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Who owns the wealth in tax havens? Macro evidence and implications for global inequality☆

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ABSTRACT

Drawing on newly published macroeconomic statistics, this paper estimates the amount of household wealth owned by each country in offshore tax havens. The equivalent of 10% of world GDP is held in tax havens globally, but this average masks a great deal of heterogeneity—from a few percent of GDP in Scandinavia, to about 15% in Continental Europe, and 60% in Gulf countries and some Latin American economies. We use these estimates to construct revised series of top wealth shares in ten countries, which account for close to half of world GDP. Because offshore wealth is very concentrated at the top, accounting for it increases the top 0.01% wealth share substantially in Europe, even in countries that do not use tax havens extensively. It has considerable effects in Russia, where the vast majority of wealth at the top is held offshore. These results highlight the importance of looking beyond tax and survey data to study wealth accumulation among the very rich in a globalized world.

1. Introduction

Measuring the wealth of rich households is getting increasingly hard in a globalized world. Since the 1980s, a large offshore wealth management industry has developed in Switzerland, Hong Kong, the Bahamas, and similar offshore financial centers. Banks located in these countries cater to wealthy individuals from around the world. They provide a variety of financial services to these individuals, many of which are legal and legitimate, but most of which make wealth harder to observe in traditional economic datasets, such as national accounts and tax records. Zucman (2013) estimates that 8% of the world's household financial wealth—the equivalent of 10% of world GDP—is held offshore. There is evidence that global offshore wealth has increased considerably over the last four decades, as a growing number of offshore centers have entered the market for cross-border wealth management, and information technology and financial innovation have made it simpler to move funds oversees.

Yet the implications of the globalization of wealth management are not well understood. As offshore centers rarely publish informative statistics, we do not have a clear view of who uses tax havens. Does most of the wealth held offshore belong to residents of rich countries, or to residents of developing countries? Does it mostly belong to ultra-rich households (e.g., with more than $50 million in net wealth), to corrupt political elites, or to a broader segment of the population? Is most of it hidden from tax authorities, or do people use tax havens for non-tax reasons—for instance, to get access to better financial services than available in their home country? These are key issues for the study of inequality, public economics, and development—and likely to become even more important in the future, as global wealth is rising fast and increasingly takes the form of movable financial assets (Piketty and Zucman, 2014).

In this paper, we take a step toward addressing these questions by drawing on newly published macroeconomic statistics. In 2016, a number of prominent offshore financial centers—including Switzerland, Luxembourg, the Channel Islands, and Hong Kong—started disclosing bilateral data on the amount of bank deposits that foreigners own in their banks. These data have been collected for several decades by the Bank for International Settlements (BIS), but

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until 2016 the BIS only disclosed statistics aggregated at the country level (such as the total amount of foreign-owned bank deposits in Hong Kong) rather than at the bilateral level (such as the amount of bank deposits owned by Indian residents in Hong Kong). In 2016, most offshore centers authorized the BIS to disseminate bilateral data. These series are retrospective and go back in most cases to the early 2000s, or even earlier. As a result, we now have access to time series for the value of the bank deposits owned by, say, Russian residents in Switzerland, or by Germans in Jersey. We use these data to make two contributions.

First, we construct estimates of the amount of wealth held by each country in all the world's offshore tax havens. More precisely, we use the newly disclosed BIS bilateral banking statistics to allocate the global amount of offshore wealth estimated by Zucman (2013) to each of the world's country. To our knowledge, it is the first time that such country-by-country estimates of offshore wealth are computed.

The analysis of this new dataset reveals a number of striking results. We find that while wealth equivalent to about 10% of world GDP is held in tax havens globally, this average masks a great deal of heterogeneity. Scandinavian countries own the equivalent of only a few percent of GDP in offshore wealth, but this figure rises to about 15% in Continental Europe, and to as much as 60% in Russia, Gulf countries, and a number of Latin American countries. The size of offshore wealth is not easily explained by tax or institutional factors. Among countries with a large stock of offshore assets, one finds autocracies (Saudi Arabia, Russia), countries with a recent history of autocratic rule (Argentina, Greece), alongside old democracies (United Kingdom, France). Among those with the lowest stock of offshore assets, one finds relatively low-tax countries (Korea, Japan) alongside the world's highest tax countries (Denmark, Norway). Instead, geography and specific national trajectories seem to matter a great deal. Proximity to Switzerland—the first country that developed a cross-border wealth management industry, in the 1920s—is associated with higher offshore wealth, as is the presence of natural resources, and political and economic instability post-World War II.

Our second contribution is to investigate the implication of offshore wealth for the levels and trends in wealth concentration. In recent years, following the pioneering work of Kuznets (1953) and Atkinson and Harrison (1978), a number of studies have used tax data to construct top income and wealth shares for many countries (see Roine and Waldenström, 2015 for a survey). A key concern raised by the use of tax returns to measure inequality, and indeed one of the main reasons why tax data have for a long time been viewed with skepticism, is tax avoidance and evasion. Tax records only provide information about income (and wealth, when a wealth tax exists) reported to the tax authority, not true economic income and wealth. Due to tax progressivity, the rich have particularly strong incentives to understate their resources. We construct revised top wealth shares factoring in offshore assets for ten countries where wealth distributions have recently been estimated—Denmark, Finland, France, the Netherlands, Norway, Russia, Spain, Sweden, the United Kingdom, and the United States.

Because offshore wealth is very concentrated at the top, accounting for it increases the top 0.01% wealth share substantially, even in countries—such as Norway or Denmark—that do not use tax havens extensively. Offshore wealth has a larger effect on inequality in the U.K., Spain, and France, where, by our estimates, 30%–40% of all the wealth of the 0.01% richest households is held abroad. It has dramatic implications in Russia, where the majority of wealth at the top is held outside of the country. In the United States, offshore wealth also increases inequality, but the effect is more muted than in Europe, because U.S. top wealth shares are already very high even disregarding tax havens. In all cases, taking offshore wealth into account increases the rise in inequality seen in tax data markedly. This result highlights the importance of looking beyond tax data to study wealth accumulation among the very rich in a globalized world.

Our paper is part of a broader project, initiated in Alstadsæter et al. (2017), aimed at studying the size and distribution of tax evasion and its implication for inequality. In Alstadsæter et al. (2017), we use a variety of micro-data—random audits, leaks from offshore financial institutions (HSBC Switzerland, Mossack Fonseca), and tax amnesties—to study how tax evasion varies with wealth. In all the micro-data we have access to, offshore wealth turns out to be extremely concentrated: the top 0.1% richest households own about 80% of it, and the top 0.01% about 50%. This finding leads us to revise upward the top Scandinavian wealth shares. Here we draw on macro data to generalize the computations made in Alstadsæter et al. (2017) to more countries. We take the distribution of hidden wealth observed in leaks and amnesties and apply this distribution to our newly constructed country-by-country estimates of offshore wealth.

At the outset, it is worth stressing that measuring offshore wealth involves a margin of error. First, the BIS statistics that we rely on only cover bank deposits, not the portfolios of equities, bonds, and mutual fund shares that households entrust to offshore banks. The distribution of offshore bank deposits across countries, however, is likely to be strongly correlated with that of total offshore wealth, so that the orders of magnitude we obtain are likely to be robust. Second, the use of anonymous shell corporations makes it increasingly hard to identify the beneficial owners of the wealth held offshore. In the macroeconomic data we use, a growing amount of wealth is assigned to the British Virgin Islands, Panama, and similar tax havens where most of the world's shell corporations are domiciled. The use of shell companies has increased particularly fast since the mid-2000s (for reasons discussed in Section 4 below). We therefore choose to express our estimates for the mid-2000s (more precisely for 2006–2007), when the available statistics are less contaminated by shell companies than today. Our results provide a snapshot of offshore wealth on the eve of the global financial crisis. In Section 3, we discuss a number changes that have happened since the Great Recession and how they have affected the dynamic of offshore wealth, but we leave to future research the task of establishing country-by-country time series of offshore wealth. Third, for the purpose of investigating the implications of offshore wealth for inequality, we assume that the distribution of hidden assets seen in recent leaks and tax amnesties (as analyzed in Alstadsæter et al., 2017) applies to all countries. This is a reasonable starting point, because the distribution of hidden assets by wealth group is remarkably similar in all the available sources. But one cannot exclude that offshore wealth is more or less concentrated in certain countries. Looking forward, we plan to expand and refine our approach as new sources of information emerge about the size and distribution of offshore assets (maybe from new leaks, or thanks to improvements in financial transparency) and wealth inequality statistics become available for more countries.

The rest of the paper proceeds as follows. Section 2 relates our work to the existing literature. In Section 3, we present our estimates of the amount of wealth held in tax havens globally, updating the analysis of Zucman (2013). In Section 4, we use bilateral banking statistics to construct new country-by-country estimates of the world's offshore wealth. We discuss the implications of our results for wealth inequality in Section 5 and conclude in Section 6. This paper is supplemented by a Data Appendix available online at http://gabriel-zucman.eu/offshore.

2. Related literature

2.1. Offshore wealth and capital flight

Our paper first contributes to the literature on offshore wealth and capital flight. A large number of studies attempt to estimate the flows of money, licit or illicit, that leave developing countries. Johannesen and Pirttilä (2016) provide a recent survey of the data, methods, and results. One prominent strand of the literature relies on accounting identities in the balance of payments, in particular discrepancies between a country's current account surplus and the flow of net new foreign investments—what is known as net errors and omissions. This method has been used by international organizations like the World Bank and the