# **International Economics**

# Sustaining Native Entrepreneurship in South African Townships: the Start-up Agenda

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Abstract: Faced with enormous unemployment, the South African government enacted pro-SMME policies. It was assumed that such policies would ignite broad-based growth within the SMMEs cluster, regardless of the sector. However, the current evidence suggests that these laudable efforts have not benefited the poorest of the poor nor have they aroused and sustained entrepreneurship in certain quarters. Using the spaza shop as the focus and two prominent townships as the locus, this paper sought to understand the factors that under mind the effective startup of businesses by natives. Furthermore, it identified the support structures that can foster and sustain new firm births. Leaning on the exploratory and descriptive research design, the quantitative research approach was enforced through selfadministered questionnaires. The data collected was captured and analysed using the Statistical Package for the Social Sciences (SPSS) software, and was based on 121 fully completed questionnaires. A number of challenges unique to native spaza shops were conceded. These included a restricted access to seed capital, inability to benefit from bulk purchases, competition from non-South African shops, lack of business information, unsuitable business location, and the lack of collateral. The customarily challenges included a high level of crime, high cost of security and limited management skills. To encourage and sustain, new firm births, firstly, spaza shop-owners must have a clear vision of what they want to achieve before they embark on the venture. Secondly, crime must be dealt with collectively. Thirdly, government agencies and the private sector must come on board to address the skills gap. Lastly, technology should be adopted, to mitigate the issues around bulk purchases and transport costs.

Keywords: spaza shop; entrepreneur; unemployment; township; Western Cape

JEL Classification: M13; L26; O17

### 1. Introduction and Background

Like most countries in Africa and the rest of the world, South Africa, suffers from acute unemployment. With the unemployment rate staggering at around 26.5% (Stats SA, 2016), the South African government is forced to outsource job creation to Small, Medium and Micro-size Enterprises (SMMEs) (Ngek & Smit, 2013). Though

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perceived to benefit the poorest among the poor, the contributions of small and micro enterprises are of particular concern (Fatoki, 2014), and this is particularly true of those operating in the informal sector.

It comes as no surprise that the South African government would invest in programmes aimed at ensuring that small business enterprises are as productive as anticipated. The Ministry of Business Development currently runs an Informal Traders Upliftment Project (ITUP), where 1000 spaza shop-owners and other informal businesses are supported with the skills and infrastructure vital for business startup and growth (Zulu, 2015). In the same light, the government invests millions in the form of the Shared Economic Infrastructure Facility to support informal businesses and spaza shops fall into this category.

Despite these government initiatives, a myriad of problems inhibit the startup of grocery shops by natives in the townships. In fact, the survival and growth of a significant proportion of the locally owned township grocery shops are questionable, while their non-South African counterparts are seemingly dominating. Liedeman, Charman, Piper and Petersen (2013), confirm that the survival rate of locally owned home-based businesses is particularly low. The participation and dominance of non-South Africans in the township grocery industry have presented an unparalleled challenge for native spaza shops. Mbata (2015) quoted the Minister of Small Business Development as follows:

"Black people were never part of the economy of South Africa in terms of owning anything, therefore when they see other people coming from outside being successful they feel like the space is being closed by Non-South Africans."

The above assertion clearly questions the efficacy of the support extended to South African entrepreneurs to stimulate and sustain business start-ups. While reasonable work has been done on the challenges and obstacles confronted by small businesses in general (van Scheers, 2010; Worku, 2013; Liedeman et al., 2013; Fatoki, 2014; Cant et al., 2013; Perks, 2010), there is a scope for a similar inquiry into spaza shops townships with particular reference to Gugulethu and Nyanga in the Cape Town Metropole. Hence, the main objective of this paper was to identify the startup challenges faced by Native Spaza shop owners in South African Townships and to recommend accordingly.

# 2. Literature Review

# 2.1. Definitions and Overview of Spaza Shops

Basardien and Friedrich (2014), describe a spaza shop as a "business that specialises in selling a limited variety of grocery products". These entities are usually found in the informal economy of South Africa. In this paper, a spaza shop is a convenience

store operated from the front of the house or in a makeshift container that sells basic grocery items to surrounding the community members (Von Broembsen, 2008). Historically, spaza shops were not allowed by the apartheid government, and as a result they operated clandestinely. As such the name spaza which means "hidden" or "camouflaged" in Zulu speaks to the clandestine operation of of these shops in the apartheid era. The operations of spaza shop become formal at the end of the apartheid regime, and efforts have since been made to support their founders (Mathenjwa, 2007). The ensuing stance was partly anchored on the need to create jobs and alleviate poverty. All things being equal, spaza shops provide some succour to unemployment and poverty, especially for the poorest of the poor.

Spaza shops are small grocery shops, which provide essential services in most of the South African townships, and are inherently part of the SMME sector (Sunter, 2006). To support this view, Charman et al., (2012) refer to them as home-based grocery shops, mostly common in the townships of South Africa. While it is generally agreed that a spaza shop has a positive role to play in our national economy, the terrain and dynamics in the business environment are changing as competition has become fierce due to the emergence of large-scale retailers. According to Mathenjwa (2007), spaza shops represent a livelihood, especially for the poor people in the townships, yet the owners of these shops are facing challenges with regard to their start up entities. This means the government needs to address barriers related to the start up as well as the growth of spaza shops so as to promote job creation.

Spaza shops are common among black townships and they operate on family lines with family members providing the much-needed labour of selling and ordering merchandise. These shops operate from a stand meant for residential purposes, yet the common feature is that they use part of the house where people stay, or part of the stand can be used to erect a wendy house or container. Most spaza shops are quite hesitant to try new brands, as they are afraid of making some loses. Experimenting with new products might mean keeping them for too long on the shelves (Terblanche, 2006). The spaza shops buy in bulk and then re-package the items in small lots. They are located very close to the markets, which in a way cut costs for consumers, as they do not need to travel, and lastly, these shops are conveniently located and operate for long hours (Terblanche, 2006).

#### 2.2. Challenges of Spaza Shops

Despite government programmes and policies meant to support the SMME sector, the spaza industry is still facing challenges with regard to their establishment and sustainability. This view is supported by a South African study that notes that 63% of small businesses fail in the first 18 months of their trading (Kumah, 2014). Besides this, a number of South African studies have explored the challenges facing small businesses in general and spaza shops in particular.

# 2.2.1. Challenges Faced by Native South African Grocery Shops During Start-Up

Many years of discriminatory legislation suppressed and deprived most black South Africans of opportunities of training and access to resources (Herrington et al., 2008). Hence, the apartheid legacy was a pool of blacks with no or shallow business skills coupled with lack of resources and confidence to run and own businesses. The following the most cited constraints that negatively impact on the spaza sector.

# 2.2.1.1. Limited Capital for Start-Up

Although it is true that all businesses require an adequate amount of startup capital in order to establish themselves effectively, most owners of spaza shops have great difficulty meeting this initial requirement (Van Scheers, 2010). Access to funding usually presents a major obstacle and the little capital raised usually comes from personal savings and borrowing from friends and relatives.

### 2.2.1.2. Lack of Savings and Collateral

Most financial institutions require that their clients provide evidence of a good saving habit and collateral to access loans—something that most small and micro businesses lack. Financial institutions also require a well-articulated business plan and there is considerable evidence to suggest that most spaza shop-owners do not have this specialised knowledge.

# 2.2.1.3. Crime

Crime has a negative effect on the startup and sustainability of spaza shops. In the townships, crime is noted to thrive against the backdrop of poverty and unemployment. Crime is a peculiar issue as robbers and thieves take advantage of the limited security of spaza premises (Bear, Tladi & Pedro, 2004). The spaza owners need to spend a considerable amount of money to maintain the reasonable security. The cost of replacing or repairing stolen and vandalised items add up to the cost of doing business in theses townships and thwarts the sustainability of spaza shops.

#### 2.2.1.4. Limited Business Management Experience

Start-up capital might be available, but in the absence of management experience, the first few months or years of running a spaza shop become a real challenge for most entrepreneurs. Lack of business management experience has dire consequences as it inhibits the effective takeoff of the business. Van Rensburg (2010) relates this aspect of management experience to a game of golf. He says "you can read the books, speak to the pros... the only way you can truly master the game is by getting on the course and playing. Over and over again."

### 2.2.1.5. Limited Business Management Skills

Most spaza shop-owners do not have the much needed business management skills and these are very vital in all start-up businesses. Business management skills include knowledge of finance, administration, marketing, human resources and leadership skills. Entrepreneurship is an undertaking that is not necessarily influenced by one's background - anyone can become an entrepreneur (Nieuwenhuizen et al., 2008). Though many may disagree, it is clear that an individual, who ventures into business without the requisite management skills can acquire them informally or formally from educational institutions, mentors, and other sources such as textbooks and the Internet.

# 2.2.1.6. Limited Government Support Services

There is a great concern among the spaza shop-owners with regard to the limited government support that they receive. Once in business, owners expect further support with regard to training and the acquisition of necessary skills, and such government support will assist entrepreneurs to grow their businesses sustainably. Van Scheers (2010) believes that spaza shop-owners would like government to improve safety and security in South African townships as this has a direct bearing on entrepreneurial activities in those areas.

#### 2.2.1.7. Limited Networks

Business networks provide the platform for entrepreneurs to share information and resources. In the absence of sustainable networks, shop-owners cannot make effective contacts that benefit their businesses. Business networks add value as shop-owners are able to benefit from reliable counterparts as well as distributors of goods and services and the end result is the growth and development of the businesses (Nieman & Nieuwenhuizen, 2009). Somali spaza shops have been noted to benefit from bulk purchases as the result of networking (Hakim & Tengeh, 2016).

# 2.2.1.8. Lack of Information

Information is power and without information it is difficult to reach the appropriate business support structures, services and initiatives offered by stakeholders such as private companies, government and non-governmental organisations. Most spaza shop-owners are not aware of the existence of information, with particular reference to start-up capital and other related training (van Scheers, 2010).

#### 2.2.1.9. Business Location

Identifying suitable business location seems to be a challenge for prospective Native spaza shop-owners. Most of the spaza shop-owners normally are tempted to take the first available location without considering the needs and the catchment area from where they would draw their customers (Mariotti & Glackin, 2012). Fatoki and Garwe (2010) argue that location has bearings on the market and growth prospects

of new enterprises. According to Mariotti and Glackin (2012) the factors to be considered include: proximity to customers, access to suppliers, convenience, the cost of facilities (rent, construction etc.), demographics, business incentives, governmental regulations and laws and proximity to competitors.

#### 3. Materials and Methods

### 3.1. Research Design

Taking advantage of the exploratory and descriptive research design, the quantitative research approach was enforced through self-administered questionnaires. The questionnaires were administered to grocery shop owners in the Gugulethu and Nyanga townships. The data collected was analysed separately using the latest version of Statistical Packages for Social Sciences (SPSS) software.

# 3.2. Research Population

Welma and Kruger (2002), refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this study, the population was restricted to South African owned spaza shops operate in Gugulethu and Nganya, in the Cape Town Metropole. The Gugulethu township has six sub-locations, namely, Gugulethu SP, New Rest,Phola Park,Zondi and Vukuzenzele,while Nyanga has 11 sub-locations, namely, Lusaka, KTC, Old Location, Maumau, Zwelitsha, Maholweni "Hostels", Black City, White City, Barcelona, Kanana and Europe. As one of the oldest townships in Cape Town, Gugulethu and Nyanga provided the platform to study trends, dynamics and development of spaza shops in South Africa.

# 3.3. Sampling Method and Sample Size

Convenience sampling is a non-probability sampling technique where participants are chosen because of their convenient accessibility and proximity to the researcher (Farrokhi, 2012). The researcher preferred this method because it is fast, cost effective, easy and the subjects are readily available. As such, the technique facilitated the inclusion of the spaza owners known to have been in operation for three years more years into the sampling frame. It was assumed that spaza shops that have been in existence for more than three years can provide far more detailed and richer information on the factors that negatively impact on start-up and the growth of their businesses, compared to new entrants to the spaza industry.

Welma and Kruger (2001) stressed the importance of having a large enough sample so as to represent and generalise the entire population. Using the Raosoft Calculator, hoping to minimise the error margin (at 5%) with the associated confidence level of 95%, and an estimated sample size of 130 was reached.

#### 4. Results and Discussions

# 4.1. Challenges Faced by Spaza Shop During Start Up

# 4.1.1. Lack of Capital

According to the results (Figure 1), 56, 2% of the respondents agreed that access to capital was a major challenge to the start-up of a business. This percentage is even bigger if combined with the 31.4% participants who strongly felt that capital was a stumbling block to the start-up of businesses.

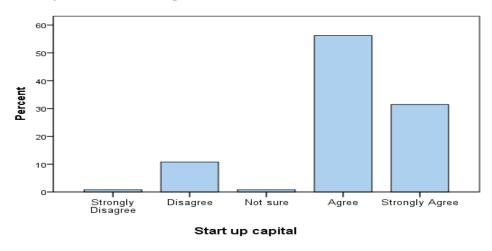


Figure 1. Start up capital

Limited access to start-up capital has a ripple effect on the startup and growth of a business. For the spaza shop owner, this translates to limited stock and sales. The issue of having a limited access to capital seems to be a recurring theme (see Tengeh & Nkem, 2017; Nsegenmana et al. 2017). Besides this, the business cannot afford advertising and other related activities that can ensure growth and sustainability.

### 4.1.2. Lack of Collateral to Get a Bank Loan

The results indicate that 57.8% (Table 1) of participants acknowledged lack of collateral as an obstacle in securing bank loans for business start-up. Issues to do with a lack of savings and a lack of collateral, as well as inability to compile a proper business plan, further limited their chances of obtaining funding from financial institutions.

Table 1. Lack of collateral security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.8	.8	.8
	Disagree	27	22.3	22.5	23.3
	Not sure	22	18.2	18.3	41.7
	Agree	51	42.1	42.5	84.2
	Strongly Agree	19	15.7	15.8	100.0
	Total	120	99.2	100.0	
Missing	System	1	.8		

Perhaps business support structures, including private financial institutions, can assist spaza shop-owners who have acquired knowledge and skills from educational institutions, especially those who have obtained entrepreneurial and managerial qualifications, and want to start small-business ventures.

# **4.1.3. Limited Management Inexperience**

Limited experience in the business sphere is a constraint to the start-up of spaza shops. The results (Table II) concede that 43.8% of participants agreed that insufficient business experience was a stumbling block to the startup and success of spaza business. This was further supported by the 10, 7% that strongly agreed to the statement.

Table 2. Business inexperience

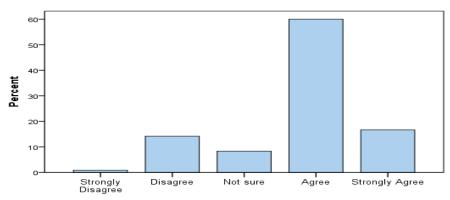
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	6.6	6.7	6.7
	Disagree	33	27.3	27.5	34.2
	Not sure	13	10.7	10.8	45.0
	Agree	53	43.8	44.2	89.2
	Strongly Agree	13	10.7	10.8	100.0
	Total	120	99.2	100.0	
Missing	System	1	.8		
Total		121	100.0		

To Van Rensburg (2010), an entrepreneur has to run a business to gain the necessary experience. Therefore, experience certainly plays a leading role in start-up businesses.

# 4.1.4. Absence of Networks that Facilitate Cheap Prices Through Bulk Buying

The results (figure 2) suggest that over 59,5% of the participants have limited networks and as a result cannot fully take advantage of the large discounts associated with buying in bulk. This outcome sits well with Nieman and Nieuwenhuizen (2009)

who emphasis the indisputable role that networks and contacts play in the success of a business. Hence, Chebelyon-Dalizu et al. (2010) attribute the inability of spaza shops to benefit from bulk buying to the absence of organised distribution network channels. Even when present, South African networks tend to be weaker due lack of trust in others.



Lacked network to buy cheaply in bulk

Figure 2. Lacked Network

### 4.1.5. Crime

Crime and even the fear of it, negatively impacts on the startup of spaza shops in the study area. The results indicated that 67.8% of respondents agree that crime is a challenge to the effective startup of businesses. Hence, crime becomes an impediment to the sustainability of spaza shops as robbers and thieves always target these shops for cash (Bear et al., 2004). In a similar and much broader study Ligthelm (2005) found that 25% of the 340 spaza shop-owners, reported crime (robbery and burglary) as the second major constraint to the sustainability of their businesses, following after a lack of financial support.

# 4.1.6. Security Improvement

Crime is indeed a major constraint and has the negative effect on the sustainability of spaza shops (Bear et al., 2004). This view is supported by the findings emanating from this research. According to the findings 39, 7% of participants agree that security improvement takes a considerable amount of their income, as spaza shops must be fitted with burglar bars and alarms. A further percentage of 17, 4% strongly agree that security improvement is an area of concern, as they must secure their stock from all sorts of risks such as theft and fire. This is against 3.3% of respondents who strongly disagree and a further 24, 8% who agree with the view that security improvement has no bearing on their incomes. This can mean that such respondent may have inherited premises that are already highly secure.

### 4.1.7. Getting a Business Location

According to the results on the table, 46.2% share the view that getting a suitable business location was indeed not a challenge, while 48% of respondents acknowledged that getting a suitable location was an obstacle that affected their start-up business. This is in line with Fakoti and Garwe (2010) who believed that business location was vital, as it has impacted on the market potential and growth opportunities of new enterprises. Since most spaza shop-owners use their dwellings as business premises it means issues of market research and business location are coincidental in their planning. Geographical proximity to either critical buyers or suppliers produces a form of enhanced environmental scanning that enables new firms to easily identify and exploit growth opportunities in the market. Mariotti and Glackin (2012) list the following considerations for deciding on a location: access for customers; access to suppliers; climate and geography; convenience; cost of facilities (rent, construction, etc.); demographics; economic conditions and business incentives; governmental regulations and laws; labour pool; proximity to competitors, and visibility.

# 4.1.8. Lack of Managerial Skills

According to the results (Table III) 56, 2% of participants felt that managerial skills were a major challenge affecting their start-up businesses, and such skills cover aspects such as accounting, business finance, marketing, selling, advertising, human resource management and stock control. This finding is supported by Perks (2010) who emphasizes the need for managerial skills for the sustainability of spaza shops.

Valid Cumulative Percent Percent Frequency Percent Valid Strongly Disagree 1 .8 .8 .8 24 19.8 20.8 Disagree 20.0 Not sure 27 22.3 22.5 43.3 Agree 61 50.4 50.8 94.2 Strongly Agree 7 5.8 5.8 100.0 120 99.2 Total 100.0 Missing System 1 .8 Total 121 100.0

Table 3. Lacked managerial skills

These results could also relate to the argument made by Van Rensburg (2010) that in order to achieve a good entrepreneurial outcome, entrepreneurs should focus on developing their business and entrepreneurial skills. This could be in line with the claim made by Nieuwenhuizen et al. (2008) that an entrepreneur should be exposed to the portfolio of management skills in order to effectively manage a new business

venture, namely project management, small business management, financial management, team building and leadership, and risk-management skills.

#### 5. Conclusions

Most discussions on the effects of business formation on the socio-economic development of a country re-echo the job generation potential of small businesses. Ironically, in South Africa, research on township grocery shops has gained traction over the last few years due to the dismal performance small businesses. It is certainly clear that the challenges currently confronted by small grocery shops further thwart South Africa's agenda of mitigating unemployment through the startup and sustainability of small businesses (Lose & Tengeh, 2015). Aiming to contribute to this discussion, this paper sought to navigate the factors that inhibit the startup and sustainability of grocery shops in the Gugulethu and Nyanga townships.

The findings indicate that township grocery shops face a number of start-up challenges, not limited to limited start-up capital, inaccessible bank loans, high rental costs, lack of networks, management inexperience, inadequate management skills, high security costs, lack of family business background, and business location. These start-up challenges informed the recommendations advanced to tackle the issues in the spaza industry.

#### 6. Recommendations

There is growing literature to suggest that the preponderance and success of non-South Africans in the spaza industry can be partly attributed to their ability to innovate, effective distribution networks and use of unconventional initiatives to spur up profits (Tengeh et al., 2012; Liedeman et al., 2013; Basardien & Friedrich, 2014; Tengeh, 2016).

On the basis of the empirical findings, and the literature on the strategies that propel immigrant-owned businesses in similar settings, the subsequent recommendations were made.

Firstly, there is the need for the formation of viable networks. Evidence suggests that networks play a major part in determining the success and growth of immigrant-owned spaza businesses. As such, Native spaza shop-owners may need to form mutually beneficial networks, such as distribution networks and so on. For instance, the benefits of a distribution network include reduced transport cost, discounts on bulk purchase etc. Mobile technology can be used by the spaza shop-owners to strength and sustain these networks. For instance, spaza shop owners can easily share best practices, share information on funding and information on alternative suppliers.

Secondly, crime prohibits the start-up of businesses in the affected areas. Spaza shop-owners may need to initiate or join vigilante groups to keep crime hot spots under check. Spaza owners may also encourage the works of vigilante groups by providing financial support. Beyond this, the spaza shop-owners may regulate their operation hours accordingly taking in consideration the risks involved. In addition, they may make security installations on their premises a priority. The challenge of crime can be dealt with if spaza shop-owners, police and community members work together. There is a need for real cooperation in terms of sharing information on suspicious criminal elements so that where possible police can be on look out.

Thirdly, access to finance is vital, especially during the start-up phase where a lot of effort is expected with regards to purchase of stock, advertising, security upgrades, payment of electricity and so forth. Hence, the spaza shop-owners need to explore various ways of raising capital such as personal saving, informal financial associations or partner with resourceful individuals. Partnering with resourceful individuals who are financially well off will ensure increased start-up capital needed to successfully launch a business.

Fourthly, limited business space was also identified as a challenge to the growth of locally-owned spaza businesses. Spaza shop-owners normally use containers, shacks and or a room within the main house and such arrangements cannot accommodate the need for more space. To maximise on the available space, the spaza shop-owners are encouraged to deal in fast moving items, and if the need to keep stock arises, the excess merchandise can be kept in boxes underneath the shelves. Alternatively, the spaza owner can move into a bigger space providing he or she enjoys the same customer base.

Fifthly, the research alluded to the strategies utilised by non-South Africans to gain and maintain a competitive advantage. Such strategies included bulk buying, selling cheaply, stocking a wider variety of goods, extended operation hours and living simple life so as to maximise on saving. The researchers believe that the native spaza owners may draw vital lessons from their foreign counterparts. As noted earlier, the native spaza shop owners may need to establish distribution networks, which are based on teamwork than individualism in order to enjoy the larger discounts that emanate from buying in bulk.

# 7. Limitations and Scope for Future Studies

A plausible shortcoming of the current study alludes to the fact that it was limited to the Gugulethu and Nyanga townships in the Western Cape, making it impractical to generalise the findings. Perhaps, other geographical areas or provinces of South Africa may produce different results given their dynamics and peculiar circumstances.

Again the study concentrated on local owned township grocery shops in Gugulethu and Nyanga townships. It is worth noting that South African grocery shop owners were not a part of the research project. Nevertheless this research study appreciate and acknowledge the role played these non-South African entrepreneurs in the community where they operate their businesses.

The study recommends an extension of this study to other townships in South Africa, which have similar characteristics to the Gugulethu and Nyanga townships, to gain a better understanding of their distinctive needs. This may provide a better framework for policy interventions.

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# International Capital Flows: An Influence of the Level Of Infrastructural Development in Zimbabwe.

# Kunofiwa Tsaurai<sup>1</sup>

Abstract: This research studied the impact of infrastructural development on FDI inflows into Zimbabwe using annual time series data ranging from 1994 to 2015. Explanatory variables that determine FDI that were included in the study include market size, trade openness and financial sector development. Using the OLS—Heteroskedastic and Standard Error Consistent White Test approach, the study found out that infrastructural development as measured by internet users (per 100 people) had a positive and a significant impact on FDI inflows in Zimbabwe in line with both theory and empirical predictions. Furthermore, market size, trade openness and financial sector development in line with literature were found to have had a positive and significant influence on FDI inflows into Zimbabwe. In order to improve the inflow of net FDI into the country, Zimbabwean authorities need to create a conducive environment that entices foreign investors to invest into the country. This includes the formulation and implementation of policies that enhances infrastructural development, open up trade with other countries and grow the economy.

Keywords: FDI; Infrastructure; GDP; Zimbabwe

JEL Classification: F13; F43; G10

#### 1. Introduction

Foreign direct investment (FDI) flow has significantly increased in recent years. Total FDI inflow increased from US\$0.69 trillion in 1980 to US\$22.81 trillion in 2012 across the whole world (UNCTAD, 2012). Recent empirical work has found out that FDI influence economic growth in the host country if two conditions are met (1) absorption capacities must be present in the host country and (2) those absorption capacities should have reached a certain threshold level. For example, Adams (2009) noted that FDI failed to positively influence economic growth in Sub-Saharan Africa (SSA) countries because the absorption capacities present had not yet reached a certain threshold level needed to make use of the technology, knowledge and other skills associated with FDI. In line with the eclectic paradigm theory, infrastructural

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development is one of the absorption capacity and locational advantage of the host country that attracts FDI. There is actually a general consensus that infrastructural development is one of the absorption capacities that must be available in the host country to enhance its ability to positively influence FDI inflows. For example, Addison and Heshmati (2003) investigated the impact of information and communication Technology (ICT) on FDI inflows to developing countries. They found out that higher ICT development was one of the key factors that increased FDI inflows to developing nations. Ang (2008) in a study on FDI determinants in Malaysia found results which resonated with the infrastructure driven FDI proponents.

Globerman and Shapiro (2003) investigated the impact of governance infrastructure (regulation, legislation, property rights security, government transparency and legal frameworks) on United States (US) foreign direct investment using a two stage estimation procedure. They found out that countries that failed to achieve a certain minimum level of governance infrastructure could not attract FDI from the US. Moreover, higher levels of governance infrastructural development were observed to be a key and significant positive determinant of FDI from the US. Kumar (2001) examined the role of infrastructural availability on FDI inflows into developing countries using a cross country regression analysis. Transport, telecommunications, information and energy infrastructural development was found to be vital in determining FDI location decisions in developing countries. Whilst there appears to be a clear consensus as to the positive impact of both hard and/or soft infrastructural development on FDI, such a study has never been done for Zimbabwe to the best of the author's knowledge. It is for this reason that the current study decided to deepen the subject matter with Zimbabwe being the unit of analysis. This study uses FDI, net inflow (% of GDP) as a proxy for FDI and number of internet users (per 100 people) as a measure of infrastructural development. The proxy for FDI was deemed the best because it shows the change of foreign investment position within a given period of time. The number of internet users (per 100 people) was chosen as a proxy of infrastructural development because of lack of data in Zimbabwe of other infrastructure development components over a reasonable time frame that allow time series data analysis. This study is organized into five parts. The second part discusses the FDI-infrastructural development trends in Zimbabwe whilst the third part reviews literature on the relationship between infrastructure and FDI. The fourth part covers the research methodology whilst the fifth part concludes the study.

# 2. Infrastructural Development and Foreign Direct Investment Trends

The number of internet users (per 100 people) has been consistently on an upward trajectory from the year 1994 to 2015 in Zimbabwe (see Figure 1). The ratio of internet users in Zimbabwe was 0.002 per 100 people in 1994, which increased by

300% to reach 0.008 per 100 people in 1995. The five year period between 1995 and 2000 was characterised by a massive growth in the number of internet users in Zimbabwe. The ratio went up from 0.008 internet users per 100 people in 1995 to 0.401 internet users per 100 people in 2000, representing a huge increase by 4 912.5%. The period between 2000 to 2005 saw a further surge in internet users in Zimbabwe. The ratio went up by 498.5%, from 0.401 internet users per 100 people in 2000 to 2.4 internet users per 100 people in 2005. The upward trajectory continued during the five year period between 2005 to 2010 which saw internet users per 100 people going up by 166.67%. The ratio went up from 2.4 internet users per 100 people in 2005 to 6.4 internet users per 100 people in 2010.

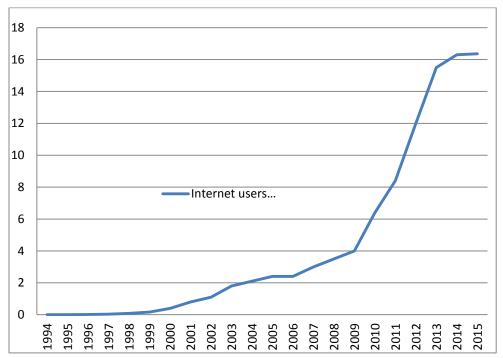


Figure 1. Internet users (per 100 people) trends for Zimbabwe (1994-2014)

Source: World Bank (2015)

Figure 1 show that the internet users in Zimbabwe further increased by 155.63% during the five year period from 2010 to 2015. They were 6.4 internet users per 100 people in 2010 and the figure surged to 16.36 internet users per 100 people in 2015 in Zimbabwe. Overally, the number of internet users per 100 people in Zimbabwe recorded a huge growth of 8 179% during the 22 year period ranging between 1994 to 2015. FDI trends in Zimbabwe shows mixed patterns during the 22 year period from 1994 to 2015 (see Figure 2). FDI net inflows as a percentage of GDP went up by a marginal 1.15 percentage points from 1994 to 1995, 0.50% in 1994 to 1.66% in

1995. The five year period between 1995 and 2000 saw FDI net inflows (% of GDP) declining by 1.31 percentage points, from 1.66% in 1995 to 0.35% in 2000. This was before FDI net inflows (% of GDP) experienced a 1.44 percentage points increase during the subsequent five year time period between 2000 and 2005. FDI net inflows (% of GDP) was 0.35% in 2000 and increased to 1.79% in 2005.

The five year time frame between 2005 and 2010 was characterised by a very marginal 0.03 percentage points decline in FDI net inflows (% of GDP) in Zimbabwe. FDI net inflows (% of GDP) was 1.79% in 2005 before declining to 1.75% in 2010 before experiencing a rebound during a subsequent five year time period between 2010 and 2015. FDI net inflows as a percentage of GDP was 1.75% in 2010 before reaching 3.09% in 2015, representing an increase of 1.34 percentage points during the five year period.

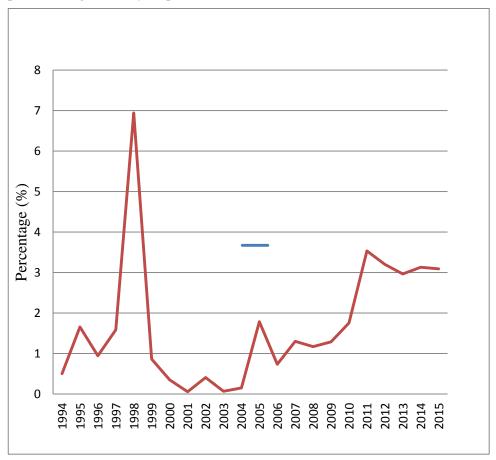


Figure 2. FDI trends for Zimbabwe (1994-2015)

Source: World Bank (2015)

# 3. Literature Review

There is overwhelming support for the infrastructural development-led FDI hypothesis both from theory and empirical evidence. Theoretically, the eclectic paradigm hypothesis founded by Dunning (1973) reported that ownership, location and internalisation (OLI) advantages are key determinants of FDI inflows into a host country. The ownership advantages that a firm requires in order to be able to compete abroad effectively include an edge that a firm has over its rivals despite being foreign such as brand name, patents and knowledge of technology (Wahid et al, 2009). "A firm that possess technology, monopoly and economies of large size advantages can enjoy higher profitability margins coupled by lower marginal costs of production if it decides to operate from abroad" (Dunning, 1973, p. 298). Location advantages include economic (market size, cost of transport, telecommunications, infrastructural development), political (favourable government policies) and social benefits which include distance between host and home countries, cultural diversity and attitude towards strangers that influence FDI flows (Denisia, 2010). Several empirical studies supported the infrastructural development driven FDI hypothesis. Mollick et al (2006) investigated the impact of infrastructure on FDI inflows into Mexico during the period between 1994 and 2001 using the Generalised Methods of Moments (GMM) approach. The findings of their study are twofold: The first is that the number of telephone lines was found to have played a very important in attracting FDI into Mexico. Secondly, higher levels of industrialisation were also critical in terms of positively influencing FDI across all states in Mexico. Asiedu (2002) examined the FDI determinants in Sub Saharan Africa (SSA). The study revealed that higher infrastructural development had a significant positive impact on FDI in non-SSA countries whilst infrastructure had a negligible influence on FDI in SSA countries.

Fung et al (2005) investigated the impact of hard infrastructure (highways and railroads) and soft infrastructure (reforms and transparent institutions) on foreign direct investment inflows into China using annual data from 1990 to 2002. Their study revealed that both hard and soft infrastructure had a significant positive influence on FDI in China. However, their study further observed that soft infrastructure had a more consistent and higher impact on FDI in comparison to the impact of hard infrastructure on FDI in China. Bellak et al (2009) examined the impact of infrastructure and corporate income taxes on FDI in Central and Eastern European countries using panel data analysis approach with data from 1995 to 2004. Their study revealed that both high infrastructural development and lower corporate income tax were central in attracting FDI into the host countries. They further observed that transport and communication infrastructural developments were the most key factors that positively attracted FDI into the host countries. Khadaroo and Seetanah (2008) analysed the impact of transport infrastructure on FDI in Mauritius during the period between 1960 and 2004 using an Auto Regressive Distributive Lag

(ARDL) and panel data analysis approaches. Using ARDL approach, transport infrastructural development was found to be one of the key determinants of FDI location decisions and attractiveness of FDI into the host countries. Panel data analysis also discovered that higher transport infrastructure played a major role in terms of attracting FDI inflows into Mauritius.

According to Denisia (2010), infrastructural development, state of the financial markets, political and macro-economic environment are part of the locational advantages within the OLI framework. Using panel data analysis with annual data from 1975 to 2009, Ranjan and Agrawal (2011) explored the determinants of FDI inflow into Brazil, Russia, India and China (BRIC). They found out that high infrastructural development, larger market size, high degree of trade openness and low labour cost attracted FDI into the BRIC countries. A study by Jordaan (2008) observed that good communication infrastructure, low labour cost, high quality of labour force and high regional demand positively attracted FDI inflow into Mexico regions. In a study of FDI inflow determinants for Indonesia in comparison with the whole of East Asia, Lipsey and Sjoholm (2011) noted that low FDI received by Indonesia was attributable to low infrastructural development, unfavourable business climate, inefficient government institutions and poor quality of education.

Investigating the impact of investment climate on FDI in developing countries using instrumental logit fixed effect model with firm level data from 2000 to 2006, Kinda (2010, p. 501) supported the OLI framework of the eclectic paradigm hypothesis by arguing that good financial market infrastructure in addition to good physical, human capital and institutional infrastructure provided a conducive environment that attracted FDI inflows into 77 developing countries. Calvo and Sanchez-Robles (2002) pointed out that the modernization theory is based on a fundamental principle in economics that economic growth requires capital investment. They further highlighted the fact that the transfer of technology through FDI is important because most developing countries lack the necessary infrastructure in terms of an educated population, liberalized markets, and social stability that are needed for innovation to promote economic growth.

The extent to which the economy can benefit from FDI inflows depends on the host country's specific conditions such as and the favourable policy environment, good infrastructure and the opportunities for linkages between FDI and domestic investment, argued Adams (2009, p. 947). According to Wang and Xie (2004), in order to benefit from the technological spillovers of FDI, so as to persistently promote economic growth, host countries should promote higher levels of infrastructural development. Moreover, investigating 23 developing countries using the individual fixed effects regression model, Wang and Xie (2009, p. 106) found out that host nations must ensure the availability of good institutional infrastructure so as to benefit from technological spillovers of FDI and realise economic growth. Factors such as physical infrastructure, financial market depth, good quality of

financial systems, extent of financial markets integration with the global financial markets, free trade agreements, human resources capabilities, cost of capital, favourable investment climate, consistent policy environment, financial constraints, balance of payment position, military expenditure and abundance of natural resources were found to be instrumental in determining FDI in developing countries. Babatunde (2011) studied the interaction between FDI, infrastructure, growth and trade openness in SSA countries using an unbalanced panel with data from 1980 to 2003. The study found out that a combination between higher levels of infrastructural development and trade openness led to more FDI inflows into the SSA counties during the period under study. On the other hand, Cheng and Kwan (2000) in a study of FDI determinants revealed that high infrastructural development and large size of the market were the key factors that attracted FDI into the Chinese regions.

Bakar et al (2012) examined whether or not infrastructure had any influence on FDI in Malaysia using time series analysis with annual data from 1970 to 2010. Their study revealed that infrastructure alongside other factors such as trade openness, market size and human capital development was a very important in influencing FDI in Malaysia. Rehman et al (2011) studied the impact of infrastructural development alongside exchange rate and market size on FDI in Pakistan using the Autoregressive Distributive Lag (ARDL) with time series annual data from 1975 to 2008. Infrastructural development was found to have led to more FDI inflows into Pakistan both in the short and long run.

Shah (2014) also investigated the impact of infrastructure in the developing countries on location decisions of foreign investors using panel data analysis with annual data ranging from 1980 to 2007. Infrastructure as proxied by telephone density in the developing countries was found to have had a very positive impact on FDI inflows. The same study also observed that exchange rate, economic growth and development also attracted FDI into the developing countries. Kaur et al (2016) studied whether infrastructural development and human capital development in India helped in attracted FDI using data from 1991 to 2010. Infrastructural development such as road network and railway transportation alongside human capital development were very instrumental in positively attracting FDI in India. Communication infrastructure and air transport had a positive but insignificant impact on FDI in India during the period under study. Khadaroo and Seetanah (2009) investigated the influence of infrastructure on attracting FDI in African countries using Generalised Methods of Moments (GMM). Both static and dynamic panel data analysis observed that transport infrastructure played a very significant role in attracting FDI into African countries during the period under study. The study further found out that other forms of infrastructure had a positive but less impact on FDI in African countries. Fitriandi et al (2014) also studied the role infrastructure played in promoting FDI inflows into the 30 provinces of Indonesia using panel data analysis with province level annual data ranging from 2000 to 2009. All the four measures of infrastructural development, namely electricity, road length, water capacity and water distribution showed that infrastructure was a vital force in terms of attracting FDI inflows into Indonesia provinces.

# 4. Research Methodology

#### 4.1. Data and Description of Variables

The study used time series annual secondary data for Zimbabwe ranging from 1994 to 2015. The data was extracted from the World Development Indicators, which is a very reliable international source of data. FDI is the dependent variable whose proxy used for the purposes of this study is the FDI net inflows (% of GDP). Internet users (per 100 people) is the proxy used to measure infrastructural development. As per the eclectic paradigm theory, high levels of communication infrastructural development attract more foreign investors, hence a positive relationship is expected between FDI and infrastructural development. Denisia (2010) noted that the state of infrastructure is a locational advantage of FDI which provide a conducive environment which not only attract FDI but enable FDI to influence economic growth in the host country. Availability of good institutional infrastructure helps the host countries to benefit from technological spillovers of FDI and realise economic growth (Wang & Xie, 2009, p. 106).

The market size hypothesis founded by Jorgenson (1963) noted that the level of GDP in the host country attracts FDI. This was supported by Denisia (1980, p. 13) who observed that economic growth in the host country is a location advantage of FDI in line with the eclectic paradigm hypothesis. This study used GDP per capita as a proxy of market size, following Sghaier and Abida (2013). According to Denisia (2010, p. 108), the level of trade openness in the host country is a political location advantage of FDI depending on whether it is high or low. The current study used a total of exports and imports as a ratio of GDP to proxy trade openness following Tsaurai and Odhiambo (2012). Guiso et al (2004) noted that a well-developed financial market attracts FDI and allow individuals and companies to easily access external funds at a low cost. Kaur et al. (2013) observed that financial markets increases the speed at which a host country benefit from FDI inflows through provision of financial support in terms of quicker transactions, availing of loans, good foreign currency services and optimal allocation of capital to more deserving projects. This study used stock market capitalization (% of GDP) as a measure of financial sector development. This study expects infrastructural development, market size, trade openness and financial sector development to have a positive impact on FDI in line with both theory and empirical findings. The data for all the variables used in this study was extracted from the World Development Indicators.

### 4.2. Model Specification

The function to examine the impact of infrastructural development on FDI alongside trade openness, financial sector development and market size is represented by the following general model specification.

FDI=f(infrastructural development, trade openness, market size, financial development) (1)

While infrastructural development is the main determinant of FDI in this study, market size, trade openness and financial sector development are significant explanatory variables for FDI (Hermes & Lensik, 2003; Alfaro et al, 2004; Kholdy & Sohrabian, 2008; Al Nasser & Soydemir, 2010, Asiedu & Lien, 2011). The study controlled the influence of the explanatory variables of FDI so as to boost the level of accuracy of the overall results. Specifically, the explanatory variables are controlled for in order to gauge the independent partial correlation between infrastructural development and FDI.

#### 4.3 Estimation Technique

The first step in the estimation of the model which investigates the statistical relationships between FDI, infrastructural development, market size, trade openness and financial development is the determination of unit roots in the time series data. It is therefore important to check each time series variable for stationarity or unit root before conducting any analysis on the specified models. The regression analysis performed in a normal or traditional way gives spurious results if the time series data is non-stationary. It is against this background that stationarity of the time series data requires to be confirmed first before any statistical analysis is done. The study follows Elliot et al. (1996) in employing the Augmented Dickey-Fuller (ADF) test for unit root testing.

The Augmented Dickey-Fuller (ADF) is a unit root test for time series where the next equation tests the unit root:

$$\Delta y_{t} = \beta_{1} + \beta_{2} t + \delta y_{t-1} + \alpha_{it-1} \sum_{i=1}^{m} \Delta y_{t-1} + \varepsilon_{t}$$
 (2)

where  $y_t$  is the variable in question,  $\varepsilon_t$  is white noise error term and

$$\Delta y_{t-1} = (y_{t-1} - y_{t-2}), \ \Delta y_{t-2} = (y_{t-2} - y_{t-3})$$
 (3)

These tests are applied to determine whether the estimated  $\delta$  is equal to zero or not. Odhiambo (2004) observed that a cumulative distribution of the ADF statistics needs to be compiled in order to show that if the value of the calculated ratio of the coefficient is less than critical value from ADF statistics, then y is said to be stationary. Consistent with Bakar et al (2012), once all the variables used in the study become stationary, then the OLS (ordinary least squares) regression analysis with

Heteroskedastic and Standard Error Consistent White test can be performed to remove bias that arise due to non-constant variance.

# 4.4. Empirical Results

This sub-section deals with unit root testing and OLS regression analysis with Heteroskedastic and Standard Error Consistent White test.

Table 1. Augmented Dicky Fuller (ADF) for Unit Root Testing

Series	Levels		First Differences		
	No Trend	Trend	No Trend	Trend	
FDI	-0.667121	-2.079225	-3.796632***	-3.891987**(S)	
			(S)		
Infrastructure	-0.893810	-1.033057	-	-4.197775**(S)	
			3.288468***(S)		
Trade openness	0.798921	-1.934668	-	-3.655902**(S)	
			3.630027***(S)		
Market size	0.694628	-2.174505	-	=	
			4.416069***(S)	4.565646***(S)	
Financial	-0.766863	-1.908402	-	-	
development			3.383382***(S)	4.029576***(S)	

<sup>\*</sup>Critical values are based on Mc Kinnon (1991)

# S represents stationary

Table 1 shows that all the variables at first difference are stationary (S) and therefore integrated of order 1. The long run relationship between the variables can now be estimated since all the variables have been confirmed to be stationary or integrated of order 1 at first difference using Augmented Dicky Fuller (ADF) approach.

Table 2. Ordinary Least Squares - Heteroskedastic and Standard Error Consistent White test

Variable	Co-efficient	Standard	T-statistic	Probability
		Error		
Constant	13.3827***	1.5629	8.5627	0.000
Infrastructure	0.5621***	0.1774	3.1685	0.021
Trade openness	0.4813**	0.2439	1.9730	0.032
Market size	0.3802***	0.1332	2.8541	0.000
Financial development	0.7494*	0.3987	1.8795	0.085
R-squared	0.7629			
Adjusted R-squared	0.7528			

Source: E-Views (8)

<sup>\*\*</sup> and \*\*\* denote significance at 5% and 1% respectively.

<sup>\*, \*\*,</sup> and \*\*\* denote significance at 10%, 5% and 1% respectively.

Table 2 shows that FDI net inflows increase by 56.21% as infrastructural development goes up by 1% at one percent significant level. This result is consistent with the eclectic paradigm hypothesis founded by Dunning (1973) which observed that infrastructural development (transport, road, communication, electricity) is a locational advantage which attracts FDI into the host country. The results also supports findings by several empirical studies (Mollick et al, 2006; Fung et al, 2005; Bellak et al, 2009; Babatunde, 2011; Ranjan & Agrawal, 2011) on the subject matter. Moreover, a 1% increase in trade openness led to a surge in net FDI inflows by 48.13% at five percent level of significant. This resonate well with Denisia (2010) who argued that trade openness of the host country is a political locational advantage which attracts FDI, consistent with the eclectic paradigm theory. In addition, FDI net inflows went up by 38.02% in response to a 1% increase in the market size at one percent level of significance. This supports the market size hypothesis founded by Jorgenson (1963) which noted that GDP levels in the host country attracts FDI. The results also resonate with findings by Denisia (1980) that economic growth is a locational advantage of FDI in the host country in line with the eclectic paradigm theory. Last but not least, a 1% increase in the level of financial sector development pushed up the net FDI inflows into Zimbabwe by a massive 74.94% at 10% significance level. This is in line with empirical studies done by Guiso et al (2004) and Kaur et al (2013) which found out that financial sector development positively and significantly influence FDI through improving the rate at which a host country benefit from FDI by providing financial services faster.

# 5. Conclusion

This research studied the impact of infrastructural development on FDI inflows into Zimbabwe using annual time series data ranging from 1994 to 2015. Explanatory variables that determine FDI that were included in the study include market size, trade openness and financial sector development. Using the OLS –Heteroskedastic and Standard Error Consistent White Test approach, the study found out that infrastructural development as measured by internet users (per 100 people) had a positive and a significant impact on FDI inflows in Zimbabwe in line with both theory and empirical predictions. Furthermore, market size, trade openness and financial sector development in line with literature were found to have had a positive and significant influence on FDI inflows into Zimbabwe. In order to improve the inflow of net FDI into the country, Zimbabwean authorities need to create a conducive environment that entices foreign investors to invest into the country. This includes the formulation and implementation of policies that enhances infrastructural development, open up trade with other countries and grow the economy.

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# Navigating the Reasons behind Joining a Business Incubation Programme: Empirical Evidence from Entrepreneurs in South

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Abstract: This study aims to examine why entrepreneurs choose to join the incubation programme in urban areas, South Africa. The study utilised a quantitative method approach to collect data by way of questionnaires. The data was collected using structured questionnaires. The research participants for this study were limited to entrepreneurs in the incubation programme in Western Cape Province and Gauteng Province in South Africa during the course of the study. Populations of all 65 (incubatees) were deemed suitable for the study. This paper provides an insight into the reasons entrepreneurs chose to join the incubation programme. The findings indicated that entrepreneurs join the incubation programme to acquire entrepreneurial skills, entrepreneurial education, funding, business networks, Access to technology, sported a gap in the market and employment creation.

Keywords: business incubatees; business incubators; entrepreneurship; growth; South Africa

**JEL Classification:** L26

#### 1. Introduction

Entrepreneurship, have been recognised for the social development and the engine to economic growth, the country's economy depends of a large number of entrepreneurial activities (Garwe & Fatoki, 2012; Al Mamun, Nawi & Shamsudin, 2016). Entrepreneurship activities in South Africa help in the distribution of wealth and inequality, thus gold and other precious resources play a crucial role in the

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country. However, South Africa still suffers from high number of unemployment, income inequality and poverty. Many countries around the world are still recognising the significant small enterprises make in addressing poverty and inequality (Diedericks, 2015), entrepreneurship is necessary to provide job opportunities to the people. In the same views Choto (2015) argue that income generation, needed employment and growth stems from entrepreneurial activities. According to Lose, Maziriri and Madinga (2016) the performance of an entrepreneurs is based on starting new small enterprise, willingness to look for new opportunity, and development a business idea into a realistic. In addition, the strategic role of the entrepreneur as an agent of economic transformation in society is visible in employment and wealth generation, stimulation of indigenous entrepreneurship or promotion of entrepreneurial culture (Shenura, Haile & Negash, 2016, p. 137). Moreover, entrepreneurs drive innovation and speed up structural changes in the economy, thereby making an indirect contribution to productivity (Herrinton, Kew & Kew, 2008; Tullok, 2010). Despite the benefits of having entrepreneurs in an economy, in today's post-modern era, entrepreneurs are joining business incubation programmes so as to succeed in their entrepreneurial businesses.

# 2. Objective of the Study

This paper aims at examining why entrepreneurs choose to join the incubation programme in urban areas, South Africa.

# 3. Significance and Contribution of the Study

In South Africa, business incubation programmes are still evolving. Thus, the study may contribute towards entrepreneurial growth and improvement. The research may assist industry experts and government officials to prioritise the benefits of entrepreneurship activities in starting new business start-ups and in academic institutions to establish the entrepreneurial skills to students. The study is significant to business incubators and SMEs, given that it encourages entrepreneurs choose to join the incubation programme to acquire entrepreneurial skills which it may improve the growth and survival rate of business ventures. This research also contributes to theory of incubation and the body of research knowledge on business incubation. Furthermore, the significance of the study enhances incubation literature in Africa.

#### 4. Literature Review

In order to address the aim of the research, it is of importance to have established a sound literature base around which the study was built. This section presents a review of the literature related to the purpose of the study. The review was undertaken in order to eliminate duplication of what has been done and provide a clear understanding of existing knowledge base in the problem area. The literature was reviewed under the following headings: functions of an entrepreneur and why entrepreneur join the incubators.

# 4.1. Functions of an Entrepreneur

The functions of an entrepreneur can be categorised into four functions which include risk taking, managerial, promotional and commercial function (Sinha, 2015). Firstly, The entrepreneur faces uncertainly and bears risks in his or her business uncertainly comprising those risks against which it is not possible to insure (Akrani, 2010). Some other risk faced include; the risk of new entry into the market, risk of failure. Secondly, the entrepreneur also plays a managerial function. Managing involves planning, organizing, staffing, directing and controlling (Yipeng, 2017, p. 52). In order to run a successful business, the entrepreneur has to plan on how to run his or her business, manage human resources, material, finances and organize the production of goods and services (Redondo & Camerore, 2017, p. 284). A properly managed entrepreneurial venture yields desired results (Horan, O'Dwyer & Tiernan, 2011, p. 117). Thirdly, the promotional function involves identifying and selection of business idea, preparing of a business plan, and finance requirements (Sinha, 2015). After idea generation, a business plan need to be put in place as a road map to how the business operation will work out and identifying sources of funds and approach investors. Lastly, The commercial function includes the following aspects: production/ manufacturing, marketing and accounting. An entrepreneur goes beyond reaching set of goals and constantly strives for excellence, exploring other higher goals in order to achieve growth and development of his or her business (Sinha, 2015).

# 4.2. Importance of an Entrepreneur

The importance of an entrepreneur will be categorised into four functions which include: economic growth and development; new businesses and employment; creation of value and equitable distribution of income. Firstly, entrepreneurs are the main contributors to economic growth, development, and prosperity; they bring a large share of technological innovation in products and production processes, which drive economic transformation and international trade (Spulber, 2008, p. 2). Secondly, Shrivastava (2013, p. 1) identified entrepreneurs as people who create new business which in turn result in employment creation for both the entrepreneur and the other individuals employed in the new venture. Thirdly, entrepreneurs create extraordinary value through conducting entrepreneurial activities, which result in

sustained competitive advantage and greater returns for different parties involved (Monsson & Jorgensen, 2014). They bring both economic and social value, economic value in the sense of productivity; growth and social include poverty reduction, enhancement of job satisfaction and personal relationships (Ahmad & Seymour, 2007). Entrepreneurs contribute to poverty reduction in developing countries (AL-Mabaraki & buster, 2010). Lastly, entrepreneurial ventures allow for equitable distribution of income, which in turn contributes to wealth distribution, the operation of the entrepreneurs is flexible and they offer personalized services (Dlodlo & Dhurup, 2010, p. 165). Dwivedi and Mishra (2013, p. 50) identified entrepreneurial ventures as a drive for female empowerment.

# 4.3. Why Entrepreneur Join the Incubators

Choto (2015, p. 40), identified the following aspects: lack of skills and expertise, funding challenges, technology and access to business networks as the reasons why entrepreneurs join business incubators. In order to be successful in their entrepreneurial ventures, entrepreneurs should have skills and expertise in the industry in which they operate, and should be able to identify gaps and opportunities in the market and take advantage of them (Kirsty, 2010, p. 3). The skill to identify gaps and opportunities is lacking amongst many entrepreneurs hence the need to attend business incubation programs. Kirsty (2010, p. 3) mentions that access to finance is the greatest challenge that entrepreneurs face which has contributed to them being involved in incubation programs. Financial institutions are quite nervous to lend money to new businesses owing to the risk of failure associated with them; entrepreneurs should find a founding partner who will act as a mentor, as well as give access to funding (Stott, Stone & Fae, 2016). This can be achieved through business incubator support, as it is easy for them to obtain funding from investors, banking institutions and the government. Most entrepreneurs lack the necessary resources that are required to successful run their business. Business incubators give entrepreneurs access to better and improved technology, which enables them to run their businesses effectively and to remain competitive (Choto, 2015, p. 40). Lastly, Kirsty (2010, p. 4) described the market as not merely an economic institution; it is also governed by social networks which enables the sharing of information to necessitate innovation. Business networks enables the entrepreneur to be successful even with limited funding (Choto, 2015, p. 40). Vegitti & Adoscalitei (2017), mention that business incubators have established networks that they can connect entrepreneurs to, and they also run workshops where social interaction is encouraged, hence the need for entrepreneur to join the incubation programs.

# 5. Research Design and Methodology

Ostlund, Kidd, Wesgstrom and Rowa-Dewar (2011) describe a research design as the strategy of a study and the plan by which the strategy is to be carried out.

According to Malhotra (2010) it is the master plan for directing a research study. There are three major research designs, namely exploratory research, (which primarily involves qualitative data), causal research and descriptive research (both of which primarily involve quantitative data) (Malhotra, 2010, p. 103). Maloi (2011) points out that descriptive research studies are constructed to answer who, what, when, where and how questions. As a result, descriptive research may be used to describe the characteristics of a target population, make predictions, determine the relationship between variables, and/or measure perceptions (Malhotra, 2010). This study seeks to examine why entrepreneurs choose to join the incubation programme in urban areas, South Africa. Therefore, this study followed a descriptive research design and, as such, the quantitative approach to data collection was followed, whereby a survey questionnaire was used to gather the required data. The research questions required individual and quantified responses from entrepreneurs; therefore questionnaire survey was an ideal means of getting such information (Veal, 2011). A respondent-completed structured questionnaire method was employed to obtain information from 65 entrepreneurs. The structured questionnaires used in the study were based on information obtained during the literature study (secondary research). A two section questionnaire was designed to collect data from the participants. Section A elicited general and biographical information about respondents. Section B requested participants' reasons as to why they choose to join an incubation programme in urban areas, South Africa. Moreover, all the responses on the measuring instruments were measured by a five-point Likert scale whereby, 1= strongly disagree, 2 = disagree, 3 = neither disagree nor agree/neutral, 4 = agree and 5 = strongly agree.

Antonites and Kliphuis (2011) define a unit of analysis as the main body that is being analysed in a study. Cooper and Schindler (2011, p. 166) define a unit of analysis as the entity being studied and which the researcher decides how the data should be analyzed for the study. For instance, people, groups or individuals could be a unit of analysis in a study. In this study the unit of analysis is the South African entrepreneur in the Cape metropolitan area as well as the Johannesburg metropolitan area.

Haralambos and Holborn (2008) define a population as any group of individuals that has one or more characteristics in common that are of interest to the research. In research, population refers to the aggregate of all the units that are eligible to participate in a study (Creswell & Plano, 2007; Salkind, 2012). In addition, a population is defined by Welman, Kruger and Mitchell (2011, p. 53) as a group of entities with a common set of characteristics. In this study the population of relevance will consist of all entrepreneurs in the incubation programme in Western Cape Province and Gauteng Province in South Africa during the course of the study.

This research was undertaken in the Cape Metropolitan area of the Western Cape as well as in the Johannesburg Metropolitan area of the Gauteng Province. Since two

of the researchers are reside in Western Cape and the other two are residing in the Gauteng Province of South Africa. The researchers found it convenient to conduct the study in these locations.

A sample can be defined as a portion of a larger population (Dube, Roberts-Lombard & Van Tonder, 2015, p. 243). Roets (2013) defines sample size as the count of factors involved in the study. According to Choto and Tengeh (2014, p. 97), a sample size larger than 30 and less than 500 is appropriate for most research studies. Therefore, this research study utilized 65 participants.

# 6. Reliability, Validity and Data Analysis

Rubin and Babbie (2011, p. 194) point out that reliability is a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time. The main purpose of reliability is to provide consistent results and minimise errors and biases (Hammond & Wellington, 2013, p. 150). To guarantee reliability and viability, a pilot study was conducted to refine the questionnaire and study protocol. The intended objectives of the study were evaluated in relation to the data collection. The process was repeat post data collection and analysis to ensure that the findings are error free and unbiased. Mouton (2001, p. 108) assert that data analysis is breaking up the data into manageable patterns, themes, connections and trends and to understand the various constitutive elements of the data through an inspection of the relationship between concepts and constructs to evaluate trends that can be identified or isolated. A Microsoft Excel spread sheet was used to enter all the data and in order to make inferences of the data obtained, the Statistical Packages for Social Sciences (SPSS), Version 24.0 for Windows was used to code data and to run the statistical analysis as well as to analyze the data with descriptive statistics as the ultimate goal. Hence, the results are tabulated and presented in percentages.

#### 7. Results and Discussion

This section is dedicated to displaying and discussing the results of the study.

# 7.1. Demographic Characteristics of Respondents Utilizing Descriptive Statistics

Liphadzi (2015, p. 72) explains that descriptive statistics are used to present quantitative descriptions in a manageable form. The main goal of using descriptive statistics is to describe and summarise the characteristics of a sample (O'Leary, 2010, p. 237).

The profile of sampled respondents in the survey comprised 18 males and 47 females (representing 28% and 72% respectively). This gender composition tends to suggest

that female entrepreneurs are substantially more likely to be involved in a business incubation program than male entrepreneurs. Table 1 also provides an outline of the respondents' locations. Findings indicate that the respondents 51% (n=33) resides in Cape Town and 49% percent (n=32) resides in Johannesburg. The age structure of the sample, as illustrated by table 1, shows that only 20% (n=13) of the respondents were under the age of 30 years, 25% (n=16) were aged between 30 and 39 years, 32% (n=21) represented the 40–49 year age group, 15% (n=10) represented the 50–59 year age group and a meagre 8% (n=5) of the sample were 60 years of age and above. The majority 32% (n=21) of the respondents were aged 40–49 years. Therefore, it seems that the entrepreneurs who are part of an incubation programme are concentrated within the age bracket of 40–49 years. Lastly in terms of formal education levels, Table 1 shows that the majority of the individuals do not have any formal education As shown by table 1, illustrate that 79% (n=51) of the participants had no formal education, 12% (n=8) had basic education, while 6% (n=4) had a diploma, and only 3% (n=2) had a degree.

#### 7.2. Reasons Behind why Entrepreneurs Join an Incubation Programme

The charts show specific reasons to attend the business incubation programme.

			Frequen cy	Percent	Valid Percent	Cumulative Percent
Valid		Strongly	1	1.5	1.5	1.5
	disagree					
		Disagree	3	4.6	4.6	6.2
		Neutral	2	3.1	3.1	9.2
		Agree	30	46.2	46.2	55.4
		Strongly	29	44.6	44.6	100.0
	agree					
		Total	65	100.0	100.0	

Table 1. The need of entrepreneurial skills

Table 1 show that 1(1.5%) of the respondents said strongly disagree; 3(4.6%) replied disagree; 2(3.1%) said they were Neutral; 30(46.2%) agreed and 29(44.6%) answered strongly agree. It is thus revealed that entrepreneurs join an incubation programme in order to enhance their entrepreneurial skills. Fatoki (2012) points out that entrepreneurial skills include creativity, innovation, risk-taking and ability to interpret successful entrepreneurial role models and identification of opportunities.

The findings of this study are in line with the previous researchers such as Adegbite (2001) who mentions that some entrepreneurs need professional assistance and business-plan services in the incubation programme. In addition, these results are in line with a study conducted by Lose (2016) to investigate the role of business incubators in facilitating the entrepreneurial skills requirements of small and medium

size enterprises in the Cape metropolitan area, South Africa. The empirical results of the study revealed that entrepreneurs join the incubation programme to attain both growth and entrepreneurial skills.

Table 2. The need of entrepreneurial education

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly disagree	5	7.7	7.7	7.7
	Disagree	12	18.5	18.5	26.2
	Neutral	5	7.7	7.7	33.8
	Agree	23	35.4	35.4	69.2
	Strongly agree	20	30.8	30.8	100.0
	Total	65	100.0	100.0	

Table 2 indicated that 5 (7.7) of the respondents said strongly disagree; 12 (18.5%) replied disagree; 5 (7.7%) said they were Neutral; 24 (35.4%) agreed and 20(30.8%) answered strongly agree. It is therefore revealed that entrepreneurs join an incubation programme because the seek entrepreneurial education. Kunene (2008, p. 118) indicates that entrepreneurship can be taught and education can actually beneficially foster entrepreneurship. In addition, Freeman (2000, p. 372) as well as Massey (2004, p. 458) explain that entrepreneurship can actually be taught and learnt. Furthermore, Entrepreneurship education is said to be very important in the nurturing of the entrepreneur (Parhankangas & Ehrlich, 2014). A study carried out by Gans and Scott (2013) revealed that entrepreneurship education produces self-sufficient enterprising individuals, produces successful business and industry leaders, enhances a graduate's ability to create wealth and produces champions of innovation. Incubators provide their clients (entrepreneurs) with educational services and counselling (e.g., the creation of business plans, counselling related to the acquisition of funds for entrepreneurship, the elaboration of the marketing strategy, mediation with contacts, and the like (Lesáková, 2012). Therefore, from the authors' explanations this substantiates or justifies the reason behind joining an incubation programme.

Table 3. Access to funding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	7.7	7.7	7.7
	Disagree	9	13.8	13.8	21.5
	Neutral	4	6.2	6.2	27.7
	Agree	29	44.6	44.6	72.3
	Strongly agree	18	27.7	27.7	100.0
	Total	65	100.0	100.0	

Table 3 sought responses regarding the extent to which entrepreneurs agreed that they join the incubation programme because they seek to have access to funding. The majority 9 (44.6%) of respondents stated that they agree that access to funding makes them join an incubation programme. The next high frequency 18 (27.7%) was for strongly agree. It is thus revealed that entrepreneurs in the Cape Town metropolitan Area as well as the Johannesburg Metropolitan area join an incubation programme in order to have access to funding since through a business incubator support, it is easier for entrepreneurs to obtain funding from investors, banking institutions and the government. These results are in consistence with the works of Fatoki (2014) who elucidates that entrepreneurs need funding to be able to achieve a competitive advantage in the market.

Table 4. Access to business networks

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly	6	9.2	9.2	9.2
	disagree				
	Disagree	9	13.8	13.8	23.1
	Neutral	18	27.7	27.7	50.8
	Agree	15	23.1	23.1	73.8
	Strongly	17	26.2	26.2	100.0
	Agree				
	Total	65	100.0	100.0	

Table 4 required respondents to indicate the extent to which they agreed that access to business networks makes them join an incubation programme. In addition, Table 4 indicates that a total of 19(26.2%) respondents strongly agree that the ability to network with other entrepreneurs who form part of a business incubation programme makes them to join a business incubation programme, followed by 15(23.1%) of respondents agreed, while some 18(27.7%) who said they were neutral with the statement. In addition, the results of this study are in line with the study that was conduct by Dawson, Fuller-Love, Sinnott, & O'Gorman (2011) to investigate entrepreneurs' perceptions of business networks. The results of this study indicate that networks may be a cost-effective way of encouraging and supporting entrepreneurs.

Table 5. Access to technology

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly Disagree	1	1.5	1.5	1.5
	Disagree	3	4.6	4.6	6.2
	Neutral	9	13.8	13.8	20.0
	Agree	26	40.0	40.0	60.0

Strongly Agree	26	40.0	40.0	100.0
Total	65	100.0	100.0	

Table 5 required respondents to indicate the extent to which they agreed that they join business incubation programmes because they seek to have access to technology. 1(1.5%) of the respondents said strongly disagree; 3(4.6%) replied disagree; 9(13.8%) said they were Neutral; 26(40%) agreed and 26(40%) answered strongly agree. It is therefore revealed that entrepreneurs join an incubation programme because they are in need of technology so as to run their entrepreneurial businesses successfully. Choto, (2015:40) and Lose & Tengeh (2016) states that business incubators give survivalist entrepreneurs access to better and improved technology, as it is always changing.

Table 6. Lack of unemployment

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly Disagree	8	12.3	12.3	12.3
	Disagree	21	32.3	32.3	44.6
	Neutral	15	23.1	23.1	67.7
	Agree	15	23.1	23.1	90.8
	Strongly Agree	6	9.2	9.2	100.0
	Total	65	100.0	100.0	

Table 6 required respondents to indicate the extent to which they agreed that they join business incubation programmes because they were unemployed. 8(12.3%) of the respondents said strongly disagree; 21(32%) replied disagree; interestingly both Neutral and agreed respondents share 15(23.1%) and 6(9.2%) answered strongly agree. The South African economy has been experiencing low economic growth, high unemployment and an unsatisfactory level of poverty for the past years (Mandipaka, 2014). Furthermore, South Africa has been described as a country where poverty is very high and this is unacceptable (Statistics South Africa, 2014); youth unemployment in particular is very high (Herrington, Kew & Kew, 2009).

Table 7. Identified a gap in the market

		Frequency	Percent	Valid Percent	Cumulative Percent
		rrequericy	1 CICCIII	vanu i cicciii	1 CICCIII
Valid	Strongly disagree	3	4.6	4.6	4.6
	Disagree	4	6.2	6.2	10.8
	Neutral	15	23.1	23.1	33.8
	Agree	34	52.3	52.3	86.2
	Strongly agree	9	13.8	13.8	100.0
	Total	65	100.0	100.0	

Table 7 required respondents to indicate the extent to which they agreed that they join the incubation programme because there was a gap in the market to start their business. The majority 34(52.3%) of respondents stated that they agree that they spotted a gap before joining an incubation programme. The next high frequency 15(23.1%) were neutral, while 9(13.8) of the participants strongly agreed that there was a need to start the business.

**Table 8. Employment creation** 

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly disagree	6	9.2	9.2	9.2
	Disagree	6	9.2	9.2	18.5
	Neutral	6	9.2	9.2	27.7
	Agree	33	50.8	50.8	78.5
	Strongly agree	14	21.5	21.5	100.0
	Total	65	100.0	100.0	

Table 8 required respondents to indicate the extent to which they agreed that they join business incubation programmes because they wanted to create employment for locals. 6 (9.2%) of the respondents said strongly disagree; 6 (9.2%) replied disagree; 6 (9.2%) said they were Neutral; a majority of 33 (50.8%) agreed and 14 (21.5%) answered strongly agree. Choto (2015) concur that entrepreneurs in the incubation programme do contribute to economic development and job creation.

# 8. Limitations and Future Research

The results of this study needed to be qualified in light of the limitations. In the light of the findings/results, it is recommended that an understanding of how. In spite of the contribution of this study, it has its limitations which provide avenues for future researches. First and most significantly, the present research is conducted from the entrepreneurs in Gauteng province. Perhaps if data collection is expanded to include other provinces, findings might be more insightful. Future studies should therefore consider this recommended research direction. There is also the problem of common method bias because qualitative research was purely used in this study. It was going to be more robust if the study included both qualitative and quantitative methods. All in all, these suggested future avenues of study stand to immensely contribute new knowledge to the existing body of entrepreneurship literature, a context that happen to be less researched by some researchers in Africa.

## 9. Conclusion

In this study the key words has been well introduced, key questions and aims of the study have been identified, a literature review has been conducted to have an overview or to gain a depth understanding of the concepts like entrepreneurship, entrepreneurs, innovation, challenges and solutions. Innovation is imperative because it allows the organisation to adapt to change, to increase market share, to meet the buyers' standards or requirements and lastly to improve productivity or reduce production costs. On the academic side, this study makes a significant contribution to the organisational behaviour literature by systematically exploring the impact of entrepreneurship, efficiency and effectiveness in the context of entrepreneurs in the Gauteng province. It has also been discovered that in today's highly competitive global environment an entrepreneur's ability to introduce innovations is a key success factor for sustaining competitive advantage.

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# Foreign Direct Investments and the Real Convergence. An Approach for Romania and Bulgaria

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**Abstract:** This paper outlines the need for an analysis of the extent to which foreign direct investments (FDIs) affects real convergence expressed using the following selected macroeconomic indicators: Gross domestic product (GDP) per capita, the unemployment rate (UR), labour productivity (LP) per person employed and the minimum wage (MW). The purpose of this paper is to analyze the impact of foreign direct investment (FDI) on real convergence in Romania's and Bulgaria's economy during 2004-2014. The main results for both Romania and Bulgaria show that FDI can be considered important sources of growth for real convergence that have contributed to economic growth, increased labour productivity and increased the minimum wage except for the unemployment rate. The results confirmed our expectations because logically, foreign firms bring their own technology, appropriate for the work of the employees, in order for their employees to produce as much as possible and pay salaries relatively higher compared to companies with local capital, but they demand instead higher productivity.

**Keywords:** employment; European Union; types of convergence; economic growth; statistical methods

JEL Classification: C1; F21; F45; F62; O52

## 1. Introduction

Foreign direct investments are one of the representative vectors of actual economic progress (Sârbu, 2016, p. 225) and their role tends to become significantly important through their contribution to achieving real convergence. In this context, the purpose of the paper is to analyze the impact of foreign direct investments on real convergence, in the Romanian and Bulgarian economy, for the period 2004-2014. The analysis focuses on Romania and Bulgaria as these economies show a similar nature in terms of economic development and they have joined the European Union

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(EU) the same year, in 2007. Our approach in carrying this study is an attempt to address the problem related to the contribution of FDI to real convergence in Romania and Bulgaria. The expression of personal believes based on personal analyses and the use of statistical methods related to the subject of this paper, is indicative. The paper outlines the need for an analysis of the extent to which FDI affects the real convergence, expressed using the following selected macroeconomic indicators: GDP per capita, the unemployment rate, labour productivity per person employed and the minimum wage. With respect to the real convergence, to be noted that in the economic literature, there are several views on the selection of indicators in order to express the real convergence. For this purpose, indicators such as GDP/capita, labour productivity per employee, unemployment rates, exports per capita, the opening degree towards outside, the stock of human capital, and not least, combinations of these indicators are used. Nevertheless, the diversity of views and the range of variables used to express real convergence make it difficult to carry out meaningful comparisons between the results of different studies in the literature on the subject of real convergence. Regarding the structure of this paper, besides the introductive chapter, the paper contains three sections. Section 2 will examine literature review, Sections 3 is devoted to the methodology of the research and shows the extent to which FDI affects real convergence, while Section 4 presents the results of the research. The paper ends with conclusions.

## 2. Literature Review

Real convergence is one of the fundamental objectives of Romania's integration in the European Union, reflecting the "interdependence between the uniqueness of the European market and the specific of the national markets", referring to "structures, flows and behaviors related to the production, distribution and consumption of goods and services that by combination should maximize the performance of the European Single Market" (Ghizdeanu, 2015, p. 11). From the analysis made by the economical literature we can distinguish the existence of several types of convergence of the integration process, namely: (1) the real convergence, indicating the proximity of the living standards in terms of income per capita towards the EU average, or mitigating the disparities between countries regarding the level of economic and social development (the growth of GDP and of the income per capita); (2) the nominal convergence, which aims at fulfilling the criteria set by the Maastricht Treaty that member states must meet in order to join the Economic and Monetary Union (EMU) and to adopt the single European currency; (3) Institutional convergence, which refers to the harmonization of the national institutions and the EU institutions, in order to reach the common objectives; (4) the structural or complete convergence (Săvoiu, 2016, p. 153; Iancu, 2007, pp. 86-87). Thus, the macroeconomic convergence criteria are considered as a condition for keeping a sustainable enlargement of the Economic Union (Šmídková, 2001, p. 364). At the same time, the economic literature develops several indicators, which reflect either the process of reducing the long-term differences between the countries concerned, the dispersion of income per capita across countries or regions, while using in this respect: dispersion, the Gini coefficient, the Theil index, which offers the opportunity to appreciate the "divergence" and in the case of an assembly structured on groups of countries, the beta convergence which assumes that the differences in the income per capita will reduce in time or the absolute beta convergence, the conditional beta convergence or the convergence of time series, the analysis of co integration series, dynamic distribution (Ghosh, 2015; Patache, 2013; Próchniak & Witkowski, 2013; Albu, 2012; Iancu, 2008; Pecican, 2008; Iancu, 2007).

Regarding the term beta convergence generated by the regression analysis of the level of development of countries or regions, it can have three basic forms namely (Iancu, 2007, p. 27): (1) absolute β convergence that occurs when the poorer countries will grow faster than the richer countries; (2) the β group (clubs) convergence, which takes into account the inclusion in the studied panel of those countries/regions that have a certain technological and institutional homogeneity, of economic policy, and (3) the conditional  $\beta$  convergence, which considers the vector of determinant factors of growth as additional variables which define the differences between the economies that require (proxy for) the achievement of a state of equilibrium, by introducing in the regression, equations of variables that keep the balance of economies steady. Regarding the term "club" convergence, Baumol introduced it in 1986, in order to describe behaviors and evolutions of a subset of savings (Baumol, 1986). In what the relationship between FDI and real convergence is concerned, in the specialized literature there are several studies that argue the fact that free movement, without restrictions, of production factors between European countries and regions especially through the integration of the capital market and through foreign direct investments, is an important factor in order to achieve real convergence (Iancu, 2008, p. 28). This scenario can be possible by: containing a consistent investment effort, favored by a high rate of savings and of FDI; increasing the level of qualification and the responsiveness to new human capital; enhancing competitiveness and increasing the social cohesion, recording an overall modernization of the country; and very important, constantly and rapidly growing the total productivity, the factors of production, which, depends on the growth of the labour productivity (Dăianu & Vrânceanu, 2002, p. 289; Dinu & Socol, 2006, p. 14; Neagu, 2009, p. 51). Strat and Popovici (2015) analyzed the evolution of the disparities between the member states of the European Union, separated into two groups, as it follows: the new member states (13 countries that joined the EU since 2004) and the old states in the European Union, states that joined before the last enlargement round. Therein, in order to reach the purpose, the Gini coefficients were used in the research, pursuing to obtain evidence demonstrating that FDI are a determining factor for real and structural convergence in the EU. The results showed that FDI could be considered an amplifier of real convergence only for the new

member states. In addition, real convergence appears to depend crucially on the ability of the countries to harness the international transfer of technology in particular through foreign direct investments (Martín et al., 2001, p. 1).

FDI are an important source concerning the process of real convergence, because FDI influence sources such as income convergence, productivity and structural convergence, by increasing the capital stock of the economy; lead to an increase of the productivity and of the income; contribute to increasing the degree of employment (Marinas, 2006, p. 75). Also, FDI contribute to the economic growth and real convergence through at least two ways: first through the transfer of technology and know-how, the technological process can be stimulated, thereby contributing to an increase in labour productivity; secondly, FDI offer financial resources, contributing to the capital accumulation (Borys et al., 2008, p. 24). One of the features of transition and of the process of real convergence is the accumulation of the production capacity to produce goods of a better quality, especially due to inflows of FDI in the manufacturing sector (Egert, 2007, p. 24). Thus, the flow of FDI plays an important role on the productivity convergence in Central and Eastern Europe, with a strong effect on the productivity convergence both on the country and industry level. But the impact of FDI on productivity depends crucially on the absorption capacity of the recipient economies and industries (Bijsterbosch & Kolasa, 2010). Šmídková, Barrell and Holland presented through a study a model for calculating the real exchange rates for five countries (Czech Republic, Estonia, Hungary, Poland and Slovenia) which were at the time in the pre-accession. Within this study the authors showed that FDI (relative to GDP) are the driving force of economic convergence in the five countries analyzed, highlighting the following aspect: the bigger the stock of FDI, the bigger the economic integration, which in turn tends to promote trade and improve net exports (Šmídková et al., 2002, p. 8). Although the intensification of integration has contributed, in general, to an economic growth, it did not necessarily lead to the reduction of disparities between the less and the most developed states because the mechanisms of the internal market had positive effects only if the conditions for their operation were met, namely: an attractive business environment, foreign direct investments, trusted official institutions, infrastructure, etc. (Tiganasu, Pascariu & Baciu, 2014, p. 175). In such a context, foreign direct investments are one of the main factors in the integration of countries in transition, in the global economy, especially in the European Union (Sohinger, 2005, p. 73).

## 3. Research Methodology

In order to achieve the purpose of this paper, there was used data sources from the databases of Eurostat, the National Bank of Romania, the Bulgarian National Bank, for the variables: FDI stock, GDP/capita (Mill. PPS/capita), unemployment rate, the

labour productivity per person employed and the minimum wage, for the period 2004 -2014, annual series. There was used this period of time for the analysis due to the availability of statistical information.

To express real convergence, there is selected the following indicators: GDP/capita, the unemployment rate, the labour productivity per person employed and the minimum wage.

By analyzing the impact of FDI on indicators such as GDP per capita, the unemployment rate, labour productivity per person employed and the minimum wage, the purpose is to verify whether the FDI has an impact on real convergence, expressed through the indicators mentioned above.

Given that at present there are many approaches and methodologies used to calculate real convergence, in this section there is intended to achieve a modest application of statistical methods, respectively, the correlation analysis and the regression analysis in order to assess the influence of FDI in Romania and Bulgaria.

Although in the economic literature there are various calculation methodologies of real convergence, the selection of the calculation methodology is determined by the available statistical data and by the purpose of the analysis.

Thus, in order to study the impact of FDI on real convergence, there is estimated a simple regression model of the FDI (independent variable) and each of the indicators of real convergence (dependent variable).

The regression model has the following form:

 $Yt = \beta 0 + \beta 1 * FDIstocks_t + \varepsilon t'$ ,

where:

β0 - constant (originally ordered);

β1 - regression coefficient (slope);

FDIstocks = foreign direct investment stocks;

Y = convergence indicators (GDP per capita, the unemployment rate, labour productivity per person employed and the minimum wage);

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t = 2004, 2005, \dots, 2014.
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In this research, we formulated the following assumptions:

Hypothesis 1: FDI stocks have a significant influence on real convergence in Romania;

Hypothesis 2: FDI stocks have a significant influence on real convergence in Bulgaria.

#### 4. Results and Discussion

The link between the stock of FDI and the variables expressing real convergence in Romania is graphed using the correlogram (the point cloud chart type, Chart 1). It can be observed, based on the correlogram, that there is a direct and strong link between the FDI and the following indicators: GDP/capita, labour productivity and the minimum wage. Instead, there is a reversed and weak link between FDI and the unemployment rate.

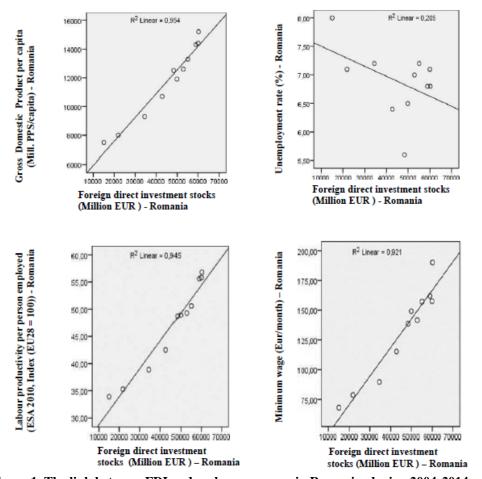


Figure 1. The link between FDI and real convergence in Romania, during 2004-2014

Source: Authors' representation

The results of the correlation analysis allow us to evaluate the meaning and the intensity of the relationship between the FDI stocks and the convergence indicators. The values of the bivariate Pearson correlation coefficients are positive and close to the value of 1, in the event of the link between the FDI and the following indicators: GDP/capita, labour productivity and the minimum wage. Therefore, there is a direct and close connection between FDI and the three indicators of convergence. The correlation between the analyzed variables is significant in the conditions of an assumed risk of 0.1%. However, between the FDI and the unemployment rate there is a reversed and weak link (the value of the Pearson correlation coefficient is -0.452). The relatively modest volume of FDI in the Romanian economy, which cannot yet generate significant effects on the unemployment rate, could explain this result. In addition, the background of the global economic crisis triggered in 2008, which caused in Romania as well as in Bulgaria, a powerful process of dismissals, with drastic effects on the variable unemployment rate can also explain the result. Furthermore, the correlation between these two variables is not significant statistically speaking (the Sig. significance level of the Student test applied in order to test the correlation coefficient is higher than 5%).

Table 1. The Pearson correlation coefficient between FDI and the real convergence indicators in Romania

#### Correlations

		FDI stocks (Mill. EUR)	GDP/capit a (Mill. PPS/capit a)	Unemployme nt rate (%)	Labour productivity per person employed (ESA 2010, Index (EU28 = 100))	Minimum wage (EUR/month )
FDI stocks (Mill. EUR)	Pearson Correlati on	1	,977**	-,452	,972**	,960**
	Sig. (2-tailed)		,000	,162	,000	,000
	N	11	11	11	11	11
GDP/capita (Mill. /capita)	Pearson Correlati on	,977**	1	-,394	,995**	,980**
	Sig. (2-tailed)	,000		,230	,000	,000
	N	11	11	11	11	11
Unemploym ent rate (%)	Pearson Correlati on	-,452	-,394	1	-,382	-,414

	Sig. (2-tailed)	,162	,230		,247	,206
	N	11	11	11	11	11
Labour productivity per person	Pearson Correlatio n	,972**	,995**	-,382	1	,977**
employed (ESA 2010,	Sig. (2-tailed)	,000	,000	,247		,000
Index (EU28 = 100))	N	11	11	11	11	11
Minimum wage (EUR/month)	Pearson Correlatio n	,960**	,980**	-,414	,977**	1
	Sig. (2-tailed)	,000	,000	,206	,000	
	N	11	11	11	11	11

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' calculation

The regression coefficients between the FDI stocks and the indicators of real convergence in the Romanian economy are obtained by estimating the four models of regression. There was also estimated the determination ratio for each model and the models were validated as a whole but also as individual factors. We presented the estimates of the coefficients of the regression models and of the coefficient determination (R-squared) synthetically in the following table.

Table 2. The coefficients for the regression model between FDI and the real convergence indicators, in Romania

The dependent variable	The constant (b <sub>0</sub> )	The regression coefficient (b <sub>1</sub> )	The coefficient of determination (R <sup>2</sup> )
GDP/capita (Mill.PPS/capita)	4295,808***	0,165***	0,954
Unemployment rate (%)	7,678***	-1,753E-5	0,205
Labour productivity per person employed (ESA 2010, Index (EU28 = 100))	23,638***	0,001***	0,945
Minimum wage (EUR/month)	22,538*	0,002***	0,921

<sup>\*\*\* -</sup> Sig. < 1%, \*\* - Sig. < 5%, \* - Sig. < 10%

Source: Authors' calculation

The coefficient of determination (R<sup>2</sup>) indicates the variation percentage of the dependable variable explained by the FDI stock.

It is observed that the FDI explains over 90% of the variation of the real convergence indicators except the unemployment rate.

The results in the ANOVA table (Table 3, Table 4, Table 5, and Table 6) present the decomposition elements of the total variation, of the dependable variable on variation sources, the value and the significance level of the Fisher test.

For the regression models between the FDI stocks and the indicators GDP/capita, labour productivity and the minimum wage, the Fisher test is statistically significant because the level of significance Sig. is inferior to the assumed risk of 0.1%.

With a 99.9% probability there can be affirmed that the link between FDI and the convergence indicators is statistically significant (except for the variable unemployment rate). We can allow therefore a linear relationship between the studied variables.

Table 3. The ANOVAs results for the regression model between the variables FDI and GDP/capita in Romania

	ANOVA <sup>a</sup>									
			Sum of							
	Model		Squares	df	Mean Square	F	Sig.			
ſ	1 Regi	ression	65216100,295	1	65216100,295	187,343	,000 <sup>b</sup>			
	Resi	dual	3132990,614	9	348110,068					
	Tota	1	68349090,909	10						

- a. Dependent Variable: Gross domestic product per capita (Mill. PPS/capita) Romania
- b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) Romania

Source: Authors' calculation.

Table 4. The ANOVAs results for the regression model between the variables FDI and the unemployment rate in Romania

			ANOVA <sup>a</sup>			
ſ		Sum of				
L	Model	Squares	df	Mean Square	F	Sig.
ſ	1 Regression	,736	1	,736	2,315	,162 <sup>b</sup>
	Residual	2,861	9	,318		
L	Total	3,596	10			

- a. Dependent Variable: Unemployment rate (%) Romania
- b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) Romania

Source: Authors' calculation

Table 5. The ANOVAs results for the regression model between the variables FDI and the labour productivity per each person employed in Romania

#### **ANOVA**<sup>a</sup>

Mo	del	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	630,140	1	630,140	155,953	,000b
	Residual	36,365	9	4,041		
	Total	666,505	10			

a. Dependent Variable: Labour productivity per person employed (ESA 2010, Index (EU28 = 100)) – Romania

b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) - Romania Source: Authors' calculation

Table 6. The ANOVAs results for the regression model between the variables FDI and the minimum wage in Romania

#### **ANOVA**<sup>a</sup>

Mod	del	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13812,501	1	13812,501	105,533	,000b
	Residual	1177,946	9	130,883		
	Total	14990,447	10			

a. Dependent Variable: Minimum wage (EUR/month) - Romania

b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) - Romania Source: Authors' calculation

The coefficient tables for the regression model between FDI and the convergence indicators present the estimated values of the regression coefficients, the standard errors and the significance level of the Student test. The estimates of the regression coefficients are presented in Table 7, Table 8, Table 9 and Table 10.

The regression equations have the following form:

GDPt = 4295.808 + 0.165\* FDIstocks<sub>t</sub> + et'; URt = 7.678 - 1.753\*10-5\* FDIstocks<sub>t</sub> + et';

 $LPt = 23.638 + 0.001* FDIstocks_t + et'; MWt = 22.538 + 0.002* FDIstocks_t + et'$ 

The effect of FDI on the convergence indicators is measured through the regression coefficients (slope): If the FDI stock increases by one Million Euros, then the variable GDP/capita increases, on average, by 0.165 Million PPS/inhabitant; If the FDI stock increases by one Million Euros, then the variable labour productivity increases, on average, by 0.001%. If the FDI stock increases by one Million Euros, then the variable minimum wage increases, on average, by 0.002 Euro. The effect of the FDI stock on the unemployment rate is not statistically significant.

Table 7. The regression coefficients for the regression model between the variables FDI and the GDP/capita in Romania

## Coefficients<sup>a</sup>

	Unstanda Coeffic		Standardized Coefficients		
Model	В	Std. Error	Beta	T	Sig.
1 (Constant)	4295,808	575,765		7,461	,000
Foreign direct investment stocks (Million EUR) - Romania	,165	,012	,977	13,687	,000

a. Dependent Variable: Gross domestic product per capita (Mill. PPS/capita) - Romania Source: Authors' calculation

Table 8. The regression coefficients for the regression model between the variables FDI and the unemployment rate in Romania

## $Coefficients^{a} \\$

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	7,678	,550		13,955	,000
Foreign direct investment stocks (Million EUR) - Romania	-1,753E-5	,000	-,452	-1,521	,162

a. Dependent Variable: Unemployment rate (%) - Romania

Source: Authors' calculation

Table 9. The regression coefficients for the regression model between the variables FDI and the labour productivity in Romania

# Coefficients<sup>a</sup>

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	23,638	1,962		12,051	,000
Foreign direct investment stocks (Million EUR) - Romania		,000	,972	12,488	,000

a. Dependent Variable: Labour productivity per person employed (ESA 2010, Index (EU28 = 100)) - Romania

Source: Authors' calculation

Table 10. The regression coefficients for the regression model between the variables FDI and the minimum wage in Romania

#### Coefficients<sup>a</sup>

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	22,538	11,164		2,019	,074
Foreign direct investment stocks (Million EUR) - Romania	,002	,000	,960	10,273	,000

a. Dependent Variable: Minimum wage (EUR/month) - Romania

Source: Authors' calculation

Testing the significance of the effect of the FDI stocks on the convergence indicators is in fact testing the significance of the regression slope. The statistical assumptions are the following: H0:  $\beta 1 = 0$  (slope is not statistically significant); H1:  $\beta 1 = 0$  (slope is statistically significant). The verification of the H0 hypothesis is performed using the t test (Student) for the regression parameter  $\beta 1$ .

The used t test is:  $t=b_1/S_{\beta 1}$ , where: b- estimation of the regression parameter  $\beta 1$ ;  $S_{\beta 1}-$  estimation of the standard deviation of the estimator  $\beta 1$ .

For the three models analyzed, the regression coefficient is statistically significant, the level of significance of the Student test is lower than the assumed risk (Sig. <0.1%). With a probability of 99%, the slope of the regression line is statistically significant. Therefore, the H0 hypothesis must be rejected, as in Romania the FDI stock has a significant impact on real convergence.

Regarding the impact of the FDI stocks on real convergence in Bulgaria, with the help of the correlogram, it can be observed that there is a direct and substantial connection between the FDI and the following indicators: GDP/capita, labour productivity and the minimum wage.

Compared to Romania, in Bulgaria there is a direct link between the FDI and the unemployment rate (for Romania the connection is reversed). However, similarly, the relationship between these two variables is weak, even very weak in Bulgaria.

The relatively modest volume of FDI in the Bulgarian economy, which cannot yet generate significant effects on the unemployment rate, could explain this result. In addition, in Bulgaria, the result can be explained against the background of the economic crisis triggered in 2008, which caused a significant decrease of the foreign direct investments in the Bulgarian economy, which generated a powerful process of dismissals.

Concurrently, the unemployment rate helps us realize the consequences of the crisis on the economic activity in a country or region. Also, the increase in unemployment amongst the population has a negative impact on the quality of life at the individual level or over the region to which it belongs, context in which it is necessary to create a climate of trust in Bulgaria and Romania, as a measure for recovering foreign investments.

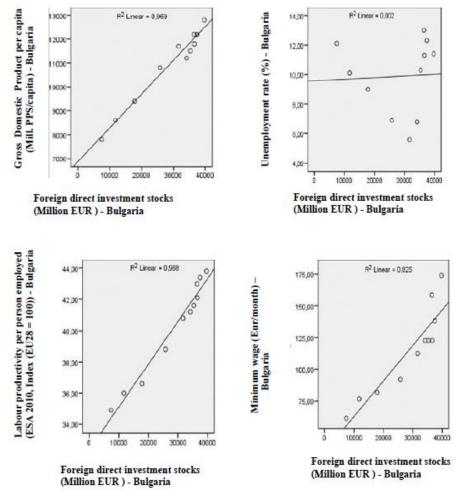


Figure 2. The link between FDI and the real convergence indicators in Bulgaria during the period 2004-2014

 $Source: Authors'\ representation$ 

The Pearson bivariate correlation coefficients are positive and statistically significant if there is a link between the FDI stocks and the following indicators: GDP/capita,

labour productivity and the minimum wage. So in Bulgaria there is also a direct and close connection between FDI and the three indicators of convergence. Moreover, between the FDI stocks and the unemployment rate there is no link that can be statistically significant (the level of significance Sig. of the Student test applied in order to test the correlation coefficient is above 5%).

Table 11. The Pearson correlation coefficient between FDI and real convergence indicators, for Bulgaria

# Correlations

			Correlatio			
					Labour	
					productivit	
					y per	
					person	
					employed	
		FDI	~~~.		(ESA 2010,	2.51
		stocks	GDP/capita		Index	Minimum
		(Mill.	(Mill.	Unemploymen	(EU28 =	wage
	_	EUR)	PPS/capita)	t rate (%)	100))	(EUR/month)
FDI stocks (Mill.	Pearson Correlation	1	,984**	,050	,984**	,908**
EUR)	Sig. (2-tailed)		,000	,885	,000	,000
	N	11	11	11	11	11
GDP/capita (Mill.	Pearson Correlation	,984**	1	,037	,979**	,922**
PPS/capita)	Sig. (2-tailed)	,000		,914	,000	,000
	N	11	11	11	11	11
	Pearson Correlation	,050	,037	1	,181	,291
(%)	Sig. (2-tailed)	,885	,914		,594	,386
	N	11	11	11	11	11
Labour productivity	Pearson Correlation	,984**	,979**	,181	1	,950**
per person employed	tailed)	,000	,000	,594		,000
(ESA 2010, Index (EU28 = 100))		11	11	11	11	11

Minimum wage	Pearson Correlation	,908**	,922**	,291	,950**	1
(EUR/mont h))	Sig. (2-tailed)	,000	,000	,386	,000	
	N	11	11	11	11	11

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' Calculation

The estimation of the coefficients of the regression models and of the coefficient of determination (R-squared) is presented, synthetically in Table 12. The regression models between the FDI stocks and the indicators of real convergence were also estimated.

Table 12. The regression coefficients for the regression model of the variable FDI and the real convergence indicators in Bulgaria

The dependent variable	The constant (b <sub>0</sub> )	The regression coefficient (b <sub>1</sub> )	The coefficient of determination (R <sup>2</sup> )
GDP/capita (M PPS/capita)	ill. 6882,973***	0,141***	0,969
Unemployment rate (%)	9,577***	1,100E-5	0,002
Labour productivity person employed (ESA 20 Index (EU28 = 100))	per 10, 32,372***	0,000274***	0,968
Minimum wa (EUR/month)	ge 34,934**	0,003***	0,825

<sup>\*\*\* -</sup> Sig. < 1%, \*\* - Sig. < 5%, \* - Sig. < 10%

Source: Authors' calculation

The results from the ANOVA tables (Table 13, Table 14, Table 15 and Table 16) represent the decomposition of the total variance, of the dependent variable, on variation sources, the value of the Fisher test and its significance. For the regression models of the variable FDI stocks and the indicators GDP/capita, labour productivity and the minimum wage, the Fisher test is statistically significant so, the link between FDI and the indicators of convergence, is statistically significant (except the variable rate of unemployment) also in Bulgaria.

Table 13. The ANOVAs results for the regression model between the variables FDI and GDP per capita for Bulgaria

## **ANOVA**<sup>a</sup>

N	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25241931,892		25241931,892	281,453	
	Residual	807159,017	9	89684,335		
	Total	26049090,909	10			

a. Dependent Variable: Gross domestic product per capita ( Mill. PPS/capita) – Bulgaria

b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) - Bulgaria

Source: Authors' calculation

Table 14. The ANOVAs results for the regression model between the variables FDI and the unemployment rate for Bulgaria

## **ANOVA**<sup>a</sup>

Mo	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,154	1	,154	,022	,885 <sup>b</sup>
	Residual	62,375	9	6,931		
	Total	62,529	10			

a. Dependent Variable: Unemployment rate (%) - Bulgaria

b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) - Bulgaria

Source: Authors' calculation

Table 15. The ANOVAs results for the regression model between the variables FDI and labour productivity per person employed for Bulgaria

## **ANOVA**<sup>a</sup>

Mo	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95,422	1	95,422	268,561	,000b
	Residual	3,198	9	,355		
	Total	98,620	10			

a. Dependent Variable: Labour productivity per person employed (ESA 2010, Index (EU28 = 100)) – Bulgaria

b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) - Bulgaria

Source: Authors' calculation

Table 16. The ANOVAs results for the regression model between the variables FDI and the minimum wage for Bulgaria

## **ANOVA**<sup>a</sup>

Mo	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9934,690	1	9934,690	42,362	,000b
	Residual	2110,663	9	234,518		
	Total	12045,353	10			

- a. Dependent Variable: Minimum wage (EUR/month) Bulgaria
- b. Predictors: (Constant), Foreign direct investment stocks (Million EUR) Bulgaria

Source: Authors' calculation

The tables of the coefficients for the regression model between the FDI and the convergence indicators, present the estimated values of the regression coefficients, the standard errors and the significance of the Student test.

The estimations of the regression coefficients are shown in Table 17, Table 18, Table 19 and Table 20.

The regression equations have the following form:

 $GDP_t = 6882.973 + 0.141* FDIstocks_t + e_t$ ;

 $URt = 9.577 + 1.100* FDIstocks_t + e_t;$ 

 $LP_t = 32.372 + 0.000274*$  FDIstocks<sub>t</sub>+ e<sub>t</sub>;

 $MW_t = 34.934 + 0.003* FDIstocks_t + e_t$ 

Table 17. The regression coefficients for the regression model between the variables FDI and GDP per capita, for Bulgaria

#### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1 (Con	istant)	6882,973	256,409		26,844	,000
FDI EUR	stocks (Mill. ) – Bulgaria	,141	,008	,984	16,777	,000

a. Dependent Variable: Gross domestic product per capita (Mill. PPS/capita) - Bulgaria Source: Authors' calculation

Table 18. The regression coefficients for the regression model between the variables FDI and the unemployment rate, for Bulgaria

## Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	9,577	2,254		4,249	,002
	FDI stocks (Mill. EUR) – Bulgaria	1,100E-5	,000,	,050	,149	,885

a. Dependent Variable: Unemployment rate (%) - Bulgaria

Source: Authors' calculation

Table 19. The regression coefficients for the regression model between the variables FDI and labour productivity per person employed, for Bulgaria

#### Coefficients<sup>a</sup>

ĺ	Unstandardized		Standardized		
Coefficients		Coefficients			
ĺ	В	Std. Error	Beta	t	Sig.
ĺ	32,372	,510		63,429	,000
	,000274	,000017	,984	16,388	,000

a. Dependent Variable: Labour productivity per person employed (ESA 2010, Index (EU28 = 100)) - Bulgaria

Source: Authors' calculation

Table 20. The regression coefficients for regression model between the variables FDI and the minimum wage, in Bulgaria

#### Coefficients<sup>a</sup>

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error		t	Sig.
1 (Constant)	34,934	13,112		2,664	·
FDI stocks (Mill. EUR) - Bulgaria	,003	,000	,908	6,509	,000

a. Dependent Variable: Minimum wage (EUR/month) - Bulgaria

Source: Authors' calculation

The effect of FDI on the convergence indicators is measured through the regression coefficients (slope): If in Bulgaria, the FDI stock increases by one Million Euros, the variable GDP/capita increases on average by 0.141 Million PPS/inhabitant; If in Bulgaria, the FDI stock increases increases by one Million Euros, the variable labour

productivity increases, on average, by 0.000274%; If in Bulgaria, the FDI increases by one Million Euros, the variable minimum wage increases, on average, by 0,003 Euro. Therefore, the results show that in Bulgaria, the impact of FDI on real convergence is significant.

#### 5. Conclusion

The topic of foreign direct investments is widely debated in the economic literature and analyzed from different perspectives, which refer to the potential effects, positive or negative, in the origin or host economies, to benefits, to costs, to their contribution in amplifying real convergence and development by bringing capital, technology, know-how, superior management, help to increase the revenues on the state budget, generate creative activities with added value and demonstrate excellence in the conduct of operations on technological innovation.

Regarding real convergence, it may constitute an important challenge for the current field of research, given that the economic theory offers a variety of disputed contents, variables and meanings that make it difficult to perform meaningful comparisons between the results of different studies in the profile literature regarding real convergence.

The purpose of this paper was to analyze the impact of FDI on real convergence. From this perspective based on analyzes carried out it was found that the link between FDI and indicators of real convergence for both Romania and Bulgaria is statistically significant (except for the variable rate of unemployment), which confirmed our expectations because logically, foreign firms bring their own technology, appropriate for the work of the employees, in order for their employees to produce as much as possible. In addition, foreign enterprises bring know – how, superior management within the companies and pay relatively higher wages than domestically - owned firms, but ask in return for higher productivity. Instead, in what concerns the unemployment rate, the analyzes showed a reversed and weak link between the FDI and the unemployment rate in Romania, while in Bulgaria, there was a direct link between the FDI and the unemployment rate, however, similarly, the link between these two variables is weak, even very weak in Bulgaria.

The explanation of these results concerning the impact of FDI on the unemployment rate could be given by the relatively modest FDI stock in both the Romanian and the Bulgarian economy, which cannot generate yet significant effects on the unemployment rate in the economies analyzed (Romania and Bulgaria).

In order to stimulate the FDI, decision makers may establish a set of general measures intended to attract FDI, namely: stimulating FDI by creating a favorable business environment, an appropriate legislative and institutional framework, simplifying the procedures for the entrance of foreign investors in the economy and

not least providing facilities to attract FDI, especially in the disadvantaged regions, which have the highest unemployment rates, in order to create jobs (for example in December 2014 the regions in Romania which registered the highest unemployment rates were the following: south west Oltenia (8.2%), followed by the south region (7.3%) and the southeast region with an unemployment rate of 6.9%, according to data from the the Romanian National Institute of Statistics. While in Bulgaria the regions that have the highest unemployment rates in 2014 were: Severozapaden (14.2%), Severen tsentralen (13.2%), Severoiztochen (12.6%) and the Yuzhen tsentralen region with an unemployment rate of 12.0 %, according to data from the Bulgarian National Institute of Statistics.

Another alternative with possible effects in increasing employment would be attracting European funds to generate jobs. In this context, we propose as future directions of research and analysis, the impact of European funds on real convergence.

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