

THE MARKET FOR TAX HAVENS*

Sébastien Laffitte[†]

November 26, 2024

Abstract

I investigate the causes and consequences of tax havens using a novel database that tracks the creation and development of offshore legal institutions in 48 tax havens. First, I describe their rise and document key empirical patterns about their determinants. Then, building on the idea that tax havens are the suppliers in the market for offshore services, I study the role of demand, competition, and technological shocks in their development. Finally, I show that per-capita GDP gains in new tax havens come at the expense of non-haven countries' tax structure, where the relative taxation of labor relative to capital increases.

Keywords: Tax Havens, Taxation, International Taxation, Tax Avoidance, Tax Evasion.

JEL codes: H26, H73, H87, F39, N40

*This paper has received the Young Economist Award 2024 from the International Institute of Public Finance (IIPF). I would like to thank Pierre Boyer, Jakob Brounstein, Eva Davoine, Samuel Delpeuch, Antoine Ferey, Sébastien Guex, Niels Johannesen, Wouter Leenders, Isabelle Méjean, Vanessa Ogle, Mathieu Parenti, Thomas Piketty, Roxanne Raabe, Nadine Riedel, Emmanuel Saez, André Seidel, Jose de Sousa, Juan Carlos Suárez-Serrato, Farid Toubal, Guo Xu and Gabriel Zucman for helpful comments and discussions. I also wish to thank seminar participants at UC Berkeley, ENS Paris-Saclay, ECARES (Université Libre de Bruxelles), AMSE, THEMA, Ifo Institute, KU Leuven, King's College, EU Tax Observatory and conference participants at the Lausanne Conference on Tax Evasion, 2022 ASSA meetings, 9th Mannheim Taxation Conference, ADRES, CESifo Area Conference on Public Economics 2023, Barcelona's "Workshop on the Economics of Taxation", FIW Workshop on "Firms, Workers and Institutions in the Global Economy", Paris Working Group on Taxation, Oxford CBT's Annual Symposium 2024, and at the 80th Annual Meeting of the IIPF for useful comments and feedback. I thank the Booster program of the ENS Paris-Saclay and the Fulbright commission for financial support and ECARES and UC Berkeley for their hospitality during the writing of this project.

[†]THEMA, CYU Cergy Paris University, Email address: sebastien.laffitte@cyu.fr.

1 Introduction

The emergence of tax havens is one of the most important economic phenomena of globalization. Despite tax havens' being nonexistent in the 19th century, there are now almost 50 of them in the world, ranging from small islands in the Caribbean, Indian and Pacific Oceans to wealthy city-states such as Singapore and Hong Kong and developed countries such as Ireland, Switzerland, and the Netherlands. Tax havens are small countries, primarily located at the periphery of large markets, that offer opacity and low levels of taxation to individuals and corporations. Their use strongly influences the tax revenues collected in nonhaven countries from both individuals (Zucman, 2013, Alstadsæter et al., 2018) and firms (Hines and Rice, 1994, Tørsløv et al., 2023, Fuest et al., 2022, Ferrari et al., 2022). Because they facilitate tax evasion and tax avoidance, they also affect tax morale (Luttmer and Singhal, 2014, Besley et al., 2023), optimal tax policy (Piketty et al., 2014), and perceptions of tax policy (Stantcheva, 2021). On top of these effects on public finance, several studies have documented their impact on various socioeconomic outcomes such as inequalities of income and wealth, capture of rents by elites, and measurement of economic activity.¹

In this paper, I investigate the determinants and consequences of the emergence of tax havens. I build on two main ideas. The first is that tax havens result from the building of an *offshore legal architecture*, i.e., legal, political and economic institutions that allow them to provide offshore services. The concept of legal architecture is useful to illustrate that, beyond low tax rates, a country's enactment of a set of offshore regulations is a necessary condition for it to become a tax haven. An offshore legal architecture is composed of blocks, which I call *legal technologies*, that reflect tax havens' specialization. Legal technologies are a key input in the production function of offshore services: they are the legal tools, such as banking secrecy or tax-exempt trusts, that allow tax havens to supply these services in exchange for the payment of a low tax rate or a fee.² To become a tax haven, a country must introduce an offshore legal technology through a legal reform. Once a country becomes a tax haven, its legal architecture can be updated to attract more demand or to adapt to new regulations in nonhaven countries. Based on this idea, I collect data about reforms of the offshore legal architectures of 48 tax havens, identifying when these countries became tax havens (the *extensive margin* of offshore services supply) and when they updated their legal architecture (the *intensive margin* of supply). My primary sources are tax haven guidebooks written by tax lawyers. I complement these with a wealth of sources ranging from academic papers to advertising brochures from offshore

1. Zucman (2013) and Guvenen et al. (2022) have shown that tax havens affect the measurement of macroeconomic aggregates. They also affect inequalities and their measurement (Alstadsæter et al., 2019, Guyton et al., 2021), measurement of portfolio holdings (Coppola et al., 2021) and corporate control (Garcia-Bernardo et al., 2017, Fonseca et al., 2023) and allow the avoidance of financial risk regulation (Alfaro et al., 2020). Additionally, elites use tax havens to capture revenues (Andersen et al., 2017, Andersen et al., 2022) or avoid regulations (see Kollewe, 2022 on sanctions against Russia), with detrimental consequences for perceptions of government and elites in many countries (Guriev et al., 2021).

2. It is often assumed that provision of secrecy is not accompanied by tax revenue collection. However, users of offshore entities generally pay fees. Registering a trust in the Cayman Islands, for example, costs \$500 at registration and \$500 in annual fees. Hence, the offshore sector accounted for 33% of the Caymans' tax revenues in 2020 (Government of the Cayman Islands, 2021).

service providers. To my knowledge, this dataset is the first to provide a time-varying account of the emergence and evolution of tax havens while the literature generally relies on a constant tax haven indicator variable (Slemrod, 2008, Dharmapala and Hines, 2009).

The second main idea is that tax havens can be studied through the lens of market forces. They are the key suppliers in the market for offshore services. On the other side of this market, demand for offshore services comes from tax evaders in nonhaven countries who seek low tax rates, advantageous regulations, and secrecy. The market environment, such as demand shocks, technological shocks and competition shocks, therefore affect countries' incentives to enter this market by becoming tax havens. Based on this idea, I study the impact of these different types of shocks on tax havens' legal architecture at both the extensive and intensive margins.

I first study demand shocks. I show that demand for tax haven services has strong geographical determinants. Using leaked data from the Offshore Leaks about more than 800,000 offshore entities opened in tax havens (ICIJ, 2022a), I estimate a gravity equation and find an elasticity of the use of tax haven entities with respect to distance equal to one while sharing common legal and linguistic characteristics also matter. Therefore, I can use geographical variation to proxy countries' differential exposure to demand shocks: I construct the demand for offshore services addressed to a country as the average level of top marginal income tax rate in foreign countries weighted by (a function of) their distance to this country and their size. Intuitively, a country such as Switzerland receives more offshore demand from France than from a more distant country such as India and more from the U.S. than from an equally distant but economically smaller country such as Canada.

I explain the tax haven status of a country and its probability of passing a new reform by the level of offshore services demand it receives interacted with its size. This interaction with size comes from the fact, already discussed theoretically by Hansen and Kessler (2001) and Slemrod and Wilson (2009), that only small jurisdictions have an incentive to become tax havens. Intuitively, this is the case because developing the offshore sector crowds resources out of the productive sector. When the productive sector is small, as in the Cayman Islands, for instance, the losses in this sector are compensated by the gains in the offshore sector. In contrast, when the productive sector is large, the gains in the offshore sector do not compensate the losses. This is because these gains are largely independent of country size since the use of a tax haven generally excludes engagement in real productive activities in that country.

I find that demand shocks increase the probability that a small country becomes a tax haven and that this probability decreases with country size. Importantly, demand matters more for the passage of the first offshore legal architecture reform (the extensive margin of supply) than for the passage of other reforms (the intensive margin of supply), on which its impact is small and not significantly different from zero. An increase in demand by one standard deviation more than triples the (initially small) probability that a very small country becomes a tax haven. This effect becomes nil for a country in the 64th percentile of size. I show that this result is robust to an instrumental variable

strategy, to the use of different variables to capture demand (such as the introduction of taxation), to a change in the definition of demand, and to placebo tests.

I then turn to competition shocks. I leverage the quasi-natural experiment of British decolonization, which is plausibly exogenous to the level of supply and demand for offshore services and which increased the number of competing tax havens. Using an event-study design, I show a sizeable impact of a nation's becoming independent from the U.K. on the number of offshore tax reforms that it passes. Hence, independence waves can be used as exogenous events that spurred to the adoption of offshore architecture reforms in newly decolonized countries and increases in competition between tax havens (see Sævdal, 2022 for an historical account).

An increase in competition decreases rents in the offshore services market, which should discourage offshore architecture reforms. At the same time, it increases the incentives to innovate and update its offshore architecture. I show that this second effect dominates: increased competition pushes tax havens to update their legal architecture, similarly to how firms update their products in response to increased market competition. I further show that tax havens react to competition shocks by both updating legal technologies that are already implemented in the country and by introducing new legal technologies. This results helps clarify tax havens' dynamics when they face negative shocks to their rents, which also happens when anti-tax haven regulations are strengthened in nonhaven countries.

Finally, using the granularity of the offshore reforms database, I study technological shocks i.e. shocks on the cost of implementing a legal technology. I document strong diffusion patterns and heterogeneous diffusion across technologies. Then, I study the technological shock induced by the introduction in 1984 of the International Business Company law in the British Virgin Island. This legal technology is one of the most important offshore tool, now implemented in several tax havens. In an event-study framework, I show that countries closer to the shock gradually introduced the technology in their offshore legal architecture, boosting the development of the offshore industry. These results illustrate the key role played by legal technologies in tax haven dynamics.

What are the consequences of the offshore development strategy for the rest of the world? From an accounting point of view, the shifting of one dollar of tax base to a tax haven is neutral: the reduction in tax revenue in the nonhaven country is offset by an increase in tax revenue in the tax haven and a rise in private (post-tax) income. However, this ignores the externalities associated with government revenue: additional tax revenues in tax havens may spur economic development, increased private income might influence investment in the tax haven or in the nonhaven country, and lost tax revenues in nonhaven countries could negatively impact their GDP. Nonhaven countries can also react by endogenously adapting their tax policies (Keen and Konrad, 2013).

I first show in an event-study framework and with a generalized synthetic control method (Liu et al., 2022) that a country's becoming a tax haven positively impacts its GDP per capita.³ The findings reveal growth gains of 3.4 percentage points annually

3. This approach speaks to a recent literature that uses synthetic control methods to estimate the causal impact of historical events on country-level GDP (e.g., Abadie et al., 2015, Funke et al., 2023).

over 10 years for tax havens, resulting in a 40% long-term increase over the growth of their nonhaven counterparts. Furthermore, I provide evidence that this result captures changes in the real economy as demonstrated by the transition of tax havens away from the agricultural sector.

Then, I explore the impact of the exposure of nonhaven countries to tax havens. Building on the assumption that tax haven exposure is a function of geographical distance, I find that the exposure to nearby tax havens, on average, does not significantly affect GDP and total tax revenues in nonhaven countries. However, exposure to tax havens durably affects nonhaven countries' tax structure. Countries exposed to tax havens face constraints on the taxation of capital and therefore shift the burden of taxation from capital to labor, with important implications for economic inequalities. The tax revenues losses from the use of tax havens by mobile agents are compensated by increases in the taxation of less-mobile agents, such that total tax revenues remain unchanged. I conclude by arguing that tax havens can be analyzed as a revenue-neutral subsidy of mobile agents financed by a tax on immobile agents.

I rationalize these results about the demand for and supply of tax havens and their consequences in a conceptual framework inspired by the literature on legal capacity building (Besley and Persson, 2011). I study the decision of a government to become a tax haven given its own characteristics, the external demand for tax haven operations and competition in the market for offshore services. The framework also supports the use of geographical variation to identify these effects.

This paper is related to several strands of research. First, it is related to the public finance literature studying the role of tax havens in the global economy (Zucman, 2014). A key contribution is the construction of a novel dataset of offshore legal architecture reforms in tax havens. It allows to follow systematically the tax haven status of many countries across time and across several legal technologies, enabling the use of modern causal inference methods. Using this dataset, I study in depth the determinants of the rise of tax havens. If some theoretical papers discuss the causes of tax havens (Kanbur and Keen, 1993, Hansen and Kessler, 2001, Slemrod and Wilson, 2009), the most related paper is Dharmapala and Hines (2009), which studies the links between governance institutions and tax haven status using cross-sectional data. They argue that better-governed countries are more likely to be tax havens and that this is likely driven by ex ante superior governance before they become tax havens. My paper differs from theirs in that it emphasizes the role of market forces in tax havens' adoption of offshore architecture reforms and tests quantitatively this role using panel data.

By analyzing tax havens through the lens of the offshore services market, I propose a unifying framework to understand them. To the best of my knowledge, this analysis is the first attempt to establish a causal link between the rise in demand for offshore services and the reforms birthing new tax havens.⁴ In my paper, demand for tax havens is identified by the geographic variation in tax policies, emphasizing the importance of

4. While Desai et al. (2006) and Garrett and Suárez Serrato (2019) discuss the demand for tax havens, these papers are interested more in which firms demand tax havens' services and how elastic this demand is than in the endogenous consequences of this demand for tax havens' policies.

gravity links between high-tax countries and tax havens (see also Ferrari et al., 2022).⁵ I also show the importance of competition between tax havens, which has been mostly overlooked in the literature. Even if some theoretical frameworks have taken this competition into account (e.g., Slemrod and Wilson, 2009, Johannesen, 2010), only Elsayyad and Konrad (2012) focus their argument on it. By affecting rents, competition between tax havens pushes them to adapt by reinforcing their legal architecture, which is made possible by legal technology innovations. I further insist on the importance of these legal tools and show their key roles in the dynamics of the market for tax havens in the spirit of the literature that studies policy diffusion (e.g. DellaVigna and Kim, 2022). From a policy point of view, these mechanisms are important for our understanding of the consequences of international tax reforms. Such reforms should aim to prevent legal innovation on the part of tax havens by increasing the costs of potential new legal technologies.

This new dataset also allows me to provide new historical evidence on the emergence of tax havens in the 20th century, thereby contributing to the global history of offshore policies (Ogle, 2017, 2020).⁶ I also discuss quantitatively the role of decolonization on tax havens, contributing to the broader literature about public finance in the colonial setting (Frankema and Waijenburg, 2014, Cogneau et al., 2018, Xu, 2019).

In addition, this paper contributes to the understanding of the consequences of globalization for public finance by studying the long-term consequences of the emergence of tax havens. My results demonstrate that exposure to tax havens has long-term consequences for nonhavens' tax structure. This finding complements the papers studying the role of globalization and tax competition on countries' tax structure (Antràs et al., 2017, Egger et al., 2019, Bachas et al., 2022, Ferey et al., 2023, Thuncke, 2023, Bilicka et al., 2023). From the tax havens' point of view, I show causal evidence of how some countries took advantage of globalization and beggar-thy-neighbor policies to grow. This effect is in line with the results of Hines (2005) and Butkiewicz and Gordon (2013), whose evidence suggests a positive impact of a country's being a tax haven on its GDP. In contrast, Miethe (2020) finds no direct link between financial activity and local activity in tax havens, but he does not use shocks to tax havens' financial activity to establish this result. Importantly, these results contribute to the broader debate on the desirability of tax havens by simultaneously evaluating their domestic and foreign long-run consequences (see e.g. Hines, 2005, Slemrod and Wilson, 2009, Hong and Smart, 2010).

Finally, my paper contributes to the large literature about the links between institutions, taxation and development (Schumpeter, 1954, Besley and Persson, 2011, Martin and Prasad, 2014). In this vein, it is part of the literature that underscores the pivotal role

5. This result is obtained using Offshore Leaks data, also contributing to a scarce literature that uses and analyzes micro-level data from this source (Omartian, 2017, Garcia Alvarado and Mandel, 2022). In addition, leaks from tax havens have been used by Alstadsæter et al. (2019), Bomare and Le Guern Herry (2022), Brounstein (2021), Johannesen et al. (2022) and Londoño-Vélez and Avila-Mahecha (2024) for matching with administrative wealth records.

6. It complements the approaches followed by historical and political science scholars, see for instance Palan et al. (2009), Ogle (2017, 2020), Hollis and McKenna (2019), and Farquet (2021) for global approaches, Guex (2023), Guex (2021) on Switzerland, Rawlings (2004) on Vanuatu and van Beurden and Jonker (2021) on Curaçao.

of the law in shaping economic outcomes (La Porta et al., 2008, Pistor, 2019) by insisting on the role of the offshore legal architecture and of legal technologies for understanding tax havens' dynamic. This paper not only demonstrates the impact of tax institutions on domestic development but also sheds light on the cross-border influence of a country's legal institutions under globalization (Aidt et al., 2021), through demand, competition and policy diffusion channels.⁷ These findings permit a better understanding of regulatory competition. Notably, the concept of legal architecture and its examination through the lens of market forces could be applied to diverse forms of regulatory competition such as the competition for capital (Keen and Konrad, 2013), for environmental regulations (Copeland, 2008) or subsidy competition (Ferrari and Ossa, 2023, Slattery, 2024).

In the rest of the paper, I first provide institutional details and describes the construction of the data in Section 2. Section 3 presents stylized facts about the development of tax havens. Section 4 presents a conceptual framework for studying a country's incentives to become a tax haven. In Section 5, I study the role of demand, competition and technological shocks in the development of tax havens. Section 6 provides new results on the impact of a country's becoming a tax haven on its GDP per capita.

2 Legal architecture of tax havens

The existence of specific laws is necessary for tax haven activity in a territory, as they provide stability and predictability to the users of offshore services. I build a new dataset that tracks the construction of this offshore legal architecture in current tax havens. A country-by-country description of how I construct the dataset is provided in the online data documentation. I use both qualitative and quantitative information to understand how countries become tax havens. The new dataset is the result of a careful analysis and classification of the legal environment of tax havens.

My data collection is motivated by the lack of quantitative, time-varying, detailed and measurable information about tax havens. There are at least four reasons for this lack. First, tax havens operate secretly and do not disclose essential information on their activities as offshore centers. Second, many tax havens are small countries with small statistical offices or territories that depend on other jurisdictions. Third, comparability across different sources and over a long period is limited. Fourth, until now, researchers have focused mainly on tax haven's tax rates. These rates are often tailored to specific offshore structures and generally differ from the statutory tax rate (except when this rate is 0% for any activity). Archival information on these rates or on the fees collected for offshore incorporation is difficult to collect and harmonize for the reasons cited above.

Institutional context Following the terminology of Ogle (2017), the *legal architecture* of a tax haven is the set of laws that provide it with legal instruments to supply offshore services. Low or zero tax rates for specific types of income is a necessary condition for a country to become a tax haven.⁸ However, it is not a sufficient condition, as an

7. See also the notion of "law market" discussed by legal scholars (Ribstein and O'Hara, 2009).

8. Note that having a low tax rate on all types of income is not necessary. Some tax havens can have high tax rates on income of types other than those for which their offshore architecture and services are specialized.

offshore legal architecture is necessary to provide tools to create secrecy, provide flexibility and blur the links between the ultimate wealth owners and their offshore assets and revenues. It is only under the condition of the existence of an adequate legal architecture that an individual can benefit from a country's tax haven features without her evasion being detected by her origin country. For instance, Switzerland's bank secrecy law of 1934, which is central to its offshore legal architecture, was enacted partly to prevent foreign authorities from accessing details about Swiss bank activities following a tax scandal in which French authorities pressured Swiss banks for information (Guex, 2000).⁹ Tax havens' legal architecture is specifically designed to circumvent high-tax countries' regulations.¹⁰ In sum, my reliance on the concept of legal architecture turns on the idea that law is a central determinant of economic processes and institutions (see for instance Pistor, 2013 and Deakin et al., 2017 for legal analyses and La Porta et al., 2008 for economic analyses). The new dataset describes the development of such architecture and the rise of tax havens.

Tax havens can use many legal technologies to build their legal architecture. For instance, one of the most prominent examples are international business companies (IBCs).¹¹ IBCs can have only one founder, shareholder, and director, who can be the same person, and require no annual meetings. They are tax-free and require limited reporting and disclosure (e.g., financial statements are not necessary, and incorporation documents do not include the identity of the company's ultimate owners). The only condition for registering an IBC is that it cannot have any domestic activity. Banking secrecy, trusts, exempt corporations, and holdings are other examples of offshore legal technologies.

Legal technologies are introduced through reforms of the offshore architecture of tax havens. Many different types of such reforms are available to tax havens, and the menu of reforms implemented determines a haven's offshore specialization. Table I summarizes the different types of laws that I record. I classify them into five broad categories that follow their different possible uses. There are the legal technologies, such as trusts, that are used to directly circumvent personal taxation ("Personal"). Other types of technologies target firms to allow them to avoid corporate taxation ("Corporate"). However, in a world where a large share of income consists of business income or capital income, the frontier between personal and corporate taxation is porous and opens up opportunities for optimization and evasion (Alstadsæter and Jacob, 2016, Smith et al., 2019, Love, 2021). Some technologies widely implemented by tax havens are classified as "Dual", as they are equally used to circumvent corporate and personal taxation. This is, for in-

9. New Caledonia, a French territory in the Pacific, offers another interesting example of the importance of the legal architecture, beyond low tax rates, for the emergence of a tax haven. It was a no-tax jurisdiction, but because France was reluctant to make it a tax haven, offshore legal technologies have never been developed there, and it has never been considered a tax haven (Rawlings, 2004).

10. See, for instance, the case of the Cook Islands described in Harrington (2016).

11. The importance of IBCs is recognized by both scholars (e.g., Palan et al., 2009, Harrington, 2016) and professionals (e.g. Riegels, 2014, from the offshore law firm Harneys). In 2014, Appleby, a leading international law firm incorporated in Bermuda, wrote a blog post to celebrate the 30th anniversary of the law in the British Virgin Islands, recognizing that "one would be hard-pressed to find an example of a similar law that has had such profound and positive implications for the jurisdiction in which it was promulgated" (Kirk, 2014).

stance, the case of IBCs, which are tax-exempt companies with limited administrative requirements and high secrecy.

Table I – Types of legal technologies

Category	Legal Technology	Description	Examples
Individual 38 reforms	- Trust laws (★)	Legal disconnection between asset use and ownership	<i>Turks and Caicos Islands' Trust Ordinance 1990</i>
	- Other (★)	Tax abolition, for example	<i>Monaco's abolition of personal income taxes 1869</i>
Corporate 37 reforms	- MNE	Attraction of MNE activities and profits	<i>Ireland's Export Profits Tax Relief 1956</i>
	- Holding	Special regimes for holding companies	<i>Luxembourg's Loi sur le régime fiscal des sociétés de participations financières (holding companies) 1929</i>
	- Offshore insurance and captives	Self-insurance allowing revenue transfers to tax havens	<i>Barbados's Exempt Insurance Act 1983</i>
	- Flag of convenience	Limited regulations and tax rates for ships registered in an offshore maritime registry	<i>Panama's Law/63 on Foreign Ship Registration</i>
Dual 65 reforms	- IBC	Tax-neutral companies with no domestic activities and limited legal requirements	<i>British Virgin Islands' International Business Companies Act 1984</i>
	- Other exempt companies	Similar as IBC	<i>Jersey's Corporation Tax Law 1940</i>
Banking 38 reforms	- Offshore banking (★)	Unregulated banks with limited taxation and legal requirements	<i>Anguilla's Banking Ordinance 1991</i>
	- Bank secrecy (★)	Protects account holders from investigations	<i>Switzerland's Banking Act 1934</i>
Other 16 reforms	- Tax treaties (★)	Limitation of bilateral taxation, allowing conduit entities to benefit from treaties	<i>Netherlands Antilles's tax treaty with the Netherlands (Belastingregeling Koninkrijk) 1964</i>
	- Specific regulations (★)	Country-specific rules not classified elsewhere	<i>Bahamas's Hawksbill Creek Agreement 1955</i>

Note: This table classifies reforms by legal technology and broad category. The number displayed after the category name counts the number of reforms adopted in each category at the end of the sample period in 2000. The total exceeds the number of reforms recorded in the database as some reforms belong to several categories. Legal technologies highlighted with the symbol ★ are grouped together within a broad category to form a subcategory.

For offshore strategies to work efficiently, the tax avoider must maintain secrecy and hold her offshore revenues and wealth in a bank. Offshore banking therefore greases the wheels of the offshore industry. It is classified separately as it appears complementary to other types of technologies because it allows individuals and firms to hold revenues in offshore banks while keeping their identity secret thanks to banking secrecy. Finally, the "Other" category includes regulations that do not fall within the classic categories, illustrating the diversity of options available to countries to become tax havens.

In sum, my approach relies on the reforms implemented by tax havens to build and develop their offshore legal architecture. Indeed, the tax haven market is characterized by the significance of non-price characteristics of offshore services. While a price does exist in this market, typically as a tax rate or registration fee, such information is not only more challenging to gather but also less crucial for understanding the market's dynamics. A potential downside of this approach is that the supply of tax haven services may not be mediated through new regulations or that my data collection might miss some significant laws. This latter issue is especially relevant for countries with a long

and complex offshore history or for countries with federal systems, where offshore legislation can be enacted at subnational levels (see, for instance, the case of Switzerland, described in Guex, 2021). Note that these represent only a very limited number of countries among tax havens. In this case, one advantage of my approach, which can alleviate biases related to these country features, is that it relies on reports written by tax lawyers advising potential users of tax havens. This allows me to include in my sample only the laws that users perceive to be most relevant for their use of a tax haven; in turn, laws not reported in my data will not be particularly important for the building of the tax havens' legal structure.

A second potential limitation of my approach is that the introduction of new legal technologies through reforms does not directly capture the supply of tax haven services, only the legislation that enables it. For instance, tax havens might write laws that are not followed by an increase in the production of tax havens' services—because of poor quality, for instance. Importantly, at the end of this section, I provide evidence that new offshore reforms do increase (on average) the supply of tax havens services. In addition, as the purpose of this database is to record the construction of offshore institutions in tax havens through their legal architectures, it is crucial to record any important law, even one of low quality, as it marks a significant change in the willingness of a country to act as a tax haven.

Construction I collect new data on major reforms undertaken by tax havens to build their legal architecture. The dataset covers reforms that made countries tax havens (the extensive margin of offshore services supply) and subsequent reforms that updated their legal architecture (the intensive margin of supply). Countries may update their legal architecture to reinforce existing legal technologies or create new opportunities for offshore users by introducing new technologies. The dataset contains information about the date of these reforms, and the type of legal technology that is introduced.

The dataset includes 50 jurisdictions representing tax havens of different types and sizes worldwide. These countries today constitute the bulk of offshore services providers. They closely match those on tax haven lists used in the literature. Appendix Figure A.1 shows countries included as tax havens in this paper on a world map, and Appendix Table A.1 lists them. It also compares this list to eleven other lists aggregated by Palan et al. (2009) established by different institutions between 1977 and 2008. Except for Costa Rica, which is absent, the list in this paper covers all the tax havens mentioned in at least 4 of the 11 sources.¹² The data collection stops in 2000, which marks the end of the expansion of tax havens and the beginning of a phase of regulation in high-tax countries (Sharman, 2019).

The construction of the dataset relies on a wealth of information provided by the *Guide Chambost des Paradis Fiscaux* (Chambost, 2000) and the *Guide Mondial des Paradis*

12. More precisely, I started with the list of tax havens from Dharmapala and Hines (2009). To it, I added the Netherlands and Malaysia (in particular, the Federal Territory of Labuan), which are considered tax havens but are not included on their list. I did not include Belgium because of conflicting information on its role as a tax haven. Watteyne (2023) argues that Belgium's history as a tax haven ended after WWI. I did not include U.S. states such as New Jersey or Delaware, either. These states have mainly been considered local tax havens (see, for instance, Dyreng et al., 2013), though this might be changing.

Fiscaux (Beauchamp, 1992).¹³ Both books scrutinize the legal architecture of tax havens and carefully describe their different possible uses. They provide a detailed description of laws and regulations that allow a potential tax evader to move assets and revenues to the haven territory. Both guides meticulously describe the banking system along with the existence of de jure or de facto banking secrecy. The authors also provide information on the haven territory—its geography, population, economy, living cost, history and political system.

For each country, I collect the key dates that the authors identify as important in the construction of the country's offshore legal architecture. I then compare these dates between both sources to ensure that the identified dates are indeed perceived as significant. This alleviates potential bias that might arise from my relying on only one source and recovers complementary information about some regulations when the original text is insufficiently precise. To deal with these issues, I collect more information from external sources. As detailed in the online data documentation, more than 100 alternative sources are used to systematically cross-check and confirm any date obtained in the main sources. Sometimes, they also reveal the existence of reforms not mentioned in the main sources and then complement the dataset with original information. These sources are other guides to tax havens (e.g. Doggart, 1975), academic papers on specific countries or regions (e.g. Fossen, 2002 on the Pacific tax havens), or books about tax havens (e.g. Palan et al., 2009). I also use information from various *Financial Secrecy Index* reports (Tax Justice Network, 2020). Finally, I use several documents written by offshore service providers to advise their clients or inform them of different offshore opportunities (e.g. the "Fact Sheets" of Trident Trust, one of the world's largest offshore providers).

Finally, I could not find reliable and precise information on the offshore legal architecture of two minor tax havens, San Marino and the Maldives.¹⁴ Consequently, my dataset includes information about 48 tax havens for which I observe 141 reforms.

Data consistency To check the consistency of this new dataset, I investigate whether the implementation of new offshore architecture reforms leads to the provision of more offshore services. I proxy offshore services provision over time using micro-level data from Offshore Leaks (ICIJ, 2022b), which aggregates data from different leaks from tax-advising firms between 2013 and 2021 (ICIJ, 2022a). It includes micro-level information on more than 800,000 entities opened in several tax havens including the date when they opened and information on their owners. I use these data to count the number of offshore entities located in a tax haven i at date t . I detail the treatment of the data in Appendix D.

13. These books are available in French only. André Beauchamp and Édouard Chambost are international tax lawyers specialized in the use of tax havens. Chambost wrote eight different editions of his book from 1977 to 2005. They are translated in 9 languages. He is specialized in the creation of tax (avoidance) schemes between jurisdictions (http://www.edouard-chambost.com/picture_library/chambost_articles_recadrer/1998-1999/1998_paradis_fiscaux_ou_sanctuaire_suisse.pdf).

14. As shown in Appendix Table A.1, the Maldives appear on only three tax havens lists and San Marino on only one. Chambost (2000) devotes only two lines to San Marino to write that he does not consider it a tax haven, as confirmed by Beauchamp (1992) ("if San Marino has an old reputation of tax haven, the republic has taken very few actions to justify it", p.549, own translation). The Maldives are not covered in the main sources.

I run an event study to investigate whether a new reform in a country i at date t has any effect on the number of offshore entities located there. This exercise focuses on the implementation of reforms introducing IBCs because this is the type of legal technology most likely to be covered by Offshore Leaks. In appendix Figure A.10, I find that following a reform adoption, the number of offshore entities recorded in Offshore Leaks increases by 200% after 10 years. This effect appears immediately after the reform and increases over time, while the prereform coefficients are close to zero and not statistically different from zero. This figure shows, using two independent data sources, that reforms of tax havens' legal architecture give rise to an increase in tax haven services provision in these countries. This result supports the consistency of the data. Details about this exercise are provided in Appendix E.

Additional data I complement the information on tax havens' legal architecture with additional data. I collect data about each territory history as a sovereign state (independent, non independent and/or colony), about the date of introduction of six different modern taxes to measure the extensive margin of taxation (from the Tax Introduction Dataset, Seelkopf et al., 2021),¹⁵ and top marginal income tax rates in 19 countries over the 20th century (from Londoño-Vélez, 2014). Appendix A provides a list of all data sources used in this paper.

3 Development of tax havens

The new dataset provides novel information about the rise of tax havens in the 20th century, shedding light on key supply and demand forces in the market for offshore tax haven services. First, I detail the characteristics and long-run evolution of tax havens. Then, guided by this first exploration, I show that the demand for tax haven services is shaped by gravity forces. Finally, I study the links between colonial empires and the development of tax havens.

3.1 Long-run development of tax havens

I first document the striking increase in the number of tax havens in the 20th century. I describe the pattern of expansion by type of reform and broad geographic region. Finally, I show that country size and colonial history are two critical determinants of a country's choice to become a tax haven.

Rise of tax havens Figure 1 describes the development of tax havens in the 20th century, distinguishing the extensive and intensive margins of tax haven supply in panel (a). The interwar period witnessed the initial rise, linked to the introduction of modern direct taxation through individual and corporate income taxes in several countries. Notably, the 1950s marked the start of large-scale updates to the legal architectures of existing tax havens, with a pronounced acceleration in follow-on reforms from the 1970s onward. The vertical line marks the beginning of British decolonization in the Caribbean, a pivotal moment that drove increased offshore architecture reforms. Most of the reforms at

15. The authors distinguish modern from premodern taxes by the former's simple and broad tax bases, administrative complexity (they require information-intensive processes), and redistributive potential.

the end of the period affected the intensive margin of tax haven supply (follow-on reforms), reinforcing the legal architecture of already existing tax havens, rather than the extensive margin.

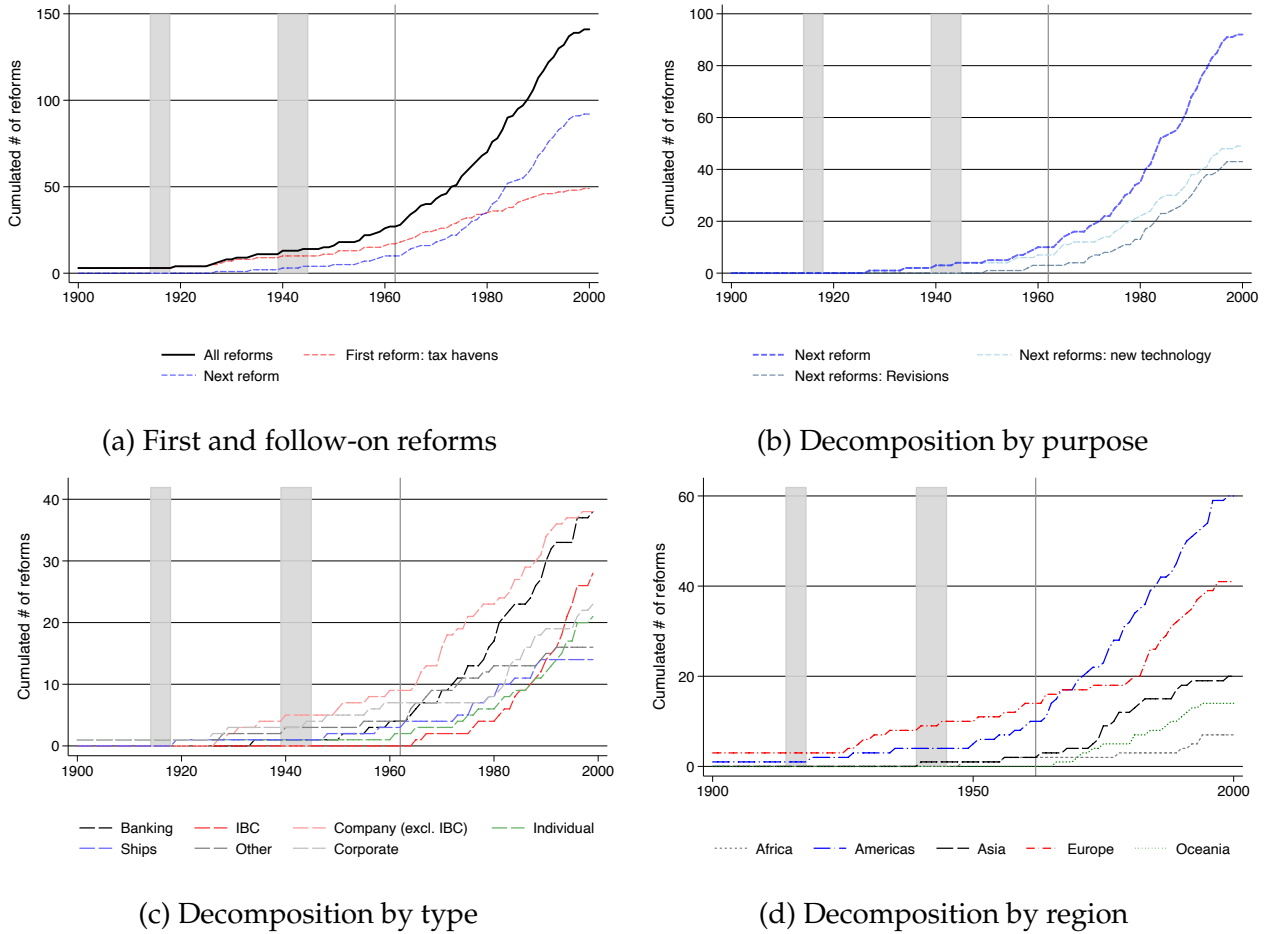


Figure 1 – Rise of tax havens in the 20th century

Note: This figure depicts the rise of tax havens in the 20th century along four dimensions: (a) extensive and intensive margin, (b) reforms introducing a new legal technology and those reinforcing an existing technology, (c) legal technology, and (d) geographical heterogeneity. Data on tax havens' reforms come from own data collection (see section 2). Shaded areas indicate the world wars and the vertical line (1962) the beginning of the independence wave in the U.K.-dominated Caribbean area.

Panel (b) decomposes the follow-on reforms into those introducing a new legal technology (*new technology*) and those reinforcing a legal technology in which the country is already specialized (*revisions*). This distinction illustrates a fundamental trade-off faced by suppliers in competitive markets—the choice between specialization for vertical competition and diversification for horizontal competition. The figure reveals a slightly higher frequency of reforms introducing new legal technologies, indicating that tax havens compete through both horizontal diversification and vertical specialization.

Legal technologies To better understand the evolution of tax havens, we need to study the type of legal technologies introduced. Panel (c) of Figure 1 decomposes the trend based on tax havens' specialization, as categorized in Table I.

During the interwar period, the inaugural reforms reflected diversification across various legal technologies, hinting at limited competition among tax havens. However,

from the 1950s, "Exempt companies" surfaced as the predominant type of tax haven technology, with the associated reforms outpacing those in other sectors. These companies, which provide flexibility to both firms and individuals (particularly for managing business income), also reduce administrative costs for countries that become tax havens. This attractive property might explain the growth in this technology's adoption by tax havens. The figure also shows a rapid rise in the number of banking reforms which are expected to develop simultaneously with other legal technologies. Finally, IBCs appear to have grown increasingly attractive at the end of the century, with a significant increase in the number of IBC reforms. They also illustrate how quickly legal innovations can diffuse, as further discussed in section 5.3. In contrast to innovations in other markets, legal innovations can be readily replicated since regulations are publicly available and are not protected from replication.

Geography of tax havens Panel (d) of Figure 1 studies the spatial dimension of the rise of tax havens. It highlights striking regional differences in their expansion, with Europe, the Americas, and later Asia hosting a significant number and Oceania and Africa lagging behind.

Until the 1950s, almost all tax havens were located in Europe and the Americas, particularly the Caribbean area. This is in line with the fact that modern taxation was first introduced in these regions (Seelkopf et al., 2021). A consequence of this global rise in taxation happening at the beginning the 20th century is that some individuals and firms are now eager to avoid it, creating demand for tax avoidance and evasion services. This trend was reinforced by the fact that personal income taxes were characterized by a high degree of progressiveness, with top marginal tax rates often higher than 60% in the 1920s.¹⁶ Figure A.2 confirms this interpretation by correlating the rise in modern direct taxation (personal and corporate income taxes) with the building of tax haven architecture in Europe and America (see Figure A.3 for Asia, Africa, and Oceania). Conversely, the reforms at the end of the 20th century cannot be straightforwardly explained by rising taxation, suggesting a role of alternative factors such as competition between tax havens and decolonization.

For a large part of the 20th century, Europe hosted the largest number of tax havens. From the 1960s, following decolonization and the global liberalization of financial flows associated with the end of the Bretton-Woods system, we observe a break in the trend of tax havens in the Americas, whose number increased significantly. This period also marked the emergence of tax havens in other regions, namely, Asia and Oceania and, to a lesser extent, Africa. We thus observe two broad periods delineated in the global history of tax havens during the 20th century. In the first, from WWI to the seventies, Europe dominated, with Switzerland being a key player (Farquet, 2018, Guex, 2000, 2021). From the 1970s, a shift occurred as more tax havens appeared in the developing world, particularly the Caribbean, which became a tax haven hub. The changing geography of the offshore world mirrored the shift in the global economic center from Europe to the U.S.

16. A recent literature shows that individuals at the top of the distribution are more likely to evade taxes (Alstadsæter et al., 2019, Leenders et al., 2023).

How did this increase in the number of reforms impact the size of the global market for offshore services? This increase in the number of reforms could have come at the expense of the tax havens already supplying the market or could have expanded the size of the market. I evaluate these alternatives in Appendix F and show, using the Swiss offshore market as a case study, that the arrival of new tax havens is not associated with a decline in the activity of old tax havens, suggesting limited substitution and an expansion of the market across time.

Characteristics of tax havens Finally, I explore two important supply-side characteristics underscored by the literature: tax havens' small size (see Dharmapala and Hines, 2009 for an empirical analysis and Kanbur and Keen, 1993, Hansen and Kessler, 2001, and Slemrod and Wilson, 2009 for theoretical models) and the tight connection between the colonial world, especially the British one, and the making of tax havens (see Palan et al., 2009, Ogle, 2017, 2020). Appendix Figure A.4 plots the share of tax havens by size and colonial history over the years. Until the decolonization period, small countries (in the first quartile of country size) exhibited a similar trend, irrespective of their colonial history. A notable shift occurred in the 1960s, with more than 80% of small U.K.-related countries being tax havens compared to 40% of non-U.K.-related countries. The trend is similar among large countries. This dynamic dimension in the tax havens market adds to the literature, indicating that the decolonization shock significantly influenced the development of tax havens, particularly in newly independent and small countries. I further examine the decolonization shock in section 3.3.

3.2 The gravity structure of tax haven use

The remarks above correlate the rise of taxation with the rise of tax havens reforms across time and space suggesting a geographical component of demand: the introduction of taxes in one country increases the demand for tax haven services in nearby countries. This boils down to assuming that the costs of tax haven use increase with geographical distance, which can be surprising at first sight given the non-physical nature of this activity. This section examines whether the use of offshore services follows a gravity structure. Empirical support for this gravity structure is found in the literature in the context of the use of tax havens by multinational firms (Ferrari et al., 2022 or Hebous and Johannesen, 2021) and by individuals (e.g. Leenders et al., 2023 find that Dutch individuals close to a border tend to locate their hidden wealth in the country with which they share the border).

Bilateral evasion costs, that justify the existence of a gravity structure for tax evasion, are diverse. First, tax evasion corresponds to the use of offshore services and it is shown that trade in services follows a gravity equation (Kimura and Lee, 2006). In addition, trust and coordination, which are highly correlated with bilateral distance, have been used to explain why the gravity equation holds for trade in goods and in services (Guiso et al., 2009). The exchange of offshore services strongly requires these two components given the opaque nature of the activity, suggesting that distance should be an important determinant of tax evasion. Even with 21st-century technologies, tax evasion implies communication and travel costs (see Harrington, 2016). Locating one's assets in a tax

haven means traveling there occasionally (for the evader or its lawyer), communicating with intermediaries in the tax haven, etc. All these costs will depend on geographical distance, but also on the linguistic distance between two countries. Finally, bilateral evasion costs will also vary with the extent of compatibility between the regulations in the high-tax country and those in the offshore country, suggesting a role for the legal distance.

I employ micro-level data from the Offshore Leaks, focusing on the bilateral information in the dataset. Using the ownership links in the data, I create a variable that measures the number of links between each (*nonhaven; haven*) country pair. These links represent connections between offshore entities in a tax haven j and entities or individuals in a nonhaven country i . I detail the treatment of the data and the main assumptions made to count links between two countries in Appendix D. I estimate the following gravity equation to explain the number of links between a pair:

$$\#Links_{ijk} = \exp(\beta_1 \ln(Dist_{ij}) + \beta X_{ij} + v_{ik} + v_{jk}) \epsilon_{ijk} \quad (1)$$

where $\#Links_{ijk}$ is the number of links between nonhaven country i and tax haven j as documented in the leak source k (see the list of sources in Appendix D).¹⁷ $Dist_{ij}$ is the geographic distance between i and j and X_{ij} includes bilateral gravity variables capturing colonial relationships, common legal origins, and common language (Gurevich et al., 2024). v_{ik} and v_{jk} are country \times source fixed effects that account for any country-level characteristic and country \times source-level characteristics such as preferences and characteristics of the offshore providers exposed in a given leak. ϵ_{ijk} is the error term. Given the count nature of the data, the equation is estimated using a Poisson pseudo-maximum likelihood (PPML) estimator. To focus on links indicative of ultimate ownership, I conduct the estimation on a restricted sample where the origin countries are nonhaven countries and the destination countries are tax havens. The results are quantitatively similar when estimated with OLS or in the nonrestricted sample.

In Table II, I find that distance plays an important role, with a 1% distance increase decreasing the number of links between two countries by approximately 1%. This result supports the hypothesis that bilateral evasion costs increase with distance. These costs decrease with the legal similarities between the origin country and the tax haven. Indeed, two legal systems with the same origin might be more complementary when one wants to evade or avoid taxation. Language proximity also increases the bilateral use of tax havens, even after controlling for legal and colonial origins. The coefficient on the colonial origins variable is not significantly different from zero, reflecting the correlation between colonial history and legal history (see, e.g., Klerman et al., 2011). Finally, it is worth noting that the Offshore leaks contains information on offshore entities that necessitate few physical operations or substance. Therefore, the estimate likely represents a lower bound of the strength of gravity determinants of the use of tax havens.

17. I retain the information about the source of the leak to absorb any source-specific bias in coverage through fixed effects. Similar results are obtained when this dimension of heterogeneity is not used.

Table II – Gravity in Offshore Leaks data

	(1)	(2)	(3)
	Nb. links	Nb. links	Nb. links
ln(Dist.)	-0.987*** (0.104)	-1.072*** (0.113)	-0.944*** (0.0950)
Colonial link		-0.146 (0.241)	-0.128 (0.246)
Common legal origin		1.435*** (0.227)	1.131*** (0.302)
Common language index			1.144*** (0.428)
Observations	2,291	2,291	2,291
Origin-source and Destination-source FE	Yes	Yes	Yes

Note: This table estimates equation 1 using a PPML estimator. Details on the construction of Offshore Leaks data is provided in Appendix section D. Robust standard errors clustered at the country-pair level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Distance appears a crucial factor influencing the demand received by tax havens. This observed pattern aligns with the concept of market access in the economic geography literature (Redding and Venables, 2004), according to which countries close to large markets are better positioned to serve demand, similarly to how tax havens benefit from proximity to countries implementing higher tax rates. Consequently, countries near large markets with high tax rates are more likely to become tax havens, irrespective of their own size.

3.3 Colonial empires and tax havens

Finally, this subsection explores in more detail the links between colonial empires, particularly the British one, and tax havens, a topic extensively discussed in the literature on the history of tax havens. Ogle (2017) argues that the connection between the colonial and offshore worlds is linked to the United Kingdom’s lasting influence on its former colonies while other studies insist on the role of the common law system, originating in the UK and perceived to be more conducive of tax evasion and tax avoidance than civil law (see, for instance, Palan et al., 2009). In addition, some scholars have argued that the United Kingdom has encouraged these countries, at least indirectly, to become tax havens to reduce their need for development aid (Sagar et al., 2013, Ogle, 2017) although Sævold (2022) concludes that there was no strategic effort by the UK administration to create a network of tax havens. Nonetheless, other colonial powers such as France have been more reluctant to encourage this development choice (Rawlings, 2004, Woker, 2024). Finally, we can note that newly independent countries might have found a convenient specialization in the tax haven industry, which was predicated on a resource available to all countries: sovereignty (Slemrod, 2008).

The new data can help us explore these questions. I study the evolution of the offshore policies of countries following their independence from the UK. I estimate a dynamic difference-in-differences specification where the treated group is composed of countries experiencing decolonization and the control group of countries that become

independent from another colonizer.

$$\sum_{y=0}^t Reforms_{iy} = \sum_{k=-7}^{15} \beta_k Independent\ from\ UK_{it}^k + \mu_i + \mu_t + \epsilon_{it} \quad (2)$$

where $\sum_{y=0}^t Reforms_{iy}$ counts the number of tax haven reforms made by country i at date t . $Independent\ from\ UK_{it}^k$ is a dummy variable equal to one for treated countries k years before or after they become independent from the UK. μ_i and μ_t are country and time fixed effects, and ϵ_{it} is the error term. The equation is estimated with the TWFE estimator of de Chaisemartin and D’Haultfœuille (2024) to account for potential effect heterogeneity in a difference-in-differences setting with different treatment dates.¹⁸

A crucial identification assumption is the exogeneity of the decolonization process with regard to tax haven policies. In theory, a positive demand shock for tax haven services could simultaneously increase a country’s probability of becoming a tax haven and probability of becoming independent. In reality, however, the timing of decolonization appears exogenous to the probability that the decolonized country becomes a tax haven. First, the timing of independence is uncertain, depending mostly on local and regional conditions, wars for independence, pro-independence protests, and negotiations with the colonizer. Sævold (2022) emphasizes that offshore policies and decolonization policies were “ad-hoc” and not “strategically planned”.¹⁹ Second, a country does not need to become independent for it to become a tax haven or implement offshore policies. Some territories became tax havens before independence (e.g., St. Vincent and the Grenadines), and some tax havens have never gained independence (e.g., the Cayman Islands). If the timing of independence were endogenous to the probability of a country’s becoming a tax haven, we would expect to observe nonparallel pretrends. As we will see below, this is not the case.

In Figure 2, I find that the number of offshore reforms passed by former U.K. colonies increases by approximately 0.15 units 10 years after becoming independent, in comparison to the number passed by territories that gained independence from a different colonizer. This effect is substantial given that the average number of reforms passed by countries in the sample is 0.17 (with a maximum of six). The absence of significant pretrends and the exogeneity of decolonization suggest that this is a causal effect.

To sum up, the shock of decolonization represents a sizable exogenous shock in U.K. colonies’ offshore history, explaining the significant increase in the number of reforms from the 1960s in the different descriptive figures above. I use this shock in section 5.2 to analyze the effects of increasing competitive pressure on tax havens’ choices.

18. I estimate a linear generalized difference-in-difference model here because it allows more flexibility in the settings with different treatment timings. Alternatively, Wooldridge (2023) proposes a nonlinear estimator that includes many interaction effects, making it hard for the model to converge in certain cases.

19. Sævold (2022) writes, “The extent to which tax havens eventually spread through the Empire was not foreseen from the outset” (p.243) and “These factors further emphasize that tax haven formation in a British context was closely entangled with processes of independence, characterized by the *ad hoc* decisions that led to more independence, and were not strategically planned by the UK administration – quite the contrary.” (p.252).

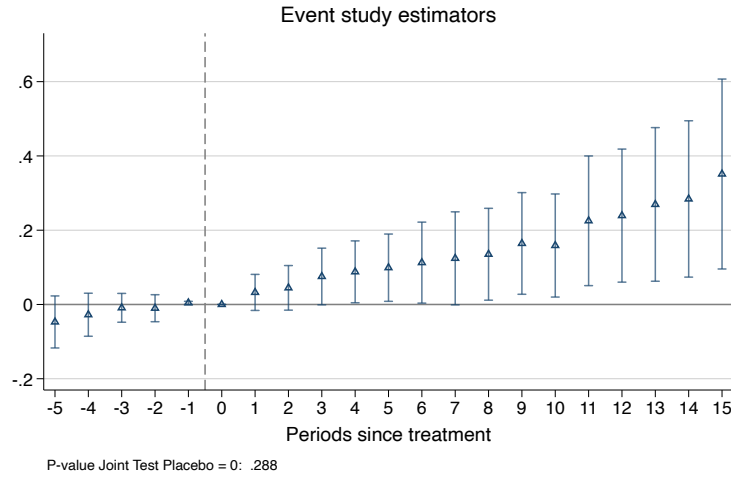


Figure 2 – Tax havens and colonial empires: Event study

Note: This figure plots coefficients from an event-study regression following equation 2. I use the estimator proposed by de Chaisemartin and D’Haultfœuille (2024). The treated group is composed of UK colonies becoming independent. The figure studies how the number of offshore reforms changes with a country’s independence. The control group corresponds to territories with a different colonizer. The average number of reforms in the sample is equal to 0.17; 95% confidence intervals with standard errors clustered at the country level.

4 Conceptual framework

To guide the empirical exploration, this section presents a conceptual framework that describes the fundamental forces influencing a government’s choice to turn its country into a tax haven and update its legal architecture. The decision to become a tax haven is the result of the building of legal and fiscal institutions, in the spirit of the legal capacity building framework of Besley and Persson (2011). In addition, this framework describes tax havens’ potential competitive interactions in the market for tax haven services. Appendix H proposes a more formal framework.

Setup Utilitarian governments want to maximize the sum of the private revenues of homogeneous individuals and of tax revenues. Tax revenues are constrained by the country’s fiscal capacity and by the fact that individuals evade taxation by using tax havens. Governments can choose between becoming tax havens or remaining non-havens. Nonhaven countries have one sector (the *productive* sector) characterized by its productivity. If a country decides to become a tax haven, an offshore sector is introduced. This sector is characterized by the quality of its legal technology, p_i , which can be increased by means of (costly) reforms of the offshore architecture. To become a tax haven, the country must invest in the development of a legal technology. The cost of such reforms increases with the quality of the legal technology targeted and decreases with the maximum level of quality that a technology can attain (noted \bar{p}) and is noted $\mathcal{L}(p_i, \bar{p})$. The real sector is taxed at rate t_i , and the offshore sector is taxed at rate $t_i^o < t_i$. Setting up an offshore sector allows the state to tax the foreign demand for offshore services and potentially increase its tax revenues. Individuals in nonhaven countries can evade taxation by using tax havens and otherwise pay taxes domestically.

The first key assumption is that in tax havens, the tax rate on the domestic sector is a function of the tax rate on the offshore sector. This constraint creates a trade-off: a decrease in a tax haven's tax rate to attract more offshore revenues comes at the expense of tax revenues from the domestic economy. This is a mechanism similar to that in Slemrod and Wilson (2009). From an empirical point of view, tax rates on the domestic economy in tax havens tend to be lower than those of comparable countries, suggesting that this hypothesis is empirically substantiated.²⁰ More broadly, this hypothesis implies that the offshore sector absorbs resources from the domestic sector.

Demand for offshore services The gains from becoming a tax haven depend on the level of demand received by the tax haven i from each nonhaven country n in the world. These gains depend negatively on bilateral evasion costs (τ_{ni}), on the tax rate of the tax haven (t_i^o), and on an individual tax morality parameter distributed Gumbel. They depend positively on the quality of the tax haven legal architecture (p_i), and on the tax rate of the nonhaven country (t_n).

Denote as V_{ni} the deterministic part of the utility received from using tax haven i by country n , as V_n the deterministic part of the utility from living in country n and not avoiding taxes, and as \mathcal{T} the set of tax havens. Then, exploiting the Gumbel distribution of the tax morality parameter, we have the probability that an individual in n pays her taxes in country i :

$$\mathbb{P}_{ni} = \frac{\exp(V_{ni}(t_i^o, p_i, \tau_{ni}))}{\sum_{k \in \mathcal{T}} \exp(V_{nk}(t_k^o, p_k, \tau_{nk})) + \exp(V_n(t_n))} \quad (3)$$

Note that \mathbb{P}_{nn} corresponds to the probability that taxes are not evaded. Multiplied by individuals' revenues, \mathbb{P}_{ni} also defines country n 's demand for offshore services from tax haven i .

Demand shocks We concentrate on *tax policy-driven demand shocks*. These are shocks that affect the tax rate in non-haven countries. When a foreign country n increases its tax rate t_n , it increases the demand sent to country i : $\frac{\partial \mathbb{P}_{ni}}{\partial t_n} > 0$.

Importantly, the magnitude of a demand shock will vary negatively with country size, all other things being equal (see appendix H for formal details). The role of country size is driven by the fact that the gains from becoming a tax haven are constant with respect to country size while the costs of becoming a tax haven increase with country size. Because tax havens' offshore sector does not attract real activity, only paper money, the gains from becoming a tax haven do not depend on country size. This is illustrated by the fact that the only physical item required to use a tax haven is often a postbox. This disconnect between size and revenues is precisely what allows very small countries such

20. Table A.14 in Appendix G compares the corporate and individual tax rates on the domestic economy in tax havens and nonhavens. It shows that tax rates in tax havens tend to be lower than those in nonhavens by 5 percentage points for personal taxation and 7 points for corporate taxation. Controlling for different country characteristics in Figures A.12 and A.13, I also find that tax havens have lower tax rates than similar countries. One can also imagine that a disconnection between the domestic and offshore tax rates in tax haven pushes domestic taxpayers to try to appear as foreigners to benefit from the lower tax rates. This is, for instance, what happens with round-tripping, whereby firms invest in their domestic countries through foreign entities to benefit from advantageous conditions (Hanlon et al., 2015).

as the British Virgin Islands to provide a great deal of tax haven services. In contrast, the cost of becoming a tax haven increases with size. Because of the assumption that the tax rate on the domestic economy varies with the tax rate on the offshore economy, a country has to decrease the tax rate on its domestic economy when it becomes a tax haven. Therefore, the larger a country is, the larger is the proportion of forgone revenues from the domestic sector with respect to the additional revenue from the offshore sector (which does not depend on size). As a consequence, only small countries, below a given size threshold, will gain from becoming tax havens.

The importance of the demand shock will also depend on the distance with the shock. Assuming that bilateral evasion costs τ_{ij} increase with the distance between i and j , as shown in section 3.2, we find that the magnitude of a *demand shock*, such as the increase of the tax rate of a foreign country n , is more important when country n is less distant to country i : $\frac{\partial^2 \mathbb{P}_{ni}}{\partial t_n \partial \tau_{ni}} < 0$.²¹

In sum, a positive demand shock such as a tax increase in a foreign country increases demand for tax haven services, especially in neighboring countries. However, this shock will have a heterogeneous impact on countries' choices according to their size: for countries that are too large, the marginal increase in benefits from becoming a tax haven do not outweigh its cost, making them not responding to the shock.

Competition shocks From the perspective of a tax haven i , *competition shocks* are shocks that increase V_{nk} , the utility of inhabitants of country n when using another tax haven k . For instance, when a tax haven decreases its offshore tax rate t_k^o , it drives down the market share of tax haven i , all other things being equal: $\frac{\partial \mathbb{P}_{ni}}{\partial t_k^o} < 0$. Similarly to demand shocks, when competition from tax haven k increases, the magnitude of this shock decreases with the distance between i and k : $\frac{\partial^2 \mathbb{P}_{ni}}{\partial t_k^o \partial \tau_{nk}} > 0$. Two tax havens that share a similar geographic location compete with each other more than two tax havens more distant from each other.

A country that faces a competition shock, i.e. a negative shock on its rent for being a tax haven, faces different decisions. First, it can decide to stop being a tax haven or not to invest in its offshore quality if the cost of investment is too large. Otherwise, the country can decide to increase its offshore quality to augment its technological level and attract more demand. The impact of a competition shock is therefore an empirical question and depends on whether investment in the offshore quality is too costly or not for the country at the moment of the shock.

Technological shocks A technological shock is a persistent (negative) shock on the cost of investing in a legal technology $\mathcal{L}(\cdot)$. In particular, when a foreign country introduces a new technology or improves an existing one, it increases the technological level of development $\bar{\pi}$ and provides positive spillovers to other countries. The cost of introducing a legal technology decreases when other countries have introduced this legal technology because it increases their knowledge of legal technologies and gives them information about how successful a given technology can be. This effect is spurred by

21. Note that it is not specific to geographical distance but also to legal, or linguistic distance, as seen in section 3.2.

the fact that laws cannot be protected by patents: they are freely observed and free to copy. Anecdotally, the British Virgin Islands' IBC law enacted in 1984 has been copied almost verbatim by other offshore jurisdictions such as Anguilla and the Bahamas. Technological shocks therefore decrease the cost of investment in legal technologies and push countries to implement reforms, all other things being equal.

5 Demand, Competition and Technological shocks

Guided by the predictions of the theoretical framework, this section aims to analyze the impact of demand shocks, competition shocks and technological shocks on the decision of countries of becoming tax havens and of tax havens of implementing new offshore reforms.

5.1 Demand shocks

The conceptual framework indicates that demand has a geographical component that comes from the assumption that bilateral evasion costs increase with distance. This assumption, empirically supported by our results in section 3, is critical to identification as it creates country-level variation in the offshore services demand faced by a country.

I construct the demand shocks received by country i as a weighted average of other countries' tax level. The weight represents the exposure of country i to the offshore demand sent by the other countries. The weights are a function of size, proxied by countries j 's population, and distance. In the baseline regression, I use the following function, and I propose a robustness analysis with different weights: $W_{ijt} = \frac{\mathbb{1}_{dist_{ij} < 2500} Pop_{jt}}{\sum_j \mathbb{1}_{dist_{ij} < 2500} Pop_{jt}}$. This weight is simple, as it is assigned proportional to country size to each country j less distant to i than 2500 km, and a weight of 0 is assigned to countries located further away. This specification puts a high weight on regional shocks. From these weights, I compute demand using a shift-share variable (Borusyak et al., 2022):

$$D_{it} = \left(\sum_j W_{ijt} \right)^{-1} \times \sum_j \left(W_{ijt} \times \frac{Direct\ Tax\ Revenues_{jt}}{GDP_{jt}} \right) \quad (4)$$

The level of taxation in country i is proxied by the top marginal income tax rate. The data come from Londoño-Vélez (2014) and covers 19 countries all over the 20th century. The top marginal income tax rate is highly relevant to measure the demand for tax havens because it is salient: individuals can observe it and make their choices based on this variable. In addition, the top marginal income tax rate offers identifying variation, with rates going between 0% and 98% during the 20th century (with an average of 44% and a standard deviation of 29 p.p). In a robustness test, I use the introduction of direct taxes (personal and corporate income tax) as an alternative variable to measure demand.

Identification To study the effect of demand on the tax havens' legal architecture, I follow the theoretical results and I interact the level of the demand with a variable

capturing country size:

$$\mathbb{1}_{Reform_{it}} = \alpha_1 D_{it} + \alpha_2 D_{it} \times \ln(Area_i) + \chi Z_{it} + \mu_i + \mu_t + u_{it} \quad (5)$$

with $\mathbb{1}_{Reform_{it}}$ being an indicator variable equal to 1 if country i passes a reform at date t and D_{it} being the demand received by country i at date t . $\ln(Area)$ is the logarithm of the size of the country. Z_{it} is a vector of control variables, and χ is the associated vector of coefficients. The control variables include an indicator for a country's being independent at date t and the number of years since independence (additional controls are introduced in the robustness analysis). Country fixed effects and time fixed effects are introduced through μ_i and μ_t . u_{it} represents the residuals. The equation is estimated with a linear probability model.²² Countries that never become tax havens are included in the estimation sample and countries that never receive any demand (i.e., countries i for which $\forall t, D_{it} = 0$) are excluded from the sample.

The identification of the coefficient of interest can be biased if unobserved shocks affect both the tax rate in foreign countries and their probability of passing a reform or if tax competition pushes nonhaven countries to decrease their tax rates to compete for capital when tax havens appear. Unobserved confounders such as regional liberalization shocks could also bring endogeneity through increased capital mobility (see, for instance, Hollis and McKenna, 2019).²³

To deal with this issue, I propose an IV strategy where I construct a variable that affects a country's probability of passing a reform only through the variable's effect on the demand for tax haven services. To do so, I predict exogenous changes in the top marginal income tax rate and then use this variable, \widehat{Top}_{jt}^{IV} , to build an exogenous demand variable, D_{it}^{IV} . The IV strategy is inspired by results from the comparative taxation literature. Kiser and Karceski (2017) highlight three important determinants of tax revenues from a comparative perspective: war, democracy, and development. The occurrence or the threat of war and development might be correlated with tax levels, capital flight or regional shocks and therefore are not a good candidates for an IV. In contrast, democratization appears much more independent of these shocks. For instance, Acemoglu et al. (2008, 2009) and Barron et al. (2014) argue, in a panel setting, that democratization is not caused by changes in income. Therefore, the level of democracy is probably not correlated with regional-level shocks that might affect the probability that some countries enact tax haven reforms. In addition, a long-standing literature describes how different government ideologies affect economic outcomes, in particular tax rates (Cameron, 1978, Pettersson-Lidbom, 2008). The variation in tax levels due to changes in government ideology is likely to be exogenous with respect to tax haven reforms in nearby countries.

22. According to Timoneda (2021), a linear probability model with fixed effects is well suited for estimating models with rare events, as it is the case in our data. It also facilitates the use and interpretation of instrumental variables and interaction models.

23. This last possibility is also taken into account through region \times year fixed effects in the robustness analysis in column (2) of appendix Table A.6.

In an initial stage of the IV strategy, \widehat{Top}_{jt}^{IV} is predicted based on the level of democracy, the ideology of the head of government (left, center or right), country fixed effects and time fixed effects. I also include the war mobilization as an explanatory variable, but shut it down when predicting the top marginal income tax rate. Using the predicted value, \widehat{Top}_{jt} , I construct the instrument, D_{it}^{IV} , as the weighted average of direct taxation in countries surrounding a given country i following equation 4. I evaluate the relevance condition of the IV by looking at the first-stage F-statistics, which are large and above the thresholds of relative bias computed by Stock and Yogo (2005). Concerning the exclusion restriction, it holds as long as no endogenous variation is introduced in our initial stage. Following Borusyak et al. (2022), I study the correlation between my instrument and shock-level characteristics to assess the validity of the IV in Table A.2. The table shows that the instrument is not correlated with GDP, per-capita GDP, inflation, or the occurrence of war. These results confirm that the instrument is not correlated with shock-level observable characteristics that might bring endogeneity.

Results The results from the estimation of equation 5 are displayed in Table III. I first comment the OLS results in the top panel. In column (1), an increase in the weighted average of the top marginal income tax rate of 1 percentage point increases a country's probability of becoming a tax haven by 0.32 percentage points for the smallest countries in the sample. To scale this effect, we must compare it with a typical variation in the residualized dependent variable and with countries' average probability of enacting a reform in the sample.²⁴ When demand increases by one standard deviation, a small country's probability of doing a reform as revealed by the standardized effect increases by 34%. This effect is not statistically significant. Note that the initial probability of doing a reform is very low in the sample. Hence, even though a typical change in demand significantly influences the probability of reform, the absolute impact remains small. This suggests that substantial demand increases are required to impact a country's decision to enact a reform. The negative coefficient on the interaction between demand and size shows that the effect of demand decreases with the size of the country. It is nil for countries with an area of 116,263 km², corresponding to the 57th percentile of size, approximately equivalent to the size of Benin, or Nicaragua.

The sample is then split between first reforms in columns (2) and follow-on reforms in column (3) to facilitate analysis.²⁵ The results in column (2) reveal that the effect of demand is driven by the extensive margin of tax havens: when demand increases, it pushes countries that are not tax havens to become tax havens. There is a large and positive effect for countries of very small size, with an increase in the probability of becoming a tax haven increasing by 220% when the average top marginal income tax rate in close countries increases by one standard deviation. This effect decreases with country size and is equal to zero for countries at the 64th percentile of size. In contrast, the effect of demand conditional on a country's already being a tax haven is not significantly different from zero and small in absolute terms, as revealed by the standardized coeffi-

24. To residualize the dependent variable, I clear it of the variation coming from the fixed effects. My procedure for doing so follows the methodology proposed by Mummolo and Peterson (2018).

25. In the specification of column (2), countries leave the estimation sample once they become a tax haven.

Table III – Impact of demand on probability of reform

	(1) Reform	(2) First Reform	(3) Other Reforms
OLS			
Demand (within 2500km)	0.0319 (0.0400)	0.0598** (0.0252)	0.243** (0.112)
Demand (within 2500km) × ln(Area)	-0.00274 (0.00330)	-0.00489*** (0.00181)	-0.0156 (0.0147)
Standardized effect	0.342	2.199	0.526
Effect = 0 at size=	116263	204951	5.559e+06
Effect = 0 at size percentile=	57	64	97
IV			
Demand (within 2500km)	-0.0135 (0.0421)	0.0699** (0.0328)	-0.416* (0.203)
Demand (within 2500km) × ln(Area)	-0.00389 (0.00399)	-0.00657*** (0.00206)	-0.0139 (0.0243)
Standardized effect	-0.144	2.570	-0.902
Effect = 0 at size=	–	42071	–
Effect = 0 at size percentile=	–	43	–
K-P F-stat	32.73	24.20	15.08
Observations	6,635	5,575	1,060
Time FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note: This table estimates equation 5. Demand is constructed using top marginal income tax rate data from 19 countries from Londoño-Vélez (2014). Data on tax havens' reforms come from own data collection (see Section 2). Column (1) includes all reforms as dependent variables. In column (2), tax havens leave the sample after the first reform. Column (3) considers only new reforms by countries that are already tax havens. Additional controls correspond to an indicator variable for a country's being independent and the number of years since independence. I compute the standardized effects by multiplying the coefficient on demand (α_1) by the standard deviation of the residualized independent variable and dividing it by the average of the dependent variable in the sample. It is the percentage change in a small country's probability of making a reform when demand increases by one standard deviation. Robust standard errors clustered at the country level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

cient. The IV estimation confirms this important result. The Kleinberger-Paap F-statistic confirms the relevance of the instrument. The role of size is even stronger and becomes nil for countries above the 43th percentile of size, approximately the size of Switzerland or Denmark. For a visual representation of these results, refer to Appendix Figure A.5.

In sum, the results presented in this table demonstrate that demand exerts a significant influence on the extensive margin of offshore reforms, but only on the smallest countries in the sample. Both supply and demand characteristics need to be taken into account to understand the market for tax havens.

Extension and robustness In table A.3, I show that the results extend to an alternative definition of demand, where I only use the extensive margin of taxation. Instead of relying on the top marginal income tax rate in foreign countries to capture demand, I use on information about tax introductions using data from Seelkopf et al. (2021). I focus on the introduction of direct taxation (personal income tax and corporate income tax) and find that the introduction of direct taxation in foreign countries less distant than 2500

km leads small countries to introduce tax haven reforms. I show placebo tests in Table A.4 and these results are not found when we look at other types of taxes such as VAT or property taxes, or at reforms that appear in countries located much further away.

I also propose different exercises to assess the robustness of the baseline results. In Table A.5, I use different thresholds to compute the demand received by a country. Results hold for a shorter threshold of 2000km but does not for larger distance of 3500km. This suggests that the geographical component of demand is restricted to medium to short distances. Finally, no results are found in a placebo test where demand is constructed with shocks coming from country *more* distant than 2500km.

In Table A.6, I sequentially add different control variables to the main estimation. In particular, I control for regional shocks through fixed effects, and for domestic shocks (GDP, GDP per capital, occurrence of war), foreign shocks (average GDP, GDP per capita and occurrence of war in countries less distant than 2500 km), and the interaction of foreign shocks with size. The results remain robust to these additional controls, suggesting that the effect on demand is not confounded by other observable shocks. Then, I correct the estimates for spatial correlation using the estimator of Colella et al. (2019) (Table A.7). Finally, I randomly permute 1000 times the shocks received by countries in the sample (Figure A.6). I find that results as extreme as those found in the OLS and IV regression occur less than 0.1% of the time in both cases.

5.2 Competition shocks

Demand shocks do not explain well why tax havens update their legal architecture. Our examination of competition shocks in section 4 suggests that competition between tax havens can also affect their offshore policies. I explore whether competition shocks can help us understand other causal determinants of the behavior of tax havens, in particular how they adapt when they face negative shocks to their rents. This is, for instance, what is expected when governments introduce anti-avoidance policies.

Identification I exploit a large quasi-natural experiment, the decolonization of British colonies, to identify the effect of competition in the market for tax haven services. Decolonization can be seen as a large supply shock. Figure 2 has demonstrated that this shock increased former U.K colonies' probability of passing an offshore reform. Following the wave of decolonization, many newly decolonized countries became tax havens or updated their legal architecture for offshoring. This shock pushed many newly independent countries to seek additional revenues by becoming tax havens. It exogenously increased competition between tax havens by increasing the number of suppliers in the market.

I also rely on the geographic component of competition. Two tax havens that are geographically close will compete more than two remote tax havens. This assumption is directly linked to my theoretical framework, where tax havens that are geographically close attract demand from the same places (see equation 5). Therefore, I study the impact

of new offshore reforms within a 1000 km circle.²⁶ The impact of competition is then identified by the fact that different countries are hit differently by the competition shock based on their geography. I estimate, on the sample of countries that are already tax havens, the following equation:

$$\sum_{z=1945}^t \mathbb{1}_{Reform_{iz}} = \beta_1 \ln(D_{it}) + \beta_2 \left(\sum_{j \neq i} \mathbb{1}_{Haven_{jt}} \times \mathbb{1}_{Dist_{ij} < 1000km} \right) + CZ_{it} + \gamma_i + \gamma_t + v_{it} \quad (6)$$

where $\sum_{z=1945}^t \mathbb{1}_{Reform_{iz}}$ is the cumulated number of reforms enacted in country i at date t . $\left(\sum_{j \neq i} \mathbb{1}_{Haven_{jt}} \times \mathbb{1}_{Dist_{ij} < 1000km} \right)$ is a variable that counts the number of tax havens j less than 1000 km away. Z_{it} is a vector of control variables, γ_i is country fixed effects, and γ_t is time fixed effects. v_{it} represents the residuals. The equation is estimated with PPML to take into account the count nature of the dependent variable. OLS estimates are provided in Appendix Table A.9.

The effect of competition on the legal architecture of tax havens is estimated through β_2 . Equation 6 is subject to endogeneity through reverse causality and through the role of unobserved shocks. Indeed, reforms passed in country i depend on other tax havens' policies, which in turn depend on i 's policies. Therefore, I use the natural experiment of decolonization to obtain exogenous variation in the arrival of new tax havens. I instrument the number of tax havens within 1000 km around a given country by the number of newly independent British colonies within the 1000 km around this country. Because of the country and time fixed effects, this instrument captures only the variation coming from newly independent countries. The variation exploited in these regressions comes from the differential exposure of different tax havens to the shock due to differences in geography and in the timing of decolonization.

The exclusion restriction requires that the independence of countries within an area of 1000 km around country i affects its offshore policies only because it pushes newly independent countries to become tax havens. The geography and timing of decolonization have the advantage of being independent of the level of demand for tax haven services. However, one might argue that decolonization could have impacted tax havens' development through a demand channel. If decolonization increased economic uncertainty, this might have triggered capital flight to close countries. This is, however, unlikely as the bulk of offshore assets came from developed countries (Farquet, 2021). The exploration of the Offshore Leaks data Table A.8 in Appendix B shows no statistically significant impact of the decolonization on the incorporation of new offshore entities. This is not compatible with a positive demand shock, in which case we would observe an increase in the number of registered entities. Therefore, I can rule out a violation of the exclusion restriction through this channel.

The instrument could still be subject to the omitted variable bias pointed out by Borusyak and Hull (2023) that arises through nonrandom exposure to random shocks. Indeed, exposure to the random shock might not be random since it depends on the

26. This threshold—lower than that in the previous section—is justified by the fact that it offers more variation given that many tax havens are clustered in similar geographic areas. Appendix Table A.10 replicates the results with thresholds of 500km and 2500km.

number of neighbors that are British colonies. I follow the suggestions of Borusyak and Hull (2023) and recenter my instrumental variable by the number of British nonindependent territories within a 1000 km circle around country i at date t . If we assume a constant probability of a country's becoming independent each year, this last variable is proportional to the expected shock.

Results The results are displayed in Table IV. The first column display the PPML estimate, and the second column the PPML-Control Function estimate. The control function approach allows to address the issue of endogenous regressors in nonlinear models (Wooldridge, 2015). In a first stage, I extract the residuals of a regression of the number of tax havens in a 1000km circle on exogenous control variables and the instrument i.e. the (centered) number of colonies becoming independent from the U.K. Control variables include a dummy for being independent, the number of years passed since independence and the level of demand as measured in section 5.1. In a second stage, I estimate 6 using PPML, adding the residuals of the previous stage as a control.

Table IV – Impact of increased competition on probability of reform

	(1)	(2)
	Cumulated number of reforms	
# Havens < 1000km (recentred)	0.0777*** (0.0241)	0.110** (0.0553)
Observations	1,537	1,537
Country and year FE	Yes	Yes
Controls	Yes	Yes
Estimator	PPML	PPML - CF
K-P F-stat		536.6
Bootstrapped 95% CI		[0.03;0.29]

Note: This table estimates equation 6 on the sample of countries that are tax havens. Data on tax havens' reforms come from own data collection detailed in section 2. Columns (1) estimate a PPML regression. Column (2) estimates control function regression using a PPML estimator and the number of independent countries from the UK in an area of 1000km as an instrument. Additional controls are included in both columns and correspond to the level of demand, an indicator variable for a country's being independent and the number of years since independence. All regressions include country and year fixed effects. "K-P F-stat" stands for the Kleibergen–Paap Wald rk F statistic of the first stage. Robust standard errors clustered at the country level in parentheses. Bootstrapped confidence interval at 95% is the result of 10000 bootstrap replications. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The resulting coefficient should be interpreted as the percent increase in a tax haven's accumulated number of reforms when there is one new tax haven in the surrounding area. The average change in the number of tax havens in a 1000 km circle from 1945 to 2000 in the sample is on average 3.6 conditional on a country being a tax haven.

The estimate in column (1) indicates that one additional tax haven in the vicinity of a given tax haven increases its number of offshore reforms by 8%, corresponding to a 30% increase for the average change of tax havens. The control function approach, that aims to control for potential endogeneity confirm this result: one new tax haven in the vicinity of a tax haven increases its number of offshore reforms by 10%. These results are confirmed in Appendix Table A.9, where an OLS estimator and a standard IV estimator are

used. The coefficient estimated is a negative function of the distance threshold chosen as shown in Appendix Table A.10 but stays positive for a larger threshold of 2500km.

These results show a large effect of competition on tax havens' policies for countries that are already tax havens. Facing a negative shock that decreases their rents while keeping the world demand constant, they chose, on average, to introduce new reforms rather than going out of the offshore market. This intensive-margin change can be decomposed into the effect on reforms in an area of specialization in which the tax haven has already passed a reform and the effect on reforms in a new area. An area of specialization corresponds to a broad type of legal technology (e.g., "Individual" or "Banking"). This is what I explore in Appendix Table A.11. This table replicates columns (1) and (2) of Table IV with variables that count the "Reforms in a new areas" and the "Revisions" as dependent variables. The table shows that the competition shock has a larger impact on the revision of already implemented legal technologies than on the introduction of new legal technologies. However, it is worth noting that both kinds of reactions are used by tax havens. Building on the theoretical framework, the results of this subsection suggest that, at the time of the decolonization shock, investment in offshore quality was not too costly for most of the tax havens as compared to the negative shock on their rents. This might not always be the case, in particular if there are decreasing returns to offshore investment (due to the concavity of the return function or due to anti tax-haven policies).

5.3 Technological shocks

Technological shocks are supply shocks that affect the cost of investing in a particular technology. These shocks are particularly relevant for tax havens as offshore legal technologies are likely to diffuse quickly across borders since there is no constraint on their use: they are freely observable and replicable.

Technology diffusion I keep using geographical variation to obtain identifying variation. I hypothesize that technological spillovers depend on geographical distance. This assumption is motivated by the fact that there likely exist costs to the diffusion of a legal technology that vary with distance, which is supported by the results on the international diffusion of technologies (Comin and Mestieri, 2014). The basic idea of this literature is that the geographical diffusion of technologies necessitates interaction between adopters and non-adopters, and that these interactions happen more frequently between agents located in close countries. This can be explained by communication costs, transport costs, or legal costs increasing with distance.

To study the extent to which specific legal technologies diffuse across countries, I study the impact of the number of countries that have introduced a given legal technology within a 1000 km circle on a country's probability of introducing this same offshore technology in its legal architecture:

$$\mathbb{1}_{FirstReform_{it}^z} = \zeta_1 \ln(D_{it}) + \zeta_2 \left(\sum_j Reform_{jt}^z \times \mathbb{1}_{Dist_{ij} < 1000km} \right) + CZ_{it} + \gamma_i + \gamma_t + u_{it} \quad (7)$$

Table V – The diffusion of legal technologies

	(1) IBC	(2) Finance	(3) Indiv	(4) Exempt (no IBC)
Number of laws < 1000km	0.385** (0.151)	0.306*** (0.110)	0.590** (0.253)	0.0932 (0.0661)
Country and year FE	Yes	Yes	Yes	Yes
Reform	All	All	All	All
Non-independent only	No	No	No	No
Observations	22,971	22,503	22,871	22,394

Note: This table estimates equation 7 on the whole sample. Coefficients on # *Reforms* < 1000 km have been multiplied by 100 for readability. "Number of laws < 1000km" corresponds to the number of countries that have implemented an offshore law of the type indicated in the column header and that are located less than 1000km away from the country of interest. The dependent variable is an indicator variable equal to 1 if a law of the type indicated in the panel header has been implemented. Countries are dropped from the sample once they implement a law the category studied. Data on tax havens' reforms comes from own data collection detailed in section 2. Details on the classification of reforms are displayed in Table I. Robust standard errors clustered at the country level in parentheses *** p<0.01, ** p<0.05, * p<0.1

where $\mathbb{1}_{FirstReform_{it}^z}$ is an indicator variable equal to 1 when a reform z is enacted in country i at date t for the first time. The country leaves the sample once it has enacted such a reform. $\left(\sum_j Reforms_{jt}^z \times \mathbb{1}_{Dist_{ij}<1000km}\right)$ is a variable that counts the number of countries that have enacted the legal technology z in foreign havens less than 1000 km away. Z_{it} is a vector of control variables, γ_i is country fixed effects, and γ_t is time fixed effects. u_{it} represents the residuals. The equation is estimated with a linear probability model and for 4 different subcategories of technologies, those that have enough reforms to provide results that can be interpreted: "IBC", "Exempt company (excluding IBC)", "Individual", and "Finance". Country i leaves the sample once the reform is introduced to avoid contamination through reverse causality.

The coefficient ζ_2 (multiplied by 100 in the table) is interpreted as the effect of one additional country that implement the technology z in a 1000 km circle on a country's probability of introducing reform in this category. The results in Table V reveal that technological shocks have different magnitudes according to the underlying technology. One additional reform targeting "Individuals" increases the probability of introducing a similar offshore technology by 0.59 percentage point. Then comes "IBC" and "Finance" reforms. On the contrary, "Exempt Company (excluding IBC)" reforms are much less likely to diffuse spatially. These results confirm that the cost of implementation and diffusion differs by technology. Using the cumulative number of reforms leads to similar results (see appendix Table A.12).

Technological shocks: the diffusion of International Business Companies (IBCs)

To investigate more deeply technological shocks, the following exercise aims at identifying positive spillovers in legal technology investment using an exogenous shock. I study the development of the "International Business Companies" legal technology following the British Virgin Island (BVI, hereafter) reform of 1984. This technology is one of the most important instrument used in tax havens to conduit tax evasion and tax avoidance (Harrington, 2016). Riegels (2014), a lawyer in a major offshore law firm, describes it

as "radical" and "ahead of its time" by the author. The chief of government of the BVI affirmed that it was the "most important law of the decade". The law is also described as having a "dramatic positive effect [...] on the growth of the offshore sector elsewhere". This view highlights that the IBC Act of 1984 is a major legislation, that improves on the International Business Companies regulations previously existing (for instance the one of Antigua and Barbuda existing since 1967). Second, it is described by the professionals in the same way as an industrial innovation. This confirms the interpretation of this legislation as a technological shock.

Its diffusion can be studied in a difference-in-differences framework. Keeping the assumption that technology diffuses geographically, the treatment status of a country corresponds to being in the vicinity of the British Virgin Islands (BVI, hereafter), as defined by the decile of geographical distance with respect to the BVI. In the baseline estimation, treated countries are those with a distance to the BVI lower than the third decile of distance between BVI and other countries. This corresponds to countries less distant from the BVI than 6595 kilometers. Robustness define treatment with the first decile of distance is provided in figure A.7. The control group corresponds to countries that are located further away. The adoption of IBC reforms in these countries is compared before and after the enactment of the IBC Act in 1984 in the following event-study estimation:

$$\sum_{y=1900}^t \mathbb{1}_{Reform_{it}^{IBC}} = \sum_{k=1977}^{1999} \delta_k \mathbb{1}_{BVIneighbor} + f_i + f_t + z_{it} \quad (8)$$

where $\sum_{y=1900}^t \mathbb{1}_{Reform_{it}^{IBC}}$ is the cumulated number of IBC reforms made in country i at date t , $\mathbb{1}_{BVIneighbor}$ is an indicator variable for being close to BVI as described above, f_i and f_t are country and time fixed effects, and z_{it} are the residuals.

The results in Figure 3 reveal a stable non-significant pre-trend, suggesting that before 1984, the neighbors of the BVI were not more likely than countries further away to implement IBC regulations. From 1984 and the introduction, we observe an increase in the number of IBC reforms that are made in countries in the vicinity of the BVI as compared to the countries further away. If the estimated coefficient is positive for all post-event periods, it becomes statistically significant at the 5% level from 1990, suggesting that it took at least 5 years for a widespread diffusion of the IBC regulation. In 1998, 15 years after the adoption of the IBC law in the BVI, the number of IBC regulation has increased on average by 0.1 while one year before the shock, the number of IBC reforms in the sample was 0.025. The introduction of IBC regulations by the BVI is then a strong shock that diffused geographically across tax havens. Figure A.7 in appendix, restricts the treated countries to those in the first decile of distance (with distance from BVI lower than 1529 kilometers) and shows that the diffusion was event more important with an estimated coefficient of 0.3 in 1998. The fact that the coefficient decreases when countries further away are included in the sample also confirms the initial assumption that diffusion decreases with distance.

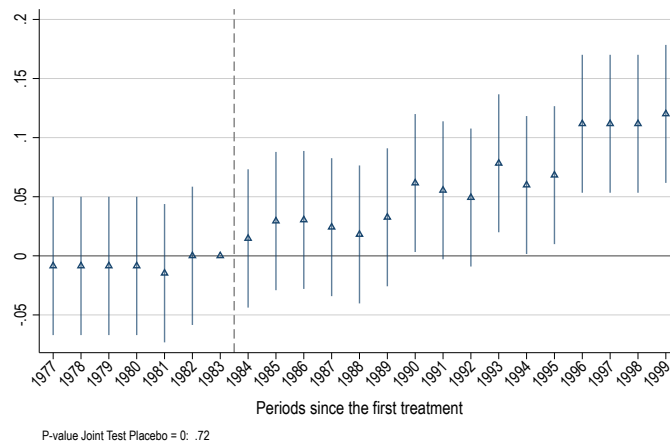


Figure 3 – The diffusion of International Business Companies: Event study

Note: This figure plots coefficients from an event-study regression following equation 8. The treated group is composed of countries having a distance with the British Virgin Islands lower than the third decile of distance between the BVI and other countries ($< 6595km$). The figure studies how the number of International Business Company reforms changes when the BVI introduced its IBC law in 1984. The control group corresponds to territories located further away from the BVI. 95% confidence intervals with standard errors clustered at the country level.

6 Consequences of tax havens

The previous section studies the determinants of tax havens and shows the importance of different kinds of shocks on tax havens formation. This section seeks to understand how the decisions of making offshore reforms affect welfare at the world level, i.e. tax haven own development and other countries' economic outcomes. Thus, it aims at contributing to the debate about the desirability of tax havens (Slemrod and Wilson, 2009, Hong and Smart, 2010), using novel data and identifying variation.

6.1 Consequences of becoming a tax haven

I first investigate the effects of a country's becoming a tax haven on its GDP per capita. I run an event-study regression where I regress the log of GDP per capita on leads and lags of the event of the country's becoming a tax haven. The data on GDP per capita are taken from the World Bank and begin in 1962. They are not available for all countries, especially for tax havens that are small and sometimes nonindependent countries.

To identify the causal effects of a country's becoming a tax haven, one would like, in an ideal experiment, to compare the evolution of two similar countries—one that becomes a tax haven and another that does not. To approximate this thought experiment as closely as possible, I adopt two different strategies. First, I run a difference-in-differences specification with heterogeneous treatment timing, following the methodology of de Chaisemartin and D'Haultfœuille (2020). To be able to effectively compare tax havens to similar countries, I restrict the sample to countries in the same region as new tax havens. This exercise is restricted to the Caribbean, Middle East and Pacific, with nine tax havens

included in the treated group.²⁷ Then, to include more tax havens in the estimation, I switch to an interactive fixed effects estimator (Gobillon and Magnac, 2016, Xu, 2017, Liu et al., 2022) that can be seen as an extension of generalized synthetic control matching (Xu, 2017). By including interactions between an individual-specific effect and a time-specific effect, it captures confounders that are time invariant but whose effect might vary over time. Fifteen treated countries are included in this estimation sample.²⁸ I estimate the following equation:

$$\ln(\text{GDPpc}_{it}) = \sum_{k=-10}^{15} \theta_k \text{Haven}_{it}^k + \eta_i + \eta_t + \iota_{it} \quad (9)$$

where GDPpc_{it} is the GDP per capita of country i at date t . Haven_{it} is equal to 1 when country i becomes a tax haven, η_i and η_t are country and time fixed effects, and ι_{it} is the error term. The control group corresponds to countries that never become tax havens.

The results are displayed in Figure 4. Both panels of the figure show a consistent and interesting pattern: becoming a tax haven increases GDP per capita by a large amount. The average growth rate estimated is almost 50% after 10 years (or 4.1% per year) in the restricted sample of panel (a). In panel (b), the estimated effect is a bit smaller, with a gain of 40% after 10 years (or 3.4% per year). This result is in line with the anecdotal observation that tax havens experienced large growth rates at the end of the 20th century.²⁹ Panel (a) shows that the gains from becoming a tax haven virtually stagnate after 10 years on average and potentially decrease over time. This pattern is not found in panel (b), even if the gains appear smaller over time. Even if the premium from becoming a tax haven is mainly short term, it creates long-term differences in GDP per capita. In both figures, the pre-event coefficients are small, stable, and not significantly different from zero, reinforcing the case for a causal interpretation of the results.

It must be noted that the GDP data should be taken with caution. First, they might not be very precise or might be partly imputed, given the level of development of the countries that enter the estimation. This is a drawback that is hard to correct for. Measurement error appears here to be a confounding factor. However, the confounding variation would have to follow a very specific path to be consistent with the observed trend in Figure 4. Second, increases in GDP in tax havens might reflect revenues accruing only to foreigners, who represent a large share of the economy. Therefore, the increases in GDP might not reflect changes in domestic welfare or in real activity. To explore this last point, I study the evolution of agricultural land in Figure A.8. I find that a country's becoming a tax haven decreases its share of agricultural land by 20% after 15 years, with a steadily decreasing trend. This effect suggests that at least part of the change in GDP per capita is driven by a transition of tax havens' economies out of the agricultural sector, which can be suggestive of structural transformation.

27. The tax havens included in the sample are Dominica, Grenada, Jordania, St. Kitts and Nevis, St. Lucia, the Marshall Islands, Tonga, St. Vincent and the Grenadines, and Western Samoa.

28. These are Belize, Hong Kong, Mauritius, Malaysia, Singapore, and Seychelles in addition to those on the previous list.

29. Using different empirical settings, Hines (2005) and Butkiewicz and Gordon (2013) also find a positive impact of a country's being a tax haven on its GDP.

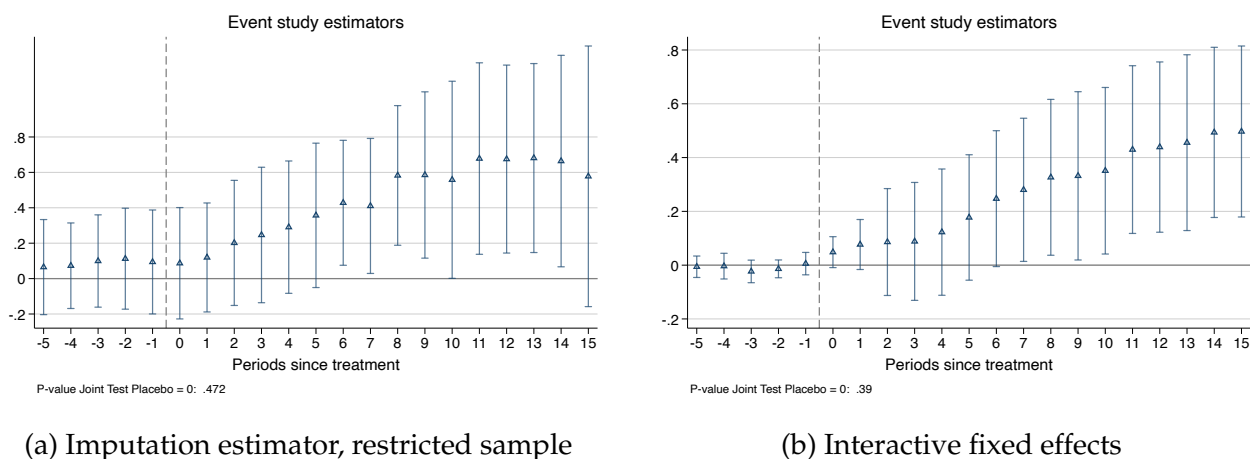


Figure 4 – Effect of becoming a tax haven on GDP per capita

Note: This figure plots coefficients from an event-study regression following equation 9. In panel (a), I use the estimator proposed by de Chaisemartin and D’Haultfœuille (2020) for TWFE models. The treated group is composed of 9 tax havens from the Caribbean, Middle East and Pacific: Dominica, Grenada, Jordania, St. Kitts and Nevis, St. Lucia, the Marshall Islands, Tonga, St. Vincent and the Grenadines, and Western Samoa. The control group is composed of countries in the same regions that never become tax havens. In panel (b), I use interactive fixed effects, following Gobillon and Magnac (2016), Xu (2017) and Liu et al. (2022). The treated group is composed of 15 tax havens: the 9 from panel (a) plus Belize, Hong Kong, Mauritius, Malaysia, Singapore, and Seychelles. The control group is composed of all never-haven countries in the world. Both panels study how a country’s becoming a tax haven affects its GDP per capita; 95% confidence intervals from bootstrapped standard errors (500 repetitions). The Wald p-value tests for the absence of differential pretrends.

The tax competition theory predicts that the marginal potential tax haven should be indifferent between becoming a tax haven or not (Slemrod and Wilson, 2009, Johannesen, 2010). The results here are at odds with this theoretical reasoning. There could be different reasons for this. First, I study here a specific group of tax havens. The large positive effects on GDP per capita would suggest that there are still rents for a country to acquire by becoming a tax haven. In the absence of structural changes in the international taxation environment, more countries would be expected to become tax havens. Second, it might be possible that rents do exist for countries with certain characteristics but that no existing country has these required characteristics and thus no country is willing to enter the tax haven market. Third, as discussed before, per capita GDP overestimates welfare in tax havens. Using a more appropriate metric might decrease the potential gains to a country from becoming a tax haven.

6.2 Effect of exposure to tax havens on other countries

A large literature shows that exposure to tax havens erodes the mobile tax base of non-haven countries (Alstadsæter et al., 2018, Tørsløv et al., 2023). These papers generally focus on the direct effects of tax havens on other countries, disregarding potential general equilibrium effects or the responses by affected countries, as studied in the tax competition literature (Keen and Konrad, 2013). This subsection studies the long-term effects of exposure to tax havens on other countries’ GDP per capita, tax revenues, and tax structure using the switch of countries from being nonhavens to being tax havens as identifying variation.

Even if the data on hand are ideal for this exercise, the empirical setup is challenging. First, all countries appear to be treated when a new tax haven emerges. To solve this issue, I again rely on geographical variation. I assume that a nonhaven country is more intensively treated when a tax haven appears in its neighborhood. This assumption is motivated by the evidence discussed in section 3 that the use of tax havens follows gravity patterns and that the costs of using tax havens increases with distance. In this exercise, I consider the treatment to correspond to the arrival of a new tax haven in a 2500 km circle around a given country.

Second, even once the treatment is defined, there might be multiple treatments (one for each new tax haven). I follow the recent developments in the difference-in-differences literature extending the canonical setup to more general settings. In particular, de Chaisemartin and D’Haultfoeuille (2024) propose an estimator robust to treatment effect heterogeneity that allows estimation of the dynamic causal effect of multiple treatments. The main idea of this estimator is to compare switchers (countries that have new tax havens in their vicinity) l periods after treatment to groups that have not switched yet but that have the same treatment at the beginning of the sample. I propose one baseline empirical model and two robustness tests.

The tax revenue data for a large set of countries are available only from 1965. I cannot measure any effect of tax havens on tax revenue outcomes before this date. To take into account the fact that countries might have been affected by tax havens before 1965, I design two different groups: the group of countries never exposed to tax havens and the group of countries already exposed to at least one tax haven. In both of these groups, some countries might be further treated (*treatment group*) and some not (*control group*). This step is necessary because the estimator compares switchers to nonswitchers with the same treatment at the beginning of the sample. To make the countries in the second group more similar, I also restrict the estimation to countries with at most five tax havens in a 2500 km circle around them when they enter the sample.

I propose two alternative empirical settings in Figure A.9 of Appendix C. In the first, I do not restrict the estimation to countries with at most five tax havens in a 2500 km circle around them when they enter the sample. This estimation has the advantage of including more countries in the estimation sample at the expense of the quality of the control group. Second, instead of relying on the number of surrounding tax havens, I use the share of countries in a 2500 km circle that are tax havens as my treatment variable. This specification allows me to account for the fact that countries that have more neighbors are structurally more likely to have tax havens in their neighborhood. The estimator will compare switchers l periods after treatment to groups that have not switched yet but that have the same share of tax havens around them at the beginning of the sample period. This condition limits the number of countries in the estimation since some treated units might not have comparable units available.

I study the effects of new tax havens on other countries’ GDP per capita, tax revenues and tax structure. I use the recent database made available by Bachas et al. (2022) on the tax revenues of a large number of countries for a long period in the second part of the 20th century. They separate these revenues between those levied on capital (corporate

income taxes, wealth taxes, property taxes, and a share of personal income taxes) and those levied on labor (payroll taxes, social security payments, and a share of personal income taxes). The tax structure is studied through the differential taxation of labor and capital. This is only an imperfect proxy of a country’s tax structure, but it is the best long-run comparative information currently available. I estimate the following equation:

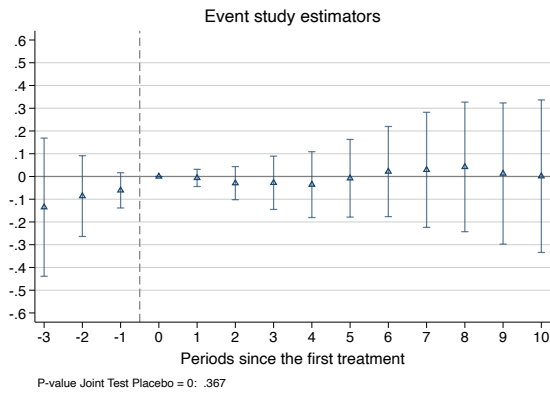
$$y_{it} = \sum_{k=-3}^{10} \beta_k \left(\sum_j Haven_j^k \times \mathbb{1}_{dist_{ij} < 2500km} \right) + \mu_i + \mu_t + e_{it} \quad (10)$$

where y_{it} is the outcome of interest for country i at date t —the logarithm of GDP per capita, total tax revenues as a share of net domestic product (NDP), or the difference between tax revenues on labor and tax revenues on capital as a share of NDP. $\left(\sum_j Haven_j^k \times \mathbb{1}_{dist_{ij} < 2500km} \right)$ corresponds to the number of new tax havens in a 2500 km circle around country i . μ_i and μ_t are country and year fixed effects. e_{it} represents the residuals of the estimation.

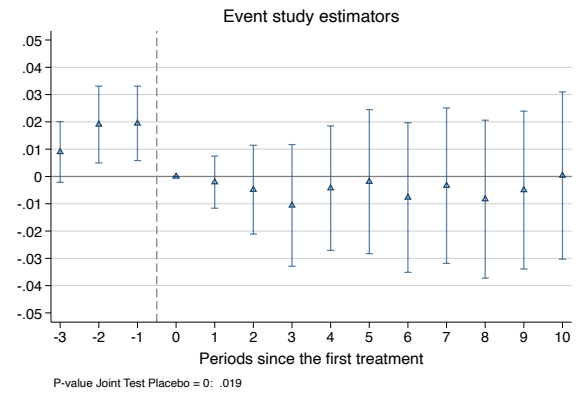
The coefficient estimated at a given period k corresponds to the weighted average of the effect of current treatment and of its previous lags on the outcome under the no-anticipation assumption and the parallel trends assumption. This last assumption requires that treated countries would have had the same expected evolution of their outcome as nonswitchers with the same initial treatment if they had not been treated.

The results are displayed in Figure 5. In panel (a) I find no distinguishable effect of exposure to a new tax haven on GDP per capita, with small coefficients and large confidence intervals. Panel (b) explores the effect on total tax revenues. The pre-event coefficients suggest that the assumption of parallel pretrends is unlikely to hold. This supports the finding in section 5 that tax havens appear in reaction to tax increases in neighboring countries. Post-event, there are no statistically significant effects of the presence of new tax havens in the neighborhood, even though the point estimates suggest a small negative effect on tax revenues. Combined with the results in the literature documenting a negative immediate effect of tax havens on tax revenues, this suggests that governments that want to collect a certain amount of tax revenue react to tax revenue losses due to tax havens by offsetting them with increased taxes on other bases. This view is in line with the finding of Bilicka et al. (2023) that German municipalities highly exposed to tax avoidance by multinational enterprises (MNEs) tend to have larger indirect tax revenues.

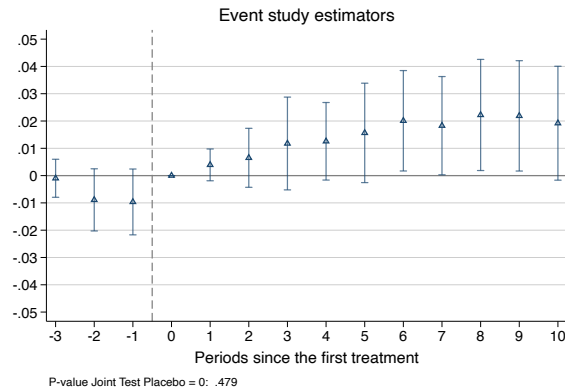
Finally, I explore the potential effect of exposure to tax havens on other countries’ tax structure in panel (c). I compare the taxation that falls on labor (a relatively immobile factor) to the taxation that falls on capital (a relatively mobile factor). Interestingly, the differences in pretrends are not significantly different from zero: if tax policy changes in nonhaven countries do cause countries to become tax havens, this is not attributable to a differential increase in taxation of capital over that of labor. Following the first event, taxation of labor increases relative to that on capital. The effect is large (+2 percentage points of NDP 6 years after the first treatment) and statistically significant at the 95% level. Given that the average difference in 2000 is approximately 4.5% of NDP, this means that the emergence of new neighboring tax havens increases this difference by approximately 44%. Importantly, this result shows that governments react to the use



(a) GDP per capita



(b) Tax revenues (% of NDP)



(c) Tax rev. on L - tax rev. on K (% of NDP)

Figure 5 – Effect of exposure to tax havens on other countries

Note: This figure plots coefficients from an event-study regression following equation 10 and estimated with the estimator of de Chaisemartin and D’Haultfœuille (2024). In panel (a), the dependent variable is GDP per capita. In panel (b), the dependent variable is total tax revenues as a share of NDP. In panel (c), the dependent variable is the difference between revenues from the taxation of labor and revenues from the taxation of capital as a share of NDP; 95% confidence intervals from standard errors clustered at the country level.

of tax havens by changing their tax structure. Taxation of capital decreases relative to that of labor, which is much less mobile. This result documents a new channel through which globalization affected the tax structure of countries over the second part of the 20th century (Egger et al., 2019, Bachas et al., 2022). Tax havens appear in non-haven countries as a (budget-neutral) subsidy to mobile factors financed by a tax on immobile factors.

7 Conclusion

In this paper, I introduced a novel database that tracks the development of tax havens’ legal architecture. Using this database, I highlighted the key role of market forces in tax havens’ creation and evolution. Demand matters through the market access of tax havens, while competition among tax havens appears as a primary driver of their development. Legal innovations also play a crucial role in the development of tax havens. Last, I demonstrated that the gains from a country’s becoming a tax haven on its GDP

per capita come at the cost of a significant impact on the tax structure of nonhaven countries.

Recent developments in the regulation of tax havens, such as the OECD-led Common Reporting Standard (CRS) and the two-pillar reform of the international corporate tax system, introduce substantial negative shocks to tax havens' rents (Gómez-Cram and Olbert, 2023). The insights from this paper suggest that these policies may induce tax havens to update their legal architectures to introduce new legal technologies. This is confirmed by the fact that some tax havens have deepened their offshore legal architecture by implementing "high-risk" citizenship-by-investment schemes to circumvent the CRS (Langenmayr and Zyska, 2023, OECD, 2022). These reforms generate substantial government revenue for these states.³⁰ An unintended consequence of regulations may be increased competition between tax havens and heightened aggressiveness in their own regulations. In turn, this paper underscores the importance of designing international regulations of tax havens to be robust against legal innovations and their diffusion.

References

- Abadie, A., Diamond, A., & Hainmueller, J. (2015). Comparative Politics and the Synthetic Control Method. *American Journal of Political Science*, 59(2), 495–510.
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2008). Income and Democracy. *American Economic Review*, 98(3), 808–842.
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2009). Reevaluating the modernization hypothesis. *Journal of Monetary Economics*, 56(8), 1043–1058.
- Aidt, T. S., Albornoz, F., & Hauk, E. (2021). Foreign Influence and Domestic Policy. *Journal of Economic Literature*, 59(2), 426–487.
- Alfaro, L., Faia, E., Judson, R. A., & Schmidt-Eisenlohr, T. (2020). *Elusive Safety: The New Geography of Capital Flows and Risk* (No. 27048). National Bureau of Economic Research, Inc.
- Alstadsæter, A., & Jacob, M. (2016). Dividend Taxes and Income Shifting. *The Scandinavian Journal of Economics*, 118(4), 693–717.
- Alstadsæter, A., Johannesen, N., & Zucman, G. (2018). Who owns the wealth in tax havens? Macro evidence and implications for global inequality. *Journal of Public Economics*, 162, 89–100.
- Alstadsæter, A., Johannesen, N., & Zucman, G. (2019). Tax Evasion and Inequality. *American Economic Review*, 109(6), 2073–2103.
- Andersen, J. J., Johannesen, N., Lassen, D. D., & Paltseva, E. (2017). Petro Rents, Political Institutions, and Hidden Wealth: Evidence from Offshore Bank Accounts. *Journal of the European Economic Association*, 15(4), 818–860.
- Andersen, J. J., Johannesen, N., & Rijkers, B. (2022). Elite Capture of Foreign Aid: Evidence from Offshore Bank Accounts. *Journal of Political Economy*, 130(2), 388–425.
- Antràs, P., de Gortari, A., & Itskhoki, O. (2017). Globalization, inequality and welfare. *Journal of International Economics*, 108, 387–412.
- Bachas, P., Fisher-Post, M. H., Jensen, A., & Zucman, G. (2022). *Capital Taxation, Development, and Globalization: Evidence from a Macro-Historical Database* (Working Paper No. 29819). National Bureau of Economic Research.

30. According to Eastern Caribbean Central Bank data, in 2021, citizenship-by-investment schemes represented 9% of government revenues in Antigua and Barbuda (0% in 2014), 54% in Dominica (12% in 2014), 4% in Grenada (0% in 2014), and 51% in St. Kitts and Nevis (37% in 2014).

- Barron, M., Miguel, E., & Satyanath, S. (2014). Economic Shocks and Democratization in Africa*. *Political Science Research and Methods*, 2(1), 33–47.
- Beauchamp, A. (1992). *Guide mondial des paradis fiscaux* (Nouv. éd. ent. rev. et complétée édition). Grasset.
- Besley, T., Jensen, A., & Persson, T. (2023). Norms, Enforcement, and Tax Evasion. *The Review of Economics and Statistics*, 105(4), 998–1007.
- Besley, T., & Persson, T. (2011). *Pillars of Prosperity – The Political Economics of Development Clusters*. Princeton University Press.
- Bilicka, K., Dubinina, E., Janský, P., & Bilicka, K. A. (2023). *Fiscal Consequences of Corporate Tax Avoidance*.
- Bomare, J., & Le Guern Herry, S. (2022). *Will We Ever Be Able to Track Offshore Wealth? Evidence from the Offshore Real Estate Market in the UK* (No. 4). EU Tax Observatory.
- Borusyak, K., & Hull, P. (2023). Nonrandom Exposure to Exogenous Shocks. *Econometrica*, 91(6), 2155–2185.
- Borusyak, K., Hull, P., & Jaravel, X. (2022). Quasi-Experimental Shift-Share Research Designs. *The Review of Economic Studies*, 89(1), 181–213.
- Brounstein, J. (2021). *The tax-price elasticity of offshore tax avoidance: Evidence from Ecuadorian transaction data* (wp-2021-187). World Institute for Development Economic Research (UNU-WIDER).
- Butkiewicz, J. L., & Gordon, L.-R. C. (2013). The Economic Growth Effect of Offshore Banking in Host Territories: Evidence from the Caribbean. *World Development*, 44, 165–179.
- Cameron, D. R. (1978). The Expansion of the Public Economy: A Comparative Analysis. *American Political Science Review*, 72(4), 1243–1261.
- Chambost, E. (2000). *Guide Chambost des paradis fiscaux*. Favre.
- Cogneau, D., Dupraz, Y., & Mesplé-Somps, S. (2018). *African states and development in historical perspective: Colonial public finances in British and French West* (halshs-01820209). HAL.
- Colella, F., Lalive, R., Sakalli, S. O., & Thoenig, M. (2019). *Inference with Arbitrary Clustering* (No. 12584). Institute of Labor Economics (IZA).
- Comin, D., & Mestieri, M. (2014). Technology Diffusion: Measurement, Causes, and Consequences. In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (pp. 565–622). Elsevier.
- Copeland, B. R. (2008). The Pollution Haven Hypothesis. *Handbook on Trade and the Environment*.
- Coppola, A., Maggiori, M., Neiman, B., & Schreger, J. (2021). Redrawing the Map of Global Capital Flows: The Role of Cross-Border Financing and Tax Havens. *The Quarterly Journal of Economics*, 136(3), 1499–1556.
- Deakin, S., Gindis, D., Hodgson, G. M., Huang, K., & Pistor, K. (2017). Legal institutionalism: Capitalism and the constitutive role of law. *Journal of Comparative Economics*, 45(1), 188–200.
- de Chaisemartin, C., & D’Haultfœuille, X. (2020). Two-Way Fixed Effects Estimators with Heterogeneous Treatment Effects. *American Economic Review*, 110(9), 2964–2996.
- de Chaisemartin, C., & D’Haultfœuille, X. (2024). Difference-in-Differences Estimators of Intertemporal Treatment Effects. *The Review of Economics and Statistics*, 1–45.
- DellaVigna, S., & Kim, W. (2022). *Policy Diffusion and Polarization across U.S. States* (Working Paper No. 30142). National Bureau of Economic Research.
- Desai, M. A., Foley, C. F., & Hines, J. R. (2006). The demand for tax haven operations. *Journal of Public Economics*, 90(3), 513–531.
- Dharmapala, D., & Hines, J. R. (2009). Which countries become tax havens? *Journal of Public Economics*, 93(9), 1058–1068.
- Doggart, C. (1975). *Tax Havens and their uses*. The Economist Intelligence Unit.

- Dyreng, S. D., Lindsey, B. P., & Thornock, J. R. (2013). Exploring the role Delaware plays as a domestic tax haven. *Journal of Financial Economics*, 108(3), 751–772.
- Egger, P. H., Nigai, S., & Strecker, N. M. (2019). The Taxing Deed of Globalization. *The American Economic Review*, 109(2), 353–390.
- Elsayyad, M., & Konrad, K. A. (2012). Fighting multiple tax havens. *Journal of International Economics*, 86(2), 295–305.
- Farquet, C. (2018). *Histoire du paradis fiscal suisse*. Presses de Sciences Po.
- Farquet, C. (2021). *Attractive Sources. Tax Havens' Emergence: Mythical Origins versus Structural Evolutions* (SSRN Scholarly Paper No. 3897377). Social Science Research Network. Rochester, NY.
- Ferey, A., Haufler, A., & Perroni, C. (2023). Incentives, globalization, and redistribution. *Journal of Public Economics*, 224(100).
- Ferrari, A., Laffitte, S., Parenti, M., & Toubal, F. (2022). *Profit Shifting Frictions and the Geography of Multinational Activity* (CEPR Discussion Paper DP17801). CEPR.
- Ferrari, A., & Ossa, R. (2023). A quantitative analysis of subsidy competition in the U.S. *Journal of Public Economics*, 224, 104919.
- Fonseca, L., Nikalexi, K., & Papaioannou, E. (2023). The globalization of corporate control. *Journal of International Economics*, 103754.
- Fossen, A. (2002). Offshore Financial Centres and Internal development in the Pacific Islands. *Pacific Economic Bulletin*, 17.
- Frankema, E., & Waijenburg, M. v. (2014). Metropolitan Blueprints of Colonial Taxation? Lessons From Fiscal Capacity Building in British and French Africa c. 1880–1940. *The Journal of African History*, 55(3), 371–400.
- Fuest, C., Greil, S., Hugger, F., & Neumeier, F. (2022). Global Profit Shifting of Multinational Companies: Evidence from CbCR Micro Data. *CESifo Working Paper Series*.
- Funke, M., Schularick, M., & Trebesch, C. (2023). Populist Leaders and the Economy. *American Economic Review*, 113(12), 3249–3288.
- Garcia Alvarado, F., & Mandel, A. (2022). The network structure of global tax evasion evidence from the Panama papers. *Journal of Economic Behavior & Organization*, 197, 660–684.
- Garcia-Bernardo, J., Fichtner, J., Takes, F. W., & Heemskerk, E. M. (2017). Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network. *Scientific Reports*, 7(1), 6246.
- Garrett, D., & Suárez Serrato, J. C. (2019). How Elastic is the Demand for Tax Havens? Evidence from the US Possessions Corporations Tax Credit. *AEA P&P*, 109, 493–499.
- Gobillon, L., & Magnac, T. (2016). Regional Policy Evaluation: Interactive Fixed Effects and Synthetic Controls. *The Review of Economics and Statistics*, 98(3), 535–551.
- Gómez-Cram, R., & Olbert, M. (2023). Measuring the Expected Effects of the Global Tax Reform. *The Review of Financial Studies*, 36(12), 4965–5011.
- Government of the Cayman Islands. (2021). 2020 Compendium of Statistics.
- Guex, S. (2000). The Origins of the Swiss Banking Secrecy Law and Its Repercussions for Swiss Federal Policy. *The Business History Review*, 74(2), 237–266.
- Guex, S. (2021). The Emergence of the Swiss Tax Haven, 1816–1914. *Business History Review*, 1–20.
- Guex, S. (2023). Introduction. “Low-Tax Predators” Rather Than “Tax Havens”: New Perspectives on the History of the International Tax Evasion and Avoidance Market. In S. Guex & H. Buclin (Eds.), *Tax Evasion and Tax Havens since the Nineteenth Century* (pp. 1–34). Springer International Publishing.
- Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural Biases in Economic Exchange?*. *The Quarterly Journal of Economics*, 124(3), 1095–1131.

- Gurevich, T., Herman, P., Toubal, F., & Yotov, Y. (2024). The Domestic and International Common Language Database. *School of Economics Working Paper Series*.
- Guriev, S., Melnikov, N., & Zhuravskaya, E. (2021). 3G Internet and Confidence in Government. *The Quarterly Journal of Economics*, 136(4), 2533–2613.
- Guvenen, F., Mataloni Jr., R. J., Rassier, D. G., & Ruhl, K. J. (2022). Offshore Profit Shifting and Aggregate Measurement: Balance of Payments, Foreign Investment, Productivity, and the Labor Share. *American Economic Review*, 112(6), 1848–1884.
- Guyton, J., Langetieg, P., Reck, D., Risch, M., & Zucman, G. (2021). Tax Evasion at the Top of the Income Distribution: Theory and Evidence. *NBER Working Papers*.
- Hanlon, M., Maydew, E. L., & Thornock, J. R. (2015). Taking the Long Way Home: U.S. Tax Evasion and Offshore Investments in U.S. Equity and Debt Markets. *The Journal of Finance*, 70(1), 257–287.
- Hansen, N. A., & Kessler, A. S. (2001). The Political Geography of Tax H(e)avens and Tax Hells. *American Economic Review*, 91(4), 1103–1115.
- Harrington, B. (2016). *Capital without Borders: Wealth Managers and the One Percent*. Harvard University Press.
- Hebous, S., & Johannesen, N. (2021). At your service! The role of tax havens in international trade with services. *European Economic Review*, 135, 103737.
- Hines, J. R. (2005). Do Tax Havens Flourish? *Tax Policy and the Economy*, 19, 65–99.
- Hines, J. R., & Rice, E. M. (1994). Fiscal Paradise: Foreign Tax Havens and American Business. *The Quarterly Journal of Economics*, 109(1), 149–182.
- Hollis, J., & McKenna, C. (2019). The Emergence of the Offshore Economy, 1914–1939. *Capitalism's Hidden Worlds* (pp. 157–178). University of Pennsylvania Press.
- Hong, Q., & Smart, M. (2010). In praise of tax havens: International tax planning and foreign direct investment. *European Economic Review*, 54(1), 82–95.
- ICIJ. (2022a). ICIJ publishes final batch of Pandora Papers data on more than 9,000 offshore companies, trusts and foundations - ICIJ.
- ICIJ. (2022b). Offshore Leaks Database.
- Johannesen, N. (2010). Imperfect tax competition for profits, asymmetric equilibrium and beneficial tax havens. *Journal of International Economics*, 81(2), 253–264.
- Johannesen, N., Miethe, J., & Weishaar, D. (2022). *Homes Incorporated: Offshore Ownership of Real Estate in the U.K* (SSRN Scholarly Paper No. 4309211). Rochester, NY.
- Kanbur, R., & Keen, M. (1993). Jeux Sans Frontières: Tax Competition and Tax Coordination When Countries Differ in Size. *The American Economic Review*, 83(4), 877–892.
- Keen, M., & Konrad, K. A. (2013). The Theory of International Tax Competition and Coordination. In A. J. Auerbach, R. Chetty, M. Feldstein, & E. Saez (Eds.), *Handbook of Public Economics* (pp. 257–328). Elsevier.
- Kimura, F., & Lee, H.-H. (2006). The Gravity Equation in International Trade in Services. *Review of World Economics*, 142(1), 92–121.
- Kirk, J. (2014). 30th anniversary of the BVI International Business Companies Act 1984.
- Kiser, E., & Karceski, S. M. (2017). Political Economy of Taxation. *Annual Review of Political Science*, 20(1), 75–92.
- Klerman, D. M., Mahoney, P. G., Spamann, H., & Weinstein, M. I. (2011). Legal Origin or Colonial History? *Journal of Legal Analysis*, 3(2), 379–409.
- Kollewe, J. (2022). Russia's richest man may have avoided freeze on £1bn Tui shares. *The Guardian*.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The Economic Consequences of Legal Origins. *Journal of Economic Literature*, 46(2), 285–332.
- Langenmayr, D., & Zyska, L. (2023). Escaping the exchange of information: Tax evasion via citizenship-by-investment. *Journal of Public Economics*, 221, 104865.

- Leenders, W., Lejour, A., Rabaté, S., & van 't Riet, M. (2023). Offshore tax evasion and wealth inequality: Evidence from a tax amnesty in the Netherlands. *Journal of Public Economics*, 217, 104785.
- Liu, L., Wang, Y., & Xu, Y. (2022). A Practical Guide to Counterfactual Estimators for Causal Inference with Time-Series Cross-Sectional Data. *American Journal of Political Science*.
- Londoño-Vélez, J. (2014). *War and Progressive Income Taxation in the 20th Century* (No. 2014-03).
- Londoño-Vélez, J., & Avila-Mahecha, J. (2024). *Behavioral Responses to Wealth Taxation: Evidence from Colombia* (Working Paper No. 32134). National Bureau of Economic Research.
- Love, M. (2021). *Where in the World Does Partnership Income Go? Evidence of a Growing Use of Tax Havens* (SSRN Scholarly Paper No. 3985535). Rochester, NY.
- Luttmer, E. F. P., & Singhal, M. (2014). Tax Morale. *Journal of Economic Perspectives*, 28(4), 149–168.
- Martin, I. W., & Prasad, M. (2014). Taxes and Fiscal Sociology. *Annual Review of Sociology*, 40(1), 331–345.
- Miethe, J. (2020). *The Elusive Banker: Using Hurricanes to Uncover (Non-)Activity in Offshore Financial Centers* (No. 8625). CESifo.
- Mummolo, J., & Peterson, E. (2018). Improving the Interpretation of Fixed Effects Regression Results. *Political Science Research and Methods*, 6(4), 829–835.
- OECD. (2022). Residence/Citizenship by investment schemes.
- Ogle, V. (2017). Archipelago Capitalism: Tax Havens, Offshore Money, and the State, 1950s–1970s. *The American Historical Review*, 122(5), 1431–1458.
- Ogle, V. (2020). 'Funk Money': The End of Empires, The Expansion of Tax Havens, and Decolonization as an Economic and Financial Event. *Past & Present*, 249(1), 213–249.
- Omartian, J. D. (2017). *Do Banks Aid and Abet Asset Concealment: Evidence from the Panama Papers* (SSRN Scholarly Paper No. 2836635). Rochester, NY.
- Palan, R., Murphy, R., & Chavagneux, C. (2009). *Tax Havens: How Globalization Really Works*. Cornell University Press.
- Pettersson-Lidbom, P. (2008). Do Parties Matter for Economic Outcomes? A Regression-Discontinuity Approach. *Journal of the European Economic Association*, 6(5), 1037–1056.
- Piketty, T., Saez, E., & Stantcheva, S. (2014). Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities. *American Economic Journal: Economic Policy*, 6(1), 230–271.
- Pistor, K. (2013). A legal theory of finance. *Journal of Comparative Economics*, 41(2), 315–330.
- Pistor, K. (2019). *The Code of Capital: How the Law Creates Wealth and Inequality*. Princeton University Press.
- Rawlings, G. (2004). Laws, liquidity and eurobonds: The making of the Vanuatu tax haven. *Journal of Pacific History*, 39, 325–341.
- Redding, S., & Venables, A. J. (2004). Economic geography and international inequality. *Journal of International Economics*, 62(1), 53–82.
- Ribstein, L. E., & O'Hara, E. (2009). *The Law Market*. Oxford University Press.
- Riegels, C. (2014). The BVI IBC Act and the Building of a Nation.
- Sævdold, K. (2022). *Tax Havens of the British Empire : Development, Policy Responses, and Decolonization, 1961-1979* (Doctoral thesis). The University of Bergen.
- Sagar, P., Christensen, J., & Shaxson, N. (2013). British government attitudes to British tax havens: An examination of whitehall responses to the growth of tax havens in british dependent territories from 1967-75. In J. Leaman & A. Waris (Eds.), *Tax Justice and the Political Economy of Global Capitalism, 1945 to the Present* (pp. 107–132). Berghahn Books.
- Schumpeter, J. (1954). Crisis of the Tax State. In W. F. Stolper & R. A. Musgrave (Eds.), *International Economic Papers*.

- Seelkopf, L., Bubek, M., Eihmanis, E., Ganderson, J., Limberg, J., Mnaili, Y., Zuluaga, P., & Genschel, P. (2021). The rise of modern taxation: A new comprehensive dataset of tax introductions worldwide. *The Review of International Organizations*, 16(1), 239–263.
- Sharman, J. C. (2019). *Havens in a Storm: The Struggle for Global Tax Regulation*. Cornell University Press.
- Slattery, C. (2024). *Bidding for Firms: Subsidy Competition in the U.S.* (SSRN Scholarly Paper No. 3250356). Rochester, NY.
- Slemrod, J. (2008). Why Is Elvis on Burkina Faso Postage Stamps? Cross-Country Evidence on the Commercialization of State Sovereignty. *Journal of Empirical Legal Studies*, 5(4), 683–712.
- Slemrod, J., & Wilson, J. D. (2009). Tax competition with parasitic tax havens. *Journal of Public Economics*, 93(11), 1261–1270.
- Smith, M., Yagan, D., Zidar, O., & Zwick, E. (2019). Capitalists in the Twenty-First Century*. *The Quarterly Journal of Economics*, 134(4), 1675–1745.
- Stantcheva, S. (2021). Understanding Tax Policy: How do People Reason?*. *The Quarterly Journal of Economics*, 136(4), 2309–2369.
- Stock, J., & Yogo, M. (2005). Testing for Weak Instruments in Linear IV Regression. *Identification and Inference for Econometric Models*. Cambridge University Press.
- Tax Justice Network. (2020). Financial Secrecy Index.
- Thunecke, G. (2023). *Are consumers paying the bill? How international tax competition affects consumption taxation*.
- Timoneda, J. C. (2021). Estimating group fixed effects in panel data with a binary dependent variable: How the LPM outperforms logistic regression in rare events data. *Social Science Research*, 93, 102486.
- Tørsløv, T., Wier, L., & Zucman, G. (2023). The Missing Profits of Nations. *The Review of Economic Studies*, 90(3), 1499–1534.
- van Beurden, T., & Jonker, J. (2021). A perfect symbiosis: Curaçao, the Netherlands and financial offshore services, 1951–2013. *Financial History Review*, 28(1), 67–95.
- Watteyne, S. (2023). Emergence of, and Threats to, the Belgian Tax Haven During La Belle Époque, 1890–1914. In S. Guex & H. Buclin (Eds.), *Tax Evasion and Tax Havens since the Nineteenth Century* (pp. 73–92). Springer International Publishing.
- Woker, M. (2024). French imperial statecraft, capital, corporate taxation, and the tax haven that wasn't, 1920s-1950s. *Past and Present*, Forthcoming.
- Wooldridge, J. M. (2015). Control Function Methods in Applied Econometrics. *The Journal of Human Resources*, 50(2), 420–445.
- Wooldridge, J. M. (2023). Simple approaches to nonlinear difference-in-differences with panel data. *The Econometrics Journal*, 26(3), C31–C66.
- Xu, G. (2019). The colonial origins of fiscal capacity: Evidence from patronage governors. *Journal of Comparative Economics*, 47(2), 263–276.
- Xu, Y. (2017). Generalized Synthetic Control Method: Causal Inference with Interactive Fixed Effects Models. *Political Analysis*, 25(1), 57–76.
- Zucman, G. (2013). The Missing Wealth of Nations: Are Europe and the U.S. net Debtors or net Creditors? *The Quarterly Journal of Economics*, 128(3), 1321–1364.
- Zucman, G. (2014). Taxing across Borders: Tracking Personal Wealth and Corporate Profits. *Journal of Economic Perspectives*, 28(4), 121–48.

Online Appendix

A Data sources

GDP and GDP per capita and population: Long-term GDP and population data from GapMinder that aggregates GDP from World Bank (World Development indicators), the Maddison Project, and the Penn World Tables. Details on the documentation: <https://www.gapminder.org/data/documentation/gd001/>. The event study on tax havens and GDP per capita uses GDP and population data from the World Bank's World Development Indicators.

Colonial History: I first associate each territory with a status relative to its sovereign history. Each country or territory can be either independent, non-independent and a colony, or non-independent and not a colony. This last status is created to deal with specific cases treated differently by different databases about colonial history. For instance, the islands of Jersey and Guernsey, despite being under the actual control of the United Kingdom, are generally not considered as colonies. However, for the purpose of this paper, it is important to highlight their link with the United Kingdom. To this purpose I use information from the Colonial Dates Dataset (Becker, 2020), the Cepii Gravity Dataset (Head and Mayer, 2014) and the ICOW colonial dataset (Hensel, 2018). The data is then manually completed when information is missing for a given territory using worldstatesmen.org, rulers.org, and wikipedia.org. The main colonial variable used in this paper record the last ruler of a territory (including its current ruler if applicable). It includes countries not generally considered as colonies, such as the Channel Islands.

Tax introductions: Data from the Tax Introduction Dataset (Seelkopf et al. (2021)).

Top marginal income tax rate: Data from Londoño-Vélez (2014).

Gravity data: Data from the U.S. International Trade Commission Gravity Portal (release 2.1), Gurevich and Herman (n.d.).

Swiss Market for haven's services: Data from Zucman (2013)

Fee revenues in Cayman Islands: Data from Government of the Cayman Islands (2021)

Citizenship by investment revenues: Data from the statistics portal of the Eastern Caribbean Central Bank (<https://www.eccb-centralbank.org/statistics/fiscals/comparative-report/3>).

Democracy: Data from Scheve and Stasavage (2012).

B Supplementary tables

Table A.1 – Comparing different lists of tax havens.

Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists
Bahamas	11	Vanuatu	10	Monaco	8	Samoa	6	Latvia	2	Campione	1	Nigeria	1
Bermuda	11	Gibraltar	9	Nauru	8	Seychelles	6	Madeira	2	Egypt	1	Northern Cyprus	1
Cayman	11	Hong Kong	9	St Kitts & Nevis	8	Lebanon	5	Netherlands	2	France	1	Palau	1
Guernsey	11	Singapore	9	Andorra	7	Niue	5	Philippines	2	Germany	1	Puerto Rico	1
Jersey	11	St Vincent & the Grenadines	9	Anguilla	7	Macau	4	South Africa	2	Guatemala	1	Russia	1
Malta	11	Switzerland	9	Bahrain	7	Malaysia	4	Tonga	2	Honduras	1	San Marino	1
Panama	11	Turks & Caicos Islands	9	Costa Rica	7	Montserrat	4	Uruguay	2	Iceland	1	Sao Tome e Principe	1
Barbados	10	Antigua & Barbuda	8	Marshall Islands	7	Maldives	3	US Virgin Islands	2	Indonesia	1	Sark	1
British Virgin Islands	10	Belize	8	Mauritius	7	United Kingdom	3	USA	2	Ingushetia	1	Somalia	1
Cyprus	10	Cook Islands	8	St. Lucia	7	Brunei	2	Alderney	1	Jordan	1	Sri Lanka	1
Isle of Man	10	Grenada	8	Aruba	6	Dubai	2	Anjouan	1	Marianas	1	Taipei	1
Liechtenstein	10	Ireland	8	Dominica	6	Hungary	2	Belgium	1	Melilla	1	Trieste	1
Netherlands Antilles	10	Luxembourg	8	Liberia	6	Israel	2	Botswana	1	Myanmar	1	Ukraine	1

Note: This table counts the number of tax havens lists in which each country is reported. Countries used in the sample of this paper are highlighted in **bold** font. The list of countries comes from table 1.4 of Palan et al. (2009). The eleven lists are the following: International Bureau of Fiscal Documentation (1977), Charles Irish (1982), Hines and Rice (1994), OECD (2000), IMF (2000), FSF (2000), FATF (2000,2002), TJN (2005), IMF (2007), STHAA (2007), Low-Tax.net (2008).

Table A.2 – Correlation of the instrument with shock-level variables.

	(1)	(2)	(3)	(4)	(5)
			$\hat{T\hat{o}p}_{jt}$		
ln(Real GDP)	-0.00696 (0.0312)	0.00871 (0.0354)	0.0107 (0.0268)	0.0108 (0.0268)	0.0114 (0.0313)
ln(Real GDP per capita)		-0.0325 (0.0667)	0.0103 (0.0297)	0.00976 (0.0302)	0.0181 (0.0288)
Inflation			0.000548 (0.000507)	0.000543 (0.000517)	0.000175 (0.000943)
War occurrence				-0.00365 (0.0146)	-0.00466 (0.0187)
Tax revenues/GDP					0.00128 (0.00204)
Observations	2,554	2,554	1,810	1,810	1,678
Time FE	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes

Note: This table regresses shock-level variable on country-level characteristics to assess the validity of the instrument. variables are extracted from Gräbner et al. (2021). Robust standard errors clustered at the country level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.3 – The impact of demand on the probability of reform: number of tax introductions

	(1)	(2)	(3)
	$\mathbb{1}_{Reform}$	$\mathbb{1}_{FirstReform}$	$\mathbb{1}_{OtherReforms}$
Extensive margin			
# Direct < 2500km	0.389*** (0.0783)	0.254*** (0.0517)	0.583 (0.419)
# Direct < 2500km × ln(Area)	-0.0338*** (0.00607)	-0.0218*** (0.00401)	-0.0196 (0.0399)
Standardized effect	0.415	0.756	0.0769
Effect = 0 at size=	99515	117809	–
Effect = 0 at size percentile=	54	57	–
Time FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	23,214	21,396	1,818

Note: This table estimates equation (5). # Direct refers to the number of Corporate income taxes or Personal income taxes introduced within a distance range. The coefficient has been multiplied by 100 to ease interpretation. Data on the introduction of taxes comes from Seelkopf et al. (2021). Data on tax havens' reforms comes from own data collection detailed in section 2. Column (1) include all reforms as dependent variables. In column (2), tax havens leave the sample after the first reform. Columns (3) only considers new reforms from countries that are already tax havens. Additional controls correspond to an indicator variable for being independent, and the number of years since independence. The scaled effects are computed by multiplying the coefficient by the standard deviation of the residualized number of direct taxes introduced in less than 2500km and dividing it by the average of the dependent variable in the sample. It can be interpreted as the percentage change in the probability of the event represented by the dependent variable when demand increases by one standard deviation. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.4 – The impact of demand on the probability of reform: number of tax introductions, robustness

	(1)	(2)	(3)	(4)	(5)	(6)
	$\mathbb{1}_{Reform}$	$\mathbb{1}_{FirstReform}$	$\mathbb{1}_{OtherReforms}$	$\mathbb{1}_{Reform}$	$\mathbb{1}_{FirstReform}$	$\mathbb{1}_{OtherReforms}$
Extensive margin						
# Direct < 2500km	0.400*** (0.0837)	0.253*** (0.0520)	0.913* (0.471)			
# Direct < 2500km × ln(Area)	-0.0354*** (0.00650)	-0.0221*** (0.00404)	-0.0647 (0.0443)			
# Indirect < 2500km	-0.122** (0.0478)	-0.0706* (0.0385)	-0.551* (0.279)			
# Indirect < 2500km × ln(Area)	0.00814** (0.00374)	0.00462 (0.00297)	0.0464 (0.0282)			
# Direct > 2500km				0.0149 (0.0181)	0.0116 (0.0110)	-0.355 (0.286)
# Direct > 2500km × ln(Area)				-0.00363*** (0.000531)	-0.00231*** (0.000358)	-0.00309 (0.00685)
Standardized effect	2.256	4.024	0.548	0.0855	0.188	-0.215
Effect = 0 at size=	81208	93001	1.350e+06	61	150	–
Effect = 0 at size percentile	50	53	92	4	7	–
Time FE	Yes	Yes	Yes			
Country FE	Yes	Yes	Yes			
Controls	Yes	Yes	Yes			
Observations	23,214	21,396	1,818	23,214	21,396	1,818

Note: This table estimates equation (5). # Direct refers to the number of Corporate income taxes or Personal income taxes introduced within a distance range. # Indirect refers to the number of taxes except Corporate income taxes or Personal income taxes introduced within a distance range. The coefficient has been multiplied by 100 to ease interpretation. Data on the introduction of taxes comes from Seelkopf et al. (2021). Data on tax havens' reforms comes from own data collection detailed in section 2. Columns (1) and (4) include all reforms as dependent variables. In columns (2) and (5), tax havens leave the sample after the first reform. Columns (3) and (6) only considers new reforms from countries that are already tax havens. Additional controls correspond to an indicator variable for being independent, and the number of years since independence. The scaled effects are computed by multiplying the coefficient by the standard deviation of the residualized number of direct taxes introduced in less than 2500km and dividing it by the average of the dependent variable in the sample. It can be interpreted as the percentage change in the probability of the event represented by the dependent variable when demand increases by one standard deviation. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.5 – The impact of demand on the probability of reform: robustness for distance thresholds

	(1)	(2)	(3)
	$\mathbb{1}_{FirstReform}$		
Demand < 2000km	0.0966** (0.0411)		
Demand < 2000km × ln(Area)	-0.00635** (0.00251)		
Demand < 3500km		-0.0128 (0.0187)	
Demand < 3500km × ln(Area)		-0.00121 (0.00127)	
Demand > 2500km			-0.00554 (0.0211)
Demand > 2500km × ln(Area)			0.000455 (0.000947)
Standardized effect	3.152	-0.294	-0.160
Effect = 0 at size=	4.082e+06	0	195710
Effect = 0 at size percentile=	97	0	63
Time FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	4,221	8,904	16,836

Note: This table estimates equation 5 using different size thresholds to compute the demand for offshore services. A threshold of 1000km is used in column (1), a threshold of 2000km is used in column (2), a threshold of 3500km is used in column (3). In column (4), I perform a placebo experiment where I compute the demand as the demand coming from countries *more* distant than 2500km.

Table A.6 – The impact of demand on the probability of reform: additional controls

	(1)	(2)	(3)	(4)	(5)
			$\mathbb{1}_{FirstReform}$		
Demand (within 2500km)	0.0598** (0.0252)	0.0606** (0.0239)	0.0622** (0.0304)	0.0634** (0.0300)	0.0557* (0.0316)
Demand (within 2500km) × ln(Area)	-0.00489*** (0.00181)	-0.00448*** (0.00169)	-0.00480** (0.00238)	-0.00485** (0.00241)	-0.00418 (0.00251)
Independent	0.00837 (0.00592)	0.0122* (0.00708)	0.00942 (0.00659)	0.00950 (0.00653)	0.00940 (0.00652)
Time from indep.	-5.92e-05 (6.30e-05)	-0.000144 (0.000105)	4.09e-06 (8.93e-05)	-5.83e-06 (0.000123)	3.19e-05 (0.000118)
War dummy			-0.00178 (0.00130)	-0.00188 (0.00138)	-8.18e-05 (0.00126)
ln(GDP)			-0.000176 (0.00723)	-0.000538 (0.00745)	-0.00166 (0.00753)
ln(GDPpc)			-0.000116 (0.00844)	0.000329 (0.00843)	0.000805 (0.00840)
ln(Average weighted GDP < 2500km)				0.00444 (0.0134)	0.0295 (0.0752)
ln(Average weighted GDP < 2500km) × ln(Area)					-0.00169 (0.00492)
Average weighted war occurrence < 2500km				-0.00126 (0.00227)	-0.0238 (0.0161)
Average weighted war occurrence < 2500km × ln(Area)					0.00203 (0.00131)
Average weighted GDPpc < 2500km				-0.00321 (0.0167)	-0.0178 (0.0910)
Average weighted GDPpc < 2500km × ln(Area)					0.000857 (0.00606)
Standardized effect	0.500	3.152	-0.294	-0.160	
Effect = 0 at size=	4528	4.082e+06	0	195710	
Effect = 0 at size percentile=	27	97	0	63	
Time FE	Yes	Yes	Yes		
Region x Time FE	No	Yes	No	No	No
Country FE	Yes	Yes	Yes		
Controls	Yes	Yes	Yes		
Observations	5,575	5,575	4,877	4,877	4,877

Note: This table estimates equation 5 using different size thresholds to compute the demand for offshore services. A threshold of 1000km is used in column (1), a threshold of 2000km is used in column (2), a threshold of 3500km is used in column (3). In column (4), I perform a placebo experiment where I compute the demand as the demand coming from countries *more* distant than 2500km.

Table A.7 – The impact of demand on the probability of reform:accounting for spatial auto-correlation

	(1)	(2)	(3)
	Reform	First Reform	Other Reforms
Demand (within 2500km)	0.0319 (0.0358)	0.0598** (0.0258)	0.243* (0.145)
Demand (within 2500km) × ln(Area)	-0.00274 (0.00266)	-0.00489** (0.00197)	-0.0156 (0.0158)
Observations	6,635	5,575	1,060
Time FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note: This table estimates equation 5 using the estimator of Colella et al. (2019) that takes into account spatial auto-correlation. I specify spatial clusters such as the correlation between error terms of two observations decreases linearly with distance and is zero when their distance is larger than 2500km and when they are separated by more than 10 years. Data on the top marginal income tax rate comes from Londoño-Vélez (2014). Data on tax havens' reforms comes from own data collection detailed in section 2. Column (1) includes all reforms as dependent variables. In column (2) tax havens leave the sample after the first reform. Column (3) only considers new reforms from countries that are already tax havens. Additional controls correspond to an indicator variable for being independent and the number of years since independence. *** p<0.01, ** p<0.05, * p<0.1

Table A.8 – Offshore entities and competition.

	(1)	(2)
	Number new offshore entities	
# Indep. countries < 1000 km	0.338 (0.307)	
# Indep. from UK countries < 1000 km		0.356 (0.299)
Controls	Yes	Yes
Country and year FE	Yes	Yes
Observations	1,939	1,939

Note: This table estimates with the Poisson pseudo-maximum likelihood estimator the following equation: $Number\ new\ offshore\ entities_{it} = \beta_1(\sum_{j \neq i} \mathbb{1}_{Independ_{jt}} \times \mathbb{1}_{Dist_{ij} < 1000km}) + XZ_{it} + \mu_i + \mu_t + \epsilon_{it}$. $Number\ offshore\ entities_{it}$ is the number of offshore entities recorded in the Offshore Leaks data for country i at date t . $\sum_{j \neq i} \mathbb{1}_{Independ_{jt}} \times \mathbb{1}_{Dist_{ij} < 1000km}$ corresponds to the number of independent countries distant by less than 1000km (column 1) or the number of independent countries from the United Kingdom distant by less than 1000km (column 2). Z_{it} is a vector of controls. μ_i are country fixed effects, and μ_t are time fixed effects. Controls include an indicator variable for independence, an indicator variable equal to one the year an offshore reform is enacted, a count of the number of offshore reforms implemented in the country, and an indicator variable indicating whether an "Exempt Company" law has been previously implemented. The sample is restricted to the post-1945 period. Standard errors are clustered at the country level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.9 – Impact of increased competition on probability of reform: OLS and IV estimates

	(1)	(2)
	Cumulated number of reforms	
# Havens < 1000km (recentered)	0.158* (0.0906)	0.246* (0.131)
Observations	1,537	1,537
Controls	Yes	Yes
Country and year FE	Yes	Yes
Estimator	OLS	IV
K-P F-stat		536.6

Note: This table estimates equation 6 on the sample of countries that are tax havens. Data on the share of taxes in GDP come from Andersson and Brambor (2019). Data on tax havens' reforms come from own data collection detailed in section 2. Column (1) estimates an OLS regression. Column (2) estimates an IV regression with the number of independent countries from the UK in an area of 1000km as an instrument. Additional controls are included in both columns and correspond to an indicator variable for a country's being independent and the number of years since independence. All regressions include country and year fixed effects. "K-P F-stat" stands for the Kleibergen–Paap Wald rk F statistic of the first stage. Robust standard errors clustered at the country level in parentheses. Robust standard errors clustered at the country level in parentheses.*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.10 – Impact of increased competition on probability of reform: Threshold robustness

	(1)	(2)	(3)	(4)
	Cumulated number of reforms			
# Havens < 500km (recentered)	0.176*** (0.0502)	0.215* (0.112)		
# Havens < 2500km (recentered)			0.0241 (0.0186)	0.0510 (0.0532)
Bootstrapped 95% CI		[-0.04;0.43]		[-0.01;0.10]
Observations	1,537	1,537	1,537	1,537
Country and year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Estimator	PPML	PPML - CF	PPML	PPML - CF
K-P F-stat			49.2	286.6

Note: This table estimates equation 6 on the sample of countries that are tax havens. Data on the share of taxes in GDP come from Andersson and Brambor (2019). Data on tax havens' reforms come from own data collection detailed in section 2. Columns (1) and (3) estimate OLS regressions with a distance threshold of 500km in column (1) and a threshold of 2500km in column (3). Column (2) and (4) estimate a PPML regression with control functions with the number of independent countries from the UK in an area of 500km and 2500km as an instrument. Additional controls are included in all columns and correspond to the level of demand received, an indicator variable for a country's being independent and the number of years since independence. All regressions include country and year fixed effects. "K-P F-stat" stands for the Kleibergen–Paap Wald rk F statistic of the first stage. Robust standard errors clustered at the country level in parentheses. Robust standard errors clustered at the country level in parentheses. Bootstrapped confidence interval at 95% is the result of 10000 bootstrap replications. *** p<0.01, ** p<0.05, * p<0.1

Table A.11 – Competition and type of reform

	(1)	(2)	(3)	(4)
	$\mathbb{1}_{Revision\ area}$	$\mathbb{1}_{New}$	$\mathbb{1}_{Revision\ area}$	$\mathbb{1}_{New}$
# Reforms < 1000 km (recentered)	0.370*** (0.0854)	0.175*** (0.0611)	0.537*** (0.0885)	0.141** (0.0693)
Bootstrapped 95% CI			[0.19;1.27]	[-0.002;0.76]
Observations	705	1,001	705	1,001
Country and year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Estimator	PPML	PPML - CF	PPML	PPML - CF
K-P F-stat	74.30	74.30	483.5	483.5

Note: Robust standard errors clustered at the country level in parentheses. "New" corresponds to reforms made in a sub-category in which the country had done no reform before and "Revision" corresponds to reforms made in a sub-category in which the country had already made a reform before. Sub-category classification is the following: Banking, Insurance, Exempt companies (IBC or not), MNE-specific, Holding regimes, Individual, Ships, and Other. Additional controls are included in all columns and correspond to the level of demand received, an indicator variable for a country's being independent and the number of years since independence. All regressions include country and year fixed effects. "K-P F-stat" stands for the Kleibergen-Paap Wald rk F statistic of the first stage. Robust standard errors clustered at the country level in parentheses. Bootstrapped confidence interval at 95% is the result of 10000 bootstrap replications. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.12 – The diffusion of legal technologies: Robustness with cumulated number of reforms as dependent variable

	(1)	(2)	(3)	(4)
	IBC	Finance	Indiv	Exempt (no IBC)
Number of laws < 1000km	6.047*** (2.042)	3.741*** (1.312)	4.176** (1.791)	2.252 (1.619)
Country and year FE	Yes	Yes	Yes	Yes
Reform	All	All	All	All
Non-independent only	No	No	No	No
Observations	23,214	23,214	23,214	23,214

Note: This table estimates equation 7 on the whole sample. Coefficients on # *Reforms < 1000 km* have been multiplied by 100 for readability. "Number of laws $c < 1000\text{km}$ " corresponds to the number of countries that have implemented an offshore law of the type indicated in the column header and that are located less than 1000km away from the country of interest. The dependent variable is an variable that counts the number of laws of the type indicated in the panel header that have been implemented in country i . Data on tax havens' reforms comes from own data collection detailed in section 2. Details on the classification of reforms are displayed in Table I. Robust standard errors clustered at the country level in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

C Supplementary figures

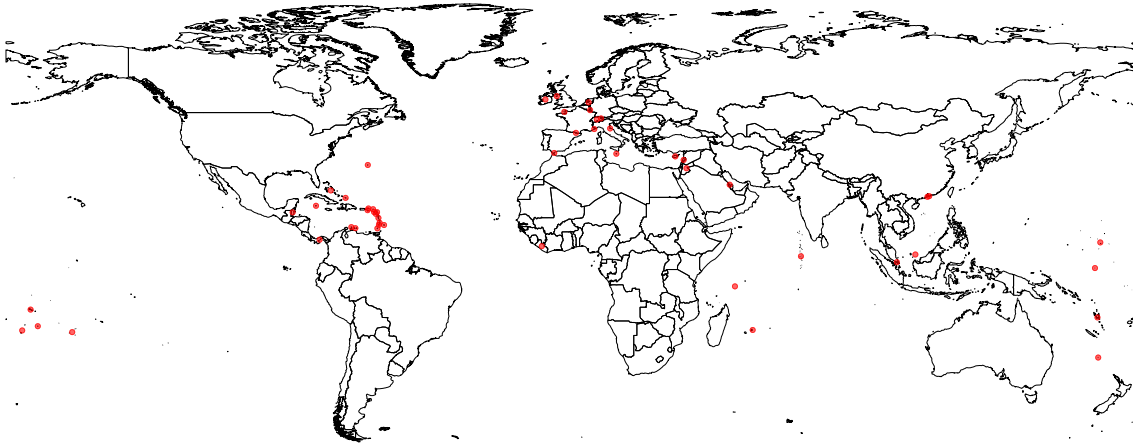


Figure A.1 – The location of contemporary tax havens.

Note: This map depicts tax havens nowadays. This list of tax havens is discussed in section 2 and presented in appendix Table A.1.

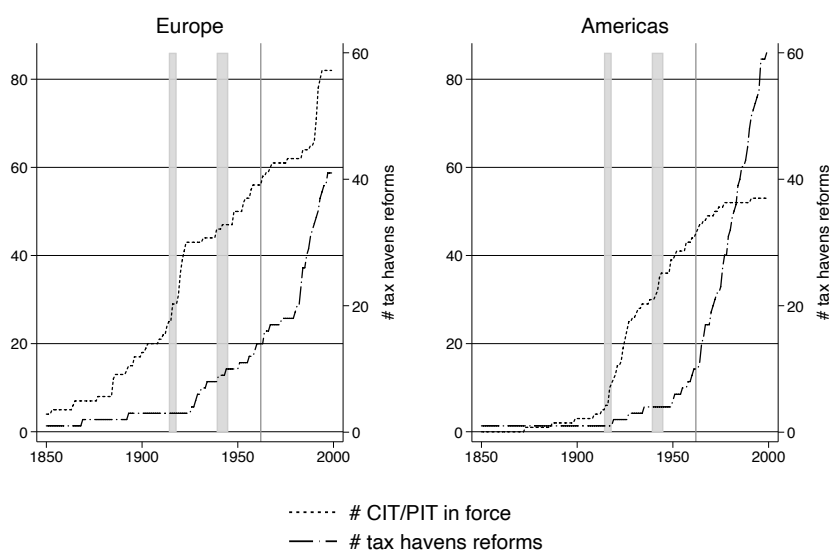


Figure A.2 – The building of tax havens’ legal architecture and the rise of direct taxation.

Note: This figure plots the number of direct taxes (Corporate income taxes and Personal income taxes) introduced and the number of tax haven reforms for Europe and the Americas. Data on the introduction of taxes comes from Seelkopf et al. (2021). Data on tax havens’ reforms comes from own data collection detailed in section 2. Shaded areas indicate the world wars and the vertical line (1962), the beginning of the independence wave in the U.K.-dominated Caribbean area.

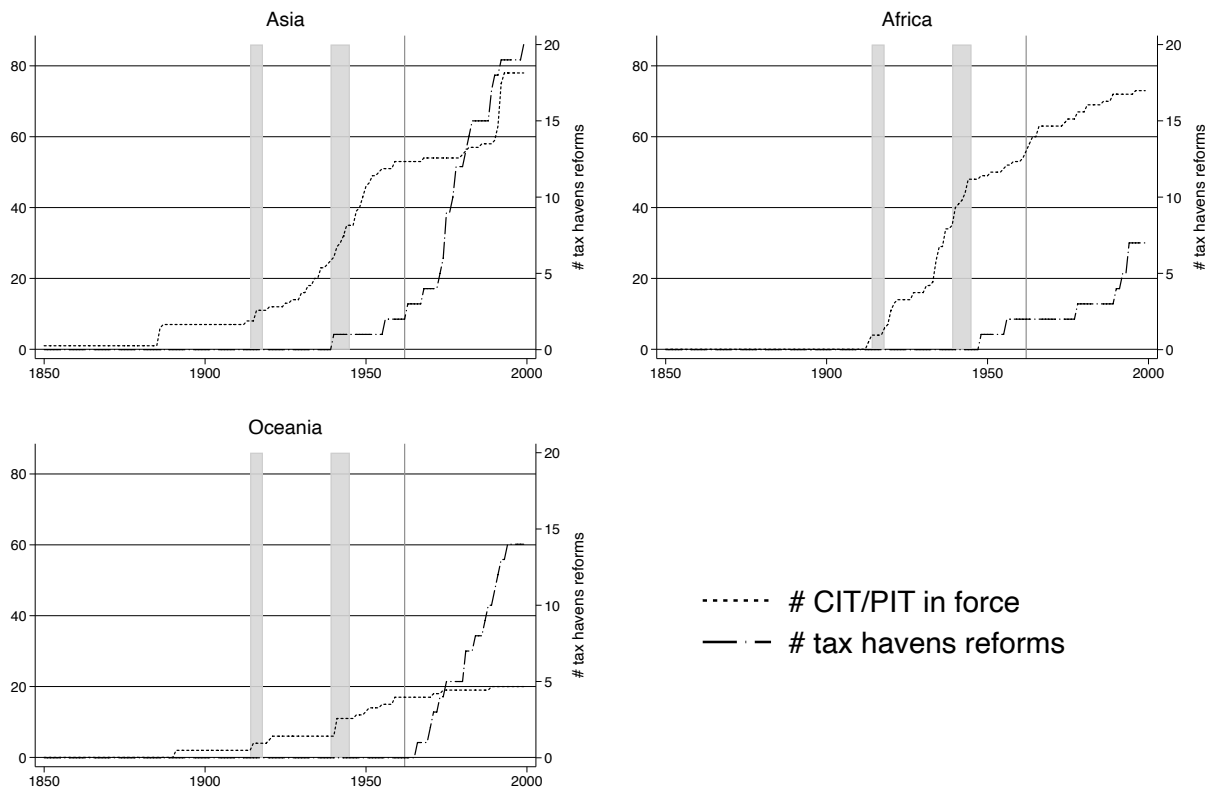


Figure A.3 – The building of tax havens’ legal architecture and the rise of direct taxation (other regions)

Note: This figure plots the number of direct taxes (Corporate income taxes and Personal income taxes) introduced and the number of tax havens reforms for Africa, Asia, and Oceania. Data on the introduction of taxes comes from Seelkopf et al. (2021). Data on tax havens’ reforms comes from own data collection detailed in section 2. Shaded areas indicate the world wars and the vertical line (1962), the beginning of the independence wave in the UK-dominated Caribbean area.

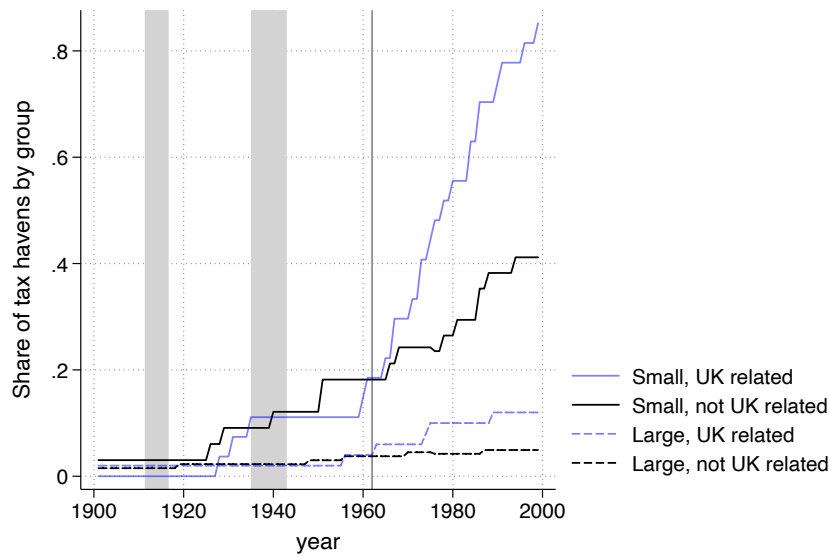


Figure A.4 – Tax havens characteristics: size and colonial history

Note: This figure plots the share of tax havens in two size groups (small and large countries) crossed with groups constructed according to colonial history (UK related or not). The group of small countries corresponds to countries in the first quartile of country size. Other countries are classified as large. UK-related colonies correspond to colonies for which the last ruler is the United Kingdom. The construction of colonial history is detailed in section 2. Data on tax havens' reforms comes from own data collection detailed in section 2. Shaded areas indicate the world wars and the vertical line (1962), the beginning of the independence wave in the UK-dominated Caribbean area.

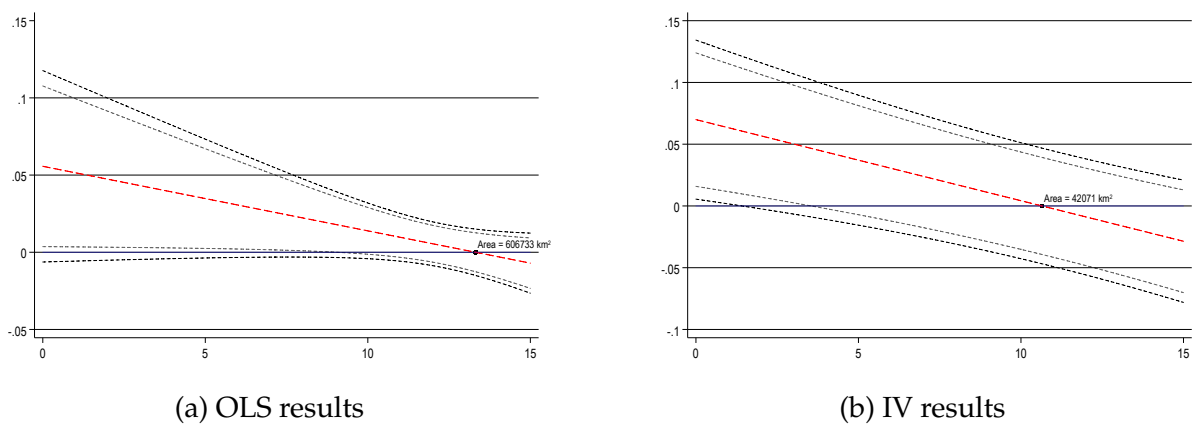


Figure A.5 – Effect of demand on the probability of becoming a tax haven:

Note: This figure plots the estimated effect of the impact of demand on the probability of becoming a tax haven for the OLS estimation (panel (a)) and the IV estimation (panel (b)). The confidence interval corresponds to a 5% confidence interval. Estimates are based on the specification of column (2) of Table III. The graph reports the size (and the corresponding decile) for which the estimated effect is exactly equal to zero.

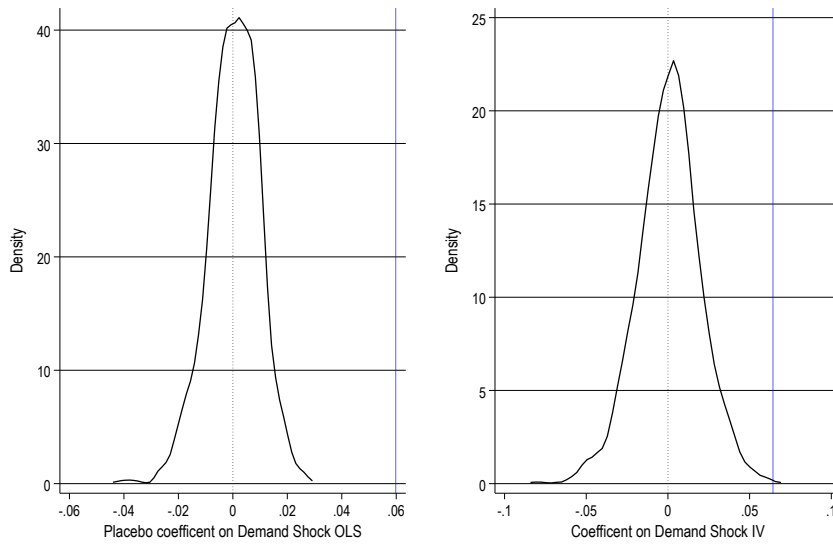


Figure A.6 – Permutation tests

Note: This figure shows the result of a 1000 permutation tests where the demand shock is randomly permuted between countries. Estimated placebo coefficients correspond to the OLS and IV specifications of column (1), Table III. The blue line denotes the estimated coefficients obtained in column (1) of Table III.

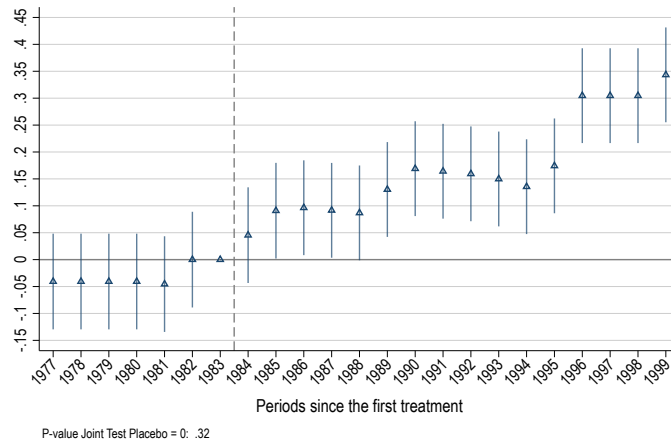


Figure A.7 – The diffusion of International Business Companies: Event study

Note: This figure plots coefficients from an event-study regression following equation 8. The treated group is composed of countries having a distance with the British Virgin Islands lower than the first decile of distance between the BVI and other countries ($< 1529km$). The figure studies how the number of International Business Company reforms changes when the BVI introduced its IBC law in 1984. The control group corresponds to territories located further away from the BVI. 95% confidence intervals with standard errors clustered at the country level.

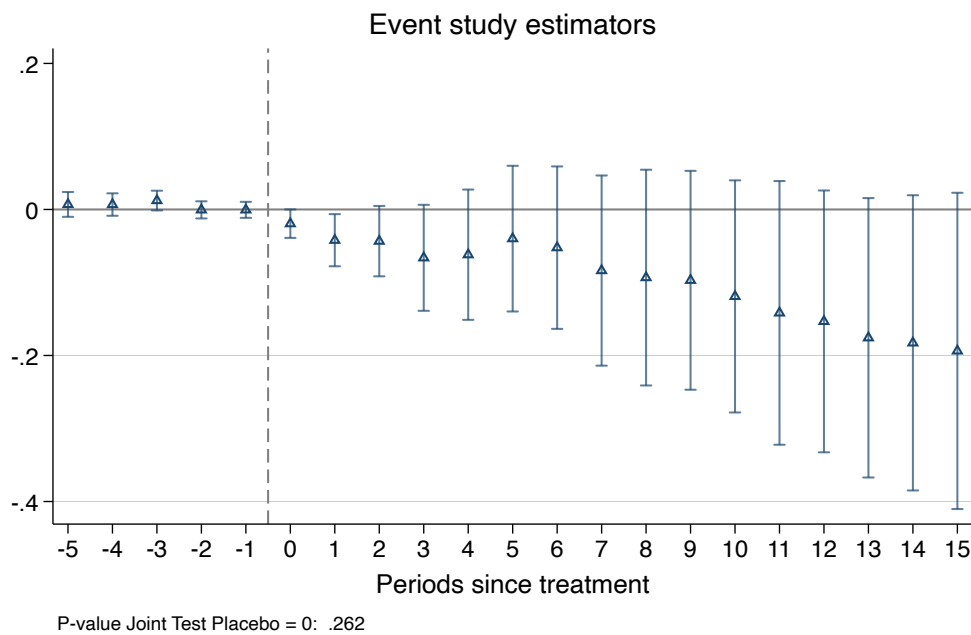
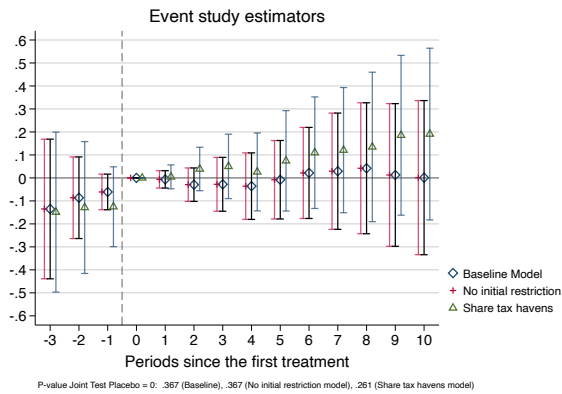
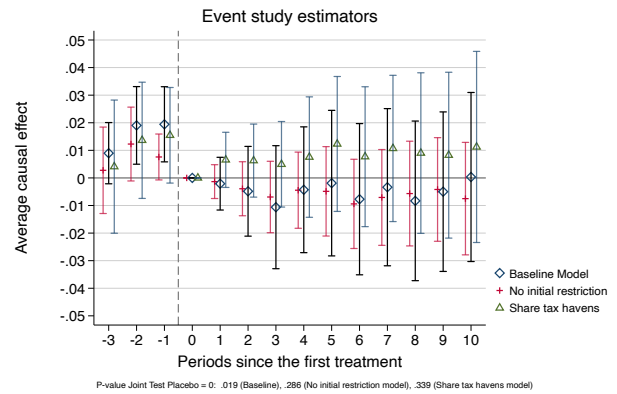


Figure A.8 – Effect of becoming a tax haven on agricultural lands

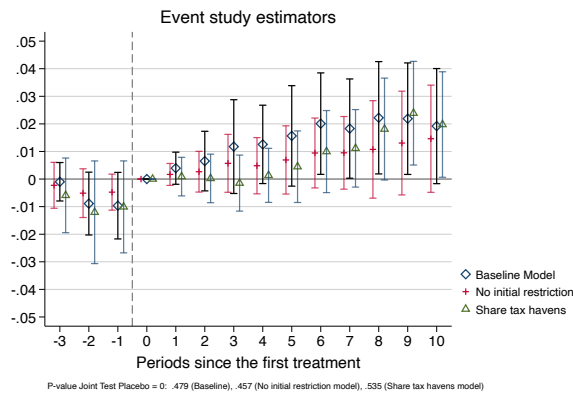
Note: This figure plots coefficients from an event-study regression following equation 9 using interacted fixed effects following Gobillon and Magnac (2016), Xu (2017) and Liu et al. (2022). It studies the impact of becoming a tax haven on the share of agricultural land. The treated group includes 15 countries: Belize, Dominica, Grenada, Hong-Kong, Jordania, Marshall Islands, Saint Kitts-and-Nevis, Saint Lucia, Saint Vincent-and-the-Grenadines, Seychelles, Mauritius, Malaysia, Singapore, Tonga, and Western Samoa. The control group is composed of all never-haven countries in the world. 95% confidence intervals from bootstrapped standard errors (500 repetitions). The p-value tests for the absence of pre-trends.



(a) GDP per capita



(b) Tax Revenues (% of NDP)



(c) Tax Rev. on L - Tax Rev. on K (% of NDP)

Figure A.9 – Effect of tax havens on other countries: robustness

Note: This figure plots coefficients from an event-study regression following equation 10 and estimated using the estimator of de Chaisemartin and D’Haultfœuille (2024). In panel (a), the dependent variable is GDP per capita. In panel (a), the dependent variable is total tax revenues as a share of NDP. In panel (c), the dependent variable is the difference between revenues from the taxation of labor and revenues from the taxation of capital as a share of NDP. The three figures estimates three different empirical models for the identification of the effect of tax havens on other countries’ outcomes. This first model is the baseline model and restricts the estimation to countries that have at most five tax havens in a circle of 2500km around them when they enter the sample. The second model ("No initial restriction") does not restrict the estimation to this subsample of countries. The Third model ("Share tax havens") uses the share of countries in a circle of 2500km that are tax havens as the treatment variable. 95% confidence intervals from standard errors clustered at the country level.

D Offshore Leaks

The Offshore Leaks data is used at several instances in the paper. The data has been released by the International Consortium of Investigative Journalists (ICIJ, [2022a](#), [2022b](#)). It is the result from different leaks:

- Panama Papers (2016): entities registered by the law firm Mossack Fonseca.
- the Paradise Papers (2017): clients of the law firm Appleby and seven tax havens' corporate registries.
- the Pandora Papers (2021): data leaked from 12 offshore service providers.
- the Bahamas leaks (2016): Bahamas corporate registry containing information on Bahamian Companies, trusts and foundations.
- the Offshore Leaks (2013): entities incorporated through two service providers.

The data allows linking entities registered in tax havens to their owners (beneficial owners when available) and to the intermediaries participating in the offshore structure. The ICIJ has linked the owners (individuals or companies, named *officers* in the database) to specific countries using their registered addresses. The database provides information on more than 800,000 offshore entities. It also provides information about the date when the offshore entity was opened. For the purposes of this paper, the raw data has been used to construct two different datasets.

Panel data on offshore entities First, I make use of the panel structure of the data in section 3 and 5.2, and in appendix E. I create a dataset that counts the number of offshore entities located in a tax haven i at date t . To do so, I simply collapse the data at the *incorporation country* \times *year* level. This dataset allows me to track the number of offshore entities recorded in each tax haven over time.

Bilateral data on offshore entities Second, I use the bilateral information provided by the dataset in section 3. This data allows me to track the number of links between a tax haven j and a non-haven country i . In 8.6% of the cases, a given officer is linked to more than one country. I drop cases where a given officer is linked to more than three countries (0.87% of the cases). Otherwise, I assign to the officer all the countries listed. I drop entities without any officer listed. I then count any observed entity linked to a given officer as a "link" between the tax haven in which the entity is registered and the country to which the officer has been assigned (if there are multiple countries, I count one different link for each different country). I obtain a dataset where I observe the number of offshore links for each pair of countries available in the data and for each different leak source. Keeping the heterogeneity coming from the source provider allows me to control for additional non-observed factors (such as the differential propensities for some law firms to work with tax havens or origin countries) through fixed effects.

I drop same-country pairs. The rest of this exercise assumes that the links available in the Offshore Leaks are a good proxy for the actual (unobserved) links. It should be the case as long as the entities revealed by the leaks are not correlated with the origin countries of officers. In all likelihood, this is not a strong assumption given the number of independent sources and the fact that the ICIJ has released data indistinctly from these considerations. This data is then merged with the USITC gravity dataset (Gurevich and Herman, [n.d.](#)) to perform gravity estimations.

E Data Consistency

From reforms to service provision To investigate whether the provision of tax havens services follows new reforms, I use the micro-level data from the Offshore Leaks database described in Appendix D. I use a feature of this database that allows me to observe offshore entities, identified by their country of registration and year of creation. I can therefore track the number of entities registered in a tax haven, before and after a reform. Entities are seen as a proxy for the provision of offshore services. For this exercise, I concentrate only on reforms that aim at allowing for the registration of International Business Companies. This is the type of legal technology that corresponds best to the entities registered in the database.

$$m^x(\text{Entities}) = \ln(\text{Entities}) \times \mathbb{1}_{\text{Entities} > 0} + (-x) \times \mathbb{1}_{\text{Entities} = 0}$$

with x that calibrates the trade-off between the extensive and the intensive margin. In this setting, a change of the number of entities registered in a tax haven from 0 to 1 is worth a $100x$ increase in the number of entities. Different values of x are used to accommodate different trade-offs between the two margins.

I estimate the following event-study regression:

$$m^x(\text{Entities})_{it} = \sum_{k=-10}^{15} \zeta_k \text{Haven}_{it}^k + u_i + u_t + v_{it} \quad (11)$$

where Haven_{it}^k is a dummy variable equal to one for treated countries k years before or after it becomes a tax haven. u_i and u_t are country and time fixed effects and v_{it} is the error term. The control group corresponds to tax havens that have never enacted any International Business Company reform. The equation is estimated using the estimator of de Chaisemartin and D'Haultfoeuille (2024) to account for potential heterogeneous effects in a generalized difference-in-difference setting with different treatment dates.

Figure A.10 illustrates the impact of IBC reforms on offshore service provision. IBC reforms appear efficient in terms of entity incorporation. Following the reform adoption, the number of offshore entities recorded in the Offshore leaks data increases approximately by 200% after 10 years, and is very similar across the different specifications. The effect appears immediately after the reform and increases during the next years. Estimates before the treatment are very close to zero and not statistically significantly different from zero. This figure shows that tax-haven reforms, in the context of IBC incorporation at least, materialize into an increase in the provision of tax haven services.

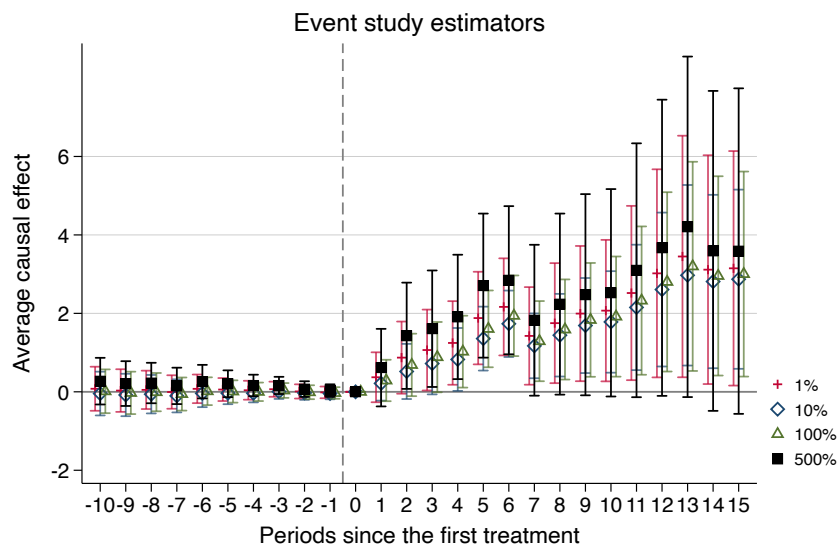


Figure A.10 – "International Business Companies" reforms and tax havens services: Event study

Note: This figure plots coefficients from four event-study regressions following equation 11 estimated using the estimator of de Chaisemartin and D'Haultfœuille (2024). The equation is estimated for different values of x , that calibrates the trade-off between the extensive and the intensive margin of the dependent variable. A change of the number of entities registered in a tax haven from 0 to 1 is worth a $100x$ increase in the number of entities. The treated group is composed of tax havens introducing "International Business Companies" reforms. It studies how the number of offshore entities registered in a tax haven changes when the country enacts a new IBC reform. The dependent variable has been transformed following Chen and Roth (2024) to keep zeros in the estimation. The control group corresponds to tax havens that have never enacted any exempt company reform. 95% confidence intervals from clustered standard errors. The p-value tests for the absence of pre-trends.

F The Swiss Market for Tax Evasion

This appendix studies whether the arrival of new tax havens substituted or complemented the already-existing tax havens.

The first challenge to answering this question is finding historical data about tax havens services' market size. To solve this issue, I use data from Zucman (2013) that collects fiduciary deposits in Switzerland by country of origin between 1976 and 2014 from the Swiss National Bank (SNB). Fiduciary deposits are deposits collected by Swiss banks and invested on behalf of their clients. As described by Zucman (2013), fiduciary deposits are used to avoid paying the 35% Swiss advance tax.³¹ An interesting feature of this data is that the SNB records the origin of the last owner and does not see through conduit entities in tax havens. Consequently, it records investments made through tax havens from other places. Zucman (2013) argues that the majority of these investments are actually coming from European ultimate owners and are going to Switzerland through conduits in tax havens. Going through tax havens adds layers of secrecy between Swiss accounts and their actual owners. Assuming that the bulk of fiduciary deposits of tax havens corresponds to the use of sham corporations (such as IBCs for instance), an increase in the share of fiduciary deposits from tax havens corresponds to an increase in tax havens' market size for the Swiss market. The Swiss market is one of the largest ones for individuals' tax avoidance: according to Zucman (2013) it represented 34% of all offshore financial wealth in 2008 and it was probably even larger before this date (Alstadsæter et al., 2018). An increase in the share of fiduciary deposits from a given tax haven corresponds to an increase in market share from this tax haven in the Swiss offshore market.

Figure A.11 plots the market size of tax havens and decomposes it between countries that become tax havens before 1960 and countries that become tax havens after this date. This year represents the moment of the entry of new tax havens following decolonization (see Figure A.4 in appendix). These tax havens will develop their activity gradually during the end of the 20th century. We observe that the global size of the tax haven market in the Swiss place has been increasing over the period, especially since the beginning of the nineties. The share of the older tax havens has been oscillating around 30% of all deposits with a little upward trend since the nineties.

Importantly, the market share of new tax havens has constantly been increasing, reaching the level of old tax havens after 2010. This increase in the share of new tax havens is not associated with a sharp decrease in the share of old tax havens, indicating that substitution between new and old tax havens should have been limited. On the contrary, the total market share of tax havens in Switzerland, proxied by the thick black line, has constantly increased. We can conclude from this graph that there is a positive correlation between the entry of new tax havens since the sixties and the increase in the market size of tax havens. In other words, the entry of new tax havens has contributed to the increase in the market size of tax havens. It must also be noted that the increase

31. More precisely, any interest received on fiduciary deposits are considered as paid by foreigners. The bank acts as "fiduciary". This feature then creates a tax exemption. Fiduciary deposits represent one quarter of all foreign holdings in Switzerland in 2008.

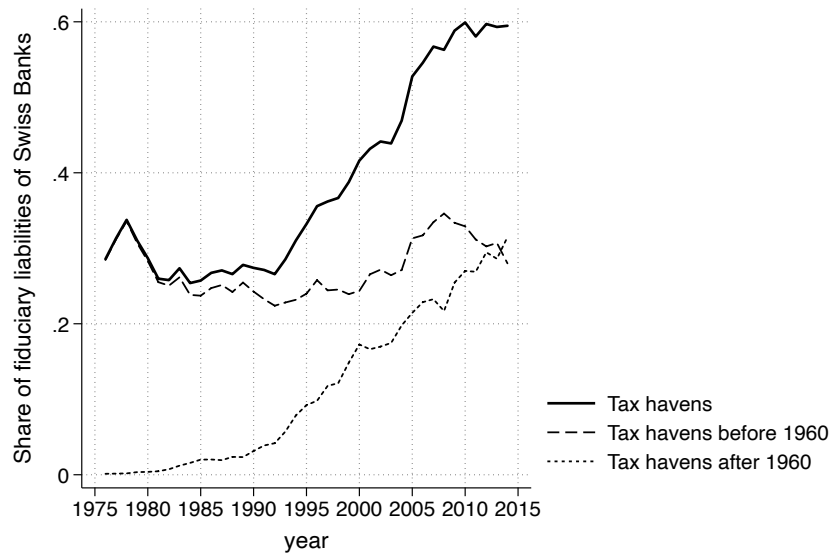


Figure A.11 – The Swiss Market for tax havens' services

Note: This figure plots the share of fiduciary liabilities of Swiss banks by the origin country of the direct owner. Fiduciary deposit data is from Zucman (2013) which collects fiduciary deposits in Swiss by origin from the Swiss National Bank (SNB). Fiduciary deposits are deposits collected by Swiss banks and invested on behalf of their clients. They are used to avoid paying some Swiss taxes. The SNB records the last owner's origin and does not see through conduit entities in tax havens. Data on tax havens' reforms comes from own data collection detailed in section 2. The category "Tax havens" includes all tax havens covered in the SNB dataset. This represents the market share of tax havens in Swiss fiduciary deposits. "Tax havens before 1960" includes entities that become tax havens before 1960: Andorra, Netherlands Antilles, Bahamas, Bermuda, Cayman Islands, Honk-Kong, Isle of Man, Ireland, Jersey, Lebanon, Liberia, Liechtenstein, Luxembourg, Monaco, Netherlands, and Panama. "Tax havens after 1960" includes entities that become tax havens after 1960: Aruba, Antigua and Barbuda, Bahrain, Belize, Barbados, Cyprus, Dominica, Guernsey, Gibraltar, Grenada, Jordan, Saint Kitts-and-Nevis, Saint Lucia, Macao, Marshall Islands, Malta, Mauritius, Malaysia, Nauru, Singapore, Seychelles, Turks and Caicos Islands, Tonga, Saint Vincent-and-the-Grenadines, Virgin British Islands, Vanuatu, and Western Samoa.

in the share of fiduciary deposits held in Switzerland is positively correlated with the increase in offshore entities recorded in the Offshore Leaks (see Table A.13).

Table A.13 – Offshore entities and fiduciary deposits.

	(1)	(2)	(3)
		ln(Fiduciary deposits)	
ln(Number entities)	0.392*** (0.129)	0.574*** (0.0728)	0.440*** (0.129)
Observations	743	287	404
R-squared	0.902	0.931	0.932
Sample		IBC reform	Other exempt reform
Country and year FE		Yes	Yes

This table display the results of the estimation of the following equation: $\ln(\text{Fiduciary deposits}_{it}) = \kappa_1 \ln(\text{Number entities}_{it}) + a_i + a_t + u_{it}$. $\text{Fiduciary deposits}_{it}$ correspond to Swiss fiduciary deposits coming from country i at date t , $\text{Number entities}_{it}$ corresponds to the number of offshore entities recorded in the Offshore Leaks in country i at date t , a_i are country fixed effects, a_t are year fixed effects and u_{it} are the residuals. "IBC reforms" stands for countries that have implemented IBC reforms. "Other exempt reform" stands for countries that have implemented other exempted company reforms. Robust standard errors clustered at the country level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

G Tax rates in tax havens

One assumption of the theoretical framework is that the tax rate on the domestic and offshore economies are correlated in tax havens. Consequently, tax rates in tax havens should be lower than in comparable countries. This section explores this hypothesis. I explore this hypothesis by collecting corporate and individual tax rates from KPMG tax rates tables (KPMG, n.d.).³² Data are provided for 151 countries between 2011 and 2021. For corporate tax rate it lists the statutory tax rate for a large firm, including local taxes when substantial. For individual tax rates, it generally lists the top marginal income tax rate and does not include deductions or special rules.

Table A.14, describes the average tax rate applicable in tax havens for corporate income tax and individual income tax. It reveals substantial differences in tax rates between tax havens and non-havens. The corporate tax rate in tax havens is, on average, about 7 percentage points lower. It is, on average, 5 percentage points lower for the personal income tax rate. However, it is uncertain if this difference is driven by the fact that tax havens have specific characteristics such as being small countries or because they are tax havens, all other things being equal. The tax competition literature has shown that small countries have lower tax rates in equilibrium than larger countries, even in models that do not include tax havens (Bucovetsky, 1991). Consequently, tax havens tax rates should be compared to those of similar countries.

Table A.14 – Comparison of tax rates between havens and non-havens

	Corporate Income Tax	Personal Income Tax
Tax havens	17.3	24.0
Non-havens	24.2	29.1

Note: Average tax rates for tax havens and non-havens in 2021. Data on statutory income tax rates is taken from KPMG Tax Rates Tables. Corporate income tax corresponds to the statutory tax rate including local tax rates when applicable. Personal income tax corresponds to the top marginal tax rate and does not include deductions or special rules. The list of tax havens used is described in section 2 of the paper and available in Table A.1 of the appendix.

To do so, I estimate the following equation by OLS:

$$Rate_{it} = \beta_1 Tax Haven_i + CZ_i + \mu_t + \epsilon_{it}$$

with $Rate_{it}$ being the statutory tax rate (either corporate or personal), $Tax Haven_i$ an indicator variable equal to 1 if country i is a tax haven, Z_i a vector of country-level characteristics such as its size, its GDP or its legal origins, C is the vector of coefficients associated. μ_t is a year fixed effect and ϵ_{it} is the error term.

In figures A.12 and A.13, I plot the estimation of β_1 along with its 95% confidence interval for different models. Figure A.12 reveals that for all models, corporate income

32. See <https://home.kpmg/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online/corporate-tax-rates-table.html> and <https://home.kpmg/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online/individual-income-tax-rates-table.html>

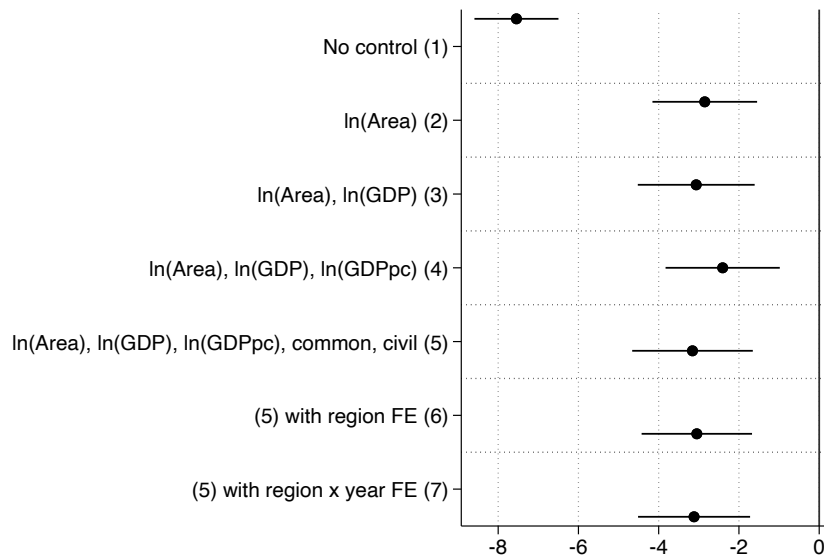


Figure A.12 – Estimation of β_1 for corporate income taxes

Note: This figure plots the estimation of β_1 along with its 95% confidence interval (robust standard errors) for different models. The dependent variable is the statutory corporate income tax rate including local taxes if applicable. Data on statutory income tax rates is taken from KPMG Tax Rates Tables.

tax rates are lower in tax havens than in comparable countries by 3 percentage points on average. This effect is significantly different from zero at the 5% level. It is also true when we control for size, GDP, GDP per capita, legal origin and include region \times year fixed effects. Interestingly, adding controls to the regression decreases by approximately 2.5 the estimated coefficient of tax havens. It confirms that a part of the lower tax rates in tax havens can be explained by their characteristics, particularly their size. However, controlling for these characteristics cannot fully explain why tax havens have lower tax rates than comparable countries.

Figure A.13 repeats the exercise for the individual tax rate. In models (1) to (5), including a diverse set of controls and year fixed effects, we observe a lower tax rate in tax havens than in comparable countries by about 2 percentage points. We add region fixed effects and region \times year fixed effects in models (6) and (7). These models compare countries to similar countries in the same broad world region. The coefficient estimated appears negative but lower than in other models. This coefficient is also imprecisely estimated and not significantly different from zero at the 5% level.

Overall, these results do not contradict the assumption made in the theoretical framework that the domestic tax rate is not independent of the tax rate on the offshore economy. Indeed, tax rates on the domestic economy tend to be lower in tax havens than in comparable countries.

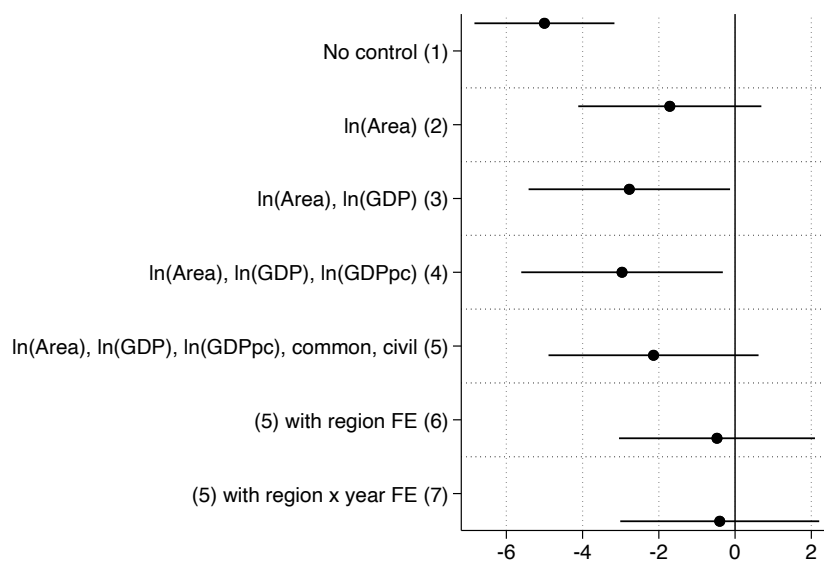


Figure A.13 – Estimation of β_1 for individual income taxes

Note: This figure plots the estimation of β_1 along with its 95% confidence interval (robust standard errors) for different models. The dependent variable is the statutory personal income tax rate base on the top marginal tax rate. Data on statutory income tax rates is taken from KPMG Tax Rates Tables.

H A Theoretical Framework

This appendix presents a theoretical framework that formally derives the Testable Implication 1 of the main text.

To build the theoretical framework, I use the legal capacity building framework of Besley and Persson (2011). In this 2-periods framework, a utility-maximizing government chooses its tax rate and the its level of productive infrastructures. Between the two periods, it can decide to invest in its productive infrastructure in order to increase revenues in period 2. To attract more tax revenues, he can also decide to become a tax haven by setting up an offshore legal architecture. This legal architecture can be upgraded through investment in legal technologies' quality between period 1 and period 2. Comparing its utility over the two periods, the government chooses before period 1 if it becomes a tax haven or not.

A simple economy Consider a simple economy where a government makes its choices taking the state of the economy in foreign countries as granted (mimicking the small open economy framework). There are two time periods $s = 1, 2$ and the population corresponds to N homogeneous individuals. The utility of a given individual is $u_s = (1 - t_s)y(\pi_s) + \alpha_s g_s$ with y its revenues, t_s the income tax rate, and g_s its consumption of a public good. Revenues are a positive function of the level of infrastructure in the country, π_s . π_s encompasses the legal support such as the administrative support or property rights protection but also more generally the level of public infrastructures in the economy such as education or health infrastructures.³³ It can be seen as the productivity of the real sector of the economy. $\alpha_s \geq 1$ is the value of the public good.

The tax rate t_s and the level of infrastructure π_s are constrained by the fiscal capacity τ_s and the infrastructure capacity Π_s . As seen later, in this simple model a non-haven government sets the highest possible tax rate and infrastructure level. The fact that they are constrained will push governments to invest in their respective capacities in order to increase future revenues. Here, because we are interested in tax havens that generally set taxes under the level of fiscal capacity, we consider the fiscal capacity as fixed: $\tau_s = \tau$. The government can invest in infrastructure by paying a cost defined as follows: $\mathcal{L}(\pi_2 - \pi_1)$. The cost is a positive and convex function of the difference between the levels of infrastructure in period 2 and in period 1 with $\mathcal{L}(0) = 0$.

Before considering the model where a country can choose to become a tax haven, I describe the optimum solution in the standard case.

The government budget is :

$$\underbrace{t_s y(\pi_s) N}_{\text{Revenues}} = \underbrace{g_s N + m_s N}_{\text{Expenses}}$$

$$\text{s.t. } t_s < \tau,$$

$$\pi_s < \Pi_s$$

33. This enlarges the definition of the fiscal capacity from Besley and Persson (2011). However, it is in line with their interpretation that investment in productive infrastructures and legal capacity share many similarities, see section 3.2 of their book.

with m_s the cost of investment per capita (which is 0 when $s = 2$). The tax revenues on the left-hand side should equal the government expenditures on the right-hand side: public goods provision and investment in infrastructures. As described in detail later, becoming a tax haven will precisely affect the government budget by bringing tax revenues from the taxation of offshore activity. Note that in the non-haven case, the size of the population will not matter. It will become important when introducing tax havens.

The timing is the following: τ_1, Π_1, α_1 and α_2 are given in stage 0. At the beginning of period 1, the government chooses a set of period-1 policies: $\{t_1, \pi_1, g_1\}$ and invest to determine Π_2 . At the beginning of period 2 the government chooses a set of period-2 policies: $\{t_2, \pi_2, g_2\}$. The model is solved by backward induction.

A non-haven government maximizes:

$$\begin{aligned} u_s^I &= (1 - t_s)y(\pi_s) + \alpha_s g_s \\ \text{s.t } t_s y(\pi_s) &= g_s + m_s, \\ t &\leq \tau, \\ \pi_s &\leq \Pi_s. \end{aligned}$$

The level of public goods can be written as a residual from the government constraint: $g_s = t_s y(\pi_s) - m_s$. Therefore, taking into account the level of the public goods, the government now maximizes:

$$u_s^I = (1 - t_s)y(\pi_s) + \alpha_s (t_s y(\pi_s) - m_s)$$

What is the level of infrastructures and taxes? A first result of the model is that they are both set at their maximum possible level, those of their respective capacities.

Proof: the first order conditions are

$$\begin{aligned} \frac{\partial u_s^I}{\partial \pi_s} &= (1 - t_s) y_\pi + \lambda_s t_s y_\pi \geq 0 \text{ (infrastructures)} \\ \frac{\partial u_s^I}{\partial t_s} &= -y_\pi + \lambda_s y_\pi \geq 0 \text{ (taxes)} \end{aligned}$$

with $y_\pi = \frac{\partial y(\pi_s)}{\partial \pi_s}$. This notation, where derivation is noted with subscripts is applied for other variables in the rest of the paper.

Increasing the level of infrastructures or the level of taxation always increases utility. At the optimum, $t_s = \tau$ and $\pi_s = \Pi_s$. To increase utility in period 2, the government can invest in the infrastructure capacity, which will increase the general level of infrastructures in period 2, therefore increasing revenues.

I now describe how the level of investment is set. The investment in infrastructure capacity is an intertemporal problem. The government sets the optimal level of infrastructures in period 2 by maximizing its utility over the two periods.

$$W = (1 - t_1)y(\pi_1) + \alpha_1 (t_1 y(\pi_1) - m_1 (\pi_2 - \pi_1)) + (1 - t_2)y(\pi_2) + \alpha_2 (t_2 y(\pi_2))$$

The level of investment in the public infrastructures that maximizes W is defined by:

$$\underbrace{\alpha_1 \mathcal{L}_\pi(\pi_2 - \pi_1)}_{\text{Marginal cost of investment}} \geq \underbrace{y_\pi [1 + (\alpha_2 - 1)t_2]}_{\text{Marginal benefits from investment}} \quad (12)$$

The government invests in the infrastructure capacity until the marginal cost of investment (lower public goods provision in period 1) is equal to or larger than the marginal benefits (higher revenues and higher public goods provision in period 2). The left-hand side is equal to 0 when there is no investment. The right-hand side is always positive because $\alpha_2 \geq 1$. Therefore, investment in the public infrastructure capacity will be positive. I use this condition as a benchmark to compare it with the situation where the country is a tax haven.

The tax haven option I now introduce the possibility for a country to become a tax haven. The government can choose to write a law before period 1 to introduce a legal technology and make its country a tax haven for periods 1 and 2. I assume that the government of a tax haven has the ability to tax foreign offshore revenues, ω_s^F . This modeling of tax evasion aims at being very simple to be as broad as possible and cover different uses of tax havens. It is possible to interpret it as individual tax evasion when an individual uses a trust structure or opens an international business company to channel its revenues in the tax haven in exchange of a small tax or a fee. It can also be interpreted as a firm shifting its revenues to the tax haven. Benefits of becoming a tax haven only come from higher tax revenues. Tax havens benefit from tax evaders only through additional taxes. As noted by Slemrod and Wilson (2009), this could extend to any indirect source of revenues such as revenues from tourism.

This new source of revenues comes with a constraint: the tax rate on the domestic economy and on the offshore revenues cannot be independent (see Hypothesis 2 of the main text). I assume that the tax rate on the domestic economy is proportional to the tax rate on the offshore revenues: $t_s = \delta t_s^o$ with t_s the tax rate on the domestic economy, t_s^o the tax rate on the offshore economy and $\delta \geq 1$. In absence of this constraint, becoming a tax haven is always utility-maximizing.

The demand for tax haven services Before describing how becoming a tax haven affects the choices of the country, I put more structure on ω_s^F , the demand for tax haven services addressed to the country of interest. Concretely, I provide here a functional form to equation 3. To do so, I look at the behavior of taxpayers in other countries indexed by n . The utility of an individual a when she pays taxes in n (no evasion) is: $V_n^a = (1 - t_n)\omega_n + \varkappa_{na}$ with ω_n its revenues and \varkappa_{na} the preference of individual a for paying its taxes in n , distributed Gumbel. Time period subscripts s are omitted. We can interpret it as tax morale for instance. The individual can also choose to evade its taxes by locating all of its revenues in a tax haven $i \in \{TH\}$. In this case, the individual preference can be interpreted as an individual's taste for a given tax haven. These random parameters are assumed to be independent across countries.

The service of tax evasion is sold competitively in each tax haven. I assume its marginal cost to be $\frac{1}{p_i}$ with p_i the quality of tax haven i 's legal infrastructure. The quality of the tax haven's legal infrastructure represents how effective is the process of tax

evasion in a country. It can be mediated through better legal technologies, better communication and travel infrastructure, better administrative and legal efficiency in the offshore sector, incentives for foreign banks and law firms to establish, *etc.* It works as a cost shifter that decreases the cost of using the country as a tax haven when it increases. On top of this cost, an individual from n has to pay an iceberg bilateral cost τ_{ni} that corresponds to communication costs, transport costs, and any other bilateral cost (the compatibility between the law systems of n and i for instance). This assumption is empirically relevant as demonstrated in Section 3. I also assume that one has to use an intermediary in i to use it a tax haven. The taxes paid by the intermediary firms in tax havens are fully passed-through to consumers.³⁴

The total cost of evading taxes in country i is therefore: $\frac{\tau_{ni}\omega_n}{p_i(1-t_i^o)}$ The utility of the individual that evades taxation is i is $V_i = (1 - t_i^o)\omega_n - \frac{\tau_{ni}\omega_n}{p_i(1-t_i^o)} + \varkappa_{na}$. Using the properties of the Gumbel distribution and noting U_k the deterministic part of the utility, the probability that an individual in n pays its taxes in country i , noted \mathbb{P}_{ni} , is

$$\begin{aligned}\mathbb{P}_{ni} &= \mathbb{P}(V_i > V_k, \forall k) = \mathbb{P}(\varkappa_{ka} < \varkappa_{na} + U_i - U_k) \\ &= \frac{\exp\left((1 - t_i^o) - \frac{\tau_{ni}}{p_i(1-t_i^o)}\right)}{\sum_{k \in \{TH\}} \exp\left((1 - t_k^o) - \frac{\tau_{nk}}{p_k(1-t_k^o)}\right) + \exp(1 - t_n)}\end{aligned}$$

This represents the share of people evading taxation in country n to tax haven i . As an individual that evades taxes shelters all his revenues in the tax haven, we can deduct the total amount of revenues sent from country n to tax haven i , which represents the demand from n to i and the total demand addressed to i :

$$\omega_s^F \equiv \omega_{i,s}^F = \sum_n D_{ni} = \sum_n N_n \omega_n \mathbb{P}_{ni} \quad (13)$$

Demand has the desired properties as it decreases with the tax haven's tax rate and the bilateral costs. It increases with the quality of the tax haven. Importantly it also decreases with the number of competitors and their bilateral costs relative to non-haven countries.

Tax rate, legal support, and tax haven quality The optimal public good level is set similarly as in the non-haven case. The new government objective function writes:

$$u_s^I = (1 - \delta t_s^o)y(\pi_s) + \frac{\alpha_s}{N} \left[\delta t_s^o y(\pi_s) N + \underbrace{t_s^o \omega_s^F(p_s, t_s^o)}_{\text{Haven-specific revenues}} - m_s N \right]$$

Once a country is a tax haven it has to choose its quality p_s . By increasing its quality, the tax haven becomes more attractive, which increases ω_s^F . The quality of the tax haven is constrained by the "tax-haven-quality" capacity noted P_s . Between periods 1 and 2, the government can invest in P in order to be able to increase the quality of its legal technologies in period 2. The cost of investment is noted $\mathcal{P}(p_2 - p_1)$ and has the same properties as \mathcal{L} .

34. This assumption makes the demand to be zero when taxes in the tax haven are equal to one.

Intuitively, as we can see π_s as the productivity of the real sector, p_s can be interpreted as the productivity of the offshore sector. Their relative strength can therefore be indicative of the advantage a country has in each sector.

We can now solve for the optimal tax rate, legal support and tax haven quality. To set its tax rate, the government maximizes its utility. Contrary to the non-haven case, where the tax rate is set at the level of the fiscal capacity, in this case, the tax rate might be set at a rate lower than the fiscal capacity. Therefore the tax rate is determined following the first-order condition:

$$\frac{\partial U_s}{\partial t_s} = \delta y(\pi_s)(\alpha_s - 1) + \frac{\alpha_s}{N} (\omega^F + t_s^o \omega_t^F) = 0 \quad (14)$$

with ω_t^F , the partial derivative of ω_s^F by t_s^o . The tax rate is set at the point where the marginal revenues from a higher tax rate equal the marginal losses on the offshore economy. There is no explicit solution to this equation. I note t_s^{o*} the solution of this equation. The tax rate on domestic activity is set to $t_s = \min\{\delta t_s^{o*}, \tau_s\}$. In the rest of the exposition, I will consider that $t_s = \delta t_s^{o*}$, *i.e.* that δt_s^{o*} is small enough to be lower than the fiscal capacity. The optimal infrastructure level and tax haven quality are set the same way as in the non haven case. They are set at their maximum possible level, *i.e.* at their respective capacities (see proof in appendix I).

Investment in legal support and tax haven quality In order to enhance its expected utility over the two periods, the government can now invest in its infrastructure capacity and the quality of its legal architecture. It does so by maximizing its expected utility over the two periods.

Implication 1 : Tax havens always invest in the quality of their legal architecture. The more so if the costs of investment are low. In particular this is the case when the quality of the tax haven is small (as the cost function is convex) and when new legal technologies reduce the marginal cost of investment, \mathcal{P}_p , for all p . The introduction of a new legal technology that decreases costs therefore increases investment in quality. This implication corresponds to Hypothesis 3 of the main text.

Proof: the two following conditions describe investment in infrastructure capacity and tax-haven quality:

$$\alpha_1 \mathcal{L}_\pi(\pi_2 - \pi_1) \geq y_\pi [1 + (\alpha_2 - 1)\delta t_2^o] \quad (15)$$

$$\alpha_1 \mathcal{P}_p(p_2 - p_1) \geq t_2^o \frac{\alpha_2}{N} \omega_p \quad (16)$$

The government invests in the infrastructure and tax haven quality until the left-hand side of equations 15 and 16 are larger than the right-hand side. The left-hand side corresponds to the marginal cost of investment weighted by α_1 , the marginal value of foregone tax revenue in period one. The right-hand side corresponds to the marginal gains of investment. As $\mathcal{L}(0) = 0$ and $\mathcal{P}(0) = 0$, it means that investment in infrastructure and tax haven quality will be positive as long as the right-hand side is positive. This is the case because $\alpha_1 - 1 > 0$.

Note that investment in the general public infrastructure is lower in tax havens than in non-haven countries. This result comes from the comparison of the investment condition in infrastructure when the country is a tax haven and when it is not. Both are very similar since the only difference is that it is scaled by a different tax rate. Because the equilibrium tax rate on the domestic economy is lower in tax havens than in other countries, this makes the investment in productive infrastructure less valuable. This result implies that tax havens, despite maximizing welfare, will invest less in the general public infrastructure than if they were not tax havens.

Which countries become tax havens? We now have all the elements to compare the utility when a government chooses to make its country a tax haven or not. The government does so by comparing utilities in both cases. The country becomes a tax haven if $U^H > U^{NH}$ over the two periods: $\mathbf{1}\{Haven\} = \mathbf{1}\{U^H > U^{NH}\}$. I define $\Delta U = U_1^{TH} - U_1^{NTH} + U_2^{TH} - U_2^{NTH}$, the difference between the utility when the country is a tax haven and when it is not. When an ambiguity is possible, I note the optimal choice of the non-haven government with the superscript NH , and the optimal choice of the tax haven government with the superscript H .

$$\begin{aligned} \Delta U = & \underbrace{y(\pi_1^*) (\delta t_1^{0*} - t_1^{NH*})}_{\text{More domestic revenues in non-haven countries}} \underbrace{(\alpha_1 - 1)}_{\text{Net value of publics funds}} \\ & + \frac{\alpha_1}{N} \left(\underbrace{t_1^{0*} \omega_1^F}_{\text{Offshore sector revenues}} \right) + \underbrace{m_1^{NH*} - m_1^{H*}}_{\text{Differences in investment}} \\ & + (1 + (\alpha_2 - 1) \delta t_2^{0*}) y(\pi_2^{H*}) - (1 + (\alpha_2 - 1) t_2^{NH*}) y(\pi_2^{NH*}) \\ & + \frac{\alpha_2}{N} t_2^{0*} \omega_2^F \end{aligned}$$

The first line shows the losses from becoming a tax haven due to lower tax revenues on the domestic economy. These lower tax revenues only impact the difference in utility if the net value of public funds is strictly positive. The level of infrastructures, by increasing revenues, increases the value of these losses. The second line shows the gains from becoming a tax haven due to higher tax revenues on the offshore economy. It also shows the role of the differences in investment in legal capacity and tax haven quality. The third and fourth line are the equivalent of the two first lines for the second period. The only difference is that $y(\pi_2^{H*}) < y(\pi_2^{NH*})$ because the investment in infrastructures has been lower in the tax haven. As a consequence, the higher the cost of investment in infrastructure, the higher the probability of becoming a tax haven all other things being equal.

I now describe how ΔU is impacted by country size (N), changes in foreign tax rates (t_i), and initial levels of infrastructure and haven quality (π_1 and p_1).

Implication 2: The probability that a country becomes a tax haven decreases with its size.

Proof in appendix I where I show that $\frac{\partial \Delta U}{\partial N} \leq 0$. This result is due to the fact that a large population size provides more domestic tax receipts while not affecting offshore tax receipts. This result is in line with observations that tax havens are generally small

countries. A similar result, with a different theoretical setting, is obtained by Slemrod and Wilson (2009).

Implication 3 (Testable Implication 1 of section 4): The introduction of taxes in foreign countries increases the probability that a country becomes a tax haven. This probability decreases when distance with these countries increases and decreases with country size.

Proof in appendix I. This Implication corresponds to the Testable Implication 1 of the main text. Intuitively, the introduction of taxes in foreign countries increases demand all other things being equal. Therefore it increases the potential revenues from becoming a tax haven. This benefits more tax havens that are closer to the country that introduces taxes because costs rise with distance, and tax havens that are smaller because the benefits of becoming a tax haven decrease with size. This result shows the key role of the market access of tax havens.

Implication 4: The higher the initial tax haven quality p_1 , the higher the probability of becoming a tax haven. On the contrary the higher the initial level of infrastructure Π_1 , the lower the probability of becoming a tax haven. This implication exhibits the role of absolute advantages. Countries with large p_1 compared to π_1 will have more incentives to become tax havens.

Proof in appendix I. This result is due to the fact that higher initial quality will increase the utility of becoming a tax haven compared to staying a non-haven country. As a consequence, if we make the hypothesis that the common law provides key legal instruments for offshore activity, common law countries are more likely to become tax havens, all other things being equal. The hypothesis of a greater offshore potential of the common law lies in the fact that trust laws are a key instrument of offshore practices and that they find their origins in the English common law (see Palan et al., 2009, Pistor, 2019 or Harrington, 2016 for discussions). Besides, if we assume the newly decolonized countries have a low level of infrastructure, we find that U.K. newly decolonized countries are more likely to become tax havens. This can explain the pattern found in Figure 2 that shows a causal impact of decolonization on the number of tax haven's reforms for former U.K. colonies. It also confirms that the reaction of countries to this shock directly depends on their characteristics.³⁵

35. On a side note, combined with Implication 1, these results can shed light on the empirical results of Dharmapala and Hines (2009). The authors argue that, on average, tax havens are better-governed countries than other countries. They also write that they cannot establish the direction of the causality. In their empirical framework, governance is measured by voice and accountability, political stability, government effectiveness, rule of law and control of corruption. One can argue that these variables are associated with a larger tax haven quality p_s . Indeed all these variables are likely to decrease the cost of using a tax haven by providing stability and predictability to its users. Implication 3 implies that a higher initial p_1 is associated with a higher likelihood of becoming a tax haven, while Implication 1 suggests that tax havens invest in their governance. In other words, the causality likely goes in both directions.

I Theoretical proofs

Infrastructure level and tax haven quality. Proof that the level of infrastructure and the quality of the tax haven are set at their maximum in the non-haven case:

The first-order condition for infrastructure maximization is:

$$\frac{\partial u_s^I}{\partial \pi_s} = \underbrace{y_\pi (\delta t_s (\alpha_s - 1))}_{\geq 0} + t_\pi \underbrace{\left(\delta y(\pi_s) (\lambda_s - 1) + \frac{\alpha_s}{N} (\omega^F + t_s \omega_t^F) \right)}_{=0 \text{ using 14}} \geq 0$$

Therefore $\frac{\partial u_s^I}{\partial \pi_s}$ is always positive. The level of infrastructure is set at his maximum, constrained by the infrastructure capacity.

The first-order condition for tax haven quality maximization is:

$$\frac{\partial u_s^I}{\partial p_s} = t_p \underbrace{\left(\delta y(\pi_s) (\alpha_s - 1) + \frac{\alpha_s}{N} (\omega_s^F + \omega_t t_s) \right)}_{=0 \text{ using 14}} + \frac{\alpha_s}{N} t_s \frac{\partial \omega}{\partial p} \geq 0$$

Therefore $\frac{\partial u_s^I}{\partial p_s}$ is always positive. The tax haven quality is set at his maximum, defined by the tax haven capacity.

Implication 2 I compute $\frac{\partial \Delta U}{\partial N}$:

$$\frac{\partial \Delta U}{\partial N} = \sum_s t_{sN} \left(y(\pi_s) (\alpha_s - 1) \delta + \frac{\alpha_s}{N} (\omega_s^F + t_s^H \omega_{st}^F) \right) - \frac{\alpha_1}{N^2} t_s^H \omega_s^F$$

Because of the first-order condition on tax rate, $y(\pi_s) (\alpha_s - 1) \delta + \frac{\alpha_s}{N} (\omega_s^F + t_s^H \omega_{st}^F) = 0$ (this is the envelope condition). It follows that

$$\frac{\partial \Delta U}{\partial N} = - \sum_s \frac{\alpha_1}{N^2} t_s^H \omega_s^F \leq 0$$

Implication 3 To show that an increase in taxes in other countries increases the probability that a country become a tax haven, I compute $\frac{\partial \Delta U}{\partial t_i}$. I can make use of the envelope theorem to derive only the direct effect of t_i on ΔU , not considering effects of change in t_i in the endogenous variables.

$$\frac{\partial \Delta U}{\partial t_i} = \sum_s \frac{\alpha_s}{N} \left(t_s^H \omega_{t_i}^F \right)$$

$$\text{with } \omega_{t_i}^F = \sum_i \omega_i N_i \mathbb{P}_{ih} \frac{\exp(1-t_i)}{\left(\sum_{k \in \{TH\}} \exp(A_k) + \exp(1-t_i) \right)} \geq 0$$

Additionally we can show that $\frac{\partial \Delta U}{\partial t_i \partial N} \leq 0$ and $\frac{\partial \Delta U}{\partial t_i \partial \tau_{ih}} \leq 0$:

$$\frac{\partial \Delta U}{\partial t_i \partial N} = - \sum_s \frac{\alpha_s}{N^2} \left(t_s^H \omega_{t_i}^F \right) \leq 0$$

$$\frac{\partial \Delta U}{\partial t_i \partial \tau_{ih}} = \sum_s \frac{\alpha_s}{N} \left(t_s^H \sum_i \omega_i N_i \frac{\exp(1-t_i)}{\left(\sum_{k \in \{TH\}} \exp(A_k) + \exp(1-t_i) \right)} \mathbb{P}_{ih} \left(\frac{-1}{p_h(1-t_h)} \right) \right) \leq 0$$

Implication 4 To show that, the higher the level of initial tax haven quality, the higher the probability to become a tax haven, I compute $\frac{\partial \Delta U}{\partial p_1}$. To show that the higher the initial level of infrastructure, the lower the probability to become a tax haven, I compute $\frac{\partial \Delta U}{\partial \pi_1}$. Again, I make use of the envelope theorem.

$\frac{\partial \Delta U}{\partial p_1}$ gives:

$$\frac{\partial \Delta U}{\partial p_1} = \frac{\alpha_1}{N} \left(t_1^H \omega_p^F \right)$$

with

$$\omega_p^F = \sum_i N_i \omega_i \frac{\tau_{ih}}{p^2 (1 - t_h)} (\mathbb{P}_{ih} - \mathbb{P}_{ih}^2) \geq 0$$

$\frac{\partial \Delta U}{\partial \pi_1}$ gives:

$$\frac{\partial \Delta U}{\partial \pi_1} = y_\pi(\pi_1) \left(\delta t_1^H - t_1^{NH} \right) (\alpha_1 - 1) \leq 0$$

This result is obtained because $\alpha_1 \geq 1$ and $\delta t_1^H - t_1^{NH} \leq 0$.

References

- Alstadsæter, A., Johannesen, N., & Zucman, G. (2018). Who owns the wealth in tax havens? Macro evidence and implications for global inequality. *Journal of Public Economics*, 162, 89–100.
- Andersson, P. F., & Brambor, T. (2019). *Financing the State: Government Tax Revenue from 1800 to 2012* (mimeo).
- Becker, B. (2020). Colonial Legacies in International Aid: Policy Priorities and Actor Constellations. In C. Schmitt (Ed.), *From Colonialism to International Aid: External Actors and Social Protection in the Global South* (pp. 161–185). Springer International Publishing.
- Besley, T., & Persson, T. (2011). *Pillars of Prosperity – The Political Economics of Development Clusters*. Princeton University Press.
- Bucovetsky, S. (1991). Asymmetric tax competition. *Journal of Urban Economics*, 30(2), 167–181.
- Chen, J., & Roth, J. (2024). Logs with Zeros? Some Problems and Solutions*. *The Quarterly Journal of Economics*, 139(2), 891–936.
- Colella, F., Lalive, R., Sakalli, S. O., & Thoenig, M. (2019). *Inference with Arbitrary Clustering* (No. 12584). Institute of Labor Economics (IZA).
- de Chaisemartin, C., & D’Haultfœuille, X. (2024). Difference-in-Differences Estimators of Intertemporal Treatment Effects. *The Review of Economics and Statistics*, 1–45.
- Dharmapala, D., & Hines, J. R. (2009). Which countries become tax havens? *Journal of Public Economics*, 93(9), 1058–1068.
- Gobillon, L., & Magnac, T. (2016). Regional Policy Evaluation: Interactive Fixed Effects and Synthetic Controls. *The Review of Economics and Statistics*, 98(3), 535–551.

- Government of the Cayman Islands. (2021). 2020 Compendium of Statistics.
- Gräbner, C., Heimberger, P., Kapeller, J., & Springholz, F. (2021). Understanding economic openness: a review of existing measures. *Review of World Economics*, 157(1), 87–120.
- Gurevich, T., & Herman, P. (n.d.). The Dynamic Gravity Dataset: Technical Documentation.
- Harrington, B. (2016). *Capital without Borders: Wealth Managers and the One Percent*. Harvard University Press.
- Head, K., & Mayer, T. (2014). Gravity Equations: Workhorse, Toolkit, and Cookbook. *Handbook of International Economics* (pp. 131–195). Elsevier.
- Hensel, P. (2018). ICOW Colonial History Data Set, version 1.1.
- ICIJ. (2022a). ICIJ publishes final batch of Pandora Papers data on more than 9,000 offshore companies, trusts and foundations - ICIJ.
- ICIJ. (2022b). Offshore Leaks Database.
- KPMG. (n.d.). Corporate Tax Rates Table.
- Liu, L., Wang, Y., & Xu, Y. (2022). A Practical Guide to Counterfactual Estimators for Causal Inference with Time-Series Cross-Sectional Data. *American Journal of Political Science*.
- Londoño-Vélez, J. (2014). *War and Progressive Income Taxation in the 20th Century* (No. 2014-03).
- Palan, R., Murphy, R., & Chavagneux, C. (2009). *Tax Havens: How Globalization Really Works*. Cornell University Press.
- Pistor, K. (2019). *The Code of Capital: How the Law Creates Wealth and Inequality*. Princeton University Press.
- Scheve, K., & Stasavage, D. (2012). Democracy, War, and Wealth: Lessons from Two Centuries of Inheritance Taxation. *American Political Science Review*, 106(1), 81–102.
- Seelkopf, L., Bubek, M., Eihmanis, E., Ganderson, J., Limberg, J., Mnaili, Y., Zuluaga, P., & Genschel, P. (2021). The rise of modern taxation: A new comprehensive dataset of tax introductions worldwide. *The Review of International Organizations*, 16(1), 239–263.
- Slemrod, J., & Wilson, J. D. (2009). Tax competition with parasitic tax havens. *Journal of Public Economics*, 93(11), 1261–1270.
- Xu, Y. (2017). Generalized Synthetic Control Method: Causal Inference with Interactive Fixed Effects Models. *Political Analysis*, 25(1), 57–76.
- Zucman, G. (2013). The Missing Wealth of Nations: Are Europe and the U.S. net Debtors or net Creditors? *The Quarterly Journal of Economics*, 128(3), 1321–1364.

Online Data Documentation

The Historical Tax Haven Database (HTHD) collects information on the key regulations that made countries tax havens. It is based on the idea that to become a tax haven a country has to build an *offshore legal architecture*. In other words, the existence of specific legal technologies is necessary to the tax haven activity of a territory as it provides stability and predictability to its users. This dataset collects the date when these legal technologies are introduced through new regulations. It allows to track the offshore activity of tax havens over time, providing unique time-variation in the tax haven status of many countries. Table A.1 is a reproduction of table 1 of Laffitte (2024) that describes the different types of legal technologies collected in the database.

Which tax havens are included in the database? There exists several lists of tax havens that can serve as a point of departure for the collection of information. All these lists generally agree on a core set of tax havens and then are more or less conservative according to their definition of tax havens and their specific focus. This database is based on the list of tax havens of Dharmapala and Hines (2009). To this list, I added the Netherlands and Malaysia, which have been considered as tax havens but are not included in their list. I did not include Belgium due to conflicting information on its role as a tax haven. Watteyne (2022) argues that the history of Belgium as a tax haven stopped after WWI. I did not include U.S. States such as New Jersey or Delaware either. These states have mainly been considered as local tax havens (see for instance Dyreng et al., 2013) even though this might be changing. Palan et al. (2009) has created a meta-list of tax havens aggregating 11 different sources. Table A.2 compares this list to the list of tax havens included in my sample. Except for Costa Rica, which is absent from the list of this database, it covers all tax havens mentioned in at least 4 of the 11 sources.

Which reforms are included in the database The goal of this database is to record the important legislative events that made countries tax havens. It is constructed based on the idea that a country needs to develop its legal architecture to become a tax haven (see Laffitte, 2024 for details). This idea implies that only events that are substantially and structurally affecting the legal architecture of a country must be recorded in the database. Conjectural adjustment to the legal architecture are out of the scope of this database.

This process of data collection involves making choices about the reforms to retain in the database. Thus, it contains a part of subjectivity. To provide transparency in the data collection process, I describe for each country which reforms were retained in the database and their source.

Table A.1 – Types of legal technologies

Category	Legal Technology	Description	Examples
Individual 38 reforms	- Trust laws	Allow legal disconnection between asset use and ownership	<i>Turks and Caicos Islands' Trust Ordinance 1990</i>
	- Other	Tax abolition for instance	<i>Monaco's Abolition of personal income taxes 1869</i>
Corporate 37 reforms	- MNE	Attraction of MNEs activities and profits	<i>Ireland's Export Profits Tax Relief 1956</i>
	- Holding	Special regimes for holding companies	<i>Luxembourg's Loi sur le régime fiscal des sociétés de participations financières (Holding companies) 1929</i>
	- Offshore Insurance and Captives	Self insurance allowing revenue transfers to tax havens	<i>Barbados' Exempt Insurance Act 1983</i>
	- Flag of convenience	Limited regulations and tax rates for ships registered in an offshore maritime registry.	<i>Panama's Law/63 on foreign Ships Registration</i>
Dual 65 reforms	- IBC	Tax-neutral companies with no domestic activities and limited legal requirements	<i>British Virgin Islands' International Business Companies Act 1984</i>
	- Other exempt companies	Similar as IBC	<i>Jersey's 1940 Corporation Tax Law</i>
Banking 38 reforms	- Offshore banking	Unregulated banks with limited taxation and legal requirements	<i>Anguilla's Banking Ordinance, 1991</i>
	- Bank secrecy	Protects account holders from investigations	<i>Switzerland's Banking Act, 1934</i>
Other 16 reforms	- Tax treaties	Limit bilateral taxation, allow conduit entities to benefit from treaties	<i>Netherlands Antilles' tax treaty with Netherlands (Belastingregeling Koninkrijk) 1964</i>
	- Specific regulations	Country-specific rules, not classified elsewhere.	<i>Bahamas' Hawksbill Creek Agreement 1955</i>

Note: This table classifies reforms by legal technologies and broad categories. The number displayed after the category name counts the number of reforms that have been adopted in each category at the end of the sample in 2000. The total exceeds the number of reforms recorded in the database as some reforms belong to several categories.

Table A.2 – Comparing different lists of tax havens.

Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists	Country	Lists
Bahamas	11	Vanuatu	10	Monaco	8	Samoa	6	Latvia	6	Campione	2	Nigeria	1
Bermuda	11	Gibraltar	9	Nauru	8	Seychelles	6	Madeira	6	Egypt	2	Northern Cyprus	1
Cayman	11	Hong Kong	9	St Kitts & Nevis	8	Lebanon	5	Netherlands	5	France	2	Palau	1
Guernsey	11	Singapore	9	Andorra	7	Niue	5	Philippines	5	Germany	2	Puerto Rico	1
Jersey	11	St Vincent & the Grenadines	9	Anguilla	7	Macau	4	South Africa	4	Guatemala	2	Russia	1
Malta	11	Switzerland	9	Bahrain	7	Malaysia	4	Tonga	4	Honduras	2	San Marino	1
Panama	11	Turks & Caicos Islands	9	Costa Rica	7	Montserrat	4	Uruguay	4	Iceland	2	Sao Tome e Principe	1
Barbados	10	Antigua & Barbuda	8	Marshall Islands	7	Maldives	3	US Virgin Islands	3	Indonesia	2	Sark	1
British Virgin Islands	10	Belize	8	Mauritius	7	United Kingdom	3	USA	3	Ingushetia	1	Somalia	1
Cyprus	10	Cook Islands	8	St. Lucia	7	Brunei	2	Alderney	2	Jordan	1	Sri Lanka	1
Isle of Man	10	Grenada	8	Aruba	6	Dubai	2	Anjouan	2	Marianas	1	Taipei	1
Liechtenstein	10	Ireland	8	Dominica	6	Hungary	2	Belgium	2	Melilla	1	Trieste	1
Netherlands Antilles	10	Luxembourg	8	Liberia	6	Israel	2	Botswana	2	Myanmar	1	Ukraine	1

Note: This table counts the number of tax havens lists in which each country is reported. Countries used in the sample of this paper are highlighted in **bold** font. The list of countries comes from table 1.4 of Palan et al. (2009). The eleven lists are the following: International Bureau of Fiscal Documentation (1977), Charles Irish (1982), Hines and Rice (1994), OECD (2000), IMF (2000), FSF (2000), FATF (2000, 2002), TJN (2005), IMF (2007), STHAA (2007), Low-Tax.net (2008).

A Sources

Three main sources are used:

- **Chambost (2000):** Chambost, Guide Chambost des paradis fiscaux, Favre, 7th edition, 1999 (hereafter GC)

This book is constructed as a guide for tax havens' users. It is written by Edouard Chambost, a Swiss lawyer specialized in tax avoidance schemes. It has been published in 8 editions from 1977 to 2005. It proposes a description of tax havens along many dimensions including the regulatory one.

- **Beauchamp (1992):** Beauchamp, Guide Mondial des Paradis Fiscaux, Grasset, 8th edition, 1992 (hereafter AB)

This book is similar to Chambost (2000).

- **Palan et al. (2009):** Palan, Murphy and Chavagneux, Tax havens - How globalisation really works, Cornell University Press, 2010 (hereafter PMC)

This book is a very complete assessment of the activity of tax havens around the world. Particularly two chapters describe the history of tax havens. It also provides important bibliographic references about the offshore history of several countries.

In addition to these three main sources, I use a variety of alternative sources to corroborate specific dates, add reforms not mentioned in the primary sources, and gain a broader understanding of the legal structures of tax havens. These sources include:

- **Tax haven guidebooks:** Other tax haven guidebooks such as Starchild (1994), Barber (2007), or Doggart (1975) have been used.
- **Tax Justice Network (TJN):** The TJN website provides a comprehensive description of tax and financial sector regulations for a wide range of countries. These reports, known as "Narrative Reports", were originally compiled for the construction of the Financial Secrecy Index. Unfortunately, these reports are no longer available on the TJN website, but they can be accessed through the Internet Archive.
- **Documentation from Offshore Service Providers:** Companies specializing in offering offshore services, such as Trident Trusts or Palladium Trusts, often provide extensive documentation about the legal frameworks of various countries for their clients. This documentation can be valuable resources for constructing the database and confirming the timing of some reforms.
- **Offshore Industry Websites:** Specialized websites like lowtax.net, Mondaq, or The Offshore Guide describe tax havens' offshore industry and provide insights into their legal structures.
- **Official Sources:** Official government websites and publications often contain relevant information about tax reforms and updates to legal frameworks. Corporate registries, in particular, can be valuable sources of information through their promotional materials.
- **Publications by International Organizations:** International organizations like the IMF and the WTO often conduct assessments of national tax and financial policies and provide valuable information regarding the legal architecture of tax havens.

- **Scholarly Articles:** Scholarly articles, particularly those focusing on specific countries or groups of countries, can offer in-depth analyses of the legal and regulatory aspects of tax havens.

Note that several sources cited in this description are Internet websites. Internet URLs are notoriously dynamic and may become inaccessible over time. Consequently, some of the links provided may no longer be functional. However, users can access archived versions of these websites through the Internet Archive (<https://archive.org/>). Additionally, I have archived the websites visited at the moment when they displayed the information used in this database. These files are accessible upon request.

B Country-by-country description

Andorra The main sources do not provide any date for Andorra. According to the TJN, Andorra transformed into a regional financial center in 1951, marked by the significant decision to eliminate all taxes on banking operations. Supporting this historical shift, the International Monetary Fund (IMF) further corroborates the transformative year in their "Assessment of Financial Sector Supervision and Regulation" in 2007 (International Monetary Fund, 2007). This pivotal reform is categorized as a *Banking* reform.

In addition, while Andorra does not facilitate the easy establishment of offshore companies, it has been historically recognized as a tax haven. This characterization is attributed to its notably low taxation policies and the absence of information exchange until 2009.

Anguilla According to GC, a set of laws that came into force in 1995 transformed Anguilla into a true tax haven. However, even before this date, numerous offshore corporations were established in Anguilla. The date of 1995 can be attributed to the *Anguilla International Business Companies Ordinance*.

The TJN attributes Anguilla's tax haven status to 1991, stating: "While Anguilla prohibits anonymous accounts, continues to seek offshore financial business, offering business and tax structures and company formation which allow some degree of anonymity. IBCs can be incorporated by company service providers in Anguilla without the requirement to publicly register shareholders or directors." The date of 1991 aligns with the *Offshore Bank and Trust Companies Ordinance*. This assertion is corroborated in USA IBP (2017).

In addition, GC notes that the trust law of Anguilla was modeled after Belize's 1992 trust law, while the law governing "trading companies offshore" was derived from those of the British Virgin Islands and the Bahamas.

Hines and Rice (1994) included Anguilla in their classification of tax havens, while Beauchamps (1983) also recognized Anguilla's status. This designation may be attributed to the lack of individual or corporate direct taxation in Anguilla, although there is insufficient evidence to identify a key reform prior to 1991.

Antigua and Barbuda Based on English common law, Antigua and Barbuda has a long-standing tradition of bank secrecy, as recognized by both GC and the TJN. This tradition was further strengthened in 1982 with the enactment of the *Bank and Trust Confidentiality Act*, which enshrined the principle of bank secrecy.

According to GC, some legislation governing international business companies (IBCs) was introduced in the 1960s, but these early efforts were not particularly successful. The specific law referred to is the *The International Business Companies (Exemption from Income Tax) Act* of 1967 (see for instance global-regulation, [n.d.](#)).

This initial legislation was followed by the more comprehensive *International Business Corporation Act* of 1982, which provided a more robust framework for IBCs.³⁶ Subsequent amendments to this Act in 1984 and 1985 further enhanced the attractiveness of Antigua and Barbuda as an offshore financial center, according to GC and the TJN. GC also notes that personal income taxes were abolished in 1977, further contributing to the country's appeal for offshore financial activities.

Given the lack of detailed information regarding the specific impact of the 1984 and 1985 amendments, it is reasonable to focus on the key dates of 1967, 1977, and 1982. These milestones mark significant developments in Antigua and Barbuda's legal framework for IBCs and personal income taxation, shaping the country's evolution as an offshore financial hub.

Aruba Aruba formed part of the Netherlands Antilles until 1986. It enters the dataset at this time. According to GC (GC), Aruba was primarily used as a conduit for the "Dutch Sandwich" strategy before 1988. This strategy, which involves routing financial transactions through Aruba to benefit from lower tax rates in the Netherlands, was facilitated by the Double Taxation Treaty between the Netherlands and Aruba, signed in 1964. This treaty corresponds to the *RIJKSWET van 28 oktober 1964, houdende Belastingregeling voor het Koninkrijk* (article 11 in particular). This is also noted by van Beurden and Jonker ([2021](#)).

In 1988, Aruba enacted a law designed to compete with Panama's zero-tax regime, establishing the *Aruba Tax Exempt Companies (AVV)*. This legislation attracted a significant influx of companies seeking to exploit Aruba's favorable tax structure. The 1988 law is also mentioned by other sources, such as the Aruba tourism agency (Visit Aruba, [n.d.](#)).

The TJN dates Aruba's emergence as a secrecy jurisdiction to 1945, but it does not provide specific justifications. However, the TJN notes that Aruba's autonomy in 1986 coincided with a government initiative to develop the island as a financial center, fueled by favorable tax laws and the *Belastingregeling voor het Koninkrijk (BRK) 2*, a treaty with the Netherlands that effectively functions as a tax treaty.

Bahamas The Bahamas has a long history of tax-free status, with no corporate or personal income taxes levied since 1717, as noted by AB. According to PMC, the country's transformation into a tax haven began in the 1930s, when holding companies were established in the Bahamas.

A significant turning point came in 1955 with the signing of the Hawksbill Creek Agreement, which established a free trade zone in Freeport, exempting businesses from taxes until 1980, later extended to 2054 (Wikipedia, [2023](#)). This agreement was crucial in attracting investment and solidifying the Bahamas' position as a tax haven (The Tribune, [2015](#)). While PMC does not explicitly mention the Hawksbill Creek Agreement, they do

36. Law number 28, also confirmed by Offshore Company ([n.d.-a](#))

discuss the Bay Street Boys, who played a central role in negotiating the agreement. I keep this date as it is a political decision that is noted by many sources and that is key to understand the offshore history of Bahamas. It is classified in the *Other* type of reforms.

The implementation of bank secrecy measures comparable to those in Switzerland in 1965 marked another milestone in the Bahamas' evolution as a tax haven (TJN). The *The Banks & Trust Companies Regulations Act, 1965* established strict confidentiality rules, fostering an environment conducive to tax avoidance. By the 1970s, the Bahamas had become one of the world's leading tax havens.

GC further corroborates this timeline, noting that the introduction of "non-resident societies" in 1965 further facilitated the country's status as a tax haven. Additionally, GC highlights the year 1990, when International Business Companies (IBCs) are introduced, as a significant development. IBCs, characterized by their ease of formation, anonymity, and tax-free status, quickly became a popular tool for offshore financial activities. The *International Business Companies Act of 1989* formalized the establishment of IBCs in the Bahamas and updates the previous law of 1965, less and less effective according to GC.

According to AB, the *Merchant Shipping Act* of 1976 played a crucial role in establishing the Bahamas as a flag of convenience, attracting foreign-owned ships seeking to register under the Bahamas' favorable tax regime. This designation is further supported by Mondaq (2012).

AB notes that the *Merchant Shipping Act* of 1976 helped to make Bahamas a flag of complaisance. This is also confirmed by a Mondaq publication.³⁷

Barbados Barbados' designation as a tax haven stems from its favorable regulatory environment for international business companies (IBCs), as noted by AB. In 1977, a significant reform of the IBC regime made it more liberal than in other jurisdictions. The *Offshore Banking Act* of 1979 further enhanced Barbados' attractiveness as a tax haven by establishing offshore banks with a limited tax rate.

While GC suggests that the first IBC legislation dates back to 1960 and was amended in 1991. Both these dates are not corroborated by other sources. Trident Trust indicates that the first IBC regulation was enacted in 1965 (*Barbados International Business Companies (Exemption from Income Taxation) Act*), a date also supported by Zagaris (1981). Zagaris (1981) further confirms the significance of the 1977 IBC reform, stating that it "breathed a new life" (p. 676) into the IBC regulations.

GC incorrectly dates the offshore banking act to 1972. The correct date is 1979, as confirmed by AB, Zagaris (1981), and Carmichael (1992, 1995). GC identifies the importance of the *Exempt Insurance Act* of 1983 for captive insurance, a type of insurance commonly used in offshore jurisdictions. This date is also supported by the Barbados Financial Services Commission's website (Barbados Financial Service Commission (n.d.)) and Carmichael (1992).

Carmichael (1992) further highlights the Foreign Sales Corporation Act of 1984 as a significant component of Barbados' offshore infrastructure. Additionally, Alleyne (1986) notes that Barbados emerged as a flag of convenience in 1982 following the *Shipping Act* of 1981.

37. <https://www.mondaq.com/marine-shipping/193420/advantages-of-registering-a-vessel-under-the-bahamian-flag>

Bahrain In an effort to compete with the offshore financial system of Singapore, Bahrain “initiated a policy of licensing offshore banking units” in 1975 according to PMC. GC dates this law from 1973. He further points to the 1978 *Exempted Joint Stock Companies* law, which enabled the formation of companies exempt from Bahrain’s local tax rates. The TJN indicates that the Bahrain Monetary Authority was established in 1973 and that offshore banking units were authorized in 1975. This date is corroborated by Gerakis and Roncesvalles (1983) and AB. I select the date of 1975 which is more backed in the sources.

According to a handbook on company law in the Middle East (USA, 2011), Bahrain’s exempt joint stock companies were established through Ministerial Order 25 of 1977.

Belize PMC indicates that Belize introduced the *Offshore Banking Act* in 1996. GC mentions a law on trusts in 1992 but provides no further details. The existence of the *Belize Trust Act* is confirmed by Trusts and Trustees (Wilson, 2007) and Lowtax.net (n.d.-a), which also states that the law was inspired by similar legislation in Cayman, Panama, and Bermuda. AB identifies the *Belize International Business Companies Act* as the key legislation enabling the establishment of IBCs in 1990. The corporate registry of Belize also confirms the 1990 date (Belize International Corporate Affairs Registry, n.d.), and it is noted that the IBC legislation is heavily based on that of the British Virgin Islands (BVI). Belize is also considered a flag of convenience, according to the TJN. The *Registration of Merchant Ship Act* of 1989 is taken as the benchmark for the opening of the flag of convenience.

Bermuda According to PMC, Bermuda’s reputation as a tax haven dates back to 1935, when the first offshore company was established (Archer, 1998). Ketcheson (1981) and Spurling (1992) also highlight the significance of the *Exempted Companies Act* of 1950, which introduced the concept of “exempted companies” and paved the way for Bermuda’s transformation into a major offshore financial center.³⁸ The *Companies Act* of 1970 further simplified the incorporation process for exempted companies (Spurling, 1992).

In 1958, Bermuda enacted the *Exempted Partnerships Act*, further expanding its offshore financial options by enabling non-residents to operate through partnerships formed in Bermuda. Spurling (1992) underscores the importance of this law in Bermuda’s offshore development. The TJN notes that the *Trustee Act* of 1975, along with the establishment of the Bermuda Stock Exchange in 1973, demonstrates Bermuda’s commitment to providing secrecy services to non-resident clients.

While AB mentions the *Exempted Undertakings Tax Protection Act* of 1966, which provided legal assurance that exempted companies would not be taxed, it’s important to note that Bermuda has historically had no personal or corporate income tax. This is why Bermuda’s reputation as a tax haven predates specific legislation, with notable usage as early as 1947 (PMC). Considering this historical context, the 1966 law is not considered a significant milestone in Bermuda’s evolution as a tax haven.

38. “Bermuda’s potential as an international business centre was recognised as early as the late 1940s and the first body of regulation for exempted companies became law in 1950, enshrined in The Exempted Companies Act 1950 (the 1950 Act). The 1950 Act introduced the concept of the ‘exempted company’ which is a Bermuda company formed primarily for the benefit of (and owned by) non-residents of Bermuda to carry on business outside Bermuda or with other exempted undertakings in Bermuda. The exempted company is exempted from the ownership requirements which apply to local companies.” (Spurling, 1992, p. 9)

British Virgin Islands The British Virgin Islands (BVI) are one of the world's leading provider of international business companies (IBCs), characterized by their tax-free status and minimal regulatory requirements. While the *International Business Companies Ordinance* of 1984 is widely recognized as the key legislation governing IBCs in the BVI (GC, AB, Garcia Pires, 2013), the *Trust Ordinance* of 1961 also played a significant role in establishing the BVI's reputation as a tax haven (Palladium Trusts, 2018, Pursall et al., 2023). This ordinance enabled firms and individuals to avoid taxes under certain conditions, paving the way for the island's emergence as a popular destination for offshore financial activity.

The TJN and GC also support the 1984 date as the defining moment for the BVI's status as a tax haven. Garcia Pires (2013) similarly indicates 1984 as the pivotal year. However, the *Trust Ordinance* of 1961, and its subsequent amendment in 1993, as noted by Palladium Trusts (2018), also played a crucial role in shaping the BVI's tax haven landscape.

Cayman Islands Freyer and Morriss (2013) credit the Cayman Islands *Company Law* of 1960 as the first piece of legislation specifically designed to promote the Cayman Islands as a financial center. They further highlight the importance of the *Exchange Control Law* of 1966, which they describe as a crucial step in establishing the Cayman Islands as an offshore financial center. This law was enacted in response to competitive pressures from other jurisdictions and was driven by the efforts of newly arrived expatriates and legal professionals.

PMC identifies several other laws that have contributed to the Cayman Islands' status as a tax haven: "In 1966 Cayman enacted a handful of laws, including the Banks and Trust Companies Regulation Law, the Trusts Law, and the Exchange Control Regulations Law, and it also strengthened its 1960 companies law. In 1976, the Confidential Relationships (Preservation) Law (a codification of English common law) was enacted to protect confidential information in the possession of financial professionals from disclosure—this in response to aggressive action by the U.S. authorities to obtain information from offshore banks. All exchange control restrictions were abolished during the late 1970s. The Insurance Law was enacted in 1979 to enhance and regulate the growing captive insurance industry (driven initially by illfounded concerns about political stability in the Bahamas)" (p.137). GC notes the date of 1960 for the creation of exempted companies and the TJN notes 1965. Even if the law of 1967 seems important, the date of 1960 should be retained as the first Company Law (as confirmed by the TJN and AB).

Jersey According to PMC, the Channel Islands have been known as tax havens since the 1920s. In 1928, Jersey enacted the *Income Tax Law*, which allowed foreign-controlled firms to pay no taxes. This law, along with the *Corporation Tax Law* of 1940, which established the world's first exempt companies, marked the island's early transformation into a tax haven.

In 1983, Jersey introduced captive insurance, a type of insurance arrangement that is popular among offshore investors (Herbert, 1992). He also attributes the development of Jersey as a tax haven to the *Trust Law* of 1984. Trident, in its factsheet on Jersey's trusts (Trident Trust, 2021), also recognizes the importance of this law (p. 1).

Herbert (1992) and GC also mention the (*Exempted*) *Companies Law* of 1991. Finally, IBCs were created in 1993, further expanding the island's range of offshore financial vehicles (GC, Trident Trust, 2021).

Guernsey While the precise timeline for Guernsey's emergence as a tax haven is less clear than for Jersey, several key legislative developments stand out. In 1986, Guernsey enacted the *Insurance Business Law*, which established a regulatory framework for captive insurance (Le Marchant, 1999, p. 217). This law, along with the creation of the Financial Services Commission in 1988, marked a significant step in Guernsey's transformation into an offshore financial center (GC, Le Marchant, 1999).

Like Jersey, Guernsey introduced IBCs in 1993 according to GC, further expanding its range of offshore financial vehicles. Dyke and Simpson (2001) discuss the use of exempted companies according to the Companies Laws of 1994 to 1996. I keep only the date of 1994. Finally, an important innovation of Guernsey are the Protected cell companies (PCC) created in 1997 (see GC, PMC, and Trident Trust, 2018 for instance).

For Jersey and Guernsey. It is a bit difficult to follow the different sources on the precise date of the reforms around 1990 because of a large number of laws. I tried to keep the most significant but this is mainly based on the interpretation of sources. Both exempted companies and IBCs have been introduced around this date.

Cook Islands According to PMC (p.146) that cites Sharman (2008), the Cook Islands established a legislative framework to attract offshore business in 1981, specifically targeting tax-exempt structures. This development is corroborated by TJN, which cites a report by the International Monetary Fund (IMF) on the Assessment of the Supervision and Regulation of the Financial Sector in the Cook Islands (International Monetary Fund, 2004). The IMF report states: "Offshore financial activity commenced in the Cook Islands (CI) in 1981 with the enactment of several laws, which provided, as a basic inducement, for all registered offshore entities to be exempt from all forms of tax." This information is further supported by AB and Van Fossen (2002b).

Cyprus According to GC, offshore societies were established in Cyprus through the article 28A of Law No. 15 in 1977. The TJN, citing lowtax.net, confirms this date and adds that Cyprus has been active in attracting offshore businesses since 1975, evidenced by the substantial number of offshore companies registered in the country. AB also mentions a prior law in 1975, which was later modified in 1977 to make it less restrictive and more conducive to offshore activities. I keep the date of 1975 as the one of 1977 seems to be a correction relative to the first one, not a real innovation.

The Merchant Shipping Act, which regulates the registration of foreign-owned ships in Cyprus, dates back to 1963 (Christensen, 2017). Offshore banking units in Cyprus are created in 1978 according to AB with a first autorisation granted to the Banque Nationale de Paris intercontinentale. According to Phylaktis (1994) (p. 125), Offshore Banking Units are created in 1981. This date is also found in Roussakis (1999). Note that AB was printed in 1981 which might explain why this date does not appear. AB, published in 1981, may not have included this later date due to its publication timeframe. The IMF's 2001 assessment of the offshore sector in Cyprus (International Monetary Fund, 2001) also supports the date of 1981, noting that the first OBU was licensed in 1982. I keep

1981 since it is more sourced and I was not able to find more information on the date of 1978.

..

Dominica According to GC, Dominica implemented a system of IBCs based on the one enacted in the British Virgin Islands. It was passed in 1996 according to the TJN. In GC: “La Dominique est le dernier-né des Paradis fiscaux et réussit d’emblée à entrer directement dans la catégorie des «autres grands».” This is also confirmed by Suss et al. (2002) that adds the economic citizenship (golden passport) program. They also mention the *Offshore Banking Act* of 1996, and the *Exempt Insurance and Exempt Trust Act* of 1997.

Gibraltar According to GC, the *Companies Ordinance* of 1983 established a regime for exempted societies in Gibraltar, which are companies that are not owned by Gibraltarians and do not conduct business domestically. This reform is an amendment of the 1967 *Exempted Societies law*. The TJN confirms that Gibraltar has had an exempt company regime since 1967. Gibraltar’s status as a tax haven was recognized as early as 1977, when it was blacklisted by the International Bureau of Fiscal Documentation. PMC also notes that Gibraltar was already a tax haven in the 1960s.

According to AB, in 1989, Gibraltar enacted the *Financial Service Ordinance*, which aimed to further develop its financial sector, including the insurance captive business. This law was intended to strengthen Gibraltar’s competitiveness against other financial centers, such as Ireland. An IMF assessment document from 2001 also references this law (International Monetary Fund, 2011). Notably, Gibraltar does not impose withholding tax or income tax on investment fund revenues.

Although GC mentions the *Companies Act* of 1930 as a potential legal framework for exempted companies, AB indicates that Gibraltar’s legal framework is primarily inspired by UK law. However, given the lack of definitive sources suggesting that the 1930 Act played a pivotal role in Gibraltar’s offshore development, the 1983 date is considered more significant.

Grenada Grenada was considered as a tax haven in 1977 by the International Bureau of Fiscal Documentation. According to AB, there is no taxes on any revenues (individuals or corporations) since 1986. This is confirmed in an United Nations documents that mentions that “in a radical fiscal experiment Grenada abolished income taxes in 1986 and introduced a 20 per cent Value Added Tax (VAT) on goods and services imported or produced for sale in Grenada.” (Ramsaran, 1999). In Effros (1998), it is noted that the *International Business Companies Act* of 1989 provides the complete secrecy of offshore companies. This law also appears in a WTO document about Grenada (World Trade Organization, 2014). Suss et al. (2002) notes that the offshore sector began in 1997, which does not seem reliable given the above information. However the set of laws suggest an important reform of the offshore sector: *International Insurance Act*, *Companies Act*, *Offshore Banking Act*, *International Trusts Act*, *International Ccompanies Act* are set up in 1996.

Hong-Kong Both PMC and the TJN identify 1978 as the moment when Hong Kong became a tax haven. This shift is linked to the Chinese Open Door policy and the end of

a moratorium on the establishment of new banks in Hong Kong. These developments created a more permissive environment for offshore financial activities, contributing to Hong Kong's ascent as a key destination for tax-evading businesses. Schenk (2003) supports the 1978 date by confirming the removal of the moratorium on new bank licenses. Jao (2003) notes "Although the Hong Kong colonial government adopted a permissive attitude towards the financial sector, it also did not pursue an active IFC policy, at least in the 1950s and 1960s."

I retain these policy changes in 1978 as the first date after WW2. Note that this is subject to debate. Some researchers think that Hong-Kong played the role of an OFC before this date. In particular, an important feature of the tax system put in place in Hong-Kong in 1940 is that it only taxes income based on source. It means that companies registered in Hong-Kong but with no local revenues will not pay taxes there (see Littlewood, 2010). This is described as an important feature of the tax haven status of Hong-Kong. Therefore, I keep this date.

PMC, citing Jao (2003), also highlights two key tax policy changes that further enhanced Hong Kong's attractiveness as a tax haven: the abolition of interest withholding tax on foreign currency deposits in 1982 and the complete elimination of all forms of interest taxation in 1989. Schenk (2020) corroborates the date of 1982.

Ireland Shaxson (2018) argues that Ireland's tax haven strategy has never been driven by secrecy, but rather by aggressive corporate tax cuts. He cites the 1956 Export Profits Tax Relief as a prime example of this strategy, which effectively exempted export sales of manufactured goods from taxes. This policy, when combined with the subsequent Shannon export processing zone established in 1959 (see PMC), laid the foundation for Ireland's transformation into a tax haven. PMC further highlights the establishment of the Irish Financial Services Centre (IFSC) in Dublin in 1987. This center attracted multinational corporations seeking to minimize their tax liabilities.³⁹ The same dates are highlighted by the TJN.

The Tax Consolidation Act (TCA) of 1997 has been identified as a significant step in consolidating Ireland's tax haven status. According to O'Boyle (2022), the section 110 of this act works as a debt-based tax avoidance instrument (see also O'Donnell, 2017 that interprets the law similarly). The Double Irish sandwich is also associated to this piece of legislation.

Isle of Man PMC indicates that the Isle of Man began to compete for tax revenues with its neighboring jurisdictions in 1970. According to PMC, two significant legislative milestones were the *Income Tax (Exempt Companies) Act* of 1984 and the combined *Shipping Law* and *Insurance Law* of 1986. A government communication further confirms the establishment of the Isle of Man's shipping registry in 1984 (Isle of Man Government, 2007).

39. PMC writes: "Following the success of its Shannon export processing zone, established in 1959, Ireland established the Irish Financial Services Centre in Dublin in 1987. With its favorable tax regime for certain financial activities, low corporate tax rate (12.5% in 2008), and no withholding tax, the IFSC still flourishes, according to the Irish economist Jim Stewart (2005), in what he calls global treasury operation, managing international funds and flows of funds within MNEs."

GC, while not specifying the exact dates, suggests that the Isle of Man's legal framework for exempt companies dates back to the 1930s. The TJN notes that the *Companies Consolidation Act 1931* laid the foundation for the Isle of Man's current company law, which is based on the U.K.'s *Companies Act 1929*. This Act has undergone several modifications such that it is called 1931-2004 law. GC also note this law as being at the origin of Manx Exempted Companies.

Based on these sources, the dates of 1931, 1984, and 1986 appear to be the most significant in the Isle of Man's offshore development.

Jordan Jordan appears to be a relatively minor tax haven with limited information available on its offshore history. According to GC, the first attempt to attract foreign investors through tax exemptions was made in 1975 through the *Temporary Law Number 46*. This was followed by two additional laws in 1989 and 1992: *Law 1* and the *Offshore Companies Regulation*. AB identifies two types of tax incentives: those provided by the *Registration of Foreign Companies Law* of 1975 and those offered by the *Encouragement of Investment Law* (1984) and the *Industrial Estates Corporation Law* (1980). However, GC notes that the 1975 law was not widely used due to administrative challenges. The existence of the 1975 law is further corroborated by a document from the US Bureau of Domestic Commerce (United States Bureau of Domestic Commerce, 1977, p. 122).

Lebanon PMC suggests that Lebanon's transformation into an offshore haven began in 1943 following its independence. However, this date is too vague and requires further confirmation. Different sources such as Gates (1998) or Kardahji (2015) explain that the reforms taken in 1943 were deregulating and opening the economy and that the main source of the offshore attractiveness is the absence of banking regulation rather than actual laws. Therefore, I do not keep this date. More specific evidence points to the establishment of the *Decret loi 45 on holding societies* and the *Decret-loi 46 on offshore societies* in 1983, indicating a more recent origin for Lebanon's offshore development. In addition, the TJN pinpoints the adoption of a bank secrecy law in 1956 as a key milestone in Lebanon's emergence as an offshore financial center.

Liberia The TJN identifies Liberia as a secrecy jurisdiction since 1951, but does not provide specific evidence to support this claim. They add that the shipping registry was created in 1948 (confirmed by Liberian Corporate Registry, n.d.). This is also the date of creation of the Liberian Corporate registry that plays an important role in the Liberian Tax haven (see the brochure of Liberian Corporate registry, Liberian Corporate Registry, 2015 for instance).

The TJN notes that the *Commercial Code* of 1956 was modeled on Delaware regulations, further indicating Liberia's alignment with established offshore jurisdictions. This is also confirmed by AB and TJN. Finally, in 1975 there seems to be a law that limits the possibility of registering ships for non-residents (*Liberian Maritime Law*, see AB). This law is not recorded in the database as it decreases the extent to which Liberia is a tax haven.

Liechtenstein The establishment of a tax haven regime in Liechtenstein can be traced back to 1926 with the introduction of the *law on Anstalt* (PMC). This legislation enabled

individuals to form companies that offered them the advantage of incorporation and secrecy. AB and GC provide additional dates that mark Liechtenstein's evolution as a tax haven: 1960 for the enactment of a banking secrecy law and 1992 for the introduction of a new banking law that was deemed of high quality by GC.

Luxembourg The introduction of holding companies in Luxembourg in 1929 marked a turning point in the country's transformation into a tax haven. This is the most important law that makes Luxembourg a tax haven and among the first holding legislation in the world. It exempted these companies from various taxes, including income tax, fortune tax, tax on the transfer of shares, and withholding taxes. This legislation attracted foreign investors seeking to shelter their assets, paving the way for Luxembourg's emergence as a major tax haven in the 1970s. The Luxembourg then emerges as a major tax haven in the 70' according to PMC and GC.

According to Chavagneux (2021), the three most important dates in the offshore of Luxembourg are 1929 (law on holdings), 1963 when the first emission of an Eurodollar obligation was done in Luxembourg, providing secrecy and launching the deregulated Eurodollar market, and 1981 when it officially puts banking secrecy in place. According to PMC, the Luxembourg maritime register is opened in 1990 to make it a flag of convenience. In addition, the first captive insurance law dates from 1984 (see PwC, 2012 or Captive Insurance Times, 2013).

The SoParFi, companies exempted from capital gains taxes, are created in 1990. A report from the French Assembly (about limits to fiscal control, financial crimes and money laundering in Europe) notes that these companies have been "deliberately created to attract, through important tax advantages, capital to the Grand-Duché" (own translation).

Macao It is difficult to find information about Macao as a tax haven. It is a port-franc (no taxes on trade) and ensures a corporate taxation between 0 and 15 percent according to the negotiation with tax authorities. According to AB1, Macao is known to be a place with low taxes and facilities since a long time but is considered as a second-zone tax haven. In particular, it is noted that the government created an advantageous tax regime in 1978. According to the Global Forum cited by the TJN, the Macao Offshore Legislation was introduced and became effective on November 1999. It corresponds to the Decret-Loi 58/99/M that has been revoked 2018 to follow OECD guidelines (see also World Trade Organization, 2013 IFLR, 2018).

Malaysia and Labuan According to AB, the *Income Tax Act* of 1974 exonerates from income tax revenues sourced outside of Malaysia for individuals and companies. Besides, in 1990, Malaysia decided to create a tax Haven in Labuan with a set of laws (including the *Offshore Companies Act*) that allows for offshore companies (see GC).

Maldives Maldives are not mentioned in GC. The TJN notes "The absence of any meaningful third-party information (IMF, FATF-style, Lowtax.net, etc.) may suggest that the Maldives only recently opted for a secrecy jurisdiction strategy. Maldives mentions on its website that "According to World Bank's 2006 Investment Climate Assessment, Maldives ranked highest in the region in terms of World Banks' ease of doing business

index." (Invest Maldives)." However it was listed as a tax haven by Hines and Rice (1994) and by the OECD (2000).

No date is found for this country. Therefore, I do not use it in the database.

Malta Malta was considered as a tax haven by the IFBD in 1977. The *Banking Act* of 1970 allows for the creation of offshore banks according to AB. It is not confirmed by other sources that offshore banks are created by this act. This date is not kept yet, since many sources talk about the *Banking Act* of 1970 but do not link it to offshore banks. According to AB, the 1980 treaty with the United States allows for treaty shopping strategies, explaining why it is closed by the U.S. in 1997.

In 1988, Malta implemented a series of reforms to reduce taxes on offshore activities. According to GC there is a limited tax rate of 15% on foreigners. Besides, the *Offshore Trust Act* is enacted in 1988, as well as the Amendment to the *Merchant Shipping Act* of 1973 that establishes Malta as a flag of convenience according to AB. Fabri and Baldacchino (1999) further note that the 1988 reforms included trading, holding, banking, and insurance offshore companies and offshore trusts under the *Malta International Business Activities Act*. Additionally, this act granted tax reductions for specific businesses, especially banks. Fabri and Baldacchino (1999) also confirm that the *Merchant Shipping Act* of 1973 opens the door to being flag on convenience.

The *Malta Companies Act* of 1995 created International Trading Companies that could be used as International Business Companies (IBCs), according to the Offshore Company website (Offshore Company, n.d.-b). This regime was phased out in 2007.

Marshall Islands The Marshall Islands emerged as a tax haven with the enactment of a set of laws in 1990 that included provisions for zero or near-zero taxation for exempt and non-residential companies, Swiss-style bank secrecy laws, trust companies laws, offshore insurance laws, flags of convenience for shipping and aircraft leasing, and, in the early 21st century, laws aimed at facilitating e-commerce and online gambling. This date is confirmed by PMC, GC, TJN, and Van Fossen. Van Fossen (2002) specifically identifies 1990 as the year the Marshall Islands re-established itself as an offshore financial center, although he does not mention any previous reforms. According to AB, the *Association Law* is the key legislation that transformed the Marshall Islands into a tax haven. In addition, the establishment of a maritime registry in 1988 marked the first step towards becoming a flag of convenience, according to AB. This date is also confirmed by a promotional tract from the Marshall Islands (International Registries, 2020), which adds the *Maritime Act* of 1990 as a milestone in the country's development as a maritime center.

Mauritius PMC, citing Sharman (2008), indicates that Mauritius became a tax haven in 1990 with legislation specifically targeted towards Indian residents. GC acknowledges the importance of the 1992 and 1994 laws but does not specify the first law that established Mauritius as a tax haven. According to the TJN: "The Mauritius Export Processing Zone (EPZ) was set up in 1970, and has become one of the country's biggest centres of employment, particularly in the garment manufacturing trade. The EPZ is meant for manufacturers and food processors who export 100% of their output, although permission is sometimes available for 10-20% of output to be sold locally [...] the following incentives apply: No customs duties or sales taxes payable on raw materials and equip-

ment; No corporate taxes payable and no withholding tax on dividends; No capital gains tax; Free repatriation of dividends, profits and capital". However, EPZs are outside the scope of the current data collection, so the focus will be on other reforms.

Sharman (2008) provide further details: in 1990, the first offshore banking and management company license was granted; in 1992, a treaty with India significantly accelerated the development of the offshore system; and in 1994, International Business Companies (IBCs) were introduced.

Monaco According to PMC, since 1869, Monaco has exempted every firm and individuals from income taxation. This is the only relevant information its offshore legal architecture that I was able to find for Monaco.

Montserrat Montserrat established a law in 1985 that created International Business Companies. According to AB, the 1980 *Income Tax Ordinance* established zero taxes on offshore banking operations. In addition, offshore banking was subsequently legislated in 1991 through the *Offshore Banking Ordinance*.

Nauru According to PMC, Nauru enacted a set of offshore laws in 1972. It is confirmed by GC and the TJN. This corresponds to a law on societies and a law on trusts. GC also adds that the banking secrecy was enacted in 1975. Note that AB dates it from 1973: "C'est la loi sur les sociétés de 1973 et une loi spéciale sur les trusts, successions et testaments qui ont fait de Nauru un paradis fiscal". AB also states that Nauru is not a tax haven for individuals due to the restrictions imposed on immigration.

Netherlands Historical information about the Netherlands as a tax haven is surprisingly limited in the tax haven guidebooks.⁴⁰ According to AB1: "C'est, en effet, au régime des *holdings substantielles* que les Pays-Bas doivent d'être l'un des rares pays industriel pouvant être qualifié de paradis fiscal". According to PMC: "Similar notions can be traced to an earlier innovation, the holding company, in 1893 in the Netherlands. The Dutch exempted from tax all income earned by foreign subsidiaries of local companies in an attempt to help Dutch firms expand in Asia. Over time the Dutch holding company evolved into a very lucrative tax avoidance scheme." These two quotes indicate that the regime of exemption put in place in the Netherlands in 1893 is an important landmark in the history of the country as a tax haven.

An important feature of the Netherlands as a tax haven is also its reliance on its treaty network, in particular the treaty with the Netherlands Antilles in 1964 (Weyzig et al., 2006, Vleggeert and Vording, 2019). Thanks to treaty shopping, it is possible to reduce the withholding taxes to 5% or 15% instead of 25%.

Finally, Weyzig et al. (2006) notes that the liberalization of exchange controls in the mid 1970 participated to make the Netherlands "a 'conduit' country for capital flows of MNE wishing to avoid taxation". As a consequence, in 1983, the Netherlands created the special financial institutions.

Netherland Antilles According to PMC, the Netherlands made its Antilles a tax haven during the WW2. They were largely used in the 1960s and 1970s.

40. In an academic article about Netherlands as a tax haven, Vleggeert and Vording (2019) notes: "The early development of the Dutch tax planning industry is not well-documented."

The main reference is van Beurden and Jonker (2021) (VBJ hereafter) that retraces the offshore history of Curacao. Here we consider the whole Netherland Antilles. VBJ shows that contrary to what is generally written, the offshore history of Curacao begins in 1951: “We therefore date the beginning of Curaçao as an OFC to that first purposeful legislation in April 1951, rather than May 1940, as the literature often does”. This year, a legislation that grants shell companies a 90% tax exemption is enacted. Note that the Netherlands Antilles are formed in 1954/1955. In absence of other source, we can consider that this legislation only applies to Curacao at the moment it is taken. The tax rate is reduced the next year but this is not considered as a major structural reform for the purposes of this database. In 1955, the benefits of the tax treaty between the Netherlands and the US are extended to Curacao. In 1965, *Belastingregeling Koninkrijk* (BRK, Tax Arrangement for the Realm) is signed with the Netherlands and gives the Netherlands Antilles the exemption of dividend taxes at source. This agreement was in negotiation since 1954. In addition, VBJ describes many reforms at the beginning of the offshore history of Curacao: 1957 (revised law on patent holding companies), 1958 (long-term - 10 years - legal guarantees of shell companies tax rate), 1967 (individual and confidential tax rulings for offshore companies), 1972 (low entry requirements and exemption from supervision for offshore banks) (see p.11). Informal banking secrecy is adopted in 1965, but such informal decisions are not considered for the purpose of this database. The laws of 1967 and 1972 are added to the database as they are the ones really contributing to the construction of the legal architecture. The one of 1957 is a revision of a law (extending the exemption to patent-holding firms) and the one of 1959 provides certainty but does not really participate to the legal architecture in itself.⁴¹

Niue The Financial Times reportedly identified Niue as a tax haven in 1994. A specialised website notes that “The legislation—The International Business Companies Act of 1994—is very similar to other IBC (international business company) jurisdictions.” (International Man, 2013) Niue’s Prime Minister reportedly stated that the law was modeled after the regulations of the British Virgin Islands and the Cook Islands and was aimed at promoting Niue’s independence from New Zealand.

Norfolk Island According to PMC, Norfolk Island is the first Pacific tax haven. It was established in 1966. This is based on Van Fossen (2002a). Fossen and Chambers (2012) confirms in an other article that the offshore history of Norfolk began in 1966. However, the specific laws that were implemented to facilitate offshore activities are not explicitly stated. While it is likely that these laws were modeled after those of successful Caribbean tax havens, further research is needed to identify the exact legislation. Following Van Fossen (2002a) reasoning, the reforms appear to have attracted numerous offshore companies. The reforms are therefore classified under the category of companies regulation.

Panama Panama has been a center for shipping registration since the 1920s. In 1970, Panama “introduced a series of rulings that liberalized its banking laws, adopting Swiss-style banking secrecy, abolishing currency controls, and setting up exempt companies” (Warf, 2002). The date of 1927 is also proposed for the adoption of Delaware-like incorp-

41. A similar decision has been taken in the case of Seychelles, see below.

oration laws. Another source, Garcia Pires (2013) confirms the date of 1927 and suggests that Panama's emergence as a tax haven can be traced back to 1919, when the country began providing facilities for foreign ship registration. The actual law establishing Panama's Flag of convenience was passed in 1917 (Law/63, dated December 15, 1917), with the first foreign ship registration occurring in 1919 according to Piniella et al. (2017).

Saint Kitts-et-Nevis Information about Saint Kitts-et-Nevis is very limited. According to GC, Saint Kitts-et-Nevis developed a trust system in 1994, through the *Nevis International Exempt Trust Ordinance* (see also Lowtax.net, 2021b). IBCs are created with the *Nevis Business Corporation Ordinance* of 1984 (Lowtax.net, 2021a), revised in 2000. According to Suss et al. (2002), an *Offshore Banking Ordinance* has been passed in 1996.

Saint Lucia According to the TJN, it began as a secrecy jurisdiction with the *Exempts Trust Act* and the *IBC Act*. According to the TJN archive of 2013, the *IBC Act* is also from 1999. This information is confirmed in Suss et al. (2002).

Saint Vincent-et-les-Grenadines The TJN notes that Swiss lawyers introduced offshore finance in St. Vincent and the Grenadines in 1976, and further improves its regulations in 1996 (see also Offshore Protection, 2023).⁴² According to AB, the 1976 regulation is about international companies and also creates a Trust authority to attract trusts, international companies, shipping companies, catives and pension funds (see also Mondaq, 1999). Suss et al. (2002) also identify the 1996 law as a key milestone in St. Vincent and the Grenadines's transformation into a tax haven.

Samoa According to PMC, the story is the same than for the other Pacific Attols. The first tax-haven style legislation dates back to 1988 (confirmed by the TJN). GC (probably referring to the same laws) dates this moment to 1987. A significant modification happened in 1991 according to GC (the modification is also noted as substantial in Betham-Annandale, 1998, note 64). The website International Man confirms the date of 1987 and gives the name of the law: the *International Companies Act* (International Man, 2014).

San Marino Information about the tax haven history of San Marino is difficult to find. GC only writes one sentence to say that San Marino is not a tax haven. AB notes that the reputation of San Marino as a tax haven is old, and not necessarily justified anymore because of a lack of investment in the tax haven structure of the country. Due to the lack of information, no date is collected about San Marino.

42. "Atrium-Incorporators further provides some interesting details about the beginning of the 'offshore finance' in St. Vincent and the Grenadines: "Swiss lawyers introduced St. Vincent and the Grenadines (SVG) to the international financial services sector in 1976. Three years later the country gained independence from Britain and embarked on the process of nation-building – setting up the foundations of an independent nation state. When the country was more mature it was able to take a second look at the international finance industry in 1996 and take the policy decision to move this sector into the forefront of the national economy. The international finance legislation was overhauled and a package of financial laws was introduced. Regulated and licensed agents and trustees, known in SVG as Registered Agents, provide international financial services."

Seychelles It was listed as a tax haven in 1977 by the IBFD. Ellis et al. (2022) refers to the creation in 1978 of the Seychelles Trust Company.⁴³ According to the Offshore Trust Guide, the Seychelles passed the *International Trusts Act* in 1994 (Offshore Trusts Guide, n.d.-a). Trident trust also refers to the *International Business Companies Act* of 1994 (Trident Trust, 2016).

According to PMC and GC, the Seychelles also passed the *Economic Development Act* which granted foreign investors (investing more than 10 million dollars) a judicial immunity. This law was repealed in 2000 due to international pressure. This law is also a bit different from our purposes and will not be incorporated in the database.

Singapore The Asian Currency Unit (ACU) introduced by Singapore in 1968 is the first type of international business facility in Singapore according to PMC. It is confirmed by the TJN. Hodjera (1978) explains clearly that the creation of ACU is linked to the development of an offshore financial center (“The willingness of the Singapore Government to provide the incentives necessary for attracting international banking business was the key to the development of an international financial center on the island”). Also confirmed by Schenk (2020): “The goal was to isolate the offshore market from the domestic market, thereby attracting regional funds inward rather than channelling domestic savings outward.” It comes with “the 10 per cent withholding tax on interest income from nonresident foreign currency deposits”. According to the TJN, the Monetary Authority of Singapore (MAS), created in 1971, boosted its regulatory capacity. Hodjera (1978) notes that different regulations were put into place in 1972 (abolishment of reserve requirement, described as important because it allows an “increase in earnings from offshore credits”) and 1973 (where “the corporate tax on net income from offshore lending and other offshore activities was reduced from 40 per cent to 10 per cent”). The date of 1973 as it is also noted (informally without refereeing to the date) by GC. This is classified as a banking regulation.

In 1998, Singapore reformed its regulatory regime by making it more light touch and liberalising the financial market (according to PMC: “The second stage in the development of Singapore as a tax haven began in 1998 (Juan, 2008).”). It is not clear when the law was passed though. I attribute it to 2001, year of the revision of *the Banking Act*. Therefore, it does not appear in the paper’s database.

Switzerland The history of Switzerland as a tax haven has been documented in several books and articles. This history is long and contested among historians (see for instance Guex, 2000, 2021, Farquet, 2016, 2018, 2021). The goal of these notes is not to contribute to this history but to isolate key reforms that participated to the construction of the Swiss tax haven.

The most well-known reform that participated to the legal architecture of the Swiss tax haven is probably the Swiss banking Act. It was enacted in 1934 (many sources

43. “Ricci became President Rene’s friend and unofficial financial advisor. In 1978 he set up a company, the Seychelles Trust Company, in a joint venture with the Seychelles government. The government granted to the Seychelles Trust Company sole rights to incorporate off-shore companies and to act as resident agent for foreign companies and foundations registered in Seychelles, which could operate free of tax. The granting of this right to a private company was unique in that it made the Seychelles Trust Company the only private offshore business registration company in the world, and, in effect, Seychelles became the world’s first socialist tax haven.”

discuss it such as PMC, GC, or Guex, 2000). It is important to note that banking secrecy was already the norm in 1912 according to PMC, citing Fehrenbach (1967).⁴⁴ According to the TJN, the banking secrecy dates back to 1713 when Switzerland prohibited bankers from revealing details about their clients. Guex (2021) also supports the idea that the construction of the Swiss tax haven was largely completed before 1914. PMC notes that since 1848 when modern Switzerland was established, the taxation at the levels of the cantons opens the door to “an orgy of fiscal evasion and dissimulation” (see PMC, p.111, citing Guex, 1998, p. 105). These early accounts of a construction of a legal architecture in Switzerland prior to the 20th century makes me consider that Switzerland is a tax haven before 1900 without attributing a date since that data collected here is restricted to the period 1900-2000.

According to PMC: “In fact, it was not until 1934 and 1944 when, respectively, Switzerland introduced its bank secrecy laws and Zug introduced taxation laws that in effect set it up as a tax haven.” According to PMC, in 1944, the Canton of Zug decreased its tax rate to 17.8% but also introduced loopholes by allowing “business control centers” (having their activity mostly out of Switzerland) to benefit from preferential tax rates.

The Canton of Zug offers incorporation facilities from the 1920s (“incorporation haven”) and Farquet (2021) observes that the number of holding companies in Switzerland increased by large numbers at this period.⁴⁵ However, I was not able to identify a precise date of a reform that come with this increase in offshore activity in Switzerland.

It is surprising to note, that no major reforms of the Swiss legal architecture happened after the World War II according to the sources used in this database. Rather, it seems that the development of this tax haven was largely based on the practices of the authorities and of the tax evasion/avoidance industry.⁴⁶

Tonga According to PMC, the story is the same as the one of the other Pacific Atolls. The first tax-haven style legislation dates back to 1984. According to Fossen and Chambers (2012), Tonga was already a (not very successful) tax haven before 1984. According to this paper, this date corresponds to an offshore banking legislation. No information on a previous regulation has been found.

Turks and Caicos Islands The Turks and Caicos Islands began its transformation into a tax haven in 1971 with the passage of the *Company Law*, followed by the *Confidential Relations Ordinance* of 1979, which established banking secrecy. According to GC, the *Company Ordinance* of 1981 played a significant role in facilitating tax avoidance. AB further highlights the *International Financial Institutions Exemption Ordinance* of 1979, which promoted the offshore financial sector and enabled the establishment of offshore banks.

44. Even though Farquet (2021) argues that this law might not be very important in practice for the Swiss tax haven, he acknowledges that it is an important step in the construction of the Swiss legal architecture: “Even if there is no doubt that preserving banking secrecy played a major role in the fiscal attractiveness of the Swiss financial centre from the 1920s onwards, this precise article had almost no influence on it, at least until the Second World War. The article reinforced banking secrecy by providing a penal protection against any infringements, which was exceptional at the time in Europe.”

45. PMC: “A Zurich- Zug-Liechtenstein triangle took shape in the 1920s as the first genuine tax haven to draw the great bulk of its funds from nonresidents.”

46. Farquet (2021) writes: “Swiss banking secrecy thus remained protected not by article 47, but rather by fiscal laws and practices, and by the lack of international convention against tax avoidance.” PMC writes: “Fehrenbach (1967) believes that Switzerland never intentionally meant to serve as a tax haven”.

The *Trust Ordinance* of 1990 further solidified the Turks and Caicos Islands' position as a tax haven by facilitating the formation of trusts for tax evasion purposes. AB also notes that trusts can be created in the Turks and Caicos Islands under common law principles, although he advises against using the Turks and Caicos Islands for trust registration.

According to GC, the Turks and Caicos Islands its transformation into a tax haven in 1971 with the law on exempted companies (amended in 1981). The TJN also notes the date of 1981. According to GC the *Company Law* of 1971 is followed by the *Confidential Relations Ordinance* of 1979 that guarantees banking secrecy. The *Company Ordinance* of 1981 is cited in the GC as an important law to do tax avoidance in the Turks and Caicos Islands. According to AB, the *International Financial Institutions Exemption Ordinance* of 1979 provides services for the offshore financial sector and allows the creation of offshore banks. The *Trust Ordinance* of 1990 is also an important law to form trusts in order to avoid taxation (see AB and Offshore Trusts Guide, [n.d.-b](#)). AB also refers to the company law of 1971, which he sees as similar as the one in other Caribbean tax havens.

US Virgin Islands The US Virgin Island Exempt Companies Act of 1986 (in force in 1987) seems to be the initial date according to the Trident Trust Key Facts (Trident Trust, [2017](#)). Information from other sources is very limited.

Vanuatu According to PMC, has a similar offshore history as the other Pacific Atolls. The first tax-haven style legislation dates back to 1970-1971. Rawlings ([2004](#)) identifies three important laws: the *Banks and Banking Regulations* of 1970, the *Companies Regulations* of 1970 and the *Trust Companies Regulations* of 1971. This information is confirmed by the TJN, with a slightly different timing.⁴⁷ I only keep the first Company Regulation (the one of 1970) as I keep the first law when two laws similar laws closely follow each other. Several websites promoting offshore jurisdictions note that the *International Company Act* of 1992, similar to other IBC laws around the world, is an important step in the building of the tax haven in Vanuatu (Lowtax.net, [n.d.-b](#), Offshore Protection, [n.d.](#)).

According to the a Washington Post article, Vanuatu passed laws in order to become a flag of convenience in 1981 (Lippman, [1981](#)).

47. "The Asia/Pacific Group on Money Laundering wrote in 2006: "Vanuatu created an offshore tax haven in 1971 with a very liberal financial regime." Connell and Pritchard ([1990](#)) writes that three regulation where important: the *Banking Regulation* (1970), the *Company Regulation* (1971) and the *Trust Company Regulation* (1971)."

References

- Alleyne, R. O. (1986). Implications of the development of Barbados as a port of registry. *World Maritime Registry Dissertations*.
- Archer, B. (1998). The Impact of International Companies on the Economies of Small Islands: a Case Study of Bermuda. *Banking and Finance in Islands and Small States*. Routledge.
- Barbados Financial Service Commission. (n.d.). Insurance - Supervisory Framework.
- Barber, H. (2007). *Tax Havens Today: The Benefits and Pitfalls of Banking and Investing Offshore*. John Wiley & Sons.
- Beauchamp, A. (1992). *Guide mondiale des paradis fiscaux* (Nouv. éd. ent. rev. et complétée édition). Grasset.
- Belize International Corporate Affairs Registry. (n.d.). International Business Company (IBS).
- Betham-Annandale, M. (1998). Off-Shore Banking, a Legal Fabrication for Money Laundering?: A Critique of the Legal Framework of the Western Samoa Off-Shore Finance Center. *Journal of South Pacific Law*, 02(2).
- Captive Insurance Times. (2013). Country Profiles: Luxembourg.
- Carmichael, T. A. (1992). Barbados. *International Financial Law Review, Offshore Financial Centres*, 5–8.
- Carmichael, T. A. (1995). Barbados. *International Financial Law Review, Banking Yearbook 1995*, 145–147.
- Chambost, E. (2000). *Guide Chambost des paradis fiscaux*. Favre.
- Chavagneux, C. (2021). Luxembourg, la fabrique d'un paradis fiscal. *Alternatives Economiques*.
- Christensen, J. (2017). The story of a tax haven: Cyprus.
- Connell, J., & Pritchard, B. (1990). Tax Havens and Global Capitalism: Vanuatu and the Australian Connection. *Australian Geographical Studies*, 28(1), 38–50.
- Dharmapala, D., & Hines, J. R. (2009). Which countries become tax havens? *Journal of Public Economics*, 93(9), 1058–1068.
- Doggart, C. (1975). *Tax Havens and their uses*. The Economist Intelligence Unit.
- Dyke, J. F., & Simpson, W. P. (2001). Guernsey. *International Financial Law Review, Structured Finance Yearbook 2011*, 77–84.
- Dyrenge, S. D., Lindsey, B. P., & Thornock, J. R. (2013). Exploring the role Delaware plays as a domestic tax haven. *Journal of Financial Economics*, 108(3), 751–772.
- Effros, R. C. (1998). Current Legal Issues Affecting Central Banks, Volume V. *Current Legal Issues Affecting Central Banks, Volume V*. International Monetary Fund.

- Ellis, S., Randrianja, S., & Bayart, J.-F. (2022). Africa and International Corruption: The Strange Case of South Africa and Seychelles. In T. Kelsall & T. Kelsall (Eds.), *Charlatans, Spirits and Rebels in Africa: The Stephen Ellis Reader* (p. 0). Oxford University Press.
- Fabri, D., & Baldacchino, G. (1999). The Malta Financial Services Centre: A Study in Micro-State Dependency Management? In M. P. Hampton & J. P. Abbott (Eds.), *Offshore Finance Centres and Tax Havens: The Rise of Global Capital* (pp. 140–165). Palgrave Macmillan UK.
- Farquet, C. (2016). *La défense du paradis fiscal suisse avant la Seconde Guerre mondiale : une histoire internationale* (1st edition). Alphil-Presses universitaires suisses.
- Farquet, C. (2018). *Histoire du paradis fiscal suisse*. Presses de Sciences Po.
- Farquet, C. (2021). *Attractive Sources. Tax Havens' Emergence: Mythical Origins versus Structural Evolutions* (SSRN Scholarly Paper No. 3897377). Social Science Research Network. Rochester, NY.
- Fehrenbach, T. R. (1967). *The Gnomes of Zurich: The Inside Story of The Swiss Banks*. Leslie Frewin.
- Fossen, A. V., & Chambers, K. (2012). *Tax Havens and sovereignty in Pacific Islands*. Univ. of Queensland Press.
- Freyer, T. A., & Morriss, A. P. (2013). Creating Cayman as an Offshore Financial Center: Structure & Strategy Since 1960.
- Garcia Pires, A. J. (2013). *The business model of The British Virgin Islands and Panama* (Arbeidsnotat Working Paper No. 31/13). Norwegian Center for Taxation. Bergen.
- Gates, C. (1998). *The Merchant Republic of Lebanon: Rise of an Open Economy*. I.B. Tauris.
- Gerakis, A. S., & Roncesvalles, O. (1983). Bahrain's Offshore Banking Center. *Economic Development and Cultural Change*, 31(2), 271–293.
- global-regulation. (n.d.). International Business Companies (Exemption from Income Tax) Act (Antigua and Barbuda).
- Guex, S. (1998). *L'argent de l'état: Parcours des finances publiques au XXe siècle* (Réalités Sociales).
- Guex, S. (2000). The Origins of the Swiss Banking Secrecy Law and Its Repercussions for Swiss Federal Policy. *The Business History Review*, 74(2), 237–266.
- Guex, S. (2021). The Emergence of the Swiss Tax Haven, 1816–1914. *Business History Review*, 1–20.
- Herbert, T. (1992). Jersey. *International Financial Law Review, Offshore Financial Centres*, 31–35.
- Hodjera, Z. (1978). The Asian Currency Market: Singapore as a Regional Financial Center. *Staff Papers*, 25(2), 221–253.
- IFLR. (2018). Macau: Offshore activities to end?

- International Man. (2013). 9 Offshore Jurisdictions You Probably Haven't Heard About.
- International Man. (2014). Offshore Jurisdiction Review: Samoa.
- International Monetary Fund. (2001). *Cyprus: Assessment of the Offshore Financial Sector*. International Monetary Fund.
- International Monetary Fund. (2004). *Cook Islands: Assessment of the Supervision and Regulation of the Financial Sector Volume II—Detailed Assessment of Observance of Standards and Codes* (No. 04/414). International Monetary Fund.
- International Monetary Fund. (2007). *Andorra: Assessment of Financial Sector Supervision and Regulation* (No. 07/69). International Monetary Fund.
- International Monetary Fund. (2011). *Gibraltar: Assessment of the Regulation and Supervision of Financial Services*. International Monetary Fund.
- International Registries, I. (2020). The Marshall Islands Registry.
- Isle of Man Government. (2007). Isle of Man Marine Administration to Change Name.
- Jao, Y. C. (2003). *Shanghai and Hong Kong as International Financial Centres: Historical Perspective and Contemporary Analysis*. Hong Kong Institute of Economics and Business Strategy.
- Juan, C. S. (2008). *Singapore's future as a financial centre: Part I*.
- Kardahji, N. (2015). *A Deal With the Devil: The Political Economy of Lebanon, 1943-75* (Doctoral dissertation). UC Berkeley.
- Ketcheson, B. (1981). The Use of Bermuda as a Tax Haven under the Foreign Affiliate Rules. *Queen's Law Journal*, 6(2), 451–481.
- Laffitte, S. (2024). *The Market for Tax Havens*.
- Le Marchant, C. M. (1999). Financial Regulation and Supervision Offshore: Guernsey, a Case Study. In M. P. Hampton & J. P. Abbott (Eds.), *Offshore Finance Centres and Tax Havens: The Rise of Global Capital* (pp. 212–229). Palgrave Macmillan UK.
- Liberian Corporate Registry. (n.d.). History of Liberia's Program.
- Liberian Corporate Registry. (2015). The Liberian Corporate Registry. A History of Reliability, a Leader in Service.
- Lippman, T. W. (1981). Vanuatu: Merchant-Ship Tax Haven. *Washington Post*.
- Littlewood, M. (2010). The Hong Kong tax system: Its history, its future and the lessons it holds for the rest of the world. *Hong Kong law journal*, 40, 65–84.
- Lowtax.net. (n.d.-a). Belize: Law of Offshore.
- Lowtax.net. (n.d.-b). Vanuatu: Types of Company.
- Lowtax.net. (2021a). Nevis: Types of Company.
- Lowtax.net. (2021b). Saint Kitts: Law of Offshore.
- Mondaq. (1999). Saint Vincent and The Grenadines: Legislation and Developments.
- Mondaq. (2012). Advantages Of Registering A Vessel Under The Bahamian Flag.
- O'Boyle, B. (2022). Tax Haven Ireland - the inside story. *Rupture*.

- O'Donnell, K. (2017). Strategies employed by Multinational Companies to Evade Tax, with a particular emphasis on Tax Havens. *Revue juridique étudiante de l'Université de Montréal*, 3.
- Offshore Company. (n.d.-a). Antigua IBC / International Business Company.
- Offshore Company. (n.d.-b). Malta Company Formation: Registration of an IBC.
- Offshore Protection. (n.d.). Vanuatu Offshore Company Formation.
- Offshore Protection. (2023). International Offshore Jurisdiction Spotlight - St. Vincent and the Grenadines as a Tax Haven.
- Offshore Trusts Guide. (n.d.-a). Offshore Trusts Report: Seychelles.
- Offshore Trusts Guide. (n.d.-b). Offshore Trusts Report: Turks & Caicos Islands.
- Palan, R., Murphy, R., & Chavagneux, C. (2009). *Tax Havens: How Globalization Really Works*. Cornell University Press.
- Palladium Trusts. (2018). A Palladium Guide to British Virgin Islands Trusts.
- Phylaktis, K. (1994). *The Banking System of Cyprus: Past, Present and Future* (1995th edition). Palgrave Macmillan.
- Piniella, F., Alcaide, J. I., & Rodríguez-Díaz, E. (2017). The Panama Ship Registry: 1917–2017. *Marine Policy*, 77, 13–22.
- Pursall, M.-T., Burnell, W., & Ostick, W. (2023). British Virgin Islands: Trusts.
- PwC. (2012). Releasing captive value.
- Ramsaran, R. (1999). Tax performance and reform in the Organization of Eastern Caribbean States (OECS).
- Rawlings, G. (2004). Laws, liquidity and eurobonds: The making of the Vanuatu tax haven. *Journal of Pacific History*, 39, 325–341.
- Roussakis, E. (1999). Offshore Banking at the Close of the Twentieth Century. *Academia Revista Latinoamericana De Administracion*, (22), 99–112.
- Schenk, C. R. (2003). Banking crises and the evolution of the regulatory framework in Hong Kong 1945–1970. *Australian Economic History Review*, 43(2), 140–154.
- Schenk, C. R. (2020). The origins of the Asia dollar market 1968–1986: regulatory competition and complementarity in Singapore and Hong Kong. *Financial History Review*, 27(1), 17–44.
- Sharman, J. (2008). Havens in a Storm: The Struggle for Global Tax Regulation. *New Political Economy*, 13.
- Shaxson, N. (2018). *The Finance Curse: How global finance is making us all poorer*. The Bodley Head.
- Spurling, R. D. (1992). Bermuda. *International Financial Law Review, Offshore Financial Centres*, 9–13.
- Starchild, A. (1994). *Tax Havens for International Business*. Palgrave Macmillan.
- Suss, E. C., Williams, O. H., & Mendis, C. (2002). Caribbean Offshore Financial Centers: Past, Present, and Possibilities for the Future.
- The Tribune. (2015). The Hawksbill agreement - and its importance to Grand Bahama.

- Trident Trust. (2016). Seychelles Introduces New IBC Act - October 2016.
- Trident Trust. (2017). US Virgin Islands' Key Facts.
- Trident Trust. (2018). Guernsey Factsheet - Companies.
- Trident Trust. (2021). Jersey Factsheet.
- United States Bureau of Domestic Commerce. (1977). *Engineers' Overseas Handbook*. Department of Commerce, Domestic; International Business Administration, Bureau of Domestic Commerce.
- USA, I. (2011). *Islamic Design Laws and Regulations Handbook Volume 1 Strategic Information, Design Law in Selected Countries*.
- USA IBP. (2017). *Anguilla A "Spy" Guide - Strategic Information and Developments*. Lulu.com.
- Van Fossen, A. (2002a). Norfolk Island and Its Tax Haven. *Australian Journal of Politics & History*, 48(2), 210–225.
- Van Fossen, A. (2002b). Offshore Financial Centres and Internal development in the Pacific Islands. *Pacific Economic Bulletin*, 17.
- van Beurden, T., & Jonker, J. (2021). A perfect symbiosis: Curaçao, the Netherlands and financial offshore services, 1951–2013. *Financial History Review*, 28(1), 67–95.
- Visit Aruba. (n.d.). Investment & Offshore.
- Vleggeert, J., & Vording, H. (2019). How The Netherlands Became a Tax Haven for Multinationals.
- Warf, B. (2002). Tailored for Panama: Offshore Banking at the Crossroads of the Americas. *Geografiska Annaler: Series B, Human Geography*, 84(1), 33–47.
- Watteyne, S. (2022). *Threat on the Belgian Tax Haven during La Belle époque* (mimeo).
- Weyzig, F., Dijk, M. v., & Murphy, R. (2006). The Netherlands: A Tax Haven?
- Wikipedia. (2023). Freeport, Bahamas.
- Wilson, G. C. (2007). Belize. *Trusts & Trustees*, 13(8), 303–309.
- World Trade Organization. (2013). *Trade Policy Review, Macao, China (WT/TPR/S/281/Rev.1)* (13-3274 WT/TPR/S/281/Rev.1).
- World Trade Organization. (2014). *Trade Policy Review (WT/TPR/S/299/Rev.1)* (14-5261 Annex 3 of WT/TPR/S/299/Rev.1).
- Zagaris, B. (1981). Barbados Develops as a Low Tax Jurisdiction. *The International Lawyer*, 15(4), 673–685.