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Offshore tax evasion in developing countries: Evidence and policy discussion

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WIDER Working Paper 2024/15

Offshore tax evasion in developing countries

Evidence and policy discussion

Niels Johannesen*

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Abstract: Offshore tax havens cause large losses of government revenue by facilitating tax evasion by wealthy individuals. This paper focuses on offshore tax evasion in developing countries and documents two empirical regularities. First, there is no clear development gradient in the exposure to offshore tax havens: a range of indicators suggests that wealth held in offshore tax havens, measured relative to the size of the economy, correlates only weakly with economic development. Second, there is a very strong development gradient in the policy response to this challenge: a highly ambitious type of international cooperation based on automatic exchange of bank account information has emerged in recent years, but only few developing countries participate. We discuss why the particular policy design chosen by the global tax community might be unattractive for developing countries and propose a simple reform that would allow developing countries to reap more benefits from the improvements in global financial transparency.

Key words: tax evasion, tax havens, information exchange, tax enforcement, offshore financial centres

JEL classification: H26, H87, F60

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1 Introduction

Offshore tax havens with financial secrecy and low effective tax rates represent an important challenge for public policy by facilitating tax evasion by wealthy individuals and tax avoidance by global firms. The available evidence suggests that the global cost of tax havens in terms of lost tax revenue could amount to hundreds of billions of dollars (Zucman 2014). Beyond the significant revenue losses, offshore tax evasion also erodes the progressivity of the tax system, lowering effective tax rates by as much as 1.5 percentage points at the very top of the income distribution (Johannesen 2023).

In the past decade, the highest levels of governance have actively addressed the offshore challenge to the tax systems with new policy initiatives. To combat offshore tax evasion by wealthy individuals, the key policy innovation is automatic information exchange, whereby banks are required to identify the beneficial owners of financial accounts and share account details with the home countries of foreign account owners. In principle, comprehensive and automatic information exchange provides an important tool for tax authorities to enforce taxation on foreign financial income.

While much of the academic literature and the policy debates focus on high-income countries, this paper asks whether low-income countries are different in terms of the offshore challenges they are facing and the possible solutions offered by tax policy. We show that while there is no clear development gradient in the size of the offshore challenge, there is a striking development gradient in the policy response: adoption of automatic information exchange increases steeply in per capita income. These patterns are suggestive that the current design of the policy, with a strong emphasis on information exchange, is suboptimal for developing countries, and we discuss whether simple alternatives, such as withholding taxes at the level of banks, would allow developing countries to reap larger benefits from the emerging global financial transparency.

In a first step of the analysis, we collect four distinct country-level indicators of the use of offshore tax havens, i.e. raw macro statistics on offshore deposits, macro-based estimates of total offshore financial assets, aggregated micro data on offshore incorporations, and aggregated micro data on offshore properties. These indicators are all imperfect: they either have limited coverage across jurisdictions or asset types or they extend coverage at the cost of strong assumptions. However, together they provide a nuanced picture of how and how much households in different countries use offshore tax havens.

When we correlate these indicators with the level of economic development, we find that the two measures of offshore financial assets exhibit almost no development gradient when assets are measured relative to aggregate income, whereas a negative development gradient emerges

when they are measured relative to aggregate tax revenue. Hence, the size of offshore financial wealth is not systematically different across high-income and low-income countries of the same economic size; however, the revenue loss is likely to be larger in percentage terms in low-income countries who tend to raise less revenue than high-income countries of the same economic size. By contrast, we find that economic development correlates negatively with ownership of offshore properties but positively with the prevalence of offshore incorporations. These findings suggest that low-income countries may use tax havens somewhat more for ownership of real assets while they may be somewhat less likely to use sophisticated holding structures involving holding companies and other financial intermediaries.

In a second step, we correlate economic development with the adoption of the global standard for automatic information exchange in a similar fashion. The results reveal a striking gradient with an adoption rate of 0% among low-income countries, less than 15% among lower middle-income countries, less than 40% among upper middle-income countries, and more than 80% among high-income countries. While it is possible that the gap will narrow over time, it is noteworthy that it remains so salient five years after the first information exchanges.

We hypothesize that the low adoption of automatic information exchange in low-income countries may reflect a *complementarity* in the production of tax compliance between the internal resources available within the tax authorities and the external information reports received from foreign banks. On the one hand, if tax authorities have sufficient internal resources to process the external information reports and use them efficiently in enforcement efforts, the potential compliance gains are large. On the other hand, if tax authorities do not have such resources and the information reports therefore cannot be used actively in enforcement efforts, the effect on compliance is likely to be small. From this perspective, it seems plausible that information exchange is a much less attractive policy design for low-income countries with scarce internal resources, even if their exposure to offshore tax havens is the same as in high-tax countries.

Finally, we describe a concrete policy proposal that may help developing countries reaping more benefits from the improvements in global financial transparency. According to the proposal, banks would not just provide *information* to the home country of a foreign account owner, they would also levy a withholding tax on the income flowing to a foreign-owned account and remit the revenue to the home country of the owner. This practice would be familiar to banks who already withhold taxes on financial income in many different settings. It would also resemble the key mechanism for ensuring taxation of offshore financial income under the first EU policy in the field.¹

¹ The so-called EU Savings Tax Directive introduced a withholding tax mechanism as an alternative to automatic information exchange for countries with banking secrecy. It is widely believed that the policy failed, but rather

From the perspective of developing countries, this proposal might be attractive because there would be a revenue gain, a return on the significant investment in financial transparency by international banks, without any commitment of scarce administrative resources. Although the withholding tax itself would arguably need to be levied at a flat rate, this would not constrain countries' policy choices with respect to the ultimate taxation of financial income: it would be possible to maintain the redistributive properties of the tax system by including foreign financial income in the tax base subject to progressive taxation while giving credit for taxes withheld by foreign banks.

The paper proceeds in the following way. Section 2 briefly reviews the literature on offshore tax evasion and reports three stylized facts. Sections 3 and 4 gauge the development gradient in the use of offshore tax havens and in the policy response respectively. Section 5 describes a concrete policy proposal to help developing countries reap the benefits from the increases in financial transparency. Section 6 concludes.

2 Three robust findings about offshore tax evasion

A growing body of research provides empirical evidence on offshore tax evasion. While empirical analysis is made difficult by the furtive nature of tax evasion and the secrecy in offshore financial centres, researchers have tried to overcome this challenge by using a patchwork of data sources. Specifically, empirical researchers were able to make significant progress through the combination of *macro data* on cross-border investment positions in deposits and securities; *administrative micro data* from tax returns, currency registers, and voluntary disclosure regimes; and *data leaks* from facilitators of offshore tax evasion with information about bank accounts and shell corporations. In this section, we briefly review the empirical literature on offshore tax evasion, identify robust findings, and present them in the form of three stylized facts.

A significant share of household wealth is owned through tax havens

One approach to estimating financial wealth held by households in offshore centres produces global estimates and draws exclusively on macro data on cross-border investment positions. In a pioneering study, Zucman (2013) develops this approach and reports estimates around \$6 trillion in 2008, corresponding to around 8% of global financial wealth. Subsequent papers have probed the methodology (Pellegrini et al. 2016) and applied it to more recent years, delivering an estimate for 2022 of around \$12 trillion (Alstadsæter et al. 2023).

because of other design features than the withholding tax mechanism (Zucman 2013; Johannesen 2014; Martínez-Toledano and Roussille 2023).

Another approach uses data from policy initiatives under which taxpayers can disclose previously undeclared offshore accounts on favourable terms. While this data source provides an incomplete picture by only covering offshore assets disclosed under the amnesty, it can still provide a rough sense of the magnitudes involved. Most strikingly, a recent study finds an amnesty in Argentina triggered disclosures of offshore assets worth more than 20% of the country's GDP (Londoño-Vélez and Tortarolo 2022). Other studies find quantitatively significant disclosures of offshore wealth under the amnesties in the United States (Johannesen et al. 2020), Colombia (Londoño-Vélez and Ávila-Mahecha 2021), Norway (Alstadsæter et al. 2022a), the Netherlands (Leenders et al. 2023), and Switzerland (Baselgia 2023).

Finally, a series of very recent and ongoing studies use account-level information about offshore financial assets reported under the Foreign Account Tax Compliance Act (FATCA) and the Common Reporting Standard (CRS) to produce estimates of offshore financial wealth for the United States (Johannesen et al. 2023), Denmark (Boas et al. 2024), and South Africa (Johannesen et al. 2024). These micro-founded estimates are generally roughly consistent with the estimates based on macro sources. For instance, based on account-level FATCA reports, Johannesen et al. (2023) find that US households own around \$2 trillion on offshore accounts directly or through partnerships, which is somewhat higher than the estimates suggested by the macro approach.

In addition to the estimates of offshore financial wealth, a new strand of research attempts to gauge the value of real estate held through offshore corporations. These empirical approaches typically use data from land registers, publicly available or leaked, and are therefore typically applied to individual countries or cities. Johannesen et al. (2022) show that offshore corporations own residential property for more than \$60 billion in England and Wales alone, while Alstadsæter et al. (2023) sets the combined value to more than \$500 billion in six cities where data is available.

In sum, the papers in the literature consistently suggest that household wealth in offshore banking centres is quantitatively important. At the global level, the best estimates imply that it amounts to around 8–10% of total household financial wealth.

Offshore assets overwhelmingly belong to the wealthiest

A smaller set of papers uses different types of micro data on offshore asset ownership to document how these offshore assets are distributed across income groups or wealth groups.

The first paper in this literature studies the distribution of offshore assets in Scandinavia across wealth groups (Alstadsæter et al. 2019). It uses leaked customer data from a Swiss bank and administrative data from voluntary disclosure programmes and combines both data sources with administrative data on wealth. It shows that the propensity to own offshore assets is increasing

steeply with wealth, even within the top of the wealth distribution, and that the top 0.01% own as much as half of the offshore assets.

Some subsequent papers take a similar approach and use micro data for amnesty disclosures to study the distribution of offshore assets in Colombia (Londoño-Vélez and Ávila-Mahecha 2021) and the Netherlands (Leenders et al. 2023). Others employ micro data from the newly introduced automatic exchange of information to study the distribution of offshore assets in the United States (Johannesen et al. 2023), Denmark (Boas et al. 2024), and South Africa (Johannesen et al. 2024). While the latter source covers a much larger share of all offshore assets, both data sources may in principle suffer from some selection to the extent that amnesty participation and automatic information exchange coverage correlates with account-holder characteristics. Except the study from the Netherlands, all these studies consistently find a high concentration of offshore assets at the top of the income and wealth distribution that is qualitatively similar to Scandinavia (see discussion in Johannesen et al. 2023).

Significant tax non-compliance among offshore asset owners

Holding assets in offshore banking centres does not necessarily imply tax non-compliance. Self-reporting of offshore account balance and the associated income to the tax authorities in the home country is typically enough to be in full compliance.

However, a number of studies provide evidence suggesting that the vast majority of offshore accounts are tax non-compliant. Importantly, these studies generally concern the period *before* the onset of automatic information exchange. It is possible that compliance rates have gone up significantly in recent years as banking secrecy has weakened and new information reports from offshore banks have facilitated the detection of offshore tax evasion.

The most direct evidence of offshore tax non-compliance comes from a study that combines leaked customer data from a major Swiss bank with the tax records of the Scandinavians among the customers (Alstadsæter et al. 2019). The study finds that less than 10% of the individuals with an account in the Swiss bank self-reported the account and the associated income. Similar evidence emerged in a US investigation of offshore tax evasion through Swiss banks, in which a major bank was compelled to hand over the details of thousands of account owners to the US tax authorities (US Senate 2008, 2014).

Moreover, several studies identify behavioural patterns that are strongly suggestive of widespread non-compliance among owners of offshore accounts. For instance, a common finding is that policy interventions against offshore evasion that involve cooperation with a subset of tax havens or cover a subset of assets cause significant shifting to tax havens or asset classes that are outside the scope of the interventions (Johannesen 2014; Johannesen and Zucman 2014; Hanlon et al. 2015; Menkhoff and Miethé 2019; Martínez-Toledano and Roussille 2023). As

these interventions generally do not change the incentives for compliant account holders, the strong behavioural responses are difficult to explain in other ways than with widespread non-compliance.

In any case, other studies suggest that also factors not directly related to tax evasion motivate offshore asset ownership, e.g., political elites laundering the proceeds from corruption through offshore tax havens (Andersen et al. 2022), political instability (Andersen et al. 2017; Badar-inza and Ramadorai 2018), and a weak rule of law (Bayer et al. 2020).

3 Offshore exposure

We use a range of indicators for the use of offshore tax havens by wealthy individuals to gauge the development gradient in the offshore challenge faced by tax authorities. We focus on the period before the onset of automatic information exchange.

3.1 Deposits in tax havens

The Bank for International Settlements (BIS) collects information about cross-border deposits in 49 financial centres and provides summary statistics in the Locational Banking Statistics. A country's deposits in offshore tax havens such as Switzerland, Luxembourg, and Jersey are a natural indicator for the offshore challenge. It is perhaps the most commonly used source of information on offshore activity in the academic literature (e.g., Zucman 2013; Johannesen 2014; Johannesen and Zucman 2014; Menkhoff and Miethe 2019; Johannesen and Stolper 2021; Andersen et al. 2022).

It is important to highlight that the BIS deposit data has significant limitations. First, it provides information about deposits, but ignores other asset classes, both financial assets such as stocks, bonds, and crypto currencies and real assets such as properties. Second, while the BIS collects information from all major international banking centres, not all of these centres allow the BIS to publish summary statistics at the bilateral level. Third, the BIS data does not look through holding structures, so if a US individual holds a Swiss deposit through a Panama holding company, the BIS data will assign the ownership of the Swiss deposit to Panama. This implies that the measures of cross-border deposits for most countries will underestimate true deposit values by ignoring deposits held through holding structures.²

As shown in Figure 1A, there is a gentle negative development gradient in tax haven deposits when measured relative to the overall size of the economy: the expected ratio of tax haven deposits to GDP (in the set of havens with publicly available data) is just below 1.5% for the

² For the jurisdictions hosting the holding companies, however, the measures will be wildly inflated.

poorest countries in the world and just above 1% for the richest countries. As shown in Figure 1B, the gradient is steeper when a country's deposits in tax havens are measured relative to its aggregate tax revenue. This follows mechanically from the fact that the ratio of tax revenues to GDP tends to increase with economic development.

3.2 Financial assets in tax havens

Alstadsæter et al. (2018) address some of the limitations of the indicator based on raw data for offshore deposits. They attempt to allocate *all* financial assets, including both deposits and securities, held in *all* tax havens, including those that allow publication of bilateral data and those that do not, while *looking through* holding structures to the ultimate beneficial owners. This exercise requires strong assumptions, both in the estimation of the global stock of financial assets in tax havens and the allocation of assets held through opaque structures. Moreover, the paper only reports estimates for 2007.

As shown in Figure 2A, there is virtually no development gradient in tax haven financial assets when measured relative to the overall size of a country's economy: the expected ratio of tax haven financial assets to GDP is around 10% at all development levels. Mirroring the result for offshore deposits, the gradient is steeper when tax haven financial assets are measured relative to tax revenue rather than GDP, as shown in Figure 2B.

3.3 Offshore real estate

Alstadsæter et al. (2022b) use leaked data to allocate ownership of Dubai properties to counterpart countries. The data has the advantage of covering the Dubai market almost comprehensively but also has important limitations from the perspective of understanding global patterns in offshore ownership. First, it covers only a single property market, whereas all other property markets in the world may in principle have some element of offshore ownership. Second, it conflates two very different motives for ownership. While foreign owners resident in Europe, Asia, or America may consider Dubai properties attractive offshore investment objects with a high potential for tax evasion and secret ownership, foreign owners resident in Dubai may purchase a Dubai property simply to live in. While the authors exploit a unique link to administrative data to distinguish the two motives for a small subsample of Norwegian property owners, this is not generally possible for other owners in other countries.

As shown in Figure 3A, there is a clear negative development gradient in the value of a country's Dubai properties when measured relative to the overall size of the country's economy, which becomes even more pronounced when measured relative to the country's aggregate tax revenue (see Figure 3B).

3.4 Offshore incorporations

The International Consortium of Investigative Journalists (ICIJ) publishes leaked micro data for offshore incorporations from a range of data leaks, including the Panama Papers, the Paradise Papers, and the Bahamas Leaks. Some of the data leaks originate from corporate service providers in tax havens, e.g. Mossack Fonseca in the context of the Panama Papers, while others originate from public corporate registers.

A number of studies use this data source to construct indicators of offshore activity (e.g., Omartian 2017; Andersen et al. 2022). However, it should be emphasized that it has limitations. First, it covers only a small subset of offshore jurisdictions and providers, and it is not clear that the offshore incorporations for which information is leaked are representative of the broader offshore system. Second, it confounds legitimate incorporations and illegitimate uses. Third, there is generally no information about the assets held through the corporations.

As shown in Figure 4A, there is a clear positive development gradient in the number of incorporations when measured relative to the overall size of the economy: the expected number of offshore incorporations is around two per \$1 billion of GDP at the lowest income levels and around five per \$1 billion of GDP at the highest income levels.

4 Policy response

In the most recent decade, a decisive policy response to the offshore challenge has emerged: automatic exchange of information (AEOI). At least in principle, the policy effectively ends banking secrecy by requiring banks to share information about account balances and income with the home countries of foreign-account owners. This section first discusses automatic information exchange in more detail, emphasizing the desirability of the policy from a theoretical perspective as well as the practical limitations, and then provides evidence on how adoption varies with economic development.

4.1 Automatic information exchange

Automatic exchange of information is conducted within two distinct but highly similar policy frameworks: the Foreign Account Tax Compliance Act (FATCA) that governs exchanges between the United States and its partner countries and the Common Reporting Standard (CRS) that governs exchanges between more than 100 other countries. While FATCA was adopted unilaterally by the United States, the political origins of CRS is a decision at the G20 summit in 2013 to make automatic exchange of information the global standard of international cooperation, and the subsequent signing of a multilateral treaty in 2014. The first information exchanges under FATCA and CRS were conducted in 2015 and 2017, respectively.

The basic principle of FATCA and CRS is the following: banks need to be able to identify the ultimate beneficial owners of accounts and provide information about accounts beneficially owned by foreigners to the tax authorities of their home countries. The information reports should identify the account owners and detail account balances as well as income flows accruing to the accounts by income type, i.e., interest, dividends, proceeds from sale, and other income. There are certain exceptions to these principles: accounts owned by listed firms are explicitly out of scope and in cases where accounts are owned by an active business, banks need to provide information to the home country of the business but not to the home country of the beneficial owner. The policy aims to provide tax authorities with information about foreign accounts held directly by individuals or indirectly through a passive holding company or a similar financial intermediary.

From a theoretical perspective, cross-border information exchange is highly desirable. Almost all countries maintain a residence principle in the taxation of households, whereby financial income is subject to the same tax schedule whether earned through domestic or foreign financial accounts. In modern tax systems, domestic banks provide comprehensive information about domestic financial income; hence, the key constraint for enforcement is imperfect information about foreign financial income. In the absence of cross-border information exchange, tax authorities rely on self-reporting by the taxpayers, which creates a significant scope for tax evasion. By essentially extending the reporting obligations of domestic banks to foreign banks, automatic information exchange, in principle, overcomes this problem. It allows tax authorities to apply the same tax schedule to domestic and foreign financial income and enforce it in the same way for the two types of income.

In practice, it is not obvious that automatic information exchange enables effective enforcement of taxes on foreign financial income. Conceptually, tax authorities can identify tax evasion simply by comparing bank-reported and self-reported foreign financial income, which eliminates the incentive to evade and makes enforcement simple. However, this is less than straightforward in practice because of the real-world imperfections of the information collection and exchange.

First, comparisons of bank-reported and self-reported foreign financial income presuppose that tax authorities can correctly match foreign accounts to domestic owners. Since information reports about foreign accounts often lack unique tax identification numbers (Belnap et al. 2021), this requires costly and imperfect matching based on other information such as name and address.

Second, direct comparisons of bank-reported and self-reported income are only possible if the income concepts on the tax return are analogous to those reported by foreign banks. This may or may not be the case for foreign dividend and interest income: some countries indeed have

separate-line items for these foreign income types that facilitate direct comparisons, whereas others lump together foreign and domestic income in one line. It is generally not the case for foreign capital gains, as information reports under both FATCA and CRS identify gross proceeds from sales rather than gains.

Third, even when direct comparisons of bank-reported and self-reported income are possible, discrepancies may reflect errors in the bank reports rather than tax evasion. In an audit experiment conducted in collaboration with the tax authorities in Denmark, Boas et al. (2024) show that erroneous bank reports are indeed causing a significant fraction of the major discrepancies between bank-reported and self-reported income.

Finally, tax authorities need to audit cases where discrepancies between bank-reported and self-reported income foreign financial income are suggestive of tax evasion in order to collect additional revenue.

The key insight is that automatic information exchange does not automatically ensure high tax compliance on foreign financial income. Rather, it is only likely to be effective if taxpayers perceive an increased risk of detection. This, in turn, requires tax authorities i) to commit resources to matching bank reports to tax returns, ii) to develop processes for using bank reports to identify cases of high-probability evasion, and iii) to conduct audits of these cases. In short, automatic information exchange is likely to have an impact on tax compliance only if domestic tax authorities allocate resources to using the information reports actively.

4.2 Development gradient in adoption

Using information from the Global Forum on Transparency and Exchange of Information for Tax Purposes (OECD 2023), we compute the share of countries that have adopted automatic information exchange by income group. As shown in Figure 5, there is a clear monotonicity, with higher-income countries being more likely to be adopters, and a steep gradient, with the share increasing from 0% for low-income to more than 80% for high-income countries.

Plausibly, the low adoption of automatic information exchange in low-income countries reflects a *complementarity* between the internal resources available within the tax authorities and the external information reports they receive from foreign banks in the production of tax compliance. The potential compliance gains are likely to be significant *only* if internal resources are sufficient to process and use external information reports efficiently. If tax authorities perceive this complementarity, those with few internal resources, typically in developing countries, are less likely to adopt the automatic information exchange standard.

5 A policy proposal

Our analysis has shown that the challenge posed by offshore tax evasion is at least as important in developing countries as in developed countries (Section 3); however, very few developing countries have adopted the global standard of information exchange (Section 4), which for the first time offers a real prospect of addressing the problem. This raises concerns that offshore tax evasion may continue to erode tax revenues and add to the striking inequalities in developing countries.

This section discusses a modification of the way governments and financial institutions are currently cooperating, which would allow developing countries to reap more benefits from the improvements in global financial transparency. In the current regime, banks are required to identify foreign-owned accounts and their ultimate owners in order to provide account information to the home country of the account owners. This enables the tax authorities in the home countries to increase compliance if they have the internal resources to use the external information reports effectively. According to our proposal, banks would also impose a withholding tax on the income flowing to foreign-owned accounts and remit the revenue to the home country of the account owners. This would imply that governments would receive a stream of revenue from the taxation of their taxpayers' foreign financial income without the commitment of any internal resources at the tax authorities. Arguably, the benefit would be largest in developing countries where tax authorities are more likely to be strained.

It is important to emphasize that withholding taxes are familiar territory for banks. Many countries require banks to levy withholding taxes on interest payments and not rarely are rates differentiated, e.g. a positive rate for foreign-owned accounts and a zero rate for domestic-owned accounts. Moreover, withholding taxes with cross-border revenue sharing were used under the so-called Savings Tax Directive, where a number of tax havens cooperating with the European Union applied withholding taxes on interest payments to accounts owned by individuals in the European Union, starting at a rate of 15% in 2005 and increasing to 35% in 2008. While most assessments find the policy to be a failure (Johannesen 2014; Martínez-Toledano and Roussille 2023), the source of the deficiency was not the withholding tax and revenue sharing mechanisms themselves, but the ample opportunities for account owners to fall outside the scope of the policy by reorganizing their affairs.

Further, the withholding tax mechanism would not constrain governments with respect to their policy choices over taxation of financial income. First, it is possible to build in flexibility that allows countries to choose themselves the withholding tax rate that foreign banks should apply to the financial income of their residents, including a zero rate. Given that banks have already identified the beneficial account owners, it would be straightforward for them to differentiate

the withholding tax rate by home country. Second, withholding tax at the banks would not need to be final. Consistent with the practice in many other contexts, governments could require taxpayers to self-report the full amount of foreign financial income, take this amount into account in the computation of the total tax liability and give credit for taxes withheld by banks. This would allow for progressive taxation of financial income, with either separate tax schedules or a single joint schedule applying to income from domestic and foreign sources.

One notable limitation of the proposal is the taxation of capital gains on securities. Capital gains are generally not subject to withholding taxes, because it requires information about acquisition prices to compute capital gains at the time of realization. As banks do not always have this information, they are not required to report it under the current standards of automatic information exchange. Rather, they report the gross proceeds from sales, which is directly observable at realization. This implies that, unless standards are raised to require banks to keep information about acquisition prices of securities, it will not be straightforward to apply the withholding tax mechanism to capital gains.

6 Concluding remarks

The existing literature on offshore tax havens shows that households hold a significant share of their financial wealth in tax havens, that most of this offshore wealth belongs to households with very high income and wealth levels, and that the majority of the offshore wealth is tax non-compliant. Thus, ending offshore tax evasion may generate hundreds of billions of dollars in tax revenue (Zucman 2014) and significantly strengthen the progressivity of the income tax systems by raising effective tax rates by around 1.5% at the very top (Johannesen 2023).

While most of this literature focuses on developed countries, this paper documents two empirical regularities about developing countries. First, there is no clear development gradient in the exposure to offshore tax havens: wealth held in offshore tax havens, measured relative to the size of the economy, correlates only weakly with economic development. Second, there is a very strong development gradient in the policy response to this challenge: while almost all high-income countries have adopted the global standard of automatic information exchange, no low-income countries have done so.

We hypothesize that automatic information exchange may be unattractive for developing countries because effective harvesting of compliance gains requires significant internal investments in the processing of external information reports. Automatic information exchange does not automatically improve tax compliance.

Finally, we propose a modification of the existing global cooperation between banks and governments that would allow developing countries to reap larger compliance gains from the improvements in global financial transparency. According to the proposal, banks would not just provide *information* to the home country of foreign-account owners, they would also levy a withholding tax on the income flowing to foreign-owned accounts and remit the revenue to the home country of the owners. This modification would ensure governments a stream of revenue from the taxation of taxpayers' foreign financial income without the need to commit scarce resources. Withholding taxes would not constrain countries' policy choices with respect to the ultimate taxation of financial income and would not add significantly to the administrative burden of international banks.

References

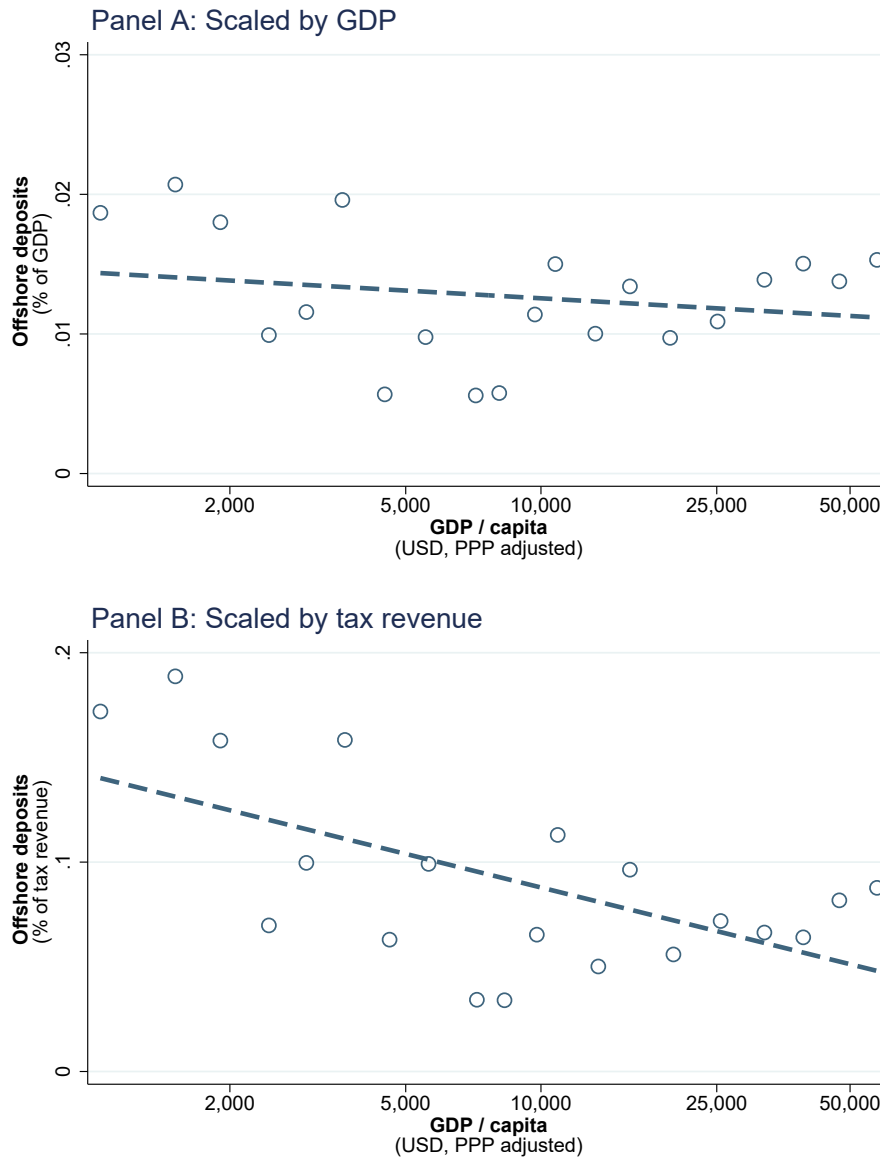
- Alstadsæter, A., Johannesen, N., and Zucman, G. (2018). 'Who Owns the Wealth in Tax Havens? Macro Evidence and Implications for Global Inequality'. *Journal of Public Economics*, 162: 89–100. <https://doi.org/10.1016/j.jpubeco.2018.01.008>
- Alstadsæter, A., Johannesen, N., and Zucman, G. (2019). 'Tax Evasion and Inequality'. *American Economic Review*, 109(6): 2073–103. <https://doi.org/10.1257/aer.20172043>
- Alstadsæter, A., Johannesen, N., Herry, S. L. G., and Zucman, G. (2022a). 'Tax Evasion and Tax Avoidance'. *Journal of Public Economics*, 206: 104587. <https://doi.org/10.1016/j.jpubeco.2021.104587>
- Alstadsæter, A., Zucman, G., Planterose, B. and Økland, A. (2022b). 'Who Owns Offshore Real Estate? Evidence from Dubai'. EU Tax Observatory Working Paper 1. EU Tax Observatory. Available at: <https://www.taxobservatory.eu/publication/who-owns-offshore-real-estate-evidence-from-dubai/>.
- Alstadsæter, A., Godar, S., Nicolaidis, P., and Zucman, G. (2023). *Global Tax Evasion Report 2024*. EU Tax Observatory. Available at <https://www.taxobservatory.eu/publication/global-tax-evasion-report-2024/>.
- Andersen, J. J., Johannesen, N., Lassen, D. D., and Paltseva, E. (2017). 'Petro Rents, Political Institutions, and Hidden Wealth: Evidence from Offshore Bank Accounts'. *Journal of the European Economic Association*, 15(4): 818–60. <https://doi.org/10.1093/jeea/jvw019>
- Andersen, J. J., Johannesen, N., and Rijkers, B. (2022). 'Elite Capture of Foreign Aid: Evidence from Offshore Bank Accounts'. *Journal of Political Economy*, 130(2): 388–425. <https://doi.org/10.1086/717455>
- Badarinza, C., and Ramadorai, T. (2018). 'Home Away from Home? Foreign Demand and London House Prices'. *Journal of Financial Economics*, 130(3): 532–55. <https://doi.org/10.1016/j.jfineco.2018.07.010>
- Baselgia, E. (2023). 'The Compliance Effects of the Automatic Exchange of Information: Evidence from the Swiss Tax amnesty'. EU Tax Observatory Working Paper 1. EU Tax Observatory. Available at: <https://www.taxobservatory.eu/publication/the-compliance-effects-of-the-automatic-exchange-of-information-evidence-from-the-swiss-tax-amnesty/>.

- Bayer, R. C., Hodler, R., Raschky, P. A., and Strittmatter, A. (2020). ‘Expropriations, Property Confiscations and New Offshore Entities: Evidence from the Panama Papers’. *Journal of Economic Behavior & Organization*, 171: 132–52. <https://doi.org/10.1016/j.jebo.2020.01.002>
- Belnap, A., Thornock, J., William, B. (2021). ‘Hidden Wealth and Automatic Information Sharing’. Working Paper.
- Boas, H. F., Johannesen, N., Kreiner, C. T., Larsen, L., and Zucman, G. (2024). ‘Taxing Capital in a Globalized World: The Effects of Automatic Information Exchange’. Working Paper.
- Hanlon, M., Maydew, E. L., and Thornock, J. R. (2015). ‘Taking the Long Way home: US tax Evasion and Offshore Investments in US Equity and Debt Markets’. *Journal of Finance*, 70(1): 257–87. <https://doi.org/10.1111/jofi.12120>
- Johannesen, N. (2014). ‘Tax Evasion and Swiss Bank Deposits’. *Journal of Public Economics*, 111: 46–62. <https://doi.org/10.1016/j.jpubeco.2013.12.003>
- Johannesen, N., and Zucman, G. (2014). ‘The End of Bank Secrecy? An Evaluation of the G20 Tax Haven Crackdown’. *American Economic Journal: Economic Policy*, 6(1): 65–91. <https://doi.org/10.1257/pol.6.1.65>
- Johannesen, N., Langetieg, P., Reck, D., Risch, M., and Slemrod, J. (2020). ‘Taxing Hidden Wealth: The Consequences of US Enforcement Initiatives on Evasive Foreign Accounts’. *American Economic Journal: Economic Policy*, 12(3): 312–46. <https://doi.org/10.1257/pol.20180410>
- Johannesen, N., and Stolper, T. B. (2021). ‘The Deterrence Effect of Whistleblowing’. *Journal of Law and Economics*, 64(4): 821–55. <https://doi.org/10.1086/715197>
- Johannesen, N., Miethe, J., and Weishaar, D. (2022). ‘Homes Incorporated: Offshore Ownership of Real Estate in the UK’. CEPR Discussion Paper 17738. Paris and London: CEPR Press.
- Johannesen, N., Reck, D., Risch, M., Slemrod, J., Guyton, J., and Langetieg, P. (2023). ‘The Offshore World According to FATCA: New Evidence on the Foreign Wealth of US Households’. NBER working paper 3105. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w31055>
- Johannesen, N. (2023). ‘The End of Bank Secrecy: Implications for Redistribution and Optimal Taxation’. *Oxford Review of Economic Policy*, 39(3): 565–74. <https://doi.org/10.1093/oxrep/grad024>
- Johannesen, N., Larsen, L., Riedel, N. (2024). ‘Does Global Financial Transparency Improve Tax compliance in Developing Countries?’ Working Paper.
- Leenders, W., Lejour, A., Rabaté, S., and Van’t Riet, M. (2023). ‘Offshore Tax Evasion and Wealth Inequality: Evidence from a Tax Amnesty in the Netherlands’. *Journal of Public Economics*, 217: 104785. <https://doi.org/10.1016/j.jpubeco.2022.104785>
- Londoño-Vélez, J., and Ávila-Mahecha, J. (2021). ‘Enforcing Wealth Taxes in the Developing World: Quasi-Experimental Evidence from Colombia’. *American Economic Review: Insights*, 3(2): 131–48. <https://doi.org/10.1257/aeri.20200319>
- Londoño-Vélez, J., and Tortarolo, D. (2022). ‘Revealing 21 per cent of GDP in Hidden Assets: Evidence from Argentina’s Tax Amnesties’. WIDER Working Paper 2022/103. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2022/237-9>
- Martínez-Toledano, C., and Roussille, N. (2023). ‘Tax Evasion and the “Swiss Cheese” Regulation’. Working Paper.

- Menkhoff, L., and Miethe, J. (2019). ‘Tax Evasion in New Disguise? Examining Tax Havens’ International Bank Deposits’. *Journal of Public Economics*, 176: 53–78. <https://doi.org/10.1016/j.jpubeco.2019.06.003>
- OECD (2023). *Pioneering Global Progress in Tax Transparency: A Journey of Transformation and Development – 2023 Global Forum Annual Report*. Paris: Global Forum on Transparency and Exchange of Information for Tax Purposes, OECD. Available at: <https://www.oecd.org/tax/transparency/documents/global-forum-annual-report-2023.pdf>.
- Omartian, J. D. (2017). ‘Do Banks Aid and Abet Asset Concealment: Evidence from the Panama Papers’. Working Paper. <https://doi.org/10.2139/ssrn.2836635>
- Pellegrini, V., Sanelli, A., and Tosti, E. (2016). ‘What Do External Statistics Tell Us About Undeclared Assets Held Abroad and Tax Evasion?’ Bank of Italy Occasional Paper 367. Rome: Bank of Italy. <https://doi.org/10.2139/ssrn.2917184>
- US Senate (2008). *Tax Haven Banks and U.S. Tax Compliance*. Permanent Subcommittee on Investigations (staff report).
- US Senate (2014). *Offshore Tax Evasion: The Effort to Collect Unpaid Taxes on Billions in Hidden Offshore Accounts*. Permanent Subcommittee on Investigations (staff report).
- Zucman, G. (2013). ‘The Missing Wealth of Nations: Are Europe and the US Net Debtors or Net Creditors?’ *Quarterly Journal of Economics*, 128(3): 1321–64. <https://doi.org/10.1093/qje/qjt012>
- Zucman, G. (2014). ‘Taxing across Borders: Tracking Personal Wealth and Corporate Profits’. *Journal of Economic Perspectives*, 28(4): 121–48. <https://doi.org/10.1257/jep.28.4.121>

Figures

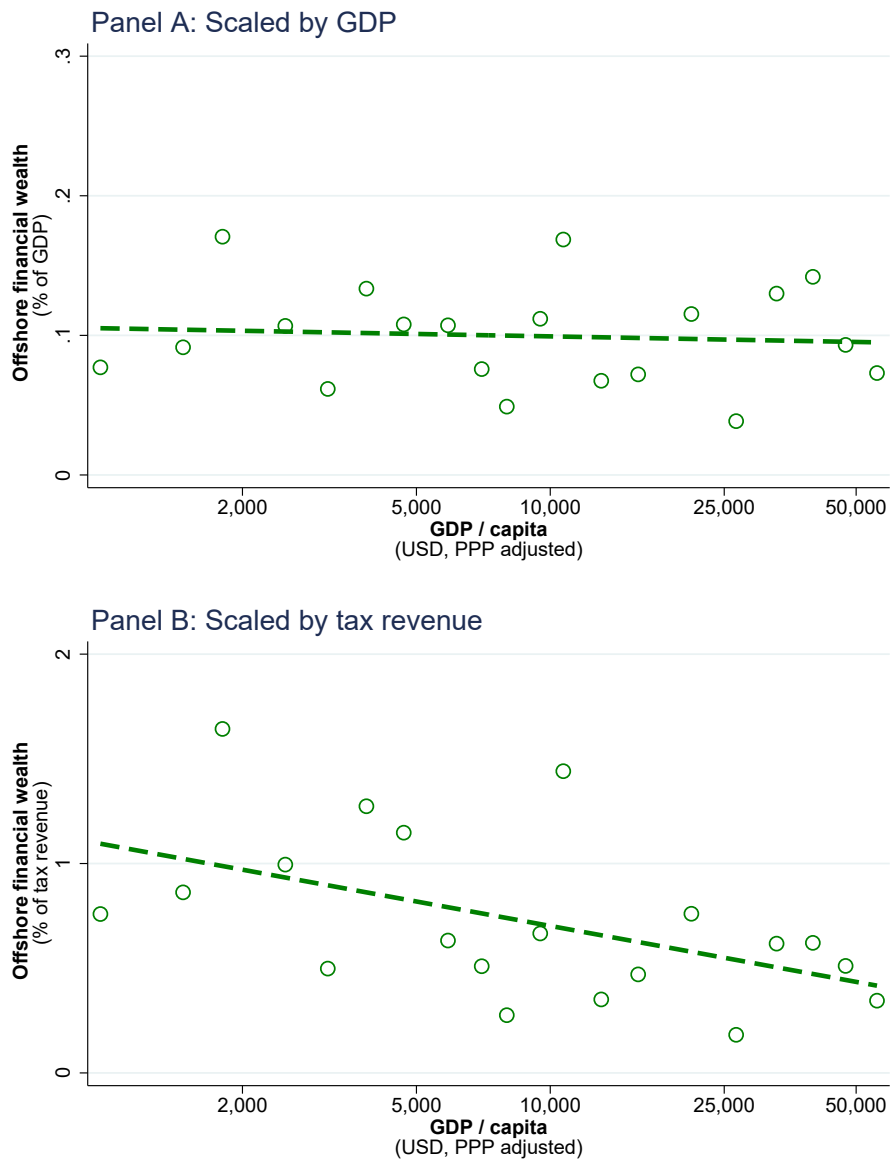
Figure 1: Offshore deposits



Note: the figure shows how the stock of deposits in offshore tax havens correlates with the level of economic development.

Source: author's construction based on data from Locational Banking Statistics and the World Bank's World Development Indicators (WDI).

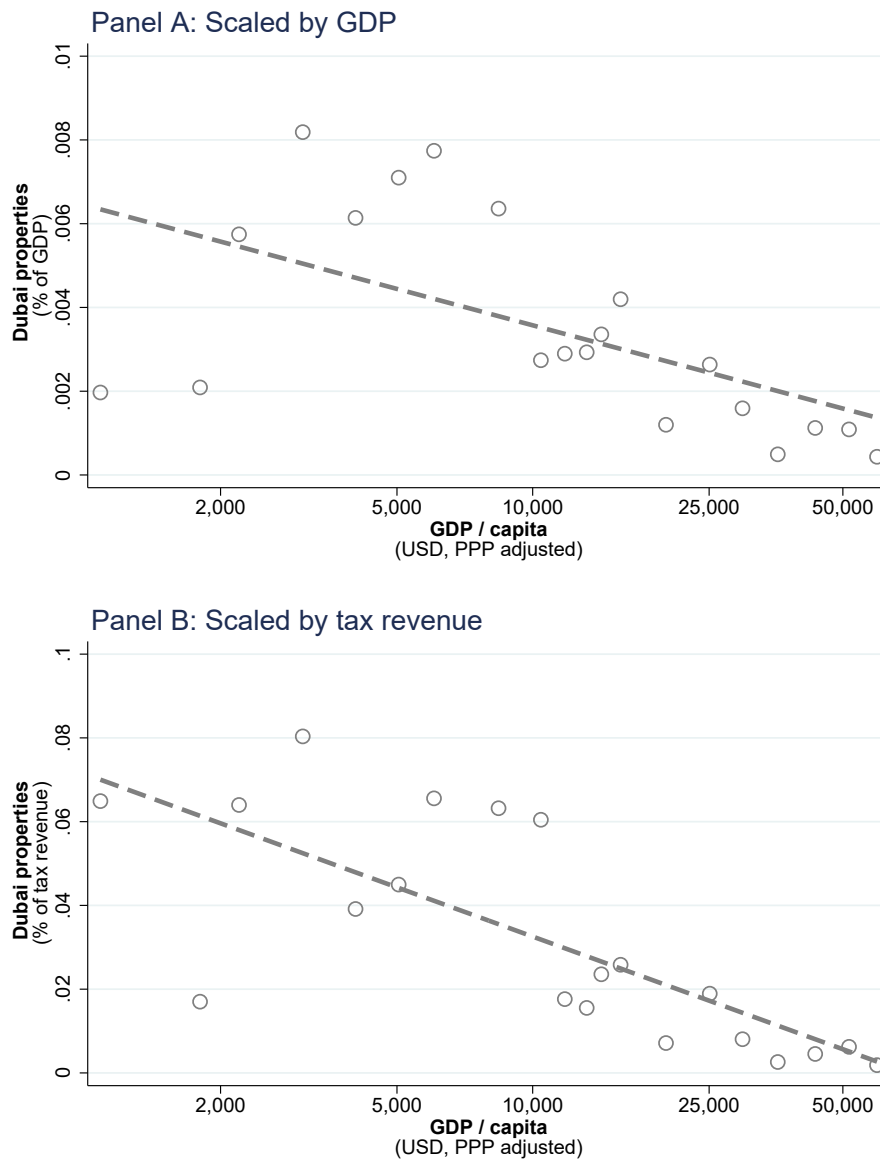
Figure 2: Offshore financial wealth



Note: the figure shows how households' financial wealth in offshore tax havens correlates with the level of economic development.

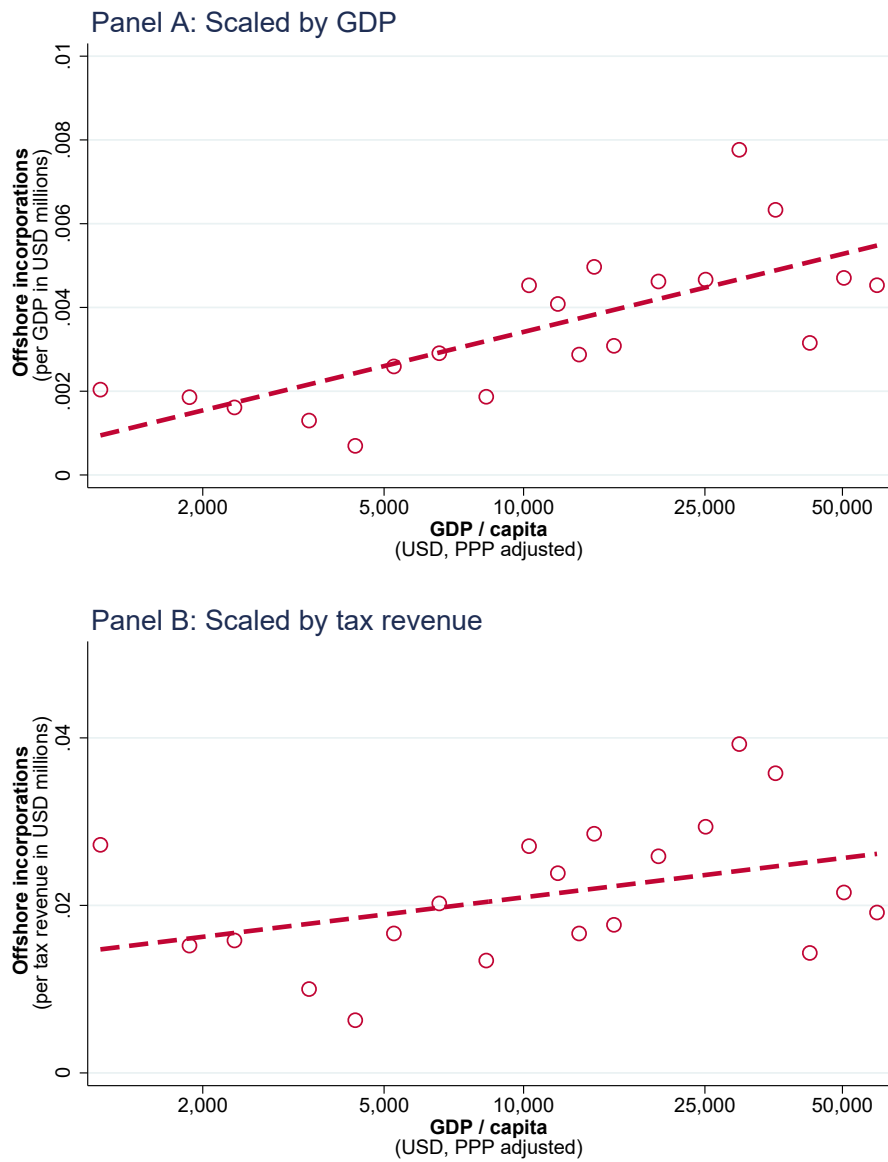
Source: author's construction based on data from Alstadsæter et al. (2018) and the WDI.

Figure 3: Offshore properties



Note: the figure shows how the value of properties in Dubai correlates with the level of economic development.
Source: author's construction based on data from Alstadsæter et al. (2022b) and the WDI.

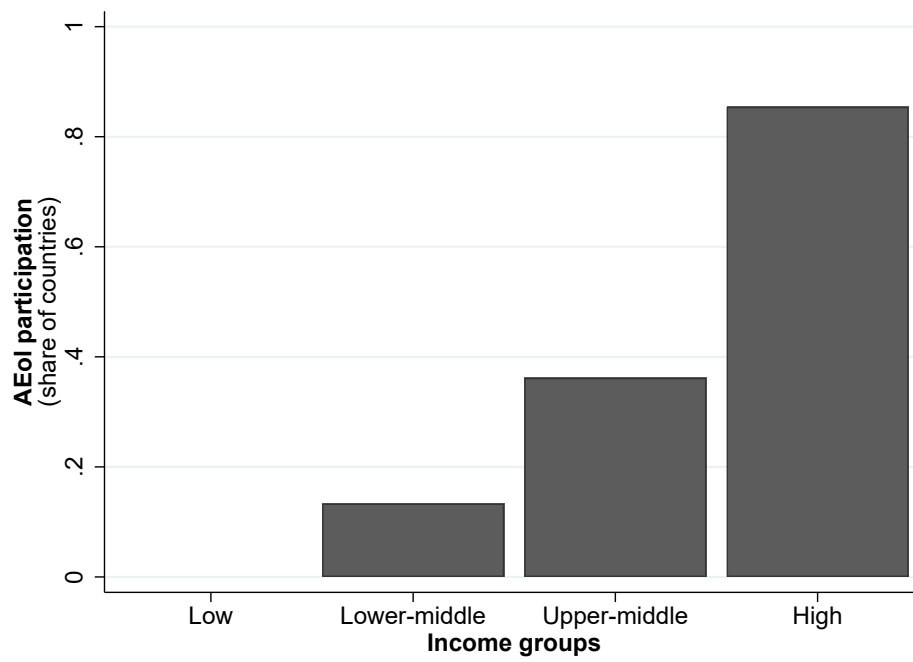
Figure 4: Offshore incorporations



Note: the figure shows how the number of offshore incorporations correlates with the level of economic development.

Source: author's construction based on data from the International Consortium of Investigative Journalists and the WDI.

Figure 5: Automatic information exchange



Note: the figure shows how participation in automatic information exchange correlates with the level of economic development.

Source: author's construction based on data from the Global Forum (OECD 2023) and the WDI.