

Money at the Docks of Tax Havens: A Guide

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Abstract

This essay critically revisits the roles and influences of tax havens in the world economy. It combines various messages of available studies in one scheme, documents a number of observations, and proposes several issues for future research.

JEL-Code: F230, H250, H320.

Keywords: tax havens, tax avoidance, tax evasion, international taxation, corruption, offshore financial centres.

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1. Introduction

It is a widespread notion that a substantial portion of global investment flows is channelled through tax havens. A tax haven, in the public eye, is a haven for tax avoidance and tax evasion. The journey of money, in the form of corporate or personal income, searching for a tax-free harbour has stimulated a number of academic studies, policy reports, and public debates. Some aspects, such as multinational firms' strategies for international tax planning, have been subjected to rigorous inspection by researchers, whereas others, such as possible non-tax motives and heterogeneity across tax havens' services, have received thus far rather cursory examination by economists. This essay presents a synthesis of academic contributions on the roles and effects of tax havens in the world economy. It raises a number of questions, answers some, and underlines those that have not been yet (completely) answered in the literature. Further, it documents a number of observations based on data at the firm level – the Deutsche Bundesbank data on German investment abroad – and also based on statistics for the banking sector provided by the Bank for International Settlement (BIS).

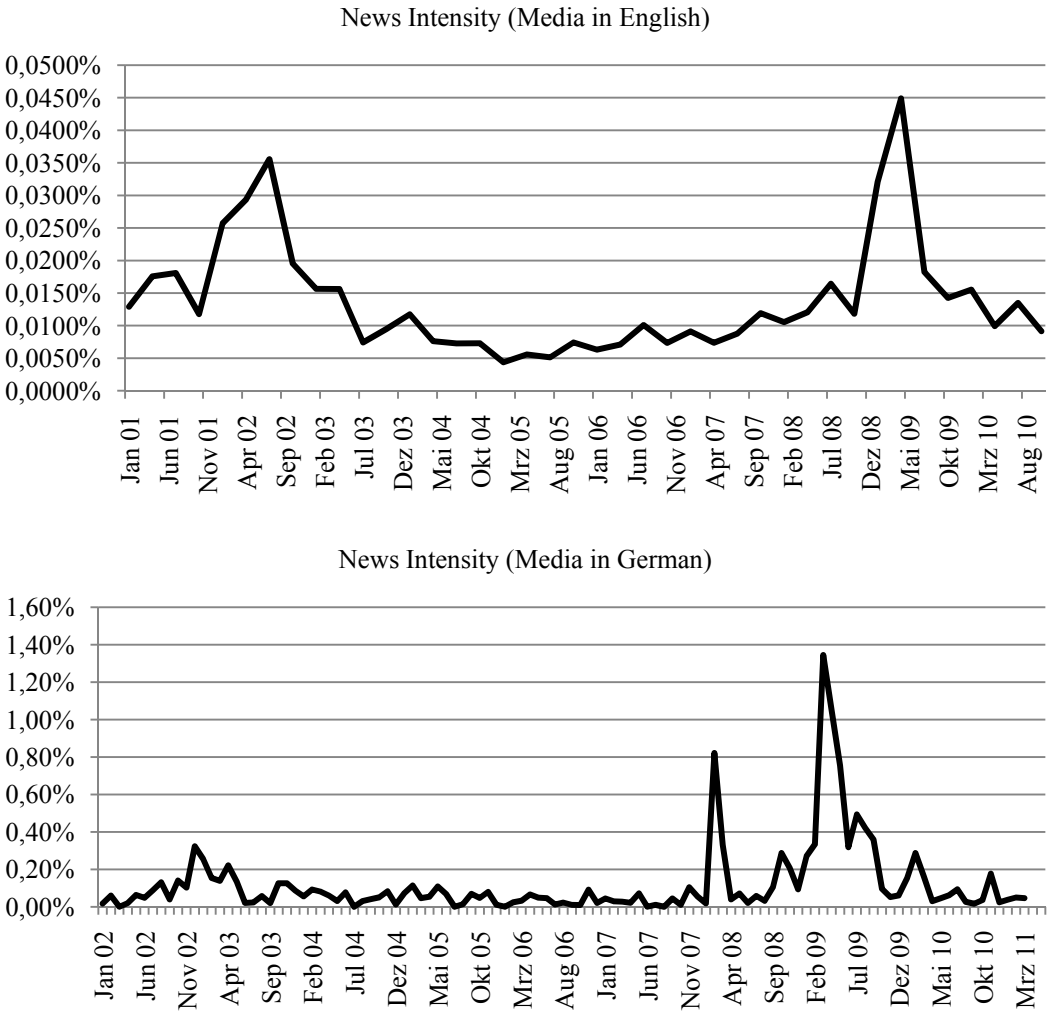
Should we be concerned about tax havens? Tax havens are often viewed as playing the role of villains when discussing personal income tax evasion of top earners or strategies of multinational corporations for tax avoidance. Also, tax havens are linked in various discussions to shipping resources' revenues out of low income and corrupt countries. In 2009, the Norwegian Ministry of Foreign Affairs published a report on tax havens with an entire chapter devoted to their effects on development. These and other issues make the topic of tax havens interdisciplinary and highly relevant from a policy standpoint. Would the global economy be unambiguously better off without tax havens? What firms establish affiliates in tax havens? What measures can be effective in eliminating tax havens' operations? In spite of a number of valuable academic studies addressing these and related questions, this essay argues that there is scope for conducting further research to reappraise the welfare effects of tax havens' operations and expedite the design of effective regulations and strategies for precluding harmful tax havens' operations.

Governments that have been deprived of a portion of their tax revenue seem to be particularly inclined to battle against tax havens in times of fiscal austerity and fragile fiscal positions. The topic has gained profuse coverage in the aftermath of the recent global economic crisis and the embraced measures of fiscal stimulus. To reflect the public interest, figure (1) presents the numbers of English-language news published in the last decade that contain in the title or the lead paragraph the phrase "tax haven" (or "tax havens").¹ The

¹ The source of the data is Factiva: www.factiva.com.

vertical axis denotes the number of hits divided by the total number of searched articles (news intensity). News periodically obtrudes upon the seclusion of tax havens. There is a clear peak of news on tax havens in the first half of 2009, following the global economic crisis, in particular in the months from February to June. Further, figure (1) reveals another peak of hits in the second quarter of 2002. This coincides with the publication by the OECD of a report listing jurisdictions not committed to internationally agreed tax standards.

Figure 1
Tax Havens in News Articles



The second panel of figure (1) plots the results for the German-language media. We note an additional peak in February 2008 when a former employee of LGT, a Liechtenstein-based

bank, sold a CD containing names and information on bank accounts of German citizens to the German authorities (the so-called “Liechtensteiner Steueraffäre”).²

This study is structured as follows. Sections are organised in questions and answers. Section 2 briefly describes the evolution of tax havens in the world economy and defines the term “tax haven”. Section 3 considers linkages between tax havens and firms. Section 4 discusses the connection between personal income shifting and tax havens. Section 5 addresses the perspective of non-haven countries, with special emphasis on potential connections between tax havens and economic development and also on the European perspective. Section 6 provides a policy discussion and outlines potential future research ideas. This essay ends in section 7 with concluding remarks.

2. The Perspective of Tax Havens

How old are tax havens?

Low or zero taxes seem to be historically rooted in efforts to attract firms, whereas the protection of bank secrecy and other related information by law seems to be historically connected with the wealth of individuals. According to Palan, Murphy, and Chavagneux (2010), the first documented practice of offering lax regulation of incorporation was in the late 19th century in the U.S. states of New Jersey and Delaware. In the 1920s, the practice was imitated and brought to Europe – in particular, first to the canton of Zug in Switzerland, and then to Zurich and Liechtenstein. The term “tax havens” was introduced later, in the mid 20th century. Thus, tax havens in the contemporaneous sense are approximately 100 years old. The evolution of several tax havens can be traced to either British or Swiss or Benelux legal origins.³

What defines a tax haven?

Nowadays, the term tax haven, although in some contexts it is used subjectively, is meant to refer to entities that effectively impose (almost) no taxes on foreign income and scarcely exchange information about the foreign income with source countries. Different lists prepared by different institutions, and based on various criteria, have some countries in common. There are some differences, though. The Organization for Economic Cooperation and Development (OECD) classified, in its publication in 2009, four countries as jurisdictions that had not

² This incident has triggered a wave of cases in Germany of self-reporting in order to avoid legal charges of personal tax evasion.

³ This summary section is meant to give a quick background on tax havens. The reader is referred to Palan, Murphy, and Chavagneux (2010) for a comprehensive historical treatment. Dyreng, Lindsey, and Thornock (2011) examine the role of Delaware as a tax haven for firms in the US.

committed to the internationally agreed tax standard. Table (1) lists these countries. In the same report, a second set of countries were classified as jurisdictions that had committed to the internationally agreed tax standard, but had not yet substantially implemented it. Examples are Bermuda, the Cayman Islands, and Liechtenstein. A third set of countries is classified as “other financial centres”. Henceforth, we call the union of the first two sets *list 1* and the union of all three sets *list 2*. Furthermore, table (1) displays countries that are classified as the *big 7* tax havens, including Switzerland and Singapore, according to Hines and Rice (1994). A last list presented in table (1) is the list of offshore financial centres provided by the Bank for International Settlements. This list includes countries such as Bermuda, Panama, and Singapore, but does not include European tax havens, since they are listed within the category Europe.

Do tax havens share similar characteristics?

Yet, in addition to low taxes and confidentiality of information, several tax havens exhibit a high quality of governance – at least in the sense of being politically stable. Dharmapala and Hines (2009) stress this finding empirically. For further insights, table (1) shows figures on population, GDP per capita, and a proxy for the quality of governance (institution) as measured by the rule-of-law index provided by the World Bank.⁴ Governance indices (rule of law, corruption, and others) are frequently cited as being highly correlated with each other. Furthermore, as depicted in table (1), many tax havens are small entities with a number of inhabitants smaller than one million. This is in line with the predictions of international tax competition models that include countries of different sizes, such as Bucovetsky and Haufler (2008) and Kanbur and Keen (1993). The tax system may be one of the few available tools for a small country to make itself attractive for foreign investment. Slemrod and Wilson (2009) model the choice of a country to become a tax haven. They derive a supply curve that positively relates the number of tax havens to the price charged for providing concealment services. The model provides a theoretical explanation for the negative correlation between country size and being a tax haven. Since the benefits of offering concealment services have to be distributed over the inhabitants, the smaller the population, the higher the utility of an inhabitant.

⁴ See Kaufmann, Kraay, and Mastruzzi (2010) for details on the methodology and construction of the rule-of-law index.

Table 1*A List of Tax Havens and Key Figures¹*

<i>Country</i>	<i>Population (in Millions)</i>	<i>GDP per Capita</i>	<i>Rule of Law Index</i>	<i>Share in Outbound Profit</i>	<i>Share in Outbound FDI</i>
OECD: Jurisdictions That Have Not Committed to the Internationally Agreed Tax Standard					
Costa Rica	4.52	6564	0.44	below 1%	below 1%
Malaysia	27.01	8212	0.49	below 1%	below 1%
Philippines	90.35	1844	-0.53	below 1%	below 1%
Uruguay	3.33	9351	0.56	(-) below 1%	below 1%
OECD: Jurisdictions That Have Committed to the Internationally Agreed Tax Standard, But Have Not Yet Substantially Implemented It					
Andorra	0.08	21,620	1.22	-	-
Anguilla ²	0.01	8,800	1.71	-	-
Antigua and Barbuda ²	0.09	17,308	0.96	-	-
Aruba ²	0.11	23,831	0.89	-	-
Bahamas	0.34	25,807	1.19	below 1%	below 1%
Bahrain	0.78	16,968	0.61	below 1%	below 1%
Belize ²	0.33	7,841	-0.23	-	-
Bermuda	0.06	72,575	0.89	below 1%	below 1%
British Virgin Islands ²	0.03	38,500	NA	below 1%	below 1%
Cayman Islands	0.05	43,800	1.17	below 1%	1 %
Cook Islands ²	0.02	9,100	NA	-	-
Dominica	0.07	4,433	0.63	below 1%	below 1%
Gibraltar ²	0.03	27,468	NA	below 1%	below 1%
Grenada	0.10	4,787	0.13	-	-
Liberia	3.79	148	-1.21	below 1%	below 1%
Liechtenstein	0.04	82,935	1.46	below 1%	below 1%
Marshall Islands ²	0.06	2,900	0.18	below 1%	below 1%
Monaco	0.03	116,773	0.90	-	-
Montserrat ²	0.005	3,400	NA	-	-
Nauru ²	0.01	2,500	0.27	below 1%	below 1%
Neth. Antilles ²	0.18	19,000	0.79	below 1%	below 1%
Niue	0.001	4,700	NA	-	-
Panama	3.40	5,688	-0.18	below 1%	below 1%
St Kitts and Nevis ²	0.05	13,429	0.77	-	-
St Lucia ²	0.17	5,671	0.83	-	-
St Vincent & Grenadines ²	0.12	9,976	0.90	-	-
Samoa	0.18	1,925	0.80	-	-
San Marino	0.03	32,165	0.90	-	-
Turks and Caicos Islands ²	0.03	11,500	NA	-	-
Vanuatu	0.23	1,539	0.48	-	-

Table 1 Continued

OECD: Other Financial Centres					
Austria	8.34	49,739	1.89	5%	4%
Belgium	10.71	47,194	1.32	2%	3%
Brunei ²	0.39	49,109	0.51	below 1%	below 1%
Chile	16.80	10,167	1.28	below 1%	below 1%
Guatemala	13.69	2,860	-1.18	below 1%	below 1%
Luxembourg	0.49	117,955	1.81	9%	7%
Singapore	4.84	39,950	1.66	1%	1%
Switzerland	7.65	65,699	1.79	4%	3%
Hines and Rice (1994): Big 7 Tax Havens					
Hong Kong	6.98	30863	1.52	1.2%	below 1%
Ireland	4.43	60178	1.71	below 1%	1%
Lebanon	4.19	7138	-0.69	below 1%	below 1%
Liberia	3.79	222	-1.21	below 1%	below 1%
Panama	3.40	6,821	-0.18	below 1%	below 1%
Singapore	4.84	39,950	1.66	1%	1%
Switzerland	7.65	65,699	1.79	4%	3%
Bank for International Settlements: Offshore Centres					
Aruba	0.11	23,831	0.89	-	-
Bahamas	0.34	25,807	1.19	below 1%	below 1%
Bahrain	0.78	16,968	0.61	below 1%	below 1%
Barbados	0.26	14381	1.26	below 1%	below 1%
Bermuda	0.06	94908	0.89	below 1%	below 1%
Cayman Island	0.05	NA	1.67	below 1%	1%
Gibraltar	0.03	27,468	NA	below 1%	below 1%
Guernsey ²	0.07	40,000	NA	(-) below 1%	below 1%
Hong Kong	6.98	30,863	1.52	1.2%	below 1%
Isle of Man	0.08	35,000	NA	below 1%	below 1%
Jersey ²	0.09	40,000	NA	below 1%	below 1%
Lebanon	4.19	5,859	-0.69	below 1%	below 1%
Macao	0.53	59,451	0.45	below 1%	below 1%
Mauritius	1.27	7,337	0.97	below 1%	below 1%
Neth. Antilles ²	0.18	19,000	0.79	below 1%	below 1%
Panama	3.40	5,688	-0.18	below 1%	below 1%
Samoa	0.18	1,925	0.80	-	-
Singapore	4.84	39,950	1.66	1%	1%
Vanuatu	0.23	1,539	0.48	-	-

Note: ¹ Numbers are for 2008. Population figures are in millions. Population and GDP per capita figures are taken from the World Bank WDI except those marked “²” which are taken from Wikipedia, and might correspond to another year than 2008. Data on GDP per capita are in U.S. dollars. The rule-of-law index is a proxy for institutional quality, and is obtained from the World Bank governance indices (Kauffmann et al., 2010). It ranges from -2.5 to +2.5. A high value is associated with high quality of law. Profit is the share of country profits in total profits in 2007. “FDI” is the ratio of German FDI in the corresponding country to total outbound German FDI in 2007. The source of data for the last two columns is the MiDi dataset. The BIS list of “offshore centres” also includes the West Indies (islands in the Caribbean).

What are the benefits of being a tax haven?

The answer is attracting money, obviously. Slemrod (2008) takes the status of a tax haven as an example of commercialization of state sovereignty and provides empirical evidence showing that it is particularly attractive when it is difficult to raise revenues from other sources. However, how much money do tax havens attract? Although it is difficult to estimate the answer to this question, available numbers offer an indication. The last two columns of table (1) present summary figures on profits and FDI based on German data at the firm level. The presented numbers are aggregated at the country level as shares in worldwide total. These data offer an opportunity to provide insights into firms' connections to tax havens, since investors are obliged by law to report key information, which in principle includes all firms investing abroad (listed, nonlisted private, and publicly traded).⁵ The numbers in table (1) indicate that some tax havens, such as Andorra and Aruba, are not important for German outbound foreign direct investment (FDI). Austria, Belgium, Luxembourg, and Switzerland are among the most important German FDI and profit destinations in Europe. For instance, about 9 percent of achieved profits abroad are reported to be in Luxembourg. Outside Europe, it is notable that a country like the Cayman Islands receives 1 percent of German outbound FDI, similarly to well-known offshore centres such as Hong Kong and Singapore.

Table (2) shows the ratio of the number of German affiliates located in tax havens, according to three definitions mentioned in section 3, to the total number of German affiliates abroad. Tax havens included in list 1 have a very small share in the number of affiliates (about 1 percent). Table (2) shows that about 8 percent of German affiliates belong to the big 7. Strikingly, more than 40 percent of the affiliates in list 1 are indirectly owned via a third party or "loopholes". Affiliates that are reported as a "holding" constitute about 25 and 10 percent in list 2 and among the big 7, respectively.

Figure (2) summarises the importance of tax havens as locations of German financial assets abroad. The ratio of financial assets located in list 2 to German GDP has increased from 4 percent in 1996 to almost 18 percent in 2008. The numbers for the big 7 are between 2 to 5 percent. The reported figures for list 1 are rather small. We recall from table (2) that about 41 percent of affiliates located in countries contained in list 1 are indirectly held through at least one intermediate party. It might be that this causes an underreporting of the actual figures. The second panel of figure (2) considers the ratio of financial assets located in tax havens to total financial assets located abroad. This ratio reaches 25 percent for list 2 and about 9 percent for the big 7.

⁵ See Lipponer (2008) for a full description of the MiDi data and the reporting requirements for investors.

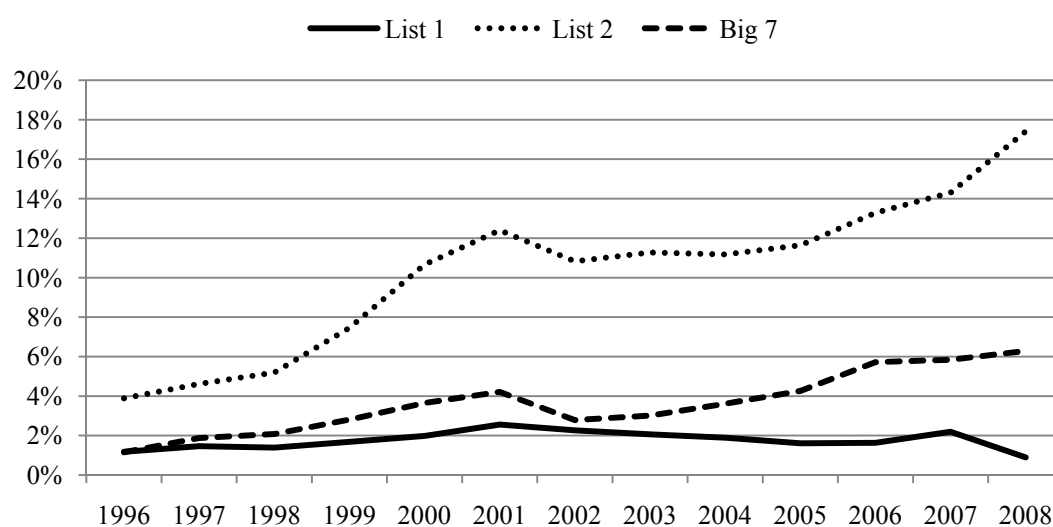
Table 2*German Affiliates in Tax Havens*

	Share in total number of affiliates abroad	Share of holding affiliates in total number of holding affiliates abroad	Share of banking affiliates in total number of banks abroad	Share of indirectly held affiliates
<i>List 1</i>	0.008	0.030	0.040	0.418
<i>List 2</i>	0.169	0.255	0.232	0.272
<i>Big 7</i>	0.077	0.106	0.109	0.246

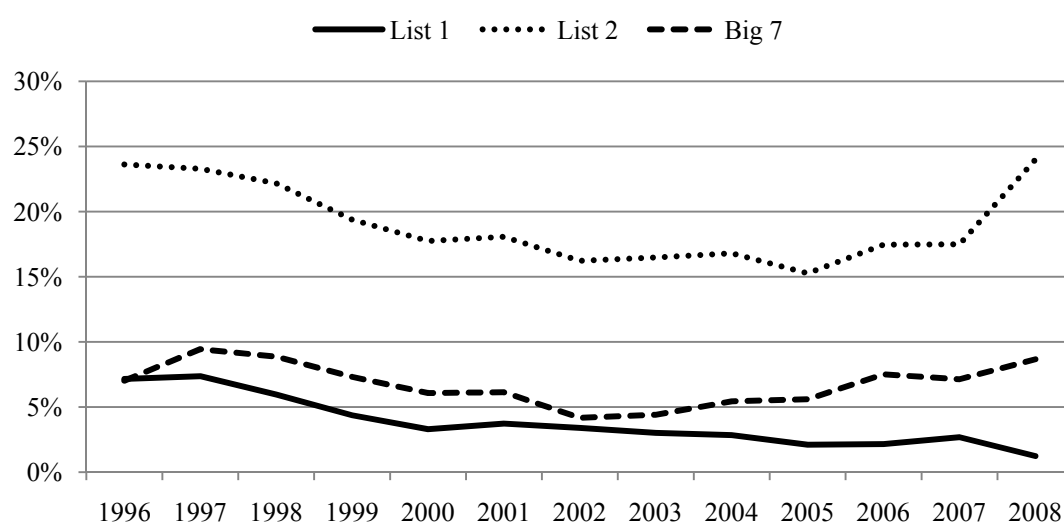
Source: The MiDi dataset.

Figure 2*German FDI and Financial Assets in Tax Havens*

The Ratio of Financial Assets in Tax Havens to GDP

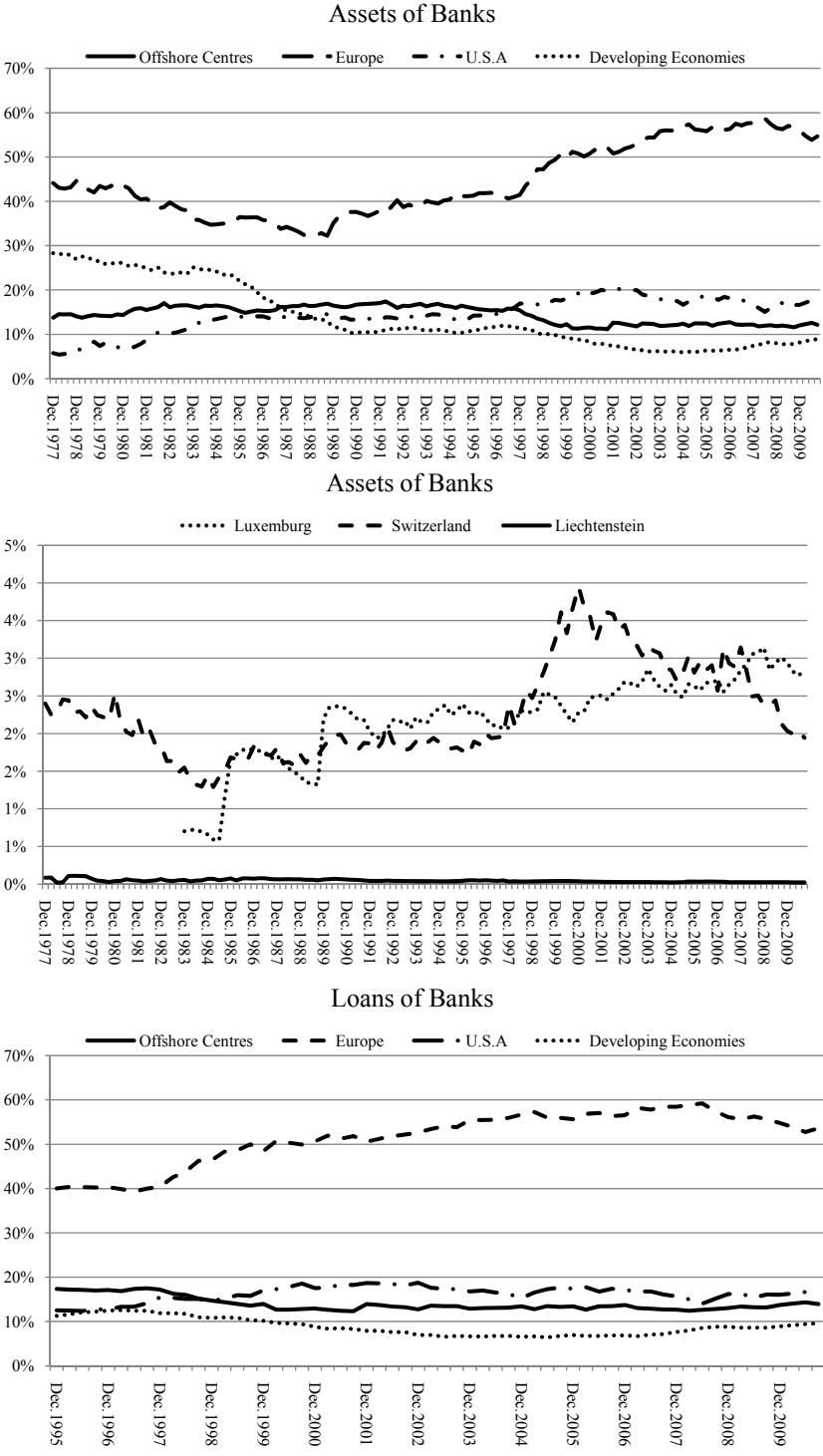


The Share of Financial Assets in Tax Havens



Note: List 1, list 2, and the big 7 are groups of tax havens according to the OECD report and Hines and Rice (1994). The reader is referred to section 2 for complete lists. Source: MiDi dataset.

Figure 3
External Positions of Banks vis-à-vis Groups of Countries (Share in the Worldwide Total)



Source: Statistics of the Bank for International Settlements .

For further insights, the upper panel of figure (3) plots the ratio of banks’ assets located in various groups of countries, including offshore centres, to total banks’ assets worldwide. These numbers are obtained from the BIS. The share of offshore centres has been fairly stable around 12 percent since 1977. However, in *absolute* terms, the value of banks’ assets located

in offshore centres has increased from about 95,000 U.S. dollars in December 1977 to 3,770,000 million in September 2010. The share of banks' assets located in Europe, in contrast to that located in developing economies, has been rising in the last three decades, reaching a peak of almost 60 percent in 2008. However, Switzerland and Luxemburg are grouped in Europe, and not included in the BIS list of offshore centres. Therefore, the second panel of figure (3) re-plots this ratio separately for Liechtenstein, Luxembourg, and Switzerland. Assets located in these three countries together constituted about 5 percent of total banks' assets worldwide.

3. Tax Havens and Corporate Income

What is the role of tax havens in theory?

Capital is mobile. This is an old and widely acknowledged notion in the economics of taxation. Sørensen (2007) and Zodrow (2010) provide comprehensive surveys. The consequence of this idea is that countries compete over capital. Originally, models of international tax competition did not explicitly mention tax havens. Recent contributions incorporate tax havens in the model. Although all models agree that the existence of tax havens is a drain on revenues in non-haven countries, there are broadly two different views. One praises tax havens while the second finds them parasitic stressing their negative effect on resources. We will gather more relevant pieces and address these views in section 6, where we consider the welfare effects of eliminating tax havens' operations.

What are the potentially positive effects of tax havens as suggested by the current literature?

The potentially desirable aspects of tax havens can be summarised in three effects: (1) Tax havens induce efficiency of firms and their use of capital in investing at home (Hong and Smart, 2010). (2) Tax havens may alleviate international tax-rate competition (Johannesen, 2010a). (3) Tax havens, or offshore financial centres, can generate a positive externality improving the banking sector's competition in neighbouring countries (Rose and Spiegel, 2007).

What observations emerge from empirical studies on international tax competition?

Devereux, Lockwood, and Redoano (2008), among others, conclude that countries do compete over capital through corporate tax rates. Overall, as suggested by the survey of Leibrecht and Hochgatterer (forthcoming), there is evidence supporting the role of tax competition in the observed decline in statutory corporate income tax rates. Auerbach (2007) stresses that, in the US, the ratio of tax revenues from nonfinancial corporations to GDP has

been nearly constant in the period between 1983 and 2003 at around 1.5 percent. At the same time, the ratio of profits to GDP has declined and the average tax rate has increased during this period. These observations may raise questions on the importance of international tax planning.

How does corporate tax avoidance work internationally?

Corporations engage in international tax planning to reduce their overall tax burden. Such strategies operate within the legal setup. This is a fruitful field of research with persuasive theoretical formulation and empirical evidence. Major techniques for tax avoidance within an international setup, to cite a few, include:

- Transfer pricing: That is, intra-group transactions are priced differently from similar transactions with independent enterprises. Haufler and Schjelderup (2000), for instance, provide a theoretical model. Examples of empirical studies on employing transfer pricing for tax purposes are Clausing (2003) and Swenson (2001).
- The location of patents and intangible assets: This can be considered as a specific application of transfer pricing. Dischinger and Riedel (2011) provide empirical evidence.
- The use of conduit holding companies to exploit a signed treaty between two countries and avoid withholding taxation: Mintz and Weichenrieder (2010) cover in detail the topic of ownership chains and corporate taxation.
- Adjusting the financial structure using inter- and intra-company borrowing (debt–equity ratio). In a high tax environment, firms rely more heavily on loan financing so as to deduct the interest payments from the tax bill. Borrowing from a member of the group that is located in a low-tax country has the additional advantage of paying less tax on the earnings of the low-tax affiliate. Several studies consider this issue; for instance, Feld, Heckemeyer, and Overesch (2011), Desai, Foley, and Hines (2004), Huizinga, Laeven, and Nicodeme (2008), and Mintz and Weichenrieder (2010).

Multinational corporations' strategies to achieve a tax shelter, with their various technical details, aim at locating (a portion of) profits in low-tax countries.⁶ However, such strategies

⁶ International differences in corporate taxation affect not only the location of profits but also other discrete pre-decisions – namely, the location of production, especially for a new investment project (Hebous, Ruf, and Weichenrieder; 2011); and the location of headquarters (Voget; 2011). Devereux (2007) and De Mooij and Ederveen (2008) offer overviews of the literature. However, tax havens are usually presumed not to be major

will exist only as long as corporate income tax rates differ across countries, and in principle do not offer per se an exclusive explanation for the role of tax havens in this process. One question is: Are there channels for shifting profits that are exclusively used in connection with tax havens? One step in answering it is taken by Maffini (2009), who finds that the marginal effective tax rate of a corporate group with tax haven affiliates is one percentage point lower than it is for groups without tax havens. Gumpert, Hines, and Schnitzer (2011) find that, under a tax exemption regime, high foreign taxation increases the probability of establishing affiliates in tax havens. Under a tax credit system, however, Desai, Foley, and Hines (2006a) conclude that the major incentive for establishing affiliates in tax havens is *domestic* taxation.

What corporations are present in tax havens?

One aspect of enriching the tax competition models described above is to introduce heterogeneity across firms. This gives us insight into the characteristics of firms that profit from tax havens. Baldwin and Okubo (2009) and Krautheim and Schmidt-Eisenlohr (forthcoming) show that large firms react more to taxes than smaller firms. Desai, Foley, and Hines (2006a) provide empirical support for this prediction. In principle, heterogeneity in size is linked to heterogeneity in productivity. Davies and Eckel (2010) explicitly model differences in labour productivity, and show that taxes affect the number of firms. Low-productivity firms tolerate high taxes, and there is excessive entry in low tax countries. This model supports tax harmonisation.

Hence, theoretically, the size of the firm and its productivity are two factors that affect its demand for operations in havens (or low tax countries). However, one aspect is still not yet extensively discussed, or even noticed. Namely, firms are heterogeneous and hence can have various planning strategies. For instance, is the relative importance of international debt-shifting strategies the same across all types of firms? The relative importance of each tax-minimising strategy, including the demand for tax havens, can be due to firm- and also industry-specific factors other than the size.

Is the main task of affiliates in tax havens to provide loans and facilitate international debt shifting?

One might expect a tax haven affiliate to be especially important for providing loans to those related firms within the multinational group that are located in high tax countries. This would constitute a double-dipping tax benefit of debt shifting. Johannesen (2010b) offers theoretical insights.

hosts of “real” production. After all, tax competition and avoidance is not only about the *physical* mobility, but also about, in the words of Slemrod (2010), “what a mere stroke of the pen can accomplish”.

However, it does not seem to be the major function of tax havens' affiliates. The last column in table (3) presents the list of top 10 countries that contain the highest numbers of net lenders among German affiliates abroad. An affiliate is identified as a net lender if the value of its total loans to shareholders and associated enterprises linked to the affiliate exceeds the total debt of the affiliate. This definition of net lender is based on Ruf and Weichenrieder (2009), who coined the term "conduit entities with positive net lending". Table (3) shows that aside from the USA, the number of net-lender firms is the highest in European countries such as the UK, Switzerland, and the Netherlands. Hence, table (3) suggests that offshore centers are not major hosts of affiliates for purposes of international debt shifting. This opens a scope for discussing the other tasks of affiliates in offshore centers.

Additionally, table (3) lists the top 10 destinations of German financial assets and profits abroad. Table (3) indicates that offshore centres are not among the most important host locations of assets and profits. One exception is the Cayman Islands, which makes it into the top 10 foreign locations of German financial assets located abroad. Also among the haven jurisdictions in the lists are European countries such as Austria and Luxembourg. Further, the Netherlands seems to play an important role in hosting and re-channelling German investment abroad.

Table 3

Top 10 Important Countries for German FDI and Affiliates Identified as Net Lenders in 2007

Country	Share in total German financial assets abroad	Country	Share in total German profits abroad	Country	Share of affiliates that are net lenders
USA	0.37	Netherlands	0.12	USA	0.19
Netherlands	0.13	Luxembourg	0.09	UK	0.11
UK	0.08	USA	0.09	Switzerland	0.10
Luxembourg	0.07	UK	0.08	Netherlands	0.09
France	0.06	France	0.07	France	0.06
Ireland	0.04	Austria	0.05	Spain	0.04
Italy	0.04	Switzerland	0.04	Austria	0.04
Switzerland	0.03	Czech	0.04	Luxembourg	0.03
Austria	0.03	Hungary	0.03	Ireland	0.02
Cayman Island	0.02	China	0.03	Belgium	0.02

Source: The MiDi dataset.

4. Tax Havens and Personal Income

Why tax profits at all?

This question might seem to be mistakenly positioned below the heading “personal income”. Basically, taxing capital income is one source of revenues to finance public goods. In his history of economic analysis, Schumpeter (1954) cites an old Italian taxation doctrine: “leave profits untouched” (page 205). Auerbach (2006) argues that fully abandoning capital taxation is associated with a loss of revenues that is not captured by a classical theoretical treatment considering only normal returns to saving. Capital returns include also firm- and risk-specific components.⁷ However, the point to be made here is that exempting capital income from taxes generates tax avoidance possibilities in the form of shifting personal income to capital income. Fuest and Weichenrieder (2002) and Weichenrieder (2005) formalise this argument. Empirically, using Norwegian data on firms and their owners, Thoresen and Alstadsaeter (2010) document evidence for the alteration of organisational forms of small Norwegian businesses so that the owner becomes an employee and a major shareholder at the same time. Their results suggest that following those organisational shifts, the after-tax personal income of the owners increased. Hence, to this end, and given the existence of taxes on wages and capital income, tax havens absorb revenues from both sources.

What do theory and empirics tell us about personal tax evasion using tax havens?

Pessimistically, the answer to the above question is: not very much more than what a non-economist already thinks. Tax evasion is by definition unobservable and secretive in nature. However, there are some serious theoretical models and econometric attempts to circumvent empirical measurement difficulties. Generally, in the theoretical framework, individuals compare the benefits from tax evasion through understating their income with the expected penalty in case detected. Empirically, there are few studies that address international personal income shifting or “evasion” by means of tax havens and other special arrangements for the wealthy. There is a scope to conduct further research within this field.

Although top earners represent a small fraction of the total population, their contribution to total income and tax payments is rather significant.⁸ As an attempt to fight tax evasion, the European Union has recently imposed taxes on savings interest earned in jurisdictions with a policy of bank secrecy. Johannesen (2010c) presents an elegant exploitation of this tax reform to identify its effects on Swiss bank deposits of EU residents. The control group comprises

⁷ See Chari and Kehoe (1999) for the classical approach to optimal capital taxation. Recent contributions based on an overlapping-generations framework derive a nonzero optimal tax on capital and labour returns due to demographic and redistribution considerations; see for example Conesa, Kitao, and Krueger (2009).

⁸ Atkinson, Piketty, and Saez (2011) summarise research results and data on top income earners.

non-EU residents with deposits in Swiss banks. His results suggest that introducing a 15-percent source tax causes a decline of Swiss bank deposits by about 40 percent. Kleven, Landais, and Saez (2010) examine the effects of personal tax rates and special tax schemes for top earners on the location choice and mobility of European professional football players. They find evidence for strong migration responses to country-specific tax incentives and regulation. Joulfaian (2000) finds that firms that do not comply with taxes are three times more likely to be chaired by executives that understate their personal income.

5 The Perspective of Non-Tax Haven Countries

5.1 Tax Havens and Development

Although there are arguments for positive implications of international tax planning that could be extended to include firms' demand for tax havens' services, the tendency in the policy arena is to argue in favour of eliminating tax havens. Understandably, the arguments for eliminating tax havens gain further support when we consider illegal activities such as money laundering and tax evasion. Such activities are usually not fully modelled or empirically captured in the above reviewed literature. After addressing these additional effects, we end this section with a reconsideration of the welfare effects of eliminating tax havens' operations.

What is special about the connection between tax havens and developing economies?

The ratio of tax revenues to GDP in most developing economies is rather low, not exceeding 15 percent. Many developing economies face difficulties in raising revenues, for various reasons discussed in detail in Fuest and Riedel (2009). Informal and shadow economies prevail in many developing countries in various degrees. Additionally, enforceable tax rules in the formal sector are lacking in many developing countries. In line with this notion, Fuest, Hebus, and Riedel (2011) find that the internal debt financing of multinational firms in developing economies is more sensitive to corporate taxation than in developed economies.

Through which mechanisms do tax havens hinder development?

It is often asserted that lower-income economies are especially hard hit by the role of tax havens in absorbing income of dictators from resource revenues and hidden sources such as bribes. The Norwegian Ministry of Foreign Affairs published in 2009 a report on tax havens and development. Torvik (2009a; 2009b) underlines theoretical mechanisms through which tax havens can be particularly harmful for developing economies. For instance, tax havens can motivate their users in developing economies to maintain low-quality institutions or even to worsen the institutional setting. Schjelderup (2011) argues that tax havens increase the profitability of illegal and wasteful activities by encouraging new entry into such businesses.

Recent popular uprisings in the Arab world have triggered a number of reports on dictators' deposits in tax havens.⁹ Schwartz (2011) finds that money laundering and tax havens are closely associated, especially in poorer tax havens. Hebous and Lipatov (2011) indicate that multinational firms' operations in highly corrupt countries and their presence in tax havens are strongly associated. This can be due to fear of bribes and potential expropriation. Also, in their model dictators "optimally" choose to deposit (a portion) of bribes in tax havens.

Thus, supporting corruption, dictators, money laundering, and other illegal activities are often cited as mechanisms through which tax havens retard the pursuit of development.

5.2 Tax Havens and Europe

The deep economic and financial integration of Europe, institutional ties, and the geographical intensity of business, with independent national fiscal authorities, make the taxation of corporate and personal income an especially delicate and challenging task. The European Union (EU) has recently suggested introducing a consolidated system according to which the EU-wide profits of the firm will be taxed. Under this system, tax revenues will be distributed to the member states according to some formula. The pros and cons of this proposal have been heavily debated. Bettendorf et al. (2010) suggest that formula apportionment does not alleviate corporate tax competition. Becker and Fuest (2010) show that even if formula apportionment can solve the problem of corporate income shifting in the EU, income shifting to a non-member country will become more severe. Ostereicher and Koch (2011) provide a detailed discussion of the implications of this suggestion for tax revenues. Further, Switzerland, an important host of foreign income lying in the heart of Europe, is not a member of the EU; see table (3).

6. Policy Discussion and Future Research

After all, is the elimination of tax havens unambiguously welfare enhancing?

Many are probably tempted to answer: Yes! Economists, as usual, answer: It depends! According to Slemrod and Wilson (2009), non-haven countries waste resources on retarding the effects of tax havens. Eliminating tax havens saves resources, increases tax revenues, and

⁹ See for example Schweizer Fernsehen (2011).

enhances the welfare of non-haven countries.¹⁰ However, tax havens receive some support in some other models.

Hong and Smart (2010) develop a model in which borrowing from tax haven affiliates reduces the cost of capital, increasing inward investment at home. The decrease in the tax burden on mobile capital facilitates investment while maintaining corporate tax rates. Hence, in their framework, the elimination of tax havens is not necessarily welfare enhancing for non-haven countries. Desai, Foley, and Hines (2006b) sketch a model with similar positive implications of tax havens for investment in high tax countries.

There is another possibility of ambiguous effects of eliminating tax havens on welfare. In Johannesen (2010a), an endogenous number of countries impose lower tax rates than others. Combining this asymmetric equilibrium with the presence of tax havens causes a decrease in revenues of both low- and high-tax-rate countries. However, the loss of revenues is sharper in the case of low-tax-rate countries, pressing their rates to go up. In equilibrium with tax havens, all countries apply the same rate. This has a positive effect on revenues. Under certain conditions, the positive effect dominates the negative one and tax revenues will increase in non-haven countries.

Thus, boosting investment at home and alleviating harmful tax competition between non-haven countries are two arguments in favour of tax havens. Rose and Spiegel (2007) suggest one additional argument, linked to the financial sector. Specifically, offshore centres enhance the banking conditions (competition) in neighbouring countries, generating positive welfare effects. Hence, these arguments suggest positive effects of tax havens alleviating (or offsetting under some theoretical conditions) the negative consequences of supporting tax avoidance and evasion.

However, a persuasive and complete welfare analysis requires taking into account not only corporate taxation but also personal tax evasion and non-tax functions of havens. One step in this direction is taken by Hebous and Lipatov (2011), who indicate new welfare consequences. In a world without tax havens, dictators find it difficult to conceal and export bribes, and are pushed to provide more public goods to reduce the probability of facing a revolution. However, tax havens can have positive effects on welfare by facilitating investment of firms fearing bribes and expropriation in corrupt countries

Which strategies can be effective in eliminating the functioning of tax havens?

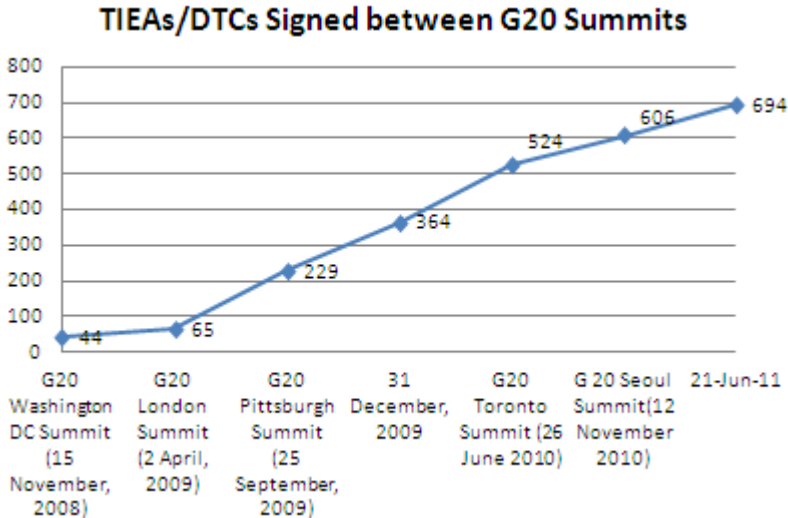
¹⁰ Bucovetsky (2010) present another version of Slemrod and Wilson's model with a modified technology, and obtain similar results.

The economics literature is still in infancy with regard to this question. Elsassyad and Konrad (2010) suggest that a sequential elimination of tax havens is not optimal. As the number of tax havens in operation decreases, the remaining ones become more powerful, due to the increase in their monopoly power. The model in Elsassyad and Konrad (2010) implies that ideally all havens ought to be shut down at the same time. In another study, Gravelle (2009) discusses various policy options, especially those in connection with the Stop Tax Haven Abuse Act in the U.S. Further research to deliver a meaningful answer to the above question may require a multidisciplinary treatment: economics, accounting, and law.

What measures have been taken to fight tax havens' operations?

Treaties have been signed to forestall further tax evasion and avoidance. The OECD's main weapon is the *blacklist*. This might subject income reported in these countries to different regulations reducing their attractiveness. A tax haven can avoid such a list by signing bilateral tax information exchange agreements. For a haven, the magic number needed to meet the international standard is 12 treaties. By June 2011, 694 bilateral information exchange treaties had been signed.¹¹ Figure (4) shows that most of these treaties were signed after 2008. Notably, many such agreements were signed between tax havens themselves. For instance, in August 2011, Bermuda signed two agreements: one with Aruba and one with Guernsey. Further, the OECD launched the Global Forum on Transparency and Exchange of Information for Tax Purposes to monitor the implementation of tax transparency standards (OECD; 2010).

Figure 4
Bilateral Tax Treaties



Source: OECD Centre for Tax Policy and Administration; OECD (2011).

¹¹ Source: www.OECD.org.

What is still to be disclosed by research?

This essay has reviewed a number of studies on a country's decision to be a tax haven. There seems to be little here for further scrutiny. Nonetheless, such economic research does not elucidate issues with regard to competition among tax havens themselves. One may argue that tax havens supply differentiated products so that different tax havens might have different specialisations. What determines the conditions for entry into the haven markets? Suppose some OECD haven countries or some with European historical connections cooperate with a new set of rules that substantially reduce tax haven operations; would this allow other, thus far unknown players, to enter the haven markets? This is a political economy aspect that may shape the approach to closing down tax havens' operations. A closely linked question is: What is the role of *domestic* tax havens as opposed to offshore tax havens?

On the demand side, firms are heterogeneous. Then, why not have heterogeneous profit-shifting plans? Intuitively, one could argue that the relative importance of a tax plan, in the menu of the well-known plans for tax avoidance, depends on industry- and/or firm-specific characteristics. A firm may settle on the best-suited international tax strategy, making other strategies redundant. Different firms may choose different strategies. A pecking-order theory and corresponding empirics of international tax plans can help in answering the question: What type of firms finds which types of tax havens and tax plans attractive? To this end, the theory suggests that large firms find all havens in general attractive. Among the attempts to document potentially heterogeneous response to corporate taxation is Overesch and Wamser (2009). In the same vein, a second issue that can be considered with this regard is the ("optimal") number of affiliates in tax havens and their "optimal" size. For example, an opaque structure of a group containing several tax haven affiliates may facilitate tax avoidance and evasion but at the same time increase costs.

It is not only tax rates that matter. Sinn (1997) presents a model of competition with respect to laxity in quality of products. Building on his idea of "system competition", research can be carried out to examine the effects of *information* or *regulation* competition over capital (even if tax rates are uniform across countries). Thus, models of capital flight have to distinguish businesses that fly to low-tax countries purely for tax reasons from those that utilize a tax haven primarily to avoid regulations.

Concerning other functions of tax havens, there is little, if any, theoretical welfare analysis or formal econometric assessment of the role of tax havens in facilitating personal income tax evasion and supporting dubious activities. These issues are of interest not only to developed but also to developing countries.

Regarding policy options, further research is needed to streamline the existing set of agreements and test the effectiveness of the signed bilateral treaties.

7. Concluding Remarks

The zenith of hits in the news addressing tax havens was recorded in the aftermath of the global economic crisis of 2008–2009. Whether for alleviating the fiscal pressure over the cycle or for other reasons, there seems to have been in the official policy arena a consensus in favour of shutting down (or at least minimising) tax havens' operations. Tax competition, tax avoidance, and tax evasion activities are the hallmarks of most current economic research on the effects of tax havens in the global economy. The preponderance of works focus on corporations' strategies for seeking shelter from their home tax authorities.

Broadly, some analyses seek to emphasise some potentially desirable effects, or at least deemphasise the undesirable effects, of tax havens, while others express great concerns. The efficiency argument posits that tax havens can have a positive effect on firms' investment at home. Also, tax havens can induce productivity of the financial sector via competition effects. Tax havens mitigate harmful tax competition among non-haven countries. However, what were the functions of tax havens in times of little capital mobility? Worried voices emphasise the role of tax havens in (inter alia) supporting covert and illicit businesses, corruption, money laundering, and holding back the pursuit of development in lower-income countries.

This essay has put forward a number of ideas to extend the ambit of this field of research. The key issue is not only statutory tax rate, but also lax regulations allowing secrecy and opacity. For instance, an explicit modelling of the role of confidential information, or regulation competition, may alter or add to the predictions of models of international competition for capital investment. Further research on these issues can help in designing regulations and taking measures to impede the negative influence of tax havens, and preserve the tax bases and revenues of the non-haven countries.

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