

**Charles University**  
**Faculty of Social Sciences**



**HABILITATION THESIS**

**Tax Havens and Financial Secrecy**

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# Chapter 1

## Introduction

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This habilitation thesis consists of an introduction and nine chapters which comprehensively present my contribution to the research of tax havens and financial secrecy. Eight chapters have been previously published or are forthcoming as articles in the following academic journals: *Economic Geography*, *Social Indicators Research*, *Development Policy Review* (two chapters), *Post-Communist Economies* (two chapters), *Applied Economics Letters*, *Journal of International Development* (all indexed in the Web of Science). The final chapter is currently under consideration for publication in *International Tax and Public Finance*. The introduction briefly describes the common threads and conclusions of my habilitation thesis and provides a summary of the findings of each of the following chapters.

As tax havens, financial secrecy and profit shifting constitute essential concepts used throughout my habilitation thesis, I shall briefly introduce them first. At the most general level, a country might be considered a tax haven if it provides benefits to foreign companies or individuals in the form of low tax burden, high financial secrecy or as a combination of the two factors or other conditions. Financial secrecy is the lack of financial transparency, ranging from a lack of corporate transparency to a lagging implementation of international standards and cooperation. Profit shifting constitutes the artificial reporting of profits in tax havens instead of in countries where economic activity in fact takes place. Profits are shifted to tax havens mainly by multinational enterprises (MNEs) without changing the locations of underlying economic activities and often in order to avoid taxes (tax avoidance generally being lawful, in contrast with illegal tax evasion). MNEs shift profit using three distinct channels: debt shifting, locating intangible assets and strategic transfer pricing. First, profits can be shifted through loans at high interest rates from one MNE unit located in a tax haven to another unit located elsewhere. Second, the subsidiaries of one MNE can pay another subsidiary in a tax haven for benefiting from intangible assets such as intellectual property located there. The third main profit shifting channel constitutes the artificial increase or decrease of the prices of goods or services being transferred between the individual parts of an MNE. Furthermore, all of the profit shifting mechanisms employed by MNEs to avoid tax also naturally influence government tax revenues.

These are simplified explanations, since, as I specifically point out in selected chapters, defining these terms is not without complications. This is especially true of the term tax haven. Since a great deal of academic research and public policy debate regarding tax

havens suffers from a lack of consistent definitions, agreement on which countries ought to be considered tax havens is far from universal. This issue is not new, e.g. a 1981 report by the United States Department of the Treasury found that no single objective test is capable of identifying a country as a tax haven (Gordon, 1981). Over time different classification alternatives to tax havens have been proposed, including the term offshore financial centre, widely used in economic geography for some time (Maurer 2008), and the more recently proposed secrecy jurisdiction (likewise explained in chapter 2). No alternative has proven good enough thus far and definition-related challenges continue to persist. It is therefore essential to clarify the preferred classification of tax havens in any research which chooses to utilize this term, as I have done in each of the following chapters.

All chapters thus focus on tax havens, a topic which has been the focal point of my research since early 2009 when I began working on the first edition of the Financial Secrecy Index. The chapters also share a number of common characteristics, both in terms of methodology and with respect to research questions. For example, most include an important empirical component: while some use straightforward statistical tools, others rely on econometric methods. Several chapters (4–6) use detailed firm-level data, whereas others (8–10) use country-level data. Most of my habilitation thesis focuses either on developing countries (3, 7–10) or on the Czech Republic (4–6). Most chapters (4–10) discuss profit shifting by MNEs while also approximating its scale. Estimating the effects of tax havens on the government tax revenues of other countries forms the primary focus of the second half of the habilitation thesis (chapters 6–10). Most chapters provide policy recommendations and some of them also introduce indicators which may be used to track the impact of policy changes over time. While individual chapters share a number of characteristics, each of them is distinct, with specific research questions, methods, data, and results relevant to a specific chapter and topic described in great detail.

In this introduction I propose an overarching research question for my entire habilitation thesis, namely: what effects do tax havens have on other countries? And, more specifically, what are the negative effects of tax havens? In particular I focus on financial secrecy and corporate tax revenues. I therefore provide examples of how research described in individual chapters provides an answer to this general research question. In chapter 2 I quantify financial secrecy. In chapter 3 I argue that tax haven-related illicit financial flows, loosely defined as funds which are illegally earned, transferred or utilized, exert a negative influence on developing countries. The remaining chapters focus on the tax revenue effects of tax havens. In chapters 4 to 7 I provide estimates of profit shifting by MNEs into tax havens out of India and the Czech Republic. In chapters 8 to 10, I approximate the scale of various tax haven-associated effects related to profit shifting. All of the chapters thus contribute to answering the main research question, albeit from different angles, and support the general conclusions of my habilitation thesis.



Findings described in the nine chapters which comprise my habilitation thesis and in other existing research may be summed up in the form of three general conclusions. First, low taxation is not the only temptation of tax havens. Low tax rates are far from the only characteristic of tax havens which are attractive to foreign individuals and companies. Financial secrecy, i.e. the lack of financial transparency, is important and facilitates illicit financial outflows from other countries. Tax havens thus prevent other countries from receiving the appropriate benefits of their economic production and also lower tax revenues are available to their governments. While these financial effects are important, tax havens may also harm the institutions of other countries. By enabling tax avoidance or illegal activities, they can weaken the role of government and citizens' willingness to pay taxes, undermine the morale of tax systems and the accountability of governments towards their citizens, lower investor confidence and harm the institutional environment in general. When tax havens are used to launder money used for corruption and bribery, they can help keep corrupt politicians and other elites in power, sustain criminal activities and hide criminal profits. I discuss these aspects of tax havens in chapter 3, while chapter 2 highlights financial secrecy as an important attraction of tax havens.

My second conclusion is that tax havens are not limited to small Caribbean islands. Some European countries and relatively big economies also constitute tax havens, or at least exhibit some important characteristics of tax havens. Lists of tax havens prepared by international organisations such as OECD (2013) and the European Commission (2015) have long been dominated by relatively small countries, while other countries – including several member countries of these international organisations – have rarely been listed. I have thus helped design and apply verifiable criteria for identifying tax havens. In chapter 2 I identify Switzerland, Luxembourg and the United States as some of the biggest suppliers of financial secrecy and in chapter 8 I conclude that the Netherlands, Ireland, Bermuda and Luxembourg systematically attract a disproportionate amount of profit with respect to their economic activity.

Finally, tax havens are associated with substantial tax revenue losses incurred by other countries' governments. A discussion on the extent of tax revenue losses stemming from profit shifting is ongoing, with some researchers including e.g. Hines (2014) suggesting that these losses may not be exceedingly high. However, recent evidence seems to confirm that global annual tax revenue losses are indeed high, reaching hundreds of billions USD, as shown by economists such as Zucman (2014) or Clausing (2016) and international organisations such as OECD's Johansson, et al. (2017) or IMF's Crivelli et al. (2016). These estimates are also comparable to the current global expenditure on development assistance and thus can be seen as the order of magnitude of what FitzGerald (2013) calls the global public goods levy. Furthermore, according to some estimates the losses tend to be higher for developing countries relative to their GDP. I contribute to these tax revenue loss estimates in chapters 8 to 10 and include a brief comparison of some of the above cited papers in the final chapter.

Along with these three general conclusions, a number of more specific findings are included in the nine chapters, some of which are highlighted in the remaining part of the introduction.

Chapter 2 of my habilitation thesis focuses on financial secrecy; the original paper is co-authored with Alex Cobham and Markus Meinzer (Cobham et al. 2015) and I assess my contribution to be roughly 50 %. In this chapter I explore and implement a concept of secrecy jurisdiction and present the findings of the resulting Financial Secrecy Index. The index ranks countries according to their contribution to global financial flow opacity. It reflects both the specific choices made by countries and the potential importance of such choices for other countries. It captures both the intensity of the countries' commitment to financial secrecy and their external scale. The empirical results reveal a geography of financial secrecy quite different from the popular image of small island tax havens still dominating popular perceptions and even some research literature. A number of secrecy-supplying major economies are identified. Instead of providing a simplified binary division differentiating between tax havens and other countries, the results introduce a comprehensive secrecy spectrum which all countries may be assigned to.

Though I have worked on research described in chapter 2 since 2009, the project remains ongoing, with the fifth version of the Financial Secrecy Index scheduled for publication in early 2018. In addition to improving the index itself, I am leading several follow-up research projects including the development of the Bilateral Financial Secrecy Index, designed to assess which secrecy jurisdictions are important for which countries, income groups and regions. This research focuses on European countries as both potential secrecy jurisdictions and as countries affected by them. We identify to what extent European countries are exposed to financial secrecy and which countries comprise the most significant secrecy jurisdictions in Europe. We encounter a high degree of heterogeneity across secrecy jurisdictions both in Europe and around the world. This new geography of financial secrecy has significant implications for policy recommendations and further research, especially as it also includes country-specific risk profiles. The research should thus point policy makers' limited resources and attention to the most relevant secrecy jurisdictions in individual countries.

Research described in chapter 2 is relevant for all other chapters especially as it argues that the term tax haven is an ill-defined misnomer. The lack of clear and agreed definitions of tax havens in academic literature has contributed to important and systematic weaknesses in existing analyses carried out in fields including international economics, international political economy and economic geography. The most obvious problem stemming from this lack of clear-cut definitions is when the category of tax haven is taken for granted without an explicit definition or classification. Without clearly defined criteria stipulating how lists of tax havens have been derived, papers such as Hines and Rice (1994) or Johannesen and Zucman (2014) expose themselves to the risk of providing insufficiently

robust results. In spite of this criticism included in chapter 2, I acknowledge that some of my own chapters are to some extent vulnerable in this respect. Throughout all chapters I use the term tax haven as there is hardly a better general term which would sufficiently cover the entire breadth of my research from low tax rates to financial secrecy. Furthermore, methodologies utilized in chapters 4 and 10 are dependent on lists of countries classified as tax havens. Where possible, I have attempted to improve on this approach and thus to contribute to research conducted in this respect as well: In chapter 6 I study the effects of specific tax havens one by one, rather than as a group. In chapter 7 I empirically derive which countries seem to be behaving as tax havens. In chapter 8 I use alternative lists of tax havens as a robustness check. I believe that the approaches used in these three chapters should become more common in research, as should the usage of indicators similar to the one presented in chapter 2.

Chapter 3 of my habilitation thesis, a sole-authored paper (Janský 2015), focuses on illicit financial flows from developing countries, what developed countries can do to diminish them and how to track their progress in doing so. Recent years have seen a growing degree of recognition of the harm caused by illicit financial flows and of the role of developed countries in providing an environment which tolerates these flows. In this chapter I explain why illicit financial flows should be reflected in the Center for Global Development's Commitment to Development Index which ranks developed countries according to their contribution to developing countries in seven policy areas: aid, trade, migration, environment, security, technology and investment. I identify the most relevant illicit financial flow indicators and discuss their advantages and limitations and ultimately propose the inclusion of a qualitative component of the Financial Secrecy Index into the investment component of the Commitment to Development Index. This recommendation has been reflected in the index since 2013, following the chapter's first publication as a working paper (Janský 2013). This chapter builds on my long-term interest in policy indices, reflected in my contribution to the estimation of the first results of the Commitment to Development Index for the Czech Republic (Janský and Řehořová 2013) as well as in my ongoing policy work associated with the United Nations' Sustainable Development Goals.

As the reduction of illicit financial flows is one of the targets of Sustainable Development Goals, the arguments of chapter 3 remain relevant. An ongoing discussion focuses on which indicators should be selected to track illicit financial flows included in target 16.4 ("By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime"). I recently joined this discussion with a co-authored paper for the United Nations Conference on Trade and Development (Cobham & Janský, 2017b) which argues that such an indicator should reflect both illegal flows based on the theft of state assets and the proceeds of crime and legal illicit flows based on tax evasion and avoidance and regulatory abuse. We focus on the latter and propose three groups of potential indicators reflecting the scale, the underlying

financial secrecy which makes illicit financial flows possible and the illicit financial flows risk exposure that individual countries face. My research presented in this habilitation thesis supports some of these arguments and might thus, depending on what the United Nations and its member governments ultimately agree on, support the design of the Sustainable Development Goals target indicators.

Chapter 4 of the habilitation thesis focuses on profit shifting out of developing countries and, in particular, India. The paper is co-authored with Alex Prats (Janský and Prats 2015) and I assess my contribution to be roughly 75 %. This chapter is one of my first contributions to the discussion on how international corporate tax avoidance may be capable of reducing tax revenue in developing countries. It is also my first empirical analysis using the detailed firm-level Burea van Dijk's Orbis financial and ownership data. The methodology, largely based on Fuest and Riedel (2012), builds on the notion that MNEs differ in their ability to shift income out of their host countries. In the case of MNEs operating in India in 2010 the paper shows that the MNEs with links to tax havens reported lower profits and paid less taxes per unit of assets than MNEs with no such links. These observations are consistent with profit shifting.

Chapter 4 was, at the time of its first publication as a working paper in 2013 (Janský and Prats 2013), one of the first firm-level analyses of profit shifting for a developing country. While some more recent studies of developing countries have exploited the detailed information included in the Orbis database (Johannessen et al. 2017), Orbis suffers from weak coverage of many developing countries and tax havens, as discussed by Kalemli-Ozcan et al. (2015), Clausing (2016) or Garcia-Bernardo et al. (2017). Thus, although I use firm-level data in chapters 4 to 6, I believe that country-level data with comparatively better coverage of developing countries may be useful in profit-shifting research. For example, while I use country-level foreign direct investment data in chapters 8 and 10, I use government revenue data in chapter 9. Therefore, in my future research I would like to use combinations of firm-level and country-level data. While much of my research focuses on developing countries, chapters 5, 6 and 7 are specifically dedicated to the Czech Republic.

Chapter 5 of my habilitation thesis focuses on profit shifting out of the Czech Republic; the paper is co-authored with Ondřej Kokeš (Janský and Kokeš 2015) and I assess my contribution to be approximately 75 %. The paper strives to contribute to a growing body of systematic evidence of profit shifting by analysing the situation in the Czech Republic. The utilized empirical strategy and data source, i.e. Orbis, is similar to chapter 4. We present evidence suggesting that while the effect of MNEs' links with tax havens on the debt ratio of companies in the Czech Republic is consistent with profit shifting, results regarding profits and taxes are not conclusive. This is to some extent consistent with profit shifting and especially with the debt shifting channel. While tax havens are considered as a group in this chapter, the next chapter describes an alternative approach.

Chapter 6 of my habilitation thesis focuses on profit shifting out of the Czech Republic to three specific European tax havens; the paper is co-authored with Ondřej Kokeš (Janský and Kokeš 2016) and I assess my contribution to be approximately 75 %. This chapter begins with an observation that most existing research, including my research presented in chapters 4 and 5, considers tax havens as a group. Chapter 6 deals with this shortcoming by considering individual tax havens separately and empirically testing whether or not ownership links with specific tax havens are associated with profit shifting. Once this approach is applied to the Czech Republic's company-level Orbis data, results suggest that profits shift through debt financing from the Czech Republic to Luxembourg, Switzerland and, to a lesser extent, the Netherlands. We also provide rough estimates of the impact of this profit shifting on tax revenues for MNEs with links to the Netherlands. In this respect, we were among the few to do so on the basis of firm-level data analysis, especially since empirical studies conducted by other academics seldom include estimates of profit shifting to revenue effects. There are of course exceptions and their number is increasing over time, as reviewed in chapter 10. Huizinga and Laeven (2008) were an early exception; their estimates of tax revenue losses for European countries have, until recently, been rarely emulated. I provide such country-level tax revenue estimates for as many countries as possible in chapters 8, 9, and 10.

Chapter 7 of my habilitation thesis, a sole-authored paper available as a working paper (Janský 2016) and forthcoming in *Post-Communist Economies* (Janský forthcoming), focuses on potential corporate income tax revenue loss in the Czech Republic due to international corporate tax avoidance and especially profit shifting. In order to quantify the loss, I first review existing estimates and subsequently provide several new – albeit merely illustrative – estimates, including those extrapolated for the Czech Republic from six international studies. In addition to concluding that reliable estimates for the Czech Republic are missing, I ascertain that the extrapolations are likely some of the more reliable estimates and that their median estimate of revenue loss stands at 10 % of current corporate income tax revenues. These findings support the case for the implementation of policy recommendations designed to deal effectively with international corporate tax avoidance. However, they also highlight the need for more research, both specifically tailored to the Czech Republic and with global outreach; this thus forms the focus of the next three chapters.

Chapter 8 of my habilitation thesis estimates the misalignment between the location of economic activity carried out by MNEs in the United States and the location of their profits; the paper is co-authored with Alex Cobham (Cobham & Janský, 2017c) and I assess my contribution to be roughly 50 %. The paper has developed a new, straightforward method designed to measure what we have termed misalignment, with profit shifting likely responsible for a part of this phenomenon. For each country we have estimated misalignment as the amount of profit being reported outside of where economic activity takes place. This method was applied to a Bureau of Economic Analysis data set of all US

MNEs. One of the advantages of our method is that we not only quantify how much money countries lose to tax havens, but also how much individual tax havens might be benefiting. We show that tax havens are of first-order importance for the world economy, with several countries with low average effective tax rates systematically attracting a disproportionate amount of profit with respect to their economic activity. The Netherlands, Ireland, Bermuda, Luxembourg, Singapore and Switzerland are responsible for the majority of misaligned profits at the expense of countries where the real economic activity in fact takes place. Overall, we estimate that as much as a quarter of the global profits of all US MNEs may be shifted to locations other than where the underlying real activity actually takes place. This estimate amounted to approximately USD 660 billion in 2012, i.e. almost 1 % of world GDP. Since US MNEs are responsible for approximately one fifth of global foreign direct investment, it is not inconceivable that the scale of profit shifting by all MNEs worldwide may be even higher than suggested by other existing estimates discussed in chapters 9 and 10.

Chapter 9 of my habilitation thesis estimates the effects exerted by tax havens on the corporate tax revenues of other countries; the paper is co-authored with Alex Cobham (Cobham and Janský forthcoming) and I assess my contribution to be roughly 75 %. This chapter re-estimates the work of the International Monetary Fund's Crivelli et al. (2016) and, to a large extent, confirms their findings. We find their results to be mostly robust to the use of different government revenue data, a different definition of tax havens and the use of average effective tax rates instead of statutory tax rates. Compared to the USD 650 billion established by Crivelli et al., our preferred global estimate figure of international corporate tax avoidance stands at approximately USD 500 billion. Furthermore, we publish country-level revenue loss estimates, establishing that losses relative to GDP are substantially greater in low- and lower middle-income countries, specifically in sub-Saharan Africa, South Asia, Latin America and the Caribbean. This appears to support two key conclusions: lower-income countries suffer more intensively from profit shifting and the substantial variations between countries warrant the close attention of policy makers to their specific situation.

Chapter 10 of my habilitation thesis estimates the scale of profit shifting and tax revenue losses related to foreign direct investment; the paper, co-authored with Miroslav Palanský (Janský and Palanský 2017), is available as a working paper and is currently under consideration for publication in *International Tax and Public Finance*. I assess my contribution to be approximately 50 %. This final chapter attempts to point out which countries' tax revenues are most affected by tax havens. While this research question is similar to the one posed in chapters 8 and 9, a different methodological approach based on foreign direct investment data is employed here. To estimate the scale of profit shifting, we start by observing that the higher the share of foreign direct investment from tax havens, the lower the reported rate of return on investment. Like the United Nations Conference on Trade and Development's 2015 World Investment Report (UNCTAD 2015), we assume

that the reported rate of return is lower due to profit shifting. However, unlike the report, we also provide illustrative country-level estimates of profit shifting and improve the methodology in a number of aspects. We find that in terms of corporate tax revenue relative to their GDP, OECD member countries lose the least while lower-income countries lose the most. We compare our results with three other recent studies which use different methodologies to derive country-level estimates of tax revenue losses which may be related to profit shifting. Specifically, we make comparisons with estimates described in chapter 8, 9 and with Clausing (2016). In the first such comparison made, we find that while every study identifies differences across income groups, the nature of these differences varies across the four included studies. Two of them have limited data for lower-income countries while the other two, i.e. chapters 9 and 10, show that these countries lose more corporate tax revenue relative to their GDP.

In conclusion to this introductory chapter, I would like to offer a brief summary of some of the most important existing policy recommendations aimed at curtailing the negative effects of tax havens. All four below mentioned specific policy proposals are currently being discussed either by the EU, the OECD or by other international institutions. First, I would like to stress the importance of ensuring the availability of high-quality beneficial ownership information. This data should ideally be made publicly available so that information about the beneficial owner of any company would be available to anyone who requests it. Second, I support the full, global implementation of automatic exchange of tax information so that tax authorities are informed of their taxpayers' income sources in other countries. Third, I would like to see the public country-by-country reporting for MNEs implemented so that companies have to report where their economic activities are conducted, where their profits are reported and where their taxes are paid. The fourth proposal addresses the flaws of the current system of international corporate taxation most substantially: I support the introduction of a common consolidated corporate tax base for the EU and its consideration globally. Following this reform, each MNE would be considered a unitary business rather than a network of independently profit-maximising affiliates, as is the case under the current arms-length principle (Picciotto, 2017). The Czech Republic should aim to support international policy agreements which include these four specific policy proposals in order to thus improve the system of international corporate taxation for the benefit of its citizens as well as those of other countries.

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