

Taxation and Migration by the Super-rich*

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Abstract

We study international migration responses of the super-rich to taxes using UK administrative data and a difference-in-differences design. We exploit a reform that removes access to a tax break on foreign income for foreigners based on their number of years in the UK, allowing us to compare individuals with similar incomes and wealth. The reform reduces the net-of-tax rate of affected taxpayers by 19%. Emigration flows increase significantly in response, but only temporarily. Overall, the number of affected super-rich in the UK decreases by 0.26% for a 1% decline in the net-of-tax rate. Those who remain resident increase reported income and income tax by around 50%, driven by foreign income coming into scope of UK tax, rather than investments being onshored. Emigrants induced to leave by the reform pay substantially less tax, but more than half still report non-zero UK income three years after leaving. By contrast, emigrants unaffected by tax changes retain a much smaller economic and fiscal footprint.

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1 Introduction

International migration is perceived to be the key constraint on national governments seeking to raise more tax from individuals at the very top of the income or wealth distribution. Consequently, coordination across countries is increasingly seen as a pre-requisite for progressive taxation of the global super-rich (e.g., see proposals by [Piketty, 2014](#); [Landais et al., 2020](#); [Zucman, 2024](#)). While coordination has many advantages from a tax design perspective, recent policy developments around the corporate minimum tax, automatic exchange of information, and global minimum tax on billionaires highlight that international coordination on tax matters is difficult to achieve and sustain. Therefore, it is crucial to understand whether unilateral taxation of the super-rich can succeed in raising more revenue from the top, despite potential behavioural responses such as relocation.

This paper asks: How responsive to taxation is *international* migration of the *super-rich*? And when the super-rich leave, how severe are the economic and fiscal impacts? Despite major policy interest in these questions, quantitative evidence is limited. There is evidence from specific professions such as footballers ([Kleven et al., 2013](#)) and inventors ([Akcigit et al., 2016](#)), from high-earners ([Kleven et al., 2014](#); [Muñoz, 2023](#)), and from relatively wealthy individuals ([Jakobsen et al., 2024](#)). Focusing on the super-rich, there is prior work on their *within-country* mobility responses to taxes ([Moretti and Wilson, 2023](#); [Baselgia and Martínez, 2024](#)). But a lack of research on the international migration responses of the super-rich to taxes leaves open the question of how national policies would work for this politically salient group.

We study the effect of taxes on the migration behaviour of the globally connected super-rich using administrative data and policy variation from one of the largest and oldest preferential tax regimes in the world – foreign-domiciled (“non-dom”) status in the UK ([Avery Jones, 2004](#); [Flamant et al., 2021](#); [Advani et al., 2022](#)). In practice, this allowed foreign-born immigrants to be taxed on a “remittance basis”: paying no UK tax on foreign-source earnings and investment returns unless they are brought into the UK. We combine detailed microdata covering the universe of taxpayers claiming non-dom status with a large tax reform in 2018 that removed access to the remittance basis for long-stayers, causing a 19% fall in the share of their income they could keep post-tax. A compelling feature of our setting is that this reform differentially affected the average tax rate of otherwise similar individuals, with those who arrived slightly more recently retaining access to the remittance basis, providing a natural control group for identifying the effects of the tax change. This also enables us to assess the economic and fiscal impacts conditional on staying or leaving after the reform.

We find that this large tax hike led to modest emigration. The emigration rate temporarily increases by six percentage points after the reform, from a base of roughly

5%, but then reverts back to its pre-reform level. Overall, we estimate that 4.9% of the affected individuals leave due to the reform, implying a stock elasticity with respect to the net-of-tax rate of 0.26. Among those who remain resident, UK-reported income and UK income tax liability increase by around 50%. This is primarily driven by a strong increase in foreign-source earnings and investment income now brought into UK tax, not by onshoring of foreign investments. For the affected super-rich who do emigrate, we observe sharp drops in income and tax liability, but more than half still report non-zero UK income three years after the reform. We also find evidence that tax-induced emigrants remain more attached to the UK than emigrants unaffected by the reform.

While most countries levy taxes on the worldwide income and capital gains of their residents, the UK has a hybrid system. UK residents are generally taxed on a worldwide basis. However, foreigners who can plausibly argue that they do not plan to stay in the UK indefinitely may elect to be taxed on the remittance basis. This provides a complete exemption for earnings and investment returns that arise and are spent or saved outside the UK. Access to the remittance basis puts no restrictions on how much time someone can spend in the UK during any tax year. The cost for remittance basis users is that they give up their tax-free allowances, worth up to £8,400 annually, and once they have been UK-resident for at least seven years they must pay a fixed charge of at least £30,000 per year. In practice, this means that remittance basis claims are concentrated among individuals with significant asset holdings abroad.

A reform in 2018 removed access to the remittance basis for individuals who had been in the UK for at least 15 of the last 20 years. This caused large increases in effective average tax rates for affected individuals, as their foreign earnings and investment returns became taxable in the UK. We leverage the 15-year threshold, providing exogenous variation within our super-rich group over time, to estimate the effects of the reform on emigration, income, tax liability, and investment. We do not consider the immigration margin because the reform increased taxes solely for individuals who had been living in the UK for a long time.

We use comprehensive administrative tax data to identify individuals claiming the remittance basis and measure their migration choices, incomes, tax liabilities, and other characteristics. Our main data source is the universe of personal tax returns filed between 1997 and 2020. We observe who claims the remittance basis and, by linking tax records across years, can track their residence status, incomes, and tax liabilities whether they claim it in a particular year or not. Our measure of migration is based on tax residence. This is the relevant measure from a fiscal perspective, but as we show, individuals can cease to be tax-resident while still retaining a significant economic footprint in the UK.

We focus on the 3,200 remittance basis users who have been UK-resident for at least 15 of the last 20 years and are thus affected by the 2018 tax reform. Despite having lived in the UK for more than a decade, baseline international mobility in this group is high, with annual emigration rates of 4–6% pre-reform. They rank among the highest-income, and highest-wealth, individuals in the UK: three-quarters (72%) are in the top 0.1% of the UK income distribution, and essentially all are in the top 1%. Average investment returns are £1.7m, highlighting their extremely high wealth. 88% of these returns come from abroad, in line with the incentives provided by the remittance basis. Although investments are the main source of income for more than 80% of remittance basis users, they also receive substantial labour income. Average earnings are £530,000 which by itself is enough to be in the top 0.1% by income. These mainly come from working in “City-type” jobs in finance and other professional activities including law, consulting, and accounting.

We compare those who had been resident for 15–20 of the last 20 years and therefore lose access to the remittance basis (treatment group) to those who had been resident for 10–14 years (control group) in a difference-in-differences framework. The reform reduces the net-of-average-tax rate in the treatment group by 18.9%, while it does not affect the tax liability of the control group. In response, the emigration rate increases significantly by about 6 percentage points, but quickly reverts back to its pre-reform level. Cumulating the effects on emigration across five years after announcement of the reform, we estimate that it reduced the number of affected super-rich in the UK by 4.9%, implying a stock elasticity of 0.26. Looking instead at the more commonly reported emigration *flow* elasticity, we find that the semi-elasticity of the three-year emigration rate with respect to a 1% increase in the net-of-average-tax rate is -0.33 , and can rule out magnitudes larger than -0.46 at the 5% level.

Although only a minority leave in response to the tax hike, the negative consequences for the public finances could in principle be large, since all tax payments of these individuals are potentially lost. To investigate how much this matters, we examine heterogeneity in the migration elasticity along various pre-reform characteristics. We find that those with higher UK incomes and tax liabilities, who are typically working in industries that pay more in the UK than elsewhere ([Advani et al., forthcoming](#)), are less responsive to tax changes. By contrast, the elasticity does not vary with proxies for worldwide income or wealth. These findings suggest it is connection to the domestic economy, rather than overall income, that determines tax responsiveness. Consistently, we find larger emigration elasticities among older individuals who are closer to retirement, and who are less likely to have school-aged children.

The affected super-rich who remain resident after the reform start paying tax on their worldwide income from 2018. Using a similar difference-in-differences design restricting the sample to people who remain resident, we find that UK-reported total

income rises by £600,000 three years after the reform, on average, representing a 56% relative increase. This translates into an increase in UK income tax liability by £190,000 (50%), or £105,000 when taking into account the remittance basis charge that affected individuals previously paid. This underscores that the moderate migration elasticity is not due to the affected individuals circumventing the reform.

To assess the implications of this increase in reported income for the domestic economy, we decompose the effect. Despite the removal of the tax wedge between foreign and UK investments, we estimate a precise null effect on UK-source investment income. The increase in investment income is entirely driven by foreign-source investment income becoming taxable, not new investment in the UK. Using information on the source country of foreign investment income, we find that almost 40% of the increase is attributable to income from tax havens, whereas home-country investments account for only 15%.

Applying the same difference-in-differences strategy but using remittance basis users who emigrate in the first year after the reform as the treatment group, we find UK incomes and tax drop sharply after emigration. However, more than half of tax-induced emigrants still report non-zero UK income three years after the reform, and the fall in reported income by 60% is entirely driven by a decline in UK earnings. Income tax liabilities remain at 27% of their counterfactual level, highlighting the importance of tax paid by leavers for overall revenue from reform. This differs from the behaviour of not-tax-induced emigrants, for whom we see a 95% decrease in reported income, and tax liabilities drop to almost zero after emigration.

To understand whether there are likely wider economic consequences of tax-induced emigration, beyond those reflected in income data, we examine how much time leavers still spend in the UK. We observe sizeable bunching below the day threshold for tax residency: almost 20% of tax-induced emigrants use up more than 90% of the maximum number of days they can spend in the UK without becoming tax-resident. By contrast, emigrating remittance basis users who are not affected by the tax reform do not exhibit bunching below the residency threshold (8% use up more than 90% of the allowable days), spend fewer days in the UK, and are much more likely to completely cut ties after leaving.

Our findings contribute to the substantial debate around tax-induced mobility by providing the first estimates of international migration responses for a broad group of super-rich individuals. A body of evidence, surveyed by [Kleven et al. \(2020\)](#), shows high-income individuals are relatively mobile when location-specific human capital is relatively unimportant. Estimates of the stock elasticity with respect to the net-of-tax rate on total income range around 1–2 for foreign and below 0.15 for domestic top-earners ([Kleven et al., 2013, 2014](#); [Akçigit et al., 2016](#); [Muñoz, 2023](#)). More recently, [Jakobsen et al. \(2024\)](#) use wealth tax reforms to study international migration

behaviour of (roughly) the top 2% by wealth in Sweden. Their estimates imply a stock elasticity with respect to the net-of-tax rate on capital income of 0.05. Focusing on the super-rich, both [Baselgia and Martínez \(2024\)](#) and [Moretti and Wilson \(2023\)](#) use data from “rich lists” compiled by journalists to examine mobility effects in settings where intra-national migration is a feasible response. [Baselgia and Martínez \(2024\)](#) study the abolition of a special tax regime for wealthy foreigners who are not permitted to work in some cantons of Switzerland, estimating a stock elasticity with respect to the net-of-tax rate on capital income of roughly 1.5. [Moretti and Wilson \(2023\)](#) assess the effect of US state-level estate taxes on the location choices of billionaires on the Forbes 400 list. They find very large mobility responses, especially among older billionaires.

Our preferred stock elasticity estimate of 0.26 is in between elasticity estimates for foreign and domestic top-earners, but lower than previous estimates of within-country mobility responses among the super-rich. We complement and extend previous research in three further ways. First, we have access to comprehensive tax data which enables us to measure precisely where people have their tax residence and to what extent they are affected by tax changes, instead of relying on proxies for residence and tax scheme usage. Second, the reform we use creates variation in tax rates within the same year for otherwise similarly well-off individuals. As well as avoiding comparisons between people at different wealth levels, who have different wealth composition and may therefore respond differently to reforms ([Bach et al., 2020](#); [Fagereng et al., 2020](#); [Smith et al., 2023](#)), this also allows us to study responsiveness at different levels of income and wealth. Third, our policy context does not impose any restrictions on working, so we can examine how emigration responses to taxes vary with ties to the local labour market. We find that those who are not attached to the labour market respond more strongly, providing context for the high elasticities found among those not allowed to work and among the elderly ([Baselgia and Martínez, 2024](#); [Kalin et al., 2024](#); [Moretti and Wilson, 2023](#)). The weaker response among those with strong labour market ties dampens the adverse economic and fiscal impacts of tax-driven emigration.

Most of the existing literature on tax-induced migration focuses on the number of individuals who change their country of residence in response to a tax change, due to data and identification challenges. But to understand the economic and fiscal implications of a tax reform, including potential positive or negative externalities ([Kleven, 2025](#)), it is important to directly assess its effects on both stayers and leavers. We advance the literature in this direction, obtaining a number of new insights about the consequences of tax reforms targeting the super-rich: First, the elimination of the tax wedge between domestic and foreign investment income did not lead the super-rich to bring their investments onshore. This highlights that temporary distortions

of investment behaviour, which are a common feature of many impatriate regimes and visa policies, can have long-term effects – even after the distortion is removed. We also show that a sizeable share of foreign investment income arises in tax havens, indicating that preferential regimes are used for active tax optimisation. Second, a substantial share of tax-induced emigrants continue to receive income, pay tax, and spend significant time in the UK as non-residents. This challenges the conventional view of migration as wholesale relocation. A key innovation is that we directly study the effects of tax-induced emigration, and compare it to not-tax-induced emigration by similarly affluent individuals during the same time period. We find that tax-induced emigrants are more likely to retain a significant economic and fiscal footprint than other emigrants, emphasising the need to consider selection effects in response to policy reforms. We also detect tax planning responses to the residency threshold which shape the economic effects of tax-driven migration. This complements recent novel evidence in [Jakobsen et al. \(2024\)](#) who assess the economic consequences of tax-induced migration using a two-step procedure that separately estimates migration responses to wealth taxes and economic effects of wealthy emigration, and then combines these estimates.

Finally, we contribute to the literature on *who* is taxed. This literature has largely focused on a debate about the tax unit: should taxes be paid at the individual or household level ([Boskin and Sheshinski, 1983](#); [Piggott and Whalley, 1996](#); [Apps and Rees, 1999](#); [Kleven et al., 2009](#); [Golosov and Krasikov, 2023](#); [Bierbrauer et al., 2024](#))? A separate question, which has been little studied, is which individuals should come into the tax net of any given country. With the wealthiest having an increasingly global footprint and spending substantial time in multiple countries each year, there is a question of what factors should be used to “connect” them to a country for tax purposes: should taxation be based on where you reside, your citizenship, some concept of your permanent home, or something else? This question is also becoming increasingly important beyond the very richest, as the move to online working allows place of residence to be divorced from place of work. Our findings highlight the costs of a regime that is based on domicile (permanent home). Unlike residence or citizenship, domicile depends on a taxpayer’s (unverifiable) plans about where they consider to be their long-term home. We find that this regime has a high deadweight cost. It leads to substantial loss of tax revenue to motivate a relatively small number of individuals to remain in the UK, and those who leave were paying little tax to begin with. Given the presence of a similar scheme in Italy, and other preferential tax regimes for migrants in Belgium, Denmark, France, the Netherlands, Portugal, Spain, and Switzerland (among others), it is important to understand the extent to which abolition or reform of these regimes would lead to emigration flows.

The remainder of the paper is organised as follows. Section 2 discusses the institutional background. Section 3 explains the data sources and key measurement details. Section 4 describes the high incomes and capital gains of remittance basis users, their economic activities, and their global connections. Section 5 presents our analysis of the super-rich’s migration responses to the tax increase and the estimated migration elasticities. Section 6 examines the effects on the incomes and tax liabilities of the super-rich who remain resident after the reform. Section 7 studies the effects of tax-induced emigration on the super-rich who leave after the reform and compares them to not-tax-induced emigration. Section 8 concludes.

2 Institutional Background

Similar to most countries apart from the US, the UK mainly taxes individuals based on residence. But there is a preferential tax regime for residents who declare they have not settled in the UK permanently. In this section, we explain the rules for determining tax residence, the special tax status and who is eligible to benefit from it, and the 2018 reform that removed access to the status for a subset of those previously using it.¹

2.1 Residence Rules

UK residents are normally liable to tax on their worldwide income and capital gains. The test for residence takes account of the number of days the individual has been present in the UK during the tax year, combined with a series of “ties” including whether they have work, accommodation, or family in the UK. An individual will be automatically resident in the UK if they have been present for 183 days or more. The relevant day count threshold is lower the more ties an individual has, down to 16 days for those with the most ties.

2.2 Domicile and Remittance Basis of Taxation

The UK offers special tax treatment to residents who claim that their permanent home (or “domicile”) is abroad. In the UK context, domicile as a legal concept is completely distinct from residence. In principle, a UK resident who spends all their time inside the UK can still have a foreign domicile. UK residents with a foreign domicile, known as “non-doms”, are entitled to claim the remittance basis of taxation. We refer to claimants as “remittance basis users”. Being taxed on the remittance basis means only being liable to UK tax on foreign income and gains if these are

¹Appendix B provides further details about the tax rules applying to remittance basis users in the UK and abroad.

brought into or used in the UK. Foreign earnings are only exempt if the job is with a foreign employer and entirely performed abroad. The tax benefit can be enormous: if the individual is only tax-resident in the UK and nowhere else, then normally they would not pay any foreign tax either. The main exception to this rule is irrecoverable withholding tax. However, as discussed in Appendix Section B.3, this is negligible in this context because the UK has double tax treaties with most countries which reduce withholding tax rates to near zero, and a sizeable share of remittance basis users' foreign investments is located in tax havens (see Figure 6) which typically do not levy any withholding tax.² In effect, the remittance basis provides an almost complete tax exemption for income that arises and is spent or saved outside the UK.

There are two main ways in which people can take advantage of the remittance basis whilst still funding their UK lifestyle. The first is by spending any income and gains that they receive from UK sources (e.g., earnings from UK employment), which are liable to UK tax on the usual basis. The second is to remit foreign funds that they derive from the capital component of their foreign assets (known as "clean capital"), while continuing to accrue the income and gains on those assets tax-free.³ The latter is particularly advantageous for individuals who have recently arrived in the UK and have a large stock of clean capital still held abroad.

The rules for determining an individual's domicile are complicated, but in practice non-dom status will typically be available to any individual who has arrived in the UK from abroad and who can plausibly claim that they do not intend to make the UK their permanent home. This includes foreign-born migrants, and until recently also included UK-born individuals who had spent time abroad. The factors that are relevant to domicile include almost everything about a person's lifestyle as well as their private intentions for the future. Consequently, it is very difficult for the tax authority to prove that an individual who has moved to the UK from abroad has become UK-domiciled as a matter of law, even if they have been living continuously in the UK for many years.

The overall effect of these rules is that individuals who live in the UK but maintain connections abroad can benefit from a tax exemption that is not available to other UK residents. In practice, the benefits of the remittance basis are highly concentrated amongst the wealthy. This is because claiming the remittance basis has sizeable fixed costs, such that it is only worthwhile for those with substantial foreign income or gains. These fixed costs include the loss of the tax-free allowances for Income Tax and Capital Gains Tax which are worth up to £8,400, fees for tax advisors who help

²The other exceptions are US citizens and green card holders, who are liable to tax on a worldwide basis irrespective of their country of residence.

³The rules for separating the capital component from income and gains are highly formalistic and are essentially satisfied by maintaining a separate bank account for "clean capital", with any interest paid directly into a separate account.

navigating the complicated rules of the regime, and a fixed annual charge for accessing the remittance basis of £30,000 for those who have been resident for seven of the last nine years, £60,000 for those who have been resident for 12 of the last 14 years, and £90,000 for those who have been resident for 17 of the last 20 years. There is a widespread perception that remittance basis users are highly mobile, as a result of their high levels of wealth and the fact that (by definition) they maintain connections with at least one other country besides the UK.

2.3 Deemed Domicile Reform in 2018

A reform taking effect from tax year 2018 removed access to the remittance basis for a subset of non-doms.⁴ Taxpayers were “deemed to be UK domiciled” for tax purposes, removing their right to claim the remittance basis, if they have been resident in the UK for at least 15 of the previous 20 years. By bringing their foreign-source income and gains into the scope of UK taxation, the reform caused a substantial tax increase for the affected individuals. It also meant that they would have to start reporting all their foreign investment income and gains to the UK tax authority. As a consequence of the reform, the £90,000 remittance basis charge became obsolete. The £30,000 and £60,000 charges remained in place.

The deemed domicile reform was announced by the Conservative Government in the Summer Budget in July 2015, just two months after unexpectedly winning a majority in the General Election. Key features of the reform, including that non-doms who have been resident for at least 15 of the last 20 years will be excluded from claiming the remittance basis and that the reform will come into effect from tax year 2018, were announced in the Budget. But details and draft legislation were not published at the time. These were established through a protracted process over the following two years. Because of the significant lag between announcement and implementation of the reform, affected remittance basis users may have responded in anticipation. Another implication of the long run-up period is that lagged emigration responses seem unlikely, given that affected individuals had plenty of time to prepare leaving the UK before the reform was implemented. We examine both of these conjectures in our analysis of migration responses to the reform in Section 5.

3 Data

To identify remittance basis users and obtain measures of their migration choices, income, tax liability, and other characteristics, we use the universe of personal tax re-

⁴Note that the UK tax year starts on 6 April and is conventionally referred to by the calendar year it ends in. Hence, tax year 2018 runs from 6 April 2017 to 5 April 2018. We follow this naming convention throughout the paper.

turns filed in the UK for tax years 1997 to 2020.⁵ We supplement these with data from HMRC’s “Pay-As-You-Earn” (PAYE) system through which employers withhold tax on employment income at source. Below, we describe in more detail how we measure non-dom status and remittance basis claims, migration, income and tax liability, and the economic footprint of emigrants.

3.1 Measuring Non-dom Status and Remittance Basis Claims

We can identify remittance basis users in the tax data, as taxpayers have to both declare non-dom status and claim the remittance basis in their tax return. Remittance basis users are also required to declare whether their unremitted income and gains were less than £2,000. As we are interested in individuals who derive a significant tax advantage from using the status, our analysis focuses on remittance basis users with more than £2,000 in unremitted income and gains.

3.2 Measuring Migration

Our measure of migration tracks whether or not an individual is tax-resident in the UK. If an individual who was previously tax-resident in the UK ceases to be resident, we describe them as having emigrated. From the perspective of public finances, this is the most relevant measure of migration since (along with domicile status) an individual’s residence status determines how much tax they are liable to pay. However, from the perspective of the wider economy, individuals can become non-resident without leaving entirely, by reducing the number of days they spend in the UK to just below the relevant residency threshold. Consequently, when an individual “emigrates” according to our measure, this entails a discrete change in their tax liability, but may only entail a small continuous change in their actual UK footprint.

To measure tax residence in a given year, we pool all available administrative tax data to identify whether the individual had some presence in the UK. For individuals who file a tax return, we can be sure that they are tax-resident unless they claim non-residence on the return. For individuals who are only present in PAYE data, we assume that they are tax-resident unless they receive income above the personal allowance without paying any Income Tax, which indicates that they have an “NT” (no tax) tax code that is generally only available to non-residents. Where an individual is not present in any of our data sources, we treat them as non-resident for that year unless they are reported as deceased or under the age of 18.⁶

⁵As the UK tax year 2020 ended on 5 April 2020, our period of analysis is not meaningfully affected by the Covid-19 pandemic.

⁶Individuals who are only present in PAYE data and have zero or missing income are treated as non-resident as they have most likely not been deleted from the payroll information even though they do no longer work at that employer.

To determine who is affected by the 2018 reform, we need to calculate the number of years remittance basis users have been UK-resident for over the previous 20 years. For this, we use our measure of annual tax residency described above, combined with information on the year and month of arrival in the UK that non-domiciled taxpayers report in their tax return. If people report a year of arrival that is before the earliest year in which we observe them in the tax records, we assume that they have been continuously resident in between.

3.3 Measuring Income and Tax

To measure an individual's income, capital gains, and tax liability, we use data from the tax return, or the PAYE record if no return is filed.⁷ The values in the tax data are not topcoded and we do not winsorise any variables, which is important as we are focusing on the very top of the income and wealth distribution. Our standard measure of income includes all taxable income from employment, self-employment, partnerships, and pensions ("earnings"), and all taxable income from investments including interest, rent, and dividends ("investment income"). If receiving income from abroad, taxpayers also have to report the country in which this income arises. Our measure of capital gains includes all taxable gains, which broadly consist of realised gains on most types of assets except the individual's main home and excluding any disposals to spouses or upon death ("gains"). As our main tax measure, we use the income tax liability which the tax authority calculates from taxable income reported in the tax return and PAYE records. We also take into account the lump-sum charge that individuals must pay to access the remittance basis once they have been UK-resident for at least seven years.

For individuals who are UK-resident and UK-domiciled, income and gains are reported and taxed on a worldwide basis. Non-doms (individuals who are UK-resident but not UK-domiciled) are also required to report their worldwide income and gains except in years when they are claiming the remittance basis. Remittance basis users are only required to report their UK-source income and gains, their foreign earnings (even if these are not taxable in the UK),⁸ and any foreign investment income and gains that they have remitted to the UK in that year.⁹ Hence, we do not directly observe remittance basis users' unremitted foreign investment income and gains.

⁷A tax return must be filed if the individual has any taxable income or gains that have not already had the appropriate amount of tax deducted at source, or if their total taxable income exceeds £100,000 irrespective of tax already deducted at source.

⁸Foreign earnings are an exception to the general rule that income and gains only need to be reported on the tax return if they are taxable.

⁹This includes any income and gains received in a previous tax year whilst the individual was UK-resident and using the remittance basis.

We impute the unreported investment income and gains of remittance basis users using information on the worldwide investment income and gains reported by taxpayers who have similar observable characteristics but cannot claim the remittance basis because they are domiciled in the UK. Full details of our methodology are described in [Appendix C](#). The approach proceeds in three main steps.

First, we estimate a lower bound for unremitted investment income and gains derived from the fact that claiming the remittance basis requires users to forfeit their UK tax-free allowances and also pay a fixed charge if they have been resident in the UK for seven years or longer. To obtain a lower bound on *worldwide* investment income and gains, we sum up the remittance basis user's investment returns reported in the UK (i.e., UK-source returns plus amounts that have been remitted) and the lower bound on unremitted returns.

Second, we use the universe of personal tax records to select a pool of UK-domiciled taxpayers ("UK doms") who (i) report at least as much investment income and gains as the remittance basis user's lower bound on worldwide investment returns (computed in step 1) and (ii) look most similar to the remittance basis user based on their earnings, house price in the local area, age, sex, and industry. Our main approach is regression adjustment with inverse probability weighting ([Wooldridge, 2007](#)), but results are very similar when simple regression adjustment is used. The approach assumes that an individual's total investment income and gains can be predicted based on these observable factors and that (taxable) investment income and gains are fully observed for UK doms.

Third, we impute to the remittance basis user the average investment income and gains reported by UK doms within the relevant comparison pool. To estimate their total worldwide income and gains, we add the remittance basis user's reported earnings (including any foreign earnings not taxable in the UK) since these are fully observed.

We use an analogous approach to estimate the additional tax that remittance basis users would have to paid if the tax status was abolished. This has the advantage that it accounts for tax planning and avoidance strategies that would likely be used if the remittance basis were removed, rather than simply assuming the headline tax rates would be paid, as the tax liability estimates are based on data from UK doms who are already using the types of strategies that remittance basis users may later wish to take.

There are some respects in which our approach may underestimate the unreported foreign investment income and gains of remittance basis users. These are discussed in more detail in [Appendix C](#). To the extent that such underestimation occurs, this would lead us to overestimate the responsiveness of migration to tax changes.

3.4 Measuring the Economic Footprint of Emigrants

In Section 7, we assess the effect of tax-induced emigration on the economic and fiscal contributions of remittance basis users to the UK. To do so, we use data from the tax returns that the majority of these emigrants – around two-thirds – still file after leaving. There are two main cases in which non-residents are required to file a tax return in the UK. Most commonly, if they receive rental income arising from UK land or property, they must file a return. Additionally, non-residents have to file a tax return if they work in the UK but are not employees (e.g., directors or self-employed). Once non-residents are required to file a tax return, they must report all their UK investment income, although this will usually not be subject to UK tax. Besides mandatory filing, some emigrants voluntarily file a return even after ceasing their UK residency. This will usually be either to actively declare their status as a non-resident to the tax authority, or because the UK tax authority has issued them a return based on their previous tax residency. Beyond their UK-source income, non-residents have to report the number of days they have spent in the UK during the tax year as the tax authority uses this information to verify their residency status.

4 The UK’s Globally Connected Super-rich

Each year, between 24,000 and 30,000 taxpayers claim the remittance basis (Appendix Figure A1). When the reform we study was announced in 2015, around 3,200 had been UK-resident for at least 15 years, meaning they would lose access to the special tax status as a consequence (Appendix Figure A2). This subset has particularly high foreign income and wealth because individuals who have been living in the UK for at least seven years are required to pay an annual charge of at least £30,000 to use the remittance basis.

Before studying the migration response of the treatment group, we document their baseline incomes and capital gains, economic activities, and global connections. Figure 1 summarises these descriptive results. The figures are based on data from 2015, the final full tax year before the 2018 reform was announced. We focus on taxpayers who claimed the remittance basis in that year and had been resident for at least 15 of the previous 20 years.¹⁰

Income and Capital Gains. Panel (a) of Figure 1 shows average UK- and foreign-source income and capital gains of remittance basis users in the treatment group. Three facts stand out. First, treated remittance basis users have extremely high in-

¹⁰Appendix Figure A3 compares the same graphs side by side for remittance basis users in the treatment group who have been resident for 15–20 years and for remittance basis users in the control group who have been resident for 10–14 of the last 20 years.

come and gains. Their average *UK* income and gains total £700,000. They also report mean foreign earnings of £35,000. In addition, we estimate that they have £1.5m in unreported foreign investment returns, on average. Cumulatively, mean worldwide income and gains are as high as £2.2m. One striking finding is that 99% of treated remittance basis users are in the top 1% and 72% in the top 0.1% of the UK income distribution when including foreign investment income.¹¹ Remittance basis users are therefore not only globally connected, but clearly among the richest individuals.¹²

Second, remittance basis users receive the vast majority of investment returns abroad. This is consistent with the incentives created by taxing UK investment but not foreign investment. On average, foreign investment income and gains are more than seven times as large as those arising inside the UK (£1.5m vs. £200,000).

Third, although they receive large returns on capital, treated remittance basis users also have substantial amounts of labour income. Average earnings are £530,000, enough to put someone into the top 0.1% of the UK income distribution by itself. Around 24% of worldwide income and gains come from labour.

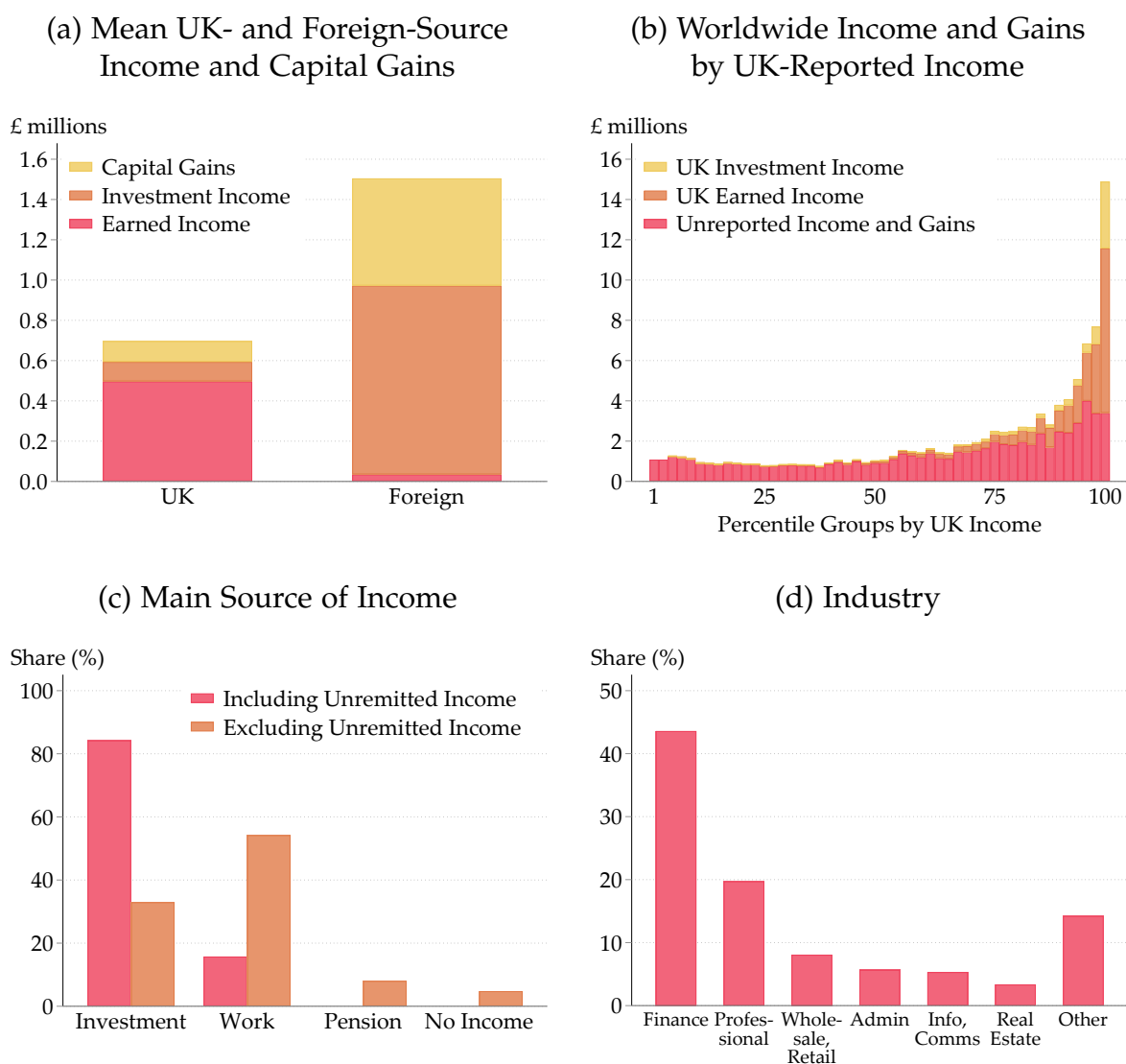
Panel (b) plots the relation between foreign investment returns and UK-reported income (from earnings and investment). We see a U-shaped pattern. Remittance basis users with high UK income are most likely to also have large unreported income and gains: the top two percentiles have on average £3.4m in unreported income and gains, on top of their UK-reported income of £11.5m. Across the top decile, mean unreported income and gains are £3.2m. However, they are higher in the bottom decile (£1.1m) than anywhere else in the bottom half of the distribution. This U-shape is mirrored in the average house prices of the local areas people live in: those in the bottom decile live in the most expensive areas, with a mean house price of £1.57m, higher than those in the middle 80% (£1.28m) and even the top 10% (£1.45m).¹³ Despite reporting total annual incomes of less than £1,000 to the tax authority, these individuals in the bottom decile live in very expensive areas and are willing to pay a large lump-sum fee to use the remittance basis. The implication is that they have substantial wealth abroad, and live off clean capital transferred to the UK from a foreign account or sustained transfers from family members.

¹¹Even when exclusively taking into account income reported in the UK, 53% of treated remittance basis users are in the UK's top 1% and 27% in the top 0.1%.

¹²Conversely, claiming the remittance basis is very common among high-income individuals. Before the 2018 reform, 15–20% (including foreign investment income) of the top 0.1% claimed the remittance basis in any given year, compared with 3–4% in the rest of the top 1%, and just 0.01% in the bottom 99%. In related work, we have documented that 40% of those with income above £5m have at some point claimed non-dom status (Advani et al., 2022). Among high-income *migrants*, who have the most plausible claim to having a foreign domicile, this share exceeds 80%. This highlights the ubiquity of this tax break among those at the top of the income distribution.

¹³House prices in the local areas that treated remittance basis users live in are about five times as high as the average across the UK population which is £274,000.

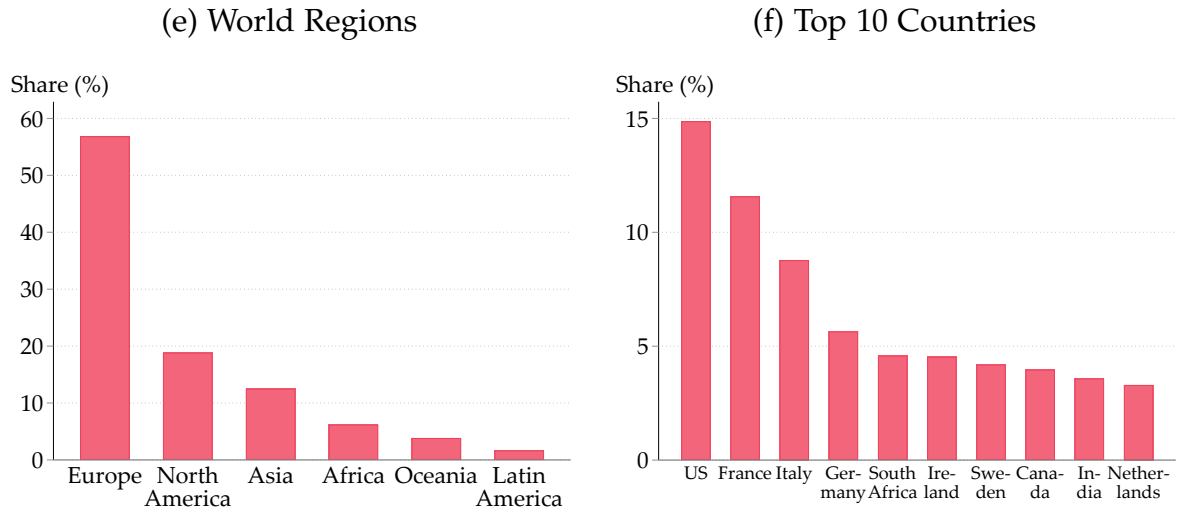
Figure 1: Pre-reform Characteristics of Super-rich in Treatment Group



Economic Activities. Panel (c) displays the share of treated remittance basis users by main source of income. Including unremitted foreign income, more than 80% receive most of their worldwide income from investments. Excluding unremitted income, work is the most important source of income for more than half of remittance basis users. But a sizeable minority of one-third still have investment income as their main income source, and a further 5% report no income in the UK at all. This confirms that investments are concentrated abroad, but also indicates that some remittance basis users do have significant UK investments.

Panel (d) shows what industries remittance basis users work in. We see that they are strongly concentrated in “City-type” jobs. More than 60% work in finance and other professional jobs such as lawyers, consultants, or accountants. These are industries which pay particularly well relative to what individuals can earn in other

Figure 1: Pre-reform Characteristics of Super-rich in Treatment Group (Cont.)



Notes: Characteristics of remittance basis users who have been UK-resident for at least 15 of the last 20 years and are thus affected by the 2018 reform. Data is from 2015, the last full tax year before reform announcement. UK income and gains, including foreign-source income and gains remitted to the UK, and foreign earnings are reported in tax filings. Unremitted foreign investment returns are estimated (see Section 3.3). Main source of income is identified from largest income source across employment, self-employment, partnerships, or owner-managed companies (grouped in “Work”), investment income, and pension income. “No income” represents those who report exactly zero income. Industry classification according to the Standard Industrial Classification (SIC) 2007 version is based on the largest source of earned income. Nationality as reported in the Migrant Worker Scan, supplemented by information from tax form SA109. For individuals reporting both a UK and foreign nationality, we use the foreign nationality.

Source: Authors’ calculations based on HMRC administrative datasets.

countries (Advani et al., forthcoming). This industrial composition means that remittance basis users are heavily clustered in London (76%) and the Southeast of England more generally (a further 12%), where the majority of these types of jobs are located.¹⁴

Global Connections. Panels (e) and (f) break down the group of treated remittance basis users by nationality. While remittance basis users hail from across the world, 57% come from Europe and a further 23% from “Anglosphere” countries in North America or Oceania. Together, these regions account for four out of five arrivals with known nationality information. In Europe, France, Italy, and Germany are the largest source countries, while the US is the predominant Anglosphere country. South Africa and India are the only two countries outside Europe and North America in the top 10. With the exception of the US, the UK is largely better paying for the high-end “City jobs” common among remittance basis users, making the UK relatively attractive for those coming to work.

¹⁴Where there are (smaller) clusters of non-doms elsewhere in the UK, these are similarly focused around high-paying local industries: sport in Manchester, higher education and research in the university cities of Oxford and Cambridge, the petrochemical industry where UK North Sea oil is processed in Aberdeen (Advani et al., 2022).

International Mobility. Despite having lived in the UK for at least 15 years, international mobility among remittance basis users affected by the reform is high. In the pre-reform period, annual emigration rates in the treatment group are consistently above 4% (Figure 2, Panel (b)). The high baseline mobility suggests that these individuals have strong international ties, in line with their claim to have their permanent home outside the UK. These baseline emigration rates are considerably higher than among other high-income or high-wealth groups whose migration responses to tax have been studied in the literature (Akçigit et al., 2016; Muñoz, 2023; Jakobsen et al., 2024). This makes remittance basis users a particularly interesting group as one might expect their migration decisions to be more responsive to tax changes.

5 Migration Response to a Large Tax Increase

Having established that remittance basis users are internationally connected and have exceptionally high income and wealth, we use a large reform to study their migration responses to tax changes. We focus on the emigration margin because the reform aims at long-stayers who have been resident for at least 15 years and does not affect new arrivals directly.

We begin by explaining the difference-in-differences strategy used for identification and by providing graphical evidence of migration responses to the reform. Then, we estimate the migration elasticity in a regression framework. Subsequently, we examine what types of remittance basis users respond more or less strongly to the reform. Finally, we compare our results to estimates from the literature.

5.1 Identification and Graphical Evidence

Identifying Variation. The 2018 reform removed access to the remittance basis for individuals who had been resident for at least 15 of the last 20 years. Since affected remittance basis users receive the majority of their worldwide income from outside the UK, where it goes largely untaxed, bringing foreign income into scope of UK taxation leads to a major increase in their tax liability.

As the reform did not change the tax treatment of remittance basis users below the 15-year threshold, the reform provides exogenous variation in the tax liability within this group of high-income and high-wealth individuals. This allows us to construct a control group of individuals unaffected by the reform who are similarly affluent as the treatment group, instead of using people further down the distribution as is commonly done in this literature.

The scale of the tax change, the focus on those at the very top of the income and wealth distributions, and the arbitrarily chosen 15-year cutoff providing varia-

tion among similar individuals make this a compelling setting to study international migration responses of the super-rich to taxes.

Difference-in-Differences Approach. We use a difference-in-differences design to estimate the migration response to the tax increase, comparing the emigration rate of affected individuals before and after the reform to those who had spent slightly less time in the UK and thus did not yet face a tax change. The identifying assumption is that the emigration rate of the treatment group would have followed the same trend as the emigration rate of the control group in absence of the reform. We validate this assumption by verifying the parallel evolution of the emigration rate in the treatment and control group during the pre-reform period.

We follow [Kleven et al. \(2014\)](#) in analysing the migration response at the aggregate level, collapsing observations into group-year cells. We compute annual emigration rates in the treatment group and control group as the share of individuals who were resident and claiming the remittance basis last year but are not resident in the current year. The treatment group includes remittance basis users who have been resident for 15–20 of the previous 20 years. As our main control group, we use remittance basis users who have been resident for 10–14 of the previous 20 years. Note that the treatment and control group are defined year by year, as repeated cross-sections. Each group therefore retains the same distance to the 15-year threshold over time. This is important to obtain consistent measures of emigration rates over time, which enables us to check for pre-trends and assess whether there is a structural break in emigration patterns when the reform is introduced.¹⁵ In post-reform years 2019 and 2020, we define treatment and control group based on remittance basis claims in 2017 as those affected by the reform cannot claim it anymore from 2018. This means our approach also captures emigration of treated individuals who do not leave immediately. Note that the Covid-19 pandemic does not meaningfully affect our analysis as the final tax year in our data, 2020, ended on 5 April 2020.

In choosing a control group, we trade off including individuals who have been living in the UK for a similar number of years as the treatment group, which makes it more likely that their emigration behaviour is affected by the same shocks, with choosing a group that is large enough to give us power to obtain precise effect estimates. Appendix Figure A4 shows that our emigration elasticity estimates do not vary much with the control group definition, except when we only include control individuals who have been resident for exactly 14 years. Using this control group, we

¹⁵This simple and transparent approach is preferable to following the same individuals over time as that would require either assigning treatment status close to the reform, in which case by construction one cannot examine pre-trends in emigration, or assigning treatment some years before, in which case it may not accurately capture who is affected which leads to attenuation bias.

find a lower elasticity, suggesting that there is an anticipation response by those who will themselves lose access to the remittance basis next year.

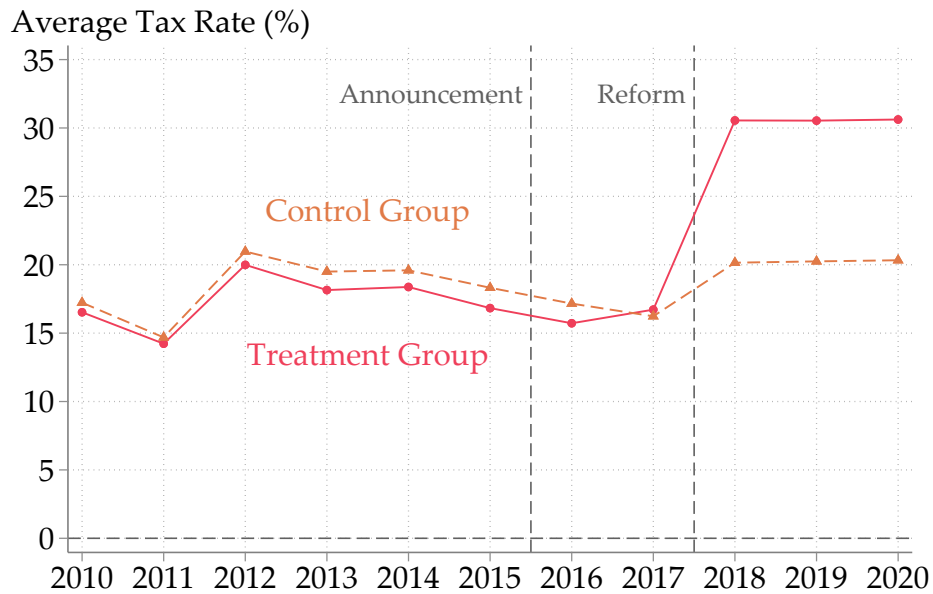
Tax Change. Using our difference-in-differences approach, we can now assess the scale of the tax change caused by the 2018 reform. Panel (a) of Figure 2 shows the evolution of the effective average tax rate on *worldwide income* in the treatment group and control group. Before the reform, when both groups are taxed on the remittance basis, tax rates are very low. They are between 15% and 20% in most years, compared with headline average rates of over 45% at this level of income, underscoring the generosity of the remittance basis tax break. These rates have a similar level and move in parallel for the two groups. After the treatment group loses access to the remittance basis due to the reform, its average tax rate increases suddenly and persistently to 31%, while the tax rate in the control group remains relatively flat. Hence, the reform leads to a drastic reduction in the post-tax income of affected individuals. To give a sense of scale, 15–20% is among the lowest effective tax rates in the OECD for a top-income individual who receives half of their income from earnings and half from dividends, while 31% is close to the median (Hourani et al., 2023).

Emigration Response. Panel (b) of Figure 2 presents graphical evidence of the emigration response to the 2018 tax reform. Looking at the period before the announcement of the reform, we see two main facts. First, the pre-reform emigration rate in the treatment group is lower than in the control group. The emigration rate is around 4–6% in the treatment group and 7–9% in the control group. This is expected as treated individuals have been living in the UK for a longer time period. Second, while emigration rates in the treatment and control group differ in levels, they trend very similarly before the announcement of the reform. This provides empirical support for the validity of the parallel trends assumption underlying our difference-in-differences strategy.

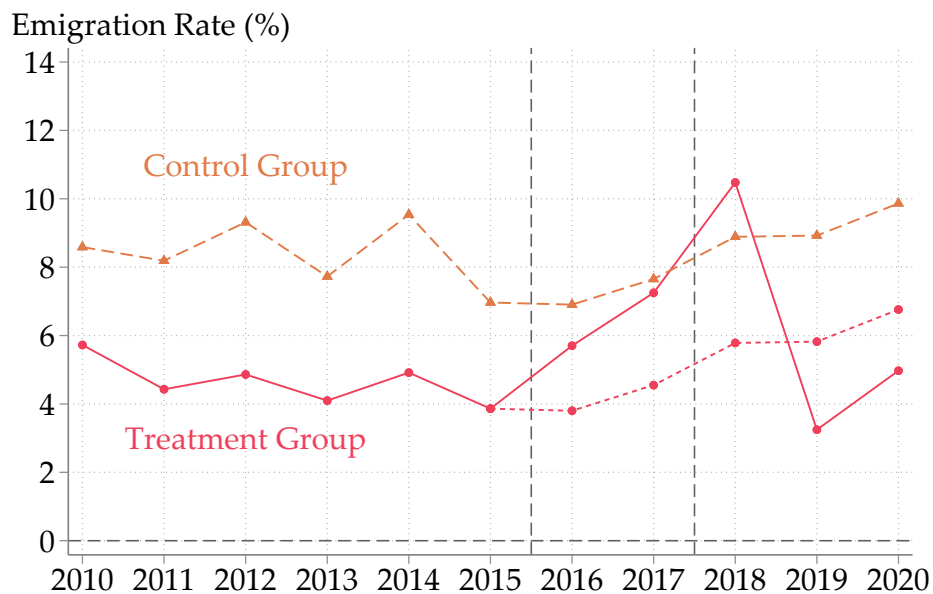
Examining emigration rates after the reform, we find clear evidence that the removal of the remittance basis increases emigration temporarily. The emigration rate in the treatment group begins to rise from announcement, exceeding 10% after the reform is implemented in 2018. However, in the following two years, it drops back to levels similar to what we observe before the reform. This suggests that those who wanted to leave in response to the reform did so immediately after it was implemented, having had time to prepare, and outflows went back to their pre-reform levels thereafter. If anything, the emigration rate observed in 2019 is lower than before the reform, suggesting that some remittance basis users who were planning to leave in that year irrespective of the reform accelerated their departure to avoid being affected at all. Meanwhile, there is a moderate increase in the emigration rate in the control group after the reform, but the level is similar to what we observe pre-reform.

Figure 2: Emigration Response to the 2018 Reform

(a) First Stage: Average Tax Rate



(b) Reduced Form: Emigration Rate



Notes: Panel (a) shows the evolution of the average tax rate in the treatment and control group over time. Panel (b) shows the evolution of the emigration rate. Treatment group includes remittance basis users who have been UK-resident for 15–20 of the previous 20 years and thus lost access to the remittance basis as a consequence of the deemed domicile reform. Control group includes remittance basis users who have been UK-resident for 10–14 years over the same period and therefore were not affected. Groups are defined year-by-year, so they retain the same distance to the 15-year threshold over time.

Source: Authors' calculations based on HMRC administrative datasets.

Stock Effect. The evidence suggests that the reform led to a one-off drop in the number of super-rich living in the UK but did not trigger a persistent increase in outflows. Nevertheless, to estimate the magnitude of the overall effect on the stock, we need to cumulate the changes in emigration across all years after announcement of the reform. For our central estimate, we apply our difference-in-differences framework and construct a counterfactual for the post-reform emigration rates in the treatment group based on the evolution in the control group (displayed as the red dashed line in Panel (b) of Figure 2). Summing up the difference between the observed emigration rate and the counterfactual across all post-announcement years, we estimate that removing access to the remittance basis reduced the number of affected super-rich in the UK by 4.9%.¹⁶ Scaling this by the drop in the net-of-average-tax rate by 18.9% (Table 1), we obtain an estimate of the stock elasticity of 0.26.

5.2 Migration Elasticity

Estimation. Having provided clear graphical evidence of the emigration response to the 2018 reform, we turn to quantifying the more commonly reported elasticity of (short-run) emigration *flows* among the super-rich. We estimate the semi-elasticity of the emigration rate with respect to changes in the net-of-tax rate using the following two-stage least squares (2SLS) regression specification:

$$E_{gt} = \eta \times \log(1 - \bar{\tau}_{gt}) + \mu_g + \lambda_t + \varepsilon_{gt}, \quad (1)$$

where E_{gt} is the emigration rate in group g in year t , with $g \in \{\text{treatment, control}\}$, μ_g denotes group fixed effects, λ_t denotes year fixed effects, and ε_{gt} represents the idiosyncratic error term. To estimate the elasticity using only tax variation provided by the reform, the log net-of-average-tax rate in group g , $\log(1 - \bar{\tau}_{gt})$, is instrumented by the (static) difference-in-differences treatment indicator, $\mathbb{1}\{t \geq 2018\} \times T_g$, where T_g is the treatment group indicator equal to one for remittance basis users who have been resident for at least 15 of the last 20 years. The group fixed effects absorb time-invariant differences in the emigration rate levels between treatment and control group. The year fixed effects control flexibly for any shock from changes in policy or economic conditions that affect treatment and control groups similarly. The target parameter η is the semi-elasticity capturing the percentage-point change in the emigration rate in response to a 1% increase in the net-of-average-tax rate. As a shorthand, we call this the “emigration elasticity” in the remainder of the paper. We

¹⁶As a sensitivity check, if instead we assume counterfactual post-announcement emigration rates in the treatment group equal to the minimum (3.9%) or maximum (5.7%) emigration rate observed before the reform, we obtain stock estimates of -12.3% or -3.0%, respectively.

use heteroskedasticity-robust standard errors, as grouped estimation obviates cluster-based adjustments (e.g., as in [Kleven et al., 2014](#)).

To ensure that the tax change among treated individuals is not endogenous to any income or composition effects of the reform, we estimate the net-of-average-tax rate after the reform as the rate they would face if their pre-reform worldwide income was taxable in the UK. Our estimates of the amount of income tax hypothetically due on their worldwide income are constructed in the same way as our estimates of unremitted income (see Section 3.3). They therefore account for tax planning strategies available to UK-domiciled individuals that treated individuals are likely to make use of after losing access to the remittance basis. This provides a more realistic measure of the post-reform tax rate than simply using headline rates.

Finally, we remove the two tax years between reform announcement and implementation, 2016 and 2017, from the estimation sample because we observe an anticipation response to the reform while the tax due has not yet increased, which would bias our elasticity estimates.

Elasticity Estimates. Table 1 reports our headline estimates of the emigration elasticity, as well as first-stage and reduced-form results. We focus first on the specification using 3-year emigration rates in Panel A. Individuals losing access to the remittance basis experience an 18.9% drop in the net-of-average-tax rate. This represents a massive decline in the share of their worldwide income that they can keep after tax. This gives us a highly powered first stage, particularly since the reform had a large impact on the tax liability on *total income*, which is ultimately what matters for location choices, not just on smaller tax bases such as capital income.

The reform triggers a significant short-term increase in the emigration rate among treated individuals by 6.2 percentage points. Taking the Wald ratio of the first-stage and reduced-form estimates, our headline estimate of the emigration elasticity is -0.33 . Based on the 95% confidence interval, we can rule out elasticities below -0.46 and above -0.19 . This means that the emigration rate of the super-rich increases temporarily by around 0.3 percentage points in response to a 1% decrease in the net-of-average-tax rate. Panel B and Panel C in Table 1 report results using as outcomes the 2-year and 1-year emigration rates, respectively. These produce very similar estimates of the emigration elasticity, between -0.31 and -0.34 . The fact that we find similar reduced-form increases in the emigration rate by 5–6 percentage points across 1-year, 2-year, and 3-year rates supports our interpretation that the uptick in emigration is a one-off effect and not a sustained increase in outflows. This is also evidenced by the flow elasticity estimates being of similar magnitude as the stock elasticity.

Robustness Checks. Our main approach compares remittance basis users who have been resident for 15–20 years (treatment group) to those who have been resident

Table 1: Emigration Elasticity

| | (1) First Stage: Net-of-Average-Tax Rate | (2) Reduced Form: Emigration Rate | (3) 2SLS: Semi-Elasticity |
|--|--|---|---------------------------------|
| Panel A: 3-Year Emigration Rate | | | |
| Treated \times post-2018 | -0.189*** (0.016) | 0.062*** (0.010) | |
| Semi-elasticity | | | -0.325*** (0.051) |
| Group-year cells | 14 | 14 | 14 |
| Individual-year obs. | 38,821 | 38,821 | 38,821 |
| Panel B: 2-Year Emigration Rate | | | |
| Treated \times post-2018 | -0.189*** (0.017) | 0.059*** (0.013) | |
| Semi-elasticity | | | -0.312*** (0.052) |
| Group-year cells | 14 | 14 | 14 |
| Individual-year obs. | 34,865 | 34,865 | 34,865 |
| Panel C: 1-Year Emigration Rate | | | |
| Treated \times post-2018 | -0.157*** (0.006) | 0.053*** (0.008) | |
| Semi-elasticity | | | -0.339*** (0.048) |
| Group-year cells | 14 | 14 | 14 |
| Individual-year obs. | 32,091 | 32,091 | 32,091 |
| Group fixed effects | ✓ | ✓ | ✓ |
| Year fixed effects | ✓ | ✓ | ✓ |

Notes: Aggregate-level IV estimates of the semi-elasticity of the emigration rate with respect to the net-of-average-tax rate, exploiting the 2018 reform. First-stage estimate captures the effect of the reform on the net-of-average-tax rate. Reduced-form estimate shows the effect on the emigration rate. 2SLS estimate of the migration semi-elasticity η is the percentage-point change in the emigration rate in response to a 1% increase in the net-of-average-tax rate, obtained from estimating Equation (1). All specifications include group and year fixed effects. Heteroskedasticity-robust standard errors in parentheses. Panel A, B, or C uses the 3-year, 2-year, or 1-year emigration rate as outcome variable, respectively. Treatment group consists of remittance basis users who have been UK-resident for 15–20 of the last 20 years. Control group includes remittance basis users who have been UK-resident for 10–14 of the last 20 years. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' calculations based on HMRC administrative datasets.

for 10–14 of the last 20 years (control group). Appendix Figure A4 documents that our elasticity estimates are robust to using different treatment and control group definitions.¹⁷ While the confidence intervals are wider because of the smaller sample size, the point estimates are almost all between -0.4 and -0.2 . The exception is when we restrict the control group to individuals who have been resident for 14 years, who

¹⁷We bin treated individuals into 2-year groups because the counts for some single years can be relatively small and the estimates correspondingly noisy.

will themselves lose access to the remittance basis in the following year, which results in an elasticity of -0.11 . The lower magnitude here suggests that some individuals emigrate one year before actually being affected, perhaps due to optimisation frictions from professional or personal commitments (e.g., children's school transfers). The lack of a gradient in the elasticity across treatment group definitions suggests that there is not much variation in the sensitivity of the migration response within this group of long-stayers.¹⁸

5.3 Heterogeneity in Emigration Elasticity

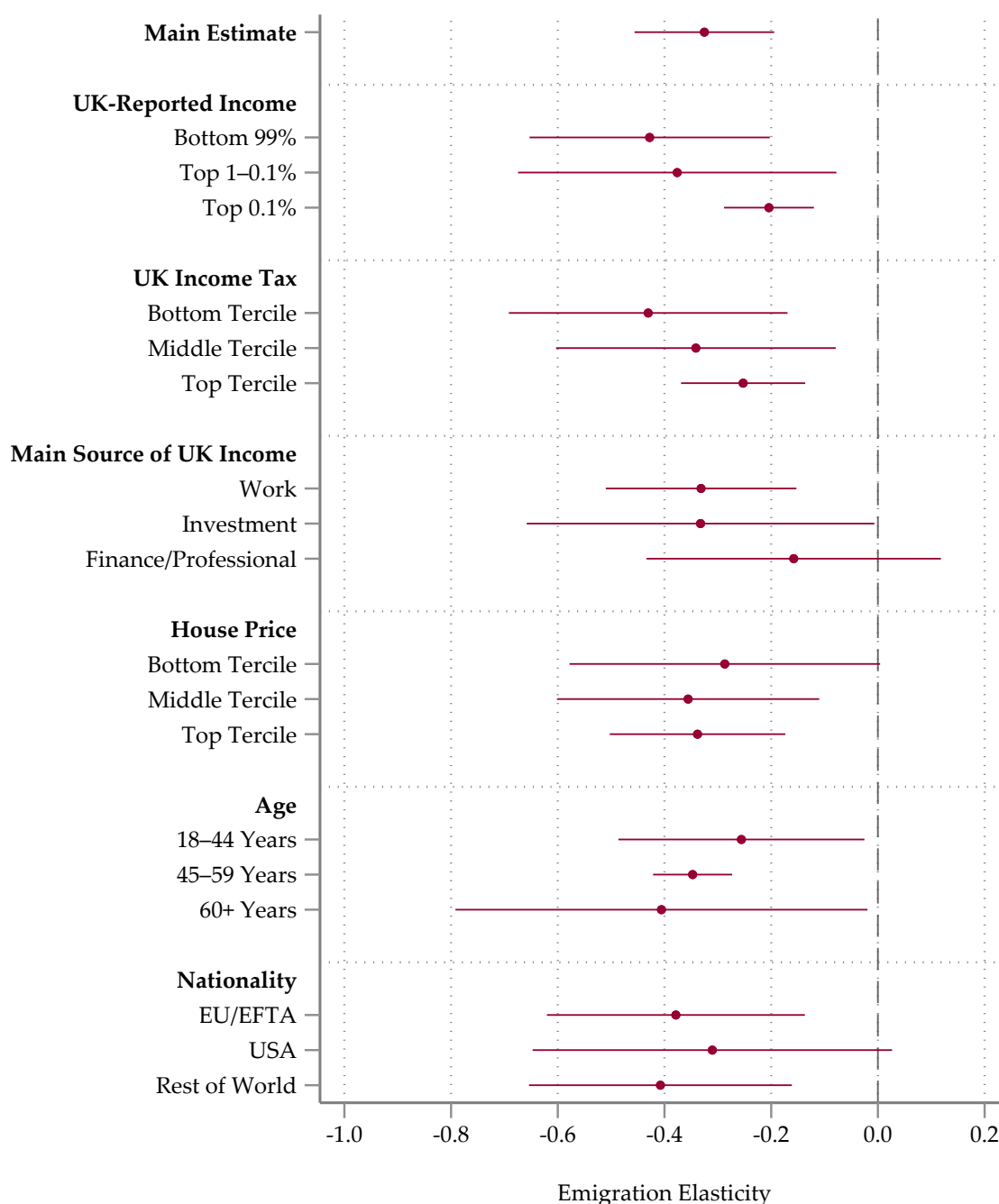
Despite finding a relatively moderate elasticity in aggregate, migration responses could have detrimental consequences if the individuals who emigrate due to the tax increase were previously contributing highly to the local economy and to public finances. We examine heterogeneity in the emigration elasticity by splitting the sample into different subgroups and repeating our estimation procedure. In line with a standard Roy model, we expect the sensitivity to tax changes to be larger for those who have better outside options or lower fixed costs of leaving.

Figure 3 plots elasticity estimates for various subgroups. We highlight three key findings consistent with theoretical predictions, concerning heterogeneity with respect to economic activity in the UK, global wealth, and age. We also estimate separate responses by nationality group to verify that our results are not contaminated by the UK's withdrawal from the European Union. Whilst in many cases the confidence intervals overlap, we consider the patterns of point estimates to still be informative.

UK Economic Activity. Individuals with higher UK incomes are less responsive to the reform. Dividing remittance basis users into those in the bottom 99%, top 1–0.1%, or top 0.1% of the overall UK distribution based on their UK-reported income, the estimated elasticity is smaller in magnitude for those with higher UK incomes. As described in Section 4, these UK incomes come largely from work, and often from industries in which salaries are higher than in alternative locations to which individuals could migrate. Hence, even with a reduction in net-of-tax income, the higher UK lifetime earnings trajectory may be large enough to make emigration not worthwhile. This can be seen directly through looking at heterogeneity in the estimated elasticity by main source of UK income. The point estimate of the elasticity is similar for those who receive the majority of their UK income from work (including employment, self-employment, partnerships, and owner-managed businesses) or from investments, but the emigration response is much lower among people working in finance and other

¹⁸Further, the fact that the elasticity estimate for those who have been resident for 15–16 years is very similar to our main estimate provides reassurance that the 2016 increase of the remittance basis charge to £90,000 for those who have been resident for 17–20 years does not bias our estimates.

Figure 3: Heterogeneity in Emigration Elasticity



Notes: Heterogeneity in the emigration elasticity by UK-reported income, UK income tax, main source of UK income, house price, age, and nationality. Terciles are defined with respect to the distribution in the treatment group. “Work” includes those with main source of income from employment, self-employment, partnerships, or owner-managed companies. “Finance/Professional” includes people working in financial and insurance activities as well as professional, scientific and technical activities based on the Standard Industrial Classification (SIC) 2007 version. House price is measured as the median house price in the Lower layer Super Output Area (LSOA) that individuals reside in according to the personal address reported on the tax return. Median house prices by LSOA are compiled by the Office for National Statistics (ONS). Nationality as reported in the Migrant Worker Scan, supplemented by information from tax form SA109. Elasticity estimates are obtained by restricting the sample to the corresponding subgroup and then following the IV approach described in Section 5.2. Standard errors are heteroskedasticity-robust.

Source: Authors’ calculations based on HMRC administrative datasets.

professional services such as consulting and law. The emigration elasticity in those industries is half the aggregate elasticity. This is also reflected in existing UK income tax liabilities. Looking across tercile groups of tax paid, those currently paying the least tax are the most responsive. Since tax paid increases with UK-source income, these are the individuals who are least economically attached to the UK, reducing the cost of leaving. This also means the reduction in revenue from people emigrating after the reform is smaller than the overall elasticity estimate implies.

House Price. By contrast to the previous findings, the emigration elasticity does not vary with the median house price in the local areas that remittance basis users live in, which we view as a proxy for their worldwide income or wealth. As wealthier individuals tend to receive a higher share of their income abroad and thus face a larger decline in their net-of-tax rate, this still means they are more likely to leave in response to the reform. But there is no observable non-linearity whereby those who are hit with particularly large tax increases are even more responsive. This is consistent with [Jakobsen et al. \(2024\)](#) who find very similar elasticities for different wealth levels.

Together with the previous findings on heterogeneity by economic activity in the UK, this suggests that people with different *global* income respond similarly to tax changes, but people with higher *UK-based* income are less likely to emigrate as they are more connected to the local economy.

Age. Older individuals respond more sensitively to the tax change. Two features are likely to explain this: (i) younger individuals are more likely to have school-aged children and therefore higher costs of moving;¹⁹ (ii) having already highlighted the importance of labour income, older individuals are closer to retirement and thus a smaller share of their lifetime resources will come from future earnings. The total cost of any reduction in ongoing earnings is therefore lower.

Nationality. We find very similar emigration elasticities for EU/EFTA nationals and the rest of the world. This is reassuring as it rules out that our estimates are skewed by the Brexit vote that took place in June 2016 and the subsequent withdrawal of the UK from the European Union. While the UK did not leave the European Union until 31 December 2020, i.e., after the end of tax year 2020 which is the final year in our analysis, and this anyway did not change the right to remain for long-stayers, the similar elasticity suggests there were no wider political sentiment effects.

Since US federal tax rates are generally lower than UK tax rates, the remittance basis provides a substantial tax saving for US citizens despite the worldwide taxation which applies to them (see Appendix Section [B.4](#) for details). That these benefits

¹⁹UK tax data do not allow us to directly observe which individuals actually have children.

are significant is underscored by the revealed preference of the large number of US citizens who claim the remittance basis (Figure 1). However, since the tax saving is smaller than for non-US citizens, we are likely to somewhat overestimate the change in the net-of-tax rate for this group. This is consistent with our estimated elasticity for the US being lower (-0.31) than for the EU (-0.38) and rest of the world (-0.41), although the confidence intervals all overlap.

5.4 Comparison with Literature

Reviewing the literature on migration responses to taxation, Kleven et al. (2020) show that mobility elasticities vary strongly across types of individuals and countries, e.g., due to the size of the jurisdiction, local amenities, or policy choices such as tax coordination. Our preferred estimate of the stock elasticity with respect to the net-of-tax rate on total income of 0.26 is in line with other estimates of international mobility in the literature, despite the higher wealth, stronger international connections, and high baseline mobility of our population.

Earlier research assessing international migration responses to income taxes has typically found large stock elasticities of 1–2 for foreign and small elasticities below 0.15 for domestic top-earners (Kleven et al., 2013, 2014; Akcigit et al., 2016; Muñoz, 2023). Our elasticity estimate for the globally connected super-rich who have been resident for at least 15 years is in between those for foreigners and locals, at the upper end of the 0.1–0.3 range that Muñoz (2023) estimates for the pooled elasticity among all top-earners in Europe.

We can also compare our elasticity to estimates of migration responses to wealth taxes, once these are transformed into elasticities with respect to (capital) income taxes using a suitable rate of return. Using variation from large wealth tax reforms in Sweden and Denmark, Jakobsen et al. (2024) estimate a stock elasticity with respect to the net-of-tax rate on *capital income* of 0.05. As capital income accounts only for a minority of total income, even among the top 2% by wealth, this implies an elasticity with respect to the net-of-tax rate on *total income* roughly aligned with ours. This is striking given that the group we study is much more internationally mobile at baseline. Our results differ somewhat in the dynamics of the migration response leading to this stock effect: they find a small but persistent change in emigration flows that cumulates to a larger stock response over time, whereas we see the full effect on the stock materialise immediately after the reform.

There are two other papers focusing on migration responses of the *super-rich*, both using data from rich lists compiled by journalists. These papers tend to find larger migration elasticities. Baselgia and Martínez (2024) analyse migration responses of super-rich foreigners to the abolition of expenditure-based taxation in Switzerland,

estimating a stock elasticity with respect to the net-of-tax rate on capital income of around 1.5. Four main factors are likely to explain the difference between our elasticities. First, the elasticity they estimate combines international and intra-national migration. Since the special tax status was abolished only in some Swiss cantons, individuals can preserve their tax break by simply moving canton. This is clearly less costly, in line with the wider literature showing intra-national migration elasticities are higher than international ones (Moretti and Wilson, 2017; Schmidheiny and Slotwinski, 2018; Agrawal and Foremny, 2019; Agersnap and Zidar, 2021; Akcigit et al., 2022; Martínez, 2022; Koethenbuerger et al., 2023). Second, only foreigners who do not earn any labour income in Switzerland are eligible for expenditure-based taxation. In contrast, we find that most remittance basis users have sizeable UK earnings, and find a larger elasticity among those who have little UK income. Third, the reform we study only affected people already living in the UK, so our estimates only capture emigration responses, whereas the elasticity in Baselgia and Martínez (2024) reflects both emigration and immigration responses. Fourth, we use comprehensive administrative tax data covering the universe of taxpayers opting for the special regime, while they use rich list data covering the roughly 150 richest foreign individuals and families identified by journalists who potentially benefit from the regime. These centi-millionaires and billionaires could be more responsive than the average user of the tax status.

Moretti and Wilson (2023) examine mobility responses of billionaires on the Forbes 400 list to US state-level estate taxes. They estimate a 35% decrease in the stock of billionaires in response to an estate tax of typically 16%. Their results are difficult to compare to ours because they do not convert their estimates into an income tax elasticity. Based on their statement that a 16% estate tax is equivalent to a 0.26% wealth tax, we can back out a wealth tax elasticity of 135. This is much larger than the estimates of Brühlhart et al. (2022) and Agrawal et al. (2025) who find wealth tax elasticities of intra-national mobility of 10 in Switzerland and 8 in Spain, respectively (corresponding to elasticities with respect to capital income taxes of 0.25 and 0.36, respectively). Hence, the implied income tax elasticity of Moretti and Wilson (2023) would also be substantially higher than our estimate. Again, this can at least partially be explained by intra-national mobility responding more strongly to taxes than international migration.

6 Effects on Incomes, Taxes, and Investments of Stayers

We have documented that a minority of the affected super-rich emigrate in response to the tax reform. The majority who remain resident start paying tax on their worldwide income from 2018. To accurately characterise the reform’s impact on the econ-

omy and public finances, we need to go beyond quantifying the pure migration response and also assess the economic and fiscal effects conditional on staying or leaving. This section focuses on stayers, whereas Section 7 considers those who emigrate.

In this section, we examine what amounts and types of income stayers report to the tax authority, how much tax they pay, and to what extent they reshuffle their investment portfolio after the differential tax treatment of domestic and foreign investment returns is eliminated. In addition to more accurately quantifying the reform's impact, this allows us to verify that the reform did result in a large tax hike and could not be easily circumvented.

6.1 Identification and Estimation

We estimate the effects of removing the remittance basis on individuals who remain resident after the reform using a difference-in-differences approach similar to the emigration analysis. Again, we compare remittance basis users who were affected by the reform to other remittance basis users who have been living in the UK for a considerable number of years but not long enough to be affected. Identification relies on the assumption that outcomes for the treatment group would have evolved similarly to the observed evolution in the control group if treated individuals had not lost access to the remittance basis. In contrast to the aggregate-level emigration analysis, we conduct this analysis at the individual level.

We focus on people who claimed the remittance basis in 2017, the year immediately preceding implementation of the reform, because these are most likely to be affected. The treatment group consists of individuals who have been resident for at least 15 of the last 20 years, including 2017, or explicitly report being deemed domiciled in the tax return. The control group includes remittance basis users who have been resident for 10–12 years, to make sure all control individuals retain access to the remittance basis until 2020. To rule out compositional changes, we restrict the sample to individuals who are resident in each year considered. We limit the estimation window to 2014–2020 because enforcing a balanced panel over a longer period would reduce power.

We estimate pre-trends and reform effects using the following dynamic difference-in-differences specification:

$$Y_{it} = \sum_{\substack{k=2014 \\ k \neq 2017}}^{2020} \delta_k \times \mathbb{1}\{t = k\} \times T_i + \alpha_i + \gamma_t + \epsilon_{it}, \quad (2)$$

where Y_{it} is an outcome of interest for individual i in year t , α_i denotes individual fixed effects, and γ_t denotes year fixed effects. T_i is the treatment group indicator

defined above. Coefficients δ_k capture pre-trends for $k < 2017$ and dynamic treatment effects for $k \geq 2018$. The coefficient of pre-reform year 2017 is normalised to zero. By including individual fixed effects, we control for any time-invariant individual characteristics that could confound our effect estimate. Moreover, by focusing on remittance basis users close to the 15-year threshold set by the reform, treatment and control group are likely to have similar characteristics in general. Year fixed effects absorb any common year-specific shocks. Standard errors are clustered at the individual level.

For our main results, we regress outcomes in levels as this has several advantages: first, it accounts properly for zeros which is important as there are significant extensive-margin responses (Chen and Roth, 2024); second, it provides effect estimates in pound sterling amounts which accurately quantify the aggregate fiscal and economic impacts; third, it allows us to break down the overall effects on income into components to dig into the underlying channels and characterise the responses in more detail. To give a sense of magnitude, we also present relative effects in percent by dividing the coefficient estimates in levels by the counterfactual outcome in absence of treatment, constructed using the post-reform trend in the control group (e.g., as in Kleven et al., 2019).

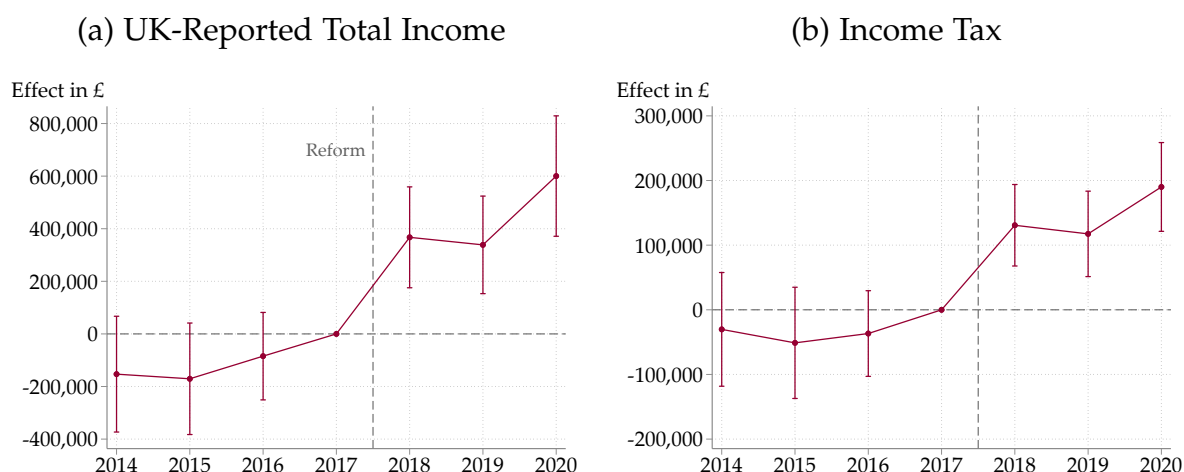
6.2 Effects on Incomes, Taxes, and Investments

Figure 4 presents the effects of the reform on UK-reported income and income tax liability of affected individuals who remain resident. Pre-treatment trends are flat, suggesting treatment and control group were on parallel trends before the reform. Appendix Figure A5 shows corresponding results for the extensive-margin effect, using an indicator for positive values as the outcome in Equation (2). Appendix Figure A6 shows the estimated effects when regressing the outcomes in logs. Appendix Figure A7 plots the mean in the treatment group and control group over time.

UK-Reported Total Income. After worldwide income comes into scope of the UK tax net, total income reported in the UK increases massively. By 2020, three years after the reform, it has risen by £600,000 on average (Panel (a) of Figure 4). That is a 56% relative increase over the counterfactual mean absent treatment of £1.07m. There is hardly any change over time in mean UK-reported total income in the control group. Summing up the average increase of £600,000 over the roughly 2,500 stayers we track here, this results in an aggregate increase in UK-reported income by £1.5 billion.

At the extensive margin, the share reporting any income in the UK increases by 4 percentage points, from a baseline of 96%. Thus, all stayers report positive income in the UK after the reform. There are no individuals left who report zero income after they lose access to the remittance basis.

Figure 4: Effects of Reform on UK Income and Tax of Stayers



Notes: Dynamic difference-in-differences estimates of the effect of losing access to the remittance basis on individuals who remain UK-resident. Panel (a) uses total income reported in the UK as outcome. Panel (b) uses income tax liability as outcome. Graphs display year-specific effects relative to pre-reform year 2017 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Estimation sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treatment group includes individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control group includes those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

UK Income Tax. The surge in reported income translates proportionally into tax revenue. On average, UK Income Tax liabilities increase by £190,000 (Panel (b) of Figure 4), representing a relative increase of 50%. When factoring in that treated individuals stop paying the charge to access the remittance basis after the reform, which cost £90,000 per year for most of them, the average increase in tax due is £105,000. These numbers underscore that the reform was effective at collecting more revenue from the targeted super-rich.

The large positive effects on income reported and tax paid in the UK are sustained across post-reform years, meaning that the public finances benefit from a persistent increase in revenue provided by these taxpayers every year. In addition, this suggests that the super-rich cannot perfectly substitute away from using the remittance basis to (legal) tax avoidance (or even illegal tax evasion), although it does not rule out tax planning responses at the time of reform (Alstadsæter et al., 2022).

Earnings vs. Investment Income. Estimating separate effects on earned income and investment income, we find that they account for an equal share of the rise in total income. As Figure 5 shows, both earnings and investment income increase by about £300,000 (Panel (a)). Compared to counterfactual untreated outcomes of £749,000 for earnings and £328,000 for investment income, earnings go up by 41% whereas

UK-reported investment income almost doubles (up 89%). The increase in earnings is much larger than the pre-reform average foreign earnings reported to the tax authority of £35,000, although by law they should have been reported in full. It seems unlikely that the reform triggered a large positive labour supply response, so we interpret the positive effect on earnings as evidence that foreign earnings were systematically underreported before the reform because they were not taxable in the UK. The substantial increase in investment income confirms that remittance basis users kept a large share of their investments abroad before the reform, in line with the incentives provided by a tax regime that leaves unremitted foreign investment income untaxed. The extensive-margin effects also look similar for earnings and investment income, with the share reporting positive values increasing by 5 percentage points for each (Panel (b)).

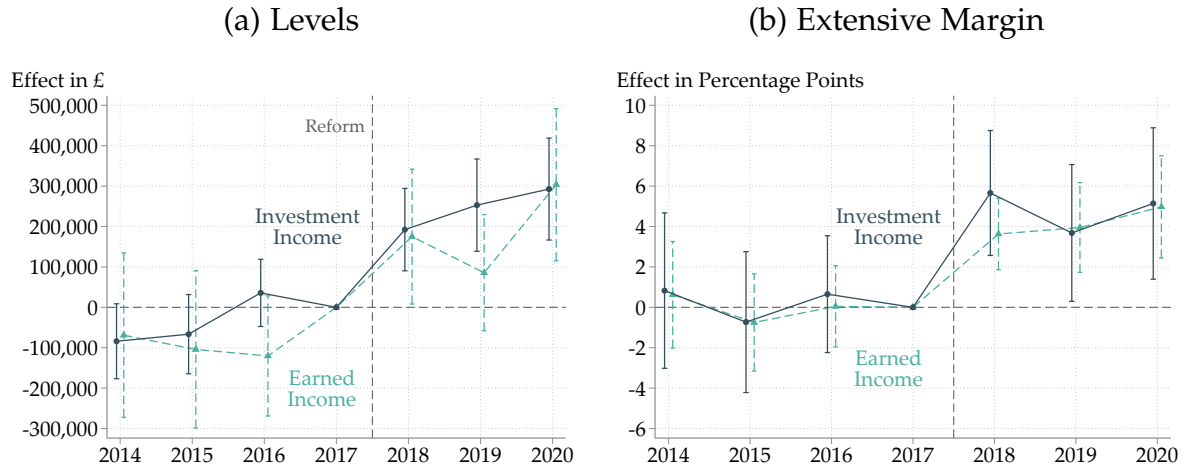
Foreign-Source vs. UK-Source Investment Income. To assess the economic impacts of the surge in investment income reported to the UK tax authority, the key question is whether it reflects a shift in real investment activity towards the UK or a mere increase in reporting of foreign investment income. While both of these actions have positive fiscal implications, the domestic economy only benefits from additional investment if assets previously held abroad are brought onshore. We break down investment income by whether it is derived from foreign-based or UK-based assets to disentangle the two responses.

We find that the increase in investment income is completely driven by income arising abroad which the affected stayers start to report to the UK tax authority after the reform. Panel (c) of Figure 5 shows that foreign-source investment income increases by £280,000, while the effect on UK-source investment income is very close to zero. Based on the 95% confidence intervals, we can rule out increases in UK investment income of more than £59,000 in any post-reform year. Panel (d) shows the extensive-margin results which tell the same story. The share reporting any foreign-source investment income shoots up after the reform, roughly doubling from a baseline of 37%. The effect on the fraction reporting any UK-source investment income is a precisely estimated zero, allowing us to rule out increases by more than 3 percentage points. The share with UK investment income remains completely flat at its pre-reform value of around 80%.

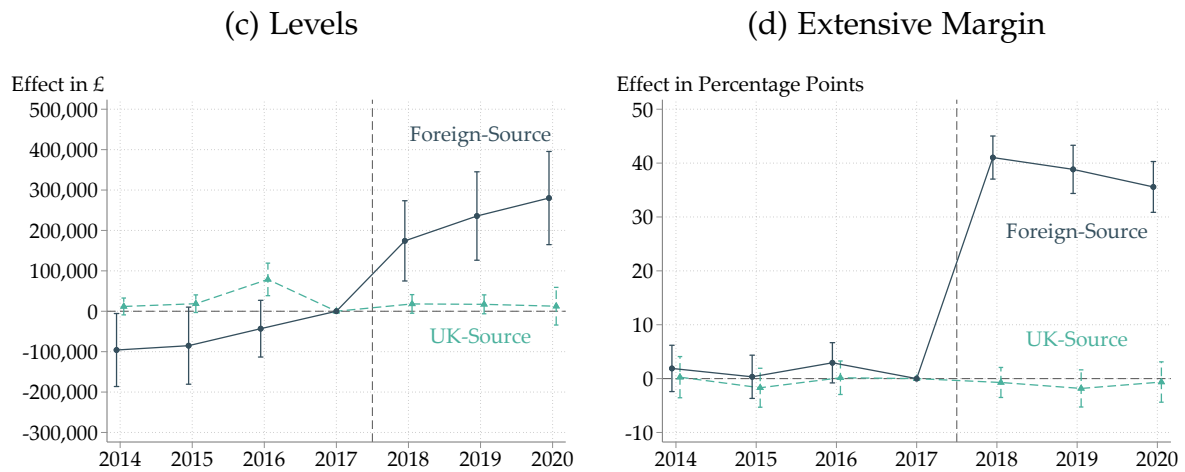
This implies that the removal of the disincentive for domestic investment has not led to any onshoring, even three years after the reform. The sizeable increase in reported investment income is entirely driven by foreign returns that the super-rich have to declare on their tax return after losing access to the remittance basis. This result highlights that temporary distortions of investment behaviour, which are a feature of many impatriate regimes, may have permanent effects.

Figure 5: Effects of Reform on Earnings and Investment Income of Stayers

I. Earnings vs. Investment Income



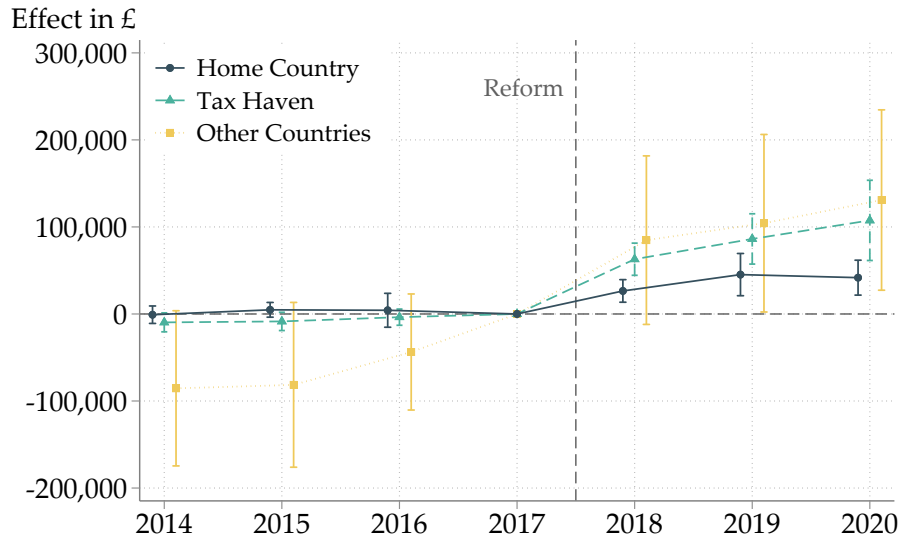
II. Foreign-Source vs. UK-Source Investment Income



Notes: Dynamic difference-in-differences estimates of the effect of losing access to the remittance basis on individuals who remain UK-resident. Panels (a) and (b) use earnings and investment income as outcomes, in levels and as an indicator for positive values, respectively. Panels (c) and (d) use foreign-source and UK-source investment income as outcomes. Graphs display year-specific effects relative to pre-reform year 2017 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Estimation sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treatment group includes individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control group includes those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

Figure 6: Effects on Foreign Investment Income of Stayers by Country Source



Notes: Dynamic difference-in-differences estimates of the effect of losing access to the remittance basis on individuals who remain UK-resident, splitting up foreign-source investment income into source-country groups. Graphs display year-specific effects relative to pre-reform year 2017 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Estimation sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treatment group includes individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control group includes those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

Decomposing Investment Income by Source Country. Do international investors actively use the remittance basis for tax avoidance or do they just passively benefit from the exemption of assets located abroad? To investigate this, we use granular information on the source country of investment income available in the tax records, checking whether investments are predominantly located in tax havens, where e.g. no withholding tax is due, or in other countries, especially in people's country of origin. We split up foreign investment income by whether it arises in an individual's home country (based on nationality), tax havens, or other countries.²⁰

²⁰Following Zucman (2013), our list of tax havens includes: Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Bahrain, Barbados, Belize, Bermuda, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Costa Rica, Cyprus, Dominica, Falkland Islands, Gibraltar, Grenada, Guernsey, Hong Kong, Isle of Man, Jersey, Lebanon, Liberia, Liechtenstein, Luxembourg, Macao, Malaysia, Malta, Marshall Islands, Mauritius, Monaco, Montserrat, Nauru, Palau, Panama, Pitcairn Islands, Saint Helena, Ascension and Tristan da Cunha, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Seychelles, Singapore, South Georgia and the South Sandwich Islands, Turks and Caicos Islands, Uruguay, US Virgin Islands, Vanuatu. If an individual's home country is a tax haven, we classify the country as home country for this person, not as a tax haven.

Strikingly, Figure 6 shows that tax havens account for almost 40% of the overall increase in foreign investment income, with a point estimate of £108,000 in 2020. By contrast, investment income arising in one’s home country makes up only 15% of the total effect, with an average increase of £42,000. Other countries account for the remaining £131,000. These findings suggest that the remittance basis is actively used for tax planning, shaping where investment activity is located, and does not merely provide a tax break on pre-existing investments.

7 Economic Footprint of Emigrants

Having established large and persistent increases in reported income and tax liability for individuals who stay, we turn to the effects on affected taxpayers who leave after the reform. Most of the empirical and theoretical literature on top-end migration (with the recent exception of [Jakobsen et al., 2024](#)) conceptualises migration as whole-sale relocation, but in practice it is possible to become non-resident for tax purposes without cutting ties altogether. This has important implications for the economic and fiscal impacts of tax-induced migration.

The 2018 reform offers a unique setting to study the economic footprint that the super-rich emigrating for tax reasons retain in their former country of residence. As it increased the annual emigration rate among those affected from 4% in 2015 to more than 10% in 2018, a large share of emigrants left due to the tax increase. Estimating the effects of emigration on their UK income and tax liability and examining the amount of time they still spend in the UK after emigrating allows us to assess the extent to which their economic and fiscal contributions are tied to their place of (tax) residency.

7.1 UK Incomes and Taxes

Identification and Estimation. We isolate the causal effect of emigrating after the reform on UK incomes and tax using a similar individual-level difference-in-differences strategy as in the previous section. We compare remittance basis users affected by the reform who leave to those who are unaffected and stay. This approach assumes that the post-reform evolution of outcomes in the group of control stayers is a good approximation of how outcomes would have evolved for tax-induced leavers, had they remained resident.²¹ We find pre-trend estimates close to zero for all outcomes, indicating that tax-induced leavers and control stayers moved in parallel before the reform.

²¹As we compare the effects of emigration on leavers affected and unaffected by the 2018 reform in Section 7.2, we are referring to the affected as “tax-induced” and to the unaffected as “not-tax-induced” emigrants throughout.

The treatment group includes individuals who claimed the remittance basis in 2017 and had been resident for at least 15 of the last 20 years at that point, and then became non-resident in 2018. We focus on those leaving in 2018 because the share of emigrants leaving *due to the reform* is highest in that year (see Figure 2) and it enables us to track the dynamic effects of emigrating over subsequent years. The control group is the same as in the stayers analysis, i.e., individuals who claimed the remittance basis in 2017 when they had been resident for 10–12 years, so they do not lose access to the remittance basis during the period 2014–2020, and who remain resident until 2020. We restrict the sample to people who had been resident in every year between 2014 and 2017 to rule out compositional changes.

We estimate a dynamic difference-in-differences specification that includes individual fixed effects and year fixed effects as in Equation (2). The only difference is that we use 2016 as reference year because some individuals leave already during tax year 2017 (although they remain resident for tax purposes in that year), so incomes start dropping in 2017. Standard errors are clustered at the individual level. Again, for our main results, we use outcomes in levels to properly account for zeros, but we also present extensive-margin responses. We report relative effects scaling the level estimates by the predicted counterfactual outcome absent emigration.

For the majority of emigrants, we have information on their UK incomes and tax payments from the tax return they file as non-residents.²² For the remaining leavers who do not file a UK tax return, we attribute a zero for all outcomes.²³ This imputation is accurate for earnings as UK earnings must be reported, but an underestimate for UK investment income because investment income other than rental income does not need to be reported if there is no other reason to file a tax return. Appendix Figure A8 plots mean outcomes among tax-induced leavers and control stayers over time.

UK-Reported Total Income. Figure 7, Panel (a) presents the dynamic effects of emigrating after the reform on the level of UK total income, while Panel (b) shows the corresponding estimates for the extensive margin. After emigration, we observe an average decline in total income reported in the UK among tax-induced leavers that gradually grows from £286,000 in 2018 to £415,000 in 2020. These effects correspond to stable relative decreases by 60% in 2018 and 58% in 2020, compared to the predicted counterfactual outcome absent emigration. At the extensive margin, the share reporting any income in the UK drops sharply after emigration, by about 35 percentage points, from a baseline of more than 90% to 55–60% where it stabilises. It

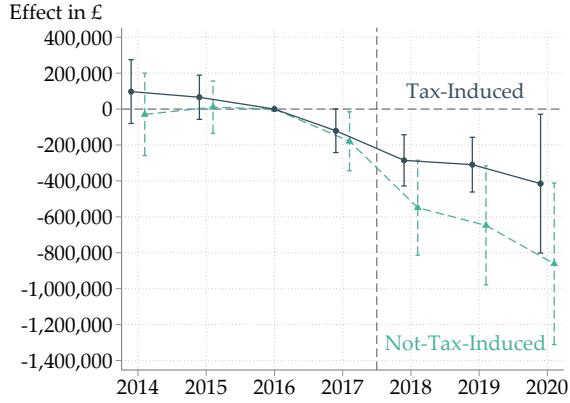
²²See Section 3.4 for more information on when non-residents file a tax return.

²³The share of non-residents who do not file a UK tax return is 24% in 2018, 38% in 2019, and 44% in 2020 (Appendix Table A1).

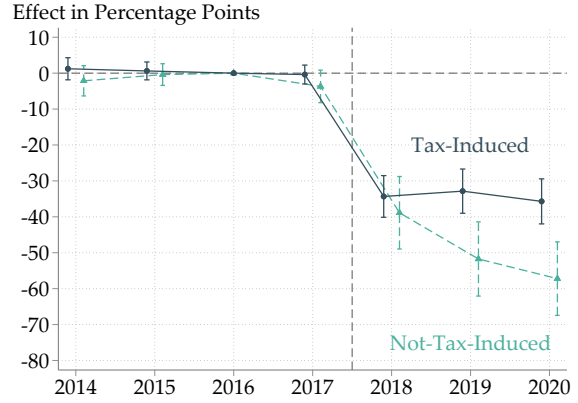
Figure 7: Effects of Tax-Induced vs. Not-Tax-Induced Emigration

I. UK-Reported Total Income

(a) Levels

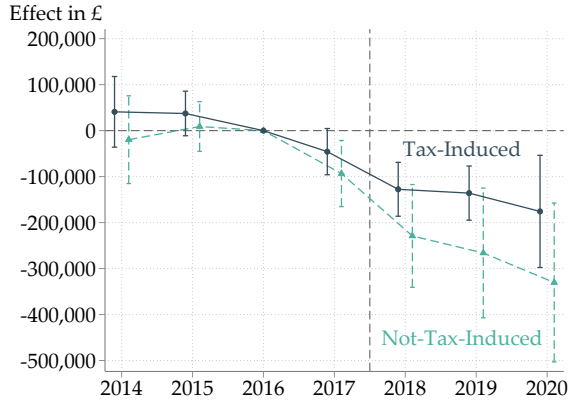


(b) Extensive Margin

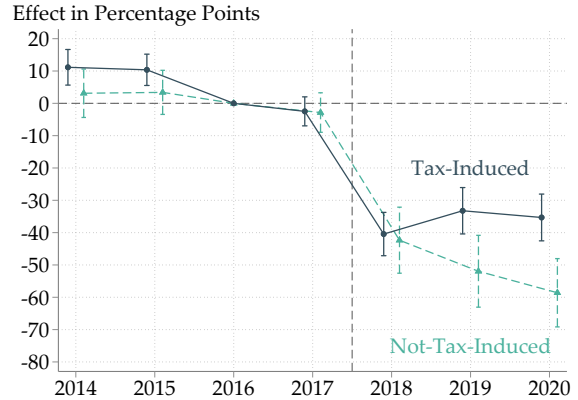


II. UK Income Tax

(c) Levels



(d) Extensive Margin



Notes: Dynamic difference-in-differences estimates of the effect of emigrating, comparing effects on individuals affected by the 2018 tax increase to effects on those leaving without being affected. Panels (a) and (b) use total income reported in the UK as outcome, in levels and as an indicator for positive values, respectively. Panels (c) and (d) use income tax liability as outcome. Graphs display year-specific effects relative to 2016 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Not-tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control group in both regressions includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Tax-induced sample includes 7,406 individual-year observations from 290 tax-induced leavers and 760 control stayers. Not-tax-induced sample includes 6,034 individual-year observations from 100 not-tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

is noteworthy that more than half of all tax-induced emigrants still report some UK income three years after giving up tax residency.

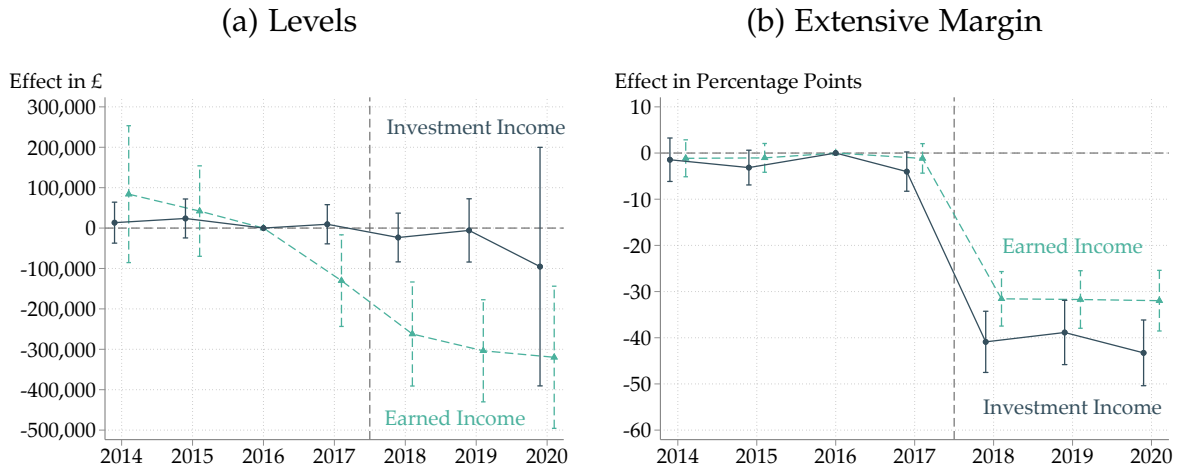
UK Income Tax. As Panel (c) shows, income tax paid in the UK decreases by £176,000 by 2020, representing a relative decline by 73%. When we factor in the charge to access the remittance basis, the drop is £250,000. The relative fall in tax is larger than in income because some of the reported income is not taxable in the UK. In line with the extensive-margin results for total income, the share of people paying any UK income tax declines by roughly 35 percentage points (Panel (d)). Around 40% of tax-induced emigrants still pay some UK income tax three years after leaving. While the fiscal impact of emigration is sizeable, it is significantly smaller than if one simply assumed that the tax liability of leavers immediately and persistently drops to zero. Consequently, prior work making this assumption tends to overestimate the negative effects of emigration on tax revenue.

Earnings vs. Investment Income. Figure 8, Panel (a) shows the effect of emigration on earnings and investment income levels. We see that the fall in total income is almost entirely accounted for by a reduction in earned income. On average, it declines by £320,000 after emigration among tax-induced leavers, corresponding to a relative drop by 72%. On the other hand, the overall level of investment income does not respond much to emigrating. All point estimates are close to zero, except for the one in 2020 that is noisily estimated. This null effect persists when we separately consider individual components of investment income such as dividends and rental income. But as Panel (b) shows, the share reporting any investment income does drop by 40 percentage points, so the (absence of an) average effect in levels likely masks some heterogeneity in responses.

The muted average response of investment income suggests that the reform did not cause the emigrating super-rich to move their investments out of the country. The sluggish response of investment mitigates the impact of super-rich emigration on the local economy. Across the stayers analysis and leavers analysis in this paper, we find that the location of investment seems to be largely independent of investors' tax residence, at least in the medium term.

Returning to the UK. Finally, we note that some of the 290 individuals affected by the reform who emigrate in 2018 return in subsequent years. Around 40 (13%) of them return to being resident in 2019, increasing to 50 (17%) by 2020 (Appendix Table A1). Hence, while there is some return migration, the vast majority of emigrants remain abroad three years after the reform.

Figure 8: Effects on Earnings and Investment Income of Tax-Induced Emigrants



Notes: Dynamic difference-in-differences estimates of the effect of emigrating after the 2018 reform. Panels (a) and (b) use UK earnings and investment income as outcomes, in levels and as an indicator for positive values, respectively. Graphs display year-specific effects relative to 2016 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Treatment group includes remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control group includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Sample includes 7,406 individual-year observations from 290 tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

7.2 Comparison with Not-Tax-Induced Emigration

Our setting allows us to examine whether the fiscal and economic effects of emigration are different for tax-induced leavers than for people who leave without being subject to any tax change.

Estimating Effects on Not-Tax-Induced Emigrants. To estimate the effects for not-tax-induced leavers, we follow the same difference-in-differences approach as before using as treatment group remittance basis users who are unaffected by the reform but leave nevertheless. Specifically, the treatment group includes individuals who claimed the remittance basis in 2017 when they had been resident for 10–12 of the last 20 years and became non-resident in 2018. The control group remains the same: remittance basis users in 2017 who had been resident for 10–12 years at that point and who remain resident until 2020. Hence, both treatment and control group do not lose access to the remittance basis in the period we study. Again, we only include individuals in the estimation sample who had been resident continuously from 2014 to 2017 to avoid compositional changes. Appendix Figure A9 plots mean outcomes among not-tax-induced leavers and control stayers over time.

UK-Reported Total Income. Panel (a) of Figure 7 shows that, by 2020, total income reported in the UK drops by £862,000 for not-tax-induced emigrants, compared to £415,000 for tax-induced leavers. This is not due to differential income levels before emigration: the relative decline for not-tax-induced leavers over the predicted non-emigration counterfactual is 95% – much larger than the 58% decrease for tax-induced leavers. Panel (b) and Appendix Figure A10 show that this difference is driven by smaller drops for tax-induced emigrants both at the extensive and intensive margin.

UK Income Tax. Consequently, the fiscal impact of not-tax-induced emigration is also larger. Panel (c) of Figure 7 shows that the income tax liability drops by £330,000 for not-tax-induced leavers. This represents a relative drop by 99%, so not-tax-induced emigrants almost completely stop paying income tax in the UK after leaving. This contrasts with a significantly smaller drop for tax emigrants of £176,000 in levels or 73% in relative terms. Even when accounting for the remittance basis charge that is higher for those who have been living in the UK for longer (i.e., emigrants affected by the reform), there is still a difference in the effect estimates of more than £100,000, and the relative drop is still 99% for not-tax-induced leavers, compared to 80% for emigrants affected by the tax change.

Earnings vs. Investment Income. Splitting up total income into earnings and investment income in Appendix Figure A11, we find that the differential effect is mainly driven by earned income. The £672,000 drop in earned income for not-tax-induced leavers, corresponding to a relative drop by 94%, is more than twice as large as the decline for leavers affected by the tax reform (£320,000). For investment income, we find no significant effect for either group.

Takeaways. Overall, the evidence suggests that the emigrating super-rich who are not responding to a tax increase reduce their income and tax liability in the country they leave close to zero. This is consistent with the common conception of migration as wholesale relocation. By contrast, emigrants pushed out by tax increases are much more likely to retain a sizeable economic and fiscal footprint. Taking into account these intensive-margin location decisions is important to accurately assess the economic and fiscal impacts of tax reforms.

7.3 Days Spent in the UK

To shed light on potential broader economic consequences of tax-driven emigration, we next consider the number of days emigrants spend in the UK after they cease being tax-resident. We focus on individuals who file a UK tax return as non-residents since they are required to report the number of days they have spent in the UK throughout the year. Around two-thirds of emigrants affected by the reform still file

Figure 9: Number of Days Spent in the UK After Emigration



Notes: Histogram of the number of days spent in the UK after emigrating in the post-reform period 2018–2020, as a share of the day threshold above which an individual would obtain UK tax residency. Day counts are measured in the first year after leaving. Tax-induced leavers are remittance basis users who have been UK-resident for 15–20 of the last 20 years. Not-tax-induced leavers are remittance basis users who have been UK-resident for 10–14 of the last 20 years.

Source: Authors’ calculations based on HMRC administrative datasets.

a UK tax return in the years after leaving. These data provide valuable insights into location choices beyond the binary decision of where to be tax-resident. We compute the number of days spent in the UK as a share of the maximum number of days an individual can spend without obtaining UK tax residency.²⁴ We aggregate the normalised day counts into three groups: spending almost no time in the UK (0–10%), spending some time (10–90%), and bunching below the residency threshold (90–100%).

Figure 9 shows the distribution of the number of days emigrants spend in the UK in the first year after leaving in the post-reform period 2018–2020, separately for emigrants affected and unaffected by the 2018 tax increase. Tax-induced leavers spend substantially more time in the UK after leaving than not-tax-induced leavers. Strikingly, the share using more than 90% of the residency threshold is 18% among affected emigrants but only 8% among unaffected emigrants. This is suggestive evidence of a tax planning response to the threshold as some of these bunchers would likely prefer to spend more time in the UK, but they need to restrict their day count to avoid becoming tax-resident again. Tax-induced emigrants are also much less likely

²⁴The maximum number of days depends on how many “ties” an individual has to the UK. We have information on the number of ties and calculate the appropriate threshold for each individual. For most remittance basis users, the threshold is 90 days.

to completely cut ties: the share spending fewer than 10% of the maximum number of days is 27%, compared to 46% amongst not-tax-induced emigrants. These findings underscore that emigrants keep spending substantial amounts of time in the UK, despite becoming non-resident for tax purposes.

8 Conclusion

Policymakers view large international migration responses by the super-rich as a key constraint on top taxes, a perception reinforced by high-profile anecdotes. Recent academic evidence has tended to find sizeable international migration responses to taxation for foreign high-earners but low responsiveness among domestic high-earners and the relatively wealthy (Kleven et al., 2013, 2014; Akcigit et al., 2016; Muñoz, 2023; Jakobsen et al., 2024). However, limited data availability means the best evidence for the super-rich has focused on mobility within countries (Moretti and Wilson, 2023; Baselgia and Martínez, 2024). Estimated responses by the super-rich are stronger, but it is an open question whether this is because the super-rich are different, or because internal mobility is generally larger.

By exploiting a UK reform that caused large increases in the tax liability for a subset of the globally connected super-rich, we are able to directly examine how internationally mobile they are in response to taxes. Our analysis has both a powerful first stage and compelling identification, leveraging exogenous differences across similarly high-income and high-wealth individuals within the UK. We find that emigration elasticities for the super-rich are modest, both in absolute terms and compared with existing estimates in the literature. While the baseline rate of migration is high enough to sustain the anecdotes, mobility in response to taxation is lower than commonly believed in public debate.

Our use of comprehensive administrative data allows us to provide three additional insights that are crucial for understanding the effects of the reform, and speak to policy concerns around similar regimes elsewhere. First, we show the reform led to major tax increases in practice. A key concern when estimated behavioural responses along one margin are weaker than expected is that this is merely driven by strong responses on some other, potentially unobserved margin (Slemrod, 1992). A modest emigration elasticity could then be explained by this well-advised group having alternative ways to reduce their tax bill. We show that this is not the case: those who stayed saw substantial hikes in income tax liability, with a mean increase of £190,000 or 50%.

Second, we are able to quantify the fiscal effects of emigration on the revenue raised by tax reform. We find that tax-induced emigrants had weaker local labour market ties and lower tax contributions pre-reform relative to those who stayed, and

that even after leaving they continue to pay some tax. This matters quantitatively: we estimate that the 2018 reform increased tax revenue by £311m in 2020. Excluding tax paid by non-residents would underestimate the revenue raised by 4%, and not accounting for selection would underestimate it by a further 11%.

Third, the elimination of the tax wedge between domestic and foreign investment did not result in the onshoring of investment. Many impatriate regimes have qualifying criteria that can distort behaviour. Moving to equal treatment after years of disincentive for domestic investment was insufficient to change investment behaviour. “Temporary” arrival regimes can thus have long-term consequences even once access to the regime ends.

A key contextual factor which contributes to the moderate elasticity we estimate is that most of the super-rich also have high labour income. Average earnings in the group are large enough on their own to put someone in the top 0.1% of the UK income distribution. This is consistent with both academic findings about the wealthy ([Smith et al., 2019](#); [Berman and Milanovic, 2024](#)) and examination of rich lists showing that the wealthiest people are active business owners ([Forbes, 2025](#)).

To the extent that the popular concern about super-rich emigration centres on individuals who primarily live off inherited wealth, and hence have weaker ties to any location, we find that this group is more responsive, in line with [Baselgia and Martínez \(2024\)](#) who focus on (intra-national) migration of the non-working super-rich. Yet, we also see that this group is relatively less important in fiscal terms. A fruitful area for further research is to examine whether they generate other externalities that could motivate a concern for attracting and retaining them ([Kleven, 2025](#)).

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Taxation and Migration by the Super-rich: Online Appendix¹

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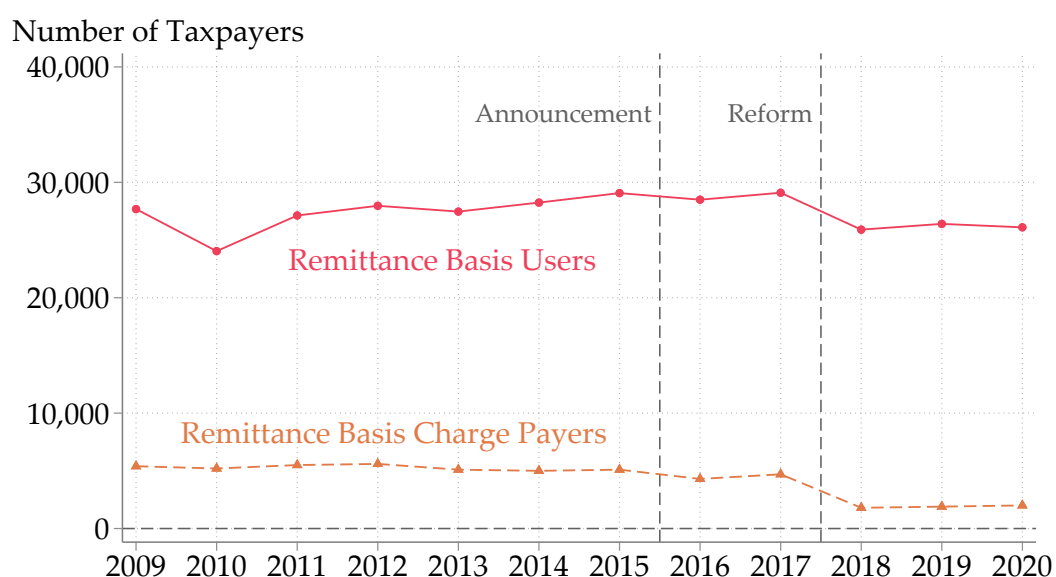
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Appendix A Additional Figures and Tables

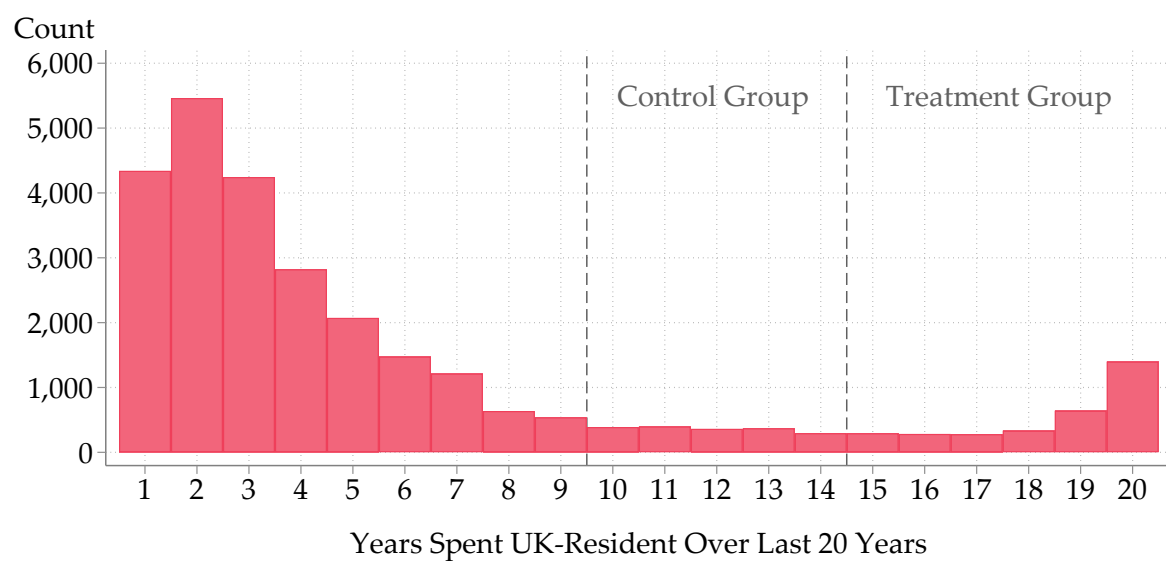
Figure A1: Number of Remittance Basis Users and Charge Payers



Notes: Number of individuals claiming the remittance basis and paying a charge to access the remittance basis, respectively. Remittance basis users are non-domiciled individuals who elect to benefit from remittance basis tax treatment and report having at least £2,000 in unremitted income. Their foreign-source income and gains are exempt from UK tax as long as they are not repatriated to the UK. The count of remittance basis charge payers is taken from HMRC Official Statistics. The number of remittance basis users is scaled to be consistent with HMRC statistics.

Source: Authors' calculations based on HMRC administrative datasets and HMRC Official Statistics on non-domiciled taxpayers in the UK.

Figure A2: Number of Remittance Basis Users by Number of UK-Resident Years Over the Last 20 Years



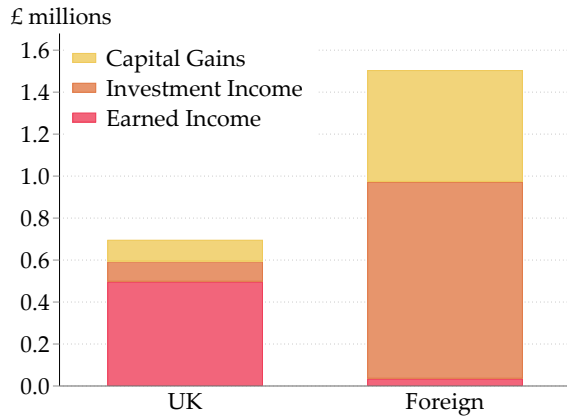
Notes: Number of remittance basis users in 2015 by number of years in which they have been UK-resident over the last 20 years. Individuals above the 15-year threshold lose access to the remittance basis after the 2018 reform. Number of years spent UK-resident is measured using annual administrative tax records, combined with information on year and month of arrival reported on tax form SA109 (see Section 3.2). Remittance basis users are non-domiciled individuals who elect to benefit from remittance basis tax treatment and report having at least £2,000 in unremitted income. Their foreign-source income and gains are exempt from UK tax as long as they are not repatriated to the UK.

Source: Authors' calculations based on HMRC administrative datasets.

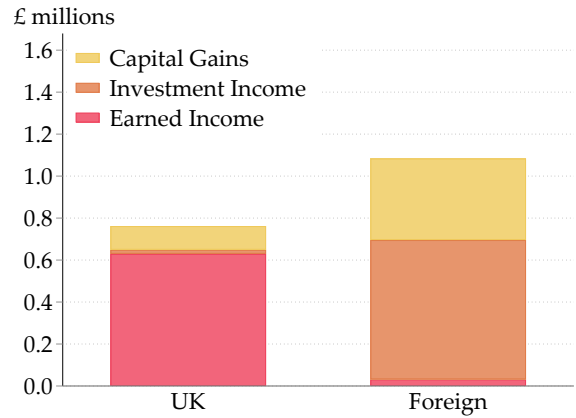
Figure A3: Pre-reform Characteristics in Treatment Group vs. Control Group

I. Mean UK-Source and Foreign-Source Income and Capital Gains

(a) Treatment Group

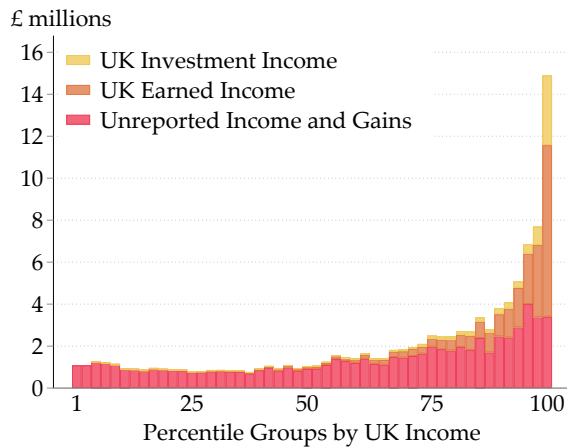


(b) Control Group



II. Worldwide Income and Gains by UK-Reported Income

(c) Treatment Group



(d) Control Group

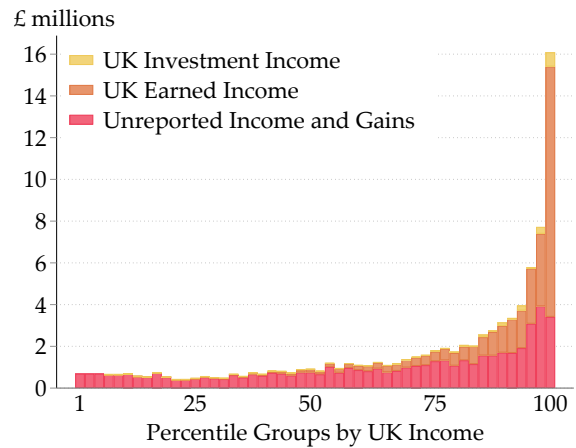
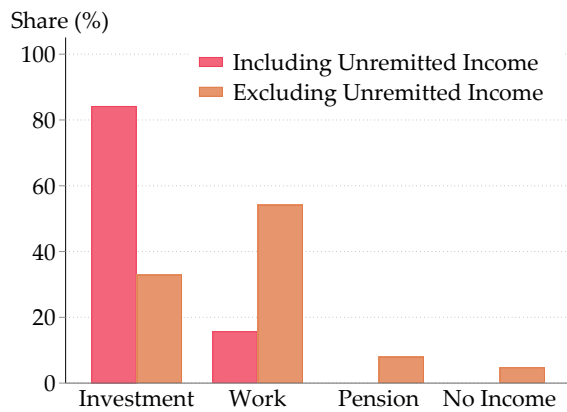


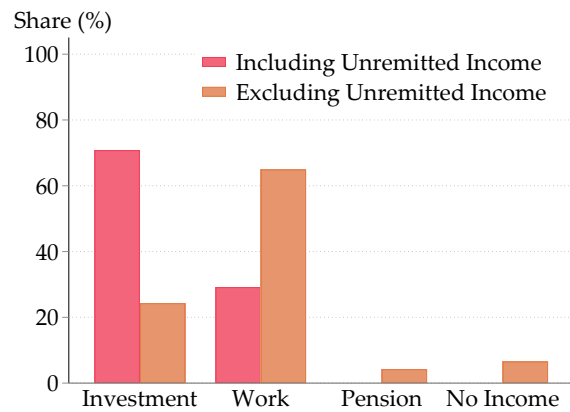
Figure A3: Pre-reform Characteristics in Treatment Group vs. Control Group (Cont.)

III. Main Source of Income

(e) Treatment Group

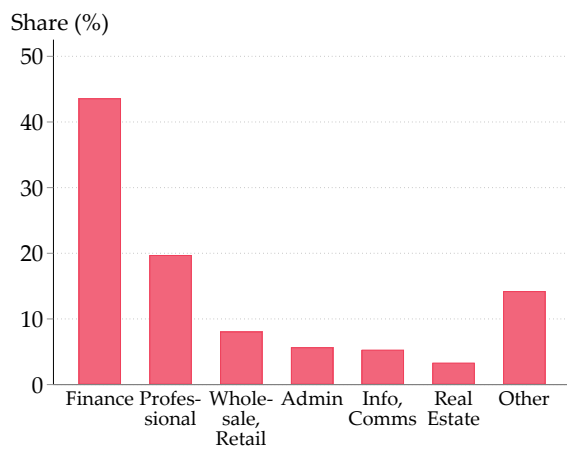


(f) Control Group



IV. Industry

(g) Treatment Group



(h) Control Group

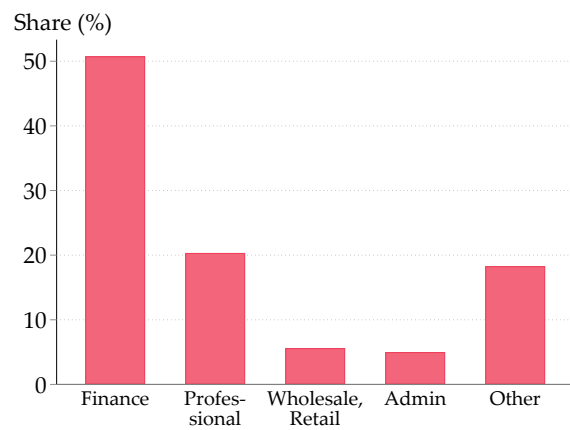
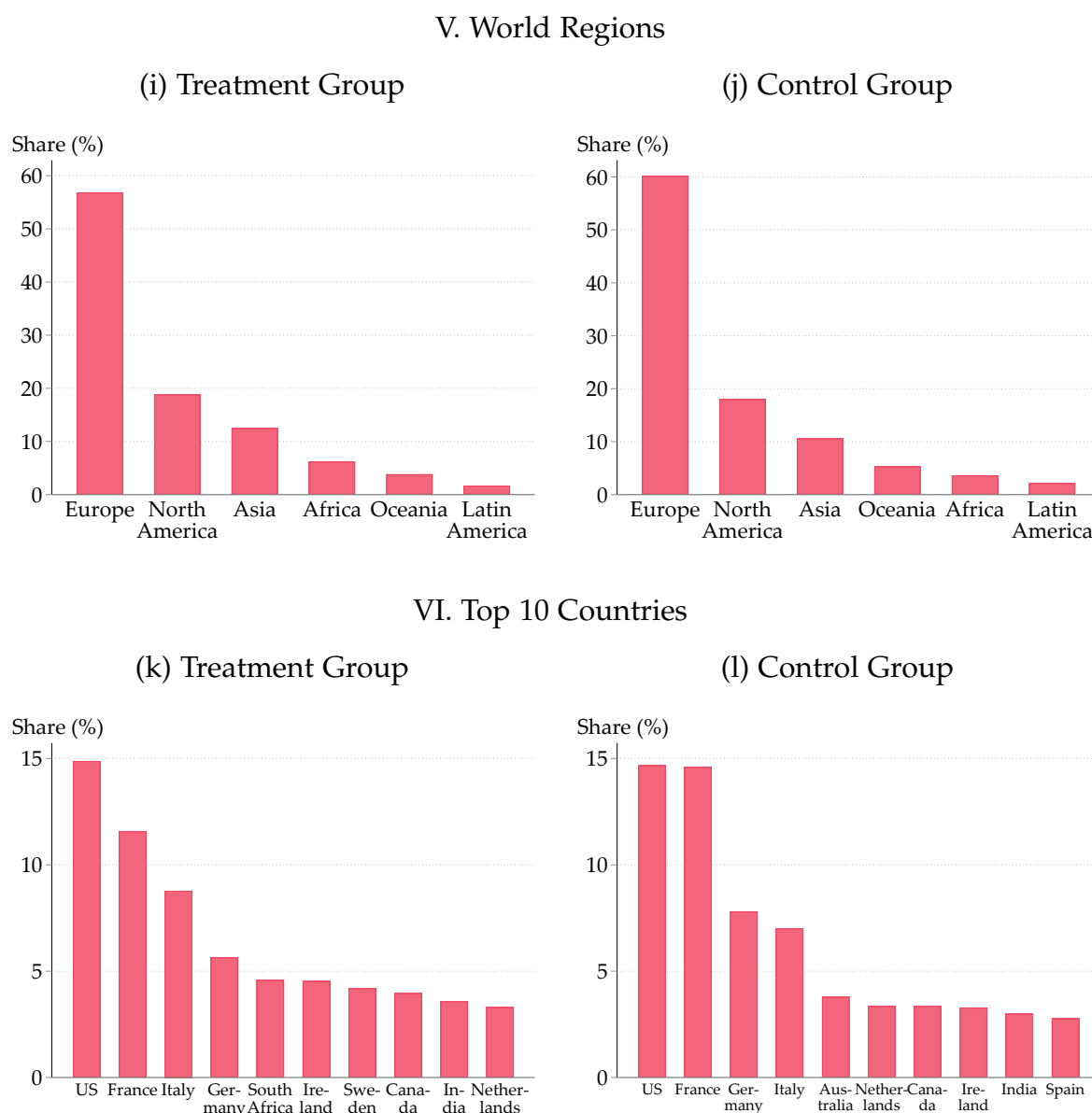


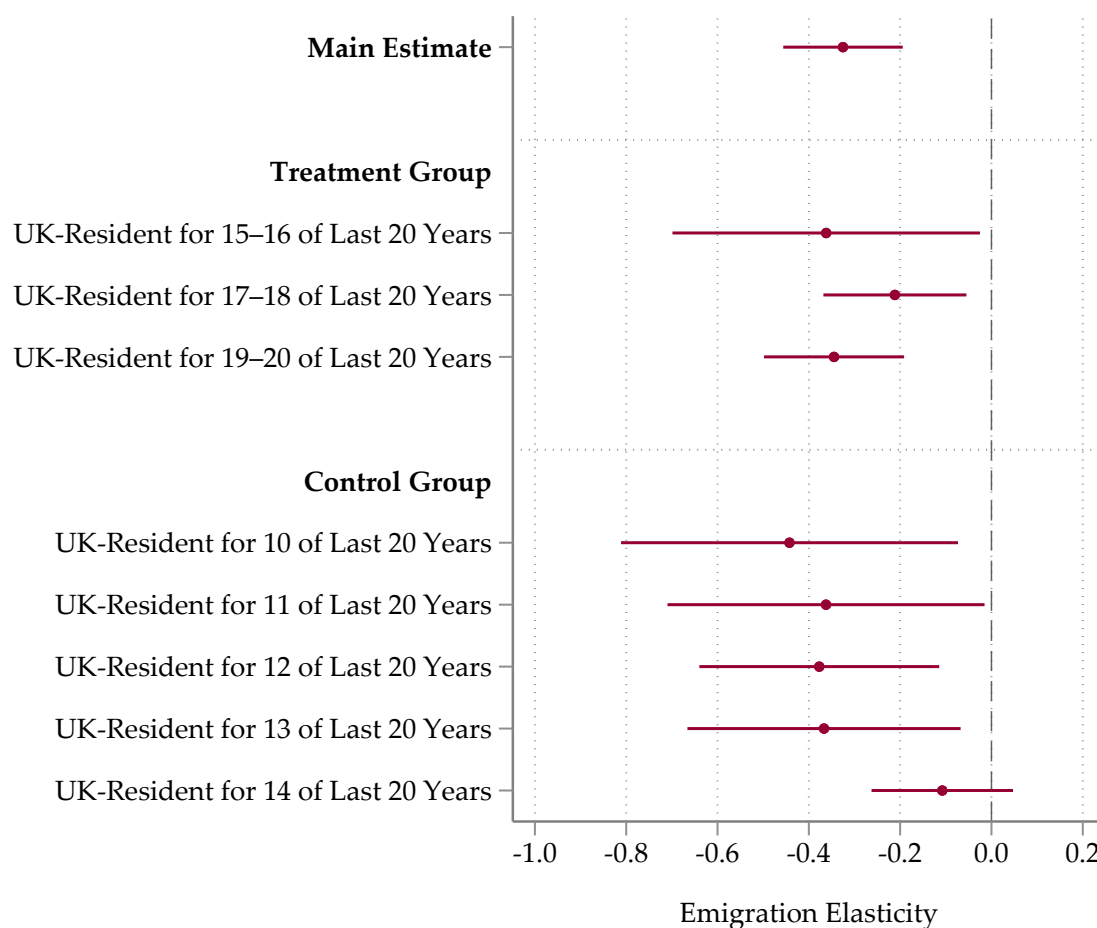
Figure A3: Pre-reform Characteristics in Treatment Group vs. Control Group (Cont.)



Notes: Characteristics of remittance basis users who have been UK-resident for 15–20 years (treatment group) and 10–14 years (control group) over the last 20 years. Data is from 2015, the last full tax year before reform announcement. UK income and gains, including foreign-source income and gains remitted to the UK, and foreign earnings are reported in tax filings. Unremitted foreign investment returns are estimated (see Section 3.3). Main source of income is identified from largest income source across employment, self-employment, partnerships, or owner-managed companies (grouped in “Work”), investment income, and pension income. “No income” represents those who report exactly zero income. Industry classification according to the Standard Industrial Classification (SIC) 2007 version is based on the largest source of earned income. Nationality as reported in the Migrant Worker Scan, supplemented by information from tax form SA109. For individuals reporting both a UK and foreign nationality, we use the foreign nationality.

Source: Authors’ calculations based on HMRC administrative datasets.

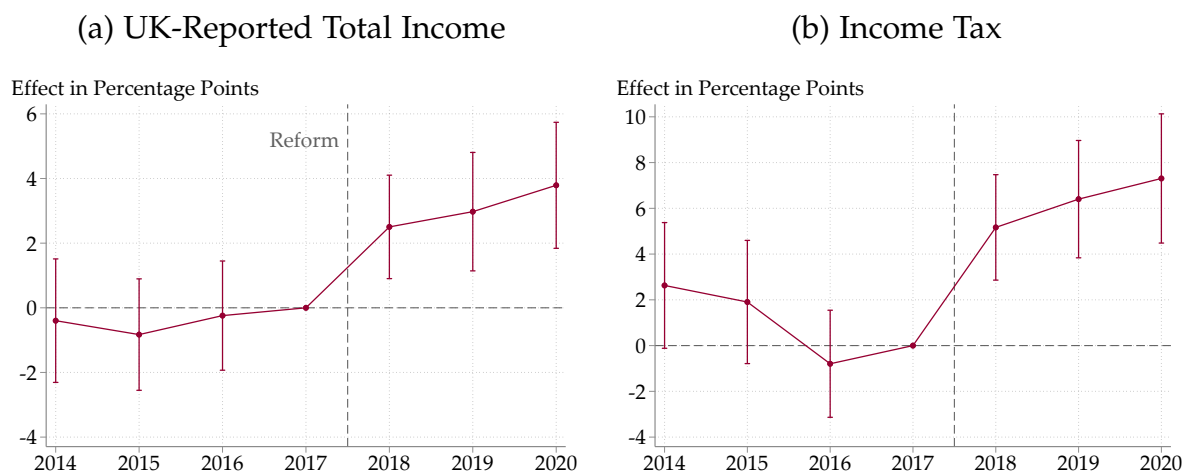
Figure A4: Sensitivity of Elasticity to Treatment and Control Group Definition



Notes: Sensitivity of the emigration elasticity, obtained from estimating Equation (1), to changing the definition of the treatment group and control group. Standard errors are heteroskedasticity-robust. Our main estimate uses remittance basis users who have been UK-resident for 15–20 of the last 20 years as the treatment group and remittance basis users who have been UK-resident for 10–14 of the last 20 years as the control group. The alternative estimates use different treatment or control groups as indicated in the figure. See Section 5.2 for more information on the estimation of the elasticity.

Source: Authors' calculations based on HMRC administrative datasets.

Figure A5: Effects on UK Incomes and Tax of Stayers – Extensive Margin



Notes: Dynamic difference-in-differences estimates of the effect of losing access to the remittance basis on individuals who remain UK-resident. Outcome is an indicator for having positive values. Graphs display year-specific effects relative to pre-reform year 2017 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Estimation sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treatment group includes individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control group includes those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

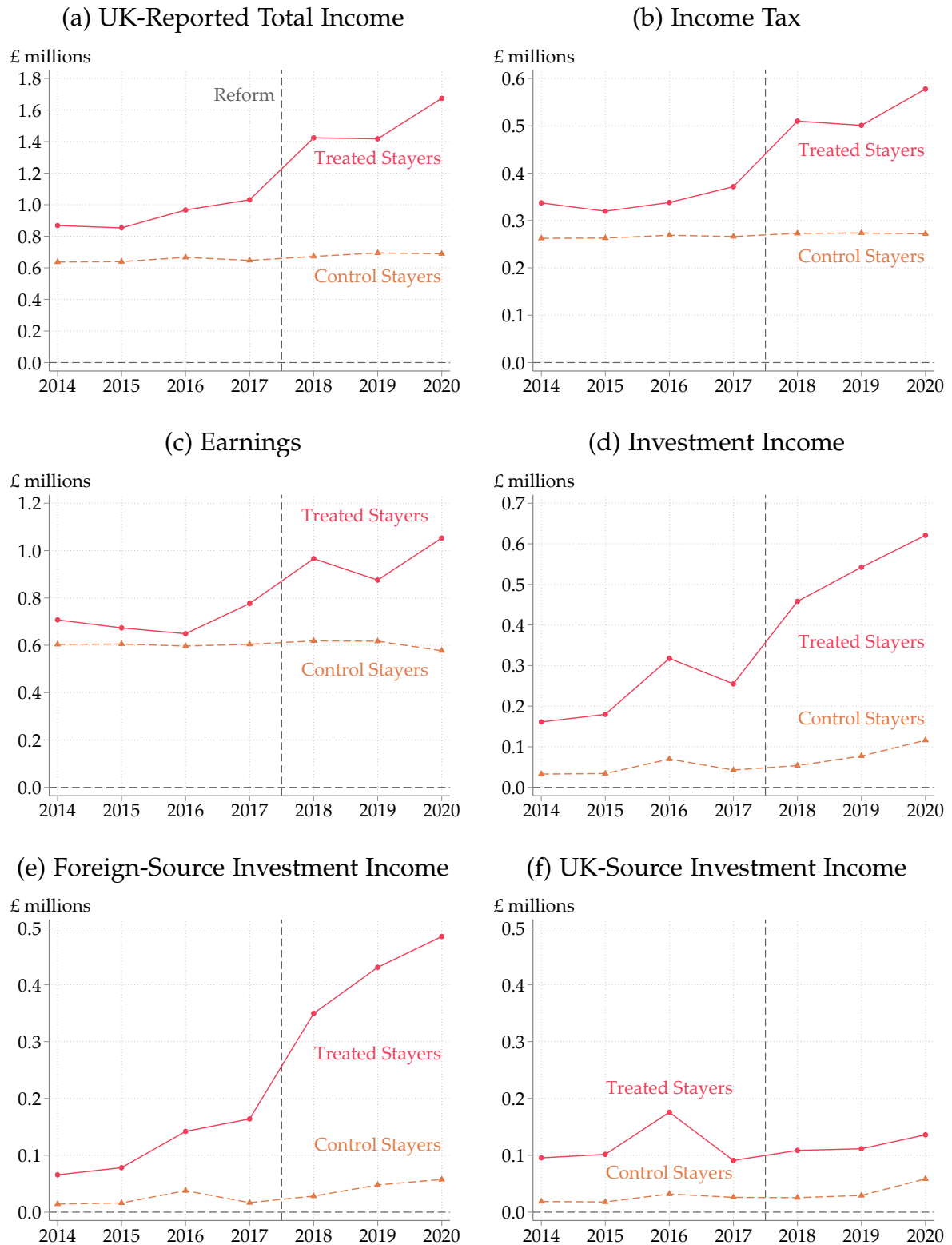
Figure A6: Effects on UK Incomes and Tax of Stayers – Intensive Margin



Notes: Dynamic difference-in-differences estimates of the effect of losing access to the remittance basis on individuals who remain UK-resident. Outcomes are in logs. Graphs display year-specific effects relative to pre-reform year 2017 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Estimation sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treatment group includes individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control group includes those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

Figure A7: Time Series of Incomes and Taxes of Stayers



Notes: Time series of means among individuals who remain UK-resident after the 2018 reform. Sample includes remittance basis users in 2017 who are UK-resident in all years 2014–2020. Treated stayers include individuals who have been UK-resident for 15–20 of the last 20 years in 2017. Control stayers include those who have been UK-resident for 10–12 of the last 20 years. Sample includes 22,015 individual-year observations from 2,464 treated and 681 control individuals.

Source: Authors' calculations based on HMRC administrative datasets.

Figure A8: Time Series of Incomes and Taxes of Tax-Induced Leavers



Notes: Time series of means comparing individuals affected by the 2018 reform who emigrate and unaffected individuals who remain UK-resident. Tax-induced leavers include remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control stayers include remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Sample includes 7,406 individual-year observations from 290 tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

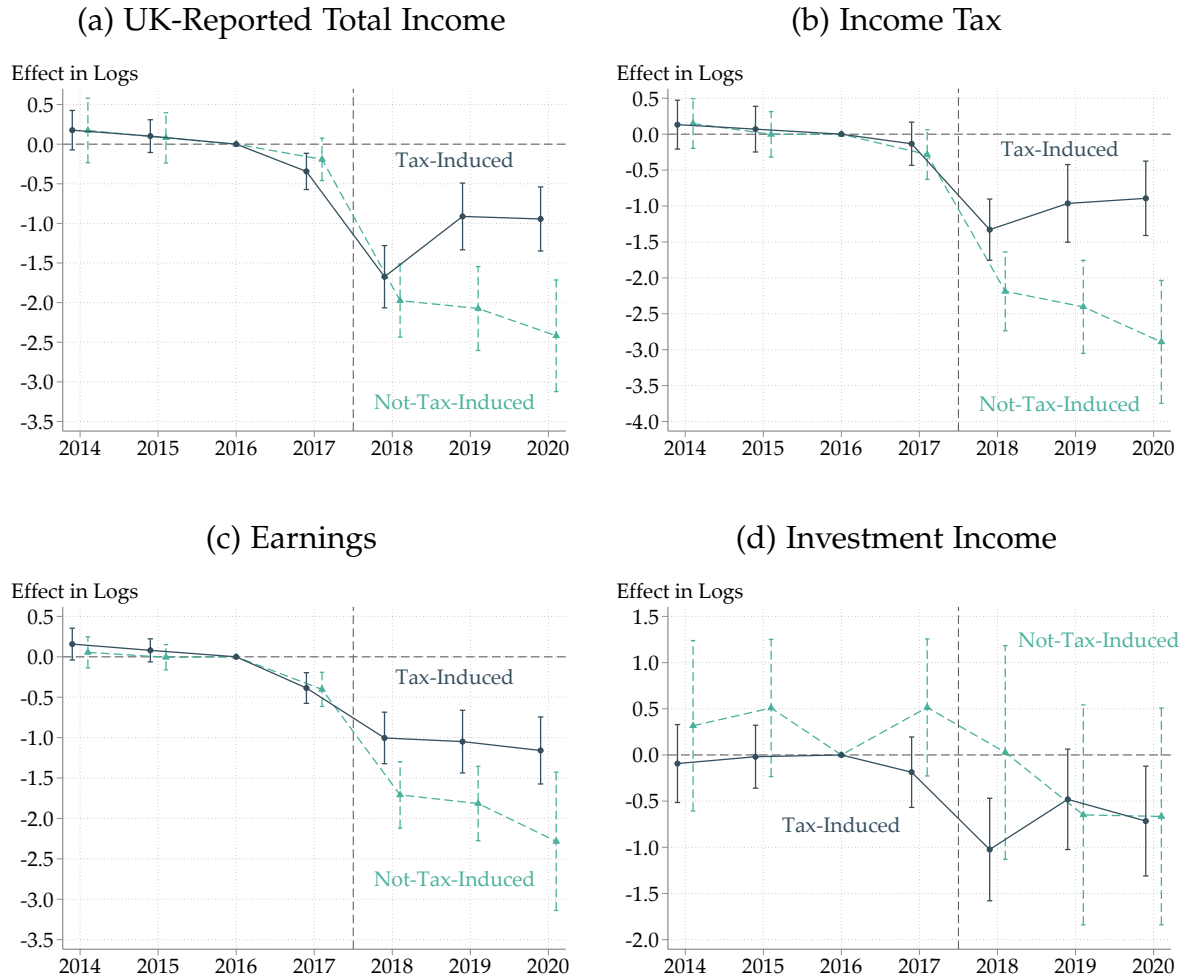
Figure A9: Time Series of Incomes and Taxes of Not-Tax-Induced Leavers



Notes: Time series of means comparing individuals unaffected by the 2018 reform who emigrate to those who remain UK-resident. Not-tax-induced leavers include remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control stayers include remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Sample includes 6,034 individual-year observations from 100 not-tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

Figure A10: Effects of Tax-Induced vs. Not-Tax-Induced Emigration – Intensive Margin



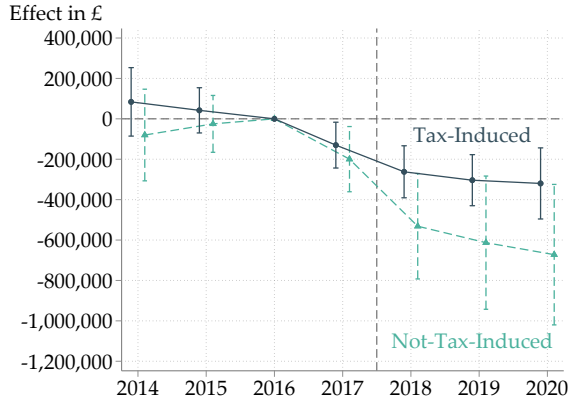
Notes: Dynamic difference-in-differences estimates of the effect of emigrating, comparing effects on individuals affected by the 2018 tax increase to effects on those leaving without being affected. Outcomes are in logs. Graphs display year-specific effects relative to 2016 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Not-tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control group in both regressions includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Tax-induced sample includes 7,406 individual-year observations from 290 tax-induced leavers and 760 control stayers. Not-tax-induced sample includes 6,034 individual-year observations from 100 not-tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

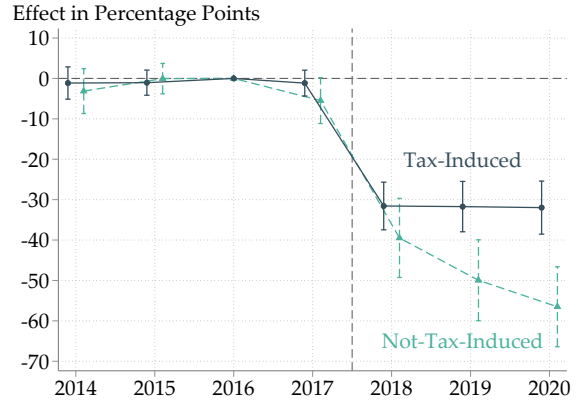
**Figure A11: Effects of Tax-Induced vs. Not-Tax-Induced Emigration:
Earnings and Investment Income**

I. Earnings

(a) Levels

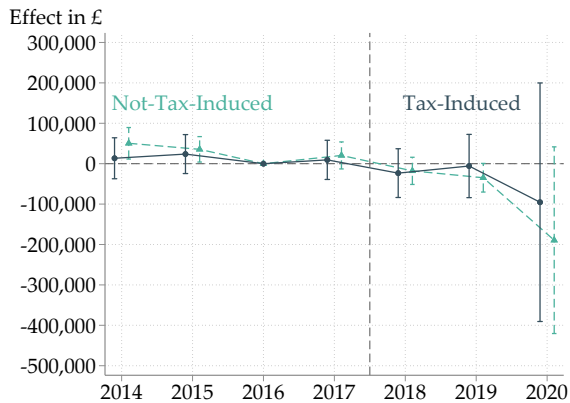


(b) Extensive Margin

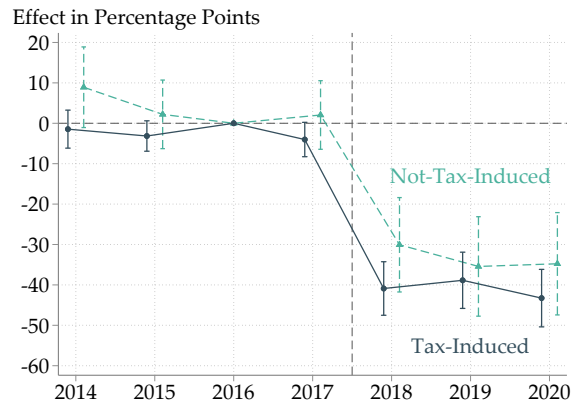


II. Investment Income

(c) Levels



(d) Extensive Margin



Notes: Dynamic difference-in-differences estimates of the effect of emigrating, comparing effects on individuals affected by the 2018 tax increase to effects on those leaving without being affected. Panels (a) and (b) use UK earnings as outcome, in levels and as an indicator for positive values, respectively. Panels (c) and (d) use UK investment income as outcome. Graphs display year-specific effects relative to 2016 and corresponding 95% confidence intervals, estimated using Equation (2). Standard errors are clustered at the individual level. Tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Not-tax-induced treatment group includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018. Control group in both regressions includes remittance basis users in 2017 who have been UK-resident for 10–12 of the last 20 years, and who are UK-resident in all years 2014–2020. Tax-induced sample includes 7,406 individual-year observations from 290 tax-induced leavers and 760 control stayers. Not-tax-induced sample includes 6,034 individual-year observations from 100 not-tax-induced leavers and 760 control stayers.

Source: Authors' calculations based on HMRC administrative datasets.

**Table A1: Number of Tax-Induced Emigrants
by Residency and Tax Filing Status**

| Year | Non-resident, Filing | Non-resident, Not Filing | UK-resident |
|------|----------------------|--------------------------|-------------|
| 2018 | 220 | 70 | 0 |
| 2019 | 160 | 100 | 40 |
| 2020 | 140 | 110 | 50 |

Notes: Number of individuals affected by the 2018 reform who emigrate in the first year after the reform, split into those who file a UK tax return while non-resident, do not file a UK tax return while non-resident, or return to UK residency. Sample includes remittance basis users in 2017 who have been UK-resident for 15–20 of the last 20 years, and who are UK-resident in all years 2014–2017 but non-resident in 2018.

Source: Authors' calculations based on HMRC administrative datasets.

Appendix B Tax Treatment of Remittance Basis Users

Whereas Section 2 describes the relevant institutional background, this appendix contains further details about the UK and international tax treatment of UK-resident remittance basis users (RBUs).

B.1 Further Details About Tax Treatment in the UK

Claiming Rules. Non-doms are required to declare non-dom status on their tax return where this is relevant to their Income Tax or Capital Gains Tax liability. Other than in exceptional circumstances, non-doms must also make a claim for the remittance basis on their tax return in each year in which it is used.⁵ This enables us to identify individuals claiming non-dom status and the remittance basis in the tax data.

Costs of the Remittance Basis. Claiming the remittance basis has some costs. Since 2009, RBUs forfeit their standard tax-free allowances for Income Tax and Capital Gains Tax, which are worth up to approximately £8,400 in saved tax, and they must pay a fixed charge of £30,000 if they have been tax-resident in the UK in at least seven of the previous nine years.⁶ Subsequently, the remittance basis charge was raised for individuals who have been UK-resident for at least 12 of the previous 14 years, to £50,000 in 2013 and £60,000 in 2016. The 2016 reform also increased the charge to £90,000 for RBUs who have been UK-resident for at least 17 of the previous 20 years. The charge can be paid using funds from a foreign bank account without that payment being treated as a remittance to the UK.

Inheritance Tax Benefits. Besides access to the remittance basis for foreign income and capital gains, non-doms are also exempt from UK Inheritance Tax (IHT) on their foreign assets. This exemption does not require a claim for the remittance basis but does require that the individual was not domiciled in the UK at the date of death.

B.2 Further Details About the 2018 Reform

Trust Protections. In July 2015, the Conservative Government announced the abolition of the remittance basis for non-doms who had lived in the UK for at least 15 years

⁵There are two cases in which non-doms are not required to make a claim in order to use the remittance basis. First, if their unremitted income and gains are less than £2,000 (s809D Income Tax Act 2007). Second, if: (i) they have no UK income or gains; and (ii) they did not make any remittances; and (iii) they are not liable to pay the Remittance Basis Charge (s809E Income Tax Act 2007).

⁶The personal allowance for Income Tax was £11,500 in 2018, but it was reduced by 50p for every pound in income above £100,000. The annual exempt amount for Capital Gains Tax was £11,300 in 2018.

(known as “deemed domiciles”) on the basis “that those who choose to live in the UK for a long time should pay taxes here like everybody else”.⁷ However, as enacted, the reform did not result in full parity, because non-doms could continue to benefit from some transitional provisions relating to trusts (known as “trust protections”), which were not available to UK domiciles.

These trust protections potentially allowed deemed domiciles to continue sheltering some foreign income and gains from UK tax after the reform, provided that they did not acquire a UK domicile as a matter of common law. However, compared with the remittance basis, the benefits of trust protections were limited in two key respects. First, they only applied to foreign income and gains arising from assets that had been settled in a non-UK-resident trust prior to the individual becoming deemed domiciled; if any assets were subsequently added to the trust, these protections were forfeited altogether (known as “tainting”). Second, trust protections only applied where the foreign income and gains were retained within the trust structure; if they were distributed to the settlor (or any other UK-resident beneficiary), then they were immediately taxable in the UK even if not remitted.

Consequently, trust protections only provided a temporary and limited benefit to individuals affected by the reform who planned to remain in the UK and who wished to spend their future foreign income and gains at some point (even abroad). The protections were potentially valuable to individuals who planned to leave the UK prior to making distributions from the trust. In practice, they may also have been used by individuals who planned to stay in the UK indefinitely and who intended to bequest (rather than spend) their accumulated foreign income and gains; however, since such individuals should by definition have acquired a UK domicile at common law, this use of trust protections would be at risk of challenge by the tax authority.

Inheritance Tax Changes. The 2018 package of reforms also included some changes to the IHT treatment of non-doms, but these were minor relative to the removal of the remittance basis. Before the reform, there was already a rule in place that non-doms who had been UK-resident for at least 17 of the previous 20 years did not have access to the IHT exemption on foreign assets. Hence, the reform only moved this cutoff down to 15 years. At the same time, the reform closed a loophole that had previously enabled non-doms to escape IHT on UK residential property that was held via a foreign company. The reform brought UK residential property into IHT for all non-doms regardless of their length of residence; consequently, it applied equally to the treatment and control group in our study.

⁷For more details, see the full text of the Summer Budget 2015: <https://www.gov.uk/government/publications/summer-budget-2015/summer-budget-2015> [accessed 20/01/2025].

Timeline of 2018 Reform. The 2018 reform to the non-dom regime was first announced at the July 2015 Budget, shortly after the General Election (May 2015) in which the Conservatives had unexpectedly formed a majority government. This announcement included the key features of the reform as eventually enacted and stated that these would apply from April 2017 (i.e., tax year 2018). A technical document released simultaneously with the Budget announcement indicated that trusts would benefit from transitional rules (i.e., what became “trust protections”), although it did not specify details.

There followed a period of uncertainty regarding the details of the reform. In particular, the government’s consultation response published in September 2015 did not include protections for trusts as had initially been indicated. A further consultation in August 2016 then did include provisions relating to non-UK-resident trusts, although their scope and application remained uncertain. Draft legislation was published in December 2016, with revised legislation published in January 2017 and March 2017. The final legislation was published in the Finance Act (No2) 2017, enacted in November 2017, partway through the 2018 tax year to which the reforms applied.

B.3 Foreign Taxes Applicable to Remittance Basis Users

RBUUs can spend an unlimited number of days in the UK and are usually not tax-resident in any other country. Since most countries levy tax on individuals on a residence basis, this means that RBUUs usually pay no tax on their foreign income and gains in any other country, except where: (1) they are liable to withholding taxes in the source country; or (2) they are also tax-resident in another country (i.e., they have dual residence); or (3) they are a citizen of a country that levies taxes on a citizenship basis (e.g., the US). We discuss each of these three cases below.

Withholding Taxes. The withholding tax rates applicable to foreign income and gains of RBUUs will usually be determined by Double Tax Conventions (DTC). The relevant convention will be the one between the UK and the country from which the income or gains are sourced (not the individual’s country of domicile or nationality). For example, the withholding taxes on US dividends paid to an Indian national who is resident in the UK and claiming the remittance basis will be determined by the UK-US DTC, not the UK-India DTC.

Since RBUUs are not required to report the source country of unremitted foreign income and gains to the UK tax authority, we do not observe this in our data directly. However, Figure 6 shows that a large share of the additional foreign income and gains reported by individuals immediately after losing access to the remittance basis flowed from tax havens, which usually do not levy any withholding taxes. This finding is

consistent with the incentive for RBUs to avoid locating their investments in countries that would levy withholding taxes.

Plausibly, the investment location decisions of RBU's could reflect some "home bias" in favour of their country of nationality. Table B1 shows the withholding tax rates applicable to income and gains from the top 10 countries ranking by nationality of RBUs in 2018, the year of reform. We see that the withholding tax rates on interest, dividends, and royalties under the UK's DTCs with these countries are typically close to zero.

Dual Residents. Where an individual is resident both in the UK (under the UK's tax rules) and in another country (under the tax rules of that country), the double tax convention between the two countries will apply a "tie-breaker" to determine which country has taxing rights. The UK has a double tax convention with all the top 10 countries by nationality of RBUs affected by the reform. The tie-breaker rule under Article 4(2) (which is substantially the same in all of these conventions) allocates tax residence to the country where the taxpayer has their "centre of vital interest". This test accounts for both personal and economic relations, and need not be the same as the country where the individual claims (for UK tax purposes) to be domiciled. For most RBUs affected by the reform, who by definition have been resident in the UK for more than 15 years, the application of this tie-breaker is likely to result in the UK being their country of treaty residence, meaning that they will not face taxes on a residence basis in the other country.

B.4 Tax Benefits for US Citizens

Although US citizens are subject to US taxation on their worldwide income, irrespective of their place of residency, US citizens who are resident in the UK still obtain significant tax benefits by claiming the remittance basis.⁸ This section discusses these advantages for US citizens in turn.

B.4.1 Tax Saving from Difference Between Top UK and US Federal Tax Rates

The wedge between UK and US federal tax rates will depend on the type of income and the relevant tax band. It can also depend on where the individual is resident within the UK, since Scottish residents face higher Income Tax rates than residents of England, Wales and Northern Ireland. Here, we only consider the wedge between the US and England. We focus mainly on the top marginal rates in each country since for high-income individuals these have the most significant effect on the total tax wedge. Rates are stated for 2018, the year of the reform.

⁸This is consistent with revealed preference as we observe a large number of US citizens living in the UK who choose to claim the remittance basis despite the costs of doing so (Figure 1).

Table B1: Withholding Tax Rates in the Top 10 Nationalities

| Source Country | Interest | Dividends [1] | Gains [2] | Royalties [3] | Property Income [4] |
|----------------|----------|---------------|------------------|---------------|---------------------|
| U.S. [5] | 0% | 5% / 15% | 0% / 0–20% | 0% | 0–40.8% |
| France | 0% | 0% / 15% | 0% / 0–40.5% [6] | 0% | 0–49% [7] |
| Italy | 10% | 5% / 15% | 0% / 0–20% | 8% | 10–43% |
| Germany | 0% | 5% / 15% | 0% / 0–50.5% [8] | 0% | 0–50.5% |
| South Africa | 0% | 5% / 10% | 0% / 0–18% | 0% | 0–46% |
| Ireland | 0% | 5% / 15% | 0% / 33% | 0% | 0–40% |
| Sweden | 0% | 0% / 5% | 0% / 22% | 0% | 30% |
| Canada | 10% | 5% / 15% | 0% / 25% | 0% / 10% | 25% |
| India | 15% | 10% | 0–30% | 10–15% | 0–30% |
| Netherlands | 0% | 0% / 10% | 0% | 0% | 30% |

Notes: Withholding tax rates applying to different types of investment returns in the top 10 countries by nationality of RBUs affected by the 2018 reform (Figure 1). [1] The lower rate applies to shareholders meeting some shareholding requirement (usually at least 10%) and generally only when paid to a corporation (though it could be an intermediate entity between the remittance basis user and the payer, unless it is treated as a conduit). The second rate applies to portfolio investments. [2] The higher rates apply to gains from real estate (usually including gains from disposal of shares deriving most of their value from real property). [3] Some DTC apply different withholding rates depending on the type of royalties. [4] Additional taxes on property might apply, but it is unlikely they would be eligible for FTC against UK income taxes. Whether they would be allowed as a deduction for computing foreign income subject to UK tax is uncertain. [5] US citizens are subject to US taxation on their worldwide income and generally do not have access to the withholding tax rates of the US-UK DTC (see Section B.4). [6] 19% CGT plus 15.5% social charges plus a maximum of 6% supplementary tax charge on gains exceeding EUR 50,000. There is taper relief granted for property held for more than 5 years, which can reduce the tax to nil after 22 years. [7] Top marginal income tax rate of 45% plus a maximum exceptional tax on high-income taxpayers of 4%. [8] Including top marginal income tax rate of 45% plus 5.5% solidarity surcharge but excluding church tax. If real estate has been held for more than 10 years, there is no tax on the capital gain.

Source: Authors' compilation based on tax treaty information from HMRC's tax treaties collection (available at: <https://www.gov.uk/government/collections/tax-treaties>) and EY Worldwide Personal Tax and Immigration Guide 2017-18 (available at: https://www.ey.com/en_gl/technical/tax-guides/tax-guide-library-archive).

Dividends. Dividends from US domestic corporations and qualified foreign corporations were taxed at the rates applicable to capital gains, with a maximum rate of 20%.⁹ A lower (15%) rate applied for those with income below \$425,800. In addition, high-income taxpayers were subject to a 3.8% Net Investment Income Tax.¹⁰ Thus, compared to the top UK tax rate on dividends of 38.1% in 2018, the tax wedge

⁹"Qualified foreign corporations" are those eligible for benefits of a comprehensive income tax treaty with the United States that the Secretary determines is satisfactory for purposes of this provision. In the latest version published by the IRS of the income tax treaties meeting this requirement, there were 56 countries (including most advanced economies), which suggest that the vast majority of dividends from non-tax havens should benefit from the 15–20% tax rate. See: <https://www.irs.gov/pub/irs-drop/n-24-11.pdf> [accessed 05/03/2025].

¹⁰This is a 3.8% additional tax which applies to high-income taxpayers (single filer above \$200,000 or married jointly filing above \$250,000). It applied on the lesser of the net investment income or the amount by which the modified adjusted gross income exceeds the thresholds for paying the Net Investment Income Tax.

was between 23.1 and 14.3 percentage points depending on the income level of the taxpayer.

If the dividend was from a non-qualified foreign corporation, it would be subject to the general federal top income tax rate of 37%, resulting in a tax wedge of 1.1 percentage points, which could be further reduced if the Net Investment Income Tax applied.

Interest and Property Income. Interest and property income were subject to the general US federal top income tax rate of 37%. Relative to the top UK tax rate on interest, this resulted in a tax wedge of 8 percentage points. At lower levels of income, the tax wedge could be larger: e.g., for taxpayers with income below £400,000 the tax wedge could be 10 percentage points, and for those with income below £160,000 the wedge could be 13 percentage points.¹¹ Both tax wedges could be reduced if the taxpayer was liable to the Net Investment Income Tax.

Employment Income. Employment income was subject to the general federal top income tax rate of 37%, resulting in a tax wedge of 8 percentage points. Again, the tax wedge could be larger at lower levels of income: e.g., for taxpayers with income below £400,000 the tax wedge could be 10 percentage points, and for those with income below £160,000 the wedge could be 13 percentage points.

B.4.2 US-UK Double Tax Convention

Although UK tax residents could further reduce their US taxation of US-source income by accessing the benefits of the US-UK DTC, for US citizens these would usually not be available as the US has incorporated the Savings Clause in all its tax treaty network. The Savings Clause is contained in article 1(4) of the US-UK DTC and states that the DTC will not affect the right of the US and UK to tax its residents and its citizens, except in regard to matters established in article 1(5). This clause is explicitly incorporated by the US to prevent US citizens or long-term residents from using a DTC to avoid taxation of US-source income.¹² Paragraph 5 of article 1, in turn, does not refer to any of the most relevant articles for the purposes of non-doms' US-source income, as it does not exempt from the Savings Clause any of the articles dealing with dividends, interest, royalties, or employment income.¹³

¹¹The top federal US tax rate in 2018 was triggered at \$500,000 (c. £400,000). For incomes above \$200,000 (c. £160,000), the federal tax rate was 35%, and above \$157,500 the tax rate was 32%. This is using single taxpayers; the amounts were different for married taxpayers filing jointly.

¹²See paragraph 111 of the OECD Model Tax Convention Commentaries.

¹³The exceptions to article 1(4) are articles 9(2) (corresponding adjustment to subsidiary income), 17(1)(b) (exempt pension income), 17(3) (statutory pension), 17(5) (alimony payments), 18(1) (unpaid pension scheme income) and 18(5) (UK pension schemes for UK employment), 24 (relief from double taxation), 25 (non-discrimination) and 26 (MAP).

B.4.3 Mistiming of Taxation of Carried Interest

There is a mismatch in the taxation of carried interest in the US and the UK which created an additional incentive to claim the remittance basis for private equity managers. This mismatch arises because the US taxes carried interest on an accrual basis (i.e., when the hurdle rate has been met, regardless of whether distributions have been made), whereas the UK taxes it on an arising basis (i.e., usually only once there has been a distribution from the fund). There can be a substantial lag between these two events, especially when the fund recycles proceeds from exiting its original investments into new investments.

This lag gives rise to cases where a foreign tax credit for the UK tax paid on the carried interest would not be available to offset the US tax liability on the same gains, because the deadline for claiming such credits had already elapsed by the time the UK tax liability was incurred.¹⁴ This situation could result in unrelieved double taxation leading to a worldwide effective tax rate on carried interest of over 50%.¹⁵ Although section 103KE of TCGA 1992 provides for the possibility of claiming a “just and reasonable” adjustment to UK tax on carried interest where another tax has been charged in relation to it, reliance on this provision has been described as “unsatisfactory and fraught with risk”.¹⁶

In this context, the remittance basis served as an important tool for mitigating the potential double taxation of US citizens who were resident in the UK, by exempting their foreign-sourced carried interest from UK tax (unless remitted to the UK), such that it would only be taxed (if at all) in the US.

B.4.4 US Limited Liability Companies

The US treats Limited Liability Companies (LLC) as pass-through entities, whereas the UK treats them as opaque for tax purposes. This means that the owners of the LLC incur US tax on their pro-rata share of profits as they accrue, but then if they are UK-resident, they must potentially also pay UK tax on the dividend when distributed. In such circumstances, they may also be unable to claim a foreign tax credit for the US tax paid, because the UK treats the tax paid in the US as a tax paid by the LLC on its profits, and not on the same income to which UK tax is applied (i.e., on the distributions from the LLC).

This hybrid mismatch can therefore result in double taxation when a US LLC is used by a UK-resident individual. There are two potential solutions, but neither is entirely satisfactory. First, the LLC could elect to be treated as opaque for US tax

¹⁴Generally, the US only allows the carry back of foreign tax credits for one year.

¹⁵For example, see: <https://www.withersworldwide.com/en-gb/insight/read/tax-relief-for-us-pe-managers-residing-in-uk> [accessed 05/03/2025].

¹⁶Ibid.

purposes. However, this is unlikely to be acceptable to other members of the LLC who are US residents. Second, the UK Supreme Court decision in *Anson* (2015) found in favour of allowing a foreign tax credit relief for the US tax, but the decision was based on the lower court's findings of fact leading to an uncertain application in other cases.

In these circumstances (similar to carried interest), the remittance basis served to mitigate the risk of double taxation for US citizens (and others) who were UK-resident and were receiving income from a US LLC. Removal of the remittance basis was correspondingly costly for such individuals.

Appendix C Methodology to Estimate Worldwide Income, Capital Gains, and UK Tax

In this appendix, we explain our approach to estimating the unremitted investment income and capital gains of remittance basis users, and the counterfactual tax revenue that they would be paying if they lost access to the remittance basis but remained in the UK. We use this to compute the change in the net-of-average-tax rate due to the 2018 reform, which we need to estimate the migration elasticity in Section 5.

Determining income, capital gains, and counterfactual tax paid of remittance basis users is challenging because unremitted investment income and gains do not have to be reported to the UK tax authority. Our methodology aims to leverage as much information from the tax data as possible, following a three-step approach: (1) we estimate a lower bound for unremitted investment income and gains exploiting policy features of the remittance basis regime; (2) we identify a comparison pool of similar UK-domiciled individuals; (3) we impute investment income, gains, and counterfactual tax as the average within the comparison pool. In the following, we consider each of these steps in turn.

C.1 Estimating Lower Bound

While individuals taxed on the remittance basis are not required to report their unremitted income and gains to the UK tax authority, we can calculate a lower bound given by the amount required to make it worth losing the UK personal allowance and/or paying a charge to access the remittance basis. As described in Section 3, the group of remittance basis users focused on in this paper has unremitted income of at least £2,000 by definition which provides an overall lower bound.

The remittance basis charge applies to individuals who have been living in the UK for a significant number of years. From tax year 2009, individuals who have lived in the UK for at least seven of the previous nine years must pay £30,000 to claim the remittance basis (“7-in-9 charge”). Since 2013, the charge for individuals living in the UK for at least 12 of the preceding 14 years has been increased to £50,000 (“12-in-14 charge”; further raised to £60,000 from 2016). In 2016 and 2017, a charge of £90,000 applied to remittance basis claimants who had spent at least 17 of the last 20 years in the UK (“17-in-20 charge”).¹⁷

We make the plausible assumption that individuals willing to pay a charge to claim the remittance basis save at least as much in tax on their unremitted income. The level of unremitted income implied by the tax saved depends on taxpayers’ marginal rate. The lower the tax rate that would be paid on the unremitted income

¹⁷The 17-in-20 charge became obsolete when the 2018 reform was implemented (see Section 2.3 for more details).

were it subject to UK Income Tax, the higher the income implied by willingness to pay the charge. Dividing the level of the charge paid by the top marginal income tax rate of 45% provides a lower bound estimate of the unremitted income of remittance basis claimants. The resulting lower bound estimates of unreported income are £67,000 for the 7-in-9 charge, £133,000 for the 12-in-14 charge, and £200,000 for the 17-in-20 charge.

Virtually all remittance basis users affected by the 2018 reform have been UK-resident for long enough to be paying the remittance basis charge. More recent arrivals who have been UK-resident for fewer than seven of the previous nine years are not yet required to pay the charge. From this population, some individuals will cease being a UK tax resident prior to reaching the threshold for paying the charge; others will stay in the UK and pay the charge; and a third group will stay but choose not to pay the charge and instead be taxed on the arising basis. For each remittance basis user with fewer than seven years of residence, we estimate the probability of paying a charge in the future. To obtain these probabilities, we first regress an indicator variable for paying a charge (separately for the 7-in-9, 12-in-14, or 17-in-20 charge) on individual-level predictors using data on all remittance basis users between 2009 and 2017. As predictors, we include age, gender, UK earned income, UK investment income, industry dummies, and mean house price in the local area of residence. As we do not want to impose linearity, continuous variables are split up into bins and included as indicator variables. We then use the estimated coefficients to predict the probability of current remittance basis users paying a charge in the future and factor these into our calculation of the lower bound.

Because the UK personal allowance is the income amount exempt from Income Tax, it can be directly added to the lower bound. The standard personal allowance equals £11,500 in 2018. It is reduced by £1 for every £2 of income above £100,000, so it drops to zero for taxpayers with UK reported income of at least £123,000. Since we can observe all income reported in the UK, we can account for the phasing out to calculate the correct personal allowance for every remittance basis user.

After obtaining a lower bound on unremitted investment income and gains, we calculate the lower bound on *worldwide* investment returns used in Step 2 by adding the remittance basis user's investment returns remitted to and reported in the UK.

The estimated lower bounds are conservative for three reasons. First, being taxed on the remittance basis makes it harder to spend foreign income and gains, since bringing them into the UK would make them subject to UK tax. Thus, it is likely that people only claim the remittance basis if it saves significantly more in tax than what is implied by the charge. Second, given the tax breaks available, e.g., lower tax rates on dividends, various deductions and reliefs, most top earners pay lower effective tax rates than the top marginal income tax rate ([Advani et al., 2023](#)). The minimum

income that would make it worth paying the charge is therefore likely to be higher, when the value of the charge is grossed up from the true lower effective rate. Third, we focus on the loss of the personal allowance and the cost of the remittance basis charge as the amount that non-doms forego by electing to pay tax on the remittance basis. This excludes the loss of other allowances, including for dividends, savings, and capital gains. To the extent that taxpayers would otherwise value and use these, we underestimate the cost of claiming the remittance basis, and hence underestimate the minimum level of foreign-source income that a remittance basis user must have.

The implication of this conservatism is that we are likely to underestimate the additional tax due if remittance basis users were to lose access to the remittance basis. This implies that our migration elasticities are likely to be overestimates, since we treat the observed migration as the response to a smaller shift in tax liability than it really would be.

C.2 Comparing to UK Doms with Similar Characteristics

As many remittance basis users will have significantly higher worldwide investment income and gains than the lower bound calculated in the first step, we obtain more refined estimates by comparing them to non-migrant UK-domiciled individuals with similar observable characteristics. We restrict the pool of UK doms to non-migrants because being domiciled for tax purposes is exogenous for them. Since UK doms are not eligible to claim the remittance basis, they must report their worldwide investment income in the UK. Our “donor groups” consist of UK doms with at least as much investment income as implied by the lower bound from step 1 who live in local areas with similar house prices, have similar levels of UK earned income, work in the same industry, and have similar age and gender as the remittance basis users.¹⁸

Specifically, within each of the different groups of UK doms defined by the minimum level of investment income, we regress total investment income (or capital gains or tax paid) on individual-level predictors including age, gender, UK earned income, industry, and median house price in the local area of residence. Again, we split up continuous variables into bins in order to estimate this flexibly.

C.3 Imputing Worldwide Income and Gains, as well as Tax Paid

We then use the estimated coefficients to predict worldwide investment income (or gains or tax paid) of the corresponding remittance basis users based on their observed individual characteristics. Unremitted income is calculated as the difference between this estimate and the value reported in the UK. Total worldwide income is computed by adding reported earnings because these are fully observed in the tax data.

¹⁸We use house prices at the level of Lower layer Super Output Areas (LSOA). This is a very granular measure as LSOAs have an average population of only around 1,500 individuals.