.S. current account deficit small enough to be consistent with Zucman's estimates. Scenario 4 only ever delivers such a large reduction from scenario 1 after 2008, when U.S. data would likely have been most accurate (and thus scenario 4 would be least likely).

Thus, the export underestimations that the BEA thought possible in 1997 likely do not balance out the changes to the U.S. net IIP that Zucman finds. Moreover, it is likely that any U.S. export mismeasurement was largely rectified in the 2000s, making scenarios 2–4 increasingly unlikely after 1997, and especially after 2008.³⁰

³⁰ Zucman's thesis also raises another interesting possibility. As I have shown in a previous paper ("Who Financed Recent U.S. Trade Deficits?" May 2014), basic U.S. government data show that since 2002, much of the U.S. current account deficit has been financed by net foreign government purchases of U.S. assets. This finding is based on publicly available data; to the extent any foreign governments have hidden their purchases of U.S. assets through third-party purchases, the percentage could be even larger. (It could not be smaller.) Given this large role foreign governments have played in the U.S.

Why tax evasion does not mean that the U.S. trade deficit must be smaller

So far, my paper has shown that as an empirical matter, it is unlikely that U.S. trade data underestimate the U.S. merchandise trade deficit. However, this conclusion does not necessarily refute Zucman's findings on the extent of U.S. tax evasion. There are at least four potential theoretical issues by which large amounts of U.S. tax evasion could occur without needing to change the reported U.S. trade deficit. My paper is not claiming any or all of these issues apply, but one or all of them potentially could, and so these concerns should be taken into account when considering whether to believe that the U.S. trade deficit must be smaller than reported due to estimates of hidden asset flows.³¹

Tax evasion is not the only reason to hide asset ownership

By focusing only on private investment flows, Zucman may have somewhat overestimated the share of hidden investment flows accounted for by U.S. tax evaders. From early on, Zucman's paper indicates that he is concerned only with entities hiding funds for tax evasion purposes. However, another major reason for hiding investment flows might be that foreign governments are trying to hide exactly what types of currency and investment moves they are making.

Whenever a country enjoys a large trade surplus, other countries may worry that it is purchasing the assets of other countries with its own currency, in order to keep its own currency weaker than it otherwise would be (and boost its net exports). In such an atmosphere, it makes sense that the national government of any country might potentially wish to hide some or all of its own foreign investments or asset accumulations. Thus, there is, besides tax evasion, an important reason for why major financiers of U.S. current account deficits may wish to hide their activity.³²

Zucman asserts that securities held in Switzerland (and presumably other tax havens) by foreigners belong to households, as opposed to corporations.³³ At another point in his paper, Zucman notes that he is assuming that securities held by governments are well measured globally. For the above reason, this may not be a reasonable assumption.

In a key quote, Zucman states, "If U.S. residents own 20 percent of all unrecorded wealth—say, 15% of the offshore wealth in Swiss banks and 25% of the other missing assets—then the net position [net IIP] of the U.S. is significantly better than in the official data."

current account deficit, if the U.S. current account deficit really were smaller (as Zucman alleges), then it follows that an even larger percentage of it is accounted for by known foreign government activity. (Foreign government activity would not be changed by Zucman's analysis.) In other words, the large U.S. current account deficit that would remain would become even more an issue of net government flows.

³¹ I have not attempted to estimate the extent to which any of these issues apply, but doing so would probably be extremely difficult or impossible due to the intentional secrecy of these flows.

³² While my paper is not speculating as to why it may have done so, there is some evidence that the government of China has used custodial accounts in other countries, in effect hiding its purchases of U.S. Treasuries. For example, economist Brad Setser indicated his belief that Chinese holdings of U.S. Treasuries were sometimes held in United Kingdom accounts, and Bloomberg News reported that Nomura Holdings believes that China held Treasuries in Belgian accounts. See Setser, "I Am Pretty Sure China Didn't Sell Treasuries," June 19, 2009, and Bloomberg News, "China Sells U.S. Treasuries to Support Yuan," August 27, 2015.

³³ Zucman, "The Missing Wealth of Nations," 2013.

Basically, Zucman is assuming that hidden foreign government activity is 0 percent of global unrecorded wealth, and unrecorded private U.S. wealth is 20 percent of global unrecorded wealth. If one believes, however, that some global unrecorded wealth reflects foreign government activity, then perhaps Zucman's U.S. tax-evasion estimates are unrealistically large, since part of what Zucman has estimated as U.S. tax evasion activity may be hidden foreign government activity instead. In other words, perhaps some substantial percentage of global unrecorded wealth actually belongs to governments, meaning that the U.S. private share of global unrecorded wealth is less than 20 percent. In turn, that would mean that Zucman's estimates of how much lower the adjusted U.S. net IIP would be than the measured one are too large in magnitude, and less adjustment would be needed to the measured U.S. trade deficit.

What if the U.S. current account deficit is already underestimated because foreigners are earning more than is realized from their U.S. assets?

In 2006, economist Daniel Gros endeavored to explain why official U.S. data indicate that U.S. investors earn more overseas than foreign investors earn in the United States.³⁴ In Gros's view, the reason for this state of affairs is that according to U.S. official data, foreign investors earn an extremely low rate of return from their U.S. direct investment.³⁵ Foreign investors' return was sometimes so low that Gros asked why they would even make risky U.S. investments when U.S. government bonds earned a higher return. Gros describes the reported state of affairs as unrealistic, maintaining that foreign investors' earnings are not being completely captured. (More specifically, he pointed to the measurement of retained earnings from foreign direct investment as being unverifiable and prone to misreporting, perhaps for tax advantages.) He concludes that the U.S. current account deficit is likely underestimated, perhaps by as much as 1 percent of U.S. GDP.³⁶

In other words, Gros is giving a reason why the U.S. current account deficit may be larger than officially recorded (implying that the U.S. capital account surplus must be larger as well). For his part, Zucman is giving a reason why the U.S. capital account surplus may be smaller than recorded (implying that the U.S. current account deficit must be smaller as well). Thus, even if Zucman is correct about the level of U.S. tax evasion, if Gros is also correct, then the two effects may offset each other, at least to some extent.³⁷ If they offset each other to a similar degree, then the official U.S. trade and current account deficits do not need to change much, even if Zucman is correct about the level of U.S. tax evasion.

U.S. ownership of foreign assets may have been recorded already

³⁴ This difference in earnings is sometimes called the U.S. FDI (foreign direct investment) returns gap. See Bridgman, Benjamin "Do intangible assets," 2014.

³⁵ Gros, Daniel. "Why the U.S. Current Account Deficit," 2006.

³⁶ Gros's analysis would explain why cumulative U.S. current accounts are greater than U.S. net debt. In his own paper, Zucman notes the claims of economist Ricardo Hausmann that the U.S. current account deficit might be overestimated if one considers the dollar as an "asset" with a hidden rate of return from safety. However, he does not cite Gros's response. Hausmann and Sturzenegger, "Why the U.S. Current Account Deficit Is Sustainable," 2006.

³⁷ As noted, Gros states that the underestimate could be as much as 1 percent of U.S. GDP for the period he covers. For some sense of scale, Zucman estimates that identifying U.S. tax evasion properly could reduce the total U.S. net international investment position (IIP) by 6 percentage points of U.S. GDP on average over the period he examines. However, this estimate is six percent of a stock (the net IIP). The change in that stock each year is significantly less than 6 percent of U.S. GDP, and thus conceivably Gros' identified effect could largely offset Zucman's identified effect.

It is also worth considering where the break between assets and liabilities occurs. For example, assume that a U.S. tax evader invests money in Switzerland. Assume further that in this instance, this transaction is observed by the BEA and recorded in the U.S. capital account. Now assume the tax evader's account in Switzerland is used to invest in China, but in a hidden fashion to avoid U.S. authorities observing the transaction. China's government may correctly record the investment as a foreign investment, but from Switzerland, while the Swiss government will not record anything, because it is not actually a Swiss investment.³⁸

In this scenario, the break in the links between global assets and liabilities can be seen. The U.S. investor's investment overseas has been correctly recorded by the BEA as a U.S. investment overseas, although the true final destination of that investment (China instead of Switzerland) has not been correctly recorded.

In other words, we can observe a Chinese liability without a corresponding asset from some other nation. Applying Zucman's methodology, one might assume that because the Swiss account was actually held by an American, it therefore should be recorded as a U.S. investment overseas, adding to the U.S. capital account. That is, in table 1, we are moving from line 4 to line 2.

However, doing so would be an error. The U.S. capital account has already recorded this investment as a U.S. investment overseas. There is no need to change either the total U.S. capital account or the total current account. (One should record it as an investment in China, and not Switzerland, though.) Thus, to the extent this kind of scenario takes place, even extensive U.S. tax evasion could fail to have an effect on either the U.S. capital or current accounts. Thus, there would be no need to change the U.S. trade deficit to the extent this type of investment takes place.

Allegations that the investments may also be hidden in the United States

Some advocacy groups and scholars have alleged that certain U.S. financial secrecy laws allow investments to be hidden from foreign tax authorities.³⁹ Most recently, the Tax Justice Network (TJN), an international nongovernmental advocacy group, described the United States as an international tax haven in close to the same category as Switzerland, Hong Kong, and possibly the United Kingdom. TJN did caution that this status would in part simply be due to the larger scale of the U.S. economy.⁴⁰

³⁸ This scenario may seem unlikely; after all, what is the tax advantage to the U.S. investor if his/her investment is recorded as a foreign investment at all? I do not know how often such scenarios occur, if it all, but it seems possible that a U.S. tax evader might want to hide the true nature (and thus magnitude) of his/her investment earnings, without necessarily needing to hide the fact that s/he has an overseas investment.

³⁹ For example, see *Economist*, "Not a Palm Tree in Sight," February 16, 2013; Gravelle, "Tax Havens: International Tax Avoidance and Evasion," January 2015; and Wayne, "How Delaware Thrives," June 30, 2012.

⁴⁰ Bowers, "US overtakes Caymans and Singapore," November 2, 2015. See also Tax Justice Network (TJN), "Narrative on the USA," 2015, in which TJN alleges that "[f]inancial secrecy by the U.S. has caused untold harm to the ordinary citizens of foreign countries, whose elites have used the United States as a bolt-hole for looted wealth." I am not opining on TJN's allegations, but let us assume for a moment that the United States has functioned as a Switzerland-like tax haven. Whatever the effect on the citizens of foreign countries, the effect on the U.S. balance of payments could be the opposite of the effect discussed by Zucman, depending on how those transactions are recorded.

To be quite clear, my paper is not making any claim about whether the United States is a tax haven or not. However, if the United States does function as a way for wealthy foreigners to hide the origins of their investment, it is possible some of that activity would actually mean that the U.S. capital and current accounts should be larger. Using table 1, if foreigners are able to hide the origin of their wealth in U.S. shell corporations, then possibly foreign investments in the United States (line 3) look like U.S. investments in the United States (line 1). If so, it is possible that the U.S. capital and current accounts could be even larger.

For example, the TJN states that “almost 2 million corporations and limited liability companies are formed in the U.S. states each year, many by foreigners, without the states ever asking for the identity of the ultimate beneficial owners.”⁴¹ If such investments are being made in a way that keeps the BEA from detecting them as foreign investments, then it is possible that there is even more foreign investment in the United States than realized, and thus an even larger U.S. capital account surplus. Here, Zucman’s logic would be working in reverse, with the United States as the tax haven, rather than the source of tax-evading funds.

Of course, to the extent that tax-evading foreign investments are already recorded as foreign investments in the United States, there would be no effect on the U.S. capital account surplus.

Conclusions

Zucman’s “The Missing Wealth of Nations” raises the interesting possibility that tax evasion by U.S. citizens means that the U.S. trade deficit is smaller than reported. However, this analysis, if true, is inconsistent with the size of the U.S. current account as reported. Unfortunately, Zucman’s proposal to balance the U.S. current account by revising the size of the U.S. capital account (1) does not take into account improvements in the way that the U.S. government measures exports, and (2) is not consistent with what large U.S. trading partners report.

My paper proposes four different theoretical possibilities why Zucman’s estimates of U.S. tax evasion may be too large or why his proposed reduction in estimates of the U.S. trade deficit may be misplaced. First, Zucman does not consider that some foreign governments may wish to hide their U.S. asset purchases from public knowledge. Second, Gros’s findings may indicate that U.S. net debt is actually underestimated; balancing his findings against Zucman’s may indicate that a smaller (or no) net change in estimates of the U.S. trade deficit are needed. Third, U.S. ownership of foreign assets may have been recorded already, even if the location of the assets has been recorded incorrectly. Finally, some advocacy groups have alleged that the United States may also be a tax haven; if so, then Zucman’s effect would partially work in the opposite direction as well.

My paper does not speculate or estimate how large any of these effects may be, if they exist at all. The world of tax evasion is by definition opaque. However, the world of U.S. merchandise imports and exports is much clearer, and it is highly unlikely that U.S. data agencies are incorrectly measuring the U.S. trade deficit.

⁴¹ TJN, “Narrative on the USA,” 2015. Similarly, Findley, Nielson, and Sharman describe some U.S. jurisdictions as allowing shell companies that could facilitate hidden fund flows. Findley, Nielson, and Sharman, *Global Shell Games*, 2012.

None of this analysis, of course, in any way questions that international tax evasion is a problem. Zucman might be right about the scale of this issue, or may even estimate it on the low end. Moreover, this paper neither minimizes nor defends the use of offshore tax havens by U.S. tax evaders. Instead, this paper shows that one must tread very carefully before accepting any claim that the U.S. trade deficit in goods has been substantially smaller than reported.

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