Foreign Direct Investment and Fiscal Policy
– A Literature Survey

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FOREIGN DIRECT INVESTMENT AND FISCAL POLICY – A LITERATURE SURVEY

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ABSTRACT

This paper conducts a literature survey on Foreign Direct Investment (FDI) and its relation to fiscal policy. Geographical and cultural proximity between originating and host countries, market size of the host countries, as well as other exogenous variables have been pointed out by a significant part of the literature as crucial factors in FDI decisions. Fiscal policy, as an endogenous factor, is an increasingly important tool on the countries competitiveness for attracting FDI, mainly in the Euro-zone. The papers analyzed identify some areas of fiscal policy: most papers focus analysis of fiscal policy only on the tax rate – that is, on the relationship between the income tax rate in force in the country and FDI; other papers analyze the relationship between fiscal harmonization and FDI; some papers study the relationship between the complexity of the fiscal system and FDI; while others attempt to relate other specific areas of fiscal policy – e.g. fiscal regime of thin capitalization – with FDI decisions; various other studies show the relationship between territories with non-existent (or extremely low) fiscal regimes and FDI. It is expected that this characteristics of fiscal policy, will be relevant in the decision-making process, where countries are competing with each other as potential locations for FDI.

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1. Introduction

The following analysis is the result of a recent literature review of the factors affecting the decisions of multinational investors in choosing a destination for FDI and aims to determine the degree of relevance authors give to fiscal policies as a factor among others affecting FDI decisions. The contribution of this analysis is therefore to identify the factors that are uniformly accepted by authors as conditions of FDI, separating them from others which, in the current state of study development, do not show generalized confidence in the literature regarding their influence on FDI decisions.

Fiscal policy, defined as a set of measures available to States, destined to fulfilling the objectives of the tax system – meeting the State’s financial requirements and fair distribution of income and wealth – is one of the factors that may affect FDI decisions.

The aim of this analysis is to identify, among the various specific measures of fiscal policy, those which in the view of authors affect FDI decisions, as opposed to other fiscal policy measures where the influence on FDI decisions is not uniformly accepted.

It should be highlighted that the concept of FDI underlying the literature analyzed can generally be defined as investment made to acquire lasting interest in firms operating outside the investor’s economy. It is also noted that for the purpose of analysis of statistical information contained in the databases of the European Union Statistics Office, the concept is as follows: «Foreign direct investment, abbreviated as FDI, is an international investment within the balance of payment accounts. Essentially, a resident entity in one economy seeks to obtain a lasting interest in an enterprise resident in another economy. A lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise, and an investor's significant influence on the management of the enterprise. A direct investment enterprise is one in which a direct investor owns 10 % or more of the ordinary shares or voting rights (for an incorporated enterprise) or the equivalent for an unincorporated enterprise», Eurostat (2013).

The factors influencing FDI decisions are very varied, and while not an exhaustive list, these include the country’s level of risk, labor costs, market size, level of development of the private sector and corruption levels. Some authors, Alan and Estrin (2000) and Lucas (1993), understand these to be main factors affecting FDI decisions. Macroeconomic stability (inflation, growth, exchange rate) and institutional stability
(fiscal policies, regulation and functioning of the legal system) are other factors mentioned as relevant in FDI decisions. Demekas, Horváth, Ribacova and Wu (2007) understand that the so-called factors of attraction explain many of the FDI decisions in the Eastern European economies in the Community as well as in countries in the south of Europe.

The factors of attraction affecting foreign investment are, as a rule, exogenous variables (e.g. market size, the country’s proximity to the source of investment), which are distinguished from other variables reflecting State policies on receiving investment. Various empirical studies (Bevan & Estrin, 2000; Carstensen & Toubal, 2004; Janicki & Wunnava, 2004, Lankes & Venables, 1996; Lim, 2001; Singh & Jun, 1996) conclude similarly that attractiveness factors are the most important explanatory variables of foreign investment decisions.

Nevertheless, several authors believe that the policies of the host country are also factors to bear in mind in FDI decisions. Key policies affecting investment decisions are, among others, labour costs, the tax burden, infrastructure, exchange and commercial policies. A policy that promotes macroeconomic stability, with respect for the law and contracts, stimulates competitiveness and encourages private sector development, and is expected to stimulate all private investment, including FDI (Demekas, Horváth, Ribacova & Wu, 2007).

Blonigen (2005) finds that empirical studies aiming to identify the impact of receiving State’s policies on FDI decisions normally reach ambiguous decisions, with studies on the impact of commercial or fiscal policies on FDI not being conclusive. More specifically, he carried out a review of the literature on the factors that influence foreign direct investment, and concluded: «this survey of the literature reveals the issues are complicated enough that broad general hypotheses - such as taxes generally discourage FDI - simply should not be expected once one takes a closer look. The more insightful and innovative papers in the literature have developed hypotheses about when a factor should matter and when it should not matter, and then find creative ways to test these hypotheses in the data. The ever greater availability of micro-level data should also help in the future to clear some of the muddy waters», Blonigen (2005 p. 398).

It is in this context that the importance of fiscal policies in FDI decisions should be assessed, knowing that, on one hand, there are attractiveness factors that are important explanatory variables in FDI decisions, and on the other, knowing that fiscal policy is only one of various policies in host countries likely to influence FDI decisions.
For reasons of a systematic nature and for greater ease of analysis, after this introductory chapter, the study is organized as follows: 2. Exogenous variables and FDI; 3. Fiscal policy and FDI; 4. Dominant factors in FDI decisions; 5. Conclusion.

2. Exogenous variables and FDI

A significant amount of the literature understands that exogenous variables are dominant in FDI decisions, with some authors, while recognizing this preponderance, also giving some relevance to host States’ policies.

Demekas, Horváth, Ribacova, and Wu (2007) conclude that exogenous variables – attraction factors: namely size of the market in the host country and geographical and cultural proximity between the originating country and the one destined for investment - are predominant in FDI decisions in Central European and Baltic countries and simultaneously recognize that host States’ policies have some relevance in FDI decisions. Through conjugating exogenous variables and home countries’ policies, they developed the concept of each country’s potential to capture FDI.

Varsakelis, Karagianni and Saraidaris (2011) conclude there are many other factors besides fiscal competitiveness (generated through lowering corporate income tax rates) that affect FDI decisions. They argue that small economies (small players) are not able to compete only through taxes to capture FDI from large economies. They state that «... there would be no incentive, for example, for countries like Portugal, Spain, ..., and Greece to conspire on keeping very low rates, because their difficulties in attracting Foreign Direct Investment are in some significant part due to factors other than tax rates...», Varsakelis, Karagianni and Saraidaris (2011, p. 18).

Simmons (2000) concludes that tax on firms’ profits is the eighth most important factor to bear in mind in an FDI decision, being less important than other factors such as political stability and the host country’s market size. A result of this study was the conclusion that the rate of tax on company profit is one of several relevant factors in FDI decision-making. In this connection, the size of the market in the host country being a more relevant factor to consider in FDI decisions than the corporate tax rate in force in that country was also the conclusion of a study made by the consultants Ernst &Young (1994).
Gillear (2013) states that whereas many countries, for example the United Kingdom, increasingly try to attract FDI through an attractive fiscal policy, namely systematic reduction of the nominal tax rate, so as to gain a competitive advantage, others, the BRICs for example, manage to attract FDI even with complex and very unattractive fiscal regimes. This seems to be justified by several reasons defended by various specialists, all of them quoted by Gillear (2013) in the article entitled BRICs attracting investment despite their tax systems.

Remy Frag (Senior International Tax Analyst at Thomson Reuters), quoted by Gillear (2013), claims that a country the size of Brazil does not need to follow the trends of international policies aiming to attract business, because many multinational firms need to have a presence there, even if Brazilian fiscal policies are not attractive. He concludes that many multinational firms do not exclude a presence in Brazil only due to the fact of its unfavourable fiscal regime compared to other countries.

Jeffrey Owens, Director of the Global Tax Policy Centre at the Institute for Austrian and International Tax Law, quoted by Gillear, states that the reason unattractive fiscal regimes continue to attract FDI is that the tax factor is only one of the factors to take into account in the investment decision process. He concludes: «Any company that allows tax to drive its business will not be around for very long», Gillear (2013, p. 21).

3. Fiscal policies and FDI

3.1. Fiscal harmonization and FDI

Concerning European Union (EU) countries, studies on the subject of corporate taxation as a determinant factor of FDI decisions have frequently focused their analysis on a previous question: discovering whether fiscal harmonization in the Community in terms of corporate income tax is more or less favorable in attracting FDI than the current situation of fiscal competition between the various EU countries.

Some authors favour harmonizing corporate tax in the EU, while others believe fiscal competition between countries creates a favourable environment for attracting investment. Smith (1999) shows that European fiscal regimes with a heavier tax burden for companies offer a qualified workforce and a stable climate favorable to creating
business and adds that fiscal harmonization regarding corporate tax has negative effects on the process of EU convergence. Mitchell (2002) concludes that fiscal competition leads to a reduction in tax rates and states that increased mobility of capital occurs when investors can easily move investment to countries with a lower tax burden. This being so, the author understands that fiscal competition is a very important factor in stimulating the free movement of capital. Hans (1990) defends fiscal harmonization as a way to promote economic convergence and development in the EU and believes fiscal competition leads to distortions that have a negative effect on the economy of EU countries.

There seems to be no unanimity in the literature on the Community regarding this subject, with the various positions adopted in the literature revealing the complexity of the topic.

Globally, i.e., from a perspective not restricted to EU countries, Baldwin and Krugman (2004) say that industries tend to gather in one region, and that industrial agglomeration gives industrialized nations – core nations – an advantage over others which they designate as peripheral. Being aware of this situation, the governments of industrialized nations can tax their industries at a higher rate than that levied by governments of peripheral nations, as long as that rate is not too high. In this connection, they say that «the core government is engaging in a «limit tax» game in which it sets a tax rate sufficiently low to make the periphery government abandon the idea of trying to attract the core». Baldwin & Krugman (2004, p. 21). Therefore, they conclude that greater economic integration can originate higher tax rates, contradicting the view of those who defend that economic integration leads to lower taxes, supporting that position on the assumption that if production factors remain identical, investors move industry to wherever has lowest taxes, which will lead countries to competing in a race to the bottom.

3.2. Corporate tax rate and FDI

Regarding the impact of the tax rate on corporate income in FDI decisions, various authors conclude on a relationship between the two variables, in that a reduction in the tax rate has an effect of stimulating increased FDI.

Diamond and Mirrlees (1971) concluded that small economies should avoid taxing the income obtained by foreign investors, in order to attract FDI decisions. Concerning
fiscal policies that affect foreign direct investment, Hines (1999) concluded that a reduced tax burden affects the level of FDI. Gropp (2000) concluded that changes in the tax rate have generated a significant impact on FDI decisions in OECD countries. He argues that the low tax rate in force in Ireland contributed decisively to the country’s success in attracting FDI. According to the study made by Bénassy-Quéré (2000), FDI is affected negatively by growth of both the effective and nominal tax rate. Desai (2002) concludes that the allocation of results between different entities of the same group with headquarters in different countries is normally sensitive to differences in the tax rate between countries. Desai (2001) also studied the relationship between the influence of indirect taxes and FDI decisions, concluding that this type of tax significantly affects the FDI decisions of American multinationals. Razin and Sadka (2006) show the importance of different tax rates between countries in the FDI decision.

Hartman (1984), Boskin and Gale (1987), Young (1988), Slemrod (1990), Swenson (1994), Cummins and Hubbard (1995), Grubert and Mutti (2000), Bénassy-Quéré (2003) and other authors studied the relationship between FDI, corporate tax rate and income generated by this tax. In general, these studies concluded on a relationship between the tax rate and the level of FDI in the countries analyzed.

However, diverging from the literature quoted above, some studies reveal that the fiscal effect of the tax rate does not affect FDI significantly. Cassou (1997) analyzed the FDI made in the period 1970-1989 in a certain number of countries, concluding that in the majority of cases analyzed the fiscal effect was not statistically significant in the FDI decision. Jun (1994) and Devereux and Freeman (1995) reached an identical conclusion. Pain and Young (1996) studied the FDI originating in Germany and the United Kingdom made in 11 countries during the period 1977-1992, concluding, for the case of Germany, that the fiscal effect was not statistically significant in the FDI decision. Bénassy-Quéré, Fontagné and Lahreche (2005) concluded on the non-existence of a linear relationship between corporate tax rate and FDI decisions.

Summarizing, the research on this subject does not allow unequivocal conclusions to be drawn, particularly given the existence of studies arriving at «opposing» conclusions. Despite a large number of authors claiming there is a relationship between the tax rate and FDI, others conclude that the effect of the tax rate is not significant in these decisions. And even between authors who defend the existence of a significant influence of the tax rate on FDI decisions, there is no unanimity regarding the degree of influence.
3.3. **Complexity of the fiscal system and FDI**

The importance of the degree of complexity of the rules forming the fiscal system in a given country in FDI decisions was analyzed by some authors, who concluded there was a relationship between the two variables, in that a less complex fiscal system has an effect of stimulating increased FDI.

Hassett and Hubbard (1997) show that a simple, transparent fiscal system should be more attractive for FDI. Muller and Voget (2012) concluded that the effect of less complexity in the fiscal system is particularly more relevant in attracting FDI in countries with low tax rates. Edmiston, Mudd and Valev (2003) studied the effect of complexity and uncertainty of the fiscal system on the FDI made in 25 countries in Eastern Europe and found an inverse relationship between the complexity and uncertainty of the fiscal system, and FDI.

Nevertheless, on the contrary, Djankov and others (2010) investigated the relationship between corporate tax rate and investment, dealing with the subject of fiscal system complexity, and did not find a relevant relationship between its complexity and FDI. Studying the relationship between complexity of the fiscal system and FDI, Lawless (2013) concluded that complexity has a limited impact on the level of FDI.

Also concerning the existence of a relationship between the complexity of the fiscal system and FDI decisions, studies on this topic do not allow an unequivocal conclusion to be drawn. More specifically, some authors conclude on the existence of a significant relationship between the complexity of the fiscal system and FDI decisions, while others conclude that complexity has a small impact on the level of investment decisions, and finally, some studies do not find any relationship between the two.

3.4. **Specific areas of fiscal policy and FDI**

Some studies find a relationship between certain other specific measures of fiscal policy (besides measures related to the tax rate) and FDI.

Simmons (2003) developed an index he called corporate tax attractiveness, constructed from the opinions of fiscal experts active in the countries analyzed, who gave their views on the various attributes (not only on corporate tax rate) of the fiscal system in these countries. He then related the index of fiscal attractiveness described
above to the level of FDI in the countries studied and concluded there was a relationship between the level of fiscal attractiveness and FDI. The existence of this relationship allowed the conclusion that the host country’s fiscal policy influences FDI decisions. In this study, Simmons attempted to fill a gap in the literature on the topic, most of which is limited to checking for the existence of a relationship between FDI and corporate tax rate. In his study, Simmons intended to cover not just the level of corporate tax, but also all the other aspects that make up a given country’s fiscal system.

Gondor and Nistor (2012) in studying six European Union economies in the period between 2000 and 2010 (Bulgaria, Hungary, Latvia, Lithuania, Poland and Romania), all of them considered emerging European economies, concluded that fiscal policies are relevant in capturing FDI, but they show in that study that fiscal policy does not mean merely setting a corporate tax rate that is competitive compared to other economies. The conclusions of the study were sustained, firstly, in an analysis of the information on the level of FDI in EU economies, which showed that the average level of FDI in EU countries is higher than the average level of this type of investment in the six emerging economies studied, all of which are in the EU. Secondly, analysis of the information on tax rates in EU countries shows that the average corporate tax rate in EU countries as a whole is higher than the average corporate tax rate in those six economies.

Conjugating these two results extracted from the information analyzed allowed the following conclusion to be drawn: the more developed countries in the EU have a greater capacity to capture FDI than the 6 emerging economies analyzed, despite corporate tax rates being higher in the former than in the latter. A low corporate tax rate alone is not enough to attract FDI if the remaining fiscal policy creates an unfavourable climate for attracting business, namely by creating unpredictability in the fiscal norms applicable, lack of transparency and ambiguity in fiscal decisions, tax evasion and fraud.

Haufler and Runkel (2008) conclude that fiscal rules that are designed specifically to attract foreign capital – namely fiscal ruling on thin capitalization – are more important in affecting FDI decisions than fiscal policies changing statutory tax rates. In the same line as specific tax rules on thin capitalization affecting FDI decisions, Beuttner and others (2008) concluded that restrictions on tax deduction of interest, resulting from changes to fiscal rules on thin capitalization, have a negative impact on capturing FDI. On the concept of thin capitalization, Taboada, (2005, p. 809) states: “Thin capitalization is the situation of a company whose capital is less than is
considered appropriate. The inadequacy can be due to the company lacking the financial resources necessary for its operation, in which case we speak of material undercapitalization, or although the company possesses such resources, they are not equity, i.e., in members’ shares, but have been acquired in the form of loans, i.e., external finance (formal or nominal undercapitalization”).

Fiscal norms in this area generally act towards limiting tax deductions of the interest paid by the financed body, in situations where there is evidence of formal or nominal undercapitalization. Sweson (2001) states that although it is generally possible to identify an inverse relationship between tax rates and FDI, the relevance of that relationship differs substantially between the various types of FDI.

Stowhase (2003a) studied FDI separately in the primary, secondary and tertiary sectors, concluding that FDI in the primary sector is not affected by the fiscal incentives of the host country (elasticity equal to zero). FDI in the secondary sector is affected significantly, and negatively, by increased effective tax rate in the host country. He concluded that the elasticity is approximately -2, meaning that a one per cent increase in the tax rate in the host country corresponds to a fall of approximately two per cent in FDI. According to this study, FDI in the tertiary sector is even more significantly affected by changes in the tax rate in the host country, with elasticity of around -3.

Stowhase (2002) made a study dividing FDI in two categories (production and services). The results obtained indicate, on one hand, that FDI in the productive sector is affected negatively by the effective tax rate and that FDI in the service sector is not affected by variations in effective tax rates. On the other, FDI in the goods producing sector is not affected by variations in the nominal tax rate while FDI in the service sector is affected negatively by the nominal tax rate. The author justifies the relevance of variations in the nominal tax rate for FDI in the service sector by the use of mechanisms for transferring results in the service sector, whereby the multinationals operating in this sector try to shift profits to regimes with lower tax rates.

Stowhase (2003b) concludes in this connection that FDI in different sectors responds with different levels of elasticity to the fiscal incentives of the host country and that the FDI made with different objectives will respond differently to the different types of fiscal incentives, namely rules that allow rapid fiscal depreciation can be relevant for a certain type of FDI but irrelevant for another.

It is a common vector in studies in this area that the different types of investment respond differently to fiscal incentives. Besides this, it is noticeable that the type of
fiscal benefit affects different types of investment differently (e.g. a fiscal benefit that allows rapid depreciation of tangible fixed assets will only be relevant for FDI that presupposes investment in this type of asset).

In this area, studies present uniform conclusions, in that they recognize that corporate tax alone is not enough to attract FDI if the remaining fiscal policy creates an unfavorable climate for creating business. In addition, the studies conclude on the relevance of other specific areas of fiscal policy – other than tax rate – in FDI decisions.

3.5. Tax havens and FDI

Increased mobility of goods and services and globalization of the economy create favourable conditions for erosion of the tax bases of industrialized countries, a reduction in income from tax and fiscal competition between governments, which can lead to a race to the bottom.

In this connection, globalization has a fiscal effect of reducing tax rates Wilson (1991). At the bottom line, capital circulating completely freely can lead to capital gains not being taxed. The forecasts of Wilson (1991) and several other authors did not fully materialize, but there is no question that tax havens have attracted thousands of millions of euros of FDI in the last two decades. Hong and Smart (2007) state that two aspects of globalization created different implications: firstly, the reduction in transport and communication costs facilitated moving real investment between countries, and secondly, financial innovations and a free capital market facilitated international tax evasion.

The subject of moving financial investment to tax havens, and consequently moving FDI decisions to tax havens or having them made through tax havens, is a situation that has been studied by several authors and by international organizations, particularly in the last two decades when this phenomenon has grown to become of major economic relevance today.

The OECD (2013a) carried out a study (entitled Addressing Base Erosion and Profit Shifting – hereafter referred to as BEPS) showing, among other conclusions, the existence of an unequivocal relationship between FDI and different countries’ fiscal policies, demonstrating that results are transferred to tax havens (or to territories with low tax), with that transfer of results originating the erosion of the tax base in territories with high nominal tax rates.
More specifically, the study referred to shows that in 2010, Barbados, Bermuda and the British Virgin Islands received more FDI (5.11% of global FDI) than Germany (4.77%) or Japan (3.76%). In the same year, these three regimes made more investment worldwide (4.54% of global FDI) than Germany (4.28%). In an analysis made by country, in 2010, the British Virgin Islands were the second biggest investor in China (14%) after Hong Kong (45%) and before the United States (4%). In the same year, Bermuda appears as the third largest investor in Chile (10%). Similar data exist in relation to other countries, for example, Mauritius is the top investing country in India (28%). The British Virgin Islands (12%), Bermuda (7%) and the Bahamas (6%) are among the five main investors in Russia. It stands out that the British Virgin Islands, Mauritius, Bermuda, Barbados and the Bahamas are all territories with lenient fiscal regimes, commonly referred to as tax havens.

Other interesting information, regarding the relationship between FDI and a country’s tax regime is shown in this study, with reference to the OECD database on FDI. In some countries making up the database, the information is detailed so as to allow separation of foreign direct investment that is carried out through merely instrumental companies (companies with a specific purpose - called Special Purpose Vehicle (SPV) in English). These companies are general entities with no or few employees, with little or no physical presence in the host economy, whose assets and liabilities represent investment in or from other countries and whose main activity consists of financing the group and/or holding financial investments.

For example, in 2011 the total FDI made in the Netherlands was US $ 3,207 thousand million. Of that amount, investment through SPVs totalled USD 2,625 thousand million. Then again, the FDI made through the Netherlands in the same year was equivalent to US $ 4,002 thousand million, with around USD 3,023 thousand million being made through SPVs.

That study adds that although choosing a company based in a tax haven to make FDI through that entity in another tax regime does not necessarily mean the investment is being made in that way with the main purpose of BEPS (erosion of the tax base or transferring results), a deeper analysis of the data related to those structures can supply information about the use of certain fiscal regimes to transfer investment and intra-group finance from one country to another, through SPV structures.

More precisely, recent studies have analyzed the effective tax rates of multinational companies aiming to demonstrate the existence (or non-existence) of behaviour to erode
the tax base and transfer results (BEPS). Most of these studies are made based on historical data about multinational companies, while others use another type of information, namely investment flows, to investigate the BEPS phenomenon.

Morgan (2012) shows the differences in average effective tax rates over a 10-year period between North American companies operating in the domestic market and North American multinational companies. Whereas domestic firms present an average effective tax rate of 36.8%, in the 10-year period analyzed, in the same period multinational firms present an average effective tax rate of 22.6%.

Avi-Yonah and Lahav (2011) analyzed the effective tax rates of the 100 biggest multinational companies with headquarters in the United States in the period 2001 to 2010 and compared with the effective tax rates of the 100 biggest multinationals based in the European Union. The conclusions of the study show that, despite the nominal tax rate being on average 10% higher in the United States than in European Union countries, the effective tax rates of multinationals are comparable, with the multinationals based in the European Union having on average a higher effective tax rate (approximately 34%) than North American multinationals (approximately 30%).

In a study made of multinational firms, Heckemeyer and Overesch (2012) concluded there was an inverse correlation between the taxable profit reported and the difference between the tax rate at the headquarters and the tax rates of other regimes where the firm is present. Based on this study, they also concluded that transfer pricing is the predominant way to «manipulate» the results between firms in the group.

Another study, Clausing (2011) using data from the United States Bureau of Economic Analysis, finds great discrepancies between the tax operations of branches abroad and the places they report their profits for tax purposes. More precisely, the ten places with the highest number of employees per branch are the United Kingdom, Canada, Mexico, China, Germany, France, Brazil, India, Japan and Australia, but these places do not coincide with the ten best locations in terms of gross profit announced in company reports (the Netherlands, Luxemburg, Ireland, Canada, Bermuda, Switzerland, Singapore, Germany, Norway and Australia).

Gravelle (2010) analyzed the profits of US-based multinationals that control foreign firms, based on a percentage of the GDP of the countries where the subsidiaries are located and the profits reported in those countries. In G-7 countries, the proportion varies from 0.2% to 2.6% (in the case of Canada) and the ratio is 4.6% for the Netherlands, 7.6% for Ireland, 9.8% for Cyprus and 18.2% for Luxemburg. Finally, the
study observes that the proportion increases dramatically for subsidiaries located in tax havens, for example, 35.3% for Jersey, 43.3% for the Bahamas, 61.1% for Liberia, 354.6% for the British Virgin Islands, 546.7% for the Cayman Islands and 645.7% for Bermuda.

The conclusions of BEPS, in this matter, most of them supported by the unequivocal evidence of quantitative data, produced a direct and immediate effect on international politics. More specifically, already in 2013 a set of measures was established to be implemented in the near future by all G-20 countries, aiming to combat erosion of the tax base and combat the transfer of results to territories with low (or non-existent) taxation. It is not within the scope of our study to analyze international fiscal policy decisions made in 2013, following the OECD guidelines published in the document named *action plan on base erosion and profit shifting*, OECD (2013b). In this study, concerning this subject of investment in tax havens or through tax havens, it is only of interest to highlight it is quite obvious that non-existent taxation (zero taxation) is a very relevant factor in guiding FDI decisions.

To summarize and conclude, a higher or lower tax rate and greater or lesser complexity of the tax system are fiscal policies which, according to authors, can influence FDI to a greater or lesser extent (with the various studies on these topics failing to reach a uniform conclusion, as shown earlier). Nevertheless, it seems evident that a zero tax policy (absence of tax and absence of any type of fiscal obligation) has a significant influence on FDI decisions.

### 4. Dominant factors in FDI decisions

Concerning the dichotomy between exogenous variables and host country policies, the analysis carried out above demonstrates that the majority of authors, of both current and less recent studies, show the preponderance of exogenous factors in FDI decisions, with state policies for receiving FDI in the background.

Demekas, Horváth, Ribacova & Wu (2007), Carstensen & Toubal (2004), Janicki & Wunnava (2004), Lim (2001), Bevan & Estrin (2000), Lankes & Venables (1996) and Singh & Jun (1996) all conclude that the factors of attraction (exogenous variables – e.g. market size, proximity of the country to the source of investment) are the most important explanatory variables in FDI decisions.
In an extreme position of absolute supremacy of exogenous variables and ignoring host country policies, namely completely ignoring fiscal policy as a relevant factor in FDI decisions, Gillear (2013) claims that the BRICs manage to attract FDI even with complex and very unattractive tax regimes.

Despite some uniformity of opinion concerning the preponderance of exogenous variables, many studies recognize that host country policies (e.g. labour costs, tax burden, infrastructure, exchange and commercial policies) are also factors to bear in mind in FDI decisions. Fiscal policy is part of a State’s receiving policies, and in turn, receiving policies – among them tax policy – are also influenced by exogenous factors.

Goodspeed (2002, p. 371) shows the importance of external factors in tax policy decisions, stating that «a horizontal fiscal externality may result when two governments ... tax a base that is mobile between the two jurisdictions. The tax rate set by any one of the jurisdictions is influenced by the fear that the mobile tax base will flee and leads to lower tax rates on mobile factors». Therefore, the internal tax policy decisions of host countries are also affected by exogenous factors, inasmuch as they require knowledge of the practices (policies) followed by the competition, i.e., knowledge of the equivalent tax regimes operating in other States.

Concerning the dichotomy between tax policy and FDI – that is, the existence of a specific relationship between tax policy and FDI – studies do not reach uniform conclusions, as will be shown next.

The studies carried out deal with various areas of fiscal policy, more specifically: (i) most studies focus analysis of fiscal policy only on the tax rate – that is, on the relationship between the income tax rate in force in the country and FDI; (ii) other studies analyze the relationship between fiscal harmonization and FDI; (iii) some authors study the relationship between the complexity of the fiscal system and FDI; (iv) while others attempt to relate other specific areas (besides tax rate and harmonization) of fiscal policy – e.g. fiscal regime of thin capitalization – with FDI decisions; (v) various other studies show the relationship between territories with non-existent (or extremely low) fiscal regimes and FDI. Aiming to systemize the analysis, the following table resumes the conclusions of these studies:
Table 1 – Conclusions of studies on FDI

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<th>Bibliographical reference</th>
<th>i) Tax rate</th>
<th>ii) Fiscal harmonization</th>
<th>iii) Fiscal complexity</th>
<th>iv) Specific areas (other fiscal policies – besides tax rate and harmonization)</th>
<th>v) Tax havens</th>
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(1), (3), (4) inverse relationship: (1) < tax rate > FDI; (3) < fiscal harmonization > FDI; (4) < fiscal complexity > FDI; (2), (5), (6) direct relationship: (2) > fiscal harmonization > FDI; (5) > fiscal policies directed to investment > FDI; (6) > non-existence of fiscal system > FDI;

The uniformity of the various authors’ opinions regarding the existence of a relationship between certain areas of fiscal policy and FDI is only found in studies showing the relationship between tax havens and FDI and in some studies trying to show the relationship between other specific areas of fiscal policy (besides tax rate and fiscal harmonization) and FDI.

As for tax havens, a direct relationship between the absence of taxation and the level of FDI seems unequivocal. The figures speak for themselves, the evidence of the
study made by the OECD is repeated, that in 2010, Barbados, Bermuda and the British Virgin Islands received more FDI than Germany, and that in the same year, those three regimes made more investment in other countries than the investment made by Germany abroad.

Despite some uniformity in the literature in recognizing that certain specific measures of fiscal policy – directed towards stimulating investment activity – influence FDI decisions, there are currently few scientific studies about the relationship between these precise measures of fiscal policy – other than the tax rate and fiscal harmonization – and FDI.

5. Conclusion

Having reviewed the literature, without claiming it to be exhaustive, on the variables affecting FDI decisions and the relationship between fiscal policy and FDI, we can conclude that a significant number of authors find that exogenous variables (namely, market size, geographical and cultural proximity between home and host countries) are preponderant in FDI decisions. However, some authors attribute relevance to policies formed by States, with various host country policies being more important in the decision process, as long as exogenous variables tend to be similar between the potential destinations considered for investment.

Many studies try to relate fiscal policies to FDI. Fiscal policies affect the investment decision more relevantly when other (e.g. economic and social) policies of the potential countries being considered for investment are convergent. In the single market of the Euro-zone countries (where there is convergence of economic and social policies) the growing tax competition among these countries and the importance they give to fiscal sovereignty – as the «last bastion» of national sovereignty – is evidence of the current importance of fiscal policy in the competitiveness of Euro-zone economies.

Given this evidence, although no scientific studies are known to confirm it, we can expect certain specific measures of fiscal policy related to investment activity, implemented in Euro-zone countries – namely fiscal rulings on thin capitalization, reporting tax losses, elimination of double international economic taxation, among others – to be relevant in the decision-making process, as long as the countries from that area are competing with each other as potential locations for FDI.
Development of studies in these specific areas of fiscal policy is a need that research and the literature should attend to.

References


Gondor, M (2011). From total to structural harmonization in the field of European direct taxation. Annals of the Stefan cel Mare University of Suceava : Fascicle of the Faculty of Economics and Public Administration, Vol.11(1(13)), pp. 269 - 278.


Morgan, J.P. (2012), North America Equity Research, Global Tax Rate Makers: Undistributed Foreign Earnings Top $1.7 Trillion; At least 60% of Multinational Cash is Abroad, 16 May 2012


