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FDI Incentives and Unequal Treatment of Domestic Investors in Macedonia: Causes and Consequences

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Benefits and Costs from Foreign Direct Investments in the Technological Industrial Development Zones:

Case: Macedonia in the period 2007-2014

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Risto Karajkov; Ljupco Despotovski; Marija Suncevska

Introduction

In 2006 with the coming to power of a new right-wing government, the Republic of Macedonia embarked on an aggressive policy for FDI promotion. The country made a stark shift from a previously FDI-inert to an ambitious FDI-promoting policy. The country changed the legislative and institutional framework and began pro-actively seeking foreign investors.

Location incentives are critical part of Macedonia's FDI promotion strategy and they include significant tax holidays, import subsidies, worker benefits subsidies, grants for infrastructure, subsidized construction land, as well as additional incentives. Incentives are offered to new greenfield investors in specific manufacturing sectors. These investors are export-oriented and can be categorized as efficiency-seeking.[1]

Incentives are primarily offered to investors located in the technological-industrial zones created by the government, but there have also been cases of investors located outside the zones which have received incentives. The specific amount of the incentive package is considered classified information and it is not available to the public.

The new FDI promotion policy has become a polarizing political issue in the country. The critical issues of contention include the potential benefits of the incentives, the quality of the government-subsidized jobs in the new foreign plants, the lack of transparency in the provision of incentives, and the issue of unequal treatment of foreign and domestic investors.

This analysis will specifically focus on the issue of unequal treatment of foreign and domestic investors, or in other words, the discrimination of domestic investors by favoring inward-FDI through incentives. This issue has, in addition to the issue of measuring of the effects of FDI, been one of the most highlighted in the public debate.

This analysis's specific interest is the extent and the specific dimensions of the argument that domestic investors are subject to unequal treatment by the government's FDI promotion incentives. The argument has been articulated by business representative organizations and it has been taken on by independent or opposition-oriented media, the expert community, and last but not the least, the political parties.

The text will try to explore the specific dimensions of the argument, and how strong this sentiment is in the business community in Macedonia. The analysis will try to explore the additional matter of how typical is this issue to the Macedonian FDI promotion experience. Have other countries with FDI incentives experienced this and in what way? If so, what have been the effects of thedebate on the issue or the opposition to the FDI incentives, in particular on the FDI promotion policy?

[1] As succinctly presented by Narula & Bellak (2009: 74) “It is generally acknowledged that there are four main motives for foreign investment: 1) to seek natural resources; 2) to seek new markets; 3) to restructure existing foreign production through rationalization; and 4) to seek strategically related created assets. These, in turn, can be broadly divided into two types. The first three represent motives which are primarily asset- exploiting in nature: that is, the investing company's primary purpose is to generate economic rent through the use of its existing firm-specific assets. The last is a case of asset-augmenting activity.” According to them, poorer countries are “unlikely to attract much asset-augmenting FDI, but tend to receive FDI that is primarily resource-seeking, market-seeking or efficiency-seeking (Narula & Bellak, 2009: 74).

Methodology

The focus of the analysis is on the Republic of Macedonia. However, the comparative dimension is essential in order to understand the nature of the phenomenon and to consider the policy alternatives based on the international experience. For this purpose, a review of available literature has been conducted with particular focus on the issue of FDI location incentives and its relation to arguments of discrimination of domestic investors.

In addition, a review of media coverage of the same issue has also been conducted. The review of literature has included a broad search of work on FDI incentives and unequal treatment of domestic investors in general, but it has also, in particular, focused on the FDI promotion policies in other transition countries from Central and Eastern Europe (CEE). The media review has also followed this pattern. Whereas there is a tremendous amount of literature available on the FDI promotion experience of the CEE countries, this research has discovered fairly little on the issue of direct interest, that is, the relation of FDI incentives to the unequal treatment of domestic investors. The CEE media review has also revealed little information, in particular due to the fact that little such material can be found online. The language barrier has been an additional constraint. There are nonetheless indications that the issue has in the past received significant media attention in these countries. A more focused research in the media archives in these countries would definitely reveal a lot of material. Such an effort however, is beyond the scope of this analysis.

The approach pursued by the analysis is that of general comparisons with the broader region experiences. This serves primarily to explore potential common characteristics of the FDI incentive experience. In addition, the analysis includes closer comparisons to Serbia, due to the obvious relevant similarities it has with Macedonia. Its current FDI promotion policy also relies on generous location incentives, and the argument of unequal treatment of domestic investors in favor of foreigners is also currently present there.

Most of the data collection effort has focused on Macedonia. An extensive media review has been conducted in order to explore the argument on discrimination of domestic investors. Available domestic literature on the issue has not been identified. In addition, a phone survey of 268 business managers has been conducted in the period 11-18 January 2016. The survey was done on a representative sample of the Macedonian economy, based on the criteria of activity sector, company size, and location. A survey on the same broader topic, but with a different methodology has been identified. [2] The survey results which are available publicly in a summarized form have been consulted.

The analysis explores in detail the arguments present in the recent Macedonian experience with FDI location incentives. It uses the data conducted from the general review of literature and in particular the data on the regional experience to draw inferences and discuss policy challenges.

[2] Извештај за анкетата за испитување на јавното мислење за странските директни инвестиции во Македонија, 2015 година, Здружение на млади аналитичари и истражувачи, достапен на: http://zmai.mk (не може да се копира целиот линк).

The International Context for FDI Incentives

The key evidence of the discrimination argument proponents in Macedonia is that domestic investors do not get the incentives received by inward-FDI. The government's position is that the normative conditions for incentives qualification are equal for domestic and foreign companies, that is, it argues there is no differential treatment. However, as of present the government has not been able to present a demonstration effect, that is, to show that domestic companies indeed receive equivalent incentives. It is evident that the sentiment of discrimination originates from the provision of the FDI incentives. If there would be no incentives, or they would not be as generous, the feeling of discrimination would not exist. The question then is why does the Macedonian government offer such favorable incentives? Is it a whim, which is not uncommon in policy decisions in Macedonia, a matter of erred estimate, or a carefully considered policy?

Given the general absence of informed, evidence-based public debate in the country, especially over the last decade, during the VMRO-DPMNE led government[3], there is no information on how Macedonia developed its FDI promotion policy. It is quite certain that the policy did not emerge from a process of public deliberation. The question then is how did the Macedonian government come up with this model? Is this model of FDI incentives typical to Macedonia, or has the country built it up on the experiences of other countries? This question has indeed long been answered in the literature on FDI, however, given that it is still unanswered in the Macedonian debate, it deserves some attention.

The discussion on the factors for attracting FDI is long-standing and quite broad. For the purpose of this analysis two broad provisional views can be discerned. The first and the dominant one, discusses these factors in the more neutral terms of economic fundamentals and good business environment. Whereas this stream acknowledges the importance of FDI incentives, it perceives them as a smaller part of the FDI promoting process. Its emphasis is on overall sound economic policies and good governance.

The other view has a specific focus on government incentives for FDI. It has a political-economy approach and it considers incentives to be a critical part of the FDI promotion agenda and a major factor influencing multinationals' investment location choices.

According to this view, recent decades have witnessed an increasing international competition for FDI. There is evidence that demonstrates that FDI incentives dynamics between countries have become a sort of “bidding wars”, which is the term used in the literature. The term “race to the bottom” is also frequently used in this discussion, used to indicate that governments commonly bid for the investment among each other. The location incentives represent the key weapon in these “locational tournaments”.

Countries differ based on their preference for incentives types they offer. For example, it has been noted that CEE countries in the 1990s preferred tax incentives, compared to EU members states which more strongly relied on grants, the reason being the smaller budget capacity of the former (Dreyhaupt, 2006:105). This is noted as a general difference between richer and poorer countries (UNIDO, 2003:8). The bottom line nonetheless is that the FDI incentives are the key mechanism competitor countries use in the process of attracting inward-FDI. A number of authors have pointed out to this increasing competition over the past few decades (Dreyhaupt, 2006; Oxelheim & Ghauri, 2004;Gurtner & Christiansen, 2008).

[3] Over the last period Macedonia has marked a significant decline in the democracy and political freedom rankings produced by major global watch-dog organizations. In the same period the country has marked a steep rise in some of the major rankings of the business environment

The competition takes place at several levels. First, there is a global-level competition to attract FDI to a certain part of the world. Second, there is an intra-regional competition between the countries of a particular region, which usually takes place after the investor has decided to screen or invest in the region. Third, there is a sub-national level competition between federal states, regions, cities, or local governments within countries (Dreyhaupt, 2006: 98).

One dimension of the increasing competition is the rising number of contestants. Emerging economies have increasingly entered the game. Industrialized countries have also been noted to take part in the FDI competition. Countries which have had a protectionist policy in the past have become FDI- friendly. Cases in point are countries such as Sweden and France which have created strong investment promotion agencies (Dreyhaupt, 2006:103).

A key dimension of the increasing competition is the rising incentives offered to foreign investors. This phenomenon has been documented and analyzed by a number of studies. The amounts of location incentives offered to foreign investors have multiplied over the last few decades (Dreyhaupt, 2006; Oxelheim & Ghauri, 2004). Different aspects of this phenomenon have been subject to attention. Some authors have pointed out the new-learned bargaining behavior of foreign investors which play governments against each other and seek higher incentives from competitor governments even after they have made the investment location decision. This is considered by some authors as a typical rent-seeking behavior (Thomas, 2011:2). The trend of overpaying for the investment as part of the bidding war between countries or regions has been noted. According to some studies, emerging economies end up paying more for the investment than industrial countries. According to the same view, EU member states pay less due to the EU regional aid regulation which limits the amounts of incentives which can be provided (Thomas, 2011:2). However, the major trend observed is the exponential rise of location incentives over the past 3 decades.[4]

Table 1 in Annex 1 presents data on FDI incentives in selected FDI projects in several industries where the FDI competition is considered very fierce. It should be noted that not all industries have such strong FDI competition.
There is strong indication that governments which decide to enter the FDI race have to accept the fact that location incentives are an important part of the process. There is, of course, the well-known argument that the general business environment is of greater importance. However, this may be an over-generalization, as different types of FDI have different preferences. According to UNIDO, for market-seeking projects, the market size and the policies that regulate it are an important factor in the investment decision. This, however, has lesser importance for efficiency-seeking, export-oriented FDI, which is specifically the type of inward-FDI Macedonia is promoting. The UNIDO study notes that "the policy environment is of paramount importance in a country with a sizeable local market and substantial natural resources. For countries with smaller markets and fewer natural resources, an active and focused investment promotion strategy is important as is having an effective Investment Promotion Agency (IPA) to implement the strategy (2003:7)."

[4] A few examples from literature can be provided. Noting that most of the competition takes place between countries in a specific region, and even at sub-national level, Dreyhaupt (2006:97) points the case of the competition for a new BMW plant in 2001, when over 250 locations in Europe competed for the investment worth estimated USD 860 million and around 5,500 jobs. The winner was the city of Leipzig "which provided incentives that reportedly included a 495 acre site for just US 2,.23 million, and an estimated USD 244 million from the EU for locating in disadvantage area. Additional assistance related to training and infrastructure was reportedly also made available from local authorities (Dreyhaupt, 2006:98)." The author concludes that the incentives total cost of over USD 45,000 per created job was nonetheless modest compared to "other parts of the world where FDI competition in the automotive industry has reached six-digit numbers such as in Brazil (USD 340,000/job, Mercedes Benz, 1996), India (USD 200,000-420,000/job, Ford, 1997), or the US (USD 166,000/job, Mercedes Benz, 1993)." Dreyhaupt concludes that "compared with the meagre USD 4,000 per job given to Honda as part of the U.S. state incentive package in 1980, the dramatic and excessive upward spiral becomes quite apparent (Dreyhaupt, 2006: 98)."Looking specifically into the FDI race in the EU, Oxelheim & Ghauri (2004) join the argument of an intensive race for FDI among countries, in this case, EU member states. They specifically analyze how the EU's policies of harmonization among member states affect their FDI promotion. They argue that even "when macro policies are common to all the member countries… taylor- designed selective (aimed at targeted firms) policies emerge in many countries with the aim of attracting inward FDI…governments under pressure will not remain inactive and watch all FDI end up in neighboring countries…. [governments] will find new ways to convince foreign investors to opt for their country… (2004:5)". They also agree the race has been intensifying and the amounts of FDI location incentives rising over the past decades. The authors analyze the EU state aid regulation whose aim is to prevent unfair competition and argue that a lot of the greenfield FDI in EU member states has been attracted with the help of EU aid (reportedly up to 80% of all the greenfield FDI in Ireland). According to them, FDI competition among EU member states has been intensifying in spite of the EU state aid rules (2004: 18).

The conclusion is the following. There is significant evidence presented by literature that promoting FDI is a highly competitive race which has been intensifying in the past few decades. Location incentive packages are the key instrument of governments in this process. They bid and outbid each other in the attempt to attract foreign investors. The review of the media in Macedonia offers several examples of investors which screened Macedonia but eventually opted for Serbia, or vice versa. This is of course not presented in terms of a bidding war, but the dynamics is not difficult to discern.

In conclusion, the Macedonian policy of generous FDI incentives is not an invention of the Macedonian government. It is acceptance of the rules of the ever more intense race for FDI. Literature and other available data show that the broader CEE region countries which embarked on intensive FDI promotion in the 1990s, as well as countries from the immediate neighborhood such as Serbia which is also in the race, have competed in the same way. The model Macedonia has developed, resting technological-industrial zones, is to a large extent similar with the models of the CEE countries, as well as Serbia.[56]

In a nutshell, governments which decide to opt for a pro-active FDI policy are compelled to provide incentives. The size of the incentives is also dictated by the terms of the race. They need to be sufficient to outbid the competitors. Macedonia is no exception.

FDI Incentives and Unequal Treatment of Domestic Investors in Macedonia

The establishment of this model in the country caused reactions. The reaction which is of particular interest to this analysis rests on the argument of domestic investors discrimination. To the extent that incentives are only provided to foreign investors, it is obvious that domestic companies are discriminated.

The media review indicates that this issue has been articulated by business managers, business representative organizations such as economic chambers, opposition political parties, certain civil society organizations (CSOs) with mandate in economic development policies, and of course the media.

The issue is politically charged with opposition parties criticizing the government for discriminating domestic companies and proposing policies for stronger support to domestic investors when they come to power. The government in turn responds with the argument that the conditions for receiving state aid for greenfield investment are equal for both foreign and domestic companies. In addition, the government's response is that the argument of domestic companies discrimination has been invented by the opposition. It has also suggested that the perception of inequality exists because of the government's high-profile international effort to attract foreign investors, which includes advertisement, road-shows, etc., which in their view is not required for attracting domestic investment since the government is in day-to-day contact with domestic investors[7]. In a nutshell, the government's argument is that the discrimination is ostensible, that it is misperception.

The key argument which has been proponed, in particular by business representatives, rests on the simple observation that the significant incentives available for foreign investors entering the technological-industrial zones (TIZs) or sometimes investing outside these zones are not available to domestic investors. The government's response that the conditions are the same for all investors has been overturned by the fact that to date no domestic investors has received incentives [8]. In sum, there is no demonstration that the normative equality is also a substantive one.

[5]Poland's model was centered on such zones. Serbia's current model is also based on free economic zones. Both Poland and Serbia's modes have involved use of tax holidays, and grants.

[7]See for example: Груевски: Дискриминацијата на домашните инвеститори е измислица на СДСМ, 30 August 2015, Фокус, available at http://fokus.mk/gruevski-diskriminatsijata-na-domashnite-investitori-e- izmislitsa-na-sdsm/

[8]The first company to enter a technological-industrial zone was announced at the time of writing this text.
Immediately afterwards the entry of a second domestic company was announced. See for example: Хајтек прва македонска компанија во Бунарџик, 25 December 2015, Телма, available at http://telma.com.mk/vesti/hajtek-prva-makedonska-kompanija-vo-bunardzhik, Технопласт е втората македонска компанија која ќе инвестира во Бунарџик, 29 December 2015, Е-магазин, available at http://emagazin.mk/vesti/vest/17664?title=tehnoplast-e-prvata-domashna-kompanija-koja-nje-investira-vo- bunardzik

Second, the related argument of discrimination is that the hefty incentives to foreign investors are paid from the pockets of domestic investors. They argue that while they pay all the taxes and labor benefits which fill state coffers, the government uses these resources to give grants to foreign investors, which are in addition exempt from these obligations. An additional argument is that, besides the incentives, the inequality is produced by the much higher effort the government spends on attracting foreign investors, or the much larger attention foreign investors receive. On the opposite end, the argument goes, domestic investors do not get even the simplest support from the government (both national and local) in dealing with day-to-day problems.

The debate has at times been sparked in response to specific developments. One investor declared for foreign media that it has been saved from bankruptcy with subsidies from the Macedonian government, thereby indicating the specific amount of the received incentives. The declaration caused strong reactions in the Macedonian public.[9] The argument was that the government is bringing in bankrupt companies and saving them at the expense of the domestic business sector.

Arguments present in the media have often associated the effects issue with the discrimination issue. It has been pointed out that despite the subsidies, the level of FDI is still low. It is also indicated, that not all foreign investors are large employers. The latter argument is in response to the government's pro-industrial policy claim that it would gladly support domestic investors offering to open a plant with about 1,000 new jobs[10]. Partly in response to this the pro-SME argument has been proponed that 1,000 (domestic) companies creating 10 jobs each is much better for the economy than 10 companies times 1,000 jobs.[11]

Much of the argument about unequal treatment exists at the general level described. At instances, the argument is combined with descriptive evidence of specific cases of lack of government support for resolving problems businesses face.[12]

An important argument has been that local businesses have to struggle to get even the simplest help from institutions, such as a bus line or a pipeline across the street, whereas foreign investors get all of that for free, as a pre-condition for their choice of location.

The view put forth by local businessmen is that they have to pay a market price for the land, building permits, utilities, energy, and pay all taxes and benefits, whereas the foreign investors get all this at a fraction of the cost or free. In the specific words of one manager, "I can also buy the machines and employ workers, if I get everything for free."[13]

[9]See for example: ПДП: Нема странски инвестици туку странски компании што нашата влада ги спасува од ликвидација, 9 August 2015, +Инфо, available at http://plusinfo.mk/vest/36065/pdp-nema-
stranski-investicii-tuku-stranski-firmi-shto-nashata-vlada-gi-spasuva-od-likvidacija..

[10]See: ЛП: Во македонската економија треба да важи правилото на еднаквост, 31 August 2015, Фокус, available at http://fokus.mk/lp-vo-makedonskata-ekonomija-treba-da-vazhi-praviloto-na-ednakvost.

[11] ibid

[12]Media reports present the case of one of the largest self-emerged industrial zones in Skopje, the zone in Vizbegovo, at the edge of the city on the road to Kosovo. The companies in the zone have recently formed an association to better represent their interests before the government institutions. Their demands include water-supply and sewerage, urbanistic plan (which is a precondition for installing water-supply and sewerage systems), and a regular bus line, which would help workers get to work. As of mid-2015, they have got the bus line which is actually a very small measure of support. The fact that they had to group into an association in order to be heard is indicative of the lack of attention domestic businesses receive from government institutions. According to the businesses active in the zone, the government has never done anything for the zone which includes some 250 companies. In 2015 the media reported a cleaning action in the zone organized by the City of Skopje. It is probable that the action was a token response to the demands by the companies from the zone. If only at anecdotal level, this case is illustrative in describing the difference in the attention provided to the foreign and the domestic companies. See Petrovski, 19 August 2015, Домашните инвеститори сакаат ист третман како странските, Капитал, available at http://kapital.mk/domashnite-investitori-sakaat-ist-tretman-kako-stranskite. Similar examples indicative of the lack of government (no just at central level) attention to the specific problems of the business sector, are shared by other businessmen in the media. According to one manager whose plant is located in another industrial zone in Skopje, Pintia, the zone does not have access to natural gas, even though there is a pipeline practically across the street. On account of this when buying new equipment, they have to orient to machines which use another source of energy, making their production less efficient. See Petrovski, 19 August 2015, Домашните инвеститори сакаат ист третман како странските, Капитал, available at http://kapital.mk/domashnite-investitori-sakaat-ist-tretman-kako-stranskite.

[13] ibid

There are several other observations which lend themselves from the media review. First, there is no direct argument against FDI promotion. Whereas there is the argument that the government should stop paying incentives, there is no argument that FDI should stop being promoted. However, there is no evidence-based debate about the link between the two. Along this line, there is actually an argument coming from a smaller opposition party, that by accusing the opposition of having fabricated the "discrimination argument", the government creates the risk of foreign investors fleeing as soon as power changes hands.[14] The point is that foreign investors might fear hostility from a new government. The argument can be interpreted to indicate a fear of foreign investors leaving, or a desire to have them stay in Macedonia.

Second, there is the argument of ethnic solidarity. An opposition Albanian party has criticized the incentives package given to individual investors on grounds that only a tiny portion of the approximately 600 jobs created were given to the ethnic communities.[15] The issue of equitable ethnic representation and the equitability in public resources allocation are important political issues in the country, and FDI incentives are public money. It is debatable whether the argument is indeed fair or may be smacking of political clientelism. Equitable job allocation in the public sector is one thing. Suggesting ethnic quotas in private sector jobs which have been created with public money is a step further. [16]

However, governments do indeed insist on overseeing the quality of the jobs supported by state aid. Serbia's regulation prohibited incentives for jobs with salaries lower than 20% above the national average.[17]

The media review presents some of the major arguments and positions in the debate over FDI. However, the presence or the strength of these views in the business community cannot be assessed based on a media review. The review is an exploratory process and it is effective in identifying the different aspects of the debate. It cannot, however, quantify them.

In order to measure these attitudes, a survey of business managers was conducted. The survey was done on a representative sample of Macedonian economy, based on the sector of activity, company size, and location criteria. The sample was slightly adjusted to allow for strong participation of companies with a larger number of employees. A total of 268 senior business managers from 268 different companies were surveyed (allowing for margin of error of +/- 5.97% at a confidence level of 95%). They were asked to provide information on their companies, but also to express their individual attitudes on Macedonia's FDI policy. The survey produced some interesting results (Annex 2).

Business managers overall feel they are informed of the process of FDI promotion in Macedonia (Tab/Chart 7). Around 2/3 of them feel they are either somewhat informed (25%), well-informed (25%), or even very well informed (14.6%) with the process.

Asked if the incentives provided to foreign investors are necessary in order to have them come to Macedonia instead of going to another country, over 1/2 half of the managers say that they agree, of whom 28% agree, and 28.4% fully agree that the incentives are indeed necessary (Tab/Chart 8). About 1/4 of the managers disagree, of whom 10.1% fully disagree with this statement, and 13.1% disagree with it. A fairly modest share of 17.5% do not have a clear position either way and some 3% have said they didn't know or did not provide an answer. In conclusion, the majority of the business managers are inclined to agree that foreign investors incentives are necessary. This is an important finding. Over 1/2 of business managers acknowledge the fact that incentives are the factor necessary to attracts investors.

[14] ЛП: Во македонската економија треба да важи правилото на еднаквост, 31 August 2015, Фокус, available at http://fokus.mk/lp-vo-makedonskata-ekonomija-treba-da-vazhi-praviloto-na-ednakvost.

[15] ПДП: Нема странски инвестици туку странски компании што нашата влада ги спасува од ликвидација, 9 August 2015, +Инфо, available at http://plusinfo.mk/vest/36065/pdp-nema-stranski-investicii-tuku-stranski-firmi- shto-nashata-vlada-gi-spasuva-od-likvidacija

[16] One should note the claim that private sector jobs (not in incentive-supported companies) are sometimes allocated by political party lines on account of the close links between politics and business.

[17] SIEPA: Strani i domaci ulagaci izjednaceni, 15 September 2013, RTS, available at http://www.rts.rs/page/stories/sr/story/13/Ekonomija/1395638/SIEPA%3A+Strani+i+doma%C4%87i+ulaga%C4%8Di+izjedna%C4%8Deni.html

When asked about the politics of subsidizing the business sector in general, whereby the question does not specify if the incentives would be for domestic or foreign companies, there is an overwhelming support. Some 3/4 of business managers agree that subsidies are good for the economy. Entire 48.9% fully agree and additional 25% partially agree that subsidies to business are a good thing for the economy. There is an obvious pro-subsidy, or pro-state aid sentiment in the business sector. Macedonian business managers feel that the government should help the economy through direct subsidies (Tab/Chart 12).

However, when asked if by giving subsidies to foreign investors, the government discriminates local business, almost half of the businesses, or 49.3%, have said that they fully agree with this statement (Tab/Chart 10). Additional 20.9% have said they partially agree. In sum, almost 70% of the businesses have said they feel discriminated. Only around 17% of the business disagreed that this is discrimination. The conclusion is that the feeling of being discriminated is strong in the business sector in Macedonia.

There is an obvious contradiction, which is probably typical of human rational self-interest based behavior. Most of the businesses are in favor of direct government subsidies; a majority of them agree that the subsidies are necessary for promoting FDI, but at the same time also feel discriminated when they are offered only to foreign investors.

At that, around 43% of business managers feel that the government policy for FDI promotion has started to produce effects, of which 26.9% said they agreed with this statement, and 16.4% said they fully agreed (Tab/Chart11). Practically, almost half of the business managers feel that the policy has produced good effects. On the other side of the pendulum, around 28% of business managers disagreed the policy has to date produced good effects, of whom 14.9% fully disagreed, and 13.4% disagreed. On this specific question over 1/4 of the surveyed managers (26.1%) have chosen not to have a clear position, for the obvious reason – its political controversiality. The conclusion on this specific issue is that a larger part of business managers feel that the incentives for foreign investors policy has started to produce effects.

The conclusion is that even though the feeling of being discriminated is strong among business managers, many of them agree that foreign investors incentives are necessary.

The feeling of discrimination is fueled by the fact that incentives are only given to foreign investors. It is of course clear that providing to a broad range of domestic companies the amount of subsidies given to foreign investors is not possible. The solution hence is to equalize the conditions under which the domestic and foreign investors can get the subsidies. This would, in the Macedonian case, mean to allow entry into the technological-industrial zone to domestic companies under the same terms as to foreign ones. Government officials keep repeating that this is the case. The nominal equality is however not sufficient since there is lack of demonstration.

At this point the question posed earlier in the text needs to be revisited. Is the discrimination argument typical of the Macedonian case? What are the experiences of other countries taking part in the FDI race? If the issue of discrimination is a consequence of location incentive policies across countries, how has it affected the policies of other countries?

The review of literature on FDI suggests that the discrimination effect of location incentives has been well-documented. However, it is not a major theme in the FDI discussion. The media review also shows that the discrimination debate takes place or has at times taken place in countries that have pursued FDI promotion.

As noted by a number of studies, the inequality created between foreign and domestic investors in the economy is one clear negative effect of location incentives. The review of the comparative practice indicates that the conditions that governments offer to foreign investors are seldom offered to home businesses. According to Gurtner & Christiansen, "investment incentives are discriminatory in so far as they provide a significant financial advantage to external investors and put local businesses at a disadvantage (2008:7). Oxelheim & Ghauri (2004: 10) also note the negative FDI effect of "discrimination in favor of inward investors." Literature notes that in most cases the government makes the effort to provide the semblance of nominally equal conditions. This is at present the case with the Macedonian government. As noted by Easson, "whilst they may be formally neutral (in that no preference is given to either foreign or domestic investors), in practice [they] benefit only foreign investors, since only they can meet the qualifying conditions. Either the minimum monetary threshold is too high for domestic investors, or the targeted sector is one in which there is no foreign expertise (2004:108)." The same observation is made by Apel (2011), who in describing tax incentives (holidays) in Poland and Hungary in the 1990s notes that "while such tax-incentive packages were formally available to domestic firms, for the most part they were limited to multinational corporations that could afford the initial start-up investment conditions. Apart from the standard legislated conditions, large companies could negotiate even better conditions with local and federal officials on case-by-case basis (2011:72)."

The consequences of this unequal treatment have also been noted. Oman (2000:11) observes that " the distortionary effects of incentives which tend to discriminate against smaller firms, against local firms (de facto, though rarely on a de jure basis) and against firms in sectors or types of activity that are not targeted can be significant." Related to this he underscores the need to "ensure the accountability of government officials, particularly those involved in the negotiation of discretionary incentive packages", and points out the need for governments to be able to monitor their own use of incentives (Oman, 2000:12).
Easson argues that "discrimination in favor of foreign investment is likely to cause resentment." He cites the work of Gray and Jarosz, according to whom the periodic outbursts of anti-foreign sentiments in the CEE in the 1990s have been caused by the privileged treatment of foreign investors. He notes this could also lead to regional political tensions (Easson, 2004:109). In earlier work done together with Zolt, he notes the possible consequences of the discrimination of domestic investors which "...distorts competition... [and] may restrict the growth of domestic enterprises, or even prevent the development of a domestic sector" (Easson & Zolt, 2003:10).

Literature indicates that location incentives for FDI can become a polarizing political issue on the national political agenda, particularly because of the discrimination argument. Easson notes the case of Slovakia whose government had to retract the plan for a new 10-year tax holiday for foreigninvestors in 2000, "following opposition protests that domestic companies would not be able to compete". He also refers to the results of a 2002 poll in the Czech Republic which had found 52% of Czech citizens thinking that foreign companies enjoy better work conditions than domestic ones (Easson, 2004:109). However, as Apel (2011: 75) notes, in the Czech Republic in the 1990s, the center- left which provided large tax incentives to foreign investors, managed to prevent an effort from the right-wing opposition to end the incentive program on grounds of discrimination of smaller domestic companies. In the past 10 years Serbia went from providing generous job subsidies to investors, to canceling the subsidies and then back to re-introducing them.[18]

[18] Laketic, M 05 May 2015, Vlada se vratila Dinkicevim subvencijama, Istinomer, available at http://www.istinomer.rs/clanak/1121/Vlada-se-vratila-Dinkicevim-subvencijama

It is evident from the review of literature that the political dynamics which surrounds the FDI incentives process in Macedonia is a phenomenon found across countries. The evidence also suggests that the outcome of the national political competition can also change the course of a country's FDI incentives policy. In turn, political parties are compelled to take positions on the issue of FDI incentives in response to the reactions by the domestic business community.

The review of the FDI debate in neighboring Serbia at present reveals a similar dynamic. The argument of domestic businesses discrimination is present in the public debate. High government officials have at times taken opposing stances in the debate and called for an end to the domestic companies discrimination.[19] There are however two differences which can be observed. First, based solely on the media review, there appears to be stronger transparency in the process of subsidies awarding in Serbia compared to Macedonia. It is a common practice for media articles to report the specific amount of subsidies which an individual investor has received. This is not the case in Macedonia where media reports use scarce indirect data and speculate.[20] It should not be understood however that the location incentives in Serbia are completely transparent. There has been at periods (usually after changes in government) intense criticism of the lack of process and work transparency of the Serbian Investment and Export Promotion Agency (SIEPA).[21] However, based on the data found in media reports, the impression is that the process is more transparent there. This is an impression based on the qualitative data available and as such it is relevant. A measurement of the views of the business community, based on a consistent methodology, would produce more accurate and comparable results.

Both in Serbia and Macedonia the discrimination argument centers on foreign vs. domestic investors. The anti-corporate multinationals vs. the poor argument is less observed in both countries. But there is another relevant difference. In Serbia, the government has managed to demonstrate (a semblance of) equality in the conditions for receiving subsidies. In response to criticism that the incentives discriminate against domestic investors, it has responded with statistics that the number of domestic companies which have received investment subsidies is actually larger than that of foreign investors.[22] The response has received strong media interest. It is this demonstration effect that makes an important difference in the argumentation on domestic investors discrimination. Not all questions have been answered of course, and not all aspects of the process are transparent, but the overall impression is that it is the actual demonstration of equality which subsides the argument of discrimination.

By analogy, the same can be expected in Macedonia at a moment when the number of domestic companies receiving incentives is roughly the same as the number of foreign ones. This process is only just beginning in Macedonia with the recent announcement of the first two companies to enter the zone in Skopje. It is obvious, by its broad advertisement, that the development was used by the government to produce the demonstration effect of equality.

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[19] In 2013 President Tomislav Nikolic criticized the job subsidies for foreign investors on grounds of domestic companies discrimination. He said that foreign investors get larger job subsidies. See: Markovic, K, 12 September 2013, Ministar Radulović za "Blic": Ne ukidamo subvencije za investitore, Blic, available at http://www.blic.rs/vesti/ekonomija/ministar-radulovic-za-blic-ne-ukidamo-subvencije-za-investitore/51w1y8r.

[20] In Macedonia there are no specific figures on the amounts of the various forms of incentives. Some media reports and recent analyses operate with estimates based on indirectly collected data and assumptions. The lack of transparency has been criticized by the media and experts who have suggested that the state aid contracts be made public. A report by the State Auditor (2013) has criticized the lack of transparency of the state aid to foreign investors. There have been repeated calls to the government to make this data public. A look into the experiences of other countries indicates that this is also a common element in the FDI promotion model. The review of literature indicates a pattern. There is evidence emerging from the studies which have looked into this issue that governments are not particularly willing to provide data on FDI incentives. For example, Oxelheim & Ghauri note that in "documenting the incentives, [they] have to rely mainly on anecdotal evidence due to the secret nature of investment packages and agreements between investors and governments (2004: 19)." Specifically focusing on the EU state aid policies, Dreyhaupt (2006:104-105) suggests that EU statistics fudges the data in different ways so that the exact amount of public money spent for location incentives is not known. Looking into the experience of Central and Eastern Europe (CEE) countries, he also finds that incentives are less transparent at a local level; that they are unregistered, and agreed on case-by-case basis. He adds that the same goes for the old member states, but to a lesser extent (2006: 106). Other authors have also given some credit to the EU in this sense. Thomas (2011) suggests that beyond the EU and some states in the US, information on incentives primarily depends on the ability of journalists to report on it. The EU state aid policy framework, designed to prevent unfair competition, is generally considered to have provided a more effective framework for controlling location incentives compared to other developed regions. However, it is not known how much it has succeeded in controlling the FDI incentives race (Oxelheim & Ghauri, 2004: 5). The recent and current investigation of the European Commission into the alleged tax breaks provided by Luxembourg, Ireland, and Belgium to large multinationals, indicates that the incentives race in the EU is still very non-transparent (See for example, Fairless, T 10 June 2014, EU to Investigate Corporate Tax Codes in Ireland, Luxembourg, Netherlands, Wall- Street Journal, State aid: Commission opens formal investigation into Luxembourg's tax treatment of McDonald's, 3 December 2015, European Commission, available at http://europa.eu/rapid/press-release_IP-15-6221_en.htm, Oliver C, Brunden J, and Boland, V, 14 December 2015, Apple's Irish tax Deal Faces Further Scrutiny by Brussels, Financial Times).

[21] SIEPA davala lazne podatke o subvencijama za radna mesta, 13 November 2013, Kurir, available at http://www.kurir.rs/siepa-davala-lazne-podatke-o-subvencijama-za-radna-mesta-clanak-1083907

[22] SIEPA: Strani i domaci ulagaci izjednaceni, 15 September 2013, RTS, available at http://www.rts.rs/page/stories/sr/story/13/Ekonomija/1395638/SIEPA%3A+Strani+i+doma%C4%87i+ulaga%C4%8Di+izjedna%C4%8Deni.html.

The issue remains whether the demonstration effect presents an apparent or substantive equality. The statistics in Serbia appear accurate even though perhaps not all the details are known. Specifically, there was the argument that the subsidy amount per job for foreign investors was larger than for domestic investors[23]. With the process in Macedonia being at its very outset, it is yet to be seen whether the domestic companies incentives will be a token or a meaningful adjustment in the policy. The conclusion is that the declaration of de jure equality is not sufficient and that an effective demonstration of real equality is required to subside the feeling of unequal treatment in the domestic business community.

Negative Effects of FDI Incentives

There is an extensive discussion in the academic literature on whether FDI incentives should be provided or not.[24] The preceding discussion has shown that the issue is not simple at political level either. In addition to the issue of impact which is the key one in the debate on FDI, it is obvious that the issue of discrimination, or unequal treatment of domestic compared to foreign investors can become an acute political issue. In the case of Macedonia, this issue is mostly discussed at the level of equality between domestic vs. foreign investors. However, as indicated several times, in the international debate there is a broader understanding of the issue of inequality along the axis of multinationals vs. the recipients of public services (with the emphasis being on the poor). In this sense, the negative aspects of FDI incentives relate to the fiscal pressures on the host country, and the consequences of the reduced tax revenue for the provision of public services. This debate is not present in Macedonia.

A few additional potential effects of the location incentives should at this point again be underlined. As already noted, the risk of the incentives race itself is a possible bidding war between countries. Thomas (2011:2) notes that the “bargaining over incentives is characterized by major information asymmetries, leading to the likelihood of a government paying more than needed to attract an investment. Companies often conduct an incentives auction even when they have already made their location decision...” Similarly, Oman (2000: 13) suggests that “the prisoner's-dilemma nature of competition for FDI creates a permanent risk of costly beggar-thy-neighbor bidding wars and downward pressure on environmental and labour standards.” Along the same line UNCTAD (2002:153) notes the high risk “for host countries attempt[ing] to attract FDI – most particularly export-oriented FDI for which international competition is particularly strong – through incentives and by lowering labour standards,environmental standards or other economic or social standards. This can lead to a race to the top as far as incentives are concerned and a race to the bottom in terms of social benefits for workers.” Finally, there is the risk that the investor relocates once incentives have expired or he has received a better offer. Referring to earlier work by UNIDO (2000), (Gurtner & Christiansen, 2008: 8) note “there are numerous examples of this happening in practice in both developed and developing countries.”

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[23] Markovic, K, 12 September 2013, Ministar Radulović za "Blic": Ne ukidamo subvencije za investitore, Blic, available at http://www.blic.rs/vesti/ekonomija/ministar-radulovic-za-blic-ne-ukidamo-subvencije-za- investitore/51w1y8r.

[24] The discussion is broad as it is complex. This debate is closely related to the debate on the FDI effects per se, however they are not one and the same. The debate on location incentives is concerned with issues such as the net benefit of incentives, their necessity, the effects on the tax base and the national business environment, the effects on labor standards and so forth. The debate then distinguishes effects by type of FDI, type and size of host economy and its level of development. Oxelheim & Ghauri suggest that most researchers would agree that the benefit from inward FDI outweighs the cost. However, they relativize the argument by noting that if the amount of incentives per job is too high, this is not the case (2004: 10). According to (Gurtner & Christiansen, 2008:8) who specifically discuss the issue of tax incentives “if the long term gains from these incentives, in the form of job creation, local procurement and tax revenues, exceeds the short term costs, and if tax incentives played a decisive role in attracting the investment in the first place, there is a case for providing incentives. In practice, however, investment decisions are most likely to be based upon key economic criteria, including macroeconomic stability, availability of production inputs, labour productivity, strength of domestic markets, and the absence of institutional barriers....This conclusion does not, however, hold good for investments directed as export oriented production... which is frequently not location-specific and therefore more likely to generate competition between countries.” In essence, Gurtner & Christiansen (2008:8) suggest that “incentives are generally more important for export-oriented projects” than for market-seeking projects

The single most critical effect of the feeling of discrimination in the domestic business community is that it can deter domestic companies from investing. This has emerged very clearly from the review of domestic business managers views presented in the media. Several managers have pointed to the fact that they do not feel like investing in the country when they have to pay for everything, whereas foreigners get the same things for free. A related consequence is the flight of domestic capital. There have been statements by Macedonian managers who said they were considering investing in Serbia where they might even get incentives as foreigners.[25] These potential effects of the FDI incentives for inward-FDI are real, measurable, and they deserve specific policy attention. A related phenomenon which has been noted in literature is the so-called round-tripping. According to Easson & Zolt, (2003:10), if “incentives are only available to foreign investors, local firms or individuals can use foreign corporations through which to route their local investments.” This is one of the factors of possible ineffectiveness of the domestic investors discrimination, since they “may engage in 'round-tripping' to disguise domestic investment as coming from foreign sources (Easson & Zolt, 2003:16).” The likelihood of this consequence will depend on a number of specifics, including the type of FDI projects which qualify for incentives. It is nonetheless documented in literature as a relevant consequence of the feeling of discrimination in the domestic business community.

Conclusions and Policy Considerations

The government FDI promotion policy has been a high-profile issue in the public over the past 7-8 years, practically since the onset of the government's campaign. Close to a decade into its implementation, the public interest in the FDI promotion policy remains high. The interest is supported by the government's regular public relations effort in updating the public on developments concerning the arrival of foreign investors and the successes of the process. In response, opposition political parties and opposition media criticize the FDI campaign most often on grounds of insufficient effects, discrimination of domestic investors, and non-transparency. The quality of the jobs created with the FDI incentives has also been a point of criticism. In sum, the government's FDI promotion policy is a highly visible political issue. The government advertises it as a cornerstone of its successful economic growth policies. The opposition criticizes it on the same grounds.

The location incentives provided to foreign investors are the key issue of interest in the public debate. It is clear that if there would be no program of incentives for the foreign investors, the FDI policy would be of lesser interest to the public (as it has been in the period prior to 2006-2007), even though the issue of the other related cost (international advertisement, etc.) would remain.

The central interest of this analysis was to answer the question of why the Macedonian government has embarked on an obviously costly policy of providing generous state aid to foreign investors. The conclusion is that the government was in a sense compelled to do this by the rules of the locational tournament. A fact not discussed in the Macedonian public debate is that the country has joined a fierce international race for FDI. This race is particularly intense in the field of export-oriented FDI that Macedonia is competing for. There is significant evidence from the review of comparative practice presented in literature that countries which decide to promote inward FDI, and especially countries with small markets and fewer resources, have no choice but to accept the rules of the locational tournament. A country can choose to pursue or not pursue a desirable type of FDI (greenfield, export-oriented). But if the decision is to actively pursue FDI, then it has to accept the rules of the FDI race. It is quite clear that for a country such as Macedonia, the FDI incentives are a critical part of the investors' decisions to come and invest. If the country decides to suspend the incentives, it has to accept the fact that the flow of inward FDI, which is anyways small, will further decrease.

[25] Petrovski, 19 August 2015, Домашните инвеститори сакаат ист третман како странските, Капитал, avaailable at http://kapital.mk/domashnite-investitori-sakaat-ist-tretman-kako-stranskite.

This is the key policy choice to be considered. It should be noted that this argument about the imperative of FDI incentives is not noticeable in the public debate where the dominant view appears to be that of the good business environment as the foremost factor for FDI promotion. Bringing this argument into the policy debate (which is the aim this paper hoes to contribute to) is thus relevant for considering the policy options.

A key related policy consideration is whether the small and fiscally-constrained Macedonia can effectively compete in this race with larger countries with more resources. This consideration needs to be weighed based on rigorous additional analysis. (Overall, to date there has been rather little analysis on the government's FDI policy beyond the one produced by journalists. Further such analysis is needed). In relation to this, the following consideration emerges: is it worth ending the campaign after almost a decade of investment in it? Is downsizing, for example, a better option?

It is obvious that there are risks to the policy decision to enter the FDI race. The obvious negative effect of this race includes the reduced fiscal capacity for delivering public services. The question is whether the effects of the inward FDI exceed the costs caused by such reduced fiscal capacity. Again, this needs to be decided based on robust measurements of benefits vs. costs. Such measurement should be longitudinal.

The issue of domestic investors discrimination remains a critical point of contention and a polarizing political issue. The preceding sections have shown that the issue is not typical to Macedonia, but that it is a phenomenon that can be observed across countries. The evidence suggests that this issue has the potential to polarize the national political agenda and to require political actors to position themselves on it. The Macedonian case follows this pattern. The survey of the business community has shown a strong feeling of unequal treatment. However, this feeling is combined with an attitude of understanding the necessity of FDI incentives and the feeling that the government's FDI promotion policy has started to show results. It is also evident that the business community is overwhelmingly supportive of state aid, to the extent that it directly benefits from it.

The debate over inequality in Macedonia is directly focused on incentives for foreign investors vs. no incentives for domestic companies. The issue of inequality seen in terms of reduced fiscal capacity to service citizens is not a relevant aspect of the debate.

Evidence from the comparative practice suggests that governments have managed to some extent to counter the discrimination argument by presenting a relevant demonstration of equality which exceeds the rhetorical and normative exercise of providing a de jure equality. The effective demonstration of real equality appears to be a key instrument for countering the feeling of discrimination by localbusinesses.

The reality of the FDI race imposes difficult choices for governments. Literature has noted that such policy challenges “cannot be fully addressed by national governments in the absence of strengthened international policy co-ordination (Oman, 2000: 13). At present such a debate is not present in Macedonia and the pursuing of such a policy objective from a current standpoint seems rather ambitious. Nonetheless, starting a regional forum of discussion on the issue could be a first step in that direction.

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ANNEX 1

Table 1. Estimated incentives for automotive, electronics, chemicals, and semi-conductor FDI projects - inward FDI (selected projects)

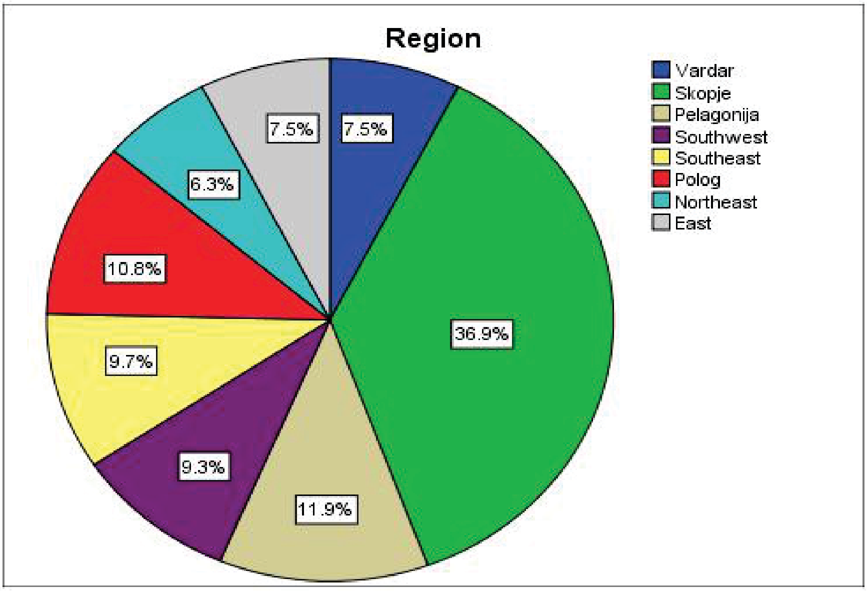
Date of Package	Country of project	Investor	Incentive per job (USD)	New Jobs
1980	United States	Honda	4.000	
1983	United States	Nissan	25.000	1.300
1984	United States	Mazda-Ford	14.000	3.500
1993	United States	Mercedes	170.000	1.500
2000	United States	Honda	105.000	1.500
1991	Portugal	Ford-Volkswagen	255.000	1.900
1993	Hungary	GM	300.000	213
1997	Germany	Volkswagen	180.000	2.300
1995	United Kingdom	Dupont	201.000	100
1996	Germany	Dow	800.000	2.000

Source: (Oxelheim & Ghauri, 2004: 11), based on data compiled from UNCTAD (1995), Moran(1999), Oman (2000), Loewendahl (2001); partially reproduced.

ANNEX 2: Results from survey with business managers

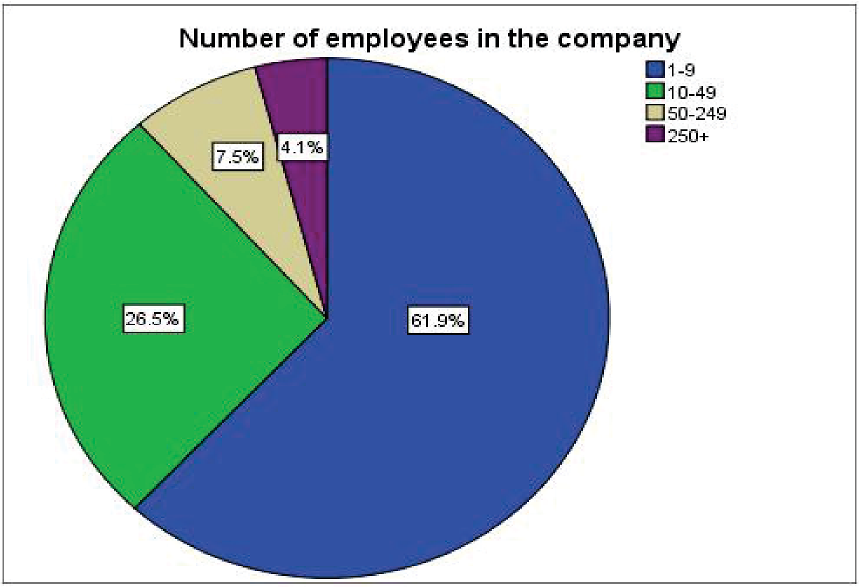
Table/Chart 1. Region

	Frequency	Percent	Valid Percent	Cumulative Percent
Vardar	20	7.5	7.5	7.5
Skopje	99	36.9	36.9	44.4
Pelagonija	32	11.9	11.9	56.3
Southwest	25	9.3	9.3	65.7
Southeast	26	9.7	9.7	75.4
Polog	29	10.8	10.8	86.2
Northeast	17	6.3	6.3	92.5
East	20	7.5	7.5	100.0
Total	**268**	**100.0**	**100.0**	



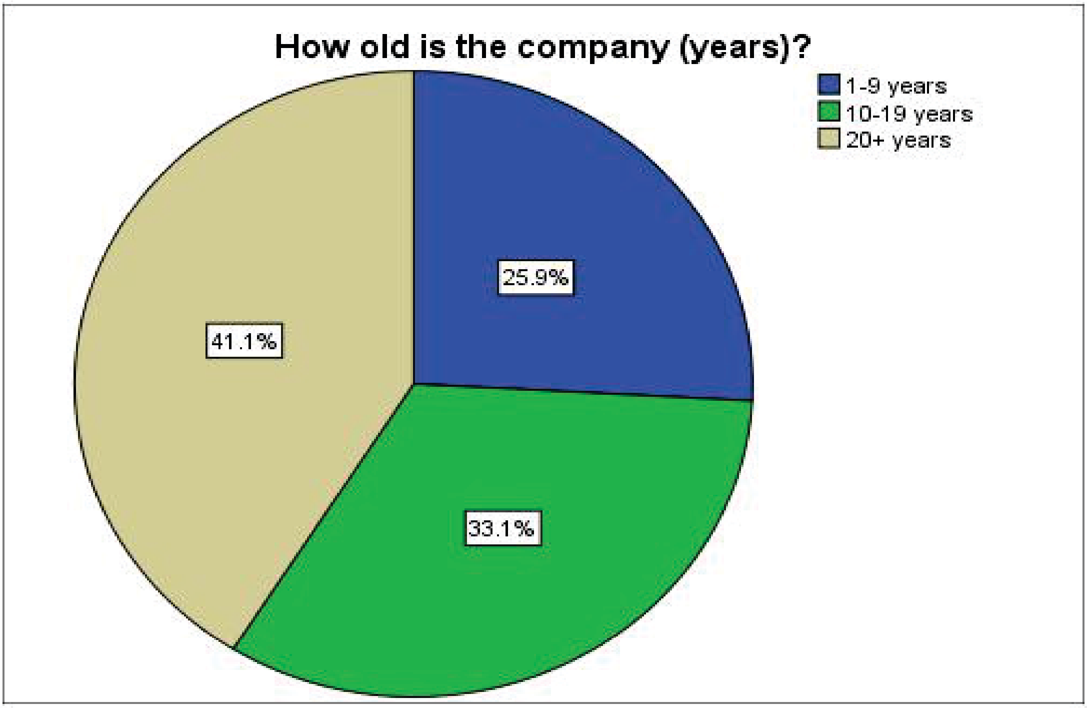
Table/Chart 2. Number of employees in the company

	Frequency	Percent	Valid Percent	Cumulative Percent
1-9	166	61,9	61,9	61,9
10-49	71	26,5	26,5	88,4
50-249	20	7,5	7,5	95,9
250+	11	4,1	4,1	100,0
Total	268	100,0	100,0	



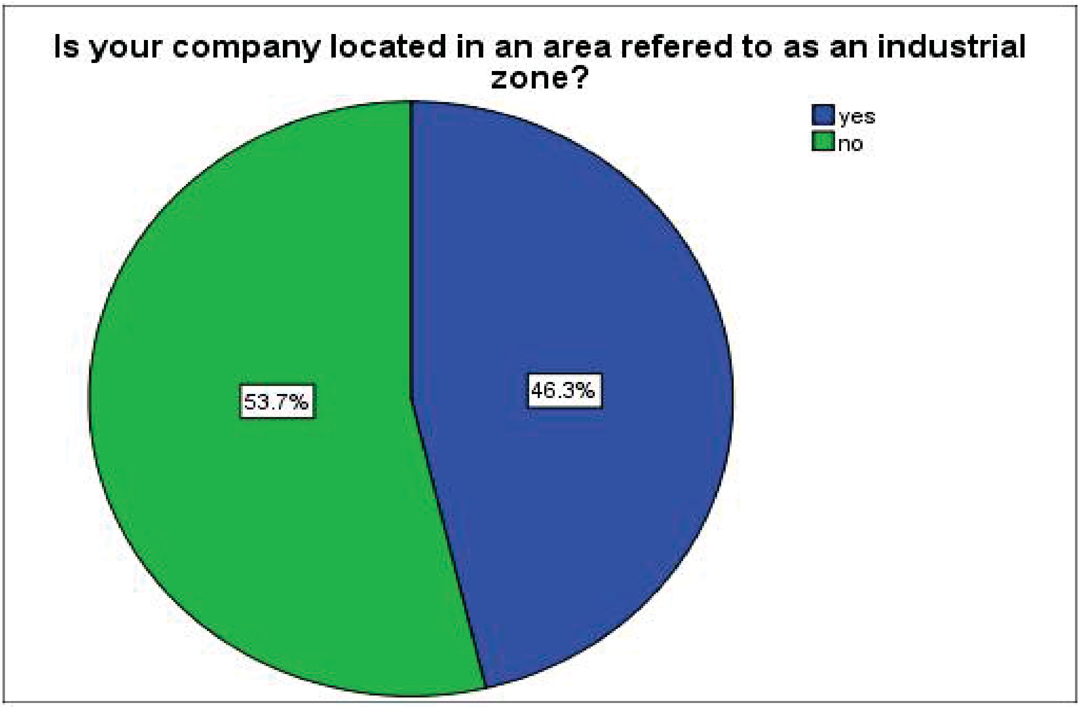
Table/Chart 3. How old is the company (years)?

	Frequency	Percent	Valid Percent	Cumulative Percent
1-9 years	68	25,4	25,9	25,9
10-19 years	87	32,5	33,1	58,9
20+ years	108	40,3	41,1	100,0
Total	263	98,1	100,0	
Missing	5	1,9		
Total	268	100,0		



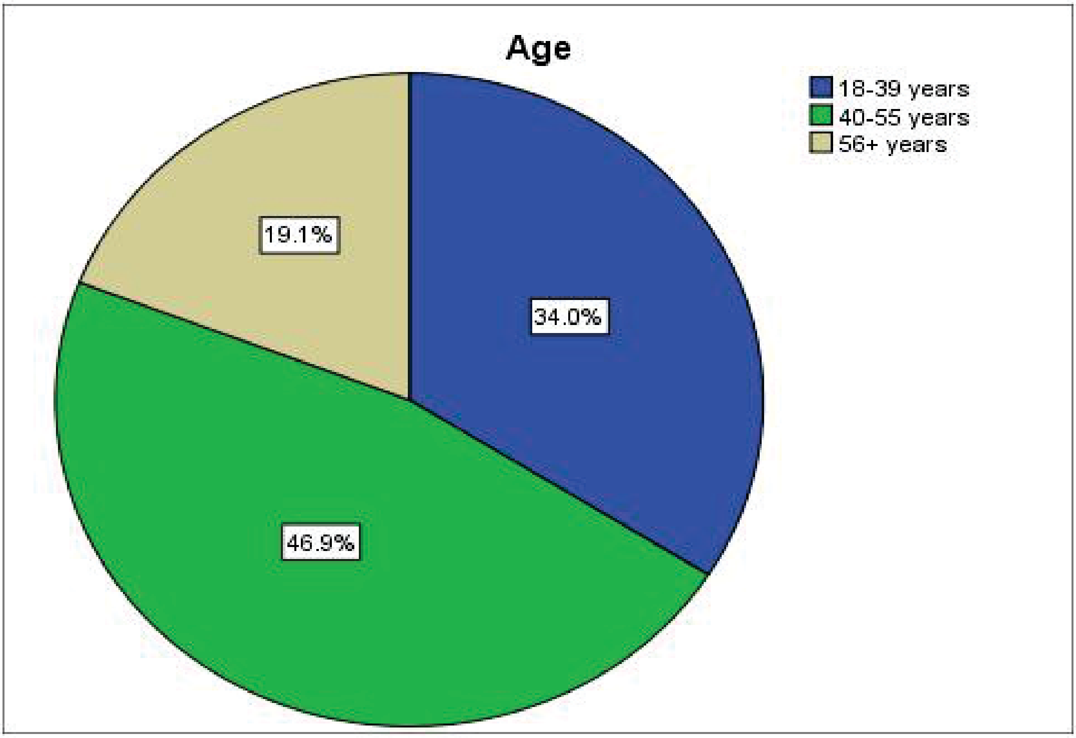
Table/Chart 4. Is your company located in an area referred to as an industrial zone?

	Frequency	Percent	Valid Percent	Cumulative Percent
yes	124	46,3	46,3	46,3
no	144	53,7	53,7	100,0
Total	268	100,0	100,0	



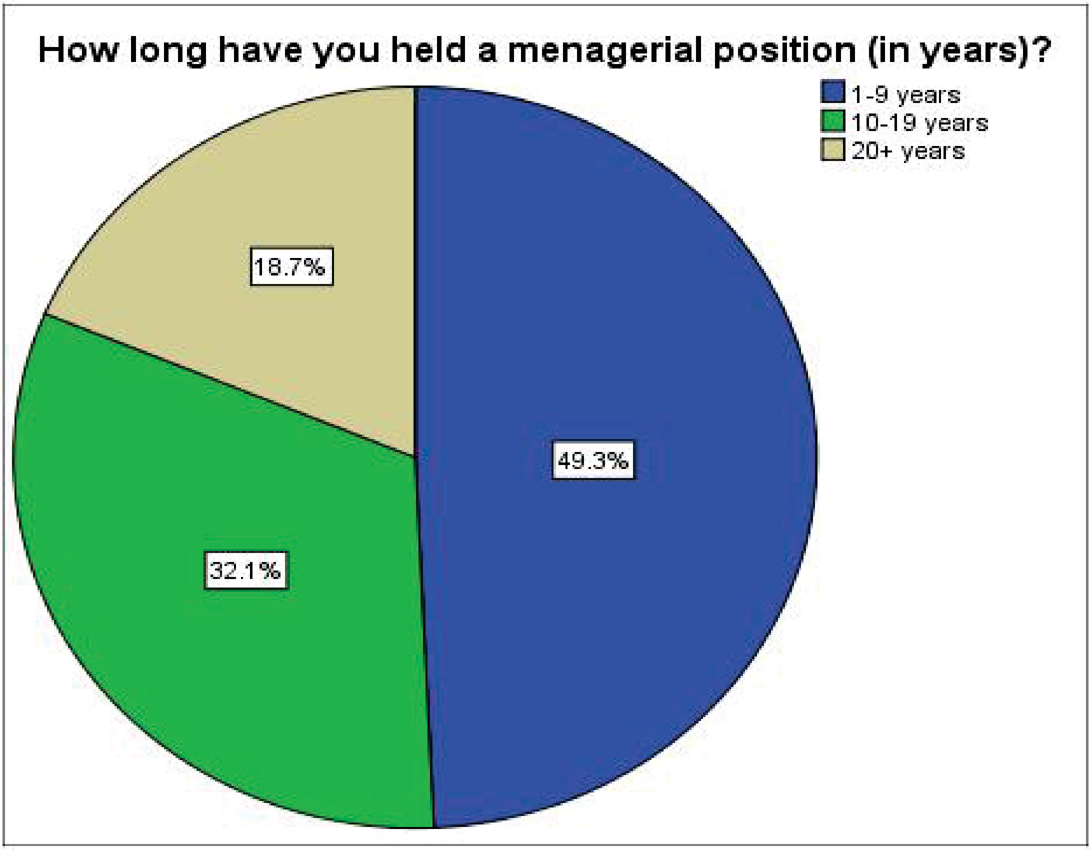
Table/Chart 5. Respondent Age

	Frequency	Percent	Valid Percent	Cumulative Percent
18-39 years	87	32,5	34,0	34,0
40-55 years	120	44,8	46,9	80,9
56+ years	49	18,3	19,1	100,0
Total	256	95,5	100,0	
Missing	12	4,5		
Total	268	100,0		



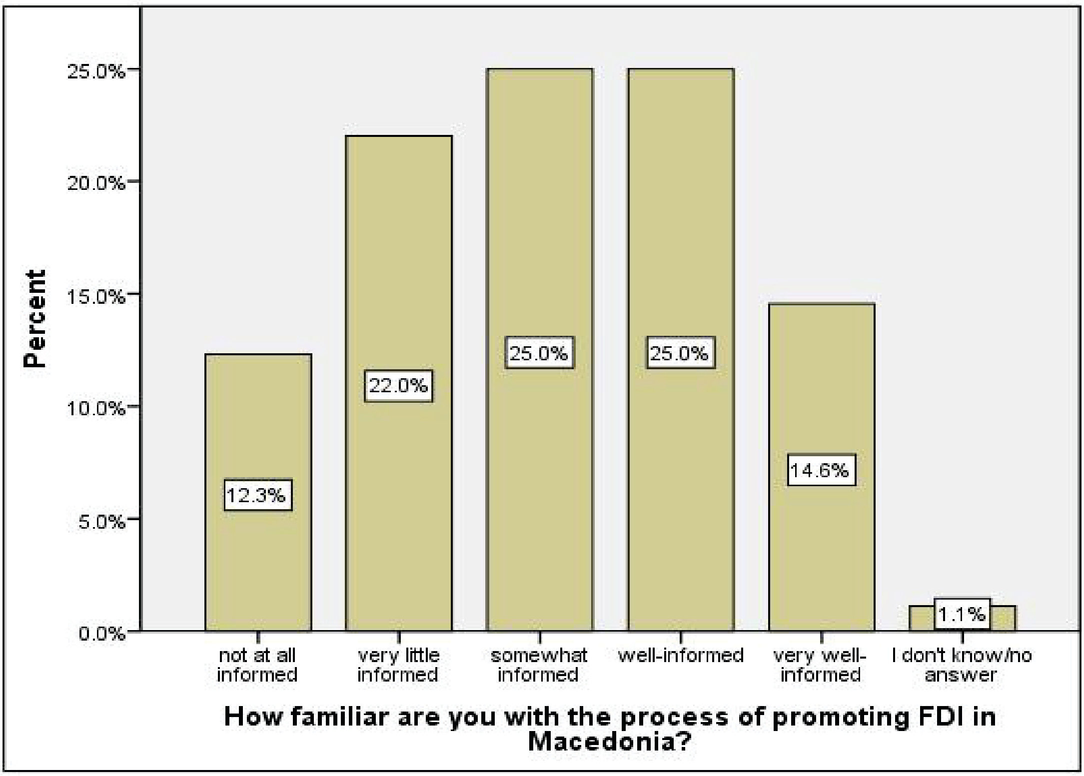
Table/Chart 6. How long have you held a managerial position (in years)?

	Frequency	Percent	Valid Percent	Cumulative Percent
1-9 years	132	49,3	49,3	49,3
10-19 years	86	32,1	32,1	81,3
20+ years	50	18,7	18,7	100,0
Total	268	100,0	100,0	



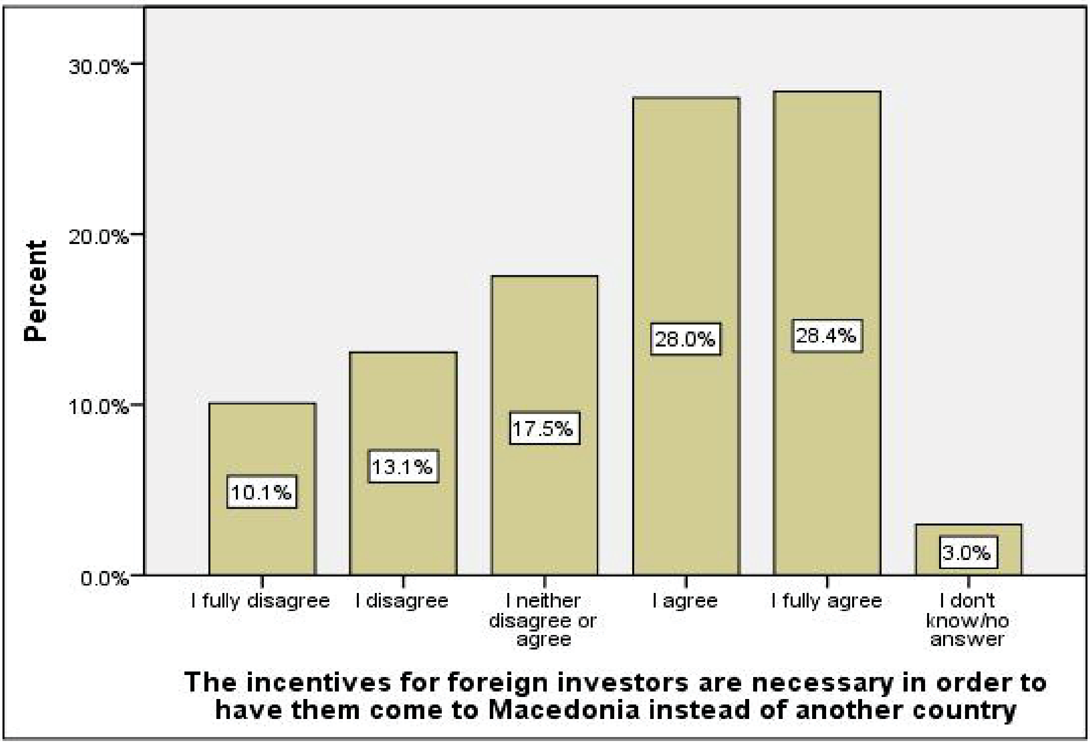
Table/Chart 7. How familiar are you with the process of promoting FDI in Macedonia?

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all informed	33	12,3	12,3	12,3
very little informed	59	22,0	22,0	34,3
somewhat informed	67	25,0	25,0	59,3
well-informed	67	25,0	25,0	84,3
very well-informed	39	14,6	14,6	98,9
I don't know/no answer	3	1,1	1,1	100,0
Total	268	100,0	100,0	



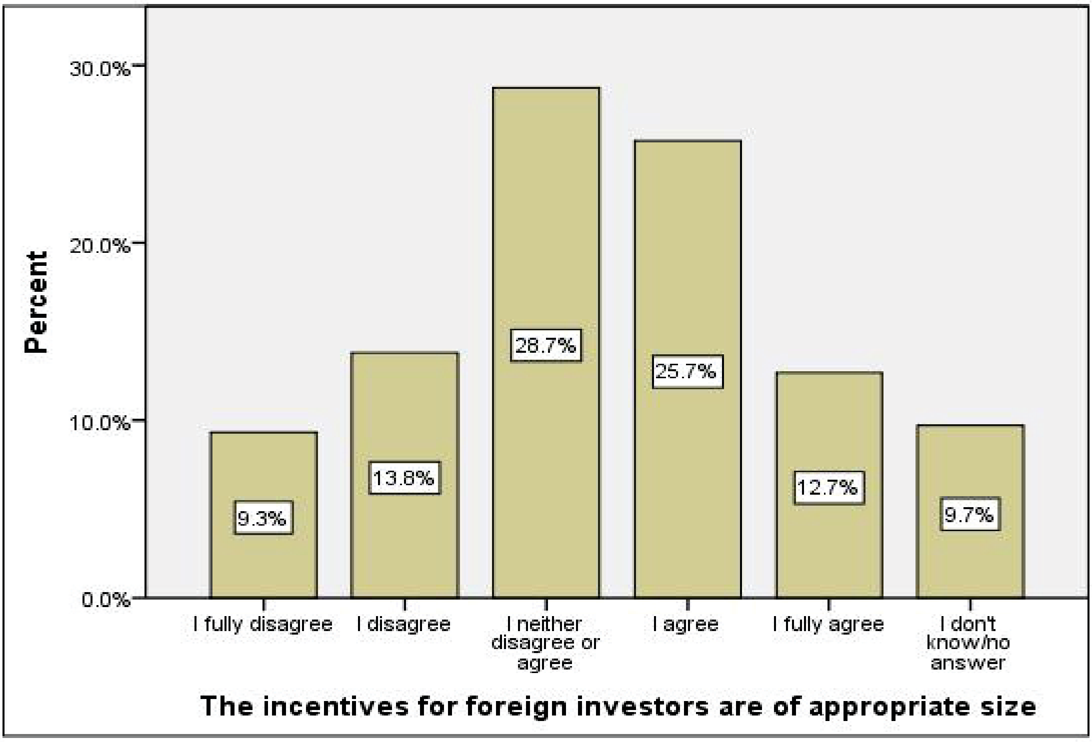
Table/Chart 8. The incentives for foreign investors are necessary in order to have them come to Macedonia instead of another country

	Frequency	Percent	Valid Percent	Cumulative Percent
I fully disagree	27	10,1	10,1	10,1
I disagree	35	13,1	13,1	23,1
I neither disagree or agree	47	17,5	17,5	40,7
I agree	75	28,0	28,0	68,7
I fully agree	76	28,4	28,4	97,0
I don't know/no answer	8	3,0	3,0	100,0
Total	268	100,0	100,0	



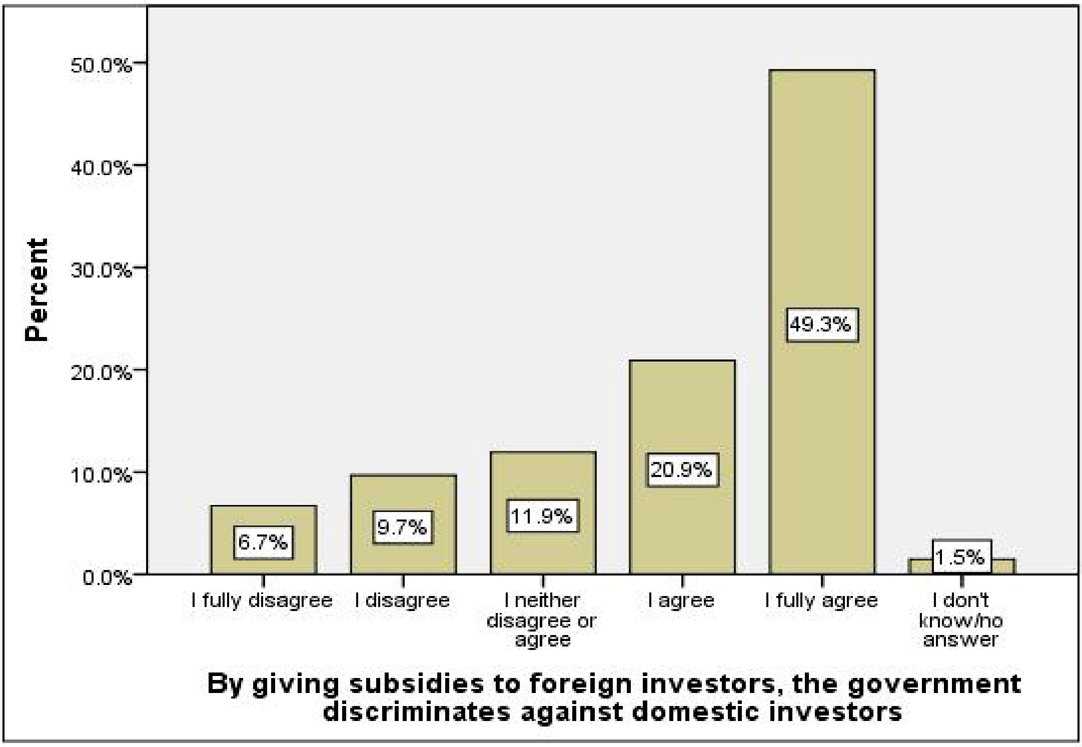
Table/Chart 9. The incentives for foreign investors are of appropriate size

	Frequency	Percent	Valid Percent	Cumulative Percent
I fully disagree	25	9,3	9,3	9,3
I disagree	37	13,8	13,8	23,1
I neither disagree or agree	77	28,7	28,7	51,9
I agree	69	25,7	25,7	77,6
I fully agree	34	12,7	12,7	90,3
I don't know/no answer	26	9,7	9,7	100,0
Total	268	100,0	100,0	



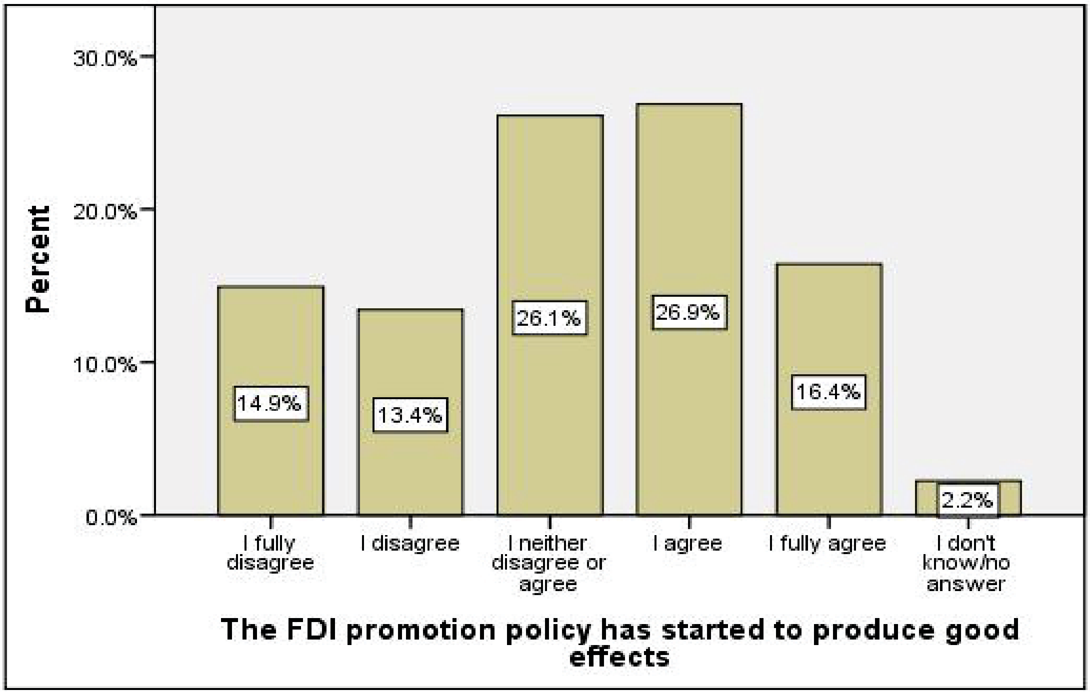
Table/Chart 10. By giving subsidies to foreign investors, the government discriminates against domestic investors

	Frequency	Percent	Valid Percent	Cumulative Percent
I fully disagree	18	6,7	6,7	6,7
I disagree	26	9,7	9,7	16,4
I neither disagree or agree	32	11,9	11,9	28,4
I agree	56	20,9	20,9	49,3
I fully agree	132	49,3	49,3	98,5
I don't know/no answer	4	1,5	1,5	100,0
Total	268	100,0	100,0	

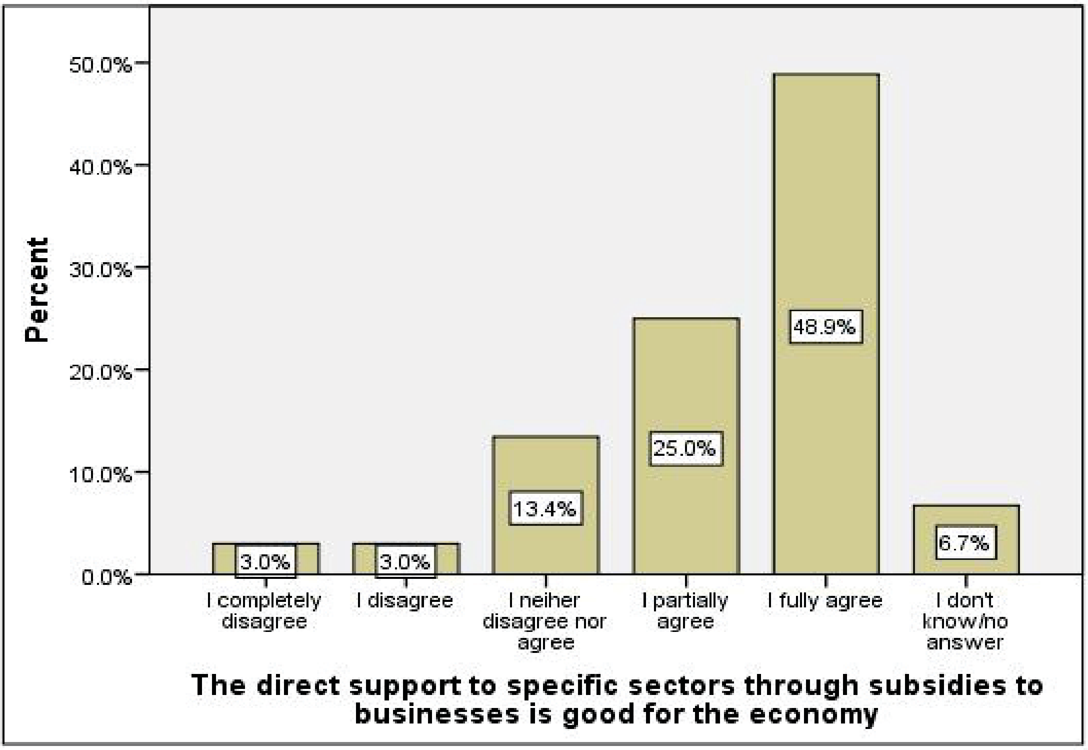


Table/Chart 11. The FDI promotion policy has started to produce good effects

	Frequency	Percent	Valid Percent	Cumulative Percent
I fully disagree	40	14,9	14,9	14,9
I disagree	36	13,4	13,4	28,4
I neither disagree or agree	70	26,1	26,1	54,5
I agree	72	26,9	26,9	81,3
I fully agree	44	16,4	16,4	97,8
I don’t know/no answer	6	2,2	2,2	100,0
Total	268	100,0	100,0	



	Frequency	Percent	Valid Percent	Cumulative Percent
I completely disagree	8	3,0	3,0	3,0
I disagree	8	3,0	3,0	6,0
I neither disagree nor agree	36	13,4	13,4	19,4
I partially agree	67	25,0	25,0	44,4
I fully agree	131	48,9	48,9	93,3
I don't know/no answer	18	6,7	6,7	100,0
Total	268	100,0	100,0	



Benefits and Costs from Foreign Direct Investments in the Technological Industrial Development Zones

Case: Macedonia in the period 2007–2014

Vesna Garvanlieva Andonova; Marjan Nikolov; Gabriela Dimovska; Igor Mitevski

Abstract/Summary

Technological Industrial Development Zones (TIDZs) are one of the forms through which the policies for attracting Foreign Direct Investments (FDI) are being promoted and implemented, their purpose being the acceleration of the economic development by attracting foreign and domestic capital for the development of new technologies and their application in the national economy, increasing the competitiveness and employment. In the three operational zones in the Republic of Macedonia, the companies, established by foreign capital, enjoy significant benefits for the realization of their goal, in the form of tax and non–tax exemptions which have fiscal and other implications, and whose overall benefit or cost cannot be easily quantified.

Under conditions of non-transparency and lack of data and information on the amount of the costs for subsidizing the FDI, this research has a purpose to try to make a quantification of the direct economic costs and benefits, and to calculate the value added from these investments, with the purpose to give general recommendations for the policies for attracting Foreign Direct Investments in the technological– industrial zones. We would like to mention that the Industrial-Green zones that (should) operate in accordance with the Law on Industrial–Green Zones[1] are not covered by this research, as well as the regional effect of attracting FDI. Namely, in the region, the governments base the attracting of FDI mostly on tight measures which include price criteria for attracting FDI (fiscal, workforce price, direct aid for lower capital costs etc.).

By using established methodologies, the analysis indicated that:

1.Macedonia is not harmonized with the European Regulation on the State Aid transparency, i.e. the amount of the allotted State Aid is not known, neither a Registry nor a map for Regional Aid has been prescribed; while the findings of the State Audit Office indicate the non-fulfilment of the legal obligation for a timely report on the State Aid to the Directorate, the Agency, and the untimely information for the investors. Moreover, indications pointed to the lack of criteria for election and conclusion of an Agreement with the Foreign Direct Investors, incomplete planning of the budget of the Republic of Macedonia, and also, a lack of monitoring and evaluation of the achieved results from the previous State Aid.

2.According to the analysis, the amount of the investments in the zones, as a share in the overall Foreign Direct Investments participates with 20% to 30% annually, except in 2009 when they reached 51%.

[1] Official Gazette of the Republic of Macedonia no. 119/2013 and 160/2014

3.According to this analysis, the amount of the export of the companies in the zones participated with 1% in the overall export from 2007 to 2009, while, afterwards, it grows in continuity, reaching 27% in 2014. From 2010 on, the participation of the export of the company Johnson Matthey is considerable, being the largest one among the overall export from all the remaining companies in the zones, with a share in the total export from the zones between 78% and 87% (in 2011 and 2014, respectively). This indicates a concentration of one company that is significantly bigger in terms of incomes compared to the remaining companies and the influence it could have on the overall indicators of investments in the zones.
4.The share of the companies in the total Gross Value Added on a national level reaches less than 1% in 2013. The Gross Value Added, as a component of GDP, which measures the contribution of every manufacturer, is visible after 2011, since the first investors started generating profits, and it increases with time. Johnson Matthey has the biggest share in the Gross Value Added in 2013 being the most significant one in terms of the amount of income and profit in the given year.
5.According to the given methodology in this analysis, the net economic benefits for the country, from the companies that have been operating in the period from 2007 to 2014, are positive for three out of seven companies, in the amount of 176.6[2] million EUR.
6.In the period which is covered with this research, and under conditions of a lack of prepared data regarding the State Aid, and the prescribed assumptions in this analysis, the tax exemptions and the allotted grants, as costs for the seven companies in TIDZ from 2007 to 2014, amount to 56.58 million EUR in absolute value.
7.Deduced as a percentage from the investment of the private entity i.e. the beneficiary, the investment share of the country evaluated by this analysis varies from 5% to 47% in regard to the company. In conditions of a lack of complete data on the State Aid and with given assumptions, the analysis showed that in absolute amount, so far, the biggest amount of costs of the country, calculated in the amount of 21.76 million EUR has been appointed to Johnson Matthey, which, in turn, represents 7% of the investment of the beneficiary, and the biggest costs in the amount of 47%, compared to the amount of the investment of the beneficiary, has been calculated for Johnson Controls Shtip in the amount of 10.37 million EUR.
8.The total average cost prescribed by the subsidizing and tax exemptions per employment generated in the period, amounts to 21.454 EUR (with a discount factor of 8%). In the given period, 3.008 new employments have been generated at every beneficiary, and the value per employment varies from the lowest 7.534 EUR in Johnson Controls Shtip, having the biggest number of employees in absolute value, up to a maximum of 46.674 EUR per employment at Johnson Matthey.
9.The financial analysis of the overall investments indicates that the set of incentives from the Government had a net positive effect on the results of the investments of the legal entities that operate in the zones. The Government's investment is crucial for attaining value of a positive return of investment for the legal entity in the zone for an assumed period of ten years, i.e. without the Government's investment, the investors wouldn't have a beneficial return on investment according to NPV, with the exception of Johnson Matthey. This raises the question of adequacy of the strategy for attracting foreign investments regarding the long-term sustainability of the investments in order to avoid the investors leaving after the termination of the tenth year, which would impose an abrupt capital drain, firing of employees, and a need for seeking other investors in TIDZ.

[2]Visteon and Johnson Matthey as first established companies with net benefits of 60.5 and 11.7 million EUR, also Van Hool appropriately with 4.3 million EUR. The remaining companies still have negative net economic benefits for the country, which are expected to become positive in the successive period;

10.The assets of the companies-beneficiaries in TIDZ, are predominantly financed through liabilities (from related entities - parent companies), and on a smaller scale, through increased capital. The liabilities of the companies are initiating increased interest expenses, and reflected in decreased net profit, decreased earnings distribution and potentially lower profit tax for a distributed earnings.

11.The average net wages of the employees in the companies are approximately on the same level as the national ones, but Visteon and Matthey record a continuous payment of net wages above the national average, which is not the case with the other companies, i.e. Johnson Controls in Shtip, Vitek and Kemet, which have annual net wages payment below the average. The continuous promotion of a cheap workforce, at the same time, promotion of attracting developed technologies policy, is not reflected in the price of the workforce. If the wages are a reflection of employments for which no highly qualified workforce is needed and which would develop new technologies with a larger value added, then, it appears that the main employments are characterized by a manual workforce with which the effect of transfer and spillover of knowledge in other companies in the sector – one of the main factors for attracting FDI, is not achieved.

12.The potential benefit for positive externalities, such as the transfer of knowledge, faces a challenge, taking into consideration that the sectors that are generators of new experience, as well as transfer or spillover of know-how: research and development, marketing, sales, are accumulated in the parent-companies or in the regional centres, which limits the factor spillover of knowledge as an argument for attracting FDI in the Republic of Macedonia.

13.In the period 2007-2014, the opportunity cost for the Republic of Macedonia, based on the tax exemptions, as assessed by this analysis, is 18 million EUR in taxes forgone. By a projection of the results up to 10 years and discounting of the value of the lost taxes, in the period of 10 years, their net present value has been estimated at 36.6 million EUR or 7% of the value of the amount of the foreign investments.

14.Indirect benefits, which cannot be quantified in the form of externalities, such as the possible transfer of knowledge, new qualifications and positive impact on other companies including the domestic ones; new business sectors which can attract other companies with their experience. As well, new technologies in the production and corporate governing; agglomeration of businesses and clusters in the industry; integration of local companies that have benefits through increase in the exchange, as well as their capacities, etc. are expected, but it is necessary to mention that there are faced with challenges in the implementation of these concepts. .

15.The main recommendation is the strategy for attracting FDI, which is to be advanced in terms of preserving the existing investments through creating a second generation of structural reforms that will not be based on fiscal exemptions and grants, but on permanent and sustainable working conditions mostly focused on the stabilization of the political ambient, creation of a predictable business climate and reducing the corruption perception. .

Abbreviations

AFIEPRMAgency for Foreign Investments and Export Promotion of the Republic of Macedonia **GDP**Gross Domestic Product **VAT**Value Added Tax **SAO**State Audit Office **DTIDZ**Directorate for Technological Industrial Development Zones **EC**European Commission **EU**European Union **EUR**Euro **IRR**Internal Rate of Return **PPP**Public Private Partnership **CPC**Commission for Protection of Competition **MKD**Macedonian Denar **SME**Small and Medium-sized Enterprises **NPV**Net Present Value **FDI**Foreign Direct Investments **SEZ**Special Economic Zones **TIDZ**Technological Industrial Development Zone

Introduction

The Free Economic Zones[3] as forms of attracting investments and improving the economic development, are an old concept. The first Special Economic Zone was established in Ireland, in 1958 (Guangwen, 2003); these zones received a significant popularity in the 1990s when it is estimated that there were around 500 FEZ, whose number worldwide, after more than a decade, is considered to be between three and five thousand, while the biggest part of them is located in the developing countries (Carter and Harding, 2011: 8).

In Macedonia, the concept of socially economic zones is relatively new, which flourished with the Law on Free Economic Zones (FEZ),[4] i.e. with the concept of Technological–Industrial Development Zones (TIDZ) from 2007 when the Law on FEZ was superseded by the new Law on TIDZ. [5]

The FEZs are defined as *"Demarcated geographic areas contained within a country's national boundaries where the rules of business are different from those that prevail in the national territory. These differential rules principally deal with investment conditions, international trade and customs, taxation, and the regulatory environment; whereby the zone is given a business environment that is intended to be more liberal from a policy perspective and more effective from an administrative perspective than that of the national territory. (Farole 2011, p.23).* [6]

TIDZ[7] in Macedonia are being promoted as one of the forms of attracting Foreign Direct Investments (FDI) and, pursuant to the law, aim at: *"acceleration of the economic development by attracting foreign and domestic capital for the development of new technologies and their application in the national economy, increasing the competitiveness and employment."* [8]Therefore, the companies that are located in TIDZ enjoy significant benefits for achieving their goal, more precisely, by tax and nontax exemptions, i.e. measures for stimulating the investors. These subsidies and exemptions are based on the Law on TIDZ, and additionally, based on the right to State Aid as an additional incentive for the investors in accordance with the Law on State Aid Inspection.[9]

According to the information of the Directorate of Technological Industrial Development Zones (DTIDZ), at the moment of researching, six new TIDZ have been established in the Republic of Macedonia, and five additional zones are planned. Out of all of them, in three zones, there are seven companies which are operational and which have submitted a Balance Sheet for 2014; on the rest of the locations, there aren't any operational companies, but there are announcements or plans, according to publications of the Commission for Protection of Competition[10] and statements in the media.

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[3]The term "free economic zone" and the term "industrial zone" will be used interchangeably for the purposes of this research, and will refer to those zones which are prescribed by the Law on TIDZ. In the international practice, the same term can be found as free trade zones, specific economic zones, zones for export promotion etc.
[4]Official Gazette of the Republic of Macedonia no. 56/99, 41/00, 06/02
[5]Official Gazette of the Republic of Macedonia no. 14/07, 103/08, 130.08, 139/09, 155/10, 127/12, 41/14, 160/14, 72/15, 129/15, 173/15, 192/15)
[6]Free translation from English: Demarcated geographic areas contained within a country's national boundaries where the rules of business are different from those that prevail in the national territory. These differential rules principally deal with investment conditions, international trade and customs, taxation, and the regulatory environment; whereby the zone is given a business environment that is intended to be more liberal from a policy perspective and more effective from an administrative perspective than that of the national territory. Source:
https://openknowledge.worldbank.org/bitstream/handle/10986/2341/638440PUB0Exto00Box0361527B0PUBLIC0.pdf
[7]Ibid.
[8]Law on Technological Industrial Zones (Official Gazette of the Republic of Macedonia 14/07, 103/08, 130.08, 139/09, 155/10, 127/12, 41/14, 160/14, 72/15, 129/15, 173/15, 192/15), Article 2
[9]Law on State Aid Inspection, Official Gazette of the Republic of Macedonia no. 145/2010.
[10]During 2015, decisions of the Commission for Protection of Competition on the State Aid for the investors in TIDZ were published for other six companies, particularly, for one of them on 3/2/2015 for a beneficiary in TIDZ Kichevo, for three of them on 21/4/2015 for a beneficiary in TIDZ Skopje, TIDZ Prilep and TIDZ Shtip, and for two on 9/9/2015 for a beneficiary in TIDZ Shtip and TIDZ Struga. Because there are no data for them and they are not operational, they won't be taken into consideration in the analysis http://www.kzk.gov.mk/mak/zapis_decision.asp?id=11 (Retrieved on 20/12/2015

The Industrial-Green Zones that (should) operate pursuant to the Law on Industrial–Green Zones[11] are not covered by this analysis. Also, the regional effect of the attracting of FDI is not covered in this research. Namely, in the region, the governments base the attracting of FDI on tight measures which include price criteria for attracting (fiscal, workforce price, direct aid for lower capital costs and such). It seems as the Governments of those countries like Serbia and Macedonia to be competing which country will pay the investors more in order for them to come to the country.[12][13][14] Certainly, the price for the political and economic instability and non-transparency is compensated by a direct outflow from the budgets of those countries, by relatively low prices intended for the workforce, and by tax exemptions.

In those TIDZs which, at the moment of preparing this research, are operational and where the beneficiaries have submitted balance sheets for 2014, total of seven (7) companies operate, out of which five (5) in TIDZ 1 Skopje (Visteon Electronics Macedonia LLC,[15] which was Johnson Controls Macedonia until 2014; Johnson Matthey LLC, Kemet Electronics Macedonia LLC, PRODIS LLC, Vitek Macedonia LLC), 1 company in TIDZ 2 Skopje (Van Hool Macedonia LLC), and 1 company in TIDZ Shtip (Johnson Controls Shtip LLC). **Therefore, these seven companies will be a subject of research.**

The purpose of this research is to quantify the direct economic costs and benefits, and to express the net benefits from the new employments, as well as to calculate the value added from these investments, with the purpose of giving general recommendations for the policies for attracting Foreign Direct Investments in the technological – industrial zones.

Here, we would like to stress out that our research does not go into the moral and ethical aspects of the State Aid and the relations of the capital and of the workforce. Also, we do not go into researching whether FDI invariably facilitate the economic growth (Menzinger 2003: "the benefits from the FDI were more of an allegation rather than an empirical affirmation"). Particularly the latter because the economic growth does not mean a more quality life and/or does not mean a sustainable growth, regarding which, there are empirical indicators for Macedonia also taken into account by the CEA.[16] In this research, we cover the microeconomic aspects of the regulation, (non)transparency, value added, and employment.

[redacted]o

Also, we would like to allude to the lack of criteria for selection and agreement conclusion with FDI, incomplete planning of the capital in the budget of the Republic of Macedonia[17] and also, a lack of monitoring and evaluation of the achieved effects from the past State Aid invested for the purpose of attracting FDI, also determined by the State Audit Office. Apart from this, there are verified irregularities which this Office has detected in the Agency for Foreign Investments and Export Promotion in 2014.[18]

[11] Official Gazette of the Republic of Macedonia no. 119/2013 and 160/2014, the Government of the Republic of Macedonia has already established inter-resource working group, coordinated by the Ministry of Economy (ME), whose task is to implement the adopted Action Plan on forming industrial – green zones, and amendments to the Law on Industrial – Green Zones are in progress

[12] Read, for example, an article from Radio Slobodna Srbija: http://www.rts.rs/page/stories/sr/story/13/Ekonomija/1896824/+Vu%C4%8Di%C4%87%3A+Investitori+mogu+da+ra%C4%8Dunaju+na+podr%C5%A1ku+dr%C5%BEave.html

[13] Or Srpski Kurir: http://www.kurir.rs/vesti/biznis/investicije-srbijo-11-kompanija-ti-pobeglo-u-makedoniju-clanak-1988399

[14] Or B92: http://www.b92.net/biz/vesti/srbija.php?yyyy=2015&mm=10&dd=21&nav_id=1053907

[15] On July 1, 2014, Visteon Corporation (NYSE: VC) published that the acquisition of the business (segment) of Johnson Controls' automobile electronics (NYSE: JCI) is finished, creating one of the world's three largest suppliers of vehicle cockpit electronics http://www.prnewswire.com/news-releases/visteon-completes-acquisition-of-electronics-business-of-johnson-controls-265370241.html (retrieved on 24/11/2105);
http://www.johnsoncontrols.com/content/us/en/contact/automotive_experience/electronics.html
Therefore, Johnson Controls Macedonia became a part of Visteon, as Visteon Electronics Macedonia.

[16] More in Nikolov, Trenovski, Risteski, Ristovska (2013): "Political consensus for the economic future of the Republic of Macedonia ", CEA: http://cea.org.mk/documents/Politicki_konsenzus.pdf. Also, more in Menzinger J. (2003): " Does Foreign Direct Investment always enhance economic growth?", KYKLOS, Vol. 56 – 2003 – Fasc. 4, 491–508

[17] More in the Final Report of the Certified State Auditor on: http://dzr.mk/Uploads/2008_Agencija_stranski_investicii.pdf.

[18] More in the Final Report of the Certified State Auditor: http://dzr.mk/Uploads/13_Agencija_stranski_investicii_izvoz_FOLOWUP_KOMPLET.pdf.

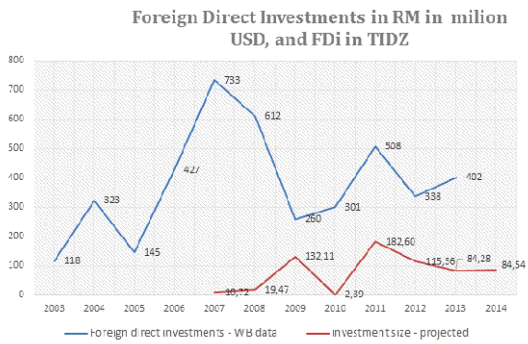
Finally, this research is organized in several sections – the first section provides a preview of the Foreign Direct Investments, regulation, and incentives, the second one provides a preview of the methodology and its use for quantification of the benefits and the costs and the third section provides a preview of the additional benefits and recommendations for the advancement of policies.

Foreign Direct Investments in Macedonia and regulation

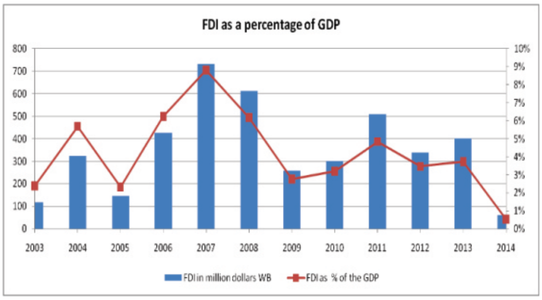
Total Foreign Direct Investments

The data on the total net Foreign Direct Investments[19] indicate that, in the period from 2003 to 2014, in the Republic of Macedonia, the Foreign Direct Investments (FDI) record a general growth trend. According to the dynamics of the investments displaced below, the level of investments in 2003 can be noticed, while the biggest level is achieved in 2007, i.e. around 733 million dollars. Compared to the implemented investments (see the methodology below) the participation of FDI from TIDZ is important and they participate with twenty percent on average. Namely, in 2008, the participation of the foreign investments from the technological industrial zones was 3%, while in 2009, it was 51%, and in the rest of the years, it was between twenty and thirty percent.

Observed as a percentage of GDP, in 2007, when the balance of the account of the FDI is the highest, the participation of the Gross Domestic Product is 9% which, in the years, continues to decline, up until its mild increase in 2011 to 5% from GDP, while in 2014, it reaches 1%.



Source: Data based on the World bank data and authors' projection



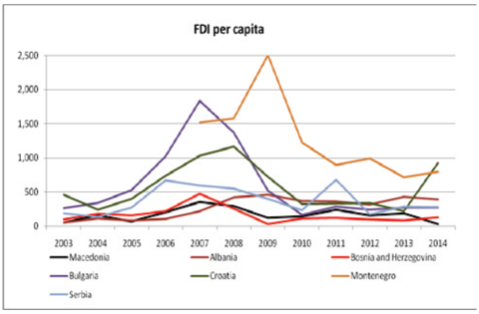
Source: Data based on the World Bank database

Compared to the neighbouring countries, Macedonia and Bosnia and Herzegovina have a similar dynamics and value of FDI per capita (USD) and they record the lowest, but constant level of investments per capita in relation to the other neighbouring countries. According to the data from the World Bank database,[20] Montenegro and Bulgaria record a fluctuating FDI flow, i.e. higher oscillations in the value per capita, with a fall of investments in the last 4 years. Only Croatia records a significant growth of FDI in 2014 compared to the previous year, which is not the case with the rest of the countries that are our subject of interest.

The participation of the export of FDI from TIDZ in the overall value of the export from Macedonia is significant and increases in continuity. Namely, the percentage of the export from the companies in TIDZ (according to a derived export value, see methodology below) from 2007 to 2009 is 1%, then, it increases continuously and in 2014, it reaches 27%. From 2010, the participation of the export of the company Johnson Matthey is significant and it is the biggest out of the total export from all of the companies in TIDZ, and it amounts to between 78% and 87% (in 2011 and 2014, respectively). This indicates the influence of one company that is significantly bigger in terms of incomes, in comparison with the rest of the companies, and the influence it could have in the overall indicators of investments in the zones.

[19] The investments of the beneficiaries of the technological industrial zones are included in the Foreign Direct Investments

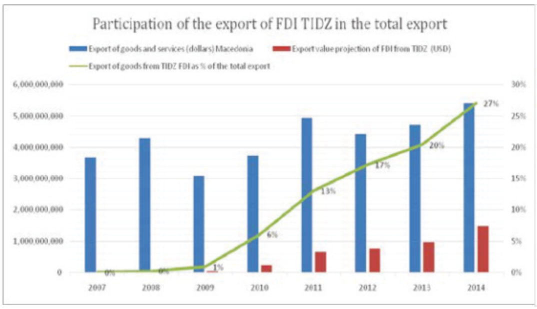
[20] http://data.worldbank.org/



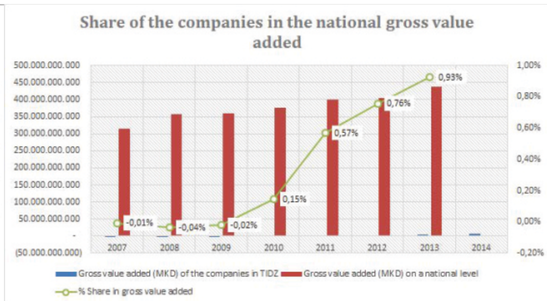
Source: Data based on the World Bank database

The participation of the export of FDI from TIDZ in the overall value of the export from Macedonia is significant and increases in continuity. Namely, the percentage of the export from the companies in TIDZ (according to a derived export value, see methodology below) from 2007 to 2009 is 1%, then, it increases continuously and in 2014, it reaches 27%. From 2010, the participation of the export of the company Johnson Matthey is significant and it is the biggest out of the total export from all of the companies in TIDZ, and it amounts to between 78% and 87% (in 2011 and 2014, respectively).

This indicates the influence of one company that is significantly bigger in terms of incomes, in comparison with the rest of the companies, and the influence it could have in the overall indicators of investments in the zones.



Source: State Statistical Office and financial reports of the companies from CRM, calculations of the authors



Source: State Statistical office, Annual financial accounts of the companies to the CRM and authors' calculations

The share of the companies in the total Gross Value Added on a national level reaches an insufficient 1% in 2013. The Gross Value Added, as a component of GDP, measures the contribution of every manufacturer, sector or industry and gives a preview of the contribution of the companies in TIDZ in the overall economy. From the figure, it could be established that the contribution through the value added of the companies[21] may be visible after 2011, i.e. after the first investors started generating profit, and it increases in time.

The biggest share that contributes to the Gross Value Added with the biggest participation in 2013 is Johnson Matthey, as the most significant in terms of income and profit in the given year. Since the companies, which are established and/or started working in 2011, in the first year, generated net operating loss, their positive influence can be expected to be noticed even after 2014. Regarding the overall Value Added of the foreign-controlled companies, as part of the overall Value Added for Macedonia, there is no available statistical data.[22]

[21] Calculated as a set of the operational profit, employment costs and amortization
[22] See more details in the table in the annex

Regulation for exemptions and State Aid for FDI in TIDZ

The Republic of Macedonia has been a candidate country for EU accession since December 2005, and the Commission gave a recommendation to the Council, for the first time, for initiating the accession negotiations in 2009. As a candidate country for EU accession, it is necessary for the country to harmonize its regulation with that of the EU, including the regulations that refer to the State Aid i.e. its control. In relation to the foreign investments through the beneficiaries in TIDZ, except for the tax exemptions, they also receive a direct aid i.e. State Aid.
According to the European Commission:[23] *The State Aid is defined as advantage in any form, given to the enterprises on a selective basis, by the national public authorities. Therefore, the subsidies given to individuals or the general measures that are open to all of the enterprises, are not enclosed in this prohibition and do not represent State Aid (for example, general tax measures or employment legislation).*

For a certain measure to be considered a State Aid, it should possess these characteristics:

- *There should be an intervention by the state or through state resources, which can take different forms (for example, grants, tax or interest exemptions, warranties, governmental investments as part of a company, or provision of goods and services under preferential conditions, etc);*
- *The intervention is to provide the receiver with an advantage on a selective basis, for example, for certain companies or industrial sectors, or companies located in certain regions*
- *The competitiveness is, or may be, violated;*
- *The intervention can influence the trade between the member countries*[24]

The last European Commission Country Progress Report (for 2015) indicates that there are inadequacies in the area of the state influence on the competitiveness: "*while the legal framework of the State Aid was strengthened in the last years, the information on the amounts and beneficiaries of State Aid, as well as on the successive assessment, is limited." Additionally, in the chapter on the policy of competitiveness, it is mentioned that*"...The registration systems for using State Aid are not used by all of the State Aid providers, with which an effective monitoring is being obstructed. ....*The State Aid Registrar hasn't been established yet, and an appropriate map of regional aid in accordance with EU Guidelines on Regional State Aid hasn't been prepared.*"[25]

aving in mind the above said, and with the purpose of increasing the transparency, its advancement is necessary through creating and regularly updating a State Aid Registrar, as well as creating a map of State Aid on a national and/or regional level, with which the transparency would be improved, and we will approach toward harmonization with the EU regulation. Additionally, in accordance with the recommendations by the SAO, it is necessary to upgrade the criteria for State Aid distribution.

From the aspect of a System for attracting FDI in the Republic of Macedonia, the main policies and measures for attracting FDI in Macedonia, which are promoted through the Agency for Foreign Investments and Export Promotion of the Republic of Macedonia (AFIEPRM), are the following[26]

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[23] http://ec.europa.eu/competition/state_aid/overview/index_en.html
[24] More in the annex
[25] Document of the Commission Services, Report on the Republic of Macedonia 2015, http://www.sobranie.mk/content/%D0%9D%D0%A1%D0%95%D0%98/PR2015_All_CK_FF_MK_16.11.2015.pdf (retrieved on 20/12/2015)
[26] http://www.investinmacedonia.com/

- Flat tax rate of 10% for personal income tax and income tax
- Tax deductions – no profit tax for reinvested net profit before taxation
- Low costs for competitive workforce
- For the investments in TIDZ[27] schemes for State Aid are additionally offered, in the form of a Regional State Aid: Exemption from paying personal and corporative income tax in the first 10 years; VAT exemption and exemption from customs procedures for goods, raw materials, equipment and machines, up to 500 thousand EUR as a subsidy for investment costs, given the value of the investment and the number of employees, land lease in the period up to 99 years; free connection to natural gas supply, water, electricity; Exemption from paying public duties to the local municipality and payments for construction permits, as well as green custom channels for goods.

We would like to stress out that the Industrial-Green zones that (should) operate pursuant to the Law on Industrial-Green Zones[28] are not covered in this analysis. The Government of the Republic of Macedonia has established an inter-resource working group, coordinated by the Ministry of Economy (ME), whose task is to implement the adopted Action Plan on forming Industrial-Green Zones, and the amendments to the Law on Industrial-Green Zones are ongoing.

Here, once again, we would like to remind that the Government is non-transparent when it comes to the FDI and that, up to the moment of the research, the information on the specific amount of the participation of the state in the form of a distributed aid is not publicly available, therefore, assumptions, which will be elaborated, will be used for some of the information, which is a limiting factor. In the process of conducting the research, except for the direct communication with those who are responsible for information on the amount and type of State Aid per company and per year, the information has been asked by a Request for Access to Public Information[29] A response has been received[30] stating that the value of the state aid provided is of confidential character with an economic and market value for the companies.

Also, we would like to point to the lack of selection criteria and criteria for concluding agreements with FDI, incomplete planning of the finances in the budget of the Republic of Macedonia[31] but also lack of monitoring and evaluation of the achieved effects from the State Aid which has been invested in the attracting of FDI; something that has also been determined by the State Audit Office (SAO), apart from the irregularities that the SAO has determined in the Agency for Foreign Investments and Export Promotion in 2014 in the respective Report of the Certified State Auditor.[32]

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[27] http://www.investinmacedonia.com/investing-in-macedonia/technological-industrial-development-zones-tidzs
[28] „Official Gazette of the Republic of Macedonia" No. 119/2013 and 160/2014
[29] RAPI has been submitted to DTIDZ and AFIEPRM 22/12/2015
[30] Reply received on 26/01/2016
[31] More in the Final Report of the Certified State Auditor:: http://dzr.mk/Uploads/2008_Agencija_stranski_investicii.pdf
[32] More in the Final Report of the Certified State Auditor:: http://dzr.mk/Uploads/13_Agencija_stranski_investicii_izvoz_FOLOWUP_KOMPLET.pdf

Incentives for Foreign Direct Investments in the technological industrial zones

According to the Law on Technological Industrial Development Zones[33] and the Law on State Aid Inspection[34] there are more types of tax exemptions and additional incentives for the foreign companies, beneficiaries of TIDZ.
Macedonia, as mentioned before, offers benefits, in the form of exemptions and State Aid through the Law on TIDZ and the Law on State Aid Inspection, to those FDI which are beneficiaries of TIDZ. The exemptions and incentives which the Government offers for the companies in TIDZ appear in the following forms:

1.Tax exemptions from profit tax: The beneficiary of the zone is exempt from paying profit tax in the period of ten years. The profit tax rate in the Republic of Macedonia is 10%. The tax rate is applicable in case of an allocation of the profit in the form of dividend. [35]
2.Tax exemptions from personal income tax: The beneficiary of the zone is exempt from paying personal income tax on the basis of wages of the employees in the period of 10 years, regardless of the number of employees[36] The personal income tax rate is 10%, which, even though being a liability of the employee, is paid by the employer.
3.Subsidizing for rental of land: The beneficiaries of TIDZ pay significantly low rent given the area of the parcels. According to the tariff of the zones, they are very low and amount to 3.1 MKD/m2. The difference between the market value which the beneficiaries would pay and the value they actually pay is regarded as a subsidy or an additional deduction.
4.Grant for construction: the amount of aid for construction in TIDZ is limited to 0.5 million EUR, and the companies - beneficiaries of the zones use this aid in the form of a grant.
5.Exemptions from a compensation for organizing the construction land (communal taxes): exemption from a compensation, which is a local compensation, determined by the municipality on which territory TIDZ are located, i.e. in this case, the municipality of Ilinden (for TIDZ Skopje 1 and TIDZ Skopje 2) and municipality of Shtip (TIDZ Shtip)[37]
6.Aid for Training of Employees: The beneficiaries of TIDZ can receive aid in the form of a grant for training of the employees in the amount of 50% of the respective training costs.
7.Exemption from paying Value Added Tax (VAT) – the beneficiary of the zone is exempt from paying VAT for goods and services in TIDZ (except the profit intended for the final consumption) and export of goods in TIDZ (provided that the goods are not intended for the final consumption)[8]
8.Субвенционирање на 50% од бруто-платата за вработените во период од 2 години: оваа помош е алтернатива на 50% од оправданите инвестициски трошоци (за инвестиции до 50 милиони евра), кои се пресметуваат или како оправдани трошоци за инвестицијата или како трошоците за плата за вработените во период од две години.[39]

[33]Law on TIDZ (Official Gazette 14/07, 103/08, 130.08, 139/09, 155/10, 127/12, 41/14, 160/14, 72/15, 129/15, 173/15, 192/15)
[34]Official Gazette of the Republic of Macedonia 145/2010
[35]http://www.ujp.gov.mk/m/megjunarodni_organizacii/category/1027
[36] Ibid.
[37] Although, at the moment, there are more TIDZs in the Republic of Macedonia, only TIDZ 1 and TIDZ 2 in Skopje and TIDZ Shtip in Shtip are analyzed in this research, because, at the end of 2014, the beneficiaries who submitted annual financial reports exist only for these three TIDZ.
[38] Ibid.
[39]http://www.vest.mk/?ItemID=1B6CBF4D0FCF0E4C9BB69A4126586C4B

Preview of existing research

When it comes to FDI in TIDZ in Macedonia, the limited access to exact information results with a lack of available research, which, in turn, make a quantification of the economic cost and the return of investment, i.e. of the benefits of the State Aid in the companies in TIDZ.

Unlike other countries, but, also the latest regulations of the EC of EU that refer to all members, regarding the transparency of the State Aid, in Macedonia, the transparency of the amount of the State Aid is almost nonexistent, i.e. neither DTIDZ nor the Commission for Protection of Competition (CPC)[40] (also competent for State Aid inspection) publish the amount of the distributed State Aid. Namely, in the available reports of the CPC, the section where the amount of the distributed State Aid should be is covered.

According to the latest amendments to the EU Regulation on the transparency of the distributed State Aid, all Member States are required to publish on a comprehensive State aid website, at national or regional level, the following information: (1) short information on the aid measure; (2) a full text for the measure aid or a link next to it; (3) information on every individual aid exceeding 200 thousand EUR which contains: name of the beneficiary, type of beneficiary (SME/big enterprise), region, economic sector, aid element, aid instrument and date of grant[41] The same has been determined by the EC State Aid Guidelines for 2014-2012, in the section on transparency.[42] " Some countries, such as The Netherlands, already have an interactive and complete web site, where this information have been displayed for quite some time[43]

The research regarding the employed methodologies for evaluation of the benefits by the foreign investments refer to the need of an enormous database of exact information that is necessary for a detailed analysis. According to Stekler, Stevens (1991), the typical calculations for the contributions of the direct investments are concentrated on the national income of the country, whereas the distribution of the income is a rarely examined issue. At the implementation of the cost-benefit analysis, the quantification of the benefits and costs depends on how perfect the market of inputs and products is, i.e. whether the marginal costs are reflected, otherwise, it is necessary to use adjusted or "shadow" prices, in order to determine the marginal cost[44]

Key question

The key question of this research is what is the value added of FDI in TIDZ and what is the cost for the public finances compared to the benefits of the investments in the past period.

[40] Law on State Aid Inspection, Official Gazette of the Republic of Macedonia, no. 145 from 05.11.2010 Article 29 Publishing of Decisions and Data 30 Trade Secret (Article 29, Indent 5: The data which are a trade secret, in the sense of Article 30 of this Law, are not published), Law on Protection of Competition 145/10, 136/11, 41/14, Article 57 Trade secret
[42] http://www.renascc.eu/documente/rag%20new%20en%202013_743en.pdf, retrieved on 25/12/2015.
[43] http://ec.europa.eu/competition/state_aid/modernisation/index_en.html, , retrieved on 25/12/2015, countries of EFTA, http://www.eftasurv.int/ (retrieved on 31.12.2015 година).
[44] The adequacy of the US Direct Investment Data, Stekler, Stevens, International Economic Transactions, Issues in Measurement and Empirical Research, National Bureau of Economic Research, 1991.

Approach and methodology

Approach and methodology

The approach for conducting this research is based on the following steps in data collection, information and their analysis:

1.Preview of existing analyses, secondary data, valid regulation that refers to the foreign investments in TIDZ;

2.Data collection on the basis of the available financial reports of the companies in TIDZ which are available through CRM, as well data published on the web sites of DTIDZ, AFIEPRM.

Direct communication with the beneficiaries and, even though, some of them were contacted by phone and e-mail, we didn't receive data, as well as with DTIDZ and AFIEPRM regarding the amount of the State Aid, for the purpose of which, a Request for Access to Public Information has been submitted[45]

4.Analysis based on the determined methodology

Scope, limitations

This research provides simplified methodology through which the net benefits of the investments can be evaluated from their establishment until the end of 2014 and a set of general recommendations can be given for the improvement of the policies for supporting the FDI in TIDZ in the Republic of Macedonia. The calculations of the net economic benefits, as well as the marginal benefit from the new employments, are based on the data from the financial reports of the companies that are located in TIDZ (CRM final financial reports), while on the other hand, the data which refer to the State Aid and the exemptions have been collected on the basis of assumptions, and partially, on statements and data from the DTIDZ.

The limitations of this analysis are from the following aspects:

It is extremely difficult to conduct a detailed comprehensive cost-benefit analysis of investments that are placed in TIDZ because of the need of a great number of detailed data and information necessary for its conduction, and it is impossible to collect the information and data within the given period, because of the accessibility and the resources, temporal and material. A great number of data which would be necessary for a detailed analysis are the data which the companies themselves treat as confidential.

The limited access to information on the amount of the State Aid and on the exemptions per company in the period which is under the scope our research makes the complete rigorous cost-benefit analysis impossible, but that's not even the purpose of this research. At the same time, because of the limited temporal scope, certain companies can be assessed only in the period from their establishment which, for some of them, is relatively short, making this an additional limitation.

The indirect, as well as delayed benefits also have a significant impact on the realization of the aims of attracting FDI but, their quantification and measuring is also limited; however, we have tried to identify some of them with this research.

With the purpose of taking into consideration the limitations as a result of the short operational period, except the period of examination, sub-simulations have been made for some of the companies, on what would the benefits and profitability of investments be like in the period up to ten years of existence, with a projected growth of the company according to the past data. Additionally, the findings are normalized by years, so that the investments are eventuated in the same period, with which the Net Present Value (NPV) of the investments and the internal return of the investment rate by discounting with an adequate discount rate are calculated. It should be mentioned that, under conditions when the plans of the development of the companies are unknown to us, the projections are based on the growth trend and the possible growth trend, having in mind the period of existence and the generally determined growth rate.

[45] Reply on the request based on the freedom of information act was received by the AFIPERM, not stating the value of the state aid with an explanation that the value is confidential and with economic and market value to the companies, and as a result of their request they do not disclose them

Benefits – Methodology, assumptions and analysis

The methodology that is used to determine the benefits and costs of the investments in TIDZ is based on a simplified analytic tool for measuring the net economic benefit of every investment, as well as determining the costs of the investment for the country, in the zones, in the period from 2007 to 2014, through the costs and benefits (cost-benefit analysis), with an accent on the benefits from the new employments in the companies in TIDZ.

The used methodology is based on a simplified methodology that mostly concentrates on the examinations and the approach of Bremer and Bell (1993) in the publication of the Center for Development Information and Evaluation (CDIE) of the U.S. Agency for International Development.[46]

The measuring of costs and benefits from projects that promote export, by measuring the benefits and costs expressed through the employments, are favourable because one of the main motifs for the support of the foreign investments through the companies in TIDZ, and a purpose prescribed by the Law on TIDZ, is the increase of employments.

The cost-benefit analysis compares the value of the cost flows related to a certain project with the value of the benefit flows from a given project in order to measure the contribution of a given project to the national economy. At the analysis of a given project, the financial benefits and costs, together with a set of economic prices (shadow prices) which reflect the opportunity cost, differ from the paid price and corrects the financial flows in their economic equivalents in order to take the costs and benefits, which are missing during the financial analysis, into consideration.[47]

According to this methodology:

Net economic benefits= (value added in the economic prices) – (opportunity cost of factors needed to generate value added) [48]

The net economic benefits for every company are presented as a collection of economic value added; in other words, the overall incomes from export, reduced by the opportunity costs as factors for generating value added and economic net benefits that refer to the overall benefits of the country. The opportunity costs that are taken into consideration in this research are:

1.The foreign capital investment – the amount of the investment on the basis of the financial reports is deduced as a sum of the change of the capital and the liabilities[49] for every year, by which we determine the amount of the investments for every beneficiary in TIDZ. Because the change/fluctuation of the liabilities during the whole year are not known (the balance sheet provides a snapshot only of the day of the balancing) and, during the year, there are changes in the balance positions for short-term and long-term loans, we add the taken loans and credits that are used for buying fixed assets and financing the working capital to the investments in fixed assets (change of the value of the fixed assets during the year plus the depreciation for the same year) as well as the need for financing of the working capital.

The financial reports of the companies indicate that the liabilities to related companies, for which there are interest costs, are high, as opposed to the financing with capital, which establishes the adequacy of this approach of deducing the amount of the investment (foreign investment). This goes for all of the companies in TIDZ which are a subject of analysis, except for one of the investments which continuously has positive results (net profit) and whose current assets are higher than the current assets and there is no need for financing the working capital through loans from related companies.[50] In addition, the needs for financing the growth of the company are met by increasing the capital through the reinvestment of the net profit.

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[46] http://pdf.usaid.gov/pdf_docs/PNAAX277.PDF, Measuring Costs and Benefits of Export Promotion Projects, Findings from A.I.D. Experience, Jennifer Bremer, Charles Bell, 1993, Center for Development Information and Evaluation U.S. Agency for International Development.

[47] Ibid.

[48] Net economic benefits = (Value-added in economic prices) – (opportunity cost of factors needed to generate value-added).

[49] According to NBRM: ....The data on the balance of the direct investments include data on the proprietary capital (by reinvesting the profit) and on the defaulting instruments.

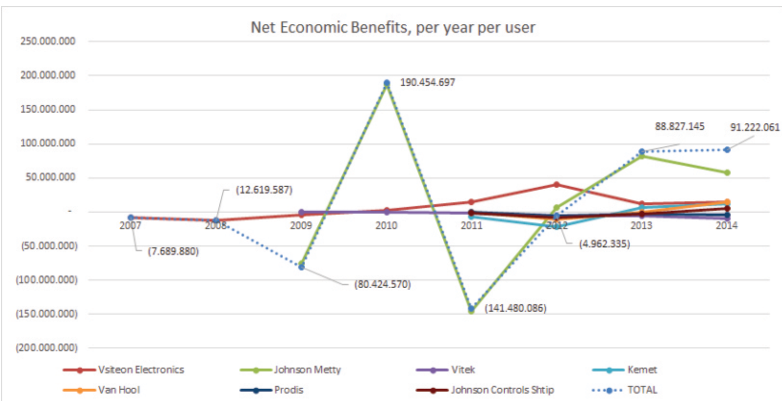
[50] This refers to Johnson Matthey

2.The net wages of the employees – the amount of the net wages for the employees is a data that is available and visible from the annual financial reports of the companies, and in the analysis, an average is taken for it, because there is no structure of the employees for technological qualifications (hi/low). The net wage average is acceptable in a situation when we have a lack of audited financial reports for the companies, which would provide a preview of the structure of the employees according to the degree of technological qualifications.
3.The import value – the amount of the import is a deduced value as a result of the initial balance of the supplies, the overall value of the material expenses, reduced by the overall value of the supplies at the end of the year.

At the implementation of this static methodology of estimating the net benefits for every year adequately for each of the examined companies, and calculating the sum of the annual net benefits, it derives that the positive net benefits appear in the two companies (Visteon Electronics and Johnson Matthey), which are the first companies established in TIDZ and have the longest period of operating. The net benefits for those companies that started working during 2011 is still negative, except for one of them (Van Hool). It may be assumed that the determination of the net benefits in the initial years of operation is still premature and a limiting factor i.e. that the net benefits from FDI are generated in the following years from the operations. Still, the results of each of the companies, the sector and the size of the company also have a significant influence. The total net benefits according to this methodology at summarizing all of the results from 2007 to the end of 2014 for all the examined companies are 123,33 million EUR, out of which, the largest share is a result of Visteon and Matthey which contribute with 172,2 million EUR.

	Visteon Electronics	**Johnson Matthey**	**Vitek**	**Kemet**	**Van Hool**	**Prodis**	**Johnson Controls Shtip**
	Start 2007*	*Start 2009*	*Start 2009*	*Start 2011*	*Start 2011*	*Start 2011*	*Start 2011*
Value added in economic prices (overall export)	**349,70**	**2.594,18**	**5,14**	**21,1**	**78,22**	**1,13**	**27,08**
Opportunity costs for generating value added	**289,21**	**2.482,46**	**26,45**	**32,73**	**73,91**	**14,06**	**34,41**
Net economic benefits	**60,49**	**111,73**	**-21,31**	**-11,63**	**4,31**	**-12,93**	**-7,33**

*** first year when generating of incomes is recorded, till the end of 2014**



Costs – methodology, assumptions and cost analysis

The costs that the country generates through the tax and the non–tax exemptions taken into consideration are the tax and non-tax exemptions and subsidies for the companies in TIDZ provided by the companies:

1.Tax exemption per profit tax: 10% of the net profit for every year when there is a net profit, regarding which, the beneficiary of the zone is exempt from paying profit tax in a period of ten years.

2.Tax exemption from personal income tax: 10% of the net costs from wages in the period of ten years, and this percent per calculation of wages is around 10% of the net wage if the average amounts of wages are taken into consideration in relation to the tax exemption and the calculation of the contributions.

3.Subsidizing of parcel rent: the difference between the assumed market value of the area,[51] determined at 3 EUR/m2 and the price in accordance with the zone tariff of 0,05 EUR/m2. Therefore, the difference between the market value which the beneficiaries would pay and the value they actually they pay is regarded as a subsidy or an additional deduction.

4.Grant for construction: The amount of the Aid for construction in TIDZ is limited to 0.5 million EUR, and we assume that all of the companies have used this aid in the form of a grant in the maximal amount.

5.Exemptions from a compensation for organizing the construction land (communal taxes): exemption from compensation, which is a local tax/compensation and is determined by the municipality where TIDZ are located, i.e. in this case, the municipality of Ilinden (for TIDZ Skopje 1 and TIDZ Skopje 2) and municipality of Shtip (TIDZ Shtip). The communal taxes, till the moment of establishing the companies, were 20 EUR/m2 (at the moments, they are reduced to 15 EUR/m2) for a constructed area (multiplied by a coefficient of 0.05 for production facilities), and in Shtip, they are around 30 EUR/m2, multiplied by a coefficient of 0.05 for production facilities).

6.Aid for Training of employees: assumed value of 5.000 EUR for every new employee. The TIDZ beneficiaries can receive aid in the form of a grant for training of employees in the amount of 50% of the similar training costs. Because there is no temporal limitation, we assume that every year, aid in the amount of 5.000 EUR is used per new employee.

7.Exemptions from paying VAT– The legal provisions stipulate VAT exemptions and we calculate VAT cost on building, with 18% VAT for the assumed cost value of building from 400 EUR/m2. With the exemption from paying VAT for construction of production capacities, the country has an opportunity cost for receivable incomes from VAT from the companies that deal with the construction of the capacities.

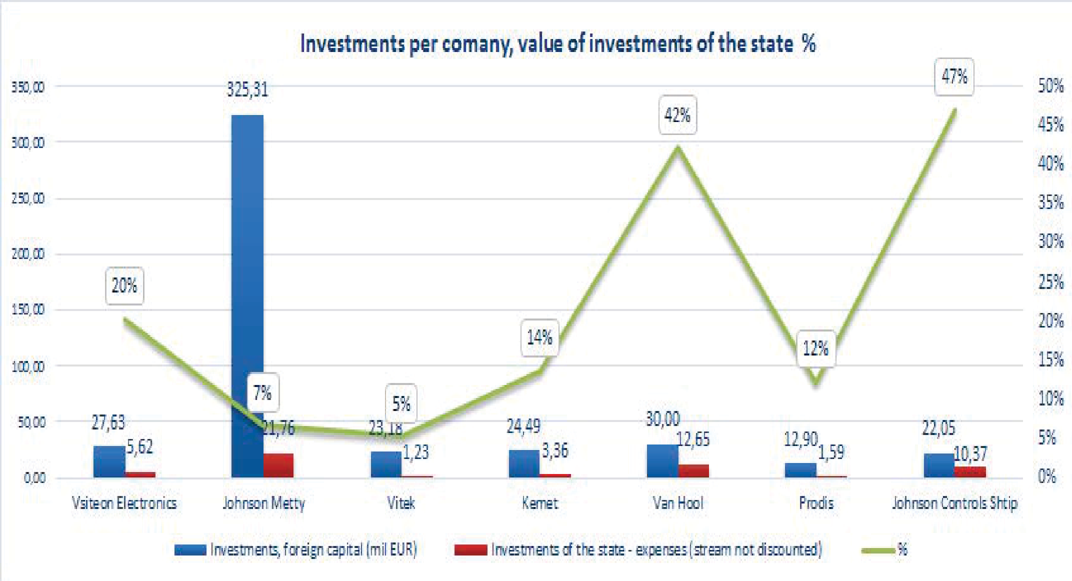
8.Employment - 50% of the gross wage in the period of 2 years, if they are calculated or are justified investment costs. Because of assumptions which meet the first criterion, we will not consider this exemption as a cost, i.e. we will assume that it is 0 for all of the beneficiaries.

Hence, the assumed investment cost in the area of the investment we are examining, i.e. the assumed state investment for each of the companies can be found (see detailed in Table 1, Costs EUR, per company and total). The amount of the costs of the public means i.e. the state investment through the exemptions and subsidies, varies per company according to the period in which they operate in TIDZ, the amount of the incomes, results, construction, etc.

If all of the costs are summarized for the period which is examining, it could be determined that the cost arising from the exemptions and subsidies based on the given assumptions, for the seven companies from 2007 to 2014, in absolute value, amounts to 56.58 million EUR, and if we discount the value in 2014, it amounts to 66.25 million EUR. The share of the investment of the country, derived as a percentage from the investment of the private entity, i.e. the beneficiary, varies from 5% to 47%, in regard to the company.

[51] The area of the parcel has been determined from several sources, these areas are used for those which can be found in DTIDZ, while the rest are based on statements of relevant media.

In an absolute amount, the highest value of the state costs so far, has been calculated for Johnson Matthey in the amount of 21.76 million EUR, which is, in turn, a smaller percentage of the investment of the beneficiary, i.e. 7%, while the biggest costs in the amount of 47% compared to the amount of the investment of the beneficiary, that is, 10.37 million EUR, has been calculated for Johnson Controls in Shtip.



In order to correct the scale back of the net benefits, an attribution rate is determined, which represents the estimated probability that certain benefits would arise if there were no interventions in the project, i.e. in our case, what is the probability that the investments would occur if there are no exemptions and incentives to that extent that they are available.

This estimation is subjective and according to the estimations of the authors, this rate has been determined on 20% having in mind several factors: - if the amount of the assumed deductions and subsidies wouldn't exist, they would be generated by the companies as investment or costs which would be reflected in the financial reports, increasing the performance costs and reducing the profit, with worse key performance indicators (KPI),[52] and by that, their investment would be less profitable; - additionally, if the wages of the employees are not subsidized, we could assume that they would be market determined and would be higher, increasing the company cost, and this would be a de-stimulating factor for implementing investments in Macedonia. In addition to this explanation, the announced leaving of the first company beneficiary of TIDZ exactly ten years from the initiation of operations, i.e. after the expiry of the exemptions for Visteon Electronics (early, a part of Johnson Controls) is also indicative, as well as the statement of the Executive director of Van Hool that the main reason for investing in Macedonia are the state subsidies.[53]

In order to determine the marginal benefit from a new employment as a result of the investments, the following method can be used, which provides an analysis of the economic return from creating jobs. In situations when it is impossible to conduct a complete and detailed cost-benefit analysis, the measuring of the benefits from employment is a useful basis for calculating the net benefits from the generated employments, and we will use the following formula for the flow of benefits

$$B = J * W * (1 - LCR) * A \quad (1)$$

[52] KPI-Key performance indicators
[53] http://24vesti.mk/subvenciite-i-rabotnata-sila-ja-spasija-belgiskata-kompanija-%E2%80%9Evan-hol%E2%80%9D

Where:
Број на генерирани вработувања (J): се новите вработувања во текот на годината, односно разликата меѓу состојбата на вработени на крајот на минатата година и тековната година врз основа на податоците евидентирани во завршните финансиски извештаи за секоја компанија за секоја година;
Number of generated employments (J) – are the new employments during the year, i.e. the difference between the balance of employees at the end of last year and the current year based on the registered data in the annual financial reports for every company
Average net wage (W) – average net wage in all of the years, subject to this analysis, in the given company on the basis of the data from the financial data for every company
Average labour conversion rate[54] (LCR) „shadow[55] wage rate[56]", which is assumed to be 0.62 basis of other research, and represents a percentage reflecting the ratio of the economic opportunity cost of labor to the financial wage
Attribution rate related to the new employments (A) (assumed value of 20% based on the estimation of the researchers).

With this formula, we calculate the benefits related to every new employment of the investment, as well as the marginal benefit which represents the difference between the financial and economic cost connected to the generating of a value added. That means a comparison on the level of investment, of the economic benefit with the costs, which are a result of the combination of exemptions that have been provided to the investor in the period of the analysis (since the establishment of the companies until the end of 2014).

Because the purpose of TIDZ is attracting high technological development investments, in this formula, we correct the value of the number of generated employments by a multiplication of 10. I.e. the benefit inflow, in accordance with formula (1), would be:

$$B=10 * J * W * (1 - LCR) * A \quad (2)$$

Company	Visteon Electronics	Johnson Matthey	Vitek	Kemet	Van Hool	Prodis	Johnson Controls Shtip	TOTAL
Number of generated new employments	**321**	**534**	**33**	**144**	**485**	**72**	**1.499**	**3.088**

If this approach is used for calculating the net benefits from the employments, it can be noticed that the difference of the net benefits per employment discounted by the costs, i.e. the marginal benefit of the employment in all of the companies except Visteon Electronics is negative, i.e. 33 million EUR are negative for all of the companies. This indicates that the marginal benefit is lower from the marginal employment cost, except for the first established company. Still, it should be considered that the results of the companies from the beginning of their operational functioning until the end of 2014 are analyzed, and that a bigger number of the companies have been operational in the period from 2011.

[54] On the basis of a calculated shadow wage rate in Eastern Europe, http://fiorio.economia.unimi.it/res/Del%20Bo%20Fiorio%20Florio%20Article%202011_1_17.pdf
[55] Shadow wage rate – represents the social opportunity cost of the labour, i.e. what the individual has to give up to receive extra unit from the good
[56] Labor conversion factor is generally stated as a percentage reflecting the ratio of the economic opportunity cost of labor to the financial wage.

Knowing the amount of the calculated investment of the country per company and year, as well as the number of newly generated jobs, we can allocate the cost per unit of new employment in every company. (See Annex Table 2)

	TOTAL
Flow of benefits per employment 10 * J * W * (1 - LCR) * A For every year until 2014.	23.496.822
Costs (undiscounted flow)	56.581.365
benefits - Costs = marginal benefit	-33.084.543

The total cost determined with the subsidizing and the tax exemptions, divided by the number of employments generated in the period, points out to a value per new employment that varies from the lowest 7.534 EUR in Johnson Controls Shtip, where in an absolute number, we have the biggest number of employees, to the maximal 46.674 EUR per employment in Johnson Matthey. On an average scale, in the examined period, the cost for the country per employment unit is approximately 21.454 EUR for these seven companies in the period 2007 - 2014.

COSTS	Visteon	J. Matthey	Vitek	Kemet	Van Hool	Prodis	J. Controls Shtip	TOTAL
Costs (ŵUR)	5.624.809	21.761.475	1.229.456	3.361.010	12.647.692	1.586.473	10.370.451	56.581.365
New jobs	321	534	33	144	485	72	1.499	3.088
Costs per employment ŵUR	17.523	40.752	37.256	23.340	26.078	22.034	6.918	18.323
Costs per employment (discounted flow) ŵUR	23.829	46.674	44.568	26.913	31.201	26.460	7.534	21.454

By discounting the flows, NPV and IRR for each of the investments in the given period can be calculated for costs and benefits with a discount rate of 8%. At the same time, we can calculate the cost per employment having in mind the total discounted flows of the costs in the given period. However, the benefit and cost flows are negative except for Visteon; the discounting of the flows additionally reduces the value of the negative NPV of the flows, and a calculation of the IRR is unfounded.

On the other hand, except for the economic net benefits which refer to the country, and which were analyzed above, a financial analysis can be made of the private investors, i.e. entities through an analysis of the financial reports and determined assumptions on the investment of the country. For that purpose, we will determine the Net Present Value of the investment for a period of ten years, with and without the investment of the country through the allotted aid and tax exemptions.

With the purpose of determining the value of the profit which is generated or will be generated as a result of the investment expressed in the current money value, we are calculating using the concept of Net Present Value (NPV). While conducting the profitability of the investments, an estimation of the period 2007-2014 has been made as a result of the short period of existence of the companies, where 2014 represents a base year for the purposes of the discounting[57] of the payment flows. of the payment flows. Additionally, a projection to 10 years has been made on the basis of the last years' trend in order to overcome the short period of existence of some of the companies, as well as an assumed growth of 5% for Visteon having in mind the announced leaving after the expiry of the tenth tear, 10% annual growth for Johnson Matthey, considering the previous years and the relatively longer period of existence, and 15% growth for the companies which exist from 2011, assuming that a bigger growth is needed to reach maturity[58] and a projection for all of the companies, that they will fully

[57] Discount rate of 8%

[58] The company Prodis, because of the negative results in the previous period and the uncertain future, has been removed from the projections. http://www.telma.com.mk/vesti/dali-farmacevtskata-kompanija-prodis-kje-se-zatvori

reinvest the generated profit in the projected years, increasing the capital of the company. The analysis of the financial return of investment, during the calculation of the net payment flows, considers the residual value of the investments (determined in this analysis) as an income flow, and determines the operational costs, the additional investment, the amount of the state investments (costs arising from the tax and non tax incentives) as outflow.

The financial analysis indicates that the combination of the Government incentives had a net positive effect on Visteon investment results. Although the NPV of the investment in the period till 2014 is negative (-9.2 million EUR), as a result of the tax exemptions and the rest of the incentive, the net loss has been reduced to 5.4 million EUR. With the additional projection of growth by 5% per year for the following two years, the net loss is reduced by 4.4 million EUR. Still, we emphasize that this analysis envisages the financial value of the investment, while the economic benefits were calculated in the previous section of this analysis (see Table 3).

When it comes to Johnson Matthey, the analysis indicates that the combination of incentives by the Government has a significant positive effect on the results of the investment; the NPV of the investment is positive after the fifth year, even without the Government incentives (47.6 million EUR), and as a result of the tax exemptions and the rest of the incentives, the net profit is increased by more than 14.5 million EUR, which, in turn, with a projection of the additional growth of 10% on an annual level for the following years, increases by 30.48 million EUR. The additional profitability of the investment through the internal investment return rate points out that it is by 2% bigger as a result of the given incentives, which, even without the exemptions, has a 15% rate, which is significantly above the 8% discount rate (see Table 3).

The combination of incentives by the Government had a crucial effect on the profitability of Vitek, i.e. had a positive effect on the results of its investment. The NPV of the investment is negative even without the government incentives, but as a result of the tax exemptions and the rest of the incentives, the net loss is reduced by 0.86 million EUR. With a projection of additional growth of 15% for the following years, the profitability of the investments, as a result of the incentives and investments, increases and becomes positive, in comparison with the negative value, if it wasn't supported with the incentives. The additional profitability of the investment through the internal investment return rate indicates that it is by 5% bigger as a result of the distributed incentives.

As for the previous company, the situation is similar when it comes to Kemet Electronics, which points out that, without the Government incentives, the investment would be financially non-profitable for the private investor, i.e. as a result of the Government incentives, with a projection up to ten years, Kemet reduces its net loss by 4.8 million EUR by which, the investment now has a Net Present Value of 0.9 million EU (see Table 3).

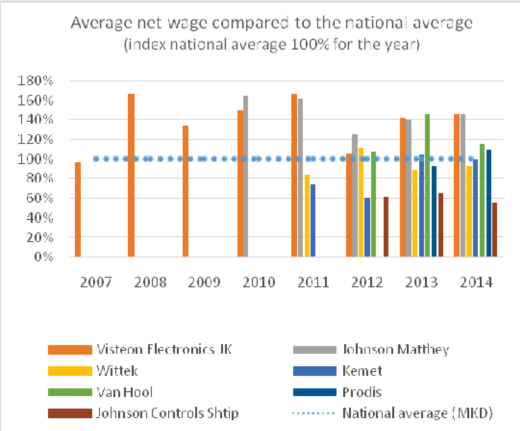
In regard to Van Hool, the profitability of the investment increased by more than 9.2 million EUR in the period of only three years of existence as a result of the Government incentives. The investment, with projected flows for ten years and an annual growth of 15%, is expected to reach 18.2 million EUR expressed in the current value, where the biggest share belongs to the country. The same goes for Johnson Controls Shtip; the key share for the profitability of the investment in the first three years of existence, but also for a period of ten years, is the participation of the incentives. Namely, the investment generated positive value, even in the first three years, of 1 million EUR, discounted by an 8% rate as a result of the incentives, and 6.5 million EUR from the net loss that the company would have generated if it didn't receive the incentives and subsidies (see Table 3)

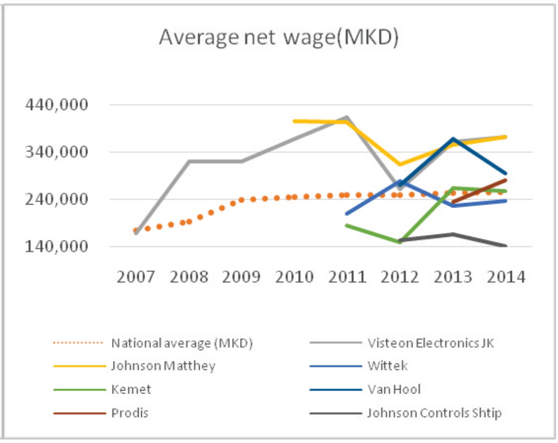
The simulation of the Government during the financial calculation of the Net Present Value of the investment since the beginning of the existence of the companies till the end of 2014, for every investment and sub-simulation which projects the profitability of the investment for a ten years' period, indicates an interesting finding. Namely, for most of the companies, the profitability of the investments in current value, even after ten years, is of crucial importance for the amount of the profitability of the investments as well as the net profit per investment for the private entity –foreign investor. This indicates the possibility that most of the companies wouldn't invest in Macedonia without the incentives of the country. This is different for the company Johnson Matthey whose profitability is significant even without the incentives of the country. This questions the adequacy of the strategy for attracting foreign investments, but even more, the manner by which they would be maintained for a longer period in order for the investors to stay after the expiry of the tenth year, because their leaving would also mean a capital drain that the investors imported/generated in the country, laying off employees, and need of looking for other investors in TIDZ.

Additional conclusions that could be deduced from the financial reports are:
The companies-beneficiaries in TIDZ, for the purpose of financing the means with a significantly bigger share, are financing through duties, and to a smaller extent, through increasing of the capital. The indebtedness is though connected parties, i.e. by taking loans from the parent companies, for which the companies pay interest, significant sums which are generated as costs reducing the profit, but, at the same time, which reflects with a reduced allocation of profit toward the parent company, i.e. lower calculated profit tax for an allocated profit. The company Johnson Matthey, which has a significant turnover and incomes, net mark-up and liquidity as Kemet Electronics, where the financing is also through an initial capital to a bigger extent in relation to the financing through a debt, is an exception.
According to the financial indicator debt versus equity, it is evident that the debt as a form of financing, to a high extent, prevails in Vitek, Van Hool, Johnson Controls and Visteon Electronics, Prodis. A larger financing through capital is noticeable in Johnson Matthey and Kemet Electronics, where the ratio is significantly below one (1). This is an indicator that the companies extract means which are not subjected to taxation through increased loan costs, with which the potential profit for the country is reduced by a tax on allocated profit, and the value of the potential profit that would be reinvested to increase the capital is also reduced. In this way, the initiating capital of the companies does not grow sufficiently; allowing the companies to easily relocate the investment "elsewhere" in a situation when the region competes with whom from the foreign investors will give more.
(See Annex Table 4).
The current ratio of the companies in TIDZ demonstrates that the liquidity of the companies is different, i.e. that Johnson Matthey and Kemet Electronics continuously have biggest liquidity for enduring the current duties with the current demands, which is around two and three, while middle coefficients of liquidity appear in Visteon, Van Hool, Johnson Controls, around 1, while the same coefficient is below one in Vitek and Prodis. (See Annex Table 4)

From the beginning of the operations till the end of 2014, the compared amounts of net profits/losses per company as a percentage from the deduced investment of the companies indicate that Johnson Matthey has the highest return of investment, which is a result of the biggest net profits compared to the other companies. A positive return of investments till 2014 is also recorded for Kemet, Van Hool and Johnson Controls Shtip. (See Table 4)
These indicators of a subtle capital drain from Macedonia indicate, once again, the potential non-sustainability of the attracted investments in order for them to remain in Macedonia after the ten year period. Therefore, the need to find another strategy for attracting and retaining investors is inevitable, because even though the negative effects cannot be quantified, such a scenario would significantly reduce the foreign investments net benefits in the following five to ten years.

.The paid net wages of the employees in the companies are approximately on the national level, but it is evident that Visteon and Matthey have a continuous payment of net wages above the average, which is not the case with the other companies, i.e. Johnson Controls in Shtip, Vitek and Kemet, which have annual net wages below the average. The continuous promotion of a cheap workforce, at the same time, of a policy of attracting developed technologies, is not reflected in the price of the workforce. Namely, if we assume that the wages are a reflection of employments for which no highly qualified workforce is needed and which would develop new technologies with a big value added, then, it appears that the main employments are characterized by a manual workforce, with which the effect of transfer of knowledge and spillover of knowledge in other companies in the sector is not achieved. Simultaneously, bigger wages are not a motivation for the government because higher costs from the budget of the country are generated in that way, through a higher absolute value for the personal tax on wages, and contribution for the whole wage of the employees, wherever this is the case. Additionally, the sectors which are a generator of new knowledge as well as transfer of knowledge such as research and development, marketing, sales, are retained in the mother companies or in the regional centers, which limits the factor spillover of knowledge.





Opportunity cost – what is the loss in taxes?

Out of the system of attracting FDI which, in Macedonia, is more of a political signal than an economic one for attracting FDI, the State Aid is actually an indirect subsidy for those investors who would come to Macedonia even without the subsidies. In accordance with this theory of indirect subsidy, the cost of these measures is actually the percentage of investors who would come even without the system of attracting investments. We will call this percentage - a redundancy rate.[59] In this section of the analysis, we consider only the tax exemptions.

In that case, the costs would be: $R*FDI*Y*t*N \quad (3)$

Where:
R – Redundancy rate (the percentage of investors who would come even without incentives);
Y – Average yield rate of an investor;
t – Tax rate;
N – number of years of tax exemption.

In this case, the incremental FDI which is attracted through the System of attracting FDI would be (1-R)*FDI.
Further, the cost of tax nonpayment would be $C=R*(Y*t*N)/(1-R) \quad (4)$

[59] More in FIAS occasional paper; 2001, "Using tax incentives to compete for foreign investment-are they worth the cost?".

In Macedonia, the profit tax rate and the personal income tax rate are 10%, and the average yield rate of each investor is displayed in Table 5 (See Annex).

The exemptions in the table below are expressed 1) in absolute numbers in the period 2007 -2014 and 2) on the basis of a ten year projection.

COSTS EUR	Visteon Electronics J Controls	Johnson Matthey	Vitek	Kemet	Van Hool	Prodis	Johnson Controls Shtip	*TOTAL 2007-2014*
Exemp from GT	585.690	13.643.740	23.355	203.302	388.653	0	184.622	15.029.361
Exemp. from PIT	946.992	930.201	27.142	193.580	318.599	66.513	608.660	3.091.687
TOTAL Taxes	**1.532.683**	**14.573.941**	**50.496**	**396.882**	**707.251**	**66.513**	**793.282**	**18.121.048**

The exemption from paying taxes lasts ten years. Taking these assumptions and calculations into consideration, the cost for the central budget in the period of ten years for each of the companies is a function of the redundancy rate, or in other words, function of the percentage of investors who would invest in Macedonia even without tax exemptions (See Table 5)

Cost = 0.20*(Y*0.10*10)/(1-0.20) (5)

The loss in taxes in that case can be calculated as: $$NPV = \int_{n=1}^{N} \frac{1}{(1+r)^n} \frac{(R * FDI * Y * t * N)}{(1-R)} \quad (6)$$

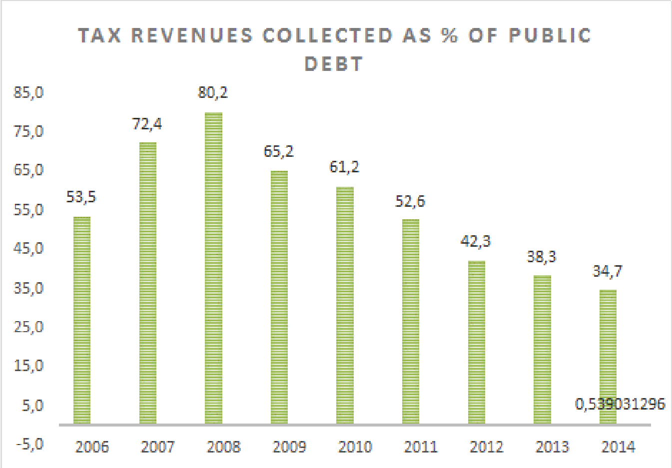
Where „r“ represents the discount rate, which we take to be equal to 8%.[60]

The loss in taxes is displayed in the following table

Investor Value in EUR	Investment (EUR) projection for 10 years (discounted)	Lost Tax (NPV)	Lost Tax % from the Investment in 10 years
Visteon Electronics	25.370.166	441.093	2
Johnson Matthey	403.820.452	28.949.862	7
Vitek	16.308.848	738.409	5
Kemet	24.238.644	1.691.788	7
Van Hool	43.039.919	2.657.108	6
Johnson Controls Shtip	23.178.437	2.170.869	9
Total (EUR)	***535.956.465***	***36.649.129***	***7***

The investment in the projected period for each of the companies is stipulated to be the whole retained profit assuming that there will be no allocation of the profit and it would be fully reinvested; normalized in the years from 1 to 10 and discounted with a rate of 8%. Therefore, we can conclude that the budget would lose 36.6 million EUR in present value as a result of the lost taxes from the companies in TIDZ.

[60] See more in: Establishing Public Sector Investment Discount Rate, 2009, Garvanlieva, Andonov, Nikolov: http://www.cea.org.mk/documents/studii/Public%20Sector%20Discount%20Rate%20short%20version%20final.pdf



Tax Revenues as percentage of the public debt (according to a definition by the MF Source: data from the Ministry of Finance and calculations by the authors

With this, we would like to point out to the significance of such analyses which, on a long-term plan, can assess whether the System of attracting FDI in Macedonia is useful or whether something needs to be changed. In particular, the dynamics of the public debt is a concerning factor, the Government doesn't respect its own fiscal rules[61] and the taxes reduce the participation in the public debt as shown in the Figure. The loss in taxes for one year, for example 2014, amounts to 452 million denars, and is 0,539% percent of the total collected income taxes or 0,2% of the public debt for the given year.

Additional indirect benefits

The incentives and projects for attracting investments and export promotion are based on investment policies which, except for direct benefits, also have more indirect benefits that cannot be quantified, or their measurement would be more costly and an analysis of the data, rather than the benefit that would derive from the data collection.

For each and every one of these numerations of indirect benefits, we could say that the expectations are good; however, we would like to emphasize some of the challenges which make the realization of these expectations in Macedonia modest at best.

[60] See more in: http://cea.org.mk/dobro-upravuvane-preku-pogolema-fiskalna-transparentnost-preporaki-za-implementatsija-na-preporakite-od-ad-hok-komisijata/?lang=en.

Indirect Benefits	Challenges in the realization of these indirect benefits
1. Positive externalities in the form of transfer of knowledge, new qualifications and a positive impact on other companies, including the domestic companies; 2. Introducing new business sectors that have an effect as pilot projects and whose experience can attract other companies i.e. multiplication effect; 3. Transfer of new technologies in the production, but also in the corporate governing such as management, finances, which, in turn, leads to the advancement of the labour capacities for those technologies, which canlater be transferred to other companies making the domestic market more competitive; 4. Agglomeration of businesses and clusters in the industry which would profit a comparative advantage on a national level and horizontal and vertical linkages; 5. Export promotion on national level because the companies in TIDZ almost exclusively place their production on the export markets. 6. Work with local companies which have benefits by increasing the transfer, as well as their capacities 7. Potential for a restructuring of the industries in the region and transforming the economy in an exporter of goods and services, integrating the national economy in the world economy in a more effective manner compared to the traditional trade.	1. The important functions (sales, research and development, marketing) with a higher value added remain in the parent company with a limited transfer in Macedonia. According to the IMF Report in relation to the externalities from these zones, it is indicated that the export (which is more than one third of the total export in 2014) is mainly based on import and the anecdotic proof reflect limiting overflow of the domestic good suppliers, partly because of their inability to meet the technical and security demands for export in EU[62]. The Industrial-Green Zones that should operate pursuant to the Law on Industrial-Green Zones and which should provide business connections and integration of the subjects from TIDZ with the domestic economy weren't realized, and we are expecting a new Law on Industrial-Green Zones 2. We are still anticipating effects of a bigger scale. Still, the withdrawal of one company exactly after 10 years when the subsidizing conditions expire, give indications that these investments are not of a sustainable character 3. This could be expected with the amended Law on Industrial Green Zones 4. Enabling these subjects to place their products on the domestic market is subjected to an unfair competition toward the domestic manufacturers and the concept of State Aid is violated. 5. This could be expected with the amended Law on Industrial-Green Zones 6. This could be expected if we attract investments in sectors that are already competitive and recognizable with the purpose of their bigger development, such as, for example, the food processing industry.

[62] More on: https://www.imf.org/external/pubs/ft/scr/2015/cr15242.pdf

Recommendations for promotion of the policies for attracting foreign investments

1.This analysis is first of its kind and is focused on evaluating the effects of FDI in the Republic of Macedonia; it provides a good platform for establishing a practice for analyzing the effects from the State Aid in TIDZ, which should grow into practice through a bigger transparency for a deeper and more detailed analysis with data and exact information, replacing the assumptions by concrete data;

2.It is necessary to make an evaluation of the policy on attracting FDI in Macedonia, considering the wider aspect of the political stability, the regional competition for attracting FDI and the political economy, as opposed to the tighter aspect of the attracting of FDI through price-fiscal measures, and to determine the sustainability and the influence of the social economy for a longer period of time.

Enhancement of the State Aid transparency and following the rules undertaken by the EU in that direction is necessary in order for the State Aid to achieve its goal[63][64] The contracts should be public and transparent, and the sums should be available to the Macedonian citizens.

4.Finding a form for an increased sustainability of the investments in the sense of retaining the investors even after the expiry of the ten year period of using the benefits, i.e. the tax exemptions. Although we have successful stories of free economic zones (FEZ) worldwide, still, one of the reasons for failure among those unsuccessful stories are attracting investments and creating employment on a short term, and, they weren't sustainable on a long term when the labour costs increased or when the preferential conditions didn't provide enough advantage[65]

5.Stimulating governing of TIDZ by the private sector through models of Public Private Partnership (PPP), which, by definition, is more dynamic in relation to the public sector in the implementation of the regulation in the zones, and at the same time, it could offer expertise and better risk management.

6.Research on FEZs on global scale indicates that new strategies, which are more than attracting multinational companies, are needed - strategies that help stay competitive, not through fiscal exemptions, but through attracting investments with a higher value added, with a focus on physical, strategic and financial connections between the zone and the local economy.

7.It is necessary the FDI advancement policies to focus on second generation reforms, particularly in the direction of increasing the Gross Value Added, through structural reforms for strengthening the education and skill, as well as through provision of a better infrastructure. These reforms will increase the growth potential which is needed to “carry” the rise in the debt[66]

[63] promotes accountability and provides an opportunity for the citizens to be better informed on the public policies. Better informed constituents enable a more effective dialog between citizens and the government and results with better decisions that refer to the policies"
[64]"Competition policy brief, State aid Transparency for taxpayers, May, 2014, EK, ISBN 978-92-79-35545-5, ISSN: 2315-3113
[65]www.wbginvestmentclimate.org, World Bank, annual report 2008, FIAS Performance, Lessons Learned and Implications for Zone Development
[66] https://www.imf.org/external/pubs/ft/scr/2015/cr15242.pdf

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Annex

Value added in foreign-controlled enterprises as a share of the total value added	2008	2009	2010	2011
EU (28 countries)	:	:	:	:
EU (27 countries)	:	9,34	9,83	:
Euro area (18 countries)	:	:	:	:
Euro area (17 countries)	:	:	:	:
Belgium	:	:	:	29,43
Bulgaria	26,17	26,6	29,91	32,28
Czech Republic	40,63	41,93	42,87	42,94
Denmark	24,21	25,31	24,81	24,64
Germany	20,2	17,36	20,32	18,14
Estonia	41,45	40,88	44,61	43,76
Ireland	47,57	49,23	54,39	56,15
Greece	:	:	:	:
Spain	13,46	13,83	17,54	18,69
France	19,54	15,6	15,99	16,25
Croatia	:	:	20,79	24,56
Italy	13,21	13,3	13,94	14,06
Cyprus	5,77	6,42	7,8	9,14
Latvia	22,92	25,68	29,34	30,13
Lithuania	21,2	26,79	29,44	29,85
Luxembourg	:	43,65	42,18	42,42
Hungary	46,99	49,1	49,26	51,89
Malta	44,31	:	:	:
Netherlands	24,42	24,29	25,33	25,92
Austria	24,04	22,97	25,18	25,49
Poland	32,13	32,98	33,71	35,07
Portugal	:	:	17,4	19,72
Romania	39,34	40,34	42,71	40,75
Slovenia	16,5	16,46	17,05	19,21
Slovakia	41,65	43,31	36,47	38,23
Finland	19,42	19,52	19,67	20,87
Sweden	26,86	28,88	28,37	27,87
United Kingdom	28,72	28,6	29,05	29,28
Iceland	:	:	:	:
Liechtenstein	:	:	:	:
Norway	27,08	24,55	25,08	25,36
Switzerland	:	:	:	:
Montenegro	:	:	:	:
FYRMacedonia	:	:	:	:

Source: Eurostat

European Regulation of State Aid and Harmonization of Law

Despite the general ban on State Aid, under certain circumstances, governmental measures for a good functioning and equitable economy are necessary. Therefore, the Treaty[67] leaves space for a great number of goals for certain policies where the State Aid can be considered compatible. The EU legislation stipulates these exemptions. The laws are regularly revised in order for their effectiveness to be improved and in order to address the European Council calls on a reduced, but better oriented State Aid for strengthening the European economy. The Commission adopts the legal regulation in a tight cooperation with the member - countries[68] This area is regulated by a Treaty on the Functioning of the European Union[69] and according to it,
"the most important exceptions are those in Article 87(3)(a) и 87(3)(v) of the Treaty: Article 87 (3) (a) covers „the aid on economic growth promotion of the areas where the living standards are low or where there is a serious unemployment level"; Article 87(3) (в) refers to the „Aid in order to enable growth of certain professions or business sectors, where such aid will not influence adversely on the conditions of trade, as opposed to the general interests ""[70]

The Law on Technological Industrial Development Zones (TIDZ) was adopted in Macedonia in 2007 and the first text was not fully harmonized with the EU legislation in the segment of the State Aid; because of that, there were consultations with the European Commission in order for a harmonization to be achieved. In 2007, the Commission for Competition Protection (CCP) issued an expert opinion that the text of the law violates the Law on State Aid and the obligations of the EU legislation. The current Law on Technological Industrial Development Zones represents an aid pattern and is in accordance with the EU State Aid Legislation in the section of regional help and it prescribes the benefits for the foreign investors in TIDZ. [71]

[67] Refers to the Treaty on the Functioning of the European Union
[68] http://ec.europa.eu/competition/state_aid/overview/index_en.html, authors' free translation
[69]Treaty on the Functioning of the European Union (Consolidated version from 2012, Official Gazette S 326 from October 26, 2012
[70] Parliamentary supervision over the competition policies, State Aid and the attracting of Foreign Direct Investments in the countries of Western Balkan, CEA, 2013, M. Nikolov, V. Garvanlieva, K, Cuculoska see on http://www.cea.org.mk/documents/6354NPCtoolkitMK-FINAL.pdf
[71]Ibid.

Table 1 Costs (EUR), per company and total

COSTS (EUR)	Visteon Electronics	Johnson Matthey	Vitek	Kemet	Van Hool	Prodis	Johnson Controls Shtip	**TOTAL for 2007-2014**
Exemptions from profit tax	585.690	13.643.740	23.355	203.302	388.653	0	184.622	15.029.361
Exemptions from personal tax	946.992	930.201	27.142	193.580	318.599	66.513	608.660	3.091.687
Difference in rent compensation	1.549.127	2.420.534	294.959	519.128	430.641	294.959	589.919	6.099.267
Grant for building an object	500.000	500.000	500.000	500.000	500.000	500.000	500.000	3.500.000
Public utilities	6.000	13.000	3.000	10.000	117.600	5.000	20.250	174.850
Training	1.605.000	2.670.000	165.000	1.215.000	2.425.000	360.000	7.495.000	15.935.000
VAT of a building	432.000	1.584.000	216.000	720.000	8.467.200	360.000	972.000	12.751.200
Costs	***5.624.809***	***21.761.475***	***1.229.456***	***3.361.010***	***12.647.692***	***1.586.473***	***10.370.451***	***56.581.365***
Discount cost flow[72] (2007-2014)	7.649.194	24.923.849	1.470.748	3.875.449	15.132.264	1.905.111	11.293.943	66.250.558

Table 2: Benefits versus costs, marginal benefit

	Visteon Electronics JK	**Johnson Matthey**	**Vitek**	**Kemet**	**Van Hool**	**Prodis**	**Johnson Controls Shtip**	**TOTAL**
Employment benefit flow **10 * J * W * (1 - LCR) * A for every year until 2014**	**7.197.143**	**7.069.530**	**206.278**	**1.471.206**	**2.421.349**	**505.501**	**4.625.815**	**23.496.822**
Costs (undiscounted flow)	**5.624.809**	**21.761.475**	**1.229.456**	**3.361.010**	**12.647.692**	**1.586.473**	**10.370.451**	**56.581.365**
Benefits - Costs = marginal benefit	**1.572.334**	**-14.691.945**	**-1.023.178**	**-1.889.804**	**-10.226.343**	**-1.080.971**	**-5.744.635**	**-33.084.543**

Table 3: Financial profitability per company

Visteon Electronics (EUR)	Period 2007-2014	With a projected growth of 5% until the 10th year
NPV (private and public capital)	(9.184.126)	(8.757.532)
NPV (private capital)	(5.357.624)	(4.357.212)
Difference NPV	3.826.501	4.400.321
IRR1 (private and public capital)	0,87%	2,60%
IRR2 (private capital)	3,68%	5,22%
Difference IRR	2,82%	2,62%

[72] Discount Rate 8%, see Establishing Public Sector Investment Discount Rate, 2009 Garvanlieva, Andonov, Nikolov

Johnson Matthey (EUR)	Period 2009-2014	With a projected growth of 10% until the 10th year
NPV (private and public capital)	47.576.878	102.252.035
NPV (private capital)	62.119.704	132.732.669
Difference NPV	14.542.826	30.480.634
IRR1 (private and public capital)	15,70%	15,44%
IRR2 (private capital)	18,12%	17,72%
Difference IRR	2,43%	2,28%

Vitek Electronics (EUR)	Period 2009-2014	With a projected growth of 15% until the 10th year
NPV (private and public capital)	(1.740.760)	(856.706)
NPV (private capital)	(882.592)	287.900
Difference NPV	858.167	1.144.605
IRR1 (private and public capital)	-3,65%	6,75%
IRR2 (private capital)	1,49%	8,44%
Difference IRR	5,14%	1,68%

Kemet (EUR)	Period 2011-2014	With a projected growth of 15% until the 10th year
NPV (private and public capital)	(4.146.540)	(3.903.431)
NPV (private capital)	(1.598.260)	916.606
Difference NPV	2.548.280	4.820.038
IRR1 (private and public capital)	0,20%	5,53%
IRR2 (private capital)	4,89%	8,60%
Difference IRR	4,69%	3,07%

Van Hool (EUR)	Period 2011-2014	With a projected growth of 15% until the 10th year
NPV (private and public capital)	(8.156.564)	421.023
NPV (private capital)	1.092.202	18.229.351
Difference NPV	9.248.767	17.808.328
IRR1 (private and public capital)	-15,36%	8,29%
IRR2 (private capital)	11,75%	21,78%
Difference IRR	27,11%	13,48%

Johnson Controls (EUR)	Period 2011-2014	With a projected growth of 15% until the 10th year
NPV (private and public capital)	(6.547.739)	(7.583.275)
NPV (private capital)	1.017.368	7.657.431
Difference NPV	7.565.106	15.240.706
IRR1 (private and public capital)	-15,61%	1,88%
IRR2 (private capital)	12,07%	15,03%
Difference IRR	27,68%	13,15%

Table 4 Financial reatios

Debt/Capital	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*
Visteon Electronics JK	-10,95	0,76	1,19	3,63	4,28	2,40	1,22	1,17
Johnson Matthey			0,14	2,61	0,42	0,26	0,41	0,40
Vitek			0,00	0,00	-89,77	-20,31	-46,05	50,62
Kemet					0,01	0,06	0,31	0,19
Van Hool						0,74	8,05	6,50
Prodis						5,47	-13,72	-3,29
Johnson Controls Shtip					-16,26	44,14	17,31	9,94

RoI Return on Investment	*From the establishment till the end of 2014*
Visteon Electronics JK	-7%
Johnson Matthey	42%
Vitek	0,3%
Kemet	5%
Van Hool	13%
Prodis	-25%
Johnson Controls Shtip	8%

Current assets/ Current liabilities	2007	2008	2009	2010	2011	2012	2013	2014
Visteon Electronics JK	0,55	0,93	1,02	1,36	1,07	0,93	1,13	0,95
Johnson Matthey			3,48	1,11	2,65	3,49	2,47	2,72
Vitek					1,84	0,11	0,26	0,46
Kemet					20,96	3,33	1,45	2,58
Van Hool						1,32	0,99	1,32
Prodis						0,23	0,38	0,24
Johnson Controls Shtip					0,38	0,38	1,82	1,29

Table 5. Average investor yield rate, cost

The calculation with those assumptions is given in the table below:

Investor	**R**	**Y**	**t**	**N**	**(1-R)**	**Cost**
Visteon Electronics JK	0,20	2%	0,10	10	0,80	0,005
Johnson Matthey	0,20	6%	0,10	10	0,80	0,014
Vitek	0,20	5%	0,10	10	0,80	0,014
Kemet	0,20	3%	0,10	10	0,80	0,007
Van Hool	0,20	5%	0,10	10	0,80	0,012
Prodis	0,20	0%	0,10	10	0,80	0,000
Johnson Controls Shtip	0,20	6%	0,10	10	0,80	0,015
Total	0,20	4%	0,10	10	0,80	0,068

*Prodis, for which there are information to have an interruption of the operations at the moment of preparing the report, and because it hasn't achieved profit so far, will be removed because, as non typical results, they will cause a distortion in the calculations, which won't give a real image of the overall review of the companies.