

The Geography of Financial Secrecy

Which countries offer financial secrecy and why?

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Abstract

This thesis aims to reveal what factors influence the financial secrecy of a jurisdiction. This topic is of academic relevance because it has never been discussed in an academic treatise and second because financial secrecy should be seen as belonging to the field of political economy. Indeed, the Financial Secrecy Index 2015 and the Financial Secrecy Index 2018 compiled by Tax Justice Network show that financial secrecy goes much further than the kind of confidentiality that ensures privacy. Many jurisdictions in the world offer secrecy provisions that allow assets to remain undetected, not only by the public, but also by tax authorities. Moreover, the same jurisdictions that have favourable tax rates are also the ones that offer the most and most extensive secrecy provisions. Financial secrecy is therefore part of an institutional framework that enables countries to become specialized and competitive in offshore finance. But being a political-economic phenomenon, it is unlikely that secrecy provisions have the same effect in all countries because their effectiveness is dependent upon factors that differ across different countries and regions. Second, the desire for a large exporting financial services sector is also unlikely to be the same in all countries and is therefore also dependent upon factors that differ by country. It is these factors that are of interest in this research.

The definition of financial secrecy is derived from Tax Justice Network's definition of a secrecy jurisdiction which includes three aspects. Secrecy jurisdictions are places that intentionally create regulation for the primary benefit and use of those not resident in their geographical domain. Second, they deliberately design the regulation they create for use by people who do not live in their territories so that it undermines the legislation or regulation of another jurisdiction. And third, secrecy jurisdictions also create a deliberate, legally backed veil of secrecy that ensures that those from outside the jurisdiction making use of its regulation cannot be identified to be doing so. But, like in the Financial Secrecy Index, financial secrecy in this research is not a dichotomous variable that divides the cases into secrecy jurisdictions and non-secrecy jurisdictions. In fact, the 102 jurisdictions investigated in this research are measured on a financial secrecy spectrum. The reason for this is that there is a considerable difference among secrecy jurisdictions concerning the number and extent of secrecy provisions. To measure the variance in financial secrecy, I followed Tax Justice Network's methodology that divides financial secrecy into a number of concrete indicators.

While there is no academic literature on the determinants of financial secrecy, a moderate amount of literature looked at what kind of countries become tax havens. The Financial Secrecy Index shows that tax havens also tend to have a high degree of financial secrecy. On the basis of these facts I considered it safe to hypothesize that the same factors that make a country more likely to be a tax haven, have an effect on its financial secrecy status as well. I reviewed said literature on tax havens and analysed which factors could be expected to have an impact on financial secrecy. This includes: population size, quality of governance, level of democracy, economic openness, being 'landlocked', 'island-ness', legal origin, origin of parliamentary system, official language and natural resource endowment.

Additionally, it was also hypothesized how and why these factors affect the specific indicators of financial secrecy. The reason for researching the specific indicators of financial secrecy separately was to establish whether these indicators as they are used by Tax Justice Network really reflect deliberate financial secrecy. By analysing the effect of the country characteristics on the indicators of financial secrecy it was established that two indicators do not reflect the concept of financial secrecy

because their correlation with GDP suggests that they have more to do with tax administration efficiency than with deliberate financial secrecy. It was also established that two other indicators do not reflect financial secrecy because Tax Justice Network's methodology is inherently flawed on these indicators. By excluding four indicators an alternative financial secrecy aggregate was created, one that better measures the concept of financial secrecy. On the basis of this alternative financial secrecy aggregate it was possible to establish what factors influence the financial secrecy of a jurisdiction.

It was found that sparsely populated jurisdictions tend to score higher on financial secrecy. This could be due to insufficient income caused by a small labour force, the absence of natural resources or the small size of the economy. On the basis of the data none of three mechanisms can be ruled out as having an influence financial secrecy. The case of the Cayman Islands illustrates that a lack of income in the 1950's caused it to look for alternative sources of income. What must have influenced its decision for offshore finance is that the country did not have significant exporting sectors, it did not have a diverse economy, nor did it have natural resources. It is likely that the size of its population and economy have played a role this.

Second, it was found that economic openness has a weak association with financial secrecy, but it has a strong influence on the method used for avoiding double taxation. The reason for this is that this openness to trade makes countries more concerned about the negative effects of double taxation on international trade and foreign investment. The consequences of this are well-known, which is that several non-secrecy countries with high economic openness became conduit-countries because of an attractive combination of participation exemptions and tax treaties that reduce withholding taxes on dividends, royalties and interests.

Third, it was found that island-ness, common law systems and English as primary language are correlated with financial secrecy. Of these three factors only the common law system has an effect on financial secrecy that is independent from population size. This effect only applies to sparsely populated countries and this suggest that an English common law system makes it more attractive for small countries to become a secrecy jurisdiction. One reason for this might be that English common law is more attractive to clients of offshore financial services. Another possible reason might be that English common law provides for a more efficient transition towards full-blown legally backed financial secrecy.

Preface

Before you lies my master's thesis about financial secrecy. It was written for Tax Justice Network which is an international think tank concerned with tax havens and financial globalization.

I would like to express my sincere gratitude to all who made this research possible. In particular Dariusz Wójcik, professor of economic geography at the University of Oxford, for sharing his vast knowledge on offshore finance and for his time and support during my stay in Oxford. My fellow research assistants at Tax Justice Network for their help in the research process. The researchers at Tax Justice Network for giving me the opportunity to do the internship in Oxford and contribute to the Financial Secrecy Index 2018. My supervisor at the Radboud University, Prof. Arnoud Lagendijk for his constructive and timely feedback.

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1. Introduction

This thesis is about the geography of financial secrecy and transparency. I became interested in this topic after reading about tax havens and their role in the global economy. Low corporate tax is only one aspect of tax havens. The other important aspect is financial secrecy (Tax Justice Network, 2015^b), which is a ‘tool’ provided by governments and used by companies and individuals to hide tax avoidance or illegal operations from law enforcement bodies, investigative journalism or from the general public. Financial secrecy for instance includes bank secrecy and secrecy of company ownership but it can take many more forms and varieties, some of which have a long history while others are very recent inventions.

Because of its role in facilitating tax avoidance and criminal cash flows, financial secrecy is now increasingly regarded as a problem and many countries are enacting legislation to provide transparency. The last couple of years have been especially important in this regard: In 2016 the European Union decided that its Member States must have a register of ultimate beneficial owners of all legal entities by 2017 (PriceWaterhouseCoopers, 2016). As of January 2017 57 jurisdictions have agreed to automatically exchange country-by-country reports (OECD, 2017) which require multinational enterprises to state their profits for each country separately, and as of November 2016 87 jurisdictions have agreed to automatically exchange financial account information (OECD, 2016). The latter two lists also include some of the prominent offshore financial centres. These are important milestones as many tax authorities will have access to information on company ownership and offshore bank accounts.

It is, however, certainly not the end of financial secrecy. First, there are still many countries without (adequate) transparency regulation. Second, there are loopholes in recent transparency legislation, as pointed out by Tax Justice Network (Knobel & Meinzer, 2014). Third, advocacy groups like Tax Justice Network (2016) argue that real transparency means disclosure to the public and not merely to tax authorities, for which they provide compelling arguments.

The persistence of secrecy and the geographically uneven emergence of transparency measures provides for an interesting research topic. Academics have previously analyzed the factors influencing whether countries become tax havens (Dharmapala & Hines, 2009). In a similar way I will investigate what factors influence the financial secrecy of a jurisdiction. Relevant factors will be identified on the basis of the academic literature on tax havens and financial secrecy.

1.1 Scientific relevance

Tax havens account for a broad academic debate, which cannot be narrowed down to one academic problem. First, there is the question of defining ‘tax haven’. This problem emerged after some jurisdictions began criticizing prevailing definitions when they appeared on blacklists (Tax Justice Network, 2014). To date there is no academic definition of tax havens, but academics have proposed alternative concepts such as ‘offshore financial centres’, ‘offshore jurisdictions’ (Wójcik, 2013) and ‘secrecy jurisdictions’ (Murphy, 2008). These alternative concepts however face the same difficulty of not having an exact definition.

Second, the question of whether tax competition is a good thing. Tax competition is the process by which jurisdictions lower taxes or create loopholes to attract foreign investments. Proponents of tax

competition use the Tiebout model (1956) which argues that people would move to places which offer the best combination of tax level and public services, thereby rewarding the most efficient allocation of public expenditure. But tax havens provide people the opportunity to benefit from public services without actually paying for it, thus rendering the model invalid in the current situation. Furthermore, without the existence of tax havens this model remains only partially valid because people do not generally move every time there is a change in taxation. Still, a number of authors emphasizes the virtues of tax competition (a.o. Brennan & Buchanan, 1980; Edwards & Keen, 1996).

Third, the question of the welfare effects of tax havens on high-tax countries. Desai, Foley and Hines (2006) found evidence for their claim that high-tax countries continue to attract foreign investments because of the existence of tax havens and Hong and Smart (2010) add that the investments effects exceed the erosion of tax revenue, thus enhancing the welfare of high-tax countries. On the other hand, Slemrod and Wilson (2006) concluded that tax havens reduce welfare in high-tax countries.

Fourth, the determinants of offshore FDI flows and the role of geographical proximity. Desai et al. (2006) have shown that non-tax haven countries benefit from the adjacency of a tax haven. Haberly and Wójcik (2015) used a gravity model to assess the determinants of offshore FDI (transactions to companies in offshore financial centres) and found that offshore FDI has “a similar level of sensitivity to physical distance as real FDI”.

Fifth, the question of what kind of countries become tax havens, which has been discussed among others by Kanbur and Keen (1993), Hansen and Kessler (2001), Slemrod and Wilson (2006) and Dharmapala and Hines (2009).

These five examples indicate that there are many theoretical problems surrounding the topic of tax havens, or what other names might be given to these countries. The problem of this research – what factors influence the financial secrecy of a jurisdiction - is most related to the fifth problem. This is a scientific or academic problem, first of all because this question has never been discussed or answered in an academic treatise. But obviously this is in itself not enough to consider it a scientific problem. The question of financial secrecy is a scientific problem because secrecy and transparency belong to the sphere of political-economic behaviour and political economy has been considered a science since the 18th century physiocrats adopted a naturalistic approach to production and its determinants (Neill, 1949).

What is, however, not clear is why financial secrecy is a political-economic choice. Indeed, the secrecy of asset and company ownership might also result from a demand for privacy (Green, 2017), in which case secrecy is not used to attract foreign capital but serves as a way of avoiding the attention of the public, or the attention of criminals. The Financial Secrecy Index 2015 (Tax Justice Network, 2015) however, bears witness to the fact that financial secrecy goes in fact much further than the secrecy that is needed to stay clear from public scrutiny, much further than this kind of privacy. Many jurisdictions in the world offer secrecy provisions that allow assets to remain undetected, not only by the public, but also by tax authorities. Moreover, the Financial Secrecy Index 2015 also shows that the same jurisdictions that have favourable tax rates (often zero) are also the ones that offer the most and most extensive secrecy provisions, and the compiler of the Financial Secrecy Index, i.e. Tax Justice Network (2016), explains that financial secrecy is used in combination with low tax rates for tax avoidance and tax evasion on (financial) assets in source-countries.

Financial secrecy makes it possible that these assets go unnoticed by the source-country's tax administration. The host countries of offshore assets benefit from this because their financial institutions are involved in these cross-border transactions. Therefore a country that hosts a lot of offshore assets will typically have a significant income on the exports of the financial services handling these transactions, and in some cases the outsourced management of these assets (IMF, 2003).

Thus, this explains why financial secrecy is considered a political-economic phenomenon. Financial secrecy is a part of an institutional framework that enables countries to become specialized and competitive in offshore finance. The implication of being a political-economic phenomenon is that it is assumed that there are factors at work, that are external to the intentions, aspirations and motivations of those that opt for financial secrecy. Indeed, it is unlikely that financial secrecy has the same effect in all countries because, like with other sectors, the success of the financial service sector is dependent upon many factors, factors that differ across different countries and regions. Therefore, there is much more to financial secrecy than wicked intentions or at the other end of the spectrum, a demand for economic justice and fiscal equity. Furthermore, the implementation of financial secrecy is not something that is done frivolously because it often entails political costs in international relations (Harrington, 2016). These political costs might also evolve to economic costs when other countries start imposing economic sanctions (Rettman, 2017).

This all implies that countries that are considering financial secrecy need to take into account:

- a) The benefits of financial secrecy in the form of income on financial service exports. These benefits greatly differ for different countries and are contingent upon many factors.
- b) The costs of financial secrecy.

But of course this does not mean that in every situation where this utility calculation has a positive outcome, there will be financial secrecy and low tax rates. In some countries the moral arguments against offshore finance will prevail. But considering that, as we will see later, many secrecy jurisdictions share some characteristics that are external to their moral considerations, it stands to reason that this kind of economic reasoning does in fact occur.

As addressed above, a number of authors looked at what kind of countries become tax havens. If the concepts of tax haven and financial secrecy designate the same countries, which the Financial Secrecy Index 2015 suggests they do, why would we need to research separately the determinants of secrecy jurisdictions? Does it not suffice to say that the same factors that influence the likelihood of being a tax haven also make a country more likely to be a secrecy jurisdiction? The answer of course is 'no'. While there are no exact definitions of tax havens, offshore financial centres, etcetera, these definitions can be distinguished from each other. According to the Collins Dictionary of the English Language (n.d.) a tax haven is "a country or place which has a low rate of tax so that people choose to live there or register companies there in order to avoid paying higher tax in their own countries". This is a rather simple definition which leaves aside the problem of what actually constitutes a 'low tax rate'. But this problem is of minor importance when distinguishing tax havens from other similar concepts.

The term secrecy jurisdiction is only used by Tax Justice Network (2018) and comprises three aspects.

First, “secrecy jurisdictions are places that intentionally create regulation for the primary benefit and use of those not resident in their geographical domain”.

Second, “secrecy jurisdictions deliberately design the regulation they create for use by people who do not live in their territories so that it undermines the legislation or regulation of another jurisdiction”

And third, “secrecy jurisdictions also create a deliberate, legally backed veil of secrecy that ensures that those from outside the jurisdiction making use of its regulation cannot be identified to be doing so”.

There are several remarkable aspects of this definition. First, nowhere does it mention ‘tax evasion’ which is quite strange for an organization that call itself ‘Tax Justice Network’. The reason for this is that tax evasion is just one of the illicit financial flows for which secrecy jurisdictions can be used. Second, what is also remarkable is the emphasized use of the words ‘intentionally’ and ‘deliberately’. Thus, a country that has regulation that benefits non-residents, undermines the legislation of other jurisdictions and has a legally backed veil of secrecy, but has so without the intention of secrecy, of benefitting non-residents and without the intention of undermining other jurisdictions is not a secrecy jurisdiction.

But the most important aspect is that in contrast to the concept of tax haven secrecy jurisdictions do not necessarily have favorable tax rates. The term ‘regulation for the primary benefit and use of those not resident’ will in many cases involve low tax rates, but this is not the case by definition. This means that tax havens and secrecy jurisdictions do not entirely overlap and for this reason we cannot automatically assume that the determinants of ‘tax haven-ness’ are also the determinants of secrecy jurisdictions. It therefore makes sense to analyze the determinants of financial secrecy apart from those of tax haven-ness.

Last, this research will also be of modest relevance for similar research on secrecy and transparency. Cobham, Janský and Meinzer (2015) note that “the shift of emphasis away from tax [to financial secrecy] leads to a second, emerging strand of economic geography literature on the geography of transparency”. This thesis will contribute to this emerging strand and will be relevant for future research as research into the determinants of government transparency – which is an emerging strand in social sciences as well - can benefit from the results of this research. The results will also be relevant for research into the effectiveness of specific transparency measures. Third, it will also be relevant for further research into the incentives and conditions of transparency and secrecy.

1.2 Societal relevance

The societal relevance of financial transparency can be divided into two aspects. The first aspect concerns the problem of law enforcement bodies not having sufficient access to the right information to tax people appropriately and enforce criminal laws. This increases the risk of tax evasion and illicit cash flows such as the financing of terrorist groups, resulting in welfare losses and crime. There are roughly three types of financial secrecy that make it difficult or impossible for tax authorities to get access to the right information (Tax Justice Network, 2015^a).

The first type involves banking secrecy. Banking secrecy can be used to hide “tax evasion, concealment of bribes and embezzlement, organised crime, illegal arms trading, trafficking in human

beings, money laundering, the covering of illicit intelligence activity, non-payment of alimonies, and other financial crimes". One way to secure banking secrecy is to deny tax authorities access to the names of account holders. A second mechanism that jurisdictions use to secure banking secrecy is the prosecution of bankers who violate secrecy rules.

Second, hidden beneficial ownership of trusts, foundations and companies can also be used for the same crimes, to which might be added infringement of competition rules, bankruptcy fraud and the non-payment of creditors. Tax administrations will not be able to track the assets in these legal entities to a real person. Furthermore, secrecy of beneficial ownership of real estate and valuable assets stored in freeports or commercial vaults can be used for money laundering.

The third type of financial secrecy involves the refusal of jurisdictions to actively collect information and exchange information with other countries, or refusal of judicial compliance (Tax Justice Network, 2015^a).

The second aspect concerns a lack of disclosure of relevant information to the *public*. While access to information for tax authorities solves a lot of problems, disclosure to the public would be preferable because of two reasons. First, when government officials are themselves involved in networks of illicit financial flows they are unlikely to pursue investigations or prosecute, or only do this selectively. In this case ordinary citizens are not better off than they were before. Second, the problem of tax avoidance. Tax avoidance is the lawful use of a tax regime in a territory in order to reduce the amount of payable taxes.

An important strategy for tax avoidance is transfer mispricing, that is, trade between legal entities within the same corporate network intended to shift profits to low-tax jurisdictions. This trade involves artificial high prices, which do not equal the value of the asset traded. In this way the profits made in one country are paid as costs to a related company in a low-tax country, without shifting much substantial activity. This can also be the trading of royalties, or paying premiums to a related insurance company in which case no productive activity occurs in the low-tax country. Governments have to decide whether the price set in this trade is acceptable and whether the involved parties are sufficiently unrelated, whether they are what is called at arm's length. This is regulated through advance pricing agreements and other tax rulings between tax administrations and corporations, which are often kept secret from the public.

However, the recent revelations of the tax strategies of multinational enterprises like Starbucks, Amazon and Apple (Dicken, 2015, p. 240) bear witness to the fact that the current tax systems are inadequate. Because fiscal authorities are sometimes too lax, are (initially) unaware of loopholes and mismatches between tax systems or lack the resources, public scrutiny is required to inform electorates and consumers about tax avoidance schemes and the role of governments in these. This research will help bring about financial transparency by providing a better understanding into the factors influencing whether or not a jurisdiction is likely to provide financial secrecy.

1.3 Research objective and research question

To reveal what factors influence the financial secrecy of a jurisdiction, by investigating 102 jurisdictions.

This leads to the following research question:

What factors influence the financial secrecy of a jurisdiction?

The research consists of two parts. The first part involves a correlational analysis using factors derived from the literature. To find out what factors have an impact on financial secrecy ten relevant factors have been identified on the basis of the literature. These are population size, quality of governance, level of democracy, economic openness, being 'landlocked', 'island-ness', legal origin, origin of parliamentary system, official language and natural resource endowment.

Financial secrecy, as mentioned before, is a multidimensional phenomenon. The sub questions of this research will therefore focus on the determinants of 12 specific kinds of financial secrecy. This comprises banking transparency, trusts and foundations register, recorded company ownership, country-by-country reporting, reporting of payments, efficiency of tax administration, tax system, absence of harmful legal vehicles, anti-money laundering, automatic exchange of information, bilateral treaties and disclosure of real estate ownership. The sub questions of this research will therefore be: What factors influence the secrecy of banking of a jurisdiction? What factors influence the secrecy of trust and foundations of a jurisdiction? And so on.

One reason why it is necessary to research the specific types of financial secrecy separately is to establish whether these indicators as they are used by Tax Justice Network (2016) really reflect deliberate financial secrecy. By analysing these types separately it can be established whether there are other reasons why some countries score worse than others on these indicators.

The second reason why it is necessary to analyse the specific kinds of financial secrecy is that the absence of a trend between a factor and financial secrecy does not automatically mean that this factor is irrelevant in all cases. A factor might still have an effect on a particular kind of financial secrecy and thus in some cases have an effect on financial secrecy.

The term jurisdiction is used instead of country because there can be multiple jurisdictions within one country and therefore different degrees of financial secrecy and because some jurisdictions do not have an independent status. A list of jurisdictions that have been included can be found in the appendix.

An important limitation of a correlational analysis or a simple linear regression is that it does not tell us anything about whether it indicates a causal or conditional connection or whether the correlation is just spurious. At most one can conclude from it which factors are not relevant. To assess whether a correlation is indicative of a causal or conditional effect on financial secrecy it is necessary to see whether a variable still has an effect on financial secrecy when the other variables are controlled. Additionally, in some cases it will be necessary to zoom in on specific jurisdiction to see whether a correlation can be explained by qualitative data. This will be the second part of the research.

2. Literature review and conceptual framework

The purpose of the literature review is to identify factors that might have an impact on the financial secrecy of a jurisdiction. To this end I will use the literature on the determinants of being a tax haven. The reason for choosing this theoretical framework is that, as evidenced by the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b), the same countries that have very low rates of taxation or no taxation at all are also the countries that offer a high degree of financial secrecy. Thus, it follows that one can expect that the same determinants that led countries to adopt low taxation rates are also responsible for the secrecy regulations adopted by these countries.

The second task is to explicate what is meant by financial secrecy. Some aspects have already been mentioned, but these needs to be further specified.

The third task is to look at what relations are to be expected between the determinants and the specific types of financial secrecy. Indeed, it is not self-evident that a positive correlation between one of the determinants and financial secrecy automatically means that this determinant also has a positive effect on each of the specific kinds of financial secrecy.

Finally I will provide an overview of the hypothesized relations in this research and this will be graphically represented by a conceptual model.

2.1 Possible determinants of financial secrecy

2.1.1 Population size

Evidence has shown that foreign direct investments are sensitive to tax rates (Ondrich & Wasylenko, 1993; Hines, 1996; Altshuler et al., 2000; Altshuler & Grubert, 2004; Dharmapala & Hines, 2006; Devereux, 2007). Thus, countries that lower tax rates can expect an increased inflow of foreign investments. The increase in investments might compensate for the initial loss of tax revenue, thereby making it profitable to become a tax haven. This touches upon the long-lasting discussion in economics on optimal taxation. A well-known contribution to this discussion is the paper by Diamond and Mirrlees (1971) who argue that high taxes on corporate income leads to lower revenues of labour tax and ultimately to lower tax revenues. This mechanism is stronger in small countries with an open economy. The reason for this is that small countries are “price-takers in world markets” (Dharmapala & Hines, 2006) and because of this they have little bargaining power vis-à-vis foreign investors. Small open economies have no incentive to tax foreign investments because “in a small open economy domestic workers would bear the burden of the tax” (Gordon & Hines, 2002). This would explain why tax havens are often small countries with an open economy.

Many tax havens, that is countries with low or no taxation, have a population of less than a million (Dharmapala & Hines, 2006). This also suggests that these countries have a propensity for financial secrecy, whereas countries with a population of more than a million would be more likely to offer transparency. It is however unlikely that financial secrecy correlates with a continuous scale of population level because tax rates do not correlate with a continuous scale of population level either.

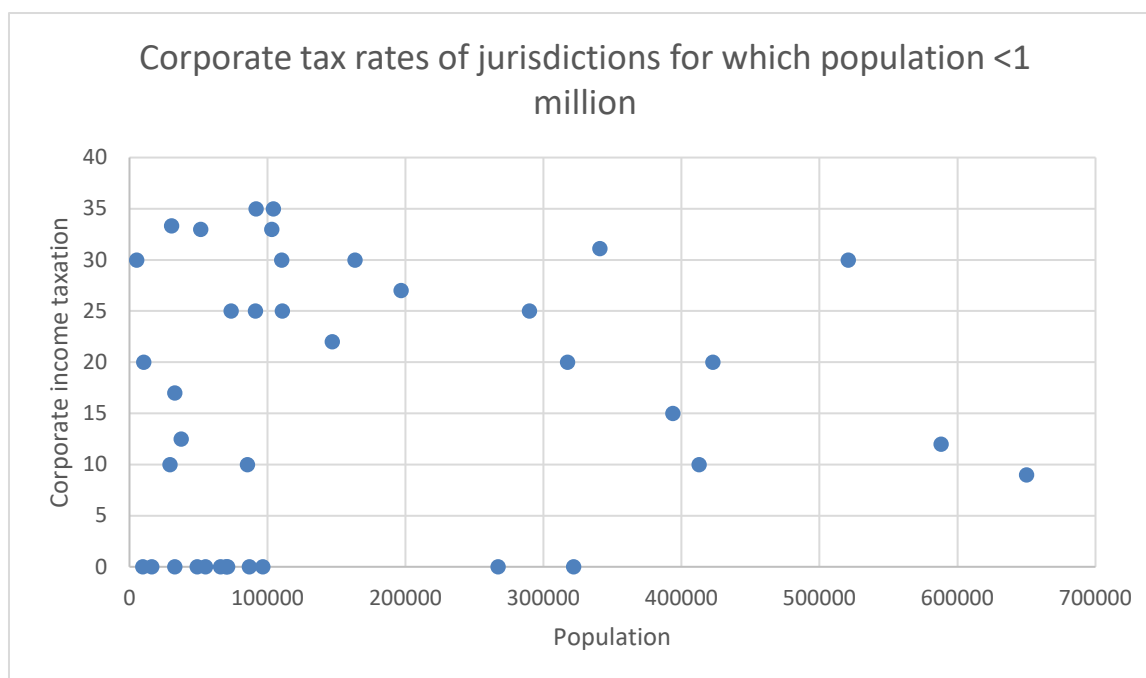


Figure 1: population and corporate income taxation (CIA World Factbook, 2016)

Figure 1 above shows the variance in corporate taxation rates for jurisdictions with less than one million residents (CIA World Factbook, 2016). The figure demonstrates that many jurisdictions with less than 1 million residents have low corporate taxation rates, but there does not seem to be a continuous trend within the <1 million group. Therefore the same can be expected for financial secrecy. It can be expected that countries with less than one million residents are more likely to have a high degree of financial secrecy than are countries with more than 1 million residents. But a marginal increase in population will not lead to lower financial secrecy estimates.

That small countries are more likely to be tax havens is an empirical observation that is widely-observed (Hampton & Christensen, 2002). And it was established by the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b) that the same small countries often have a high degree of financial secrecy. But we also need a theoretical explanation of why a higher degree of financial secrecy is expected for countries with a population of less than a million.

Size of the economy

Considering the argument by Diamond and Mirrlees (1971) one possible explanation might be the size of the economy. Thus, the hypothesis would be that a small-sized economy leads to being a price-taker on world markets (Briguglio, 1995, p. 1616) and therefore to a weaker position vis-à-vis foreign investors. This leads to a lack of capital in exporting sectors, which might lead to a lack of income, which then creates an incentive to become an offshore financial centre. This mechanism can be further amplified by the fact that often small economies are already dependent upon foreign sources of finance (Briguglio, 1995, p. 1617).

Labour force

It stands to reason that in general countries with a small population also have a smaller labour force than countries with a large population. As evidenced by the industrialization of several regions in east Asia in recent history, a large and spatially concentrated labour force is an important factor behind large scale industrialization (Austin & Sugihara, 2013). The ample supply of labour is one of

the advantages of what are usually called economies of agglomeration, which refers to the economic advantages derived from a certain spatial concentration of production and production factors (Glaeser & Gottlieb, 2009).

There are three reasons why countries with large labour forces would be better off. First, a large labour force can be a precondition for obtaining economies of scale. Adding more workers or labour hours to the production process does in itself not provide economies of scale. But the ample availability of labour enables producers to increase the scale of the production process and this might provide economies of scale through several mechanisms, such as quantity discounts on the purchase of raw materials (Stigler, 1958).

Second, a large (labouring) population often equals a large number of domestic consumers and this enables producers in these countries to increase the scale of the production process, without being affected by decreasing returns to scale due to the high transportation costs of foreign sales. This of course varies with industry characteristics but especially industries with “high transport costs and more differentiated products tend to be concentrated in large countries” (Hanson & Xiang, 2004). This is called the home market effect (Corden, 1970).

The third reason also has to do with the numbers of consumers. For some industries in some countries the (transportation) costs of foreign sales are so high that it's no longer profitable to export. This might particularly be the case in countries that are remotely situated or countries that face institutional barriers to international trade. In these cases the size of the domestic market constitutes the limit to the scale of the production process. This implies that the size of the domestic market also determines the limit of the extent in which economies of scale can be obtained. The cost reductions due to economies of scale might eventually outweigh the costs of bringing merchandise to foreign markets but these economies of scale can only be obtained in countries with a large domestic market (Brugiglio, 1995, p. 1616).

The absence of a large labour force thus might make it impossible to reach the optimum scale of production of a plant. This especially applies to mass-produced manufactured goods (Streeten, 1993). This might lead to insufficient income and this would make it attractive to develop an offshore financial centre.

Natural resource endowment

Another explanation might be that countries with a small population, and especially those with a population of less than 1 million, are often also small in area. This often implies lower amounts of natural resources (Brugiglio, 1995), and less diversity of natural resources (Streeten, 1993) and therefore fewer opportunities for the extraction industry. The absence of an extraction industry might lead to a lack of income, which makes it attractive to become an offshore financial centre.

2.1.2 Wealth

Another characteristic of tax havens is that they are more affluent than non-tax havens (Dharmapala & Hines, 2006). The reason for this is probably that the absence of taxation and perhaps financial secrecy facilitate the creation of an offshore financial centre and this is a very lucrative business (Zoromé, 2007). This implies that financial secrecy causes wealth and not the other way around. It is therefore unlikely that wealth is a cause of financial secrecy.

2.1.3 Quality of governance

Additionally, Dharmapala and Hines (2006) analysed the influence of quality of governance and found that low tax rates are more effective in attracting investments of US firms in well-governed countries than in poorly-governed countries. This suggests that quality of governance conditions the relation between foreign investments and low tax rates. In other words, the effectiveness of low tax rates in attracting foreign direct investment is dependent upon a certain minimum level of governance quality. They also suggest that poorly-governed countries, although they may desire to be a tax haven, generally do not attempt to become a tax haven because they know they will fail in attracting investments as investors seem to prefer well-governed countries.

It remains to be seen, however, if poorly governed small and economically open countries offer more transparency because poor governance often goes hand in hand with government opacity in terms of economic information (Islam, 2006). But given that poorly governed countries are almost never tax havens and tax havens are usually well-governed countries it is still interesting to investigate the relation between quality of governance and financial secrecy.

Rose and Spiegel (2007) however, distinguish between three different dimensions of quality of governance – rule of law, political stability and regulatory quality – and their empirical findings indicate that only regulatory quality is positively associated with being an offshore financial centre.

The definition of regulatory quality is taken from Kaufmann et al. (2003) and includes “measures of the incidence of market-unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development”. In other words, a country has a good regulatory quality when it has a low incidence of market-unfriendly policies. Obviously, this is very narrow definition of regulatory quality, but one that is useful in relation to tax haven-ness and financial secrecy.

The relation between the low incidence of market-unfriendly policies and tax haven-ness might be explained in the following way. The low incidence of market-unfriendly policies creates an image of a competent government that prioritizes economic stability and economic growth. This is important for people who send their money offshore because they want to be sure that the money keeps its value. This reputation spreads to other countries and this makes it possible to become an offshore financial center.

While Rose and Spiegel (2007) find no empirical evidence for a connection between rule of law and tax haven-ness or political stability and tax haven-ness, Shaxson and Christensen (2013, p. 73), however, do consider rule of law and political stability important, but provide no evidence for this. The reason for this difference is probably that very few countries score low on rule of law and political stability and as a result they cannot be differentiating factors. However this does not mean that rule of law and political stability cannot be conditions of tax haven-ness or financial secrecy.

As with regulatory quality Rose and Spiegel (2007) rely on the Governance Indicators 3 (Kaufmann et al., 2003) for a definition of rule of law and political stability. Rule of law is measured by “perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts”(Kaufmann et al., 2003). It stands to reason that these conditions, that is, a low incidence of crime, an effective and predictable judicial system and enforceability of contracts have to be met for a country to become successful in the offshore business. Indeed, people holding assets

offshore want to be sure that their assets are protected from theft and fraud. They also want to be sure that in case their partners or representatives do not hold up their end of the deal they can rely on the judicial system to put a legal claim on their assets. Lastly, they want to be sure that the terms of contract are met.

Political stability is defined as “the perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means” (Kaufmann et al., 2003, p. 3). For foreign investors as well as for tax evaders these kind of political upheavals are perceived as a threat either because of the economic downfall that might result from it or because of disposessions of assets by the new people in power. Thus, it stands to reason that political stability is a crucial condition that has to be met in order to become tax haven and/or offshore financial center.

2.1.4 Higher education institutions and presence of an intellectual community

Hampton and Christensen (2002) argued that microstates are often without higher education institutions or an intellectual community that opposes domestic laws and policies. Hence, the presence of higher education institutions might be associated with the absence of financial secrecy. The reason that critique of secrecy-providing policies only seems to come from an intellectual community or higher education institutions is probably that because of the complexity of these policies they are the only people that have the time and expertise to analyse these policies. However, the absence of higher education institutions only applies to a few jurisdictions (University Directory Worldwide, n.d.). Since many secrecy jurisdictions and tax havens do in fact have higher education institutions it is therefore unlikely that the absence of higher education institutions is a condition for becoming a tax haven, offshore financial centre or secrecy jurisdiction. Furthermore, the concept of ‘intellectual community’ is too vague to measure.

2.1.5 Level of democracy

Shaxson and Christensen (2013, p. 74) point out that in order to become a secrecy jurisdiction financial actors must neutralize democratic challenges to their plans. This means that the level of democracy is an important factor and that a lack of certain democratic procedures is a precondition for realizing these plans. Level of democracy is of course a very broad phenomenon that involves many aspects and not every aspect might be of equal importance in preventing policies of financial secrecy that do not have the approval of a significant part of the electorate. Thus, the question at stake here is in what ways can plans to create financial secrecy on the side of one minor group in the country be halted by means of democratic procedures. The obvious way is by means of a vote in parliament. But the parliament should also consist of representatives that have been chosen through fair elections with an ample and diverse choice of political parties. Additionally, there need to be sufficient checks against corruption. Another very important aspect is that the electorate needs to know about the plans to implement financial secrecy. Thus, the electorate needs to have access to correct and up-to-date information. These features of democratic systems are included in many so-called democracy indices and these can be used to assess the level of democracy of jurisdictions (Munck & Verkuilen, 2002).

The relation between level of democracy and financial secrecy is likely to be complex. Indeed, a very low level of democracy is usually seen to coincide with a low quality of governance (Rivera-Batiz, 2002), whereas as good quality of governance is supposedly a condition for becoming a secrecy

jurisdiction. It is therefore unlikely that autocratic states become secrecy jurisdictions. Genschel et al. (2016) found that small autocratic states are also less likely to engage in tax competition and become a tax haven, than democratic small states. According to the authors the reason for this is that autocratic leaders are less concerned about welfare of the population and second, because low taxes are less able to attract foreign capital in autocratic states. The most likely scenario is thus that secrecy jurisdictions are not non-democratic but lack some subtle components of democracy that would otherwise prevent the unsupported creation of financial secrecy.

2.1.6 Proximity to major capital exporters

Other findings (Dharmapala & Hines, 2006) indicate that “[tax havens] are physically close to major capital exporters”. According to Gallup et al. (1999) proximity to major exporting regions of capital goods – Gallup et al. use New York, Tokyo and Rotterdam – increases the economic openness of a country which is therefore more likely to reduce corporate tax rates. This would mean that international economic openness is an intermediate factor between distance and tax haven-ness. Being close to a major capital exporter thus enhances economic openness which then somehow leads to an incentive to reduce tax rates. This concerns two relations which have to be further explained.

First, why does being physically close to a major capital exporter lead to increased international economic openness? By ‘capital goods’ Gallup et al. (1999) are referring to machinery and transport equipment. The explanation that Gallup et al. (1999) give is that the price of capital goods is affected by distance and thus by transport costs. Countries that are physically close to major capital exporting regions can import capital goods at a cheaper price and therefore prefer to import these goods instead of producing them themselves. The increased import implies an increased international trade to GDP ratio, and therefore higher economic openness.

Second, why does this increased economic openness, due to increased imports, lead to reduced corporate tax rates? A country typically reduces its corporate taxation rates to attract foreign investors or to prevent domestic enterprises from leaving the country (Slemrod, 2004). A country that has a high import of relatively cheap capital goods usually also sees an increase in production and this is followed by an increase in the export of consumer products (Lee, 1995). When foreign sales increase and become an increasingly large share of the turnover, enterprises in this country become more and more dependent on foreign sales. To maintain competitive prices in international trade companies ask for reductions in corporate tax rates and governments will often concede to this because they notice that these companies and thus domestic employment has become dependent on international trade. They will also concede because of the argument that lower corporate tax rates lead to increased turnovers which might then result in a net increase in tax revenues.

Thus, proximity to a major capital exporting country leads to an increased import of cheap capital goods, which leads to increased exports, which leads to lower corporate tax rates. However it is questionable whether being close to a major capital exporting country and the same chain of events also leads to more financial secrecy. This relation does not make sense because there are no advantages to financial secrecy in the country that hosts the manufacturing process. For this reason we cannot make a comparison between corporate tax rates and financial secrecy with respect to the effects of proximity to major capital exporting regions.

2.1.7 Economic openness

But can we make a comparison for economic openness? Economic openness increases the likelihood of reductions in tax rates, but will it also lead to financial secrecy? It is difficult to find an answer to this question because many countries with a high degree of openness to trade are also countries with a small population size, area size, little natural resource and a small economy (Briguglio, 1995), all of which are said to have a positive effect on the likelihood of financial secrecy. Furthermore secrecy jurisdictions are often involved in the offshore business and this in itself leads to high amounts of exports of financial services, which will then be reflected in the economic openness index figures. On the basis of the literature there is no reason to suspect that economic openness has an independent effect on financial secrecy.

2.1.8 Being landlocked

Tax havens are also “unlikely to be landlocked, are likely to be situated on islands, and large proportions of their populations live close to coasts” (Dharmapala & Hines, 2006). These factors are seen as indicators of international openness. Outside of Europe there are very few high-income landlocked countries. The exceptions in Europe, such as Luxembourg, Switzerland, Austria, are probably due to their integration within the European markets. While these countries are landlocked, they are still very close to the core economies of Europe. This is vastly different from for instance a country like Bolivia where in a city such as La Paz millions of people live very remote from the core economic regions in South-America. Furthermore, nine of the twenty poorest countries in the world are landlocked (MacKellar et al., 2000), which is a lot considering that countries with coastal access by far outnumber landlocked countries.

The disadvantage of being landlocked stems from not having access to the sea (Gallup et al., 1999), which raises the question of what is the importance of having access to the sea. The accepted theory is that landlocked countries face higher transport costs both for imports and exports (Cárcamo-Díaz, 2004) because sea transport tends to be less expensive than land transport. This is underpinned by empirical evidence like in the work by Venables and Limão (2001) who found that in South America landlocked countries median transport costs are 46% higher than in countries having access to the sea. Aside from less international trade higher transport costs also cause less and more expensive import of capital goods which makes economic growth more difficult (Gallup et al., 1999). Another explanation has been explored by Carmignani (2015) which is that landlocked countries outside of Europe have lower quality institutions because they are more often disconnected from international flows of knowledge and ideas.

But why are tax havens unlikely to be landlocked countries? If it is true that landlocked countries are economically speaking in a structurally disadvantaged position, then it would make sense to think that they could benefit from more competitive tax policies in order to compensate for the increased costs to investments in a landlocked country. Instead many landlocked countries still maintain a corporate income tax rate of 25% or higher (Deloitte, 2017). One possible explanation for this phenomenon is that the geographic disadvantages are so big that they cannot be overcome by lowering corporate income taxation, in which case nothing would be gained by doing so. This is especially true for countries that besides remoteness have to deal with inadequate infrastructure and rough terrain. Another explanation might be that a country has considerable social security costs and taxation cannot be reduced even if that means more revenue after a few years because human lives are at stake.

On the other hand there are also countries where the geographic disadvantages are less difficult to overcome and where tax reductions might become successful in enhancing international trade and investments. This is particularly true for low-income countries in eastern Europe (Deloitte, 2017). But access to the sea does not seem to be a differentiating factor in this case. They do however have in common that they are more remote from the core economies of Europe than countries in Eastern Europe like Czech Republic and Slovakia that are closer to the core economies of Europe.

However, while landlocked countries might reduce their corporate tax rates, they almost never go below 10%. Most countries or jurisdictions that are said to be a tax haven do not levy corporate income taxes. In addition, jurisdictions with no (corporate) income taxes have different motives than the landlocked countries reducing their taxes. They do not so much intend to attract real economic activity but intend to become an offshore financial center. Thus, a country like Hungary which reduced its corporate tax rate by the 1st of January 2017 to 9% (Deloitte, 2017) in order to lure foreign direct investments (Byrne, 2016) cannot be compared with the Cayman Islands or the Bahamas.

There is however no clear reason as to why a country like Hungary cannot become an offshore financial center. Indeed, there are several landlocked countries which are undoubtedly offshore financial centers. This for example includes Andorra, Switzerland, Liechtenstein and Luxembourg (Zoromé, 2007). However, these are all situated in Western or Central Europe and outside of this region there are no landlocked offshore financial centers. The reason for this is probably that in contrast to the landlocked states in Western Europe, landlocked jurisdictions in other parts of the world are more remote from core economies. This would mean that the factor of landlocked-ness is contingent on the geography of states and is in itself not a condition for becoming an offshore financial center. Thus there is no meaningful relation between landlocked-ness and the supposedly diminished economic openness because of it, and an inability to become an offshore financial center. It is more likely that proximity to core economies increases the likelihood of success as an offshore financial center and that in general landlocked countries happen to be situated remote from the major economies of the world. Following this line of reasoning there is no reason to suspect a direct relation between landlocked-ness and financial secrecy either.

2.1.9 Island-ness

Next, many tax havens are situated on islands (Hampton & Christensen, 2002). In the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b) too 30 out of 50 secrecy jurisdictions (jurisdictions with a secrecy score above average) are islands or situated on islands. This in particular concerns small islands. According to Dharmapala & Hines (2006) islands are on average more economically open and there is ample evidence to support this thesis (Worldbank, 2016). Island economies on average have a large international trade to GDP ratio.

There may be several reasons why island economies are more economically open. It has already been said that adjacency to the sea reduces the costs of international transport. However many countries have access to the sea and on average countries with coastal regions are still less economically open than island states (Worldbank, 2016).

There may be another factor which happens to coincide with the island factor which is that most island states are also small in territory, population and economy (CIA World Factbook, 2016). As a consequence of this these countries do not have the factor endowments to produce enough and rely

on the imports of capital goods and consumption good. On the other hand a country like the United States which is a large country in terms of territory, population and economy, has a low economic openness (Worldbank, 2016) because it relies only to a very small extent on imports of capital and consumption goods as most of it is produced domestically. The suggestion that imports have a large effect on the economic openness index figures is also confirmed by the Balance of Payment Statistics published by the IMF (2017). In other words, countries that have large export flows can still have low economic openness because of low imports. This includes many large economies such as the United States, France, Japan, China, India and Brazil (Worldbank, 2016).

Thus, while economic openness may be enhanced by having access to the sea, there is no reason to suspect that this effect is stronger for island states than for continental countries with access to the sea. It is more likely that the higher economic openness of island states and countries situated on islands is due to them being smaller in territory, population and economy which increases the need for imports, which is then reflected in the economic openness index figures.

Moreover, considering that nothing suggests that being an island constitutes an extra incentive to become a tax haven or secrecy jurisdiction, it is likely that island-ness does not have an independent effect on financial secrecy and that any correlation is due to island states being small which, as argued before, does supposedly have a meaningful effect on financial secrecy.

2.1.10 Legal system

Furthermore “[tax havens] are also likely to have British legal origins – i.e. English common law - and parliamentary systems, and to use English as an official language”, which is probably the result of former colonial ties (Haberly & Wójcik, 2014). Indeed many no-tax jurisdictions or secrecy jurisdictions as described in the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b) are former British colonies. Here too the question is what the determining factor is and which phenomena just happen to coincide with the determining factor.

Can having a British legal system, parliamentary system or having English as an official language be a condition of becoming a tax haven or secrecy jurisdiction? These relations seems very far-fetched, but it is striking that among the small island secrecy jurisdictions/tax havens many are former British colonies or are still connected to the UK as a Crown Dependency or Overseas Territory, while certainly not every island in the Caribbean or Pacific area is a former British colony. Out of the 50 secrecy jurisdictions in the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b) 30 are former British colonies or current dependencies of Britain. In contrast, only 2 jurisdictions are Dutch dependencies, and only 1 secrecy jurisdiction is a former French colony.

It could be that the correlations with the legal system, parliamentary system and the English language are just spurious relations that result from their correlation with being a former British colony or being a current British dependency. This would suggest that a historically-rooted path-dependent connection with the UK is itself of importance perhaps because of long-standing relationships between financial institutions of these countries and the trust and institutional compatibility that evolves from this. But the same could actually be said of other Western-European colonizing states. France for instance was also colonizing country that imposed its language and institutions on its colonies (Prochaska, 2002). Moreover, like Britain France has also always been one of the largest economies of the world (Worldbank, 2017), which suggests that like England it has a large elite that desires to send its wealth offshore. Additionally, the Netherlands was able to keep

control over its colonies to a late date and have kept possession of several overseas dependencies. Nevertheless neither the French overseas territories nor the Dutch have become significant offshore financial centres (Tax Justice Network, 2015^b). This suggests that the English did or are doing something different than the Dutch and the French.

One possible explanation is that legal systems of British origin on itself offer more possibilities for people who want to send their money offshore and therefore countries having a British legal system are in a better position to become an offshore financial centre. Indeed, English common law systems often offer a wide variety of legal arrangements including trusts and a special type of private foundations which many other countries do not offer. Probably the most important legal arrangement in this regard is the trust. The trust is characteristic of English common law, although Liechtenstein has a somewhat similar arrangement called an 'Anstalt' (Glos, 1984). All 44 common law jurisdictions included in this research feature a domestic trust law (Global Forum reports, 2016).

Furthermore, private foundations are not an exclusive feature of common law systems, but the specific form assumed by private foundations in these countries is characteristic to common law systems (Panico, 2016). According to Panico (2016) there are three models of private foundations, which are the classical Liechtensteinian private foundation, the Dutch model and the common law model. The common law private foundation differs from the other two models because it is a 'disguised' trust, that is, a trust that has the status of being a legal person.

Common law jurisdictions also tend to offer protected cell companies and series limited liability companies. These are legal persons that offer an increased protection against claims. 23 out of 44 common law jurisdictions (Feetham & Jones, 2010) offer these kind of companies in their legislation, as opposed to 6 out of 58 civil law jurisdictions.

Another possible explanation is that being an former British colony these jurisdictions have to some extent similar institutions (in the broadest sense of the word) as the UK and the United States. In 2013 the UK and the USA are the largest sources of foreign direct investment (CIA World Factbook, 2016). It is therefore likely that they are also the largest sources of FDI into offshore financial centres. In this scenario it is not the inherent features of the legal system that make it successful, but the fact that the system has commonalities with the British and American system and is therefore more compatible.

There is also a third explanation which is less likely. English common law is the most widespread legal system in the world (Wood, 2007). English common law is applied in 27 % of the 320 legal jurisdictions in the world. 30 % of the world's population is living under English common law and this legal system accounts for 21 % of the world's land mass. Thus the prevalence of an English legal system among tax havens and secrecy jurisdictions might be explained by the fact that the English legal system is the most widespread legal system in the world. However, this explanation is not very likely because the correlation between legal system and tax haven-ness is too strong to be explained by this. Indeed, the second most widespread legal system is the French legal system which is used in 26 % of jurisdictions. The fact that English common law is used in 27 % of the jurisdictions and the French legal system in 26 % of the jurisdictions does not explain why almost all tax havens and secrecy jurisdictions have English common law.

In summary, it is possible that legal systems of British origin are more popular among people who want to send their assets offshore because these systems on itself offer more fit solutions and offer better protection against legal claims. It is also possible that they are more popular because much offshore capital comes from the UK and USA which happen to have compatible systems.

2.1.11 Parliamentary system

Tax havens are more likely to have a parliamentary system of British origin (Dharmapala & Hines, 2006). Such a parliamentary system is also called the Westminster system. There is on the basis of the literature and to the best of my knowledge no reason to suspect that the parliamentary system has an independent effect on financial secrecy. Thus, the other characteristics of former British colonies must account for a possible correlation of financial secrecy and parliamentary system.

2.1.12 English as an official or primary language

Tax havens are more likely to have English as an official or primary language (Dharmapala & Hines, 2006). There are two possible explanation of why an English speaking jurisdiction is more fit to become a tax haven than non-English speaking countries. First, obviously English being a world language leads to better communication with clients in the source country. This leads to fewer misunderstandings and an overall efficiency increase in the communication between financial institutions, clients, lawyers and consultants which results in less transaction costs. Second, English-speaking jurisdictions share the same language with the UK and the USA, countries which, as said before, are supposedly large contributors to offshore finance.

2.1.13 Natural resources

Lastly, “tax havens have substantially smaller natural resource endowments than non-tax havens” (Dharmapala & Hines, 2006). Although, as has already been mentioned, this can be a correlate of being a small country it is possible that natural resource endowment has an independent effect on tax haven-ness. There are two possible explanations for why natural resource endowment affects the likelihood of becoming a tax haven. The first explanation has to do with the absence of natural resources. Countries who do not have or have few natural resources lack a source of income and this might create an economic necessity to shift towards offshore financial services.

The second explanations has to do with an abundance of natural resources (Dharmapala & Hines, 2009). An abundance of natural resources, might induce a resource curse (Auty, 1994), which refers to the phenomenon of other exporting sectors becoming less competitive because of the export of natural resources. Thus, a resource curse would also hamper exports of financial services and countries with large amount of natural resources do not have incentives to become a tax haven and a secrecy jurisdiction. There are four ways in which the resource curse may operate.

The first mechanism is the Dutch disease (Corden, 1984). This term refers to the large inflow of foreign currency and this leads to appreciation of the local currency. This leads to decreased revenues in other sector. This leads to a lack of investment capital in these sector and therefore a diminished productivity growth. Besides a nominal appreciation of the local currency the Dutch disease also involves a real appreciation of the local currency, meaning that labour, capital goods and land become more expensive. The third way in which the Dutch disease works is through the uncertainty that evolves from the significant fluctuations of resource prices on international markets. This uncertainty has a negative influence on investments in other sectors like manufacturing and the service sector.

A second mechanism through which the resource curse operates is rent-seeking (Baland & Francois, 2000). The resource revenues may be used to improve and secure the position of a particular class of people. This means that capital keeps circulating within this group instead of investing it where it will be most profitable. This of course reduces economic efficiency. Rent-seeking increases the share in the national wealth of this group of people but the population as a whole will likely become poorer.

The third mechanism concerns the observation that countries that have high revenues on natural resources tend to underestimate the importance of education and therefore have low public expenditure on education (Gylfason, 2001). In the long run this leads to insufficient human capital and therefore lower productivity in other sectors.

The fourth mechanism is that the resource revenues tend to be consumed instead of invested and this leads to a lack of capital in non-resource sectors (Arezki & van der Ploeg, 2011).

The hypothesized correlations mentioned here, imply a positivist approach. The application of a sort of mechanistic approach to the phenomenon's of financial secrecy and transparency might seem far-fetched since the geographies of financial secrecy and transparency are the outcome of much more complex, contingent historical processes (Palan et al. 2010; Shaxson, 2011; Wainwright, 2011). But the fact remains that we know very little about the determinants of financial secrecy and this approach will verify or falsify these correlations, after which a further investigation into the determinants of financial secrecy becomes possible.

2.2 Hypotheses on the determinants and correlates of financial secrecy

In the section above there has been a discussion on the basis of evidence from the literature regarding possible determinants of financial secrecy. In this section I will provide an overview of the hypotheses on the determinants of financial secrecy.

1. Small countries are more likely to be secrecy jurisdictions.

I expect to find that small jurisdictions ('small' should be interpreted in the broadest sense) are more likely to be a secrecy jurisdiction because:

- a. A small country typically has a small population and therefore a small labour force. A large labour force is a requirement for obtaining economies of scale and increasing returns to scale which are required to be competitive in international trade.
- b. A small country often has few natural resources, the abundance of which is in certain sectors required to obtain economies of scale and a strong bargaining position on world markets.
- c. A small country usually has a small-sized economy. A small economy size means a small share in international trade which causes dependency on world markets. This dependency makes it more vulnerable and a more risky investment for foreign investors, and this results in a lack of foreign capital in exporting sectors.

Leaving all other economic parameters aside for a moment, all three of these mechanisms, although they are not always present to the same extent, lead to small countries lacking income on exports of goods, and thus small countries, especially those where all three mechanisms are present, have more incentive to move towards the offshore business because of economic necessity. These of course are generalizations. Some small countries will not be affected by a lack of income in non-service sectors because of a specialization in a highly differentiated product.

2. High-income countries are more likely to be secrecy jurisdictions.

I expect to find that jurisdictions with high GDP per capita are more likely to be a secrecy jurisdictions because financial secrecy is used to establish an offshore finance sector, which then generates high incomes. This implies that wealth is an effect of financial secrecy and not a cause.

3. A sufficient quality of governance is a precondition for becoming a secrecy jurisdiction.

I expect to find that jurisdictions which score high on indices of governance quality are more likely to be a secrecy jurisdiction because:

- a. These jurisdictions typically have a better regulatory quality which means they have lower incidence of market-unfriendly policies and are therefore a safe destination for offshore capital.
- b. These jurisdictions typically have a better 'rule of law', meaning that there is a (perceived) low incidence of crime, a reliable judicial system and a good enforceability of contracts. This implies that assets are protected against theft and fraud and that for this reason the jurisdiction is a secure destination for offshore capital.
- c. These jurisdictions typically are politically stable, which means that there is little chance that the government is overthrown by means of violence. These sudden regime changes might bring about chaos, lawlessness, economic downfall, or even dispossessions all of which are perceived as threats by those holding assets offshore.

4. A low level of democracy is a precondition for becoming a secrecy jurisdiction.

I expect to find that secrecy jurisdictions' government systems lack certain democratic features and that because of this plans for becoming a tax haven and secrecy jurisdiction could not be stopped, or could not be negotiated in order to find some middle-ground.

5. Economic openness is positively associated with financial secrecy.

I expect to find that economic openness correlates with financial secrecy. This correlation would be due to small countries being more economically open.

6. Non land-locked countries are more likely to be secrecy jurisdictions.

I expect to find that secrecy jurisdiction are less likely to be landlocked. However, it is likely that this relation is due to landlocked countries being more remote from the core economies of the world and thus being landlocked has no independent effect on financial secrecy.

7. Being situated on an island is positively correlated with financial secrecy.

I expect to find that island-ness is positively correlated with financial secrecy and that this correlation is due to islands generally being small.

8. Having a legal system of British origin is positively correlated with financial secrecy.

I expect to find that jurisdictions with a British legal system are more likely to be a secrecy jurisdiction because:

- a. British legal systems provide for the creation of trusts and private foundations which can be excellent investment vehicles for offshore capital. They also offer other legal entities and arrangements that are well-appreciated by offshore investors.
- b. Jurisdictions with legal systems of British origin have more or less the same institutions as the United Kingdom and the USA. These two countries are among the world's largest economies and the largest sources of foreign investments. It is therefore likely that these countries also account for a large share of offshore capital flows and they would favour offshore financial centres with British legal systems for having the same institutions.

9. Having a Westminster parliamentary system is positively associated with financial secrecy.

I expect to find that having a parliamentary system of British origin has a positive effect on financial secrecy. However, there is no reason to suspect that the Westminster parliamentary system has an independent influence on financial secrecy. The positive effect will be due to the fact that countries with a Westminster parliamentary system often also have a legal system of British origin and English as a primary language.

10. Secrecy jurisdictions are more likely to have English as a primary or official language.

I expect to find that the likelihood of becoming a secrecy jurisdiction increases with having English as a primary or official language because:

- a. English is a world language. Having English-speaking employees allows companies, including those in the financial sector, to do business with almost any place in the world. It therefore increases the amount of potential clients. It also enhances efficiency of transactions and thereby reduces transaction costs.
- b. English is the primary language in the UK and the USA. These are prominent source-countries of offshore foreign investments and assuming that they favour an offshore financial centre that speaks the same language, this too explains why English speaking countries are more likely to be successful as offshore jurisdictions.

11. Financial secrecy increases with lower rents on natural resources.

Although, as mentioned before, low income on natural resources often coincides with other features of small countries which have an effect on financial secrecy through the lack of economies of scale, I nevertheless expect that natural resource endowment has an independent effect on financial secrecy. Indeed, not all small countries have few amounts of natural resources and not all big countries have large amounts of natural resources. Natural resource endowment can be expected to have an independent effect on financial secrecy because:

- a. The lack of income on natural resources might induce an economic necessity to become an offshore financial centre.
- b. Having a high income from natural resources might induce a resource which entails that other sectors including the financial service sector become less competitive in international trade.

2.3 Conceptual model of the determinants of financial secrecy

The figure below recapitulates graphically the factors that are hypothesized to have an independent effect on financial secrecy and also the hypothesized covariance between several factors. Where a covariance is considered present, there is both an independent effect and a spurious effect due to the covariance. Factors that were said to have no independent effect on financial secrecy, but are nevertheless to be correlated with financial secrecy are not in the conceptual model.

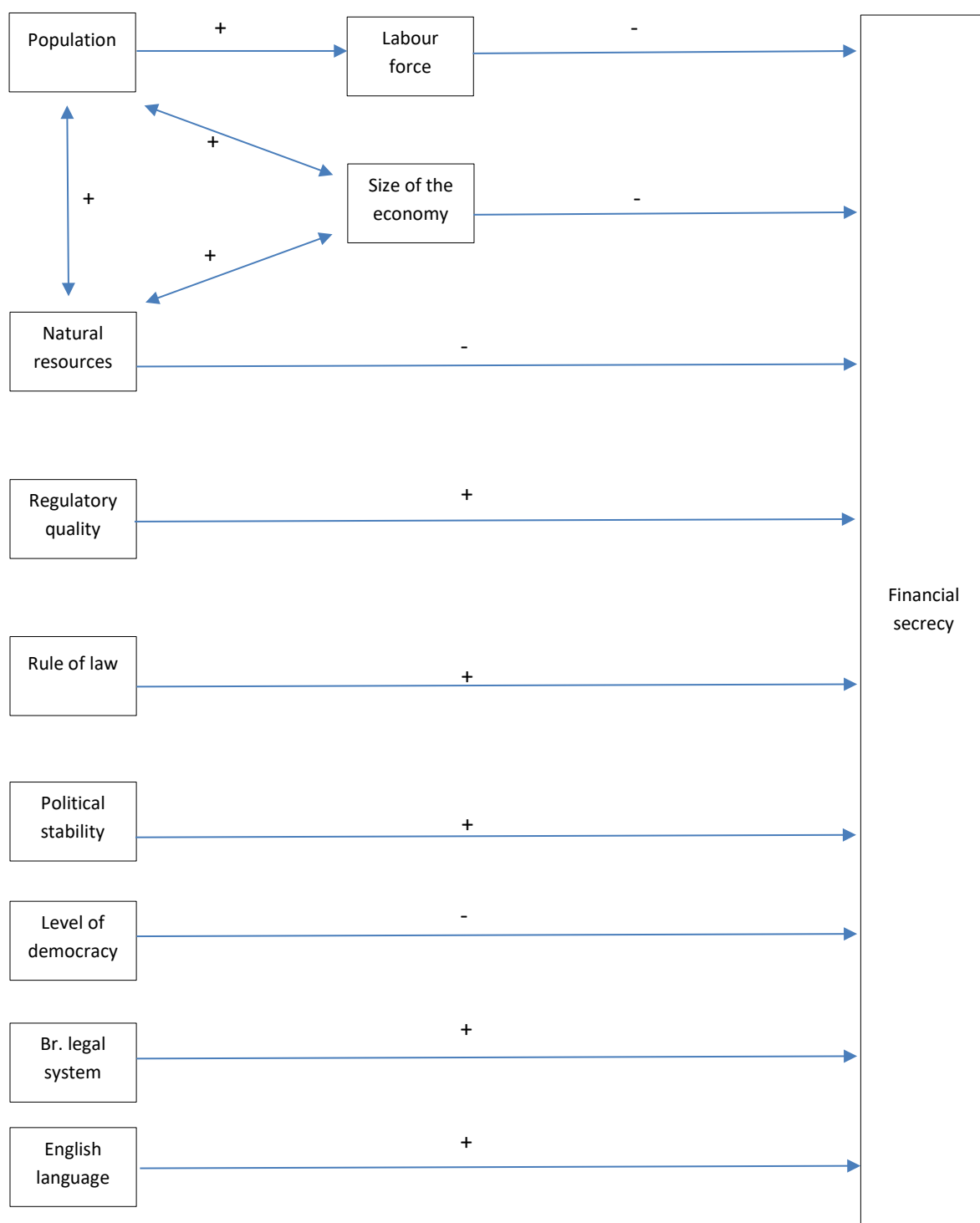


Figure 2: Conceptual model of the factors influencing financial secrecy

2.2 The various types of financial secrecy

For the measurement of financial secrecy I draw on the operationalization that was used by Tax Justice Network (2016) for the Financial Secrecy Index 2015. The reason for this is that, to the best of my knowledge and according to their own declaring, it is the most comprehensive list of secrecy indicators that exists today (Tax Justice Network, n.d.), with the exception of the methodology that is used for the Financial Secrecy Index 2018. I have not included all of the indicators as some of the indicators show very little variation. This is the case for two indicators namely the *public disclosure of company beneficial ownership* and the *public disclosure of company accounts*. Very few jurisdictions require these *public* disclosures and hence these variables have little effect on the list of secrecy scores. Most likely they have been added by Tax Justice Network to stress the importance of public disclosure. I will also include the indicator for which I gathered data during my research internship at Oxford University in collaboration with Tax Justice Network: the secrecy of real estate ownership.

The subdivision into different kinds of secrecy is an advance in relation to the research by Dharmapala and Hines (2006) who used a ready-made list of 41 tax havens and could therefore not assess the influence of factors on specific kinds of secrecy. This research also differs from that of Dharmapala and Hines (2006) in that it exchanges the binary terminology of tax haven and non-tax haven for a continuous secrecy-transparency spectrum.

In this section I will discuss the various types of financial secrecy that will be assessed in this research. Second, I will also discuss how these types are affected by the aforementioned factors.

2.2.1 Bank secrecy

A jurisdiction can be said to have banking transparency when it can answer positively to the following criteria (Tax Justice Network, 2016):

- a. Banking secrecy does not have a legal standing. Bank secrecy has a legal standing when written laws prescribe the secrecy of banking information.
- b. The jurisdiction does not allow anonymous bank accounts.
- c. The jurisdiction requires banks to keep banking records for at least five years.
- d. The jurisdiction requires financial institutions to maintain records over time.
- e. The jurisdiction requires financial institutions to report large transactions.
- f. Tax authorities have sufficient power to obtain banking information.
- g. There must be no obstructions to sharing banking data.
- h. Whistle-blowers are free from prosecution.

These transparency measures should assure that the appropriate information is available to tax administrations. Tax Justice Network (2016) considers it insufficient to look solely at the legal standing of banking secrecy. The legal standing of banking secrecy is also referred to as 'formal banking secrecy', which is opposed by 'factual banking secrecy'. Factual banking secrecy refers to the deliberate sloppiness on the side of financial institutions in verifying the identity of account holders. Formal banking secrecy has been in decline in the past decade as jurisdictions with bank secrecy were pressured by the OECD to amend their laws.

A 2011 OECD report (OECD, 2011, p. 2) famously announced the end of the bank secrecy era. The report states that in the period 2009-2010 almost 14 billion Euros of tax revenue had been secured because of the collective effort of OECD and G20 countries to abolish harmful bank secrecy

legislation. These 14 billion Euros were disclosed through voluntary disclosures, which means that people with undeclared assets offshore were given the chance to report their assets without being prosecuted. The increased restrictions on bank secrecy made it preferable for many with assets offshore to come forward.

However, it is likely that many tax evading companies and individuals and especially those with more advanced arrangements have not felt the incentive to come forward voluntarily. The report acknowledges that still billions of dollars somehow end up in offshore jurisdictions and financial institutions are involved in this (OECD, 2011). Thus, it is clear why the Financial Secrecy Index has as its first indicator banking secrecy: trusts, shell companies and other anonymous legal entities need to maintain a bank account and the information held by banks is often the only way to detect fraudulent practices (Tax Justice Network, 2016, p. 16).

How will banking secrecy be affected by the factors mentioned in the literature? Bank secrecy is perhaps the most important type of financial secrecy because it is one of the most common types of financial secrecy (Tax Justice Network, 2015^b). For this reason it stands to reason that there will be a large overlap between the factors influencing aggregated financial secrecy and the factors influencing banking secrecy. Thus, the same hypotheses as regard to financial secrecy apply here as well.

2.2.2 Trusts and foundations register

This indicator consists of four criteria:

- a. There is a public register of trusts accessible at a cost of less than 10 Euros, US dollars or GBP.
- b. There is a public register of private foundations accessible at a cost of less than 10 Euro, US dollars or GBP.
- c. The jurisdiction's legislation does not provide for trusts.
- d. The jurisdiction's legislation does not provide for private foundations.

A jurisdiction can obtain a full transparency credit when it has a register of all trusts and foundations or alternatively when it does not provide legislation for the creation of trusts and foundations.

A trust is a legal entity that has the legal ownership of assets, while the gains from these assets are paid to beneficiaries. A trust is created by a settlor who owns the assets. A trustee represents the trust, is the legal owner of the assets and takes care of the assets. The names of the settlor, trustee and beneficiaries are usually mentioned in a trust deed and thus so far nothing suggests that a trust creates secrecy. The American tax administration, the IRS (IRS, 2017) lists several ways in which trusts can be abused. Most importantly, the control of a company can be handed over to a trust. This domestic trust sends the income from the company to a foreign trust in a tax haven country. The company is usually the trustee of this foreign trust. Then a second foreign trust is created which is controlled by the first foreign trust and which receives the business income from the first foreign trust. Because the trustee that now owns the income on the assets is a foreign individual there is no longer a requirement to file with the domestic tax authorities. The trust's control of the foreign trusts becomes opaque.

Moreover, since the trusts are created in a tax haven there is usually no accessible register of trusts. If there is a register of trusts, identification data of the individual who owns the assets can be obtained, albeit often through different steps and with considerable effort. If there is a register it will also be possible to establish whether there is any economic substance to the transfer of money to the foreign trusts.

Private foundations are, like trusts, used to hand over the control of assets to a representative. But like in the case of trusts, there are ways to secretly maintain day-to-day control over the assets. In all countries private foundations require registration but in some tax haven jurisdictions the registration only involves recording of identification details of one member of the foundation council. The beneficiary or beneficiaries can be another council member and in this way retain direct control of the assets and set up a tax evasion scheme.

As mentioned before, trusts and private foundations are typical Anglo-Saxon legal entities. It is therefore probable that few of the British dependencies and former colonies do not provide legislation for the creation of trusts and private foundations. Since they already provide for trusts and foundations there is a greater chance in these jurisdictions that the registration of trusts and private foundations is inadequate. For instance not all parties in the trust are required to register. It is therefore likely that the factors 'legal system' and 'English as primary language' will show strong correlations with this type of financial secrecy. These factors will influence the secrecy of foundations and trusts for the same reasons as in the case of generic financial secrecy.

With respect to the other factors mentioned in the literature and described above, there is no reason to expect that their influence on financial secrecy in general is different than their difference on the secrecy of trusts and private foundations.

2.2.3 Recorded company ownership

This indicator measures whether companies are required to report details on beneficial owners to a governmental authority. This indicator does not make use of the definition of beneficial ownership that is accepted by the European Union and which sets a minimum of a 25 percent share in the entity. A full transparency credit on this indicator is given when natural persons holding at least 10 percent of the shares in an entity are recorded. This includes full names, country of residence and address. The absence of the recording of beneficial ownership of companies makes it possible to anonymously own, control and invest in a company. This leads to increased risk of tax evasion because an individual or legal entity may pay for services or goods supplied by the company that is secretly owned by the same individual and thus he reduces his taxable income. Tax authorities may suspect that it is not an honest business transaction but there is no way find out because beneficial ownership information is not recorded in the jurisdiction where the company was created. One can start a judicial procedure but this requires a lot of time and money, and even more so when there are several layers of anonymous companies.

According to Tax Justice Network (2016) the absence of recorded company beneficial ownership is a typical feature of tax havens and secrecy jurisdictions. It is likely that the factors affecting financial secrecy affect the secrecy of company ownership in the same way.

2.2.4 Country-by-country reporting

Country by country reporting means that companies are required to report their activities and profits for each country separately to a governmental authority. This indicator gives a full credit when all companies are required to file a country-by-country report. In reality this is not yet the case and usually only companies with a global turnover of more than 750 million US Dollars are required to file the country-by-country report. Also, some countries only require country-by-country reporting in specific sectors, most notably the banking sector and the extractive industries. These too are recent inventions and country-by-country reporting does not have a long history. In fact, the concept of country-by-country reporting was first proposed in 2003 by Richard Murphy (Murphy, 2003). The idea behind the concept was, in Murphy's words, that "we need to account for globalization locally". What he means by this is that profit shifting can be seen as a phenomenon of globalization and has become increasingly common. The concept of country-by-country reporting was designed specifically to obtain information about MNE's that currently cannot be obtained on the basis of current financial reporting standards. The following questions in figure 3 could be answered if a full-scale country-by-country reporting were to be adopted by jurisdictions (Murphy, 2012, p. 7):

- a. In which countries does a multinational company operate?
- b. What are the subsidiaries of each multinational corporation called in each jurisdiction in which it operates?
- c. What is the scale of a multinational corporation's operations in each country in which it operates?
- d. How much does a multinational corporation have invested in each place where it trades?
- e. Where does a multinational corporation record its profits?
- f. Where does a multinational corporation pay tax and how much does it pay there?
- g. What is the extent of intra-group trading within multinational corporations?
- h. Where does the company engage staff and how well, on average, do they pay their staff in each jurisdiction in which they work?
- i. Where does a multinational corporation exploit natural resources, and to what extent?
- j. By implication, and based on analysis of the foregoing data:
 - i. What is the risk of there being serious transfer mispricing within the group?
 - ii. If the level of activity and profit vary widely within the group does this suggest a high risk of tax enquiry at potential cost to future earnings?
 - iii. Is the multinational corporation a big user of tax havens, and if so what is the likely scale of the risk that results?
 - iv. What is the geopolitical risk within a multinational corporation and is that exacerbated by low tax payments?
 - v. What degree of risk does a company face if its operations in any country were to close?
 - vi. Is the company's employment policy universally fair and if not what risk does that imply?
 - vii. Is the company's activity sustainable?

Figure 3: hypothetical list of questions that could be answered through full-scale country-by-country reporting (Murphy, 2012)

These are highly relevant questions and clearly these questions could shed light on the tax avoidance schemes of multinational corporations. Of course there have been many revelations in recent years concerning tax avoidance by multinational corporations. But these leaks usually occur after the

damage has already been done and sometimes billions of tax revenues have already been lost. Thus, since country-by-country reporting was proposed in 2003 it has become increasingly seen as the best-qualified action against profit shifting and tax base erosion. That it was eventually adopted by the OECD in BEPS Action 13 (OECD, 2015), which was published in 2014, bears witness to the fact that it has found widespread support and is becoming an international standard. For this reason it can be seen as an indicator of financial secrecy.

This type of transparency is somewhat different from the first three mentioned above because country-by-country reporting is a recent development that is not yet a standard procedure undertaken in all countries. Notwithstanding the opinion of activist groups like Tax Justice Network (2016) the absence of country-by-country reporting is not (yet) seen by the international community as a form of financial secrecy, but rather as an extra effort conducted by countries willing to reorganize tax systems to account for present-day globalization.

Because of this it is probable that this type of financial secrecy will not show the same patterns as the former three. Indeed, many countries that are not considered tax havens or secrecy jurisdictions have not yet implemented country-by-country reporting (KPMG, 2018). But that does not necessarily make them secrecy jurisdictions. Another reason why this type will not show the same patterns is that many secrecy jurisdictions have implemented country-by-country reporting (KPMG, 2018; Tax Justice Network, 2015^b).

The map (KPMG, 2018) of countries that have implemented country-by-country reporting clearly shows that the least developed countries in the world have not implemented country-by-country reporting. Country-by-country reporting thus seems to be affected by development. There are only a few developed countries that have not implemented country-by-country reporting. These are Saudi Arabia, United Arab Emirates, Qatar and Bahrain.

It is therefore unlikely that this type of financial secrecy is affected by population size, island-ness, being landlocked, economic openness, legal system, parliamentary system and the English language. On the other hand, since commitment to country-by-country reporting seems to coincide with development it is probable that it also coincides with size of the economy and wealth.

A correlation of GDP (per capita) and country-by-country reporting might be explained in the following way. Many multinationals with a global turnover exceeding 750 million US dollars do not yet have branches in less developed countries (Buckley & Clegg, 2016). It thus makes sense that the OECD pressures developed countries to implement country-by-country reporting while the OECD is not in a hurry to get country-by-country reporting in less developed countries.

2.2.5 Reporting of payments

This indicator measures whether a jurisdiction requires resident taxpayers to report payments of dividends and interest to non-residents to the domestic tax administration. Dividends and interest payments are in many countries subject to withholding taxes and so joint stock companies and banks are usually required to report these payments. However, often when a jurisdiction does not levy withholding taxes on dividend and interest payments or levies withholding taxes anonymously it is probable that it does not require the reporting of these payments to non-residents. In these countries, a non-resident can receive these payments on his bank account, without disclosure to the tax administration. This creates an incentive to create joint stock companies and open bank accounts

in these countries, and this leads to opaque international structures, which are inaccessible to tax authorities.

The reporting of these payments is not common and the absence of the reporting of payments is not something exclusive to secrecy jurisdictions (Tax Justice Network, 2016). Hence this type of financial secrecy will probably have somewhat different patterns as well. It is probably not affected by many of the determinants mentioned in the literature. There is also no indication of which factors might have an effect on this specific kind of financial secrecy.

2.2.6 Efficiency of tax administration

This indicator measures whether tax administrations use taxpayer identifier systems to enhance the efficiency of analysing information and whether the tax administration has a special unit for large taxpayers. Using a taxpayer identifier system means that a unique number is used to match information reported by “financial institutions on interest payments and by companies on dividends” (Tax Justice Network, 2016). This implies that the information reported by financial institutions and companies should include the taxpayer identifier number of the recipients of their payments. This enables tax administrations to identify cases of non-compliance faster. If the recipient of the payments has not reported these to the tax administration, the information obtained from companies and financial institutions will instantly give certainty about the concealment.

Clearly numbering taxpayers makes the tax system more efficient, but is efficiency really necessary to avoid tax evasion? Tax Justice Network (2016) seems to think so and makes the rather bold assertion that inefficient tax administrations attract wealthy individuals and corporations. This is not backed by evidence. Savic et al. (2015) conducted an analysis on 13 European countries in order to find out whether the efficiency of tax administrations is related to the size of the grey economy. Efficiency was not measured on the basis of a taxpayer identifier system or the existence of a large taxpayer unit, but on the basis of an equation which involves compliance, the number of employees of the tax administration and the rate of unemployment. The rate of unemployment is supposed to indicate the size of the grey economy. It followed that in countries where the tax administration was more efficient, the size of the grey economy was estimated to be significantly lower. The grey economy does not exactly coincide with all sorts of tax evasion, and probably not the tax evasion of wealthy individuals and corporations, but it does show a relation between efficiency and compliance. So while there is no empirical evidence that inefficiency attracts persons willing to evade taxes, it does stand to reason that dangerous inefficiencies create an incentive for evasion. The existence of a large taxpayer unit is also seen as a commitment to efficiency because large and multinational corporations significantly differ from other taxpayers in terms of complexity.

Only about a quarter of the jurisdictions included in the Financial Secrecy Index 2015 (Tax Justice Network, 2016) have an efficient tax administration which indicates that an inefficient tax administration is not a feature of tax havens or secrecy jurisdictions per se. This type of financial secrecy will therefore show a different pattern than aggregated financial secrecy. The scoring on this indicator in the Financial Secrecy Index (2016) gives the impression that it is predominantly large countries that have efficient tax administration. This makes sense because a larger population means more taxpayers and this might create an incentive to improve the efficiency of the tax administration. I expect therefore population size and GDP to have an effect on this type of financial

secrecy whereas there is no reason to suspect that other factors will have an effect on this type of financial secrecy.

2.2.7 Tax system

This indicator looks at what sort of system is used by jurisdictions to avoid double taxation. Most jurisdictions want to avoid that income that has already been taxed in another country is taxed again at the normal tax rate by the domestic tax administration. The most radical way to avoid this is to exclude worldwide income from the tax base. This is called a territorial tax system in which all kinds of foreign income are exempted. A system, therefore, in which only income within the national territory is taxed.

A second way to avoid double taxation is to include worldwide income in the tax base, but to subtract the amount of tax paid abroad from the amount payable to the domestic tax administration. To give an example: an individual has an income of 40 000 in country B and 10 000 in country A. The individual is resident in country A. The tax base is 50 000. Theoretically, on the basis of this tax base and a tax rate of 24 % he owes the domestic tax administration 12 000. But he has already paid 10 000 in country B and so he only needs to pay 2000 to the domestic tax administration. Many countries also hold a proportionality limit which sets a maximum to the amount that can be subtracted. Usually this limit is calculated as $\text{foreign income} / \text{total income} * \text{tax payable to domestic tax administration}$. In this case the equation would be $40\,000 / 50\,000 * 12\,000 = 9\,600$, so only 9600 can be subtracted instead of 10 000. The proportionality limit makes sure that the income is taxed in both countries according to their respective tax rates. So in the end it is as if 10 000 is taxed in country A at 24 % and 40 000 is taxed in country B at a rate of 25 %. But the calculation of the tax base as the aggregate income from all over the world was still necessary since country A has a progressive tax system. This implies that a tax credit system is only appropriate for progressive tax systems where the tax rate increases with income.

A third way to avoid double taxation, although it does not fully prevent double taxation, is a deduction system. Deduction means that taxes paid elsewhere are deducted from foreign income before adding foreign income to the domestic tax base. So to use the same example: this individual has a foreign income of 40 000 but pays 10 000 in taxes abroad, therefore only 30 000 is added to the tax base which then will be $30\,000 + \text{income country A} = 40\,000$. This amount is taxed at 24 % which amounts to 9600. So in the end he pays $10\,000 + 9\,600 = 19\,600$ in taxes, whereas in the credit system in which exactly the right amount was paid to each tax administration, he paid $10\,000 + 2\,400 = 12\,400$. If there was no double taxation relief he would pay 22000 in total. Thus, the deduction system offers only a little relief from double taxation.

It must be said however that the distinction between these three systems is too simple. In fact, countries do usually not have either a credit, exemption or a deduction system. Rather, in most cases for some forms of foreign income and for certain countries credits are granted, while for other forms of income and countries deductions are granted. While Tax Justice Network (2016) certainly wants to put an end to tax evasion, it considers systems that do not offer a full relief from double taxation in all cases, an invitation to tax evasion. A full transparency score is therefore only awarded when tax credits are given for all sorts of payments.

Surprisingly – since it normally values international compliance positively – Tax Justice Network (2016) favours the unilateral tax credit over a bilateral double taxation treaty. The reason for this is

that many double tax treaties currently are too permissive because countries so eagerly want to increase international trade and investment. This leads to abuse and also to something that is called 'treaty shopping'. Treaty shopping refers to the activity where a company or individual takes advantage not so much of a jurisdiction's tax policies, but of the agreements *between* two countries. A jurisdiction itself may have strict tax laws and high taxes but the relation with another country might still offer huge advantages and opportunities for tax evasion or tax avoidance.

Furthermore, there is now a very complex network of tax treaties and this in itself leads to opaqueness. Hence, the tax credit system is seen as the best indicator of transparency with regard to the prevention of double taxation.

With respect to this type of financial secrecy too we can expect significant differences with the aggregated financial secrecy scores. The Financial Secrecy Index 2015 (Tax Justice Network, 2016) shows that very few jurisdictions grant tax credits in all kinds of payment scenarios. The absence of tax credits is thus not something exclusive to zero tax jurisdictions. I therefore expect that none of the factors mentioned in the literature will have an effect on this type of financial secrecy.

2.2.8 Harmful legal vehicles

This indicator looks at whether jurisdictions allow the creation of legal entities or series of legal entities that can easily be used for tax avoidance. Series limited liability companies and protected cell companies are identified as harmful legal vehicles by Tax Justice Network (2016) but the definition is extended to similar arrangements outside the Anglo-Saxon world. Both kind of companies are used to protect a part of the assets in a company against claims. It is therefore a type of ring fencing – that is separating a portion of the assets in a company while maintaining operational integration - but a type that has been created to save cost and time. They also constitute the most radical form of ring fencing because the liquidation of cells is also segregated and in some countries tax liabilities are also segregated.

The splitting of companies into cells does not necessarily lead to secrecy, but in jurisdictions such as Jersey there is no need for members of a cell to be a member of the entire company (Ogier, 2015). When a tax administration request ownership information from the cell company, the members of specific cells are alerted and this allows them to escape before the company has handed over the ownership information.

An article by Oguttu (2011) addresses specifically how protected cell companies can be used to avoid paying taxes. The same author has also written an extensive account on offshore tax avoidance with a focus on South Africa (Oguttu, 2007). South Africa itself does not offer protected cell companies in the strict sense but the use of offshore cell companies is very popular among wealthy South Africans. The South African government was the first government worldwide to acknowledge the risk of tax avoidance associated with cell companies (Murphy, 2010).

Protected cell companies can be used for rental captive insurance. Rental captive insurance is a form of captive insurance in which the insured does not own, or partly own the captive insurance company but rents (a portion of) the capital in the captive insurance company. Now the same structure which here takes place between unrelated companies can also be created within a protected cell company whereby the cells are owned by the insureds while the core company provides the insurance. The advantage of this is a reduction of costs.

Protected cell companies are often not subject to 'controlled foreign company' legislation. Normally a resident taxpayer is required to include his income from foreign companies. But in the past the income would not have been taxed until it was paid to him. Controlled foreign companies legislation determines that for certain foreign companies, that is those qualified as controlled foreign companies, the income should be included in the tax base even if it is not paid directly. In case premiums are higher than pay-outs in the rental captive protected cell company, then the company has created an artificial profit which is not subject to controlled foreign company legislation. Although captive insurance companies are not after profit, it is not uncommon for captive insurance companies to make a profit since this is necessary for future expenses.

Tax administrations however might find it suspicious that the captive insurance company which provides insurance to a taxpayer has made very large profits but they need to establish that the taxpayer is a member of the insurance company. Since the insurance company is a protected cell company the tax administration first needs to get access to the general company and then to the cell. Since the taxpayer is alerted by the company in the first phase he will be out by the time the tax administration gets to the specific cell. There will be no evidence that he is a member of this insurance company.

Additionally, this indicator also looks at whether trusts are allowed to have flee clauses. Flee clauses can be included in trust deeds and determine that the trust may be moved to another country following a disadvantageous event. The latter term can also be interpreted as an investigation into the trust. This allows taxpayers to remain anonymous and this of course is helpful in the case of tax evasion.

The existence of legal vehicles that stall or obstruct the investigation of tax authorities seems to be a typical feature of tax havens and secrecy jurisdictions (Tax Justice Network, 2016). I therefore expect this type to be affected by the same factors as financial secrecy.

2.2.9 Anti-money laundering

This indicator measures whether a jurisdiction complies with the international standards for the prevention and prosecution of money laundering. The accepted international standards are those set by the FATF, the Financial Action Task Force (FATF, 2003). This concerns 40 recommendations and most recommendations are followed by all jurisdictions.

However there are several recommendations that are not followed by all countries. For example recommendation 5-12 deal with customer due diligence in the banking sector. Jurisdictions with formal or factual banking secrecy will likely not fully comply with these recommendations. Since these recommendations largely coincide with the banking secrecy indicator it is probable that anti-money laundering compliance will show the same patterns as the banking secrecy indicator.

Notwithstanding the former, the customer due diligence requirements are absent in the banking secrecy indicator, whereas they are present in the FATF recommendations. Customer due diligence procedures have among others been reviewed by PriceWaterhouseCooper (2016) and this reveals that some jurisdictions do not require the identification of the person on whose behalf the customer holds a bank account. This makes it possible to secretly hold a bank account which can then be used to launder untaxed income.

The results of the Financial Secrecy Index 2015 (Tax Justice Network, 2016) on this type of financial secrecy offer no suggestion as to what factors might have an effect on anti-money laundering compliance.

2.2.10 Automatic exchange of information

This indicator shows whether a jurisdiction has signed the Multilateral Competent Authority Agreement. The implication of signing this agreement is that tax authorities automatically exchange information in line with the OECD's Common Reporting Standard instead of exchange upon request. The OECD's Common Reporting Standard is an international agreement initiated by the OECD council in 2014 (OECD, 2018). This agreement prescribes what information financial institutions are required to report and what information should automatically be exchanged with other countries.

According to Tax Justice Network (2016) information exchange upon request has substantial flaws when it comes to identifying instances of tax evasion. The most important reason for this is that many agreements regarding information exchange upon request and particularly those based on the OECD model Tax Information Exchange Agreement require that tax administrations must already have a strong case against a resident taxpayer before information can be requested (Meinzer, 2013).

Often the problem lies with a very vague definition of an appropriate information request. The signing of the MCAA will lead to more favourable conditions regarding information exchange, in spite of its scope being considerable diminished by several clauses. Although it will not be a panacea to tax evasion, it is probably the best way to improve the current conditions of information exchange and can thus be a marker of transparency.

The results in the Financial Secrecy Index 2015 (Tax Justice Network, 2016) give the impression that the signing of this agreement is characteristic to OECD countries or developed countries. This type can therefore be expected to show a different pattern than financial secrecy. Wealth and size of the economy will likely correlate with the signing of the MCAA.

2.2.11 Bilateral treaties

This indicator measures the number of bilateral treaties which involve information exchange upon request according to the OECD standard. This seems rather paradoxical because Tax Justice Network's (2016) stance on the tax system indicator was that a unilateral credit system is preferable over a bilateral double taxation treaty and second, as was argued above, because information exchange upon request is inadequate.

In fact, it is considered better to have an institutional framework for information exchange rather than not participating in any information exchange at all. Furthermore information exchange upon request is said to become more effective when the international network of information exchange upon request becomes more dense. For this reason it is incumbent for jurisdictions to have a sufficient number of bilateral treaties that provide for exchange of information.

Additionally this indicator also measures whether jurisdictions have signed the Amended Council of Europe / OECD Convention on Mutual Administrative Assistance in Tax Matters. This is a multilateral agreement developed jointly by the OECD and the Council of Europe in 1988 (OECD, 2017^b). This agreement helps countries entering into bilateral treaties that provide for information exchange.

The results in the Financial Secrecy Index (Tax Justice Network, 2016) do not show a clear pattern. It seems that countries with an insufficient amount (Tax justice Network proposes an amount of 53) of bilateral treaties are often very small countries. This makes sense because very small countries typically have less international trading partners. Having a small population also statistically reduces the chance of being host to foreign residents from all over the world. Hence there is no need for these countries to enter into bilateral treaties with many countries.

Another factor that can be expected to influence the number of bilateral treaties is economic openness. If a country is already very active in international trade, it supposedly has more need for bilateral treaties. Braun and Zagler (2014) found that among developing countries economic openness has an influence on the number of tax treaties. They also find that GDP has an influence on the number of tax treaties. These findings concern developing countries but it stands to reason that they also apply to developed countries.

Thus, the hypothesis for this type of financial secrecy will be that it is affected by population, size of the economy and economic openness, whereas it will not be affected by the other factors mentioned in the literature.

2.2.12 Disclosure of real estate ownership

This indicator, for which I collected the data myself during my stay in Oxford, establishes whether a jurisdiction discloses the identification details of either beneficial or legal owners of real estate. Disclosure of real estate ownership information is an important aspect of financial transparency because the absence of this information creates opportunities for tax evaders and money launderers. This indicator is not included in the Financial Secrecy Index 2015, but will be included in the Financial Secrecy Index 2018. I included it in this research because it is no doubt an important aspect of financial transparency.

The reason for this is that over the years there have been several accounts on the use of real estate markets for the purpose of tax evasion or money laundering. For instance in the documentary 'From Russia with Cash' (Reed, 2015) two investigative journalists approach real estate agents in London and pretend to be interested in buying real estate to make stolen public money disappear. The approached real estate agents are willing to help out since secretly owned offshore companies are used to prevent their names from appearing in the real estate register. Money laundering through real estate is often an international operation which involves anonymous companies established in offshore jurisdictions. A resident taxpayer can use an offshore entity to purchase real estate without anyone knowing that he is behind the purchase. He then sells the real estate to himself or to another one of his secretly owned companies at a higher price which allows him to launder money in the process. Of course, the transparency of companies and trusts would reveal the money laundering, but since secrecy jurisdictions are not willing to give up their secrecy provisions, the legal requirement of identifying beneficial owners in all cases can act as a secondary mechanism in disclosing the persons involved in real estate purchases.

During my work on this indicator of financial secrecy I noticed that there are no countries that disclose the beneficial owners of real estate in the real estate register. Many countries, however, require the disclosure of the legal owners and in many cases the beneficial owner can then be identified using the other public registers such as the business register. However, when the legal

owner is an anonymous entity established in a secrecy jurisdiction there is no way of finding out who's the beneficial owner of the real estate.

I also noticed that the absence of disclosure of real estate ownership is not exclusive to secrecy jurisdictions and tax havens. For this reason it is unlikely that the factors mentioned in the literature will affect this type in the way that they affect financial secrecy.

3. Methodology, methods and techniques

In this section I will explain how the variables in this research can be measured, why they should be measured this way and what the limitations and biases are. A potential bias that applies to the entire research might result from a slight time lag. The cut-off date for the measurement of financial secrecy is 31-12-2014 (Tax Justice Network, 2016). Consequently I have looked for data closest to this date. This is not always feasible and for some variables the date of measurement will be another date in 2014, which implies a time lag of several months. However, the independent variables in this research usually show a great degree of constancy over time and therefore the bias is probably very weak.

In addition, I will elaborate which respondents will be included, in what way their scoring on the variables will be assessed and how the data will be analysed.

3.1 Measurement of included determinants and correlates

3.1.1 Size of the population

There are several sources that have figures on population sizes of countries and jurisdictions, most notably the UN organizations and the American Central Intelligence Agency. The CIA World Factbook (2016) data on the year 2014 will be used in this research because the CIA has included several dependent territories which in other sources are aggregated with the parent-country. It describes the population figures of 238 jurisdictions which is the highest number of all reliable sources on population. The population estimation figures are dated July 2014 which thus gives a 5 or 6 months time lag with the measurement of financial secrecy. This might give a very slight bias but the effects of this will be very small since populations usually do not show large increases or decreases within 6 months. The average population growth worldwide in 2016 was 1,182 % (Worldbank, 2017^c) which means that on average 6 months population growth is about 0,6 %. It is unlikely that these differences will affect the outcome regarding the effect of this determinant on financial secrecy.

3.1.2 Wealth or GDP per capita

This hypothesized correlate of financial secrecy is expressed in GDP per capita. GDP per capita signifies the value of all goods and services (GDP) produced within a country per year divided by the average population of the same year. There are two kinds of GDP per Capita, these are the nominal GDP per Capita and the purchasing power parity per Capita (PPP). When comparing the wealth of the average resident of different states it is appropriate to use the purchasing power parity GDP per Capita in order to account for the fact that in some countries price levels are on the whole lower and therefore the nominal figures are inadequate for comparing the average material conditions in different countries.

Data on this variable will also be retrieved from the CIA World Factbook (2016). In some cases the CIA World Factbook offers outdated data in which case a second source, the UN or World Bank data, will be used to look for data on 2014. The CIA World Factbook (2016) however is the best place to start looking because it has included important dependencies, which in the UN or World Bank data are either excluded or merged with the country claiming possession over these jurisdictions.

3.1.3 Quality of governance

Quality of governance is measured by the Worldwide Governance Indicators project (Kaufmann & Kraay, 2015) which is organized by the World Bank. I will use these figures because of several reasons. The first reason is that the Worldwide Governance Indicators Project has included an extensive amount of jurisdictions, namely 213. Another source on quality of governance is the Quality of Government Institute which is affiliated to the University of Gothenburg (Quality of Government Institute, 2016). However this index of quality of governance covers only 107 countries. This might seem enough since the Financial Secrecy Index 2015 includes 112 jurisdictions, but it has not included the dependency jurisdictions whereas the Financial Secrecy Index has included many of these jurisdictions.

The second reason for choosing this source is that it has included the three indicators of quality of governance that were said in the literature to have an effect on tax haven-ness and were therefore hypothesized to have an effect on financial secrecy as well. These three indicators are included in the exact same form whereas for instance in the Quality of Government index (Quality of Government Institute, 2016) these are further differentiated into different types. Thus, this source has been chosen because it fits well with the theory in this research.

Kaufmann's quality of governance (Kaufmann, Kraay & Mastruzzi, 2004, p. 4) comprises six indicators. These are:

- Voice and accountability. This includes being able to participate in selecting the government, the absence of factual and formal restrictions on the freedom of expression, the freedom of association and the freedom of the media.
- Political stability and the absence of violence and terrorism. A country also has a high quality of governance when the perceived likelihood that the government is "destabilized or overthrown by unconstitutional or violent means" (Kaufmann, Kraay & Mastruzzi, 2006, p. 4) is low.
- Government effectiveness. Government effectiveness involves "the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (Kaufmann, Kraay & Mastruzzi, 2006, p. 4).
- Regulatory quality. Regulatory quality has already been defined in the former chapter as the perceived incidence as market-unfriendly policies (Kaufmann, 2003). Kaufmann, Kraay and Mastruzzi (2006) define regulatory quality as "the ability of government to formulate and implement sound policies and regulations that permit and promote private sector development". This latter definition is not much different from the first one as both definitions seek to measure how much governments contribute to the effectiveness of markets. Whereas government effectiveness looks at the value of government for the individual citizen who has certain rights, regulatory quality looks at the value of government for market actors.
- Rule of law. Rule of law has already been defined in the former chapter as the "perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts"(Kaufmann et al., 2003).
- Control of corruption. Control of corruption is defined as perceptions of "the extent to which public power is exercised for private gain, including both petty and grand forms of

corruption, as well as capture of the state by elites and private interests” (Kaufmann, Kraay & Mastruzzi, 2006, p. 4).

A potential problem and bias with all these indicators is that they are measured by perceptions. It is of course highly questionable whether objective measurement of quality of governance can be obtained on the basis of perceptions. This is something that the authors are full aware of, but they defend this choice by arguing that first of all a truly objective scale is not possible because objective evidence of bad governance is often untraceable due to the actions of that same government (Kaufmann et al., 2010, p. 18). Second, they argue that perceptions are important because citizens and companies base their decisions upon perceptions. Third, they argue that objective data often reflect the formal situation in a country, whereas the de facto reality might be completely different. For instance in most countries it is officially illegal to accept bribes, but that does not mean it does not happen. In these situations perceptions might actually be closer to reality than objective measures.

Fourth, they also defend their choice by stating that the Worldwide Governance Indicators project uses a wide variety of sources. The project uses 31 well-known sources all covering a large number of jurisdiction, although none of the data sources cover all 212 included jurisdictions. However, “60 % of pairwise comparisons would be based on at least 5 common data sources” (Kaufmann et al., 2010, p. 17). Furthermore all the sources used in the project are cross-country researches. These sources are either based on surveys among households and firms, expert assessments conducted by NGO’s or governments. The Worldwide Governance Indicators Project uses an average figure based on all the sources on one indicator. By averaging the other sources one arrives at a figure that cannot be far from the truth as errors of particular sources are smoothened out.

Of course the use of different data sources can also be a point of critique aimed at the Worldwide Governance Indicators Project, as was for instance done by Arnd and Oman (2006). Indeed, how can a comparison be made between two countries when two different data sources are used? But according to Kaufmann et al. (2006) this is not a discrediting criticism because the project uses overarching concept which capture both data sources. For instance one data source might assess corruption in the judiciary while another data source in another country assesses corruption related to government expenditure. But this difference does not matter since the overarching concept of control of corruption is able to accommodate both data sources. For the assessment of this concept it makes no difference whether the corruption is present in the executive or in the judiciary.

As addressed in the former chapter, according to the literature only three of these indicators are relevant. These are regulatory quality, political stability and rule of law. However, I opt to include all 6 indicators in the analyses in order to rule out the possibility that the other three indicators explain more of the variance in financial secrecy scores, and second because Dharmapala & Hines (2006) computed an aggregate of all 6 indicators and found an independent effect of quality of governance when the population variable was controlled.

3.1.4 Level of democracy

The level of democracy is difficult to measure as there is no consensus on how to define democracy. Commonly used indices are the Polity IV Index (Center for Systemic Peace, 2015), the Freedom in the World Index (Freedom House, 2016), the Democracy Index (The Economist Intelligence Unit, 2016) and the Transformation Index (Bertelsmannstiftung, 2016) (Coppedge et al., 2011). I will discuss the

advantages and disadvantages of these four indices and discuss which indices are the most appropriate for this research.

As with the quality of governance the first criterion is the number of jurisdictions that is included and also whether it includes the small states and dependencies which are very numerous in the Financial Secrecy Index. The Freedom in the World Index (Freedom House, 2016) takes the lead with 197 jurisdictions included. However it has not included 18 of the small states and dependencies that are included in the Financial Secrecy Index 2015 (Tax Justice Network, 2015^b). The Democracy Index (The Economist Intelligence Unit, 2016) has included 181 jurisdictions but did not include 35 small states and dependencies that are included in the Financial Secrecy Index 2015. Third, The Polity IV Index (Center for Systemic Peace, 2015) covers 167 countries and leaves out 40 small states and dependencies that are included in the Financial Secrecy Index 2015. The Transformation Index (Bertelsmannstiftung, 2016) includes 125 jurisdictions and lacks 40 small states and dependencies that are included in the Financial Secrecy Index. Thus, in terms of the jurisdictions included the index by Freedom House best serves the purpose of this research because it has the largest overlap with the Financial Secrecy Index. Because of the low amount of included jurisdictions I have decided to not use the Transformation Index.

The second criterion is that we need the right concept of democracy. Democracy indices nowadays tend, for political reasons, to broaden the concept of democracy to account for their observation that parliamentary democracy is insufficient for the people to be in power for example because of restrictions in the free circulation of information. Although original definitions of democracy do not include civil liberties such as the free circulation of information and opinions, this is actually quite useful for this research. The reason for this is that a well-informed electorate is a requirement for preventing the unsupported implementation of financial secrecy. In fact, only the Freedom House Index and the Democracy Index include civil liberties whereas the Polity IV Index focuses on the electoral process and the executive. This does not mean however that the Polity IV Index is not useful in this research. It can still be used to assess whether the inclusion of civil liberties leads to different results. To distinguish between the Freedom in the World Index and other indices Freedom House (2016) contrasts the concepts of liberal democracy and electoral democracy. The former concept includes civil liberties whereas the latter concept does not. Thus the Polity IV Index is an example of an electoral democracy assessment.

However, a disadvantage of indices measuring liberal democracy is that they tend to include aspects that are very unlikely to be related to financial secrecy. This for instance applies to questions concerning the informal political status of minority groups. Thus, a very broad definition of democracy might also provide less data less suited for analysing the effect of democracy on financial secrecy.

There are also other differences between the democracy indices besides the aspect of civil liberties. Both the Freedom in the World Index (Freedom House, 2016) and the Democracy Index (The Economist Intelligence Unit, 2016) assess the influence of foreign powers on government policy. The Freedom in the World Index also assesses the influence of foreign powers on the electoral process. On the other hand the Polity IV Index assesses the competitiveness and openness of executive recruitment (Högstrom, 2013), an aspect which is absent in the other indices.

A third criterion is that the measurement of democracy has to be objective and reliable. All three indices obtain their data from local experts (Freedom House, 2016; Economic Intelligence Unit, 2016; Center of Systemic Peace, 2015). Also, none of the indices provide information about who these experts are and what makes them qualify as experts (Munck & Verkuilen, 2002). This of course leaves us in doubt about the objectiveness and reliability of these data. Therefore it is incumbent to be careful with drawing conclusions from these data. For this reason I will include all three indices in order to smoothen out potential biases in the data.

3.1.5 Economic openness

The openness of an economy to international trade can be assessed by a simple calculation: the ratio of a country's total trade (import and export) to the GDP. The World Bank (2017^a) has instant index figures on the openness to trade and I will use these whenever data is available. The date of measurement of the World Bank data is 2014 with no specific date mentioned. This list includes 218 jurisdictions with no data for 58 jurisdictions that are included in Financial Secrecy Index. This does not mean that the openness index of all these jurisdictions will be absent in this research. The CIA World Factbook (2016) offers data on GDP, imports and exports in 2014 and these can be used to calculate economic openness.

The GDP in this case refers to the nominal GDP, that is a the gross domestic product without the modifications for price levels. The reason for this is that the value of exports and imports in this calculation is determined by the prices paid in international trade and there is thus no need to adjust for domestic price levels as the international markets constitute a common standard of measurement.

3.1.6 Being landlocked

A world map can be used to assess whether a jurisdiction is completely isolated from the sea.

3.1.7 Island-ness

A world map can be used to assess whether a jurisdiction is an island or is situated on an island. According to official definitions an island cannot be a continent, which is why Australia is not seen as an island in this research.

3.1.8 Legal system

The CIA World Factbook (2016) can be used to establish whether a jurisdiction has an English common law system.

3.1.9 Parliamentary system

The CIA World Factbook (2016) can be used to establish whether a jurisdiction has a Westminster type parliamentary system.

3.1.10 English as an official or primary language

The CIA World Factbook (2016) can be used to establish whether a jurisdiction uses English as an official or primary language. Primary language will be used alongside of official language because some countries such as Australia and the USA do not have an official language but do have English as the primary language.

3.1.11 Natural resource endowment

World Bank data (2017^b) show the ratio of the rents on natural resources to the gross domestic product by jurisdiction. I will use the data on 2014. Data on several jurisdictions is missing. This is the case for 18 jurisdictions. This may cause a bias because the missing jurisdictions are with 3 exceptions secrecy jurisdictions/tax havens.

The ratio of income on natural resources to the GDP is used because what this needs factor needs to measure is to what extent a country can rely economically on its extraction industry. Thus, following the theoretical propositions on this subject, a country that owes very little of its income to the extraction of natural resources would be more motivated to invest in offshore financial services. On the other hand a country that owes a large deal of its income due to the extraction industry might see increase in wage levels which reduces the competitiveness of other sectors. Obviously, it is necessary to use this ratio instead of an absolute figure because a small amount of natural resources might guarantee the livelihood of a small population, but it may not be enough in another country with a large population.

3.2 Measurement of financial secrecy

For the measurement of financial secrecy I will use the data that stems from a questionnaire designed by Tax Justice Network and sent out to 112 Ministries of Finance in 2015. These data were assembled in the Financial Secrecy Index 2015, which has been published online (Tax Justice Network, 2015^b). The questions on this survey are directly related to indicators of financial secrecy in this research.

This survey is not the only way to collect data on financial secrecy. Data can also be found on (governmental) websites of jurisdictions and in this way more jurisdictions could be covered. However, it is probable that there will be more missing data using this method as governments do not necessarily provide complete information on legislation and the methods of tax authorities online. Furthermore, language barriers make it a very inefficient method.

The Financial Secrecy Index 2015 includes two different but related series of secrecy scores. These are the Financial Secrecy Index scores and the financial secrecy scores. The Financial Secrecy Index scores, as calculated by Tax Justice Network (2016) contain two components. One is the financial secrecy score of the jurisdiction and the other is the global scale weight which is a measure of the share of a jurisdiction in the global market of financial service exports. Tax Justice Network (2016) uses the IMF Balance of Payment Statistics (2017) for data on the exports of financial services. Jurisdictions that score average on secrecy regulation but have a very large share in the global market of financial service exports end up very high on the financial secrecy index as a consequence of the global scale weight. This is especially true for the United States which account for almost 20 percent of the exports of financial services. On the other hand the UK, which has the second largest share in the exports of financial services with more than 17 percent ends up relatively low on the list because it scores low on financial secrecy. It is also apparent that jurisdictions that score high on secrecy do not necessarily have a thriving financial service sector. Vanuatu which is the most secretive jurisdiction has a very low global scale weight.

Tax Justice Network (2016) sees an unusual high export of financial services as an independent marker of financial secrecy. However, it would be unwise to follow Tax Justice Network in their choice to include the global scale weight in the measurement of financial secrecy. The reason for this

is that the inclusion of the global scale weight is an odd choice because large economies tend to have large shares in the export of financial services, as a consequence of their large economy. It appears that Tax Justice Network tries to redirect attention, or at least redistribute in part, to countries such as the UK and the USA and other large economies. It would however make more sense to look at the share of financial services exports in relation to the size of the economy. For this reason I have calculated the ratio of the share of financial service exports to the jurisdiction's GDP. The results of this calculation point out a different perspective on which jurisdictions are overrepresented in financial service exports. Table 1 below shows which jurisdictions have the relative largest shares in the global market for financial services and which jurisdictions have the largest shares in absolute terms.

		GSW (percentages)/GDP (in billion US dollars) ratio multiplied by 100		GSW
1	Cayman Islands	194	USA	19,603
2	British Virgin Islands	31	UK	17,394
3	Marshall Islands	30	Luxembourg	11,630
4	Luxembourg	21	Germany	6,026
5	US Virgin Islands	7	Switzerland	5,625

Table 1: relative and absolute share in global market for financial services

What is especially striking is the exceptionally high score of the Cayman Islands on the GSW/GDP ratio. This high score is also reflected in the high global scale weight. It seems therefore that the Cayman Islands takes a special position among the small jurisdictions that are overrepresented in financial service exports. Figure 4 shows the entire distribution of the GSW/GDP ratio set against the Global Scale Weight (both axes are exponential). This figure too shows the exceptional position of the Cayman Islands and Luxembourg.

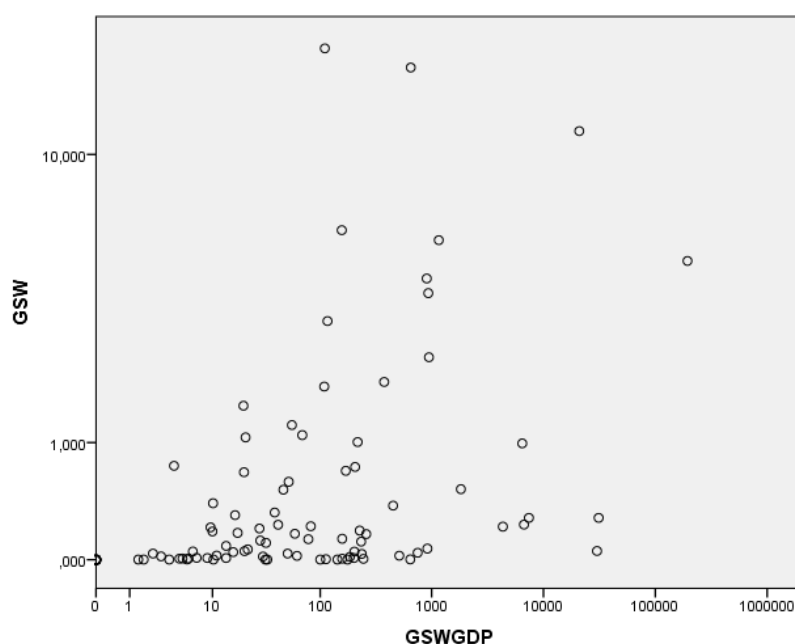


Figure 4: Global scale weight set against global scale weight/GDP

The lists of jurisdictions with the highest GSW/GDP ratio and those with the highest GSW show little overlap. Only Luxembourg appears in the top 5 of both lists. The GSW/GDP ratio, however, shows more overlap with the hierarchy of financial secrecy scores. Jurisdictions that are high on the list of the global scale weight, with the exception of Switzerland and Hong Kong, do not have high secrecy scores. A quantitative analysis has been conducted to assess whether the GSW/GDP ratio indeed correlates with financial secrecy scores. The results point out that although some jurisdictions have both a high GSW/GDP ratio and a high financial secrecy score, a general correlation cannot be confirmed. The GSW/GDP ratio could serve as an independent marker of financial secrecy when this ratio would correlate with financial secrecy. But this is not the case and I will therefore use the financial secrecy scores to represent financial secrecy and not the Financial Secrecy Index scores nor a data series that has included the GSW/GDP ratio.

3.3 Choice of jurisdictions

Ideally, to reach the highest possible degree of validity, all jurisdictions in the world would have to be included. But the number is set by the weakest link which in this case is the financial secrecy variable. Although a 112 jurisdictions were initially included, Tax Justice Network could not obtain enough data for 10 jurisdictions to include them in the Financial secrecy Index. Therefore out of 112 jurisdictions 102 jurisdictions will be included in this research

Second, there is a rationale behind the choice made by Tax Justice Network for these 102 jurisdictions, which has to be addressed. For the Financial Secrecy Index in 2009 60 jurisdictions were included (Tax Justice Network, 2016). A jurisdiction was included when it appeared on at least 2 tax havens lists out of 11 prominent tax haven listings. In 2011 nine jurisdictions were added because of their share in global market of financial services exports and another four were added because of alleged provision of financial secrecy. In 2013 another seven jurisdictions were included because of their financial services exports and another two because of suspected provision of secrecy. In 2015 another 6 jurisdictions were added because of financial services exports and all OECD countries were included because of new evidence on illicit financial flows to OECD countries (Tax Justice Network, 2016). In short, all these jurisdictions were included because they were thought to qualify to some extent as tax havens. This raises the question of whether the inclusion of only these jurisdictions does not cause a tremendous bias. But as said before, financial secrecy will be measured on a continuous scale and not in binary terms. The values are therefore likely to be normally distributed.

3.4 Data analysis

In order to find an answer on the research questions the data in this research are used in regression analyses. The qualitative data on financial secrecy have already been quantified by Tax Justice Network (2016). On the other hand, among the independent variables there are still variables of a qualitative nature. These will be coded as dummy variables. For the level of democracy and quality of governance the scoring system of these respective indexes will be used. The statistical software programme SPSS will be used to conduct these analyses.

3.5 contribution to further development of theory

The results of this research should indicate whether the factors in this research had an influence on the financial secrecy status of jurisdictions. This can be done by controlling different variables and by looking at the historical moment of the implementation of financial secrecy in specific cases. On the basis of this it will be possible to propose tentative theoretical explanations as to why some

jurisdictions have more incentive to implement financial secrecy than others. Tentative, because of the extraordinary complexity of these phenomena. Hence this research will not offer a conclusive theoretical model but it will contribute to further development of theoretical understanding of which countries are more likely to implement financial secrecy.

3.6 Internship

Between February 15 and May 15 2017 I have been working for Tax Justice Network, which is headquartered in Oxford. In February 2017 Tax Justice Network sent out the survey for the Financial Secrecy Index 2017. The responses to the survey were expected mid-February, but unfortunately they did not return until the end of April. However, a large part of my research internship in Oxford consisted of researching both the formal and factual real estate registration through various internet sources and thus I have been able to proceed without the survey responses. I covered the EU Member States while others did other jurisdictions or other indicators. Tax Justice Network was the appropriate organisation for my research internship as there is a lot of expertise within this network on financial secrecy and taxation. However, TJN's capacity to assist me was also rather limited as they are very busy themselves with the research for the FSI 2017. For this reason my research was also embedded in the School of Geography and the Environment, part of the University of Oxford, where I have been a Visiting Student for the same period. I enjoyed the assistance of Professor Dariusz Wójcik, who specializes in financial geography and has written about offshore finance and country-by-country reporting. I have benefitted greatly from his expertise.

4. Quantitative analyses

4.1 Financial secrecy

The financial secrecy scores are obtained by adding up all the specific types of financial secrecy, with the exception for the real estate disclosure indicator as this indicator was not yet include in the Financial Secrecy Index 2015. The scores range between 31 (Denmark and Finland) and 87 (Vanuatu). Out of a 102 jurisdictions the secrecy score on 10 jurisdictions could not be calculated because for 9 jurisdictions there is no data on the bilateral treaties indicator and for one jurisdiction, namely Nauru, there is no data concerning the Global Scale Weight which made Tax Justice Network (2016) decide not to calculate the financial secrecy score either. The mean secrecy score is 60,14. As said before, the term secrecy jurisdiction will refer to any jurisdiction with a financial secrecy score above average, thus above 60,14. This includes 50 jurisdictions. The standard deviation is 15,78. The following table shows the jurisdictions with the highest financial secrecy scores.

	Jurisdiction(s)	Financial secrecy score
1	Vanuatu	87
2	Samoa	86
3	Liberia, Saint Lucia, Brunei	83
4	Antigua & Barbuda	81
5	Lebanon, Marshall Islands, Bahamas, Belize	79
6	Barbados, Saint Vincent and the Grenadines, Saint Kitts and Nevis	78
7	United Arab Emirates, Andorra	77
8	Cook Islands, Dominica, Grenada, Guatemala, Liechtenstein	76
9	Malaysia	75
10	Bahrain, Monaco	74

Table 2: jurisdictions with the highest financial secrecy scores

Figure 5 show the entire distribution of financial secrecy scores.

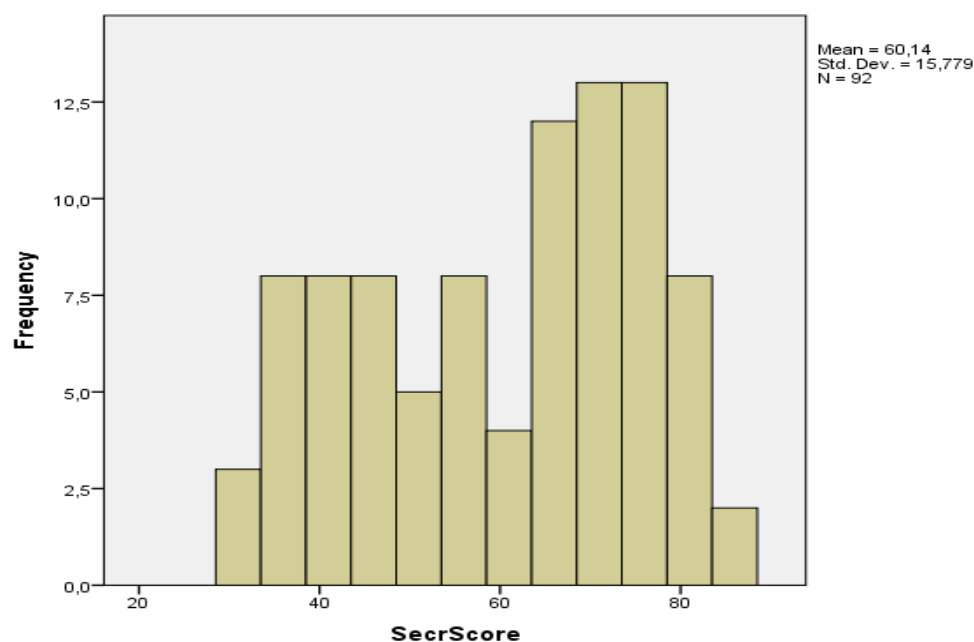


Figure 5: distribution of financial secrecy scores

Some aspects which have been discussed are immediately apparent in table 2. The most secretive jurisdictions are all small countries. What is also striking is that the jurisdictions are to some extent clustered, especially in the Caribbean's and the Pacific area. On the other hand jurisdictions such as Liberia and Lebanon are more isolated from the other secrecy jurisdictions.

4.1.1 Population

The first factor that has been hypothesized to have an effect on the financial secrecy score is the size of a jurisdiction's population. Since allegedly secretive jurisdictions more often than not have small populations the hypothesis suggested that there is a relation between the size of the population and the secrecy score. It was also said that this relation is not continuous but that having a population of less than 1 million increases the likelihood of having an above average financial secrecy scores. Figure 6 shows the distribution of financial secrecy scores set against population size (exponential scale) with a reference line at 1 million population.

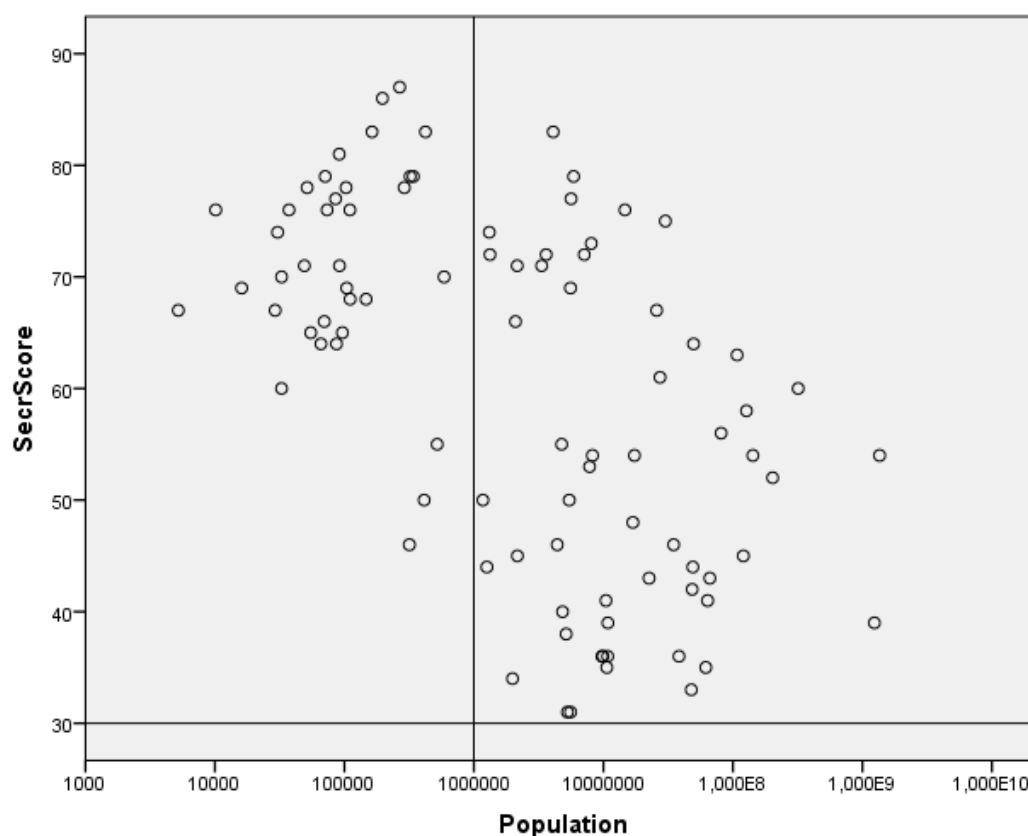


Figure 6: Financial secrecy set against population

This figure shows that many jurisdictions with large populations have below average financial secrecy scores, whereas jurisdictions with less than 1 million inhabitants are most of the time secrecy jurisdictions. The plot shows that while there are secrecy jurisdictions among the jurisdictions with more than 1 million population size, almost all jurisdictions with a population below 1 million score above average on financial secrecy.

Consistent with the hypotheses the results of the linear regression analysis suggest that there is no significant continuous relation between population and secrecy score. However, jurisdictions with a population of less than a million are indeed significantly more likely to have a higher degree of

financial secrecy. Thus, predicting financial secrecy scores on the basis of two group means leads to better predictions of financial secrecy than when the overall mean financial secrecy score (60,14) is used to predict financial secrecy scores.

The distribution of financial secrecy scores gives the impression that area size coincides with financial secrecy as well, which is not surprising since in general geographically smaller countries have smaller populations. For this reason I have included the data on area size. As could be expected – since there is not continuous relation between population and financial secrecy - there is no general continuous relation between geographic size and financial secrecy scores. However, recoding geographic size into a binary variable with a cut-off value of a 1000 square kilometres gives positives results on the t-test. Jurisdictions with an area size less than 1000 square kilometres are significantly more likely to be a secrecy jurisdiction.

However, population size provides better predictions of financial secrecy scores than area size. This might indicate that population is more closely related to financial secrecy, which is in line with the theory that a small population implies a small labour force which hampers the obtainment of economies of scale and this creates an incentive to look for alternative ways of acquiring income. A certain minimum of available labour is required to obtain economies of scale and above this minimum there is no longer a marginal effect which is why a certain concentration of population is sufficient for obtaining economies of scale.

4.1.2 Wealth

Figure 7 plots the wealth of jurisdiction's residents expressed in GDP per capita PPP against the respective financial secrecy scores. The analysis indicates that there is no significant relation between GDP per capita and financial secrecy score. This is not consistent with the hypothesis in this research which stated that one can expect a positive correlation between wealth and financial secrecy because financial secrecy leads to wealth through the intermediate factor of a high-functioning offshore financial services sector.

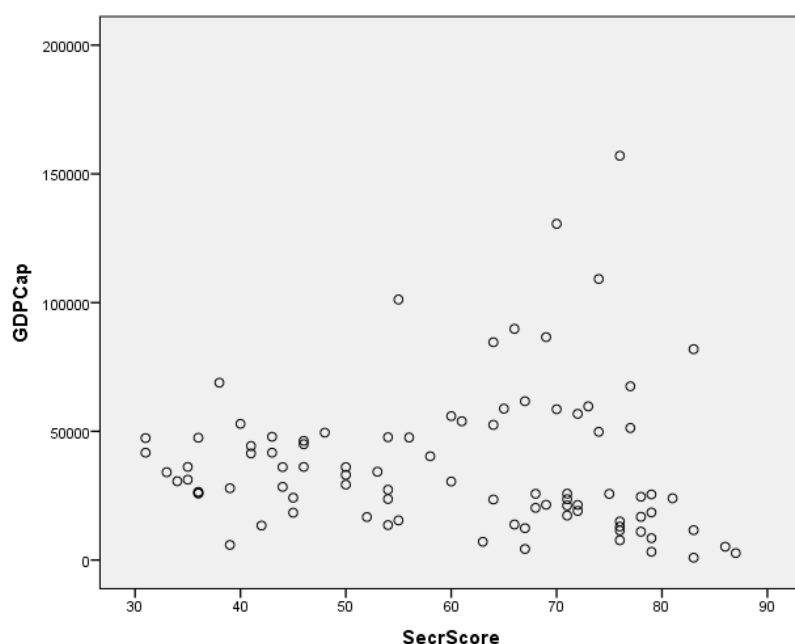


Figure 7: GDP per capita set against financial secrecy

However, the GDP per capita values appear to vary more among the jurisdictions with high financial secrecy scores. It is striking that among the most secretive jurisdictions there are some with extremely low GDP per capita, most notably Samoa, Vanuatu, Liberia and the Marshall Islands. This is illustrated in table 3 below which shows the jurisdictions included in this research with a GDP per capita of less than 10,000 US dollars. The data show that many secrecy jurisdictions have the same standard of living as the countries that are often mentioned as third-world countries.

Jurisdiction	GDP per capita (PPP) in US\$	Financial secrecy score
Liberia	900	83
Gambia	1700	No data
Vanuatu	2700	87
Tanzania	2800	No data
Marshall Islands	3200	79
Ghana	4300	67
Samoa	5200	86
India	5900	39
Bolivia	6800	No data
Philippines	7100	63
Guatemala	7700	76
Belize	8500	79
Paraguay	9000	No data

Table 3: Jurisdictions with the lowest GDP per capita and their respective financial secrecy scores

This seems odd compared to Dharmapala and Hines' (2006) view that tax havens are more wealthy than non-tax havens. Perhaps tax havens are more affluent, secretive jurisdictions are often very poor. Or rather they are either very poor or very rich, but more often very poor. This means that the poor secrecy jurisdictions are either not successful in the financial service sector or that the revenues in this sector are booked by a very small elite and for some reason do not trickle down in the economy, thereby leaving the rest of the population in poverty which drastically lowers the GDP per capita figure.

The global scale weight data (Tax Justice Network, 2015^b) can provide some clues with regard to this problem because one can infer from it the successfulness of the financial services sector by dividing it by population. The following figure plots the "global scale weight per capita" (exponential axes) – which should reflect how much the population benefits from the exports of financial services – against the financial secrecy scores.

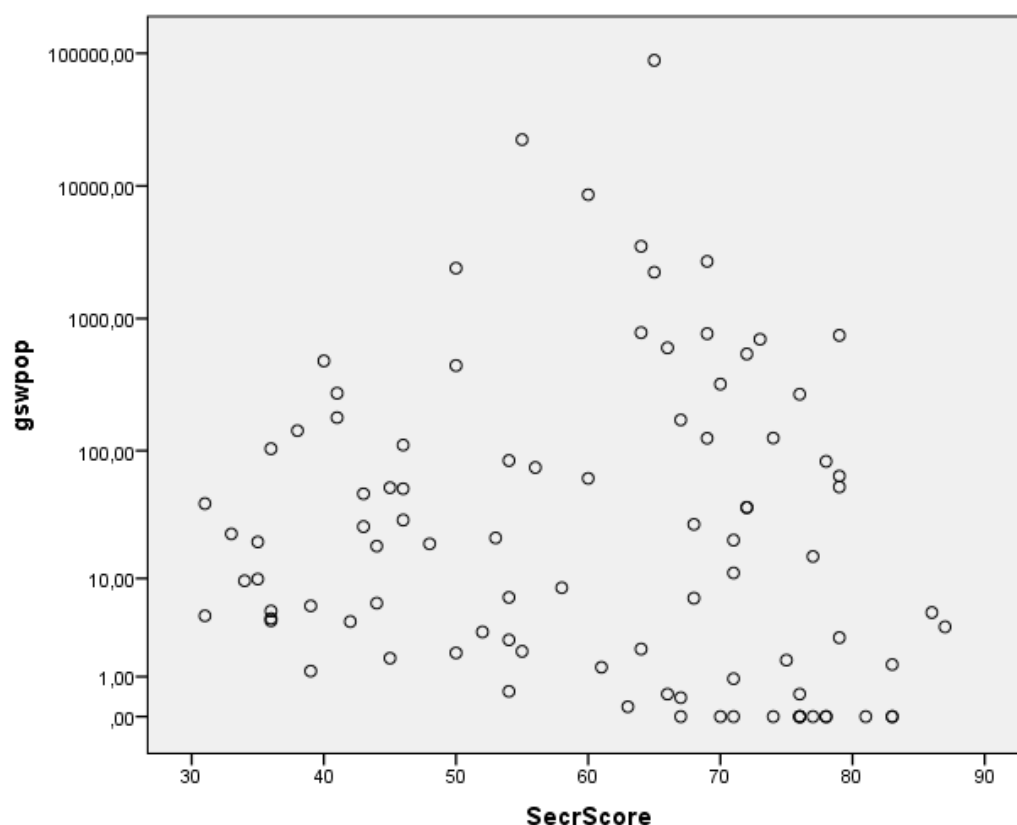


Figure 8: global scale weight / population set against financial secrecy

This figure clearly shows that in many secrecy jurisdictions the contribution of the financial service exports to citizen's wealth is not larger than in non-secrecy jurisdictions. This indicates that many secrecy jurisdictions are not very successful in the exports of financial services, or at least are not more successful than non-secrecy jurisdictions. Thus, while financial secrecy might be necessary for establishing an exporting financial service sector in a place where it could otherwise not exist, it does not automatically lead to a disproportionate large global scale weight and income per capita on the exports of financial services.

4.1.3 Quality of governance

On the issue of quality of governance it was hypothesized that three indicators of quality of governance, namely regulatory quality, rule of law and political stability are positively correlated with financial secrecy. However, I have decided to include all indicators assessed by the Worldwide Governance Indicators Project to see if there is really a difference between these three indicators and the other three. The other reason to include all 6 was that Dharmapala and Hines (2006) computed an aggregated quality of governance score on the basis of these 6 indicators and found that it had an effect on tax haven-ness when the population variable was controlled, i.e. countries with less than 1 million residents were more likely to be a tax haven when they had higher levels of quality of governance. I have done the same thing, but the analysis suggests a reverse trend than the one found by Dharmapala and Hines (2006). For countries with less than 1 million residents financial secrecy decreases for higher levels of quality of governance.

Voice and accountability

The first indicator of quality of governance, voice and accountability, is significantly correlated with

financial secrecy with jurisdictions becoming more transparent when citizens voices are heard. Figure 9 shows the variance in the voice and accountability indicator set against financial secrecy scores.

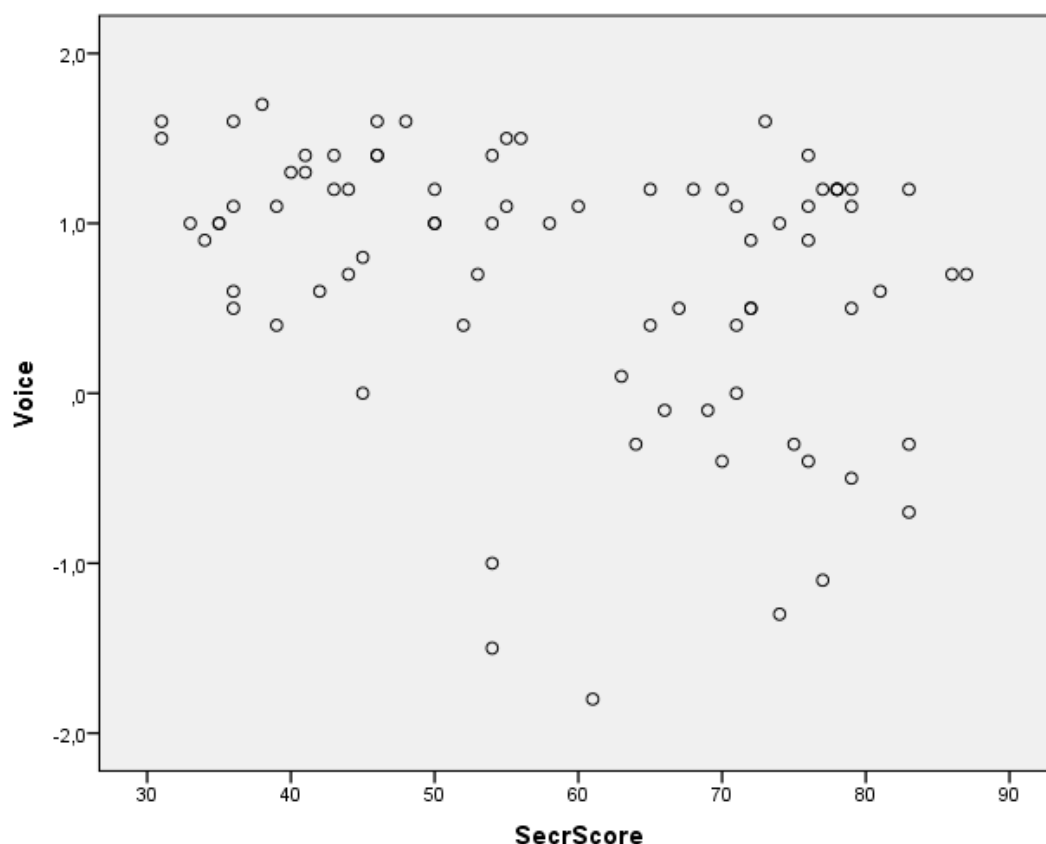


Figure 9: Voice and accountability set against financial secrecy

This figure suggests that there may be a slight decreasing trend. If so, this trend reflect a pattern which is that among the non-secrecy jurisdictions there are very few countries that score low on voice and accountability, whereas among the secrecy jurisdictions there are several countries that score low on voice and accountability.

Political stability

Contrary to what was hypothesized in this research there is absolutely no significant relation between political stability and secrecy score, the values seem to be distributed completely at random as can be observed in figure 10. This is odd as popular opinion is that tax havens or offshore jurisdictions are unaffected by the political upheavals that take place in the rest of the world and thus offer a safe shelter for offshore capital. However, most jurisdictions in the world are politically stable if we count a score of zero as stable too and therefore political stability cannot function as a differentiating principle. Thus the absence of a positive effect might be explained by the fact that very few countries are politically unstable to the extent that offshore account holders avoid these jurisdictions.

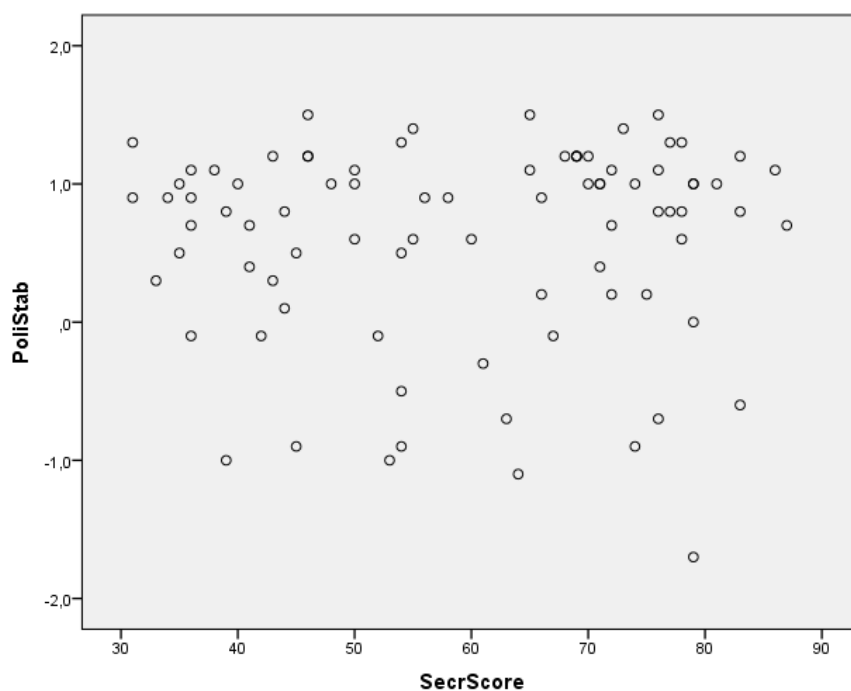


Figure 10: Political stability set against financial secrecy

Government effectiveness

Effectiveness of government has a significant but very weak correlation with financial secrecy scores. The same sort of pattern as with voice and accountability can be distinguished here as well as is apparent in figure 11.

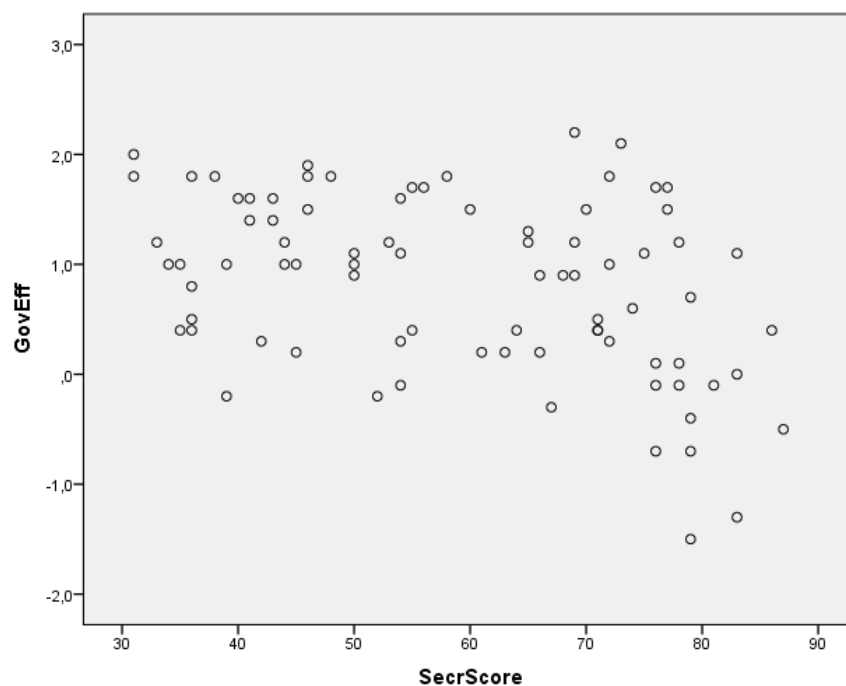


Figure 11: Government effectiveness set against financial secrecy

There is a decreasing trend which is slightly greater than in the case of voice and accountability, but which is still very small. As can be observed in the above figure this trend is likely caused by the several high secrecy jurisdictions that score low on government effectiveness.

Regulatory quality

Regulatory quality was hypothesized to have a positive effect on financial secrecy. However, the analysis points out that there is a significant decreasing trend as can be seen in figure 12. Here too the small decreasing trend might be explained by the fact that the high secrecy jurisdiction (>75) score low on regulatory quality. These findings are entirely not consistent with the suggestions in the literature and the hypothesis formulated in this research. Secrecy jurisdictions and tax havens were thought to have good regulatory quality because this is valued by offshore account holders.

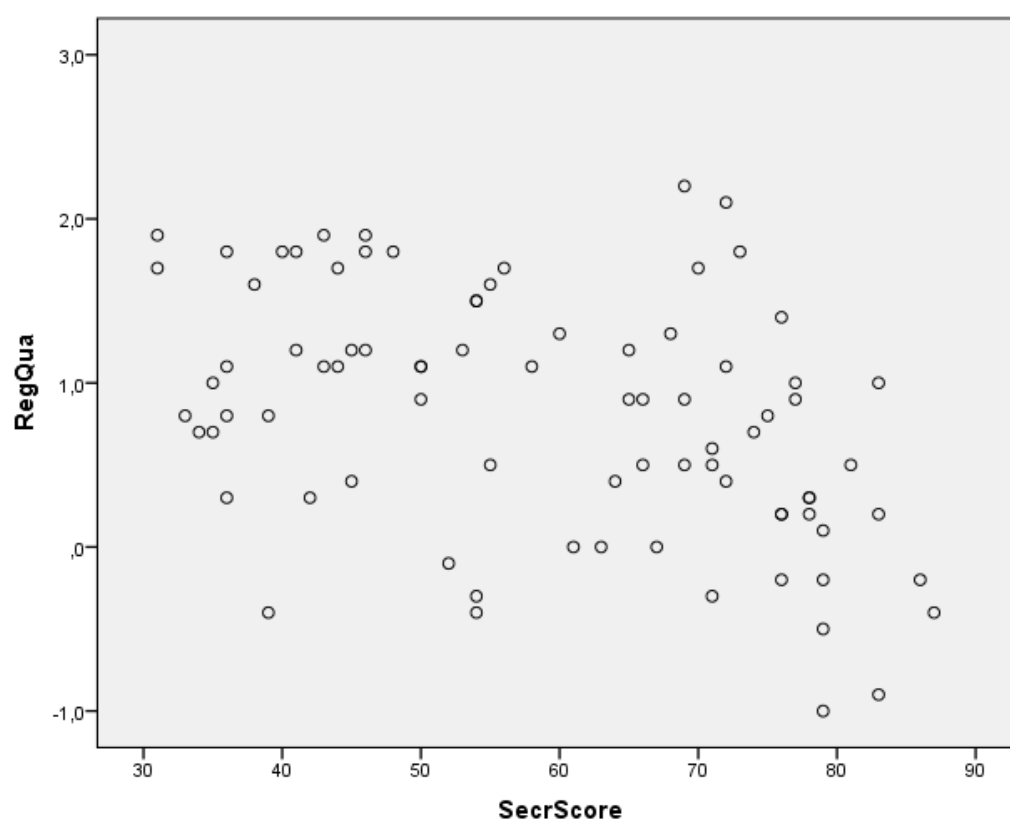


Figure 12: Regulatory quality set against financial secrecy

Rule of law

There is a significant correlation between rule of law and financial secrecy. It was hypothesized that financial secrecy scores would increase with higher levels of regulatory quality, but actually the reverse is true. Secrecy scores tend to decrease slightly when rule of law increases. Figure 13 plots rule of law against financial secrecy.

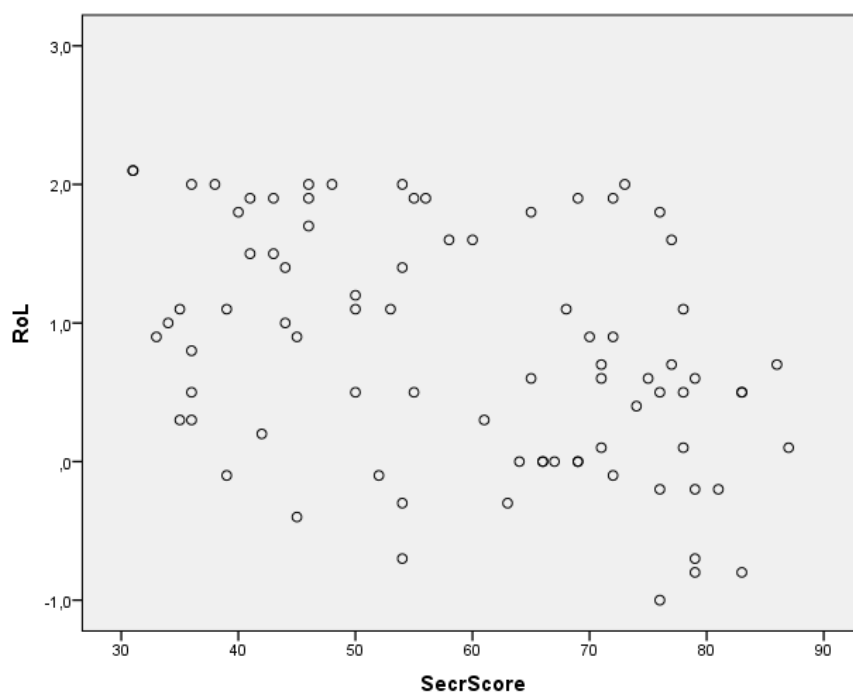


Figure 13: Rule of law set against financial secrecy

Control of corruption

There is a very small decrease on financial secrecy when control of corruption is better organized as is apparent in figure 14.

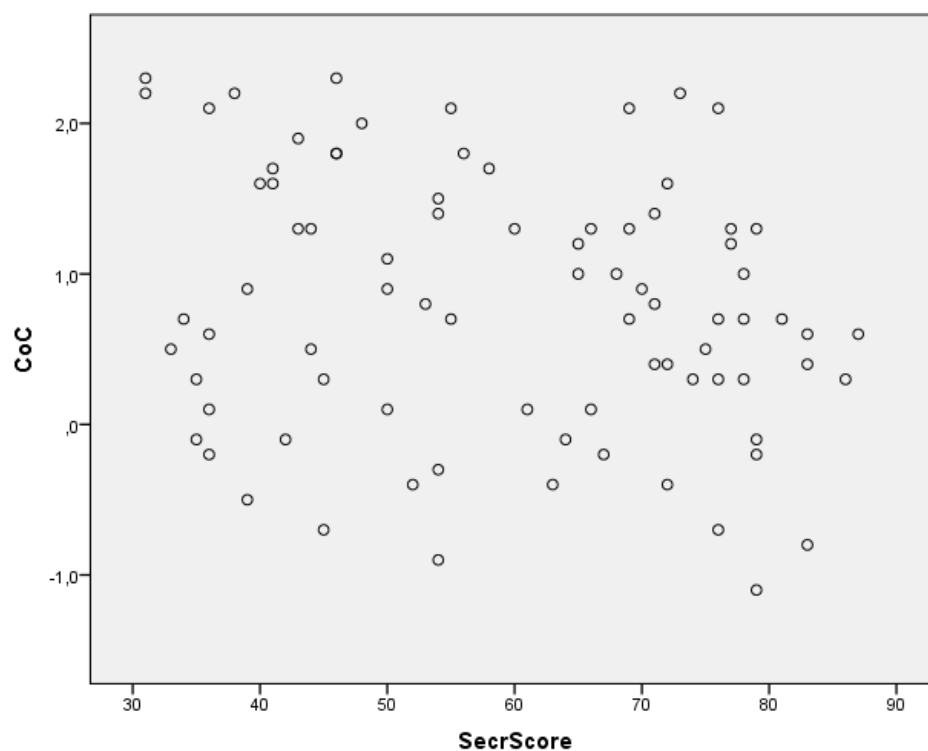


Figure 14: Control of corruption set against financial secrecy

In summary it might be noted that all indicators of quality of governance show significant trends with financial secrecy but these are so small and explain so little of the variance that it is highly doubtful whether there is any meaningful relation between quality of governance and financial secrecy. Considering the plots in the figures above it is quite fair to say that there is none.

4.1.4 Level of democracy

The hypothesis suggested that a higher level of democracy would make it more difficult to implement a secrecy regime. To research this hypothesis I chose to include 3 indices of democracy that I deemed appropriate for this research. These are the Polity IV index, the Freedom House index and the Democracy index. The Freedom House index has the most complete list of jurisdictions, but uses a fairly simple scale with three possible values, whereas the other two indices have a more differentiated scale but have more missing values.

Polity IV Index

In line with the hypothesis there seems to be a significant decrease of secrecy scores when jurisdictions score higher on the Polity IV scale, meaning that secrecy decreases with higher levels of democracy. This can be observed in the following plot.

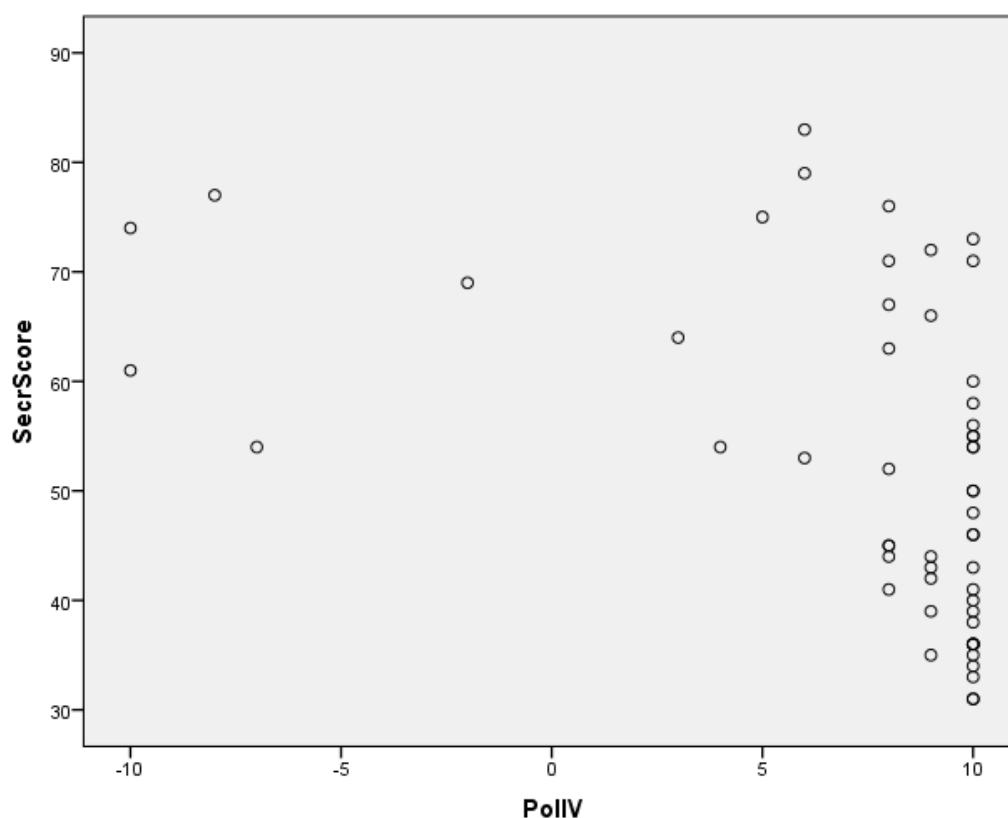


Figure 15: Financial secrecy set against Polity IV democracy levels

However, as is apparent in this plot the Polity IV Index especially misses data on secrecy jurisdictions. There are 50 secrecy jurisdictions included in this research and only 16 appear on the Polity IV Index. On the one hand the non-secrecy jurisdictions do seem to be included considering the high density of values below 60. These numbers of missing data leads to a distortion in the pattern because many high level democracy secrecy jurisdiction are not included. Thus the Polity IV data are not very reliable.

Freedom House Index

The Freedom House Index, however, has data on 33 out of 50 secrecy jurisdictions and 51 out of 52 non-secrecy jurisdictions. The independent samples t-test on the Freedom House index shows that there is a significant difference between the jurisdictions with a score of 0 and those with a score of 1 on the Freedom House index, while there is no significant difference between the groups with -1 and 0, which is probably due to the small amount of cases in the -1 group. Financial secrecy appears to decrease from 69 to 55 when the level of democracy increases from 0 to 1. Figure 16 plots the Freedom House Index against the financial secrecy scores.

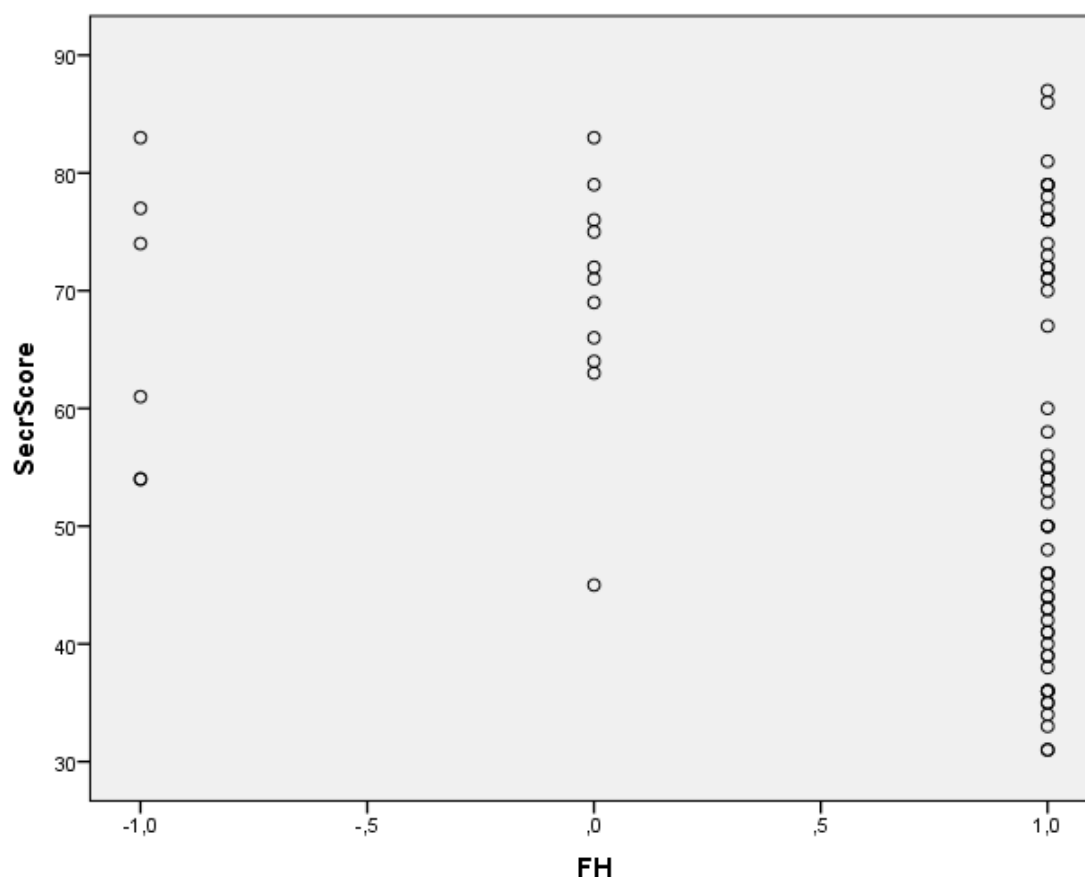


Figure 16: Financial secrecy set against Freedom House democracy scores

Perhaps this plot tells us more than the regression analysis since it shows that having a high degree of democracy certainly does not imply the absence of financial secrecy, as evidenced by the significant number of democratic secrecy jurisdictions. Therefore it would make no sense to assert that lower levels of democracy are required for financial secrecy. This directly opposes the hypothesis on this aspect which stated that a lack of democracy is required in order to by-pass the electorate.

Democracy Index

The Democracy Index is also significantly correlated with financial secrecy. There seems to be a slight decreasing trend as can be observed in figure 17. However the Democracy Index has included only 18 out of the 50 secrecy jurisdictions and a comparison with the Freedom House Index shows that this distorts the pattern because many secrecy jurisdictions with high democracy levels are not included and this compromises the reliability of the data.

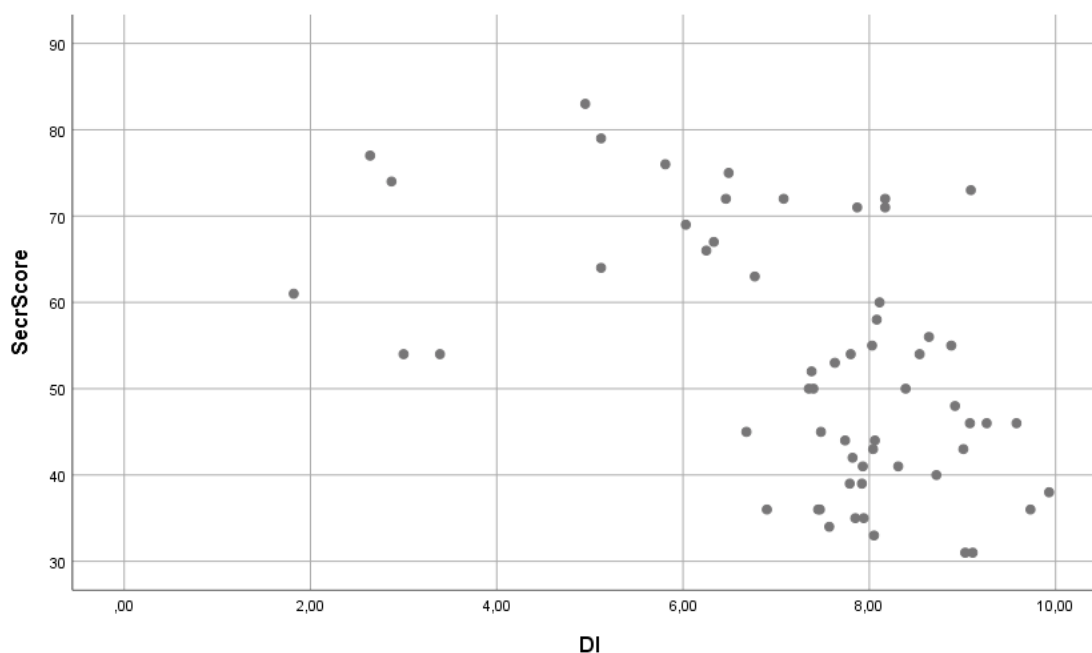


Figure 17: Financial secrecy set against Democracy Index democracy levels

In short we might conclude that, first, a lack of democracy is not required for the implementation of financial secrecy and second that jurisdictions with below average levels of democracy have a propensity for financial secrecy. This means that there is a certain coincidence of democracy and financial secrecy, but that it cannot have the hypothesized form. It might be possible that financial secrecy is a concept that can be put under the broader concept of autocratic government in which case its function is to protect an oligarchic elite. Another possibility is that there is an overlap in the measurement of financial secrecy and democracy.

4.1.5 Economic openness

Economic openness cannot be used to adequately predict financial secrecy scores. Jurisdictions that have a more open economy do not necessarily have a higher financial secrecy score. This is not consistent with the hypothesis on this factor which suggested that openness to international trade is positively correlated with financial secrecy.

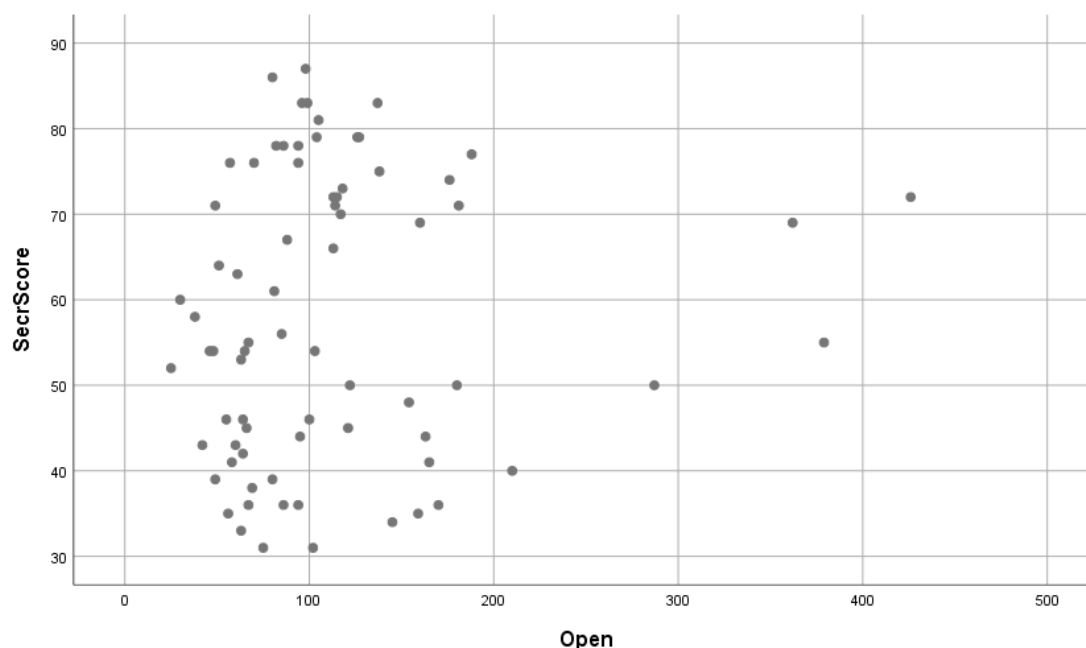


Figure 18: Financial secrecy set against economic openness

4.1.6 Being landlocked

The landlocked variable cannot be used to adequately predict financial secrecy scores. Only 13 out of the 102 jurisdictions are landlocked and the mean on their secrecy score is almost the same as the mean of the jurisdictions that are not landlocked. This is not consistent with the hypothesis that said that being landlocked and financial secrecy would be correlated.

4.1.7 Island-ness

Being an island or being situated on an island would, according to the hypothesis, increase the likeliness of being a secrecy jurisdiction. The independent samples t-test shows that the 55 non-island jurisdictions have a mean secrecy score of 55,13 whereas the 37 island jurisdictions have a mean secrecy score of 67,59. This implies that being situated on an island significantly increases the likeliness of having a high secrecy score.

4.1.8 Legal system

Having a legal system of British origin increases the likelihood of having a high secrecy score. Jurisdictions that do not have the English common law system have an average financial secrecy score of 54, whereas jurisdictions with English common law have an average financial secrecy score of 67. Using these averages instead of the overall mean financial secrecy score leads to more accurate predictions of financial secrecy. This is consistent with the hypothesis.

4.1.9 Parliamentary system

Contrary to what was hypothesized there is no significant correlation between the parliamentary system being of British origin and financial secrecy.

4.1.10 English as an official or primary language

The correlation between having English as a primary or official language and financial secrecy on the other hand is strong, which is consistent with the hypothesis. The jurisdictions with English as a primary or official language are with the exception of seven jurisdiction all present on the high levels

of financial secrecy. The plot in figure 19 shows that non-English speaking jurisdictions are more or less equally distributed along the secrecy scale and which therefore include secrecy jurisdictions as well as non-secrecy jurisdictions. This indicates that having English as a primary or official language is not a pre-condition for becoming a secrecy jurisdiction. It is therefore unlikely that English as a primary or official language has an independent effect on financial secrecy. This, however, does not rule out that some jurisdictions benefit from having the same language as the United States and the United Kingdom.

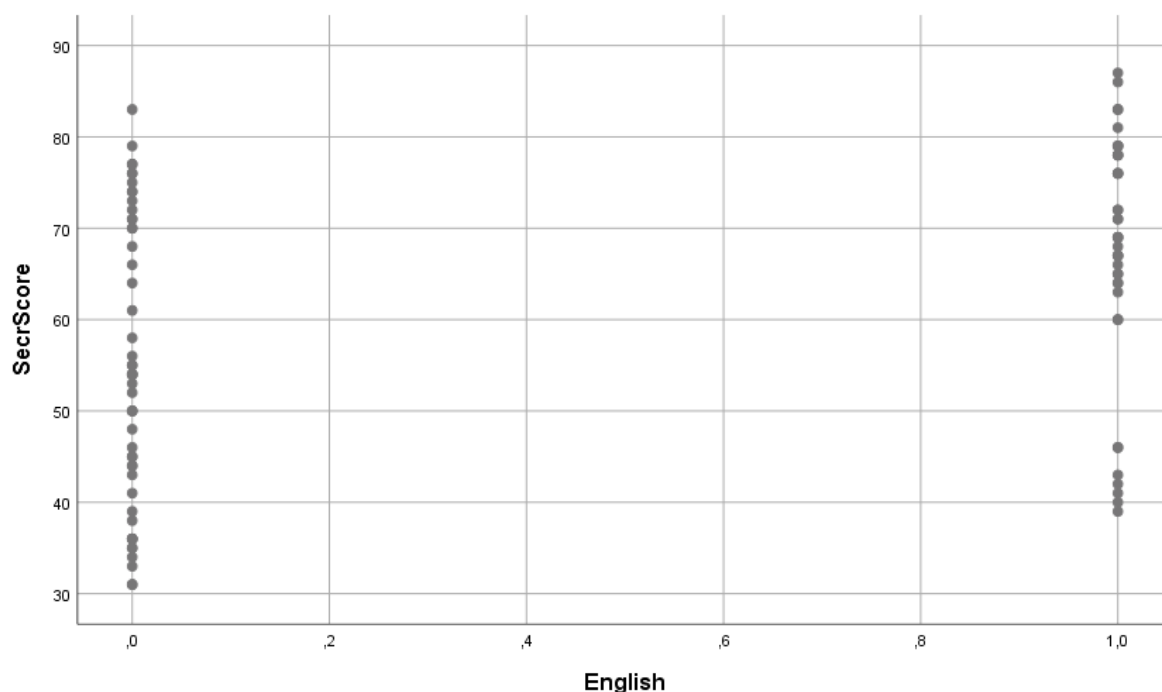


Figure 19: Financial secrecy set against English as a primary language

4.1.11 Natural resource endowment

There is no significant correlation between rents on resources as percentage of the GDP and secrecy scores. Thus there is no evidence that jurisdictions with fewer natural resources resort to financial secrecy in order to become more competitive in the international market of financial services. This is not consistent with the hypothesis.

4.2 Banking transparency

Banking transparency measures the extent to which financial institutions are obliged to record a set of banking details and also the extent to which tax authorities have access to these data. Tax Justice Network derived the data on this indicator from a OECD report called Tax Cooperation 2010: Towards a level playing field (Global Forum on Transparency and Exchange of Information, 2010). This report discusses whether jurisdictions comply with the recommendations that were proposed by the FATF. FATF stands for Financial Action Task Force, an intergovernmental organization that sets legislative and regulatory standards in order to combat money laundering and the financing of terrorism. Another source that was used is a report called 2014 International Narcotics Control Strategy Report (US Department of State, 2014). The following table shows the jurisdictions with the lowest scores on banking transparency.

	Jurisdiction	Banking transparency
1	Andorra	0,23
2	Barbados	0,27
3	Bahrain, Luxembourg, Montserrat, Saint Lucia	0,30
4	Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines	0,33
5	Bahamas, Latvia, Vanuatu	0,34
6	Singapore	0,36
7	Antigua & Barbuda, Belize, Brunei, Liechtenstein, Seychelles, Switzerland	0,37
8	Chile, Cyprus, Dominica, Guatemala, Marshall Islands, Nauru, San Marino, Slovakia, Turkey	0,40
9	Hong Kong, Samoa	0,44
10	Austria, Ghana, Lebanon, Macedonia, Poland, Turks & Caicos Islands, Uruguay	0,47

Table 4: Jurisdictions with the lowest banking transparency

Figure 20 shows the entire distribution of banking transparency scores including the mean and standard deviation.

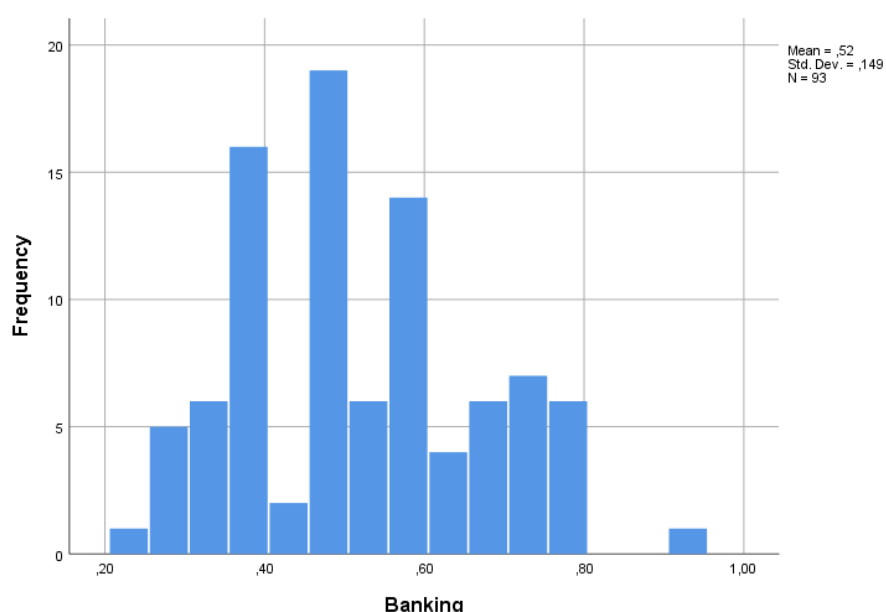


Figure 20: Distribution of banking transparency scores.

The data show that Andorra outranks the other jurisdictions with a banking transparency score of 0,23. At the other end of the list Belgium also has an exceptional score as being the most transparent jurisdictions on banking issues. Furthermore, many high secrecy jurisdictions return in this ranking. This is not very surprising as banking secrecy is of course one of the factors in the aggregated secrecy score. There is a strong correlation between banking secrecy and financial secrecy meaning that in general secrecy jurisdictions have some degree of banking secrecy.

An analysis of residuals however shows that there are some exceptions to this. Liberia, Malaysia, Samoa, The British Virgin Islands and the United Arab Emirates have the highest positive residuals, meaning that they are significantly less secretive on banking data than on financial matters in general. Poland, Latvia, Czech Republic, Finland and Denmark on the other hand have the highest

negative residuals which indicates that they are significantly more secretive with regard to banking than they are in general on financial matters. The former countries in particular are interesting because it might indicate that they offer some special kind of financial secrecy, since they do not need banking secrecy to operate as a secrecy jurisdiction.

Banking secrecy also significantly correlates with the other indicators of financial secrecy with the exception of the trust and foundation register indicator – which suggests that banking secrecy jurisdiction do not necessarily offer trusts and private foundations - and the real estate register indicator which is not included in the aggregated financial secrecy. The correlation with other indicators suggests that different ‘flavors’ of secrecy often go together.

Table 5 shows whether banking secrecy correlates with the determinants and whether the predicted trend is consistent with the hypotheses.

Determinant	Correlates with bank secrecy	Consistent with hypothesis?	Comments
Population	Yes (+)	Yes	
Wealth	No		
Quality of governance	Government effectiveness, regulatory quality and rule of law show a very weak correlation (-)	No, reverse trend	
Level of democracy	No		
Economic openness	No		
Landlocked	Yes (-)	No, reverse trend	Likely biased due to small number of landlocked countries (11)
Island-ness	Yes (-)	Yes	
Legal system	No		Different from financial secrecy
Parliamentary system	No		
English	No		Different from financial secrecy
Natural resources	No		

Table 5: Correlation between hypothesized factors and bank secrecy

4.3 Trusts and foundation register

This indicator allots high transparency scores to jurisdictions whose domestic laws do not allow the creation of trusts and foundations or jurisdictions which disclose the necessary information in order to compromise the risks of money laundering and tax evasion posed by trusts and private foundations. The data for this indicator are derived from the survey sent out by Tax Justice Network for the Financial Secrecy Index 2015 and from OECD reports.

Figure 21 shows the distribution of trusts and foundations secrecy. The following jurisdictions share a top position as being the most secretive with respect to trusts and foundations: Anguilla, Antigua & Barbuda, Bahamas, Gambia, Germany, Isle of Man, Italy, Liberia, Liechtenstein, Malaysia, Malta, Mauritius, Samoa, Switzerland, Turkey, Vanuatu. It is apparent that several jurisdictions in this list are

not high up the financial secrecy ranking. Among the jurisdictions with the highest positive residuals are Andorra, Brunei, Saint Lucia, Marshall Islands and Lebanon. These jurisdictions have transparency on trusts and foundations while having high secrecy scores. On the other hand Italy, Denmark, Sweden, Belgium and Finland are much more secretive with respect to trusts and foundation than with respect to financial matters in general.

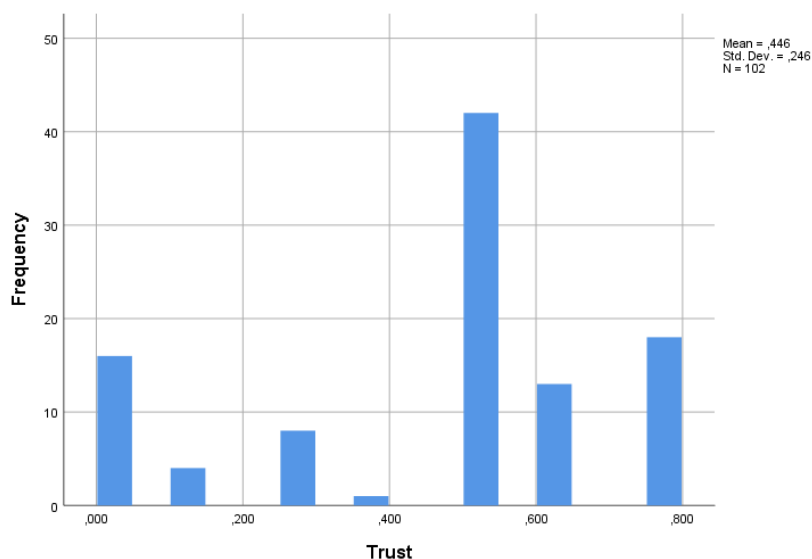


Figure 21: distribution of transparency of trusts and foundations

There is little similarity between the variance on the trusts and foundation variable and the variance in the other indicators of financial secrecy. The only indicators that correlate with the trusts and foundation variable are: reporting of payments, efficiency of tax administration, tax system and real estate. This might suggest that the secrecy of trusts and foundations does not need the other kinds of secrecy than mentioned here, to be effective. The following table shows the correlations between the determinants and trusts and foundations transparency and whether this validates or falsifies the hypotheses.

Determinant	Correlates with trusts and foundations transparency	Consistent with hypothesis?	Comments
Population	Yes (+)	Yes	Strangely, area size is not related to trusts and foundations secrecy
Wealth	No	No	
Quality of governance	No	No	
Level of democracy	No	No	
Economic openness	No	No	
Landlocked	No	No	
Island-ness	Yes (-)	Yes	
Legal system	Yes (-)	Yes	
Parliamentary system	No	No	
English	Yes (-)	Yes	
Natural resources	No	No	

Table 6: Correlation between hypothesized factors and trusts and foundations secrecy

4.4 Recorded company ownership

Here high transparency scores are awarded to jurisdictions that record the identification data of beneficial owners of corporate entities. The absence of the recording of beneficial owners makes it very difficult for tax authorities to pursue investigations. Foreign tax authorities request ownership information at the domestic tax authority, but if this tax authority does not record beneficial ownership it obviously cannot provide the requested information. The foreign tax authority can then start a judicial case against the corporate entity which it suspects to evade taxes but this usually takes months and when the information is finally obtained it may turn out that the company is owned by another legal vehicle established in a third country in which a judicial proceeding is necessary as well. Recording of company ownership makes ownership information readily available and this saves a lot of time and money, but it also takes away the risk element that tax authorities usually have to deal with.

The data for this indicator are derived from four sources which comprises OECD reports (Global Forum on Transparency and Exchange of Information Reports), the fourth EU anti-money laundering directive, websites like lowtax.net and the FATF peer reviews (Tax Justice Network, 2016). The scores of the jurisdictions on this indicator are either 0 or 0,25 and only about a quarter of the cases fall into the latter category which means that most jurisdictions do not or not sufficiently record company beneficial ownership.

All jurisdictions which adequately record beneficial owners are, with no exception, EU Member States, which is the effect of the fourth EU AML directive. Because the transparency of company ownership has been decided at a supranational, or at least intergovernmental level, country-specific characteristics are irrelevant. It would therefore not make sense to study the effects of the determinants on company ownership secrecy.

4.5 Country-by-Country Reporting

Country-by-Country reporting is seen by experts as an important instrument in combatting the tax avoidance by large multinational corporations. CbCR, if implemented properly, will show whether these companies engage in profit shifting and what routes are taken by these profits. But there are also critics who argue that CbCR alone is not enough to end profit shifting because it does not prevent the legal exploitation of mismatches between different tax systems and particularly the mismatches between double taxation arrangements. This is of course a valid argument, but CbCR is useful in cases where the arm's length principle is violated. It also reduces the amount of time and resources that tax authorities need to investigate transfer pricing. Furthermore it raises public awareness of the profit shifting strategies and hence repercussions are likely to ensue.

As was already said in the introduction, there is a progressive trend of more and more countries adopting CbCR legislation. Many jurisdictions already have implemented CbCR and other jurisdictions are preparing legislation or have made known their intentions to implement CbCR. The driving force behind these developments is the OECD and its BEPS Report which provides the model legislation. This implies that CbCR will be more or less standardized, at least for those jurisdictions that make use of the OECD provisions. The OECD model legislation requires CbCR for all multinational corporations with a global turnover of more than 750 million US dollars. However, many countries have a partial CbCR meaning that only companies within a certain sector like the extractive industry are required to fill out the CbCR forms.

In addition to the Country-by-Country Report which are intended to disclose payments to governments the OECD BEPS Action 13 offers two extra standards which are called the local file and the master file. These files require companies to disclose relevant information about the company and their transactions. The master file should include all relevant information of all members of a MNE group, while the local file contains information of transactions of the local taxpayer. The OECD has recommended that countries both implement the master file and the local file but not all countries have implemented both files in their legislation. As is argued by Wojcik (2015) Country-by-Country Reporting cannot be fully effective if it does not include “reference data on revenues, assets or employment by country” (Wojcik, 2015, p. 1187).

There are several limitations in the BEPS Action 13 proposal that limit the transparency obtained by Country-by-Country Reporting, which might explain why many allegedly offshore jurisdictions are not reluctant to commit to this proposal. These limitations were not present in the initial OECD proposal and according to the article by Knobel and Cobham (2016) the OECD amended the proposal as a result of corporate lobbying by multinationals. So what are these limitations? Multinational corporations are only obliged to file CbCR data directly to the headquarter country tax authority. And secondly, the data can only be shared with other tax authorities on certain conditions and the received data can only be used for certain purposes (Knobel & Cobham, 2016).

The Tax Justice Network methodology makes a distinction between the absence of CbCR, CbCR for the extractive industry and/or for the financial sector and full CbCR. In 2014 none of the jurisdictions in the world have full CbCR. Only the Member States of the European Union have CbCR for both financial institutions and enterprises in the extractive sector. This was the implication of the EU Capital Requirements Directive 4 which was adopted in June 2013. Since this is a collective measure taken by EU Member States it would make no sense to look at the influence of country characteristics.

However much has changed since then and I will subsequently modify the data to account for the most recent situation, which is September 2017. Of course this may account for a bias, but since many of the determinants usually show little variation over time, it is in many cases still possible to look at the influence of the determinants.

In the assessment of the current situation I will give 50 % credits for CbCR and 25 % for the local and master file respectively. The data can be found at the OECD website or in the weekly report published by KPMG which also keeps track of the CbCR developments. Although still almost half of the included jurisdictions have not committed to CbCR, 26 countries have adopted the full OECD package. Among these are several jurisdictions with high secrecy scores, such as Switzerland, Liechtenstein and the Isle of Man. Among the jurisdictions with only CbCR legislation are Guernsey, Jersey, Gibraltar and Singapore. The following table shows how the commitment to country by country reporting correlates with the country characteristics.

Determinant	Correlates with CbCR	Consistent with hypothesis?	Comments
Population	Yes (+)	Yes	
Wealth	No		
Quality of governance	Yes (-)	No, reverse trend	

	with the exception of political stability		
Level of democracy	Yes (+)	Yes	
Economic openness	No		
Landlocked	No		
Island-ness	Yes (-)	Yes	
Legal system	Yes (-)	Yes	
Parliamentary system	No		
English	Yes (-)	Yes	
Natural resources	No		

Table 7: Correlation between hypothesized factors and the presence of country-by-country reporting

Country by Country Reporting also correlates with population as a continuous variable, as well as with the GDP. Countries are more likely to have adopted Country by Country Reporting when they are large in population and GDP. This makes sense because, as has already been addressed, these countries often host branches of multinationals with a global turnover exceeding 750 million US dollars. It is therefore highly questionable whether the absence of Country by Country Reporting should be interpreted as a deliberate act of providing secrecy.

4.6 Reporting of payments

This indicator of financial secrecy assesses whether joint stock companies and financial institutions are required to report dividend or interest payments to non-residents to the domestic tax authority. If the domestic tax authority does not receive this information it cannot be shared with their foreign counterparts and so the jurisdiction will be unfit for information exchange with other jurisdictions.

Information on these payments often points towards bank accounts and companies which tax authorities were previously unaware and which are being used for tax evasion. If the jurisdiction does not have banking secrecy or secrecy of company ownership the information can also be obtained by other means but this takes more time because tax authorities have to search through the data in order to filter out the payments to non-residents. For this reason the reporting of payments can be seen as a transparency measure.

The data on this indicator are derived from the Tax Justice Network survey, an OECD report called Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies (2015) and the IBFD Database (Tax Justice Network, 2016). Out of the 102 included jurisdictions 73 jurisdictions do not require the reporting of dividend and interest payment to non-residents. Among these are many that are overall not very secretive. The following table shows how the reporting of payments correlates with the country characteristics.

Determinant	Correlates with reporting of payments?	Consistent with hypothesis?	Comments
Population	Yes (+)		
Wealth	No		
Quality of governance	Yes (+) except for political stability and control of corruption		
Level of democracy	No		

Economic openness	Yes (-)		Likely due to small countries being more economically open
Landlocked	No		
Island-ness	Yes (-)		Ditto
Legal system	Yes (-)		Ditto
Parliamentary system	No		
English	Yes (-)		Ditto
Natural resources	No		

Table 8: Correlation of hypothesized factors with reporting of payments

4.7 Efficiency of tax administration

This indicator reveals which jurisdictions use a taxpayer identifier system in order to increase the efficiency of the tax administration and whether they have a specialized unit for large taxpayers. Taxpayer identifiers can be used for cross-referencing information reported by financial institutions and companies. This improves the efficiency of the tax administration.

According to Tax Justice Network (2016) the absence of large taxpayer unit “indicates a willingness on part of a jurisdiction to allow large taxpayers to go untaxed”. This of course is a bold assertion as a lack of government resources could also be the reason. Furthermore, it stands to reason that jurisdictions with a small population did not feel the need to improve their tax administration’s efficiency.

The data on this indicator are derived from the Tax Justice Network Survey and from an OECD report called “Tax Administration 2015. Comparative Information on OECD and Other Advanced and Emerging Economies” (2015). Most countries do not use a identifier system and do not have a large taxpayer unit. In fact, 52 jurisdictions have an extremely inefficient tax administration according to these criteria. These can roughly be divided into two categories: poor jurisdictions and jurisdictions with a small population.

It is also apparent how this indicator shows many similarities with the previous indicator: out of the 22 jurisdiction that require the reporting of payments to non-residents 17 have a 100 % efficient tax administration. Here too population and GDP (not GDP per capita) are the most important factors with regard to the efficiency of tax administrations. This might imply that these measures too are more a reflection of the amount of data the tax administration has to process, rather than laxity or deliberate financial secrecy.

The following table shows how the efficiency of tax administrations correlates with the country characteristics.

Determinant	Correlates with efficiency of tax administration	Consistent with hypothesis?	Comments
Population	Yes (+)	Yes	
Wealth	No	Yes	
Quality of governance	Rule of law, government effectiveness and regulatory quality are	No	

	positively associated with efficiency of tax administration		
Level of democracy	No	Yes	
Economic openness	No	Yes	
Landlocked	No	Yes	
Island-ness	Yes (-)	No	
Legal system	Yes (-)	No	
Parliamentary system	No	Yes	
English	Yes (-)	No	
Natural resources	No	Yes	

Table 9: Correlation of hypothesized factors with efficiency of tax administration

4.8 Tax system

This indicator of financial secrecy indicates whether payments from abroad are included in the taxable income and whether a jurisdiction grants tax credits for taxes paid abroad. These measures are intended to avoid double taxation, which would be bad for cross-border trade and investments. But if jurisdictions do this on a unilateral basis this creates a risk of gaps between two tax systems in which some income goes untaxed. The solution to this would be harmonization of tax systems through bilateral or multilateral treaties. But jurisdictions are not eager on negotiating treaties because of two reasons (United Nations, 2014). First, there is the cost of the negotiations which can be a problem for small or poor countries and second there is often an imbalance of power in these negotiations which results in one of the parties being worse off than the other. Hence many jurisdiction favor a unilateral relief of double taxation at the risk of tax evasion.

Furthermore, there is still no conclusive evidence in economics on the effect of double taxation treaties on foreign direct investment, leaving jurisdictions in doubt whether the benefits of a treaty will exceed the costs of negotiating. An article by Neumayer (2007) which is cited by Tax Justice Network (2016) demonstrates statistically that developing countries that have a double taxation treaty with major capital exporting countries like the US received a higher inflow of foreign direct investment than developing countries that did not have a double taxation agreement. Bilateral treaties would show commitment of both jurisdictions and this would mean more certainty for investors. Barthel, Busse and Neumayer (2010) too show that double taxation treaties positively affect foreign direct investment. But they also add that the mechanisms involved are so complex that the effect of double taxation treaties should be analyzed on the country level. On the other hand an article by Baker (2014) shows that double taxation treaties have no effect on foreign direct investment and that the reason for this is that in most cases unilateral relief of double taxation is already in place.

The data on this indicator are derived from the IBFD-database (IBFD, n.d.; Tax Justice Network, 2016). Higher scores are attributed to countries that are more transparent. There are two possible means for unilateral double taxation relief. These are an exemption system and the credit system. The exemption arrangement is seen by Tax Justice Network (2016) as more damaging. The reason for this is that exemption increases the relative importance of tax rates in the country hosting the FDI. This creates an incentive for host countries to engage in tax competition to attract foreign direct investments. In the credit system the tax rate in the host country becomes irrelevant since the taxes paid abroad reliefs the taxable income at home. The absence of unilateral double taxation relief is

also seen as promoting tax evasion because no one wants to pay taxes twice. Hence the full transparency score is awarded to jurisdictions which use a comprehensive credit system. The following table shows how 'tax system' correlates with the country characteristics.

Determinant	Correlates with tax system?	Consistent with hypothesis?	Comments
Population	Yes (+)	No	A credit system is also positively associated with area size and GDP
Wealth	No	Yes	
Quality of governance	No	Yes	
Level of democracy	No	Yes	
Economic openness	Yes (-)	No	
Landlocked	No	Yes	
Island-ness	Yes (-)	No	
Legal system	Yes (-)	No	
Parliamentary system	No	Yes	
English	Yes (-)	No	
Natural resources	No	Yes	

Table 10: Correlation of hypothesized factors with tax system

Jurisdiction with credit systems tend to have larger populations, size and GDP but they have lower economic openness. Economic openness has an effect on tax system that is independent from the other correlates. Thus, a small country, situated on an island, with an English common law system, with English as the primary language, becomes more secretive when its economic openness increases.

In general jurisdictions that have a credit system have low secrecy scores as well. The high secrecy jurisdictions have either the exemption system or do not have a unilateral double taxation relief, the latter being more likely in absence of taxation. This indicator also correlates with the other indicators of financial secrecy except for anti-money laundering, automatic information exchange and real estate ownership disclosure.

4.9 Harmful legal vehicles

This indicator shows whether the law provides for the creation of series LLC's and segregated portfolio companies. Both series limited liability companies and segregated portfolio companies are used to protect some assets in a company against legal claims against other assets in the company. But they can also be used to enhance the opacity of the company. The reason for this is that investigating tax administrations first have to request information on the entire company and then on the separate cells, thereby giving owners the opportunity to remove untaxed assets from the company between the first and the second phase of the investigation.

The second component of this indicator is the prohibition of flee clauses in trusts. Flee clauses allow the movement of the trust to another jurisdiction after certain events such as the introduction of taxation on trusts.

The data on this indicator are derived from the Tax Justice Network survey 2015 and OECD reports (Tax Justice Network, 2016). Higher scores are attributed to countries that are more transparent. 29

jurisdictions allow the creation of harmful legal vehicles, while 73 jurisdictions do not. Many of these 29 are secrecy jurisdictions. The following table shows how this indicator relates to the country characteristics.

Determinant	Correlates with harmful legal vehicles?	Consistent with hypothesis?	Comments
Population	Yes (+)	Yes	
Wealth	No	No	
Quality of governance	Political stability (+)		Financial secrecy does not correlate with political stability
Level of democracy	No	No	
Economic openness	No	No	
Landlocked	No	No	
Island-ness	Yes (-)	Yes	
Legal system	Yes (-)	Yes	
Parliamentary system	Yes (-)	Yes	Very weak correlation
English	Yes (-)	Yes	
Natural resources	No	No	

Table 11: Correlation of hypothesized factors with harmful legal vehicles

4.10 Anti-money Laundering

This indicator measures the compliance with the FATF recommendations against money-laundering. The data on this indicator are directly derived from a review of compliance conducted by the FATF in 2012 (Tax Justice Network, 2016). The following table shows the countries with the lowest FATF compliance.

	Jurisdiction	FATF compliance
1	Maldives	0,09
2	Tanzania	0,13
3	Saint Lucia, Liberia	0,14
4	Paraguay	0,17
5	Seychelles, Aruba, Ghana	0,23
6	San Marino, Botswana	0,24
7	Bolivia, Dominica	0,26
8	Brunei, Samoa, Costa Rica	0,28
9	Grenada	0,29
10	Dominican Republic	0,30

Table 12: jurisdictions with lowest scores on anti-money laundering compliance

This table suggests that there are roughly two categories of jurisdictions that are non-compliant. These are secrecy jurisdictions and less developed countries. However, a significant amount of secrecy jurisdictions has a high degree of compliance.

The following table shows the correlation of anti-money laundering with the country characteristics.

Determinant	Correlates with anti-money laundering?	Consistent with hypothesis?	Comments
Population	No	Yes	

Wealth	Yes (+)		
Quality of governance	Yes (+) Except for political stability	No	Aggregated QoG is also associated with anti-money laundering
Level of democracy	Yes (+)	No	Very weak correlation
Economic openness	No	Yes	
Landlocked	No	Yes	
Island-ness	No	Yes	
Legal system	No	Yes	
Parliamentary system	No	Yes	
English	No	Yes	
Natural resources	Yes (-)	No	Very weak correlation

Table 13: correlation of hypothesized factors with anti-money laundering

The positive association of anti-money laundering with GDP per capita gives the impression that anti-money laundering compliance is related to being a developed country.

4.11 Automatic Exchange of Information

This indicator measures the signing of the Multilateral Competent Authority Agreement. This is a OECD proposal based on the OECD's Common Reporting Standard (Tax Justice Network, 2016) and which provides for the automatic exchange of information. Country-by-Country reports are among the data that can be exchanged. However, as said before there are limitations to this exchange and these limitations are not fixed by the Multilateral Competent Authority Agreement.

In fact, the MCAA contributes to these limitations via section 7 of Annex E (Knobel & Cobham, 2016). Annex E states that jurisdictions are free to choose other jurisdictions that they would like to automatically exchange information with. Second, there is a loophole in what is called the secondary mechanism of country-by-country-reporting. The principal mechanism is, as explained before, the filing of a country-by-country report to the tax authority of the jurisdiction that shelters the parent entity of a multinational group. This of course is problematic when this jurisdiction has not implemented BEPS action 13. In this case the secondary mechanism requires multinational enterprises to appoint a subsidiary in a different jurisdiction as the surrogate parent entity.

There are two other situations in which the secondary mechanism is activated. First, it is activated when the exchange of information for some reason goes wrong. And second, it is activated when the jurisdiction has not signed a Competent Authority Agreement (like e.g. the MCAA). However the model legislation in the BEPS action 13 determines that this last condition only applies to jurisdictions that have signed an international agreement on automatic exchange of information. If there is no such agreement between two countries then the secondary mechanism is not activated and the jurisdiction where the subsidiary is located does not have access to CbCR data.

But there is still a benefit to investigating the signing of the MCAA, even though it does not necessarily lead to the exchange of information between all jurisdictions that have signed the MCAA. The benefit is that these jurisdictions accept the Common Reporting Standard and therefore when there is automatic exchange of information they are required to exchange bank account information.

The scoring on this indicator is based on whether a jurisdiction has signed the MCAA or is committed to automatic information exchange via other means, and second, it is based on the date when

automatic exchange of information will start. The source of the data are the reports published by the OECD on the status of commitments.

There are 21 jurisdictions which have not signed the MCAA and are not interested in exchanging information automatically. On average jurisdictions that have signed the MCAA are significantly less secretive. Table 14 shows how automatic exchange of information correlate with the country characteristics.

Determinant	Correlates with automatic exchange of information?	Consistent with hypothesis?	Comments
Population	No	Yes	
Wealth	Yes (+)	Yes	Weak correlation
Quality of governance	Yes (+) all indicators of quality of governance correlate with automatic exchange of information	No	Steep trend
Level of democracy	Yes (+)	No	
Economic openness	No	Yes	
Landlocked	No	Yes	
Island-ness	No	Yes	
Legal system	No	Yes	
Parliamentary system	No	Yes	
English	No	Yes	
Natural resources	Yes (-)	No	

Table 14: Correlations of hypothesized factors with automatic exchange of information

Jurisdictions that have signed the MCAA and have started exchanging information in 2017 have higher GDP per Capita and lower rents on resources and this suggests that like in the case of anti-money laundering the signing of the MCAA is a feature of developed countries.

4.12 Bilateral Treaties

This indicator of financial secrecy establishes whether a jurisdiction has bilateral treaties that conform with the OECD standards. These standards ensure that information can be exchanged upon request. Indeed, jurisdictions can have for instance a double taxation agreement but which does not provide for exchange of information.

The data on this indicator stems from the OECD Global Forum Peer Review Reports (2015). The full transparency credit goes to jurisdictions that have more than 53 qualifying bilateral treaties. There is a strong correlation with financial secrecy which suggests that secrecy jurisdictions have less bilateral treaties. The following table shows how the number of bilateral treaties correlates with the country characteristics.

Determinant	Correlates with bilateral treaties?	Consistent with hypothesis?	Comments
Population	No	No	Contrary to the hypothesis larger countries (in terms of

			population and GDP) are not more in need of bilateral treaties
Wealth	No	Yes	
Quality of governance indicators	Yes (+) except for political stability	No, reverse trend	Very inaccurate predictions
Level of democracy	Yes	No	
Economic openness	No	No	Contrary to the hypothesis economically open countries do not have more bilateral treaties.
Landlocked	No	Yes	
Island-ness	No	Yes	
Legal system	No	Yes	
Parliamentary system	No	Yes	
English	No	Yes	
Natural resources	No	Yes	

Table 15: Correlations of hypothesized factors with bilateral treaties

One would expect this the number of bilateral treaties to be correlated with GDP, population, economic openness and perhaps size as larger and more open economies would be in need of more bilateral treaties. This is however not the case. Furthermore, the absence of a correlation with GDP per capita suggests that while multilateral agreements are generally a thing of developed countries as evidenced by the previous two indicators, qualifying bilateral treaties are not exclusive to rich countries.

4.13 Disclosure of real estate ownership

The opacity of real estate beneficial ownership can be used for money laundering. This is done by organizing a transaction with an anonymous legal vehicle that is in fact operated by the person who is laundering the money and in which the price is set higher than in the original purchase. The definition of beneficial owner I have used for this indicator is the one used by the European Union. Article 6 of the 4AMLD (Official Journal of the European Union, 2015) states that a beneficial owner is a natural person holding 25 % of the shares in a company, or a natural person who is the beneficiary of a trust or foundation. In the European Union, as well as in many other jurisdictions, service providers are required to identify beneficial owners and this should also give tax authorities access to beneficial ownership data.

Furthermore, the 4AMLD proposes that EU Member States establish a central register of beneficial owners. Article 30 of the 4AMLD states that Member States shall ensure that legal entities incorporated within their territory hold information on their beneficial owners and that this information is hold in a central register. Member States have the option to make the register publicly accessible but are not obliged to do so. But foreign legal entities can still purchase real estate in the European Union without disclosing their beneficiaries. A real estate register which discloses beneficial owners would put an end to money laundering through real estate, but there are actually no countries which require the disclosure of real estate beneficial ownership. There are however jurisdictions that publicly disclose the legal owners of real estate.

This indicator of financial secrecy measures which jurisdictions publicly disclose legal ownership of real estate on the internet and whether data is accessible for free. Public disclosure is important because it also gives foreign tax authorities instant access to the data. These data are often exchanged upon request which takes more time than when tax authorities can browse each other's real estate registers. Many countries have registers that are inadequate either because they do not disclose all the necessary identification data (as in the case of Denmark), or the register does not cover the whole territory (as in the case of Bulgaria), the register does not contain all properties (as in the case of Italy). The data for this indicator on the EU Member States have been collected by myself during my internship in Oxford. The sources I used can be found in the original work included in the appendix. Data on other countries was obtained from the Financial Secrecy Index survey. However, very few countries replied to this survey. This is very unfortunate because this lead to a shortage of data.

The data on the transparency of real estate ownership do not show a correlation with any of the determinants. This indicator is also not correlated with financial secrecy, and neither with any of the other indicators of financial secrecy. These results might be distorted by the large number of missing cases.

5. The determinants and correlates of financial secrecy

The purpose of this chapter is to further discuss the findings of the previous chapter and see whether correlations can be further explained when specific variables are controlled or on the basis of specific cases. In order to arrive at a theoretical understanding of the processes that led to secrecy or transparency we need to determine whether a correlation is spurious or whether it is indicative of a causal or conditional effect on financial secrecy.

The following table recapitulates the hypotheses of this research on financial secrecy and indicates whether they were verified or falsified by the data. The third column shows, where the hypothesis has been verified, which indicators of financial secrecy are associated with the respective determinant in the same way as financial secrecy. The fourth column on the right either mentions findings on the specific types of financial secrecy that oppose the general findings or other remarkable patterns in the data. If a determinant is not in general associated with financial secrecy but does however correlate with a particular type of financial secrecy, then it follows that in some countries this determinant does have an effect on aggregated financial secrecy. For this reason determinants cannot be completely put aside once it is established that it has no overall association with financial secrecy.

	Hypothesis	Correct or false	Indicators	Remarkable findings
1	Small countries are more likely to be secrecy jurisdictions	Correct	Banking, trusts, CbCR, reporting of payments, efficiency of tax administration, harmful legal vehicles	
2	High income countries are more likely to be secrecy jurisdictions	False		Notwithstanding the average many secrecy jurisdictions are extremely wealthy and have a relatively large share in the global market of financial services
3	A sufficient quality of governance is a precondition for becoming a secrecy jurisdiction	False		
4	A low level of democracy is a precondition for becoming a secrecy jurisdiction	False		
5	Economic openness is positively associated with financial secrecy	False		Economically open countries tend to use more radical methods for avoiding double taxation (tax system)
6	Non land-locked countries are more likely to be secrecy jurisdictions	False		

7	Being situated on an island is positively associated with financial secrecy	Correct	Banking, trusts, CbCR, reporting of payments, efficiency of tax administration, tax system, harmful legal vehicles	
8	Having a legal system of British origin is positively correlated with financial secrecy	Correct	Trusts, CbCR, reporting of payments, efficiency of tax administration, tax system, harmful legal vehicles	
9	Having a Westminster parliamentary system is positively associated with financial secrecy	False		
10	Secrecy jurisdictions are more likely to have English as a primary or official language	Correct	Trusts, CbCR, reporting of payments, efficiency of tax administration, tax system, harmful legal vehicles	
11	Financial secrecy increases with lower rents on natural resources	False		

Table 16: Findings on the hypotheses

As said in the introduction, one purpose of looking at the different indicators of financial secrecy separately to establish whether indicators really signal deliberate financial secrecy, which was an aspect of the definition of financial secrecy. The findings in the previous chapter on the specific types of financial secrecy indicated that not every type signals this intentional character.

First, the recording of company beneficial ownership is only required by EU Member States. This makes the assertion by Tax Justice Network (2016) that the absence of this recording is typical to tax havens an odd statement. Many jurisdictions that not all aspire to be a secrecy jurisdiction or tax haven do not require the recording of company beneficial ownership. It is therefore unreasonable to consider the absence of this recording as a sign of financial secrecy.

Second, GDP has an effect on Country by Country Reporting and efficiency of the tax administration that is independent from population size and this effect was absent for the other types of financial secrecy. It is therefore plausible that these types do not reflect deliberate attempts but should be considered as tools that tax administrations need once they deal with a certain number of taxpayers and taxable income and assets.

Third, Automatic Exchange of Information was highly correlated with GDP per capita. The reason for this is probably that many high-income countries are OECD countries and these countries are usually the first to sign OECD proposals. The Multilateral Competent Authority Agreement is a very recent proposal and the first possibility to sign this agreement was 29 October 2014 (OECD, 2017). The cut-off date of the Financial Secrecy Index 2015 was 31-12-2014. Thus countries that had not signed

within this period of little more than 2 months receive a bad score on this indicator. This is thus an unreasonable indicator. Moreover, the most recent update on which countries have signed this agreement (OECD, 2018) shows that many countries that scored low on this indicator in the Financial Secrecy Index 2015 have signed the agreement since then.

Because these indicators do not signal intentional secrecy I will recompose a financial secrecy aggregate that excludes these indicators. This alternative aggregate will be used to further investigate the correlates of financial secrecy. The following table shows how this alternative financial secrecy aggregate relates to the hypotheses. The alternative aggregate is correlated with economic openness, a correlation that was absent for the original figures. Furthermore, where there was already a correlation, the correlations have become stronger.

	Hypothesis	Correct or false
1	Small countries are more likely to be secrecy jurisdictions	Correct
2	High income countries are more likely to be secrecy jurisdictions	False
3	A sufficient quality of governance is a precondition for becoming a secrecy jurisdiction	False
4	A low level of democracy is a precondition for becoming a secrecy jurisdiction	False
5	Economic openness is positively associated with financial secrecy	Correct, but very weak
6	Non land-locked countries are more likely to be secrecy jurisdictions	False
7	Being situated on an island is positively associated with financial secrecy	Correct
8	Having a legal system of British origin is positively correlated with financial secrecy	Correct
9	Having a Westminster parliamentary system is positively associated with financial secrecy	False
10	Secrecy jurisdictions are more likely to have English as a primary or official language	Correct
11	Financial secrecy increases with lower rents on natural resources	False

Table 17: alternative financial secrecy aggregate outcomes on hypotheses

5.1 Size

According to the hypothesis in this research small countries tend to have higher financial secrecy scores because:

- A small country typically has a small population and therefore a small labour force. A large labour force is a requirement for obtaining economies of scale, in particular in labour-intensive industries, which is required to be competitive in international trade.
- A small country often has few natural resources, the abundance of which is in certain sectors required to obtain economies of scale that enhance its competitiveness in the international trade of raw materials.
- A small country usually has a small-sized economy. A small economy size often implies a small share in international trade which causes dependency on world markets. This

dependency makes it more vulnerable and a more risky investment for foreign investors, and this results in a lack of foreign capital in various sectors.

The first part of this hypothesis has been verified which is that population and area size are associated with financial secrecy. This holds true for the alternative financial secrecy aggregate.

Furthermore, the data show a pattern which is that countries with a population above 1 million are either secretive or transparent, but countries below the 1 million population are almost exclusively secretive. These patterns suggests that being a secrecy jurisdiction is not exclusive to scarcely-populated countries and a small population is therefore not a precondition of financial secrecy, but the likelihood of secrecy increases below the threshold of 1 million.

The second part of the hypothesis mentions three reasons, which are in theory not mutually exclusive, why small countries are more likely to be a secrecy jurisdiction. All three reasons come down to the same thing, which is that the under-development of other sectors leads to insufficient income which incites these countries to develop an offshore financial centre.

5.1.1 Size of the population

As said the quantitative analyses showed a correlation of population size and financial secrecy where population is divided in two groups involving those with more than 1 million residents and those with less than 1 million residents. This correlation holds true for the alternative financial secrecy aggregate which can even more accurately be predicted.

The first explanation for this correlation was that a small population involves the absence of several advantages for sectors exporting merchandise. The CIA World Factbook data (2016) on the size of the industrial sector and the agricultural sector as a percentage of the GDP, which were included in the data, can be used to provide some clues regarding this explanation.

The data show that sparsely populated countries are less industrialized but they do not have smaller agricultural sectors. This vaguely suggests that population size has an effect on the size of the industrial sector. Small countries do on average not have comparative advantages in the industrial sector, which could be due to the scale of production not being at the optimum level. An increase in production in the industrial sector could enable small countries to increase the productivity in the industrial sector vis-à-vis the productivity in other sectors, which gives a comparative advantage. A small population could pose a limit to the increase of the scale of production, but there may also be other causes.

5.1.2 Natural resource rents

The hypothesis on natural resource rents stated that financial secrecy would increase with lower rents on natural resources, relative to the GDP. This turned out to be incorrect. Still, the distribution on this variable shows a remarkable pattern which is that many secrecy jurisdictions have low or zero income on natural resources, but this does not lead to a general correlation of resource rents with financial secrecy because there are also secrecy jurisdictions with extremely high incomes on natural resources.

In particular countries like Liberia, Saudi Arabia, the United Arab Emirates, Ghana and Brunei have high rents on natural resources, while at the same time being secrecy jurisdictions. The rents on natural resources in these countries are more than 10 % of the GDP. Liberia and Ghana however are

low income countries which implies that an offshore finance sector is an attractive option for these countries, despite the fact that a large part of the required income is covered by natural resource rents. The rich oil states on the other hand appear to form a different category. Their high income on natural resources will, hypothetically speaking, lead to a resource curse and this makes it increasingly difficult to get into the offshore business. Since these countries seem to constitute two distinct categories, low income resource-rich secrecy jurisdictions and high income resource-rich secrecy jurisdictions, it is incumbent to take a closer look as to why these countries have adopted financial secrecy. This will be done by looking at one case for each of these categories respectively.

Liberia

Liberia is an exceptional case for several reasons. Unlike many other secrecy jurisdictions Liberia is geographically isolated from the major economies in the world while at the same time being isolated from other secrecy jurisdictions. Additionally, Liberia is also an exception because while being a secrecy jurisdiction it is not commonly known as a tax haven by the public. Moreover, Liberia derives almost half of its GDP from natural resources, which is exceptionally high. But also in absolute terms Liberia has a high amount of natural resources, especially compared to the size of the country (CIA World Factbook, 2017).

It was listed in 2002 by the OECD (OECD, 2007) as a non-compliant jurisdiction. On the other hand the IMF (Zoromé, 2007) has not listed Liberia as a tax haven country. Recently, the OECD provided an update on the list of non-cooperative jurisdictions (OECD, 2017) which no longer identified Liberia as an non-cooperative jurisdiction. The reason why Liberia did not appear on the list by Zoromé (2007) is that Zoromé looked at offshore financial centres and Liberia is not a significant financial centre (INCSR, 2017).

The different perceptions concerning the status of Liberia are due to the fact that Liberia's secrecy provisions have a very specific purpose, namely the shipping industry (Sharife, 2010). Shipping companies register their ships in Liberia for fiscal or regulatory reasons. This is a well-known arrangement in the shipping industry and is commonly referred to by the concept of "flag of convenience". Countries offering secrecy to conceal ship ownership are referred to as FOC havens. According to the OECD (1973) there is only one reason to become a FOC jurisdiction which is the collection of registration fees. This explains why Liberia has financial secrecy while at the same time not being a financial centre. There is no profit shifting towards offshore accounts in Liberia, instead the country is used for secret ship ownership. In 2009 Liberia has the second's largest shipping registry after Panama (UNCTAD, 2009). Moreover Liberia, Panama and the Marshall Islands (also secrecy jurisdictions) account for almost 40 % of the world fleet. These figures indicate the scope of the Liberian shipping registry.

There are several ways in which the beneficial ownership of vessels can be concealed when registering with the Liberian register. Liberia allows the holding of shares by nominees without a requirement to identify and record the beneficial owners (Global Forum, 2012). Second, Liberia allows bearer shares and there is no registry of bearer shares or a recording of bearer share transfers. Third, there is no requirement to register settlors in trust deeds. This all implies that Liberia scores low on the transparency of trusts and company ownership, which is also reflected in the data. Liberia also owes its high secrecy score to the low compliance with international transparency standards. The latter suggests that the case of Liberia does not reflect the average effect of

population on financial secrecy since population does in general not affect the compliance with international transparency standards.

The case of Liberia shows that the same secrecy features are not always used for the same goals. The secrecy of company ownership and trusts is not used here to shelter offshore capital but instead it provides for the secret ownership of ships.

It is likely that the very low GDP (3,8 bln US\$) and GDP per capita (900 US\$) formed strong incentives for organising the open shipping registry. Considering however that the low GDP is not so much caused by the absence of natural resources, it follows that Liberia lacks competitive advantages in manufacturing. This is also reflected in the contribution of the manufacturing sector to the GDP, which in 2015 accounts for only 14,4 % (CIA World Factbook, 2017). This is very different from industrializing developing countries which tend to derive more than 30 % of their GDP from manufacturing (CIA World Factbook, 2017). It is also reflected in the percentage of the labour force that is employed in manufacturing, which is only 8%. Indeed, the country for the largest part relies on agriculture for its livelihood. The small labour supply likely contributes to the lack of competitive advantages in the manufacturing sector. Liberia has a population of roughly 4 million and a labour force of roughly 1,654 million (CIA World Factbook, 2017). This amount is nowhere near the labour forces of countries that have very high exports of manufactured goods (CIA World Factbook, 2017) and this suggest that it is insufficient for obtaining economies of scale in manufacturing.

Additionally, since Liberia has a very small economy and a low production in manufacturing it stands to reason that explanation C also holds true for Liberia. Hypothetically, due to its low production Liberia will be a price-taker on world markets and therefore foreign investors are not very eager to invest in Liberia's manufacturing sector. The figures on Liberia's foreign direct investment stock (CIA World Factbook, 2017) however appear to tell a different story. At 31 December 2015 Liberia had a stock of foreign direct investment of roughly 17 billion US Dollars. Moreover the net annual inflow of FDI is 21,6 % of its GDP (World Bank, 2016) which is much higher than countries that have high exports of manufactured goods. The availability of natural resources has always been one of the principal host-country determinants of foreign direct investments (Noorbakhsh et al., 2001) although foreign direct investment has shifted more towards the manufacturing and service businesses. Considering the abundance of natural resources and the small manufacturing sector it is therefore likely that Liberia owes its large FDI stock to the extractive industry and not to the manufacturing sector.

The case of Liberia suggests that a low national income in general creates an incentive to implement financial secrecy and that ultimately it does not make a difference which sectors generate insufficient income. Liberia has a considerable income on natural resources but due to the absence of sufficient income in other sectors it still has a GDP per capita of 900 US dollars and this forms a strong motivation for the open shipping registry.

United Arab Emirates

The United Arab Emirates derives a large part of its income from natural resources, in particular oil, and still it has found it necessary to implement financial secrecy policies. This opposes the hypothesis which stated that countries earning less on natural resources would be more incited towards financial secrecy and countries with large revenues on natural resources less since there is no need for an offshore finance sector, and which also stated that it becomes increasingly more difficult to

branch out to offshore finance due to the effects of the resource curse. The United Arab Emirates however owe 22,5 % of their GDP to the exploitation of natural resources and it has a financial secrecy score of 77. The data show that it is surprisingly transparency on banking and trusts but that it scores low on international transparency commitments. The United Arab Emirates have a population of roughly 5,6 million and a labour force of roughly 5,1 million (CIA World Factbook, 2017).

Relative to its population size the United Arab Emirates do not feature a considerable high global scale weight (0,085). If one were to call it an offshore financial centre, it ought to be called a modest one. Still it is considered an offshore financial centre by for instance the European Union who put the jurisdiction on a blacklist in 2017 (Aljazeera, 2017) because it was worried that offshore banks in Dubai are being used for tax evasion. Indeed, it is not a secret that Dubai aspires to be an international financial centre and a financial hub within the Middle East region, as these plans were explicitly laid out by its government in 2004 (Dubai International Financial Centre, 2017).

Still, the question remains how a country that has such large inflows of foreign currency maintains its competitiveness in other sectors, such as the finance sector? Are the Emirates really not affected by the resource curse? According to several academic accounts the United Arab Emirates have indeed been able to steer clear of the resource curse and this might explain why it was able to organize a finance sector.

According to Soto and Haouas (2012) the Emirates did not completely avoid the oil curse but have nevertheless been able to diminish its effects.

The government of the United Arab Emirates has managed to avoid the full force of the resource curse by tackling three out of four aforementioned mechanisms of the resource curse. Soto and Haouas (2012) found no evidence for Dutch disease effects which is probably the result of the local currency being pegged to the US dollar. Second, rent-seeking has been avoided by a sound regulation of the private sector. The third mechanism of the resource curse, however, has not been fully avoided. Due to the availability of low-paid workers from overseas there has not been an incentive to invest in human capital. The fourth mechanism has been avoided by diversifying the economy, which especially took place in Dubai. The Dubai international financial centre which was set up with the help of oil revenues is exemplary to this attempt to diversify exports. Soto and Haouas (2012) add a final note that in Dubai firms did not achieve the growth levels of jurisdictions like Singapore and Hongkong, and this would be due to a nevertheless weak presence of the resource curse.

The case of the United Arab Emirates demonstrates another reason why a jurisdiction features financial secrecy while it has high rents on natural resources. The rents on natural resources might be used to diversify into the offshore finance business, although the success of these offshore financial centres will be modest because it is very difficult to fully escape the resource curse. Thus, this case shows that the resource curse can actually form an incentive to become involved in offshore finance.

5.1.3 Size of the economy

The third explanation of why small countries are more likely to be secrecy jurisdictions was that small countries generally have a smaller economy as well. This implies smaller export volumes and thus very little influence on the prices in international trade which then makes it more vulnerable to fluctuations. This is unattractive to foreign investors and a lack of foreign capital therefore keeps the

turnover in various sectors at a low level. Moreover, many industries do not exist in these small countries, as evidenced by their reliance on imports (Streeten, 1993).

Basically, this explanation implies that countries that already export large quantities of a particular product are more likely to maintain this position because they receive more foreign direct investments. On the other hand countries that export small quantities of this product or do not export this product at all are structurally disadvantaged and these industries will not be able to grow, and emerging productions of this product will not be successful.

The findings indicate that size of the economy does not have an effect that is independent from population size on financial secrecy. Financial secrecy in sparsely populated countries does not increase when the GDP decreases. It is however not feasible to find out if some countries are still affected by this mechanism because it depends on the products that a country exports. Accordingly, large economies can be price-takers too when it concerns certain products. Therefore all countries are to some extent affected by this mechanism. Only a country-specific analysis can establish to what extent a country is affected by this and this is beyond the scope of this research.

5.1.4 The Cayman Islands

Thus, countries with small populations are more likely to have high financial secrecy scores and this would be due to a lack of income in other sectors which leads them to look for other sources of income. The economic structure of these small economies offers some partial evidence for the assertion that these countries lack advantages and therefore income in exporting sectors other than the financial services sector. However, the only way to obtain certainty about this relation is by looking at the particular circumstances in a country before it adopted financial secrecy.

The data showed that not all secrecy jurisdictions are rich. In fact, some secrecy jurisdictions are among the poorest jurisdictions in the world. These cases support the assertion that a lack of income leads countries to opt for financial secrecy. However, we can really verify this hypothesis when we can prove that jurisdictions that are now wealthy and have successful offshore financial centres were once too motivated by insufficient income. The Cayman Islands is an excellent case for this because it is a secrecy jurisdiction that is now extremely wealthy and is relative to its GDP and population the most extensive offshore financial centre in the world.

According to Picciotto (1992, p. 124) the Cayman Islands has been a tax haven since 1965. According to Williams' History of the Cayman Islands (1992) there were no banks on the islands before 1953 which means that the jurisdiction completely shifted its economic structure in the second half of the 20th century. There have been several academic accounts of the Cayman Islands' transformation to secrecy jurisdiction. This includes the works by Roberts (1995), Hudson (1996) and Freyer and Morris (2013). According to Freyer and Morris the Cayman Islands' economy in the 1950's relied heavily on the shipping industry, that is, Caymanian workers were employed on commercial shipping vessels. The Cayman Islands did not have any significant exporting sectors (Cayman, n.d.). In fact, the first bank established in 1953 had nothing to do with the offshore business but handled remittances sent home by seamen. The Cayman Companies Law of 1960 is the first sign that the jurisdiction aspires to become an offshore financial centre. This law effectuated the abolishment of all direct forms of taxation. It also allowed nominee ownership which conceals the beneficial owners behind legal entities. Thus, the same law that abolished taxation also included financial secrecy. Then in 1966

there was the Banks and Trust Companies Regulation Law which included the penalization of confidentiality breaches (Hudson, 1996).

These laws were sufficient for turning the Cayman Islands into a full-grown secrecy jurisdiction. Subsequent laws were only minor amendments aimed at tackling possible weaknesses in the secrecy system. In particular the famous 1976 Castle Bank investigation conducted by the American IRS led to the toughening up of secrecy through the introduction of the Confidential Relationships Preservation Law which made it illegal even to ask for confidential information. But the basic legal infrastructure for financial secrecy was already established as early as 1960, because the Companies Law allowed the anonymous creation of companies.

One reason for the provisions in the Companies Law was that at the time the Cayman Islands faced potential mass unemployment due to technological advancements in the shipping industry (Freyer & Morris, 2013), which was the most important exporting sector of the Cayman Islands. A second reason was that there was a mosquito infestation which would make a shift towards tourism unviable and the offshore business could fund the eradication of mosquitos. But until 1964 there was still only one bank on the Cayman Islands (Freyer & Morris, 2013, p. 21). There was also no expertise in financial services and this only started to change when the newly introduced secrecy legislation began attracting expatriate professionals (Freyer & Morris, 2013) who helped with the consolidation of the original legislation.

Thus, the primary source of the Cayman Islands' competitive advantage in offshore finance is its secrecy legislation because this is what instigated the inflow of professionals. The Cayman Islands case in fact shows that financial secrecy pre-exists financial service exports and moreover that financial secrecy is a precondition for being successful in financial service sector, although it is not a guarantee that it will lead to success. The case of the Cayman Islands also shows that an economic shock might create an incentive to get into offshore finance. One of the characteristics of small economies is that they often have a less diverse economy and less diversity in exports (Briguglio, 1995). This makes them more vulnerable to economic shocks, which was exactly what happened in the Cayman Islands.

There are no data on the GDP of the Cayman Islands before the advent of financial secrecy and the offshore finance sector but considering that there were no banks on the island until 1953 and the mass unemployment around that time it is likely that the national income was insufficient and many people were living at the bare minimum. This demonstrates that a secrecy jurisdiction that is now very wealthy once used to be very poor and this further strengthens the argument that a lack of income in other exporting sectors forms a strong incentive for financial secrecy. The same developments can also be demonstrated for other secrecy jurisdictions that are now extremely wealthy. Singapore, for instance, had a GDP per capita of 516 US\$ in 1965 (World Bank, 2009) and is now too one of the primary examples of a wealthy offshore jurisdiction.

5.2 Economic openness

The hypothesis on economic openness stated that there would be a positive correlation between economic openness and financial secrecy. The analysis, however, pointed out that the original financial secrecy scores are not related to economic openness. But 'tax system' did turn out to be associated with economic openness. Moreover, when the alternative financial secrecy aggregate is substituted for the original financial secrecy scores, then financial secrecy is, in fact, associated with

economic openness, although this accounts for a very weak model. Economic openness also has an effect on financial secrecy that is independent from population size.

Thus, jurisdictions that are more economically open tend to use more radical measures for avoiding double taxation. This means that in these countries economic openness actually did have an effect on the aggregated financial secrecy score. Of course this is true for jurisdictions without taxation in which case it makes no sense to use a credit system. But there are also jurisdictions with normal tax rates and which use exemptions beside a credit system, such as France, Czech Republic, The Netherlands and Ireland. France, however, has only a moderate economic openness, whereas Ireland, Czech Republic and the Netherlands are on position 5, 15 and 16 of the economic openness ranking respectively. This raises the question of what specific situation led these countries to use an exemption system and whether this is related to the openness to trade.

The Czech Republic uses a deduction system in the absence of double taxation treaties to avoid double taxation (KPMG, 2017). Therefore the presence of the Czech Republic in this list is not completely justified. Indeed, no income goes untaxed when a deduction system is effective. However, a deduction system does not fully prevent double taxation. This is enough reason for Tax Justice Network (2016) to regard the deduction system as an incentive for tax evasion.

The Netherlands

The Netherlands on the other hand offers two kinds of exemptions. First, the Netherlands has tax treaties with about 80 different countries and many of these treaties exempt interest and royalties from withholding taxes (Duijn's Tax Solutions, 2012). Second, there is a participation exemption. Many countries of course offer some sort of participation exemption, but the Netherlands offers a full exemption of corporate taxation on inter-corporate dividends and capital gains (Belastingdienst, 2017) where there is a participation share of at least 5 %. Other countries offer less attractive conditions either because they require a 10 % participation (as for instance in Belgium), there is a 95 % exemption (as for instance in France), or they only exempt capital gains (as for instance in Ireland) (Deloitte^a, 2017; Deloitte^b, 2017; Deloitte^c, 2017).

The participation exemption in the Netherlands has a long history, which goes back to the 19th century (Toet, 2012). The initial legislation of 1894 only applied to domestic inter-corporate dividend payments. But already in 1914 there was an amendment that exempted international subsidiaries from Dutch taxation (van der Geld, 2011). Initially Dutch companies with international subsidiaries benefited from the participation exemption, but over time many international concerns started creating holding companies in the Netherlands (De Bruijn, 2011) because the Dutch participation exemption is favorable to that of other jurisdictions because of the reasons that have just been mentioned.

The participation exemption required that international subsidiaries are subject to tax. But until 2007 the Dutch laws did not specify the appropriate taxation rate and so a subjection to a 1 % corporate tax would be enough to become eligible for the participation exemption (Toet, 2012). The amendments of 2007 and 2010 substituted a motive-test (which excludes investment vehicles) for the subject-to-tax test (Toet, 2012). In 2016 the European Union proposed the Anti-Tax Avoidance Directive which posed a significant threat towards the existence of the Dutch participation exemption because of the inclusion of a switch-over clause. Under pressure of the Dutch government the EU deleted the switch-over clause. The participation exemption is defended by the Dutch

government as being “important in offering an attractive investment climate” (Ministerie van Financiën, 2011). It is argued by the Dutch government that the Netherlands have an open economy, with a small domestic market and a large international market. For this reason it wants to remove obstructions to international trade, such as double taxation. Therefore, this case shows that (perceived) economic openness can be a cause of more aggressive methods for avoiding double taxation.

Besides the extensive participation exemption the Netherlands is one of the few non-tax haven countries that has tax treaties that exempt interests and royalties from withholding taxes (Deloitte, 2017^d). Not all treaties offer these exemptions, but about one third of the 80 tax treaties exempts both royalties and interests unconditionally. Furthermore, many tax treaties also lower the amount of dividend withholding tax payable. The Netherlands has these kind of tax treaties for the same reason as it has the participation exemption, that is, the Dutch government is afraid that not having these policies would harm the Dutch investment climate (Financieel Dagblad, 2017). The Dutch government was pressured by the EU in 2016 (Investico, 2016) to implement taxes on royalties and interests and it appears that the request was successful because the new Dutch government constituted in the fall of 2017 has agreed to do this (Financieel Dagblad, 2017).

The Netherlands is the world’s largest conduit-country (Weyzig, 2012) and an empirical analysis by Weyzig (2012) found that a tax treaty with the Netherlands is the most important structural determinant of diverted FDI (i.e. FDI that passes through an intermediate country). Thus, “FDI diversion is higher if the home and host country both have a tax treaty with the Netherlands, and lower if there exists a direct treaty between the home and host country” (Weyzig, 2012, p. 930).

Ireland

Ireland appears as fifth on the ranking of economic openness and 10th on the global scale weight ranking. The country does not have a comprehensive participation exemption but it offers several other types of exemption that intend to avoid double taxation. The most important one is the exemption of foreign income for non-residential companies. Non-residential companies are companies that have their central management elsewhere but are still incorporated in Ireland. So this structure is almost the same as the participation exemption, except for the fact that there is no need to create a participation structure. Participation exemptions require a certain percentage of shares and require that a company is not used for portfolio investments, which would make the Irish arrangement more attractive.

However, the non-residential company exemption has been restricted (Lowtax, n.d.). The non-residential company status is only granted to companies that are resident in a treaty country and companies that are controlled by an EU resident or a resident of a treaty country or whose shares are traded on an EU Member State stock exchange or a treaty country stock exchange. It is clear that these restrictions are not very strict and many companies have continued to benefit from the Irish non-residential company exemption. Furthermore, like the Netherlands, Ireland has about 80 tax treaties (Revenue, 2018). And like in the Netherlands, many of these treaties unconditionally exempt withholding taxes on royalties and interests.

The tax policies of Ireland are elaborated in government documents (Department of Finance, 2017). There is also a strategy document called “A Road Map for Ireland’s Tax Competitiveness (Department of Finance, 2014). This document announced the abolishment of the non-resident status granted to

Ireland incorporated companies in the 2014 Finance Bill. However there is a transition period to 2020 for existing companies. There is no explicit account of why Ireland had this risky exemption arrangement. But the document on tax competitiveness (Department of Finance, 2014) defines the globalization of trade as an important reason for creating attractive tax policies, thereby implicitly referencing to Ireland's economic openness. It is therefore probable that its economic openness has been the reason why Ireland has this rather radical and risky method of avoiding double taxation.

5.3 Islands, Common Law and English language

These three determinants, island-ness, English common law and English as a primary language, are strongly associated with financial secrecy. It is now incumbent to further study these apparent relations to see whether they are spurious or whether they had an independent effect on financial secrecy. The data also show that these characteristics have a high degree of covariance, meaning that the combination English speaking island with English common law is very frequent. This makes sense because often these jurisdiction are former colonial territories of the UK or are still connected to the UK as a dependency.

Additionally, these factors tend to be associated with the same kinds of financial secrecy, which indicates that the same kinds of financial secrecy tend to be present on English speaking islands with common law. The similarity of secrecy arrangements in these places, further supports the argument that the frequent combination of these factors with financial secrecy is not a mere coincidence.

5.3.1 Islands

According to the hypothesis on island-ness, being situated on an island would be positively associated with financial secrecy and this would be due to the fact that islands, on average, tend to be small in size, population and economy. The factor island-ness correlated with banking, trusts, CbCR, reporting of payments, efficiency of tax administration, tax system and harmful legal vehicles. These factors, with the exception of CbCR and efficiency of tax administration, can be used to recompose a financial secrecy aggregate.

The second part of the hypothesis implicitly renounces an independent effect of island-ness on financial secrecy. A multiple regression analysis confirms that island-ness does not have an independent effect on financial secrecy and that the correlation of island-ness and financial secrecy is due to population size, and not area size and size of the economy.

5.3.2 Common law

According to the hypothesis the type of legal system would correlate with financial secrecy. The explanations given for this correlation imply that an independent effect was hypothesized. A multiple regression analysis indicates that the type of legal system has an effect that is independent from other factors included in this research, in particular the factor population size. This independent effect is due to countries with less than 1 million residents becoming more secretive when they obtain an English common law system. Countries with more than 1 million residents do not become less secretive when they dispose of the English common law system. Another interesting finding was that bank secrecy is not related to common law.

5.3.3 English language

The hypothesis on this aspect stated secrecy jurisdictions are more likely to have English as a primary or official language. The data verified this hypothesis. Two explanations were provided which implies that an independent effect of English as a primary or official language was hypothesized.

English does not have an effect on financial secrecy that is independent from population. This means that countries with less than 1 million residents do not become more secretive when they start speaking English and also that countries with more than 1 million residents do not become less secretive when they do not feature English as a primary or official language.

6. Conclusion

6.1 Answering the research question

The research question of this research was:

What factors influence the financial secrecy of a jurisdiction?

The definition of financial secrecy was derived from Tax Justice Network's (2018) definition of a secrecy jurisdiction. Secrecy jurisdictions were defined as jurisdictions that *intentionally* create regulation for the benefit of non-residents, said regulation undermines the regulation of other jurisdictions and said regulation is supported by a legally backed 'veil of secrecy'. However, financial secrecy was not used as a binary variable but as a spectrum variable because secrecy jurisdictions differ in the extent they offer undermining regulation and also in the impermeability of their secrecy veil. To measure the variance in financial secrecy, I followed Tax Justice Network's (2016) methodology that divides financial secrecy into a number of concrete indicators.

The Financial Secrecy Index 2015 (Tax Justice Network, 2015^b) showed that tax havens, that is countries with 'favourable' tax rates, also tend to have a high degree of financial secrecy. On the basis of these facts I considered it safe to assume, or at least safe to hypothesize that the same factors that make a country more likely to be a tax haven, have an effect on its financial secrecy status as well. The literature provided a number of country characteristics that seem to be related to tax haven-ness and on the basis of this I hypothesized the factors influencing financial secrecy.

In order to answer the main research question it was considered necessary to answer a series of sub questions dealing with the influence of these factors on the specific indicators of financial secrecy. On the basis of the answers to these sub questions several indicators of financial secrecy could be excluded from the financial secrecy aggregate because the data suggested that they do not really reflect *intentionally* organized financial secrecy. The creation of this alternative financial secrecy aggregate leads to more reliable findings as to what factors are associated with financial secrecy.

On the basis of this alternative financial secrecy aggregate it was possible to establish what factors influence the financial secrecy of a jurisdiction.

It was found that sparsely populated jurisdictions tend to score higher on financial secrecy. It was suggested that this could be due to insufficient income and this in turn would be due to a small labour force, the absence of natural resources or the small size of the economy. Of these three mechanisms, natural resource rents as a percentage of the GDP does not correlate with financial

secrecy. However, this might be due to on the one hand the existence of secrecy jurisdictions that have a low national income despite the considerable size of the extraction industry and on the other hand secrecy jurisdictions that have high income on natural resources and look to offshore finance as a way of diversifying their economy and mitigating the symptoms of the resource curse. Therefore, none of these three mechanisms can be ruled out as having an influence on financial secrecy. It is, however, difficult to prove their presence, because it is difficult to be certain what causes the absence of something. The case of the Cayman Islands illustrates that a (forecasted) lack of income in the 1950's caused it to look for alternative sources of income. What must have influenced its decision for offshore finance is that the country did not have significant exporting sectors, it did not have a diverse economy, nor did it have natural resources. It is likely that the size of its population and economy have played a role this.

Second, it was found that economic openness has a weak association with financial secrecy, but it has a strong influence on the method used for avoiding double taxation. The reason for this is that this openness to trade makes countries more concerned about the negative effects of double taxation on international trade and foreign investment. The consequences of this are well-known, which is that several non-secrecy countries with high economic openness, in particular the Netherlands, became conduit-countries because of an attractive combination of full-blown participation exemptions and tax treaties that reduce withholding taxes on dividends, royalties and interests (Weyzig, 2012). Although the initial intention of the favourable tax treaties and participation exemption was not to undermine other jurisdiction's regulation, the fact that Netherlands has been an important conduit-country for more than a decade – A 2006 SOMO report (Van Dijk, Weyzig & Murphy, 2006) already established that the Netherlands functioned as a conduit-country - suggests that the Dutch government was okay with undermining other jurisdictions' regulation and the Dutch methods of avoiding double taxation thus are covered by the definition of financial secrecy.

Third, it was found that island-ness, common law systems and English as primary language are correlated with financial secrecy. Of these three factors only the common law system has an effect on financial secrecy that is independent from population size. This effect only applies to sparsely populated countries and this suggest that an English common law system makes it more attractive for small countries to become a secrecy jurisdiction. One reason for this might be that English common law is more attractive to clients of offshore financial services. Another possible reason might be that English common law provides for a more efficient transition towards legally backed financial secrecy. The prevalence of common law among secrecy jurisdictions is probably related to what has been dubbed Britain's 'second empire' (the first empire being the British colonial empire), which signifies a network of offshore FDI flows with London as its central hub (Haberly & Wójcik, 2014). The existence of such a network demonstrates the importance of colonial ties. But this does not explain why there is no French 'second empire'. This suggests that the institution of common law, which all the jurisdictions in the British offshore network have in common, has something to do with its success.

6.2 Critical reflection

This section will reflect on the limitations of this research. This will be split into two parts. This research draws heavily on the methodology used by Tax Justice Network (2016) for the

measurement of financial secrecy and the first task is to reflect on this methodology. The second part will reflect on the limitations of the conclusions of this research.

6.2.1 Tax Justice Network's methodology

Criticism addressed at TJN's methodology can be found throughout this thesis, but this section will provide a more systematic elaboration of its flaws. There are several points on which this methodology can be criticized, some of which are quite harmless, others have more far-reaching implications. This comprises the following:

- The inclusion of indicators with extremely abnormal distributions
- The use of the global scale weight
- The inclusion of indicators that do not really reflect regulation that intentionally undermines the regulation of other countries, or intentionally providing financial secrecy

Unnecessary indicators

As addressed in the theory section of this research two indicators are included that have extremely non-normal distributions. These are the public disclosure of company beneficial ownership and the public disclosure of company accounts. Almost none of the jurisdictions included feature regulation requiring these disclosures.

Global scale weight

To the layman that takes a cursory look at the methodology used by Tax Justice Network (2016) the Financial Secrecy Index looks like an objective and reliable ranking because unlike many other cross-country rankings it draws on objective data. However, in the calculation of the Financial Secrecy Index Tax Justice Network makes an arbitrary move that supports their political cause, namely the multiplication of the secrecy scores with the global scale weight.

The global scale weight offers a percentage that reflects the share of a country in the global market of financial services. The assumption behind this choice is that a country that has a lot of financial services exports, must also has a large share in transactions to offshore jurisdictions. This is not necessarily true. The Netherlands has extremely large outbound flows of FDI to offshore jurisdictions but has a relatively low global scale weight (Haberly & Wójcik, 2015). Many among the countries with the highest global scale weight are also among the largest economies in the world. Large economies are usually large sources of FDI and this alone would suffice to give a country a high global scale weight. Considering that 30 to 50 % percent of global FDI is "accounted for by networks of offshore shell companies" (Haberly & Wójcik, 2015) it is safe to say that high exports of financial services increases the likelihood of a country handling FDI send to offshore jurisdictions, but there is no ground for assumption made my Tax Justice Network. The use of the global scale weight puts large economies like the USA high on the Financial Secrecy Index and this provides a distorted view of the geography of financial secrecy, especially to the general public who will likely only take a quick look at the ranking, without considering the underlying concepts.

Indicators that do not reflect the concept of financial secrecy

As said before, several indicators are included that on closer inspection do not capture the concept of financial secrecy as it defined by Tax Justice Network (2016) and as it is used in this research. The first indicator that qualifies for this is the recording of company beneficial ownership. This is only required by EU Member States and moreover it is a very recent proposal (Council of the European

Union, 2015). Considering that other jurisdictions have had little time to follow the EU in this, the absence of the recording of company beneficial ownership does not signal intentional secrecy. Second, country by country reporting and efficiency of tax administration only become necessary in large economies and the absence of these should therefore not be seen as financial secrecy. Third, automatic exchange of information is a very recent regulation as well and the absence of it two months after the Multilateral Competent Authority Agreement could first be signed, does not make a country more secretive.

6.2.2 Limitations of the findings of this research

This research has made a contribution to the development of theory surrounding the topic of offshore finance and financial secrecy because it shows what factors influence the intensity of financial secrecy, and second it shows how particular types of financial secrecy tend to be related to specific country characteristics. It was found that population size, economic openness, island-ness, legal system, and English as primary language can be used to predict the financial secrecy score of a jurisdiction. The most important limitation of this research is that the findings cannot simply be used to predict the financial secrecy score of any country in the world. The reason for this is that not all jurisdictions in the world have been included in this research and moreover the included jurisdictions are not a representative sample for all the jurisdictions in the world. This is of course an implication of the selection of jurisdictions by Tax Justice Network (2016). It is not a representative sample because among developing and less developed countries it only includes those that aspire to benefit from secrecy and flexible regulation while the selection has been less strict towards developed countries. Consequently, the findings of this research cannot be used to predict the financial secrecy of developing and least developed countries.

Furthermore, the scope of this research is also limited by the fact that the findings cannot be used to predict financial secrecy very accurately. The data are better at predicting whether a jurisdiction is a secrecy jurisdiction than they are at predicting the exact secrecy score. This, however, also suggests that the intensity of financial secrecy is not very relevant. The data show that countries tend to specialize in specific kinds of financial secrecy as even the most secretive countries are not secretive on every aspect of financial secrecy. Furthermore, the countries with the highest global scale weight / population or global scale weight / GDP, such as the Cayman Islands, British Virgin Islands, Guernsey, US Virgin Islands and Jersey tend to have moderate financial secrecy with scores within one standard deviation above the mean. A focus on the intensity of financial secrecy is very helpful in identifying the countries that are most at risk of being used for illicit financial flows, it does however add little to the objective of this research which is identifying factors that influence financial secrecy.

6.3 Recommendations for further research

The findings of this research can be compared with the empirical analysis conducted by Dharmapala & Hines (2009) on the determinants of tax haven-ness. Secrecy jurisdictions share a number of correlates with tax havens. This comprises population size, economic openness, island-ness, legal system and English as a primary language. On the other hand Dharmapala & Hines' (2006) findings regarding the influence of quality of governance on tax haven-ness, could not be demonstrated for financial secrecy. Thus, a typical country with population under 1 million, does not become more likely to implement financial secrecy when its quality of governance improves. This suggests that in contrast to tax havens, a country does not need a sufficient quality of governance to become a

secrecy jurisdiction. Additionally, landlocked-ness and parliamentary system, which were associated with tax haven-ness, are not associated with financial secrecy.

The findings in this research can also be compared with the empirical analysis conducted by Haberly and Wójcik (2014) on the determinants of offshore FDI. They find that offshore FDI is just as sensitive to physical distance as real FDI. Haberly and Wójcik (2014) suggest that this might be due to travel requirements of offshore financial professionals and their clients. This might explain why some remote secrecy jurisdictions are insignificant as offshore financial centers. On the other hand financial secrecy is, without doubt, not associated with proximity to major sources of FDI considering that many secrecy jurisdictions are remotely situated. The same applies to the specific types of financial secrecy, these do not seem to be affected by proximity to major economies. Haberly & Wójcik (2014) also analyze the impact of rule of law on offshore FDI and also draw on the Quality of Governance project data. Several of their models suggested a positive effect of rule of law on inward offshore FDI. This too contrasts the findings of this research where rule of law did not have an effect on financial secrecy.

Thus, these three concepts, secrecy jurisdictions, tax havens and offshore financial centers, while they are often said to overlap, do not exhaustively share the same determinants. This suggests that the relation between financial secrecy and low tax rates or high exports of financial services is far from self-evident. What is thus required is a more precise conceptualization of how financial secrecy relates to low tax rates and offshore finance. Furthermore, Haberly and Wójcik (2014) argue that offshore FDI flows and outward stocks do not change direction overnight and the offshore sector is not as footloose as is commonly thought. This argument is premised on their findings that offshore FDI is mainly affected by variables that do not change over time such as physical distance and colonial history and by variables that show very little change over time such as rule of law, double taxation treaties and economic agreements. If we want to grasp the significance of financial secrecy for global financial networks (Coe et al., 2014) – a concept which integrates offshore FDI networks and real FDI networks - it should be in relation to these structural factors. A qualitative analysis of particular jurisdictions (taking into account its tax treaties, economic agreements etc.) would therefore provide a better insight into why a country would need a particular type of financial secrecy. For instance, in order to understand why the Netherlands has secret tax rulings (SOMO, 2017) we would need to consider both its economic openness and the characteristics of its double taxation treaties.

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Appendix I List of included jurisdictions

Andorra	Dominican Republic	Macao
Anguilla	Estonia	Macedonia
Antigua & Barbuda	Finland	Malaysia (Labuan)
Aruba	France	Maldives
Australia	Gambia	Malta
Austria	Germany	Marshall Islands
Bahamas	Ghana	Mauritius
Bahrain	Gibraltar	Mexico
Barbados	Greece	Monaco
Belgium	Grenada	Montenegro
Belize	Guatemala	Montserrat
Bermuda	Guernsey	Nauru
Bolivia	Hong Kong	Netherlands
Botswana	Hungary	New Zealand
Brazil	Iceland	Norway
British Virgin Islands	India	Panama
Brunei	Ireland	Paraguay
Canada	Isle of Man	Philippines
Cayman Islands	Israel	Poland
Chile	Italy	Portugal (Madeira)
China	Japan	Russia
Cook Islands	Jersey	Samoa
Costa Rica	Korea	San Marino
Curacao	Latvia	Saudi Arabia
Cyprus	Lebanon	Seychelles
Czech Republic	Liberia	Singapore
Denmark	Liechtenstein	Slovakia
Dominica	Luxembourg	Slovenia

South Africa

Spain

St Kitts and Nevis

St Lucia

St Vincent & Grenadines

Sweden

Switzerland

Taiwan

Tanzania

Turkey

Turks & Caicos Islands

United Arab Emirates
(Dubai)

United Kingdom

Uruguay

US Virgin Islands

USA

Vanuatu

Venezuela

Appendix II Data on transparency of real estate ownership in EU Member States

Real estate registers in the EU

Piet van Loon

Overview

Jurisdiction	Is there a registry of real estate that is accessible online to the public?	Are the owners of real estate disclosed in a public registry online?	Score
Austria	Yes	The identities of legal owners are disclosed but access entails a complex user-registration arrangement and a cost exceeding EUR 10.00	0
Belgium	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Bulgaria	Yes	Identification data of legal owners is available online for free	0.25
Croatia	Yes	Identification data of legal owners is available online for free	0.25
Cyprus	No	No	0
Czech Republic	Yes	Identification data of legal owners is available online for free	0.25
Denmark	Yes	The legal owners of real estate are disclosed online, but only names are provided (no addresses or birth dates)	0
England	Yes	Identification data of legal owners is available online against a cost not exceeding GBP 10.00.	0.125
Estonia	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Finland	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
France	No	No	0
Germany	No	No	0
Gibraltar	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Greece	No	No	0

Hungary	Yes, but access requires registration in person at a government office	Identification data of legal owners is available online against a cost not exceeding EUR 10.00 after registration at a government office	0
Ireland	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Italy	Yes, but access entails a complex user-registration arrangement	Identification data of legal owners is available online, but access either entails a complex user-registration arrangement or cost exceeding EUR 10.00.	0
Latvia	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Lithuania	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Luxembourg	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Malta	No	No	0
Netherlands	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Northern Ireland	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Poland	Yes	Identification data of legal owners is available online against a cost not exceeding EUR 10.00.	0.125
Portugal	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Romania	No	No	0
Scotland	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Slovakia	Yes	Identification data on legal owners is available online for free	0.25
Slovenia	Yes	Identification data on legal owners is available online for free	0.25
Spain	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Sweden	No, but information can be requested online	No, but information on the legal owners of real estate can be requested online	0
Wales	Yes	Identification data of legal owners is available online against a cost not exceeding GBP 10.00.	0.125

Directives and proposals of the European Union

The Fourth Anti Money Laundering Directive (Official Journal of the European Union, 2015) came into force on 26 June 2015 and replaces the third Directive of 2005. The 4AMLD must be transposed into the national law of Member States by 1 January 2017 (European Commission, 2016). However, because initially the deadline of transposition was 26 June 2017 many Member States did not manage to implement the Directive by 1 January 2017. The 4AMLD follows the recommendations of the FATF, but also adds several rules. With respect to the disclosure of real estate owners the 4 AMLD contains several relevant provisions. This concerns the central register of beneficial owners and customer due diligence.

Central register of Ultimate Beneficial Owners

Article 30 of the 4AMLD (Official Journal of the European Union, 2015) states:

“1. Member States shall ensure that corporate and other legal entities incorporated within their territory are required to obtain and hold adequate, accurate and current information on their beneficial ownership, including the details of the beneficial interests held.”

And

“3. Member States shall ensure that the information referred to in paragraph 1 is held in a central register in each Member State...”

And

“4. Member States shall require that the information held in the central register referred to in paragraph 3 is adequate, accurate and current.”

Member States have the option of making the central register of beneficial owners publicly accessible but are not obliged to do so.

Article 6 of the 4AMLD (Official Journal of the European Union, 2015) lays down the definition of beneficial ownership:

“(6) ‘beneficial owner’ means any natural person(s) who ultimately owns or controls the customer and/or the natural person(s) on whose behalf a transaction or activity is being conducted and includes at least:

(a) in the case of corporate entities:

*(i) the natural person(s) who ultimately owns or controls a legal entity through direct or indirect ownership of a sufficient percentage of the shares or voting rights or ownership interest in that entity, including through bearer shareholdings, or through control via other means, other than a company listed on a regulated market that is subject to disclosure requirements consistent with Union law or subject to equivalent international standards which ensure adequate transparency of ownership information. A shareholding of **25 %** plus one share or an ownership interest of more than 25 % in the customer held by a natural person shall be an indication of direct ownership. A shareholding of 25 %*

plus one share or an ownership interest of more than 25 % in the customer held by a corporate entity, which is under the control of a natural person(s), or by multiple corporate entities, which are under the control of the same natural person(s), shall be an indication of indirect ownership.

(b) in the case of trusts:

(i) the settlor;

(ii) the trustee(s);

(iii) the protector, if any;

(iv) the beneficiaries, or where the individuals benefiting from the legal arrangement or entity have yet to be determined, the class of persons in whose main interest the legal arrangement or entity is set up or operates;

(v) any other natural person exercising ultimate control over the trust by means of direct or indirect ownership or by other means;

(c) in the case of legal entities such as foundations, and legal arrangements similar to trusts, the natural person(s) holding equivalent or similar positions to those referred to in point (b);

Customer Due Diligence

Article 2 of the 4AMLD, as well as the same article in the Second and Third Anti-Money Laundering Directives, state that real estate agents, and notaries and other independent legal professionals, where they participate whether by acting on behalf of and for their client in any financial or real estate transaction, or by assisting in the planning or carrying out of transactions for their client concerning buying and selling of real property are defined as 'obliged entities'. As such they are obliged to identify the natural persons that ultimately exercise control over their customers. Since these obligations were also included in previous Anti-Money Laundering Directives, these requirements are now effective in all Member States, **meaning that in all Member States of the European Union service providers are required to identify beneficial owners**. Nominee shareholders are not in all member states obliged to identify the beneficial owners for whom they act as legal owners.

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Austria

Real estate registry in Austria is based in the 'Grundstücksdatenbank'. Online access for the public is possible via 12 companies (Die Österreichische Justiz, n.d), which all charge a fee. These fees are set the same for all companies by the law and consist of EUR 1.79 for access to ownership information (B-Blatt). Searching by name of the owner is only possible at courts and in certain cases at offices of notaries or lawyers and is limited to entitled persons. One can however search by address or property number and this provides information about the legal owners.

All 12 companies have a user-registration arrangements and charge a one-time fee (not set by the law) for registration which in all cases is above EUR 10.00.

The real estate registry has its legal standing in the Grundbuchsgesetz (Federal Law on Land Registry). Article 84 states that registration into the Grundbuch requires the first and last name, the date of birth and place of residence of the natural persons involved in the conveyance of the property. Where the conveyance involves legal entities, the firm's number in the company register or the foundation's number in the foundation register are mentioned. The Grundbuch is updated continuously as registration in the Grundbuch is the only valid method of acquisition of property rights (Eulis, 2017).

Shareholders of limited liability companies are registered in the company register, so in some cases the beneficial owners can be identified by searching the Firmenbuch, which is not free of charge. Joint stock companies, European companies and co-operatives are by section 9 of the Aktiengesetz (Jusline, 2017) required to keep a share register but are not required to disclose these to the public.

Score: 0 credits as access to identification data requires the establishing of complex user-registration arrangements and entails a cost exceeding EUR 10.00.

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Belgium

Real estate information can be requested on the internet and is sent by mail or fax (European Land Information Service, n.d.). It is not possible to request information by name, only by clicking on the property on the map. A payment of EUR 5.50 (E-justice, 2015) gives access to details of the legal owner, to the owner's other properties within the same register department and to legal owners within a 50 meter radius. The request of real estate information should mention the purpose of the request. Article 7 of the Royal Decree on the Provision of Cadastral Information states that the request can be denied in case privacy considerations outweigh the importance of disclosure (Ejustice, 2006). The Belgian law does not require the recording of beneficial owners in the real estate registry.

Score: 0 credits as identification data of real estate owners is not available online.

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Bulgaria

The Bulgarian real estate register is publicly accessible online for free, after one has registered on the website. The registration requires the Bulgarian citizenship number or the ЛНЧ, which is a personal identification number given to foreigners for tax purposes. Therefore, those who are not subject to taxation in Bulgaria do not have direct access to the real estate register. As of September 29 2015 the digital cadastral map covered **only twenty percent of the country** (Nederlandse Ambassade in Sofia, 2015).

The Bulgarian real estate registry is based upon the Law on Cadastre and Property Register (Cadastre, 2012). With regard to ownership the register records the following information (article 61 of said law):

- Natural persons: Name, address, the unified citizen's number or some other identification number
- Companies: Name, organizational form, seat, and code in the BULSTAT Register or some other identification number
- The court, the type of register and the number of volume and lot of local juridical persons and foreign juridical persons that have registered a branch in Bulgaria
- Code in the BULSTAT Register of local and foreign juridical persons that have no court registration

Thus, the property register does not in all cases provide the details of natural persons. All foreign entities and foreign natural persons are required to register with the BULSTAT Register when they purchase a property in Bulgaria (DitaEm, n.d.; article 3.5c and 3.10b respectively of the BULSTAT Register Act). The BULSTAT Register is the main source of ownership information (OECD, 2016) and is publicly accessible and free of charge for Bulgarian citizens (article 36 of BULSTAT Register Act). With regard to (foreign) corporate bodies the following relevant information in the BULSTAT Register is available to the public.

- Headquarters and address of management

- Address of economic activity or property
- Names and identification number of managers or representatives
- Way of representation and position of the representative
- Names of partners and owners (since 01.05.2016) – with respect to foreign companies this applies to foreign companies who implement economic activity in Bulgaria, whose effective management is in Bulgaria, who own immovable property in the country. Foreign entities operating a branch in Bulgaria were not in all cases required to report the owners to the commercial register. An amendment of the Corporate Income Tax Act which came into force on September 27 2016 states that “A foreign legal person carrying out business in the country through a place of business, shall state in their annual tax return identification data about the owners, shareholders or partners in the foreign legal entity and the amount of their participation, where the amount of this participation is more than 10 percent” (article 92.7 of Corporate Income Tax Act). Therefore branches operated by foreign entities can no longer be an instrument of anonymous property purchases. However annual tax returns of companies are not available to the public. Thus, the public cannot obtain information about beneficial owners of foreign entities that operate a branch in Bulgaria.

With regard to (foreign) physical persons the following relevant information in the BULSTAT Register is available.

- Date of birth, citizenship, names, identification document
- Address - for foreign persons: correspondence address on the Bulgarian territory
- Address of economic activity or property

Score: 0.25 credits as identification data on the legal owners of real estate is available online for free.

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Registry Agency (n.d.). Cadaster of Bulgaria. Retrieved at February 24, 2017 from <https://icadastre.bg/index.aspx?ReturnUrl=%2f>

Croatia

Croatia has a public online register which can be accessed for free (article 7.1 of Land Registration Act). However, not all municipalities have been included yet in the centralized online register. Searching the online registry requires the insertion of the plot number or the ownership certificate number, but one can also search on the map in case one does not know any of these numbers. With regard to ownership the following information is available in the public online registry:

- Full names of all the owners
- OIB (personal identification number) – legal entities have an OIB too
- The address of residence or seat of the owners
- The shares of different owners
- Other properties of the owners

The OIB number can be used to search the Commercial Register, which is publicly accessible for free, and this provides the name of the director or the president of the board of directors. Details of shareholders, however, are not published and information about the beneficial owners of real estate properties is therefore not in all cases available to the public.

The Croatian tax administration has access to shareholder registers, which companies are legally required to keep. The tax administration also has access to ownership information through service providers. However foreign joint stock companies that issued bearer shares before April 2008 are not required to identify all shareholders (OECD, 2016).

Score: 0.25 credits because identification data on legal owners of real estate is published online for free.

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Cyprus

There is no publicly accessible registry in Cyprus. Only interested parties who have a legitimate interest in a property can request information on this property (E-Justice, 2015; section 51A of the Law on Immovable Property). The cadastral map is available online for free (Department of Land and Surveys, n.d.). The map contains technical data of properties and the amount at which it was purchased as well as the year of purchase. But ownership information is not available.

The company register is publicly accessible on the internet for free (Department of Registrar of Companies and Official Receiver, n.d.). It provides the names of members. Names of shareholders are not available to the public.

Score: 0 credits because only those with a legitimate interest have access to ownership information of real estate.

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Czech Republic

Access to the land registry in the Czech Republic is free and online available (Czech Geodetic and Cadastral Office, n.d.).

The registration of real estate is established in the Law on Land Registry (Zakony Pro Lidi, n.d.). Where a natural person owns a property the following ownership information is recorded:

- Full names of the owners
- The personal identification number, or else the date of birth
- Address of residence

For legal persons the following information is recorded:

- Name
- Personal identification number or other identification data
- Seat

The public register (Ministry of Justice of the Czech Republic, n.d.), an integrated online register which holds information on all natural and legal persons in the Czech Republic, is publicly accessible for free. It provides the following relevant information with regard to natural persons:

- Full name, address of office and residence and in some cases date of birth of directors
- Full name, address of office and residence and in some cases date of birth of managing directors
- For limited liability companies, public and limited partnerships (article 48.1 of the Law on public registers of legal entities and natural persons) it records the name and address of office and residence of shareholders – either natural or legal persons. When a legal entity owns the share it does not give further information on involved natural persons. Thus the public cannot identify in all cases the beneficial owners, especially when it concerns foreign legal persons. The shareholder details of joint stock companies are only published when there is a single shareholder (article 48.1.k of the Law on public registers of legal entities and natural persons).
- In some cases the date of birth of shareholders
- The name and address of foreign natural persons that established a branch, if a foreign legal entity establishes a branch it records the founder
- The name and addresses of the founder and members of foundations (article 34 of the Law on public registers of legal entities and natural persons)
- Name and addresses of the board members of institutes and charitable societies

The public register is updated as soon as possible after entries (E-Justice, 2016).

Score: 0.25 credits because identification data on the legal owners of real estate is published online for free.

References

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Denmark

The Danish land registry is online available for free. It provides the names of the natural person or legal entity and their shares in the property. It does not provide the address of residence of the owner.

The central business register is publicly accessible online (Virk, n.d.). The business register provides the names of shareholders (natural persons or legal entities) with more than five percent of the shares in the company. Where a foreign legal entity owns holds shares in a company the public cannot retrieve the natural persons behind this entity within the Danish register system.

Score: 0 credits as the land register does not provide enough information to identify the owners of a property.

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Estonia

Estonia has an online land register. The charge of obtaining information about the owner of a property is EUR 1.00. When there is more than one owner, all owners are stated including their shares in the property (E-justice, 2015).

The following details about the owners are recorded in the land register (section 35 of Land Register Act):

- Names
- Estonian personal identification number and birth of date
- For foreign persons the relevant identification number
- The name of legal entities and the registry code. The registry code needs to be indicated if the legal person is not subject to entry in a public register

The land register does not record addresses of Estonian individuals and legal persons. Addresses of individuals are recorded in the population register, but this register can only be accessed by those with a legitimate interest (Population Register Act section 5). Submissions of foreign (legal) persons to the land registry department must state address details, but this information is not available in the public land register.

The publicly accessible central commercial register of Estonia (Centre of Registers and Information Systems, n.d.) includes data from the commercial register, the register of non-profit associations and foundations and the commercial pledge register.

The following relevant information is available for free:

- Names and personal identification number of persons with power of representation

Information about shareholders is not available.

Score: 0.125 credits because identification data on only legal owners of real estate is available online, but access entails a cost not exceeding US\$10, €10 or £10.

References

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Finland

Finland has a centralized electronic land register. One can get access by submitting a request to the National Land Survey on their website. There is a fee of EUR 1.98 for obtaining ownership information (Maanmittauslaitos, n.d.).

The land register contains information on the legal owners.

The business and foundations register in Finland is publicly accessible but charges a fee of EUR 6.20. The register provides a) the names, addresses and birth dates of directors b) the details of partners. Where the partner is a natural person the register provides names, address, birth date, personal identity number and nationality. The partner can also be a nominee. Where the partner is a legal person it provides the company's identification number (section 3 and 4 of Trade Register Act). Foreign entities establishing a branch are recorded in the register. No information about shareholders is available.

Score: 0.125 credits because identification data on the legal owners of real estate is available online, but access entails a cost not exceeding US\$10, €10 or £10.

Maanmittauslaitos (n.d.). Website of the National Land Register. Retrieved at February 28, 2017 from <http://www.maanmittauslaitos.fi/ammattilaisille>

Finlex (2016). Trade Register Act. Retrieved at March 1, 2017 from <http://www.finlex.fi/fi/laki/ajantasa/1979/19790129>

France

France does not have a centralized online public real estate registry (E-Justice, 2017). Instead there are 354 property registers that exist independently of each other. These too do not have an internet portal. The website of the Cadastre shows the cadastral maps for the whole of France, but these do not contain ownership information.

Information on ownership can be obtained by sending in a written request to the local land registry office (Centre des Impôts Fonciers). The local land registry office will then show a document called the matrice cadastrale (French-Property, n.d.)

Score: 0 credits because no identification data on the owners of real estate is available online

References

E-Justice (2017). Land registers in Member States – France. Retrieved at March 1, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-fr-en.do?member=1

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Germany

There is no nationwide land registry in Germany. The land registries can only be accessed by those who have a legitimate interest, as explained by section 12 of German Land Registry Act (Bundesministerium der Justiz und für Verbraucherschutz, n.d.).

Score: 0 credits because identification data on the owners of real estate is only available for those with a legitimate interest.

References

German land registers. Retrieved at March 1, 2017 from <http://www.grundbuch-portal.de/stufe1-nw.htm>

Bundesministerium der Justiz und für Verbraucherschutz (n.d.). Grundbuchordnung. Retrieved at March 1, 2017 from http://www.gesetze-im-internet.de/gbo/__12.html

Greece

Information on ownership can be obtained for free by using the computers at local cadaster offices, the addresses of which can be found on the website of the National Cadaster and Mapping Agency (Ktimatologio, n.d.). One can search by personal data, Hellenic cadaster code and property address. Some areas in the country are not yet included in the 'Hellenic Cadaster' because the land registration is not completed there. Here local mortgage registries are operating as land registries (E-Justice, 2015).

Score: 0 credits because no identification data on the owners of real estate is available online

E-Justice (2015). Land Registers in Member States – Greece. Retrieved at March 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-el-en.do?member=1

Ktimatologio (n.d.). National Cadaster and Mapping Agency. Retrieved at March 2, 2017 from <http://www.ktimatologio.gr/Pages/Default.aspx>

Hungary

There is an online public real estate registry, which requires registration. One can only register in person at a government office or Hungarian embassy (Ügyfelkapu, n.d.). The cost of information about ownership of a property is HUF 1000 (EUR 3.25) (Földügy, 2011).

The online real estate register has a demo function which allows users to explore the service. With regard to ownership the register provides the following information (section 15 of Land Registry Act):

- Names, personal identification number, address and nationality of individuals
- Name, seat and number in the commercial register of legal entities

The commercial register (Ministry of Justice, n.d.) is publicly accessible and free of charge (Ministry of Justice, n.d.). For access to the commercial register one does not need to register with the Hungarian authorities. The register provides:

- Names, fiscal identification number, date of birth and address of representatives
- Names, fiscal identification number, date of birth and address of partners
- In case of single-member private limited companies, the name (corporate name) and home address (registered office) of the single shareholder (Companies Registration Act article 27)

Hence, in many cases information on beneficial owners can be retrieved. However in some situations beneficial ownership information cannot be retrieved:

- The single shareholder is a legal entity
- Shareholders holding more than 25% of the shares but who are not partners in the firm
- Foreign companies are not required to share the identities of beneficial owners with the Hungarian authorities

Score: 0 credits as access to identification data entails a complex user-registration arrangement.

References

Hungarian Gazette (2006). Act V of 2006 on Public Company Information, Company Registration and Winding-up Proceedings. Retrieved at April 11, 2017 from http://njt.hu/cgi_bin/njt_doc.cgi?docid=101684.335646

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Wolter Kluwers (n.d.). Land Registry Act. Retrieved at March 2, 2017 from https://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=99700141.TV

Ireland

There is an online public registry, which charges EUR 5.00 for access to ownership information (Property Registration Authority, n.d.).

The registers contains the following information, as determined by Rule 3 of the Land Registration Rules 2012 (Property Registration Authority, n.d.):

“the name of the owner of the property and his/her address in the State for service of notices”

This implies that the law does not require the recording of addresses of foreign owners.

The company register is publicly accessible. The charge of information about a company is EUR 2.50. The public can inspect the following information (ISB, 2014):

- The names of the directors and secretaries
- Date of birth, residential address, nationality of directors
- Particulars of any other directorships held by the director, or previous directorships, in Ireland or elsewhere
- The names and address of shareholders must be stated on annual returns – N.B. previously the online availability of holders of bearer shares was limited due to companies not being obliged to inform authorities about the transfer of bearer shares (GF, 2013). However, this is no longer an issue given the abolishment of bearer shares by the Companies Act 2014 (ISB, 2014). In cases where a legal entity holds shares, there is no further requirement to state details of the natural persons enjoying the benefits of this legal entity.

Ireland is preparing legislation for a central register of beneficial owners in line with the EU proposal (Companies Registration Office, 2017). It is expected that the register will be in place by mid-June 2017 (Lexology, 2017).

Thus, beneficial ownership information is available in many but not in all cases. In particular when a foreign legal entity holds shares in a company the identities of beneficial owners cannot be retrieved through the Irish register.

Score: 0.125 credits because identification data on the legal owners of real estate is available online, but access entails a cost not exceeding US\$10, €10 or £10.

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Property Registration Authority (n.d.). Land Direct. Retrieved at March 4, 2017 from <https://www.landdirect.ie/index.html>

Italy

To get access to the public online registry one needs to register with the Poste Italiane. This registration requires an Italian tax code, so only Italian tax payers can access this registry. This register is accessible for free. Furthermore, this registry does not cover all areas in the country. The former Austro-Hungarian provinces of Trento and Bolzano have their own system (Catasto Tavolare).

The second way to obtain real estate ownership information is through the website of the Italian cadaster. To see information on a property or a person a fee of 12,20 euros is payable.

The Italian registries provide information on the legal owners.

Score: 0 credits as access to the real estate register is either complicated by a user-registration arrangement or entails a cost exceeding US\$10, €10 or £10.

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Website of the Catasto. Retrieved at April 11, 2017 from <http://visure.catasto.it/catasto.html>

Latvia

There are two registers in Latvia (E-Justice, 2016). These are the cadastral information system and the land register. The difference between these registers is that only the latter provides ownership information. The charge for obtaining information about the owners of a property is EUR 4.27. It provides information on the legal owners.

In case the legal owner is a company registered in Latvia the commercial register can be used for further inquiries into the beneficial owner of a property. The commercial register in Latvia is not free of charge either (Valst Valodas Centrs, 2015). There is no internet portal for the commercial register. One has to submit a request form in person, by post or by e-mail. The fee for obtaining information is EUR 7.11. In some cases companies are required to report the beneficial owners to the commercial register. A shareholder which is not a natural person is required to report the identity of the beneficial owner to the company and the company will report this to the commercial register. However foreign companies are not in all cases required to share ownership information.

Score: 0.125 credits as identification data on the legal owners of real estate is available online, and access entails a cost not exceeding US\$10, €10 or £10.

References

E-Justice (2016). Land registers in Member States – Latvia. Retrieved at April 11, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-lv-en.do?member=1

Land Register of Latvia. Retrieved at April 11, 2017 from <https://www.zemesgramata.lv/lv/Search/GetFolioDataByCadastre>

Valst Valodas Centrs (2015). Law on the Enterprise Register of the Republic of Latvia. Retrieved at April 11, 2017 from <http://vvc.gov.lv/index.php?route=common/home>

Lithuania

The Lithuanian real estate register is accessible to the public (E-Justice, 2015; article 42 of Law on the Real Property Register). It provides information on the legal owners. There is a fee of EUR 1.74 in which case it takes 7 working days until one receives the requested information.

The register of legal entities can be used for cases in which a property is owned by a legal entity. However the register of legal entities does not provide information on ownership for free (Centre of Registers, n.d.). Furthermore one needs to sign a contract first in order to become a registered user. The register of legal entities contains information about shareholders where the legal entity is a private limited liability company. Nominee shareholding is only allowed in certain circumstances and always involves an obligation to report the identity of the ultimate owners (OECD, 2013). However foreign legal entities are not required to provide information on the identity of owners. Thus, the identities of beneficial owners cannot be retrieved in all cases.

Score: 0.125 credits as identification data on the legal owners of real estate is available online, and access entails a cost not exceeding US\$10, €10 or £10.

References

E-Justice (2015). Land registers in Member States – Lithuania. Retrieved at April 11, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-lt-en.do?init=true&member=1

Centre of Registers (n.d.). Real Estate Register of Lithuania. Retrieved at April 11, 2017 from http://www.registrucentras.lt/ntr/p/a_en.php

OECD (2013). Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Reviews: Lithuania 2013: Phase 1: Legal and Regulatory Framework, OECD Publishing.
<http://dx.doi.org/10.1787/9789264202559-en>

Luxembourg

Ownership information can be requested online but is sent by post. There is a fee of EUR 3.00 for obtaining the name of the owner of a property (Le Gouvernement de Grand-Duché de Luxembourg, n.d.; article 2 and 20 of the Law on the conditions and procedures for issue of cadastral documentation). The register provides names and tax identification number but not (company) addresses, birth dates or other identification data.

Where the owner of a property is a legal entity the Register of Commerce and Companies can be used for obtaining information about the beneficial owners. Since the real estate register does not mention addresses the Register of Commerce and Companies can be used to obtain the address details of the legal entity. In many cases the law requires that companies provide the names of shareholders and partners to the register (OECD, 2011). However public limited companies, partnerships limited by shares and European companies are not required to directly report information on shareholders, instead they are to keep a register themselves. The shareholder can be a nominee shareholder. Where a nominee holds shares companies are not required to report the beneficial owner to the register.

Score: 0 credits as identification data of real estate owners are not published online.

References

E-Justice (2016). Land Registers in Member States – Luxembourg. Retrieved at April 12, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-LU-nl.do?clang=fr

Le gouvernement de Grand-Duché de Luxembourg (n.d.). Internet portal of the Land register of Luxembourg. Retrieved at April 12, 2017 from <https://map.geoportail.lu/theme/main?version=3&zoom=19&X=682177&Y=6379096&lang=fr&layers=359&opacities=1&bgLayer=blank>

Official Gazette of the Grand Duchy of Luxembourg (2009). Grand-Ducal Regulation of 9 March 2009 laying down the conditions and procedures for the issue of cadastral documentation. Retrieved at April 12, 2017 from <http://legilux.public.lu/eli/etat/leg/rgd/2009/03/09/n5/jo>

Malta

There is no internet search tool for the real estate register. Instead one has to send an email to Land Registry Department (E-justice, 2016). Each request costs EUR 5.15 (Land Registration Rules). It provides information on the legal owners.

Score: 0 credits as identification data of owners is not published online, but can only be obtained by sending a request to the registrar.

References

E-justice (2016). Land registers in Member States – Malta. https://e-justice.europa.eu/content_land_registers_in_member_states-109-mt-en.do?init=true&member=1

Ministry for Justice, Culture and Local Government (n.d.). Land Registration Rules. Downloaded at April 18, 2017 from <http://www.justiceservices.gov.mt/LOM.aspx?pageid=24>

Netherlands

There is an online public registry. Obtaining ownership information is subject to a fee of EUR 2.40. It shows the legal owner, the address of the owner and the purchase price of the property. The public register is updated every time there is a change in the register of notarial deeds of registered property, as stated in article 54 and 56 of the Land Register Law (Kadasterwet). Article 18 of the Land Register Law requires that natural persons involved in the purchase are recorded in the notarial deed and are thus also visible in the register. The notarial deed contains the following information about natural persons: names, birth date, place of birth, address of residence. For legal entities it records the name and address. The commercial register (Handelsregister) can in some cases be helpful in identifying the natural persons behind legal entities. The charge for an extract that gives an overview of the registration into the commercial register is EUR 2.65. Dutch legislation allows for nominee owners, so in some cases the beneficial owners cannot be identified.

Score: 0.125 as identification data on the legal owners of real estate is available online at a cost of less than EUR 10.00.

References

E-Justice (2016). Land registers in Members States – the Netherlands. Retrieved at April 12, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-nl-en.do?member=1

Internet portal of the Dutch land register. Retrieved at April 20, 2017 from <https://www.kadaster.nl/>

Law on the Land Register. Retrieved at April 12, 2017 from http://wetten.overheid.nl/BWBR0004541/2016-10-01#Hoofdstuk2_Titeldeel2

Poland

The Polish land and mortgage register can be accessed online for free. Searching the register can be problematic because one cannot search by address. Instead it requires a land registry number. There is a search engine (Znajdzksiege, n.d.) which allows one to search by address in order to find the number which it provides against a cost of EUR 7.02. The register provides identification data on the legal owners. Where a legal entity owns a property the national court register can be used to obtain further information about the owners. Identification data on beneficial owners is not available in all cases as shareholders of joint stock companies and joint stock limited partnerships are not in the

national court register, second, because these types of legal entities can issue bearer shares, and third because shareholders can be nominee shareholders (OECD, 2013).

Score: 0.125 credits as identification data on legal owners is available online at a cost not exceeding EUR 10.00.

References

E-justice (2014). Land registers in Member States – Poland. Retrieved at April 20, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-pl-en.do?init=true&member=1

OECD (2013), Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Reviews: Poland 2013: Phase 1: Legal and Regulatory Framework, OECD Publishing. <http://dx.doi.org/10.1787/9789264191860-en>

Internet portal of the Polish land register. Retrieved at April 20, 2017 from https://przegladarka-ekw.ms.gov.pl/eukw_prz/KsiegiWieczyste/wyszukiwanieKW

National court register. Retrieved at April 20, 2017 from <https://ems.ms.gov.pl/krs/wyszukiwaniepodmiotu?t:lb=t>

Znajdzksiege (n.d.). Wyszukiwarka ksiąg wieczystych. Retrieved at April 20, 2017 from <http://www.znajdzksiege.pl/>

Portugal

Identification data of real estate owners is not directly available online. One can use the website of the land register to request information on a property which will be sent by email or post. The cost of retrieving information about a single property is EUR 15.00 (E-justice, 2016; Predial online, n.d.).

Score: 0 credits as identification data of real estate owners is not directly available online and entails a cost exceeding EUR 10.00.

References

E-Justice (2016). Member States – Portugal. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-pt-en.do?member=1

Registo Predial Online (n.d.). Website of the Portuguese land register. Retrieved at May 2, 2017 from <https://www.predialonline.pt/PredialOnline/>

Romania

Romania is in the progress of setting up an electronic register of real estate (Agentia Nationala de Cadastru si Publicitate Imobiliara, n.d.). This means that it is not yet possible to access ownership information online.

Score: 0 credits as no identification data on the owners of real estate is available online.

References

E-Justice (2016). Registre funciare în statele membre – România. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-RO-en.do?clang=ro

Agentia nationala de cadastru si publicitate imobiliara (n.d.). Website of the land register agency. Retrieved at May 2, 2017 from <http://www.ancpi.ro/pages/home.php>

Slovakia

Slovakia has an online registry which can be accessed for free. It provides information on the legal owners of a property. The register is updated once a week.

The Obchodný register (commercial register) can be used for further enquiries into the owners behind legal entities. It provides the names and addresses of partners. No further information on natural persons is provided where partners are legal entities. Slovak laws also allow nominee shareholders and foreign trusts. Furthermore, not all foreign companies are required to provide ownership information (OECD, 2012). Thus, identification data of the beneficial owners of real estate is not available in all cases.

Score: 0.25 credits as identification data on legal owners of real estate is available online for free.

References

E-Justice (2016). Land registers in Member States – Slovakia. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-sk-en.do?member=1

OECD (2012), Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Reviews: Slovak Republic 2012: Phase 1: Legal and Regulatory Framework, OECD Publishing. <http://dx.doi.org/10.1787/9789264168954-en>

Úrad Geodézie, Kartografie a Katastra Slovenskej Republiky (n.d.). Internet portal of the Slovakian land register. Retrieved at May 2, 2017 from <https://www.katasterportal.sk/kapor/>

Slovenia

Slovenia has an online register that is free of charge (Article 198 of the Land Registry Act), but requires registration beforehand. The provision of certified extracts is subject to a court fee. One can access the data by entering the cadastral municipality, the parcel number, the identification number of the property and the identification number of the right. One can find these identification number by using a different website (Prostor, n.d.). Article 24 of the Land Register Act (Official Gazette of the Republic of Slovenia, 2003) lays down what identification data must be recorded in the land register. For natural persons it records names, personal identification number and address of residence. For legal entities it records the name, address of office and the identification number in the business register.

The business register is free of charge but requires registration as well. The names in the business register are not necessarily the beneficial owners as nominee owners are permitted (OECD, 2014). Hence, not in all cases can the beneficial owners of real estate be identified.

Score: 0.25 credits as identification data on legal owners of real estate is available online for free.

References

E-justice (2016). Land registers in Member States – Slovenia. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-si-en.do?member=1

Official Gazette of the Republic of Slovenia (2003). Land Registry Act. Retrieved at May 2, 2017 from <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2003-01-2857?sop=2003-01-2857>

OECD (2014), Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Reviews: Slovenia 2014: Phase 2: Implementation of the Standard in Practice, OECD Publishing. <http://dx.doi.org/10.1787/9789264210158-en>

Prostor (n.d.). Prostorski Portal RS. Retrieved at May 2, 2017 from <http://prostor3.gov.si/javni/login.jsp?jezik=sl>

Spain

There is no information directly available online but the website of the land register can be used to request information which will then be send by email. Information on a single property entails a cost of EUR 9.02. The request should explain the reason of the query and the Registrar will establish whether the legitimacy of the reason of query. The main reason for this check is to prevent people from collecting the data for later commercialization. There is thus no requirement of a legitimate interest in the property.

Score: 0 credits as identification data of the owners of real estate is not available online.

References

E-Justice (2016). Land Registers in Member States – Spain. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-es-en.do?member=1

Website of the Spanish land register. Retrieved at May 2, 2017 from <https://www.registradores.org/registroonline/home.seam>

Sweden

Identification data of real estate owners is not directly available online. Information can be requested on the website of the land registry agency. The same website offers a number of electronic services, but these cannot be used for obtaining ownership information.

Score: 0 credits as identification data of the owners of real estate is not available online.

References

E-justice (2016). Land registers in Member States – Sweden. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-se-en.do?member=1

Website of the Swedish land register. Retrieved at May 3, 2017 from <http://www.lantmateriet.se/sv/>

England

Identification data of real estate owners are available online. The cost of obtaining ownership information is GBP 3.00. One must register on the website to get access. The register provides the name and address of the owner.

Where the legal owner is a legal entity the company register (Companies House) can be used for further enquiries into the beneficial owners. The company register concerns the whole of the UK and can be accessed for free. Not all beneficial owners show up in the register because of nominee shareholding and because foreign companies are not required to provide ownership information in their tax returns (OECD, 2013).

Score: 0.125 as identification data on the legal owners of real estate is available online at a cost not exceeding GBP 10.00.

References

Companies House. Retrieved at May 3, 2017 from <https://www.gov.uk/get-information-about-a-company>

E-justice (2016). Land registers in Member States – England. Retrieved at May 2, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-ew-en.do?member=1

OECD (2013), Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Reviews: United Kingdom 2013: Combined: Phase 1 + Phase 2, incorporating Phase 2 ratings, OECD Publishing. <http://dx.doi.org/10.1787/9789264205987-en>

HM Land Registry. Retrieved at May 3, 2017 from <https://www.gov.uk/search-property-information-land-registry>

Wales

The website of HM Land Registry can also be used for searching properties in Wales. The charge and the data provided are the same.

Score: 0.125 as identification data of the legal owners of real estate is available online at a cost not exceeding GBP 10.00.

References

HM Land Registry. Retrieved at May 3, 2017 from <https://www.gov.uk/search-property-information-land-registry>

Northern Ireland

The online registry requires registration. The charge for viewing ownership information is GBP 5.00. The register gives access to identification data on the legal owners.

Score: 0.125 as identification data of the legal owners of real estate is available online at a cost not exceeding GBP 10.00.

References

E-Justice (2016). Land registers in Member States – Northern Ireland. Retrieved at May 4, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-ni-en.do?member=1

Land and Property Services (n.d.). Website of the North Irish land register. Retrieved at May 4, 2017 from <https://www.landwebni.gov.uk/appFrame.jsp>

Scotland

Real estate ownership information is not directly available online. Information can be requested on the website of the land register and is sent by email within two working days. This information concerns the identification data of legal owners.

Score: 0 credits as identification data of real estate owners is not available online.

References

E-Justice (2016). Land registers in Member States – Scotland. Retrieved at May 4, 2017 from https://e-justice.europa.eu/content_land_registers_in_member_states-109-sc-en.do?member=1

Registers of Scotland. Retrieved at May 4, 2017 from <https://www.ros.gov.uk/services/ownership-search>

Gibraltar

Identification data of real estate owners is available online after registration. There is a charge of GBP 10.00 for a single search in the register (Gibraltar Land Titles Regulations 2011). The register consists of deeds, which provide the identification data of the legal owners.

One can put in a request with the Companies House Gibraltar in order to identify the owners of legal entities. There is a charge of GBP 15.00 for a single request.

Score: 0.125 as identification data on the legal owners of real estate is available online at a cost not exceeding GBP 10.00.

References

Companies House Gibraltar. Retrieved at May 4, 2017 from <http://www.companieshouse.gi/>

HM Government of Gibraltar (2011). Gibraltar Land Titles (Register) Regulations 2011. Downloaded at May 4, 2017 from http://www.gibraltarlaws.gov.gi/view_article_a.php?group_id=000000088&id=000003958

Appendix III Test results

Test results for financial secrecy

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,576 ^a	,332	,324	12,969

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7519,056	1	7519,056	44,703	,000 ^b
	Residual	15138,107	90	168,201		
	Total	22657,163	91			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	71,417	2,162		33,040	,000
	PopCata	-18,524	2,771	-,576	-6,686	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of population divided into <1 million and >1 million residents (figure 6)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,319 ^a	,102	,090	15,757

a. Predictors: (Constant), Voice

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2217,492	1	2217,492	8,931	,004 ^b
	Residual	19615,421	79	248,296		
	Total	21832,914	80			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), Voice

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	63,969	2,378		26,902	,000
	Voice	-6,739	2,255	-,319	-2,988	,004

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of 'voice and accountability' (figure 9)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,398 ^a	,159	,148	15,119

a. Predictors: (Constant), GovEff

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3448,712	1	3448,712	15,087	,000 ^b
	Residual	18286,898	80	228,586		
	Total	21735,610	81			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), GovEff

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65,879	2,402		27,425	,000
	GovEff	-8,101	2,086	-,398	-3,884	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of government effectiveness (figure 11)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,434 ^a	,188	,178	14,851

a. Predictors: (Constant), RegQua

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4090,737	1	4090,737	18,547	,000 ^b
	Residual	17644,873	80	220,561		
	Total	21735,610	81			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), RegQua

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	66,783	2,411		27,697	,000
	RegQua	-9,486	2,203	-,434	-4,307	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of regulatory quality (figure 12)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,413 ^a	,170	,160	15,015

a. Predictors: (Constant), RoL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3699,157	1	3699,157	16,407	,000 ^b
	Residual	18036,453	80	225,456		
	Total	21735,610	81			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), RoL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65,515	2,281		28,724	,000
	RoL	-7,966	1,967	-,413	-4,051	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of 'rule of law' (figure 13)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,217 ^a	,047	,035	16,090

a. Predictors: (Constant), CoC

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1025,198	1	1025,198	3,960	,050 ^b
	Residual	20710,412	80	258,880		
	Total	21735,610	81			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), CoC

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	62,414	2,411		25,888	,000
	CoC	-4,091	2,056	-,217	-1,990	,050

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of 'control of corruption' (figure 14)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,446 ^a	,199	,183	13,097

a. Predictors: (Constant), PolIV

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2252,757	1	2252,757	13,133	,001 ^b
	Residual	9091,170	53	171,532		
	Total	11343,927	54			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), PolIV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	61,675	3,147		19,599	,000
	PolIV	-1,272	,351	-,446	-3,624	,001

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of the Polity IV democracy index (figure 15)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,316 ^a	,100	,088	15,879

a. Predictors: (Constant), FH

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2019,733	1	2019,733	8,010	,006 ^b
	Residual	18154,605	72	252,147		
	Total	20174,338	73			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), FH

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	63,774	2,776		22,971	,000
	FH	-8,516	3,009	-,316	-2,830	,006

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of the Freedom House democracy index (figure 16)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,517 ^a	,268	,255	12,496

a. Predictors: (Constant), DI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3251,783	1	3251,783	20,824	,000 ^b
	Residual	8900,895	57	156,156		
	Total	12152,678	58			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), DI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	83,421	6,913		12,068	,000
	DI	-4,177	,915	-,517	-4,563	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of the Democracy Index (figure 17)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,416 ^a	,173	,164	14,431

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3915,387	1	3915,387	18,802	,000 ^b
	Residual	18741,776	90	208,242		
	Total	22657,163	91			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	54,911	1,928		28,475	,000
	Island	13,367	3,083	,416	4,336	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of 'island-ness'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,390 ^a	,152	,143	14,608

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3451,557	1	3451,557	16,174	,000 ^b
	Residual	19205,606	90	213,396		
	Total	22657,163	91			

a. Dependent Variable: SecrScore

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	54,769	2,026		27,036	,000
	English	12,356	3,072	,390	4,022	,000

a. Dependent Variable: SecrScore

Regression model predicting financial secrecy on the basis of 'English as a primary language'

Test results for banking transparency

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,416 ^a	,173	,164	,13625

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,354	1	,354	19,053	,000 ^b
	Residual	1,689	91	,019		
	Total	2,043	92			

a. Dependent Variable: Banking

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,449	,022		20,030	,000
	PopCata	,126	,029	,416	4,365	,000

a. Dependent Variable: Banking

Regression model predicting banking transparency on the basis of population divided into < 1 million and > 1 million

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,265 ^a	,070	,060	,14448

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,143	1	,143	6,867	,010 ^b
	Residual	1,900	91	,021		
	Total	2,043	92			

a. Dependent Variable: Banking

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,556	,019		28,820	,000
	Island	-,080	,031	-,265	-2,621	,010

a. Dependent Variable: Banking

Regression model predicting banking transparency on the basis of 'island-ness'

Test results for trust and foundation transparency

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,218 ^a	,048	,038	,241222

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,291	1	,291	5,004	,028 ^b
	Residual	5,819	100	,058		
	Total	6,110	101			

a. Dependent Variable: Trust

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,378	,039		9,790	,000
	PopCata	,110	,049	,218	2,237	,028

a. Dependent Variable: Trust

Regression model predicting trust and foundation transparency on the basis of population (< 1 million, > 1 million)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,203 ^a	,041	,031	,242057

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,251	1	,251	4,280	,041 ^b
	Residual	5,859	100	,059		
	Total	6,110	101			

a. Dependent Variable: Trust

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,486	,031		15,806	,000
	Island	-,102	,049	-,203	-2,069	,041

a. Dependent Variable: Trust

Regression model predicting trusts and foundation transparency on the basis of island-ness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,268 ^a	,072	,063	,238138

a. Predictors: (Constant), LegalSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,439	1	,439	7,742	,006 ^b
	Residual	5,671	100	,057		
	Total	6,110	101			

a. Dependent Variable: Trust

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,504	,032		15,990	,000
	LegalSys	-,132	,047	-,268	-2,782	,006

a. Dependent Variable: Trust

Regression model predicting trusts and foundations transparency on the basis of 'legal system'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,294 ^a	,086	,077	,236264

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,528	1	,528	9,457	,003 ^b
	Residual	5,582	100	,056		
	Total	6,110	101			

a. Dependent Variable: Trust

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,506	,031		16,598	,000
	English	-,146	,048	-,294	-3,075	,003

a. Dependent Variable: Trust

Regression model predicting trusts and foundations transparency on the basis of 'English as primary language'

Tests results for country-by-country reporting

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,471 ^a	,222	,214	,37741

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,060	1	4,060	28,505	,000 ^b
	Residual	14,244	100	,142		
	Total	18,305	101			

a. Dependent Variable: CbCR2017

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	,141	,060		2,334	,022
	PopCata	,411	,077	,471	5,339	,000

a. Dependent Variable: CbCR2017

Regression model predicting country-by-country reporting on the basis of population divided into < 1 million and > 1 million

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,463 ^a	,214	,202	,37410

a. Predictors: (Constant), DI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,478	1	2,478	17,705	,000 ^b
	Residual	9,097	65	,140		
	Total	11,575	66			

a. Dependent Variable: CbCR2017

b. Predictors: (Constant), DI

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-,225	,188		-1,198	,235
	DI	,107	,025	,463	4,208	,000

a. Dependent Variable: CbCR2017

Regression model predicting country-by-country reporting on the basis of the Democracy Index

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,416 ^a	,173	,165	,38898

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,174	1	3,174	20,975	,000 ^b
	Residual	15,131	100	,151		
	Total	18,305	101			

a. Dependent Variable: CbCR2017

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,536	,049		10,856	,000
	Island	-,361	,079	-,416	-4,580	,000

a. Dependent Variable: CbCR2017

Regression model predicting country-by-country reporting on the basis of 'island-ness'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,385 ^a	,148	,140	,39488

a. Predictors: (Constant), LegalSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,711	1	2,711	17,388	,000 ^b
	Residual	15,593	100	,156		
	Total	18,305	101			

a. Dependent Variable: CbCR2017

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,539	,052		10,314	,000
	LegalSys	-,328	,079	-,385	-4,170	,000

a. Dependent Variable: CbCR2017

Regression model predicting country-by-country reporting on the basis of 'legal system'

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,380 ^a	,144	,136	,39581
a. Predictors: (Constant), English				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,638	1	2,638	16,841	,000 ^b
	Residual	15,666	100	,157		
	Total	18,305	101			

a. Dependent Variable: CbCR2017

b. Predictors: (Constant), English

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	,529	,051		,000
	English	-,327	,080	-,380	,000

a. Dependent Variable: CbCR2017

Regression model predicting country-by-country reporting on the basis of 'English as primary language'

Test results for reporting of payments

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,431 ^a	,186	,178	,3815

a. Predictors: (Constant), PopCata

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,319	1	3,319	22,804	,000 ^b
	Residual	14,554	100	,146		
	Total	17,873	101			

a. Dependent Variable: ROP

b. Predictors: (Constant), PopCata

Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	,026	,061		,420
	PopCata	,371	,078	,431	4,775
					Sig.
					,676
					,000

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of population divided into < 1 million and > 1 million

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,215 ^a	,046	,035	,4278

a. Predictors: (Constant), Voice

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,786	1	,786	4,295	,041 ^b
	Residual	16,286	89	,183		
	Total	17,071	90			

a. Dependent Variable: ROP

b. Predictors: (Constant), Voice

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	,214	,057		3,771	,000
	Voice	,115	,056	,215	2,072	,041

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of 'voice and accountability'

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,262 ^a	,069	,058	,4213
a. Predictors: (Constant), GovEff				

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,179	1	1,179	6,644	,012 ^b
	Residual	15,973	90	,177		
	Total	17,152	91			

a. Dependent Variable: ROP

b. Predictors: (Constant), GovEff

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,192	,056		3,407	,001
	GovEff	,130	,050	,262	2,578	,012

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of government effectiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,256 ^a	,066	,055	,4220

a. Predictors: (Constant), RegQua

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,126	1	1,126	6,324	,014 ^b
	Residual	16,026	90	,178		
	Total	17,152	91			

a. Dependent Variable: ROP

b. Predictors: (Constant), RegQua

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,194	,056		3,441	,001
	RegQua	,132	,052	,256	2,515	,014

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of regulatory quality

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,294 ^a	,087	,077	,4172

a. Predictors: (Constant), RoL

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,488	1	1,488	8,546	,004 ^b
	Residual	15,665	90	,174		
	Total	17,152	91			

a. Dependent Variable: ROP

b. Predictors: (Constant), RoL

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	,194	,053		3,657
	RoL	,136	,047	,294	2,923

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of 'rule of law'

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,354 ^a	,125	,114	,4229

a. Predictors: (Constant), Open

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,024	1	2,024	11,315	,001 ^b
	Residual	14,130	79	,179		
	Total	16,154	80			

a. Dependent Variable: ROP

b. Predictors: (Constant), Open

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	,562	,086		6,558
	Open	-,002	,001	-,354	-3,364

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of economic openness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,369 ^a	,136	,128	,3929
a. Predictors: (Constant), Island				

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,436	1	2,436	15,781	,000 ^b
	Residual	15,436	100	,154		
	Total	17,873	101			

a. Dependent Variable: ROP

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,379	,050		7,596	,000
	Island	-,317	,080	-,369	-3,973	,000

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of island-ness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,305 ^a	,093	,084	,4026
a. Predictors: (Constant), LegalSys				

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,665	1	1,665	10,273	,002 ^b
	Residual	16,208	100	,162		
	Total	17,873	101			

a. Dependent Variable: ROP

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,368	,053		6,909	,000
	LegalSys	-,257	,080	-,305	-3,205	,002

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of 'legal system'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,248 ^a	,061	,052	,4096

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,097	1	1,097	6,539	,012 ^b
	Residual	16,776	100	,168		
	Total	17,873	101			

a. Dependent Variable: ROP

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,342	,053		6,462	,000
	English	-,211	,082	-,248	-2,557	,012

a. Dependent Variable: ROP

Regression model predicting the reporting of payments on the basis of English a primary language

Tests results for efficiency of tax administration

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,506 ^a	,256	,249	,3792

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,948	1	4,948	34,406	,000 ^b
	Residual	14,382	100	,144		
	Total	19,330	101			

a. Dependent Variable: eta

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,077	,061		1,267	,208
	PopCata	,453	,077	,506	5,866	,000

a. Dependent Variable: eta

Regression model predicting efficiency of tax administration on the basis of population divided into < 1 million and > 1 million

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,446 ^a	,199	,191	,3935

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,850	1	3,850	24,867	,000 ^b
	Residual	15,481	100	,155		
	Total	19,330	101			

a. Dependent Variable: eta

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,513	,050		10,264	,000
	Island	-,398	,080	-,446	-4,987	,000

a. Dependent Variable: eta

Regression model predicting efficiency of tax administration on the basis of 'island-ness'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,320 ^a	,103	,094	,4165

a. Predictors: (Constant), LegalSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,981	1	1,981	11,421	,001 ^b
	Residual	17,349	100	,173		
	Total	19,330	101			

a. Dependent Variable: eta

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,481	,055		8,713	,000
	LegalSys	-,281	,083	-,320	-3,380	,001

a. Dependent Variable: eta

Regression model predicting efficiency of tax administration on the basis of legal system

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,320 ^a	,102	,093	,4166

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,977	1	1,977	11,391	,001 ^b
	Residual	17,354	100	,174		
	Total	19,330	101			

a. Dependent Variable: eta

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,473	,054		8,801	,000
	English	-,283	,084	-,320	-3,375	,001

a. Dependent Variable: eta

Regression model predicting efficiency of tax administration on the basis of English as primary language

Test results for harmful legal vehicles

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,622 ^a	,387	,381	,1783

a. Predictors: (Constant), PopCata

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,009	1	2,009	63,162	,000 ^b
	Residual	3,180	100	,032		
	Total	5,189	101			

a. Dependent Variable: HLV

b. Predictors: (Constant), PopCata

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,179	,029		6,286	,000
	PopCata	,289	,036	,622	7,947	,000

a. Dependent Variable: HLV

Regression model predicting the absence of harmful legal vehicle on the basis of population divided into < 1 million and > 1 million

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,473 ^a	,224	,216	,2007

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,161	1	1,161	28,835	,000 ^b
	Residual	4,027	100	,040		
	Total	5,189	101			

a. Dependent Variable: HLV

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,444	,025		17,403	,000
	Island	-,219	,041	-,473	-5,370	,000

a. Dependent Variable: HLV

Regression model predicting the absence of harmful legal vehicles on the basis of 'island-ness'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,491 ^a	,241	,233	,1985

a. Predictors: (Constant), LegalSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,248	1	1,248	31,682	,000 ^b
	Residual	3,940	100	,039		
	Total	5,189	101			

a. Dependent Variable: HLV

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,456	,026		17,349	,000
	LegalSys	-,223	,040	-,491	-5,629	,000

a. Dependent Variable: HLV

Regression model predicting the absence of harmful legal vehicles on the basis of 'legal system'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,198 ^a	,039	,030	,2233

a. Predictors: (Constant), ParSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,203	1	,203	4,076	,046 ^b
	Residual	4,986	100	,050		
	Total	5,189	101			

a. Dependent Variable: HLV

b. Predictors: (Constant), ParSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,381	,025		15,272	,000
	ParSys	-,109	,054	-,198	-2,019	,046

a. Dependent Variable: HLV

Regression model predicting the absence of harmful legal vehicles on the basis of 'parliamentary system'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,488 ^a	,239	,231	,1988

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,238	1	1,238	31,321	,000 ^b
	Residual	3,951	100	,040		
	Total	5,189	101			

a. Dependent Variable: HLV

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,450	,026		17,536	,000
	English	-,224	,040	-,488	-5,596	,000

a. Dependent Variable: HLV

Regression model predicting the absence of harmful legal vehicles on the basis of English as a primary language

Test results for anti-money laundering

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,314 ^a	,098	,089	,15475

a. Predictors: (Constant), GDPCap

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,254	1	,254	10,596	,002 ^b
	Residual	2,323	97	,024		
	Total	2,577	98			

a. Dependent Variable: AML

b. Predictors: (Constant), GDPCap

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,415	,025		16,680	,000
	GDPcap	1,834E-6	,000	,314	3,255	,002

a. Dependent Variable: AML

Regression model predicting anti-money laundering on the basis of wealth (GDP per capita)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,433 ^a	,187	,178	,14761

a. Predictors: (Constant), QoG

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,437	1	,437	20,076	,000 ^b
	Residual	1,896	87	,022		
	Total	2,333	88			

a. Dependent Variable: AML

b. Predictors: (Constant), QoG

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,416	,020		20,507	,000
	QoG	,015	,003	,433	4,481	,000

a. Dependent Variable: AML

Regression model predicting anti-money laundering on the basis of quality of governance (aggregated)

Test results for automatic exchange of information

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,255 ^a	,065	,055	,43474

a. Predictors: (Constant), GDPcap

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,270	1	1,270	6,719	,011 ^b
	Residual	18,332	97	,189		
	Total	19,602	98			

a. Dependent Variable: AIE

b. Predictors: (Constant), GDPcap

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	,374	,070		5,341	,000
	GDPcap	4,102E-6	,000	,255	2,592	,011

a. Dependent Variable: AIE

Regression model predicting automatic exchange of information on the basis of wealth

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,513 ^a	,263	,255	,38098

a. Predictors: (Constant), QoG

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,512	1	4,512	31,083	,000 ^b
	Residual	12,627	87	,145		
	Total	17,139	88			

a. Dependent Variable: AIE

b. Predictors: (Constant), QoG

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	,285	,052		5,456	,000
	QoG	,049	,009	,513	5,575	,000

a. Dependent Variable: AIE

Regression model predicting automatic exchange of information on the basis of aggregated quality of governance indicators

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,616 ^a	,379	,370	,35703

a. Predictors: (Constant), DI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,062	1	5,062	39,713	,000 ^b
	Residual	8,286	65	,127		
	Total	13,348	66			

a. Dependent Variable: AIE

b. Predictors: (Constant), DI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,562	,179		-3,137	,003
	DI	,153	,024	,616	6,302	,000

a. Dependent Variable: AIE

Regression model predicting automatic exchange of information on the basis of the Democracy Index

Test results for the alternative aggregated financial secrecy

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,637 ^a	,406	,399	,96398

a. Predictors: (Constant), PopCata

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57,714	1	57,714	62,107	,000 ^b
	Residual	84,562	91	,929		
	Total	142,276	92			

a. Dependent Variable: altfs

b. Predictors: (Constant), PopCata

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2,164	,158		13,655	,000
	PopCata	1,609	,204	,637	7,881	,000

a. Dependent Variable: altfs

Regression model predicting aggregated alternative financial secrecy on the basis of population divided into < 1million and > 1 million

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,308 ^a	,095	,082	1,25793

a. Predictors: (Constant), Open

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11,898	1	11,898	7,519	,008 ^b
	Residual	113,933	72	1,582		
	Total	125,831	73			

a. Dependent Variable: altfs

b. Predictors: (Constant), Open

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3,927	,265		14,805	,000
	Open	-.005	,002	-.308	-2,742	,008

a. Dependent Variable: altfs

Regression model predicting alternative aggregated financial secrecy on the basis of economic openness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,483 ^a	,234	,225	1,09456

a. Predictors: (Constant), Island

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33,252	1	33,252	27,755	,000 ^b
	Residual	109,024	91	1,198		
	Total	142,276	92			

a. Dependent Variable: altfs

b. Predictors: (Constant), Island

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,619	,146		24,744	,000
	Island	-1,222	,232	-,483	-5,268	,000

a. Dependent Variable: altfs

Regression model predicting alternative aggregated financial secrecy on the basis of 'island-ness'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,460 ^a	,212	,203	1,11020

a. Predictors: (Constant), LegalSys

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30,114	1	30,114	24,433	,000 ^b
	Residual	112,162	91	1,233		
	Total	142,276	92			

a. Dependent Variable: altfs

b. Predictors: (Constant), LegalSys

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,661	,157		23,317	,000
	LegalSys	-1,141	,231	-,460	-4,943	,000

a. Dependent Variable: altfs

Regression model predicting alternative aggregated financial secrecy on the basis of 'legal system'

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,396 ^a	,157	,148	1,14798

a. Predictors: (Constant), English

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22,351	1	22,351	16,960	,000 ^b
	Residual	119,925	91	1,318		
	Total	142,276	92			

a. Dependent Variable: altfs

b. Predictors: (Constant), English

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,568	,159		22,416	,000
	English	-,987	,240	-,396	-4,118	,000

a. Dependent Variable: altfs

Regression model predicting alternative aggregated financial secrecy on the basis of English as a primary language