Regional FDI distribution in Bulgaria

MSc Graduation Thesis

ABSTRACT: This study seeks to understand why certain administrative regions in Bulgaria attract more FDI than others. For the purpose it plots data from the national statistics institute of Bulgaria on NUTS 3 level against data from FDI Markets database using a negative binomial model. The analysis shows that only major city regions in Bulgaria attract the most FDI with the rest significantly trailing behind.

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1 INTRODUCTION

Today's rapidly changing business and trade environment presents many opportunities and challenges for multinational enterprises (MNEs) in terms of strategic geographical expansion or outsourcing of their business activities. It introduces a new degree of complexity in competition both on regional and international level. Investing abroad often follows a strategic motivation, such as seeking to explore and cater to new markets or to acquire unique physical or intellectual resources.

MNEs global strategic decisions are most often observed in host countries as inward foreign direct investment (FDI) and have important implications for local government, markets and labor force. Inward FDI can affect local population in different ways. An example of this is Hindustan Lever's outsourcing of production activities in Kodaikanal, India, which led to a severe mercury pollution of the local river in 2001 damaging regional flora and fauna as well as endangering the lives of locals (NY Times, 2003). The same company however has successfully outsourced and runs an operating center in Bangalore, which employs thousands and enables their and their families' wellbeing. From that perspective, with their ability to make or break local markets and have a significant societal impact, understanding the underlying reasons behind these decisions is crucially important for local government and regional cohesion policy. From an institutional point of view this is especially important when countries are part of a larger economic entity as is the case of Bulgaria in the European Union, where trade markets are open and free goods movement enabled.

Significant contributions have thus far been made into understanding the underlying rationale of FDI, its effects in developing and developed economies on macroeconomic level, but to our knowledge there is insufficient research into regional characteristics and their effect on attracting FDI to host countries, especially the transition economies of Eastern Europe. Hence investigating the large disparities between capital, second tier city and rural regions is compelling not only from a societal point of view, but also from a scientific one.

This paper aims to build on the current base of knowledge and introduce further clarity by studying Bulgaria as one of the transition economies of the European Union. It investigates the individual location decisions of MNEs in Bulgaria on a regional level and more specifically, the role of regional characteristics in determining the investment decision. The analysis is further discussed and evaluated from a policy perspective and conclusions will be drawn thereupon.

2 LITERATURE REVIEW

2.1 THEORETICAL FRAMEWORK

The publication of *The Road to a Free Economy* in 1990 (Kornai, 1990) brought about an enormous surge in transition studies. The majority of these studies have been focused predominantly on the most successfully developing countries, such as the Czech Republic, Hungary and Poland and not so much on the laggards like Bulgaria (Kalotay, 2008). The same is true for the studies of FDI in transition countries (Hunya, 2000). Case studies have only recently started to appear and continue the trend based on the frontrunners, such as the investigation of FDI likelihood based on regional characteristics in Poland, by Chidlow et al (2009). Such studies give an interesting theoretical insight and provide a methodological base that acts as a solid foundation for further analysis of other transition economies.

It has been established that the motives behind foreign direct investment can be accredited to different factors (Chidlow, 2009). Porter, 2007, argues that "… there are substantial differences in economic performance across regions in virtually every nation. This suggest that many of the essential determinants of economic performance are to be found at the regional level".

In approaching the issue of studying FDI motivations there are two general strings of economic theory, considered in this paper, which suggest complementary paradigms of the underlying factors supporting such decisions.

One of these is the so called new geographic economy (NGE) (Krugman 1991, 1993, 1996). Krugman proposes that agglomeration economies are explained by a trade-off on gains in production in relation to transportation costs. He shows that the location of economic activity is determined by two groups of factors (Chidlow, 2009).

The first group relates to natural advantages such as market size, location and economies arising from clustering, such as knowledge spillovers and intercompany linkages. These are more broadly classified as agglomeration factors.

The second group relates to market forces, such as labor costs and other factors, such as institutional trust, corruption and pollution among others. These fall under the description of geographical factors. Campos and Kinoshita (2003) and Pusterla and Resmini (2005) find agglomeration economies as a primary determinant of regional distribution of FDI. Martin and Velazquez (2000) find that sharing a common border in OECD countries has a positive significant effect on FDI. Studies relating to

agglomeration and geographical factors, like the aforementioned ones put different weights on the importance of each factor, based on the region and industry, which the FDI in question relates to.

The second economic lens that research takes advantage to look upon the FDI question is the one of Dunning's eclectic paradigm (Dunning, 1993). Dunning argues that firms base their investment decisions on three types of prospective advantages: ownership advantages, internalization advantages and location advantages. In essence the investment flows coming out of these are viewed either as market seeking, efficiency seeking or resource seeking FDI.

Market seeking FDI pertains to a location decision, based on satisfying unexplored local markets demand. Such decisions can be based on weak local competition, undersupplied markets, availability of gaps for goods or services among others. Primary goal is to extract consumer surplus and realize company gains thereof. Efficiency seeking investments are done with the intention to optimize production functions, by finding cheaper labor or profiting from agglomeration economies in the investment location. Last, but not least, resource seeking FDI strives to explore unique natural or intellectual resources, an example in the latter case would be otherwise unattainable strategic know-how.

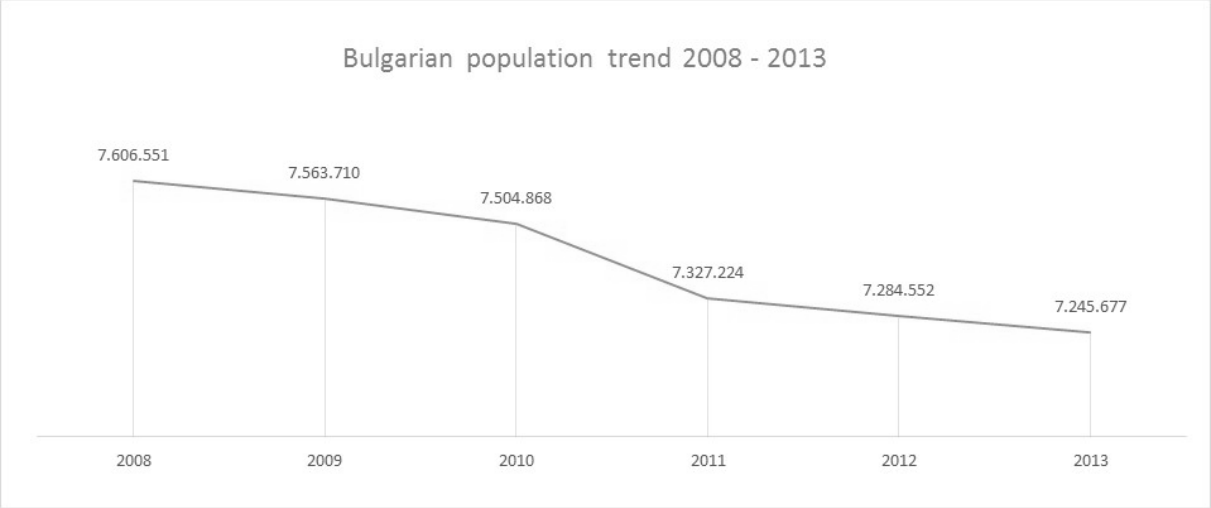
Dunning's eclectic paradigm and NEG are the theoretical foundation upon which this paper will analyze FDI decisions in Bulgaria and thus the prescriptive part of this study. The slower transition economies, such as Bulgaria, however have a unique set of features, which makes it important to include a descriptive part and an extensive presentation of the facts and figures, as it is possible that the theoretical foundation does not cover the extremities and specificity of certain investments and the reasons supporting these. Henceforth the paper will present an overview of the economic climate and a number of advantages and disadvantages of Bulgaria as a location for foreign direct investment.

2.2 MACROECONOMIC INDICATORS

The fall of the communist regime and centrally planned economy in the 1990s led Bulgaria into a long and turbulent political and economic transition, which eventually resulted in a hard earned relatively stable socioeconomic climate. After a severe banking and financial currency crisis in 1996 and deeply rooted problems with crime, corruption, political and institutional instability, the country was delayed entry into the European Union during its 5th enlargement in 2004 and became a full-fledged member only on the 1st of January 2007. Both the period leading up to EU accession from 2004 to 2007 and the time Bulgaria has spent under the EU umbrella have led to a vast increase in inward FDI, at least partly due to increase in trust and investor confidence.

Up until 2005 the majority of FDI had come from neighboring countries, such as Greece and Turkey, Austria and of course the Russian Federation (Kalotay 2009; Bitzenis 2003, 2004, 2006, 2007, 2009), with which Bulgaria has a long standing positive relationship following a couple of historic events, such as the Russo-Turkish wars, which effectively helped Bulgaria achieve independence from Ottoman rule, and later its status as a satellite for the socialist regime later. Recent figures however show that the primary sources of FDI are changing. A report on the investing landscape in Bulgaria produced by KPMG in 2015 shows that the most significant investor currently is the Netherlands, shortly followed by Austria. Among the top ten investors are also the UK, Russia, Switzerland, Belgium, Spain, Hungary, Czech Republic and the USA. It is interesting that we no longer see Greece and Turkey in the top 10 list, which is likely a consequence of the financial crisis and more substantial international and Western investors gaining momentum.

Furthermore, the three most important sectors, which FDI was partly composed of, are real estate (40.5% of total FDI), financial services (13.9% of total) and energy (8.7% of total) (KPMG, 2015). FDI at the end of 2013 was €1.182 million, which represented 2.8% of total GDP. In terms of market size and labor force, latest figures from the World Bank show a shrinking population of 7.24 million in 2013 as compared to 8.2 million at the break of the millennium. This change is attributed to a persistently negative population growth rate, which has trended around -1% for the past 15 years and in addition to that, a negative migration rate (World Bank, 2015). Labor force is estimated at 3.37 million persons, which is 53.9% of people older than 15 years old (National Statistical Institute of Bulgaria, 2015).



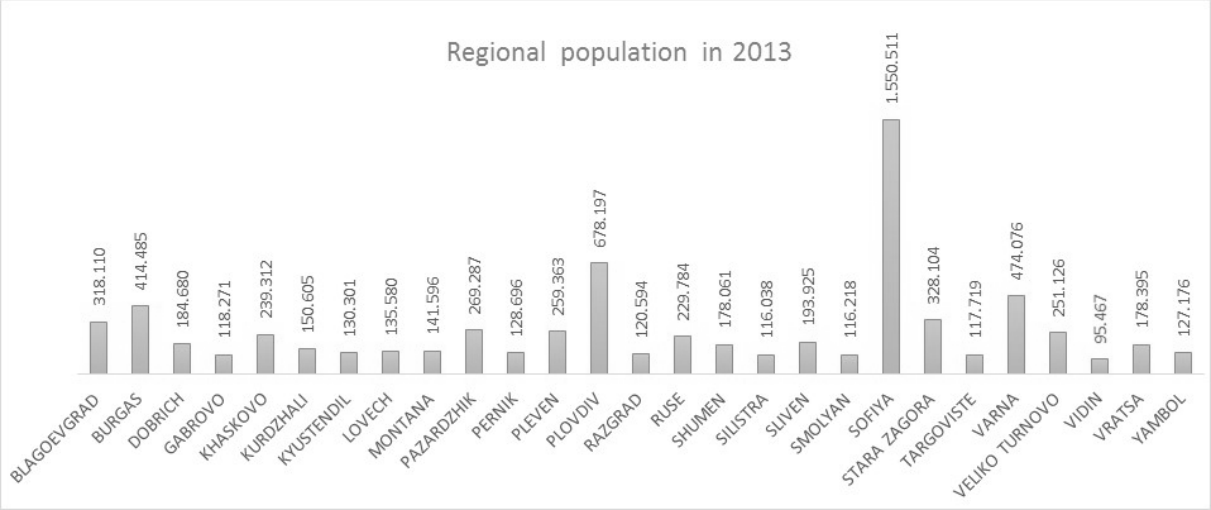
Albeit skilled and well-educated, labor in Bulgaria is much cheaper as compared to Western Europe and even the majority of transition economies, an indicator for which is the average gross monthly wage, which was €433 in the last quarter of 2014. It represents also a slight increase over 2013 levels of €412. In addition to that gross national income (GNI) per capita was estimated at $7.420, which is still

relatively low, compared to neighbors Romania at $9.370 and Croatia at $13.020 and overall EU average as high as $35.672 (Figure 2; World Bank, 2015). The fact that these wages are so low presents an opportunity for efficiency investments as is the case under the second set of factors of Krugman's NEG.

2.3 REGIONAL OVERVIEW

Examining the regional characteristics, such as population, average wages, education and juxtaposing these to the amount of FDI received on the scale of NUTS 3 elucidates a major discrepancy between the capital region of Sofia and the rest of the administrative regions. Below graphs are created with data from the National Statistics Institute of Bulgaria.

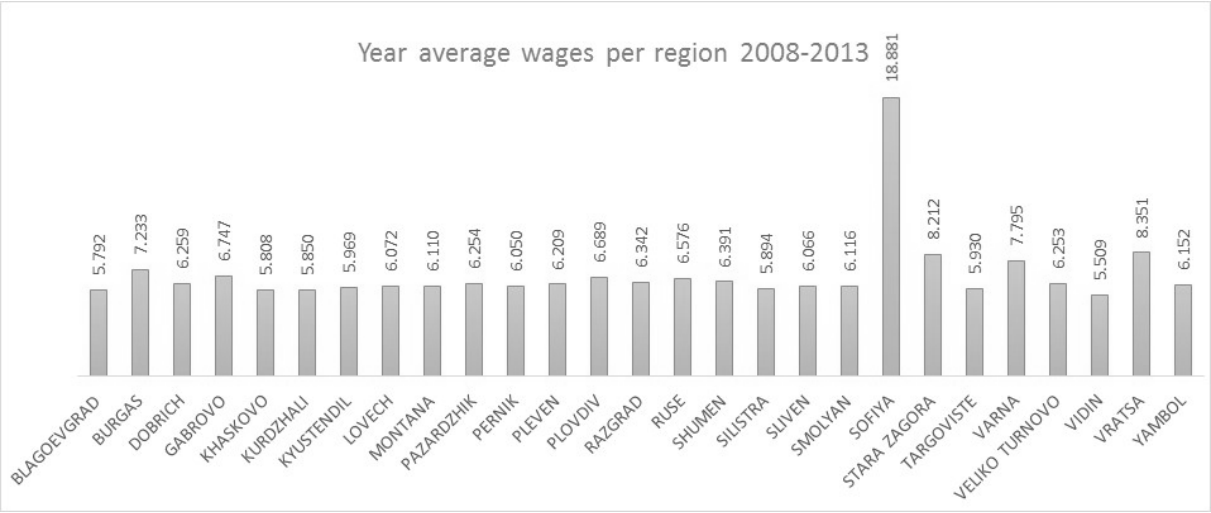
The capital region of Sofia is the most populated out of all the regions, with roughly 1.55 million people at the end of 2013. This is more than twice larger than the second largest Plovdiv. Vidin is the least populated region of all, with 95 thousand citizen. It is also the poorest region in Bulgaria and in the European Union altogether according to Eurostat (2015).



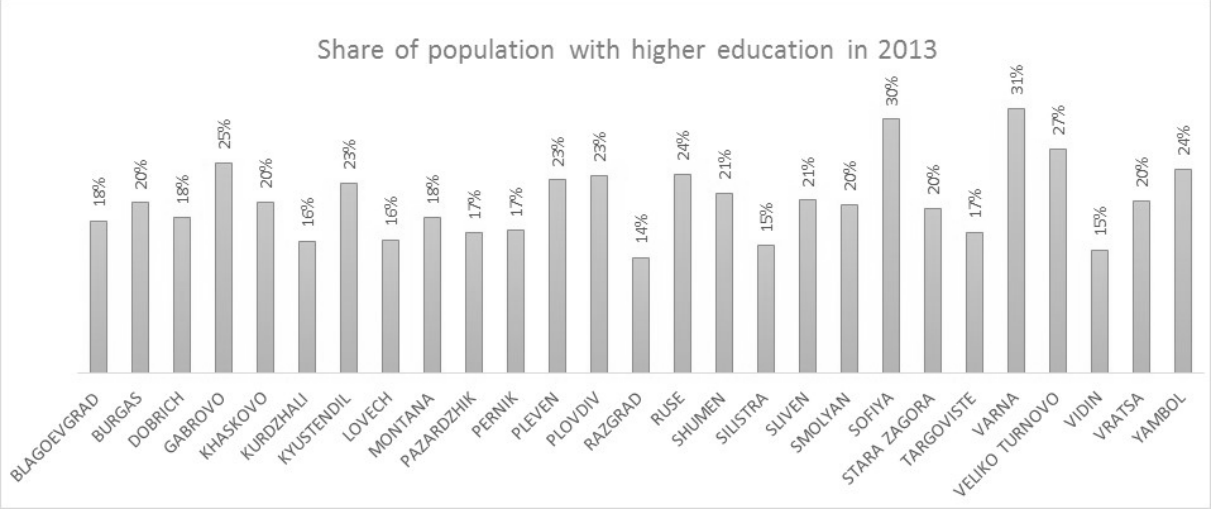
The data is not surprising and can be largely attributed to the strong wave of urbanization of the last century. Under communism land had been made public property where nobody was allowed to own build on. Thereby the population had also been forced to move away from the villages towards cities as these locations were the only options to lead a social and working life, while receiving a certain set of living conditions in the form of apartment blocks. The search for opportunities drove the population out of the smaller villages towards the cities in waves of urbanization by the end of the 20th century. In 1990 with the fall of communism, massive scale privatization all of a sudden left many unmatched lots of land with an owner. Generations of people born under the regime had forgotten the way to live in villages and had lost trace of their property, hence there wasn't any sign of a return to the mostly deserted villages. Typical Bulgarian villages are hardly self-sustained economic entities, more often than not

lacking the basic means to keep population fed, educated and occupied. Hence to this day majority of the population inhabits the major cities.

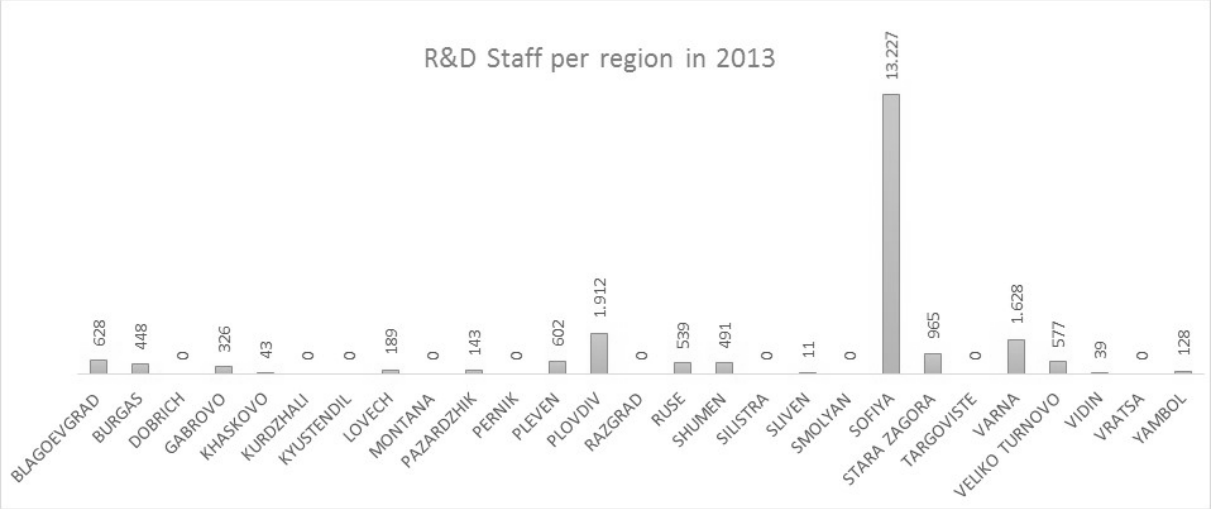
Below graph represents the average wage per region in the country. In turn these statistics are representative of the potential market-size available to foreign direct investors and the relative size of these markets across geographical regions. A market-seeking FDI is hence likely to pick the highest populated regions in order to explore potentially unsatisfied demand.



Highest yearly average wages, following the pattern of population, are concentrated in the capital region, more than twice higher than the average of all other regions. Plovdiv however lacks behind Vratsa, Stara Zagora and the coastal regions of Varna and Burgas in terms of wages. Vidin is at the bottom of the scale. From an efficiency seeking perspective, an FDI of that kind would seek out the regions with the lowest costs of labor. Efficiency however on an international scale can be obtained through transportation economies from geographical proximity or through wages being higher in the source country, leading to gains from investing in a lower wage country altogether bypassing the regional wage effect.

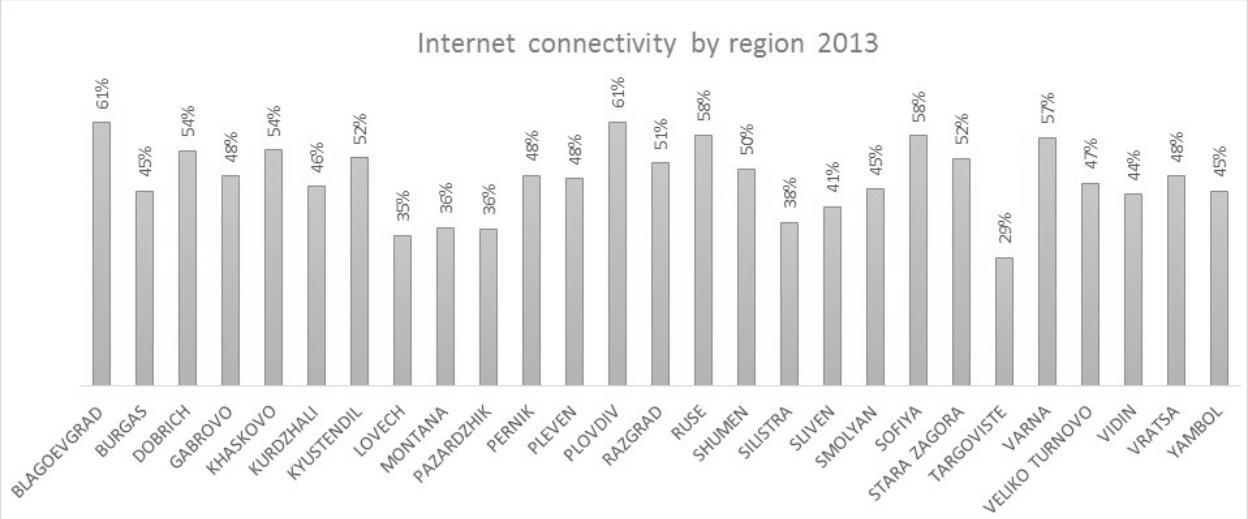


The region of Varna is home to the largest population share of persons with completed higher education, a little over 31%. Second is the capital Sofia with 30%, followed by the rest of the regions, which exhibit. Similar trends are observed in the distribution of R&D personnel regionally with highest concentration in the capital region. Absolute number of staff is over 6 times larger in the capital than the second and third best, Plovdiv and Varna accordingly.



From the perspective of a resource-seeking FDI, regions with a higher share of educated population and R&D staff would fit within the context of the country as the relatively more attractive places to invest. This is due to the generally low availability of valuable natural resources and lack of scientific and industrial "know-how".

It is worthwhile to observe that despite the presence of over 900 internet providers in the country (KPMG, 2015), some regions like Targoviste remain with an access rate lower than 30%. This is can be indicative of market-seeking behavior and a lack of policy on a regional and country level towards homogenous modernization of infrastructure. It could also signify that regions with large cities have a larger amount of population with access to internet, due to urbanization.



3 DATA & VARIABLES

The data for this study has been collected from two primary sources. One is the National Statistics Institute of Bulgaria and the second is a dataset on FDI flows on a regional level, courtesy of FDI Markets.

The NSI dataset includes a range of regional characteristics, such as the ones presented in the literature review, including population, average wages, share of population with completed university education, road density and internet access among others. It spans 6 years from 2008 to 2013 and constitutes a strongly balanced panel dataset, with observations for each of the 28 administrative regions on NUTS 3 level.

The FDI markets dataset consists of foreign direct investment records on NUTS 3 level in Bulgaria. It contains observations among a longer time span, however results have been considered explicitly between 2008 and 2013 and matched against NSI data by region and year.

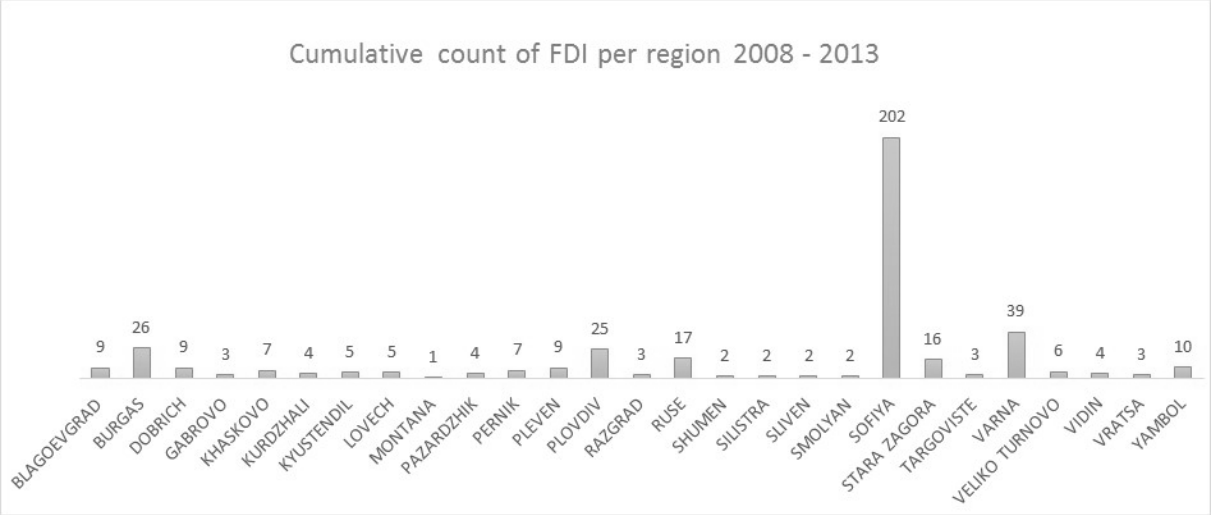
Hereby from the two sets we created a strongly balanced panel dataset with 162 observations and 6 years of measurements for each region. Important to note is that NSI makes a distinction between Sofia-city and Sofia-region in their database, however both regions are going to be studied as one consolidated part in this paper. This is to homogenize the data available for the capital city with its surrounding region, as is the case with the rest of the municipal regions. An example to explain the rationale is the region of Varna, which shows records for the length of motorways, however the city of Sofia has no records thereof in the NSI database as it only pertains to the city.

For the purpose of this research we created eight count variables in four distinct categories out of the complete dataset, based on a number of assumptions relating to FDI research and other possible distinctions.

The first category represents total FDI count per region and comprises only of a single count variable, which is the count of foreign direct investment per region on a yearly basis, between 2008 and 2013.

The second category of count variables we created are based on the Dunning's paradigm of MNE choice to invest abroad. As discussed in the literature overview, the eclectic paradigm proposes three types of foreign direct investment: market seeking, efficiency seeking and resource seeking. Efficiency seeking FDI is also partly explaining Krugman's NEG, hence this variable could be seen from both prisms. Our dataset contains descriptions of the type of industrial activity for each investment made. Based on these activity types we have distinguished three count variables pertaining to each motivation in the aforementioned paradigm. The choice of flagging an activity as either pertaining to a market seeking, efficiency seeking or resource seeking investment is based on an arbitrary selection, influenced by the description of the activity and an individual review of the various investments within it. Moreover this

is why the latter results of the research conducted in this paper should be viewed exclusively through the prism of assumptions behind these count variables.



For the market seeking count variable we have decided to include only investments in recycling; business services; construction; electricity; sales, marketing & support; ICT & internet infrastructure; maintenance & servicing and headquarters. All of these activities have a common motivation in supplying demand for a particular market, from which an MNE is also expected to create or expand its market share. For efficiency we chose to include manufacturing; customer contact centers; logistics, distribution & transportation; shared services centers and technical support centers. Despite the fact that these investments can exhibit market motivations, such as manufacturing, the underlying drivers for such foreign direct investments are to gain efficiencies, usually from outsourcing in favor of cheaper labor or materials. The remaining four activities: design, development & testing; extraction; research & development, and education & training are included in the resource count variable for their capacity to hint at either physical or intellectual resources.

The third category of count variables are distinguished based on the average amount of jobs created. Here we identify different foreign direct investments by activity clusters in contrast to business activities as is the case with the previous category of count variables. The category is comprised of two variables, one for high amount of jobs created and one for medium to low amount of jobs created. For the distinction, the average amount of jobs created per activity cluster is measured and an arbitrary threshold of 100 average jobs makes the difference between high and medium to low job creating FDIs.

The last category of count variables distinguishes low and medium to high technology intensive FDIs. As technology is a broad definition, we focus here on the difference between advanced and computing technology versus rest. High to medium technology are investments in ICT & electronics, financial services and life sciences, which are all computing intensive investments. High to medium technology is also exemplified in industrial; energy and environmental technology investments, which all rely to a

certain degree on advanced tech, such as robotics for industry, photovoltaic panels for environmental solar electricity or other computing and highly specific equipment for energy investments.

Matrices of the count variables setup are provided for extensive look in the appendix. Hereby concludes our data setup, in the next part we will review the methods and models of analysis.

4 METHODOLOGY

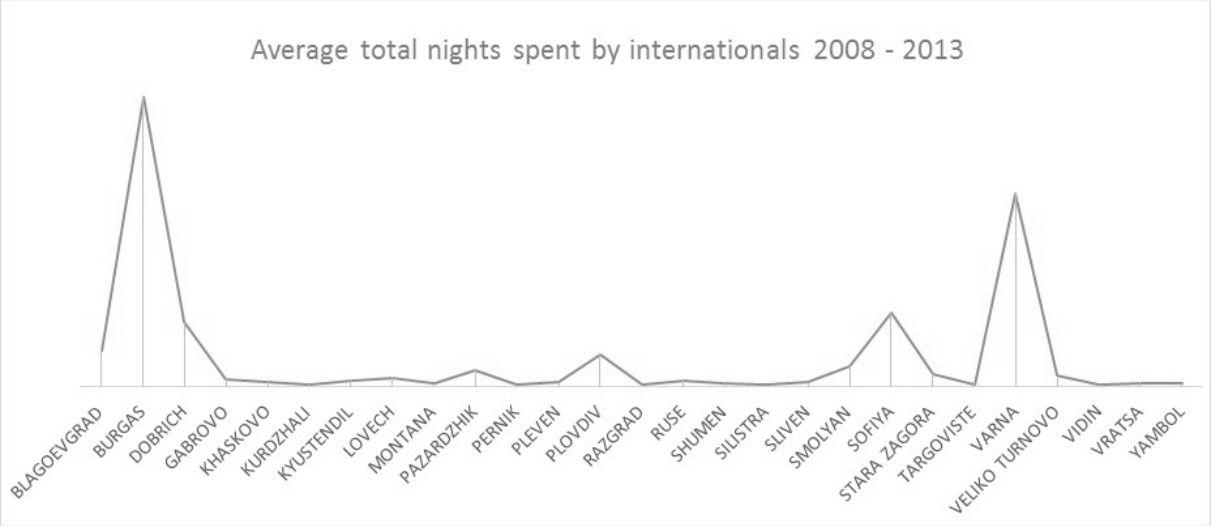
This paper aims to shed some light on the regional distribution of foreign direct investment in Bulgaria. It seeks to understand why certain regions foster more FDI than others. We do so by cross-examining regional characteristics and indicators against different types of FDI and draw conclusions thereby.

For the purpose we make use of a data analysis technique called principal component analysis (PCA). The idea behind PCA is to extract and consolidate hard to observe underlying relationships or patterns in large datasets. It does so by creating components out of individual variables based on detecting similar patterns in the way they vary together. The dataset we are analyzing in this paper contains a total number of 29 distinct variables, ranging from population and wage measurements to crime among others. It is impractical to iterate models with individual variables, especially when it happens that a majority of them measure the same underlying phenomena. An example of this is Population and the majority of the amenity and education variables, such as total hospitals, general practitioners per person, and university students per share of the population. All of them are strongly correlated, which makes sense since more densely populated regions naturally hold a stronger resource of amenities.

PCA identifies four distinct components in the dataset. We apply orthogonal varimax rotation, which establishes the components as uncorrelated by definition. As a test of model fit we use the Keiser-Meyer-Olkin (KMO) measure, which gives us a total figure of 0.8753. From the variables undergone KMO there are none with a result below 0.5, justifying the use of each one in our analysis. An eigenvalue scree plot of the PCA results shows a slight, but significant break in the eigenvalues between component 3 and 4, due to which we will address in our analysis only the first three components. Overall results and graphs are detailed in the appendix for further reference.

First component has positive loadings on population; turnover; output; value added; expenditure on tangible assets; total hospitals; total number of physicians; total dwellings; R&D expenditure & staff; railways and average wage. It is representative of developed urban areas with richer resource of amenities, infrastructure and research facilities. Second component is positively loaded on road and railway density; net migration; share of urban population; share of households with access to sewage; crimes per thousand persons; higher education rate and negatively loaded on category 2 roads. It is indicative of vitality and concentration or agglomeration of regional economic activity and the presence of skilled labor. Third component is loaded positively on total accommodation; total nights spent by

international visitors; crimes per thousand persons and category 3 roads, and it is negatively loaded on railway density. It hints at regions developed as tourist locations, with available accommodation and lower railway density, as is the case with many tourist places along the coast of the Black Sea or other resorts in the mountain ranges of Rila, Pirin and the Rhodopi.



The model choice of this paper is a negative binomial regression of the count variables created against the components of the PCA analysis via iterative models further including regional and time dummies. The decision to take the conventional negative binomial approach with dummies over the negative binomial with fixed effects for our strong panel dataset is that the latter does not accomplish what is expected under a fixed effects methods, namely controlling all stable covariates, a finding of Alison and Waterman (2002). As a feasible alternative is given the conventional approach including time dummies. The concrete model specification is given here:

Specifications 1 through 3:

$$\text{Count dependent} = \beta_0 + \beta_n * \text{Component}_n + r$$

Specification 4:

$$\text{Count dependent} = \beta_0 + \beta_n * \text{Component}_n + \text{Time dummies} + r$$

Specification 5:

$$\text{Count dependent} = \beta_0 + \beta_n * \text{Component}_n + \text{Regional dummies} + r$$

Specification 6:

$$\text{Count dependent} = \beta_0 + \beta_n * \text{Component}_n + \text{Time dummies} + \text{Regional dummies} + r$$

The models are run with Stata's robustness option, which allows one to adopt model-agnostic "robust" variances. Such give accurate assessments of the variability of parameter estimates from sample to sample even with miss-specified models. It is also known as the Huber or White estimate of variance (Huber, 1967; White, 1980).

Hereby concludes the methodology section. Following section details the results of the modelling and analysis, followed by a section of discussion and conclusions.

5 RESULTS

Hereby we break down the description of the most relevant results into subsections detailing the findings per investment type. All regression results and marginal effects graphs are to be found in the appendix.

5.1 TOTAL COUNT OF FDI PER REGION

Total count of FDI is positively influenced by all three PCA components, with statistical significance at the 5% level and convex curves can be seen at the marginal effects, showing us that the predicted number of FDI increases with an increase in each of the components. In specification 4 nearly all of the time dummies are statistically significant, besides 2009. The margins plot of the time dummies shows an overall trend of decline in absolute count of FDI at a rate lower than 1 per year, especially after 2011. Components from PCA retain their significance level and sign. In specification 5, introducing regional dummies shows us various differences between regions. Notable regions, which show statistically significant positive FDI count predicted margins are in order of strongest effect to lowest: Sofia, Varna, Plovdiv and Stara Zagora, a total of 4 out of the 27 administrative regions. Vice versa a statistically significant trend of FDI decline is seen in Kardzhali, Montana, Razgrad, Silistra, Targoviste and Vidin, a total of 6 out of the 27 administrative regions. Only component 1 is significant. Specification 6 no longer shows any significance on the components. Time dummies are all significant and show a similar trend as under specification 4. None of the regional dummy effects are statistically significant.

5.2 MARKET SEEKING FDI

Market seeking FDI in specification 3 is statistically significantly positively influenced by components 1 and 3, respectively highly urbanized regions and touristic regions. Introducing time dummies in specification 4 shows an overall trend of decline, whereby all dummies are statistically significant. Components retain their significance and coefficient sign, component 2 is now also significantly positively affecting the predicted count of market seeking FDI. Under specification 5 we find that regions on the rise of FDI are Sofia, Plovdiv, Varna and Stara Zagora. Further regions with a decline in market seeking investment are Gabrovo, Montana, Razgrad, Silistra, Sliven and Smolyan. Only

components 1 and 2 are now significant, with flipped signs. Specification 6 shows none of the components with a statistical significance. Time dummies are all significant, however from the regional dummies the coefficients of growing regions are no longer significant. No noteworthy changes are observed for declining regions.

5.3 EFFICIENCY SEEKING FDI

In specification 3 we see that efficiency seeking FDI is positively and significantly influenced by components 1 and 2, urban regions and concentration of economic activity respectively. Specification 4 with time dummies shows that all of them are statistically significant and their marginal effects plot a decreasing trend 2008 to 2010 that stabilizes and even increases over the years. Specification 5 on a regional level shows that the primary regions where efficiency seeking FDI significantly increases are Sofia and Burgas, which is only 2 of the 27 administrative regions. Furthermore this type of FDI has declined over its previous levels in the following regions: Dobrich, Gabrovo, Khaskovo, Kurdzhali, Kyustendil, Lovech, Montana, Pazardzhik, Pernik, Razgrad, Shumen, Silistra, Sliven, Smolyan, Targoviste, Veliko Turnovo, Vidin, Vratsa and Yambol, 20 regions in total, more than half of the 27 regions in this study. Component 3 is now also significant, but with a negative effect. Specification 6 leaves only component 2 significant and takes away significance from years 2011 and 2013. Positively attracting regions are no longer significant, declining regions remain statistically significant.

5.4 RESOURCE SEEKING FDI

It is not in the scope of this study to distinguish between intellectual and physical resource seeking FDI, hence both types are reviewed under one count variable. From specification 3 we see that resource seeking FDI is attracted to regions with higher urbanization, a finding which likely pertains to the availability of R&D staff and infrastructure in such locations. This type of FDI is further declining in tourist areas as signified by the statistically significant coefficient and declining marginal effect of component 3. Specification 4 introduces only 2 significant time dummies for the years 2009 and 2012, with FDI rising in 2009 and dipping in 2012. Regional dummy specification indicates that regions where resource seeking FDI landed are Sofia, Burgas, Pleven and Veliko Tarnovo. Alternatively regions with declining resource seeking FDI are Kurdzhali, Lovech, Montana, Pazarzhik, Razgrad, Silistra, Sliven, Smolyan, Targoviste, Vidin, Vratsa and Yambol. Specification 6 does not converge, hence the results are unreliable.

5.5 FDI CREATING MORE THAN A HUNDRED JOBS AVERAGE

FDI creating more than 100 jobs on average is subject to a statistically significant increase when components 1, 2 and 3 increase in model specification 3. In the following time dummy specification we observe only 1 statistically significant value for the year 2012, which represents a slight decline. The components retain their significance. Introducing regional dummies in specification 5 significance is shifted away from components 2 and 3 and remains only on 1. Three regions show predictions of growth in terms of this FDI type: Sofia, Plovdiv and Varna. To the contrary a number of regions have a predicted decline, such as: Silistra, Razgrad, Montana, Kyustendil, Pazardzhik, Smolyan, Targoviste and Dobrich, in order of largest to smallest decline. Specification 6 shifts significance level to more of the year dummy variables, from which we can observe an overall trend of decline. Significance also shifts away from the growing regions under specification 5, which indicates that the trend of growth is perhaps weak.

5.6 FDI CREATING LESS THAN A HUNDRED JOBS AVERAGE

In specification 3 the count of this FDI type is statistically significantly positively affected by components 1 and 3. With time dummy variables, significance for components under specification 3 is preserved. From the 5 dummies 4 are significant, except for year 2009. Plotting the marginal effects reveals a 'ladder'-like trend of decline, which slightly recuperates in 2013. In specification 5 (regional dummies) the significance of components 1 and 3 is lost. We see a number of regions with predicted positive increase in this FDI type: Sofia, Burgas, Varna, Plovdiv and Dobrich. A statistically significant decline is only seen in Sliven. Under specification 6 statistical significance returns for component 1 with the same sign and next to that time dummies retain their significance and sign. The positive growth of this FDI type in the major regions is no longer significant, only for Dobrich. Sliven shows a statistically significant decline still.

5.7 LOW TECH FDI

Low tech FDI is significantly positively influenced by all three components in the component specification. Time dummies are also all statistically significant in specification 4 and the plot of their marginal effects shows a declining trend between the years of 2008 to 2012, with a slight growth towards 2013. Components 1 through 3 retain their significance in that specification. The only regions exhibiting growth in low tech FDI under specification 5 are Sofia, Varna and Plovdiv. Another 19 regions show a statistically significant decline, a few among which with the strongest effects: Razgrad, SIlistra, Kyustendil and Pazardzhik. Component 1 is the only statistically significant PCA independent in this specification. In specification 6 PCA components are no longer significant and the time dummy for 2013 as well. Majority of the declining regions retain their statistical significance, however the growing ones not.

5.8 MEDIUM TO HIGH TECH FDI

Specification 3 shows that a significant positive effect on the predicted events of this FDI type is observed only with components 1 and 3. In specification 4 these components retain their significance. Time dummies are significant apart from 2009. A plot of the time dummy marginal effects shows a 2-step overall decline trend, with a stable level between 2010 and 2011. In specification 5 with regional dummies we see a number of growing regions, such as Sofia, Varna, Plovdiv, Stara Zagora, Veliko Turnovo, Pleven and Dobrich. Statistically significant decline is only observed in Sliven and Gabrovo. Components 1 and 3 are no longer significant and there is a small negative effect of component 2, which is concentration of economic activity. The last specification shows only component 1 as positively statistically significant and all of the time dummies. From the growing regions under specification 5 all, but Dobrich lose their statistical significance. There are no noteworthy differences in the declining regions.

As a closing remark to the description of results, with respect to component one's effects on the types of FDI it fosters, the strongest are market seeking and high tech FDI, as well as overall FDI, where the last combines the pace of all other FDI types. Component 1 does not have such a strong influence towards attracting efficiency and resource seeking as well as low tech FDI. With respect to component 2 there is negligible difference in its effect on attracting different types of FDI. Component 3 proves strongest effect in attracting market seeking FDI, after which lower, but still significant effects on low job creating FDI; high tech FDI; low tech FDI and high job creating FDI in that order respectively. Its effect is also deterrent towards resource seeking FDI, with a decline in this type of FDI where an increase in component 3 is seen on regional level.

6 DISCUSSION AND CONCLUSIONS

The results of our analysis elucidate a strong disparity among Bulgarian administrative regions. Better developed touristic and urban destinations soak up the majority of foreign direct investment. Regions such as Sofia, Varna, Plovdiv and Burgas are among the major attractors of FDI, where the latter three combined do not measure up to the capital region. The majority of regions indeed do not have the infrastructural capacity and resource to promote their own as valuable candidates for investment. In the context of an overall decline in investment, there can be little expectation that without a certain outside stimulus such regions will at all attract any more FDI than they currently do. In turn such findings raise questions regarding the national regional development policy and the EU sustainable regional growth policy, according to which regional development should be promoted at equal terms and pace.

Albeit being a transitional economy, FDI in Bulgaria follows closely the principles of Dunning's eclectic paradigm and Krugman's new economic geography. We see market investments attracted by large

markets and stronger buying power, efficiency investments attracted to agglomerating economies and resource investments following locations of available research and development labor force. It is the second part of Krugman's NEG relating to corruption, institutional trust and pollution among others that this paper was unable to test against.

The results do shed some light on what stimulus foreign direct investment reacts to. All types of investment are strongly fostered by regions with larger populations, higher output and value added, higher average wages, more amenities, such as hospitals, the presence of research and development staff and interestingly enough, the availability of railways. The most developed in this regard are the capital region of Sofia, nearby Plovdiv in southwestern Bulgaria, Varna and Burgas along the coastline. Some FDI types, such as efficiency seeking FDI, low tech FDI and FDI creating above a hundred jobs on average are significantly attracted to regions with higher concentration of economic activity and level of interaction in the local economy. Such regions have higher road and railway densities, stronger net migration, higher share of urban population, stronger share of higher educated population and better access to basic amenities. Besides the four regions above, such characteristics are also covered by only 3 more, namely Veliko Turnovo, Stara Zagora and Pleven. Additionally nearly all FDI with the exception of efficiency and resource seeking FDI is attracted to regions with stronger infrastructure for tourism. Such regions offer more accommodation, see more foreign visitors yearly, have a more extensive network of category 3 roads and are less dense in terms of railways. This is the case with many touristic locations along the coastline, which are physically remote from big cities.

In total we see that the basic prerequisites to prove attractive to FDI are relevant for only the major cities, which constitute seven out of the 27 administrative regions in Bulgaria. Next to that the amount of FDI attracted to the capital region is incomparable to the rest of the major cities.

It becomes apparent that if FDI is an important factor in the development of lagging regions, it would have to be fostered by other means than simply relying on infrastructure or tourism, since these will be the byproducts of successfully developing regions. Whether it is a decrease of rates, governmental subsidies or tax deductions, bureaucratic ease and introduction of ways to protect investment there are plenty of options to bolster the attractiveness of certain regions. Perhaps rather than looking to equally grow every region there are alternative ways such as specializing output of regions given their unique geo-economical characteristics and giving them a specific purpose. It is worth mentioning here that the quality and granularity of statistical information publicly available regarding FDI and regional indicators of Bulgaria is fairly limited and that can be a cause for existing relationships to be overlooked if such are not factored in our analysis. Very relevant indexes such as corruption and government perception have not been taken into account in this study as information for such is not available on the level of NUTS3 regions.

Further research could build on creating such indexes and exploring their effect on the attraction of FDI and testing these against the second subset of ideas behind Krugman's NGE. Another topic could also investigate the fiscal and/or governmental incentives and their effects as either catalysts or deterrents for FDI.

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8 APPENDIX

8.1 COUNT VARIABLE MATRICES

8.1.1 Category 2 count variables

ASSUMPTIONS CATEGORY 2 VARIABLES	COUNT VARIABLE: ECLECTIC PARADIGM		
INDUSTRIAL ACTIVITY	MARKET	EFFICIENCY	RESOURCE
Manufacturing		+	
Customer Contact Center		+	
Recycling	+		
Business Services	+		
Logistics, Distribution & Transportation		+	
Construction	+		
Electricity	+		
Shared Services Center		+	
Sales, Marketing & Support	+		
ICT & Internet Infrastructure	+		
Maintenance & Servicing	+		
Design, Development & Testing			+
Technical Support Center		+	
Extraction			+
Research & Development			+
Education & Training			+
Headquarters	+		

8.1.2 Category 3 count variables

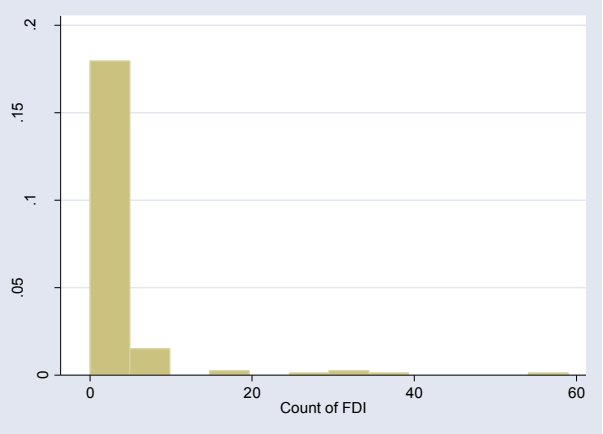
ASSUMPTIONS CATEGORY 3 VARIABLES	COUNT VARIABLE: AMOUNT OF JOBS CREATED		*Note: threshold is at 100 jobs*
CLUSTER	ABOVE 100	BELOW 100	Average amount of jobs created per activity cluster
ICT & Electronics	+		141
Industrial		+	96
Energy		+	91
Environmental Technology		+	85
Transport Equipment	+		309
Financial Services		+	58
Construction	+		742
Consumer Goods	+		162
Professional Services	+		105
Tourism	+		294
Food, Beverages & Tobacco	+		188
Life Sciences		+	77
Transportation, Warehousing & Storage		+	68
Creative Industries		+	83
Physical Sciences	+		217
Wood, Apparel & Related Products	+		344
Retail Trade		+	25

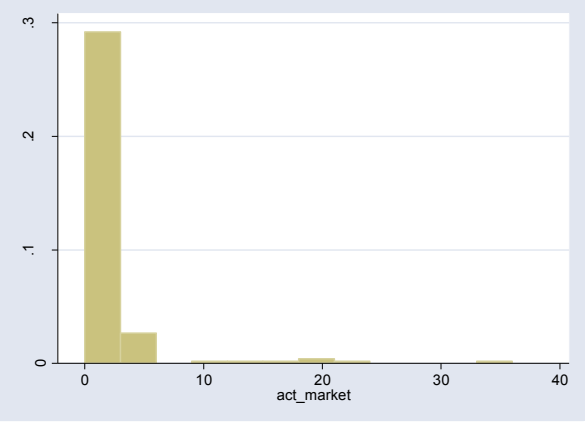
8.1.3 Category 4 count variables

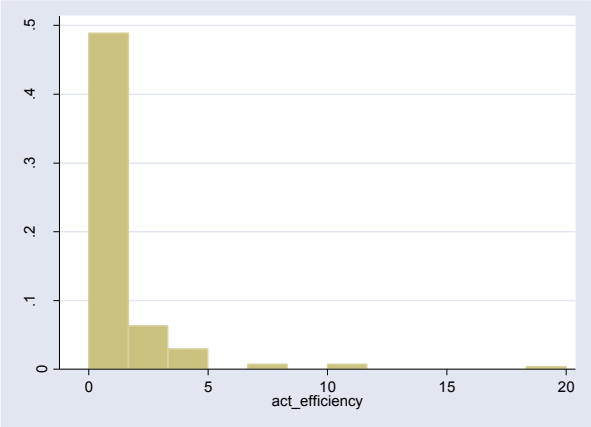
ASSUMPTIONS CATEGORY 4	COUNT VARIABLE: TECHNOLOGICAL INTENSITY	
CLUSTER	LOW	MEDIUM TO HIGH
ICT & Electronics		+
Industrial		+
Energy		+
Environmental Technology		+
Transport Equipment	+	
Financial Services		+
Construction	+	
Consumer Goods	+	
Professional Services	+	
Tourism	+	
Food, Beverages & Tobacco	+	
Life Sciences		+
Transportation, Warehousing & Storage	+	
Creative Industries	+	
Physical Sciences	+	
Wood, Apparel & Related Products	+	
Retail Trade	+	

8.2 VARIABLE SUMMARIES

Variable	Obs	Mean	Std. Dev.	Min	Max
Population	162	274892.5	278535.5	95467	1550511
Turnover	162	7742038	1.88e+07	599239	1.07e+08
Output	162	4704857	1.03e+07	365589	5.70e+07
Val_added	162	1423206	3236459	131338	1.85e+07
Expen_Tan_~s	162	753156.6	1852855	52647	1.41e+07
Hospitals_~l	162	12.21605	13.94253	2	81
Physicians~l	162	34.37593	11.6921	23.5	85.8
dwellings_~l	162	142513.4	134405.1	57365	786754
acommodati~l	162	122.0802	189.7577	12	1176
rnd_expend	162	15290.17	65797.37	0	425958
rnd_staff	162	758.0741	2397.573	0	13227
Railways	162	151.6481	96.9779	0	500
rail_density	162	3.741539	1.728273	0	9.627345
nights_total	162	683048.3	1485305	17833	8009877
net_migrat~n	162	-.0355333	.0373704	-.1474707	.0821137
share_urba~p	162	.653213	.1051711	.415	.8379564
share_acce~e	162	.3587617	.2569304	0	.86086
crimes_~1000	162	12.722	3.996409	2.987615	23.11125
Roads3	162	445.7654	124.3782	247	735
EconActiv_~e	162	.6539475	.0445936	.487	.75
Unemployed~n	162	12451.98	6373.969	2435	39045
HIGHED_rate	162	.1892346	.0413183	.089	.314
internet_a~e	162	.3401667	.1278039	.08	.607
Avg_wage	162	6870.759	2591.552	4799	22103
cinema_vis~p	162	.3564672	.3562135	0	1.571148
road_density	162	17.82868	2.945188	10.32642	24.864
Motorways	162	17.75926	29.68003	0	137
Roads1	162	110.1235	69.69443	0	363
Roads2	162	149.3025	76.28405	30	346



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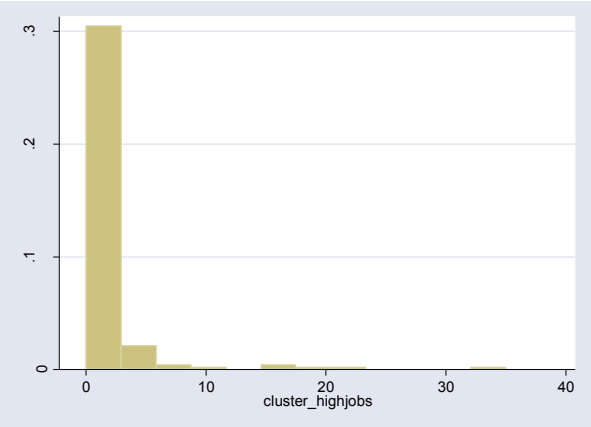
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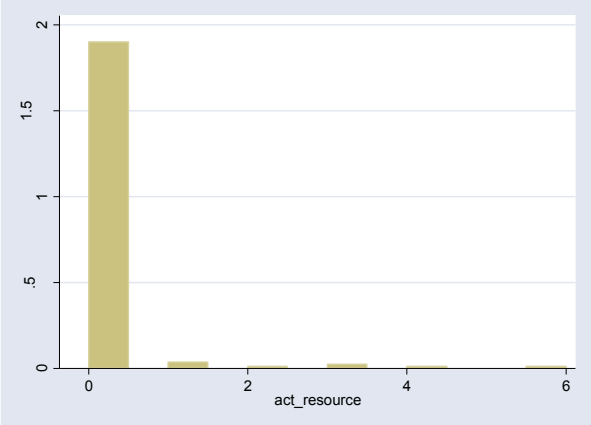
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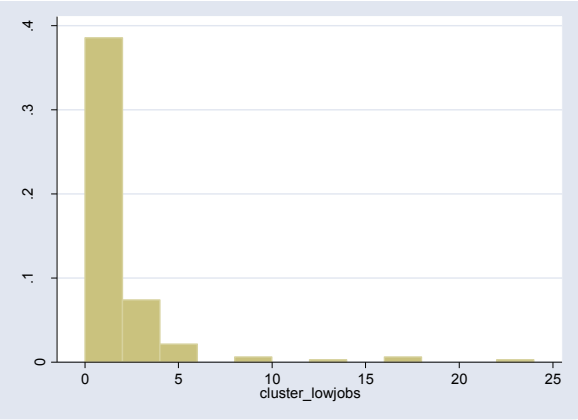
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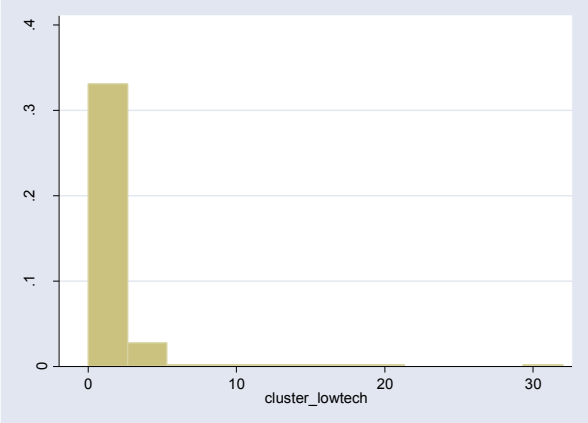
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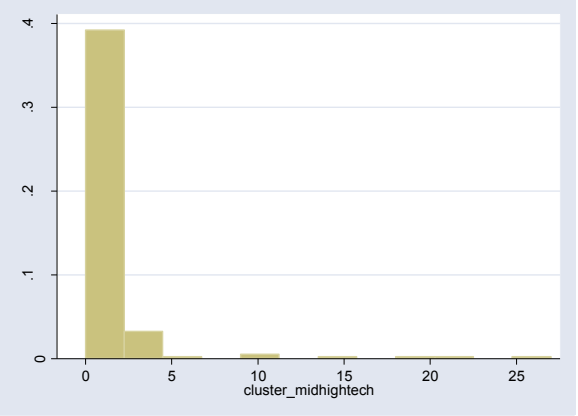
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8.3 PRINCIPAL COMPONENT ANALYSIS

```
Principal components/correlation                  Number of obs    =        162
                                                  Number of comp.  =          4
                                                  Trace            =         29
    Rotation: (unrotated = principal)             Rho              =     0.7862
```

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	16.5777	13.7915	0.5716	0.5716
Comp2	2.78618	.695822	0.0961	0.6677
Comp3	2.09035	.743406	0.0721	0.7398
Comp4	1.34695	.366516	0.0464	0.7862
Comp5	.980433	.0526576	0.0338	0.8201
Comp6	.927775	.0277495	0.0320	0.8520
Comp7	.900025	.232253	0.0310	0.8831
Comp8	.667772	.0891812	0.0230	0.9061
Comp9	.578591	.112478	0.0200	0.9261
Comp10	.466113	.166577	0.0161	0.9421
Comp11	.299536	.0116209	0.0103	0.9525
Comp12	.287915	.0652258	0.0099	0.9624
Comp13	.222689	.0399343	0.0077	0.9701
Comp14	.182755	.0142132	0.0063	0.9764
Comp15	.168542	.0323498	0.0058	0.9822
Comp16	.136192	.0287783	0.0047	0.9869
Comp17	.107414	.0255304	0.0037	0.9906
Comp18	.0818833	.00804844	0.0028	0.9934
Comp19	.0738349	.0268606	0.0025	0.9960
Comp20	.0469743	.0204547	0.0016	0.9976
Comp21	.0265196	.0100786	0.0009	0.9985
Comp22	.016441	.00360939	0.0006	0.9991
Comp23	.0128316	.00677752	0.0004	0.9995
Comp24	.00605411	.00265515	0.0002	0.9997
Comp25	.00339896	.000832727	0.0001	0.9998
Comp26	.00256623	.00114923	0.0001	0.9999
Comp27	.001417	.000499509	0.0000	1.0000
Comp28	.000917491	.000650393	0.0000	1.0000
Comp29	.000267098	.	0.0000	1.0000

Principal components (eigenvectors) (blanks are abs(loading)<.3)

Variable	Comp1	Comp2	Comp3	Comp4	Unexplained
Population					.02533
Turnover					.04108
Output					.03889
Val_added					.03204
Expen_Tan_~s					.09835
Hospitals_~l					.0282
Physicians~l					.1483
dwellings_~l					.01384
acommodati~l		0.3525	-0.4465		.1329
rnd_expend					.09213
rnd_staff					.03955
Railways					.2073
rail_density			0.3113		.1936
nights_total		0.3878	-0.3795		.1154
net_migrat~n					.4358
share_urba~p		0.3960			.1557
share_acce~e		0.3497			.4646
crimes_~1000				-0.4903	.3491
Roads3					.6526
EconActiv_~e				0.3432	.6108
Unemployed~n					.2267
HIGHED_rate			0.3269		.2229
internet_a~e				0.6265	.2735
Avg_wage					.1352
cinema_vis~p					.3564
road_density			0.3792		.2759
Motorways					.2249
Roads1					.2261
Roads2			-0.3076		.3819

Principal components/correlation — Number of obs = 162
Number of comp. = 4
Trace = 29
Rotation: orthogonal varimax (Kaiser off) — Rho = 0.7862

Component	Variance	Difference	Proportion	Cumulative
Comp1	15.222	12.147	0.5249	0.5249
Comp2	3.075	.170309	0.1060	0.6309
Comp3	2.90469	1.30527	0.1002	0.7311
Comp4	1.59942	.	0.0552	0.7862

Rotated components (blanks are abs(loading)<.2)

Variable	Comp1	Comp2	Comp3	Comp4	Unexplained
Population	0.2503				.02533
Turnover	0.2625				.04108
Output	0.2580				.03889
Val_added	0.2667				.03204
Expen_Tan_~s	0.2600				.09835
Hospitals_~l	0.2570				.0282
Physicians~l	0.2330				.1483
dwellings_~l	0.2460				.01384
acommodati~l			0.5728		.1329
rnd_expend	0.2690				.09213
rnd_staff	0.2701				.03955
Railways	0.2134				.2073
rail_density		0.2598	-0.2025		.1936
nights_total			0.5503		.1154
net_migrat~n		0.2365			.4358
share_urba~p		0.4857			.1557
share_acce~e		0.3368			.4646
crimes_~1000		0.2127	0.2172	-0.4546	.3491
Roads3			0.2124		.6526
EconActiv_~e				0.3797	.6108
Unemployed~n				0.2778	.2267
HIGHED_rate		0.3739			.2229
internet_a~e				0.6455	.2735
Avg_wage	0.2369				.1352
cinema_vis~p					.3564
road_density		0.3726			.2759
Motorways					.2249
Roads1					.2261
Roads2		-0.2733			.3819

Component rotation matrix

	Comp1	Comp2	Comp3	Comp4
Comp1	0.9500	0.2152	0.1897	0.1231
Comp2	-0.2990	0.6930	0.6490	0.0957
Comp3	-0.0179	0.6675	-0.7368	0.1063
Comp4	-0.0880	-0.1668	-0.0073	0.9820

Kaiser-Meyer-Olkin measure of sampling adequacy

Variable	kmo
Population	0.9030
Turnover	0.8625
Output	0.8975
Val_added	0.9049
Expen_Tan_~s	0.8965
Hospitals_~l	0.8948
Physicians~l	0.9585
dwellings_~l	0.9374
acommodati~l	0.7817
rnd_expend	0.8641
rnd_staff	0.8997
Railways	0.8875
rail_density	0.8385
nights_total	0.7469
net_migrat~n	0.9127
share_urba~p	0.7522
share_acce~e	0.8497
crimes_~1000	0.6968
Roads3	0.6572
EconActiv_~e	0.6031
Unemployed~n	0.9263
HIGHED_rate	0.9167
internet_a~e	0.6685
Avg_wage	0.9016
cinema_vis~p	0.8787
road_density	0.8218
Motorways	0.9028
Roads1	0.8961
Roads2	0.8694
Overall	0.8753

8.4 REGRESSION OUTCOMES

Dependent Variable	Count of FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.201***	0.165***	0.153***	0.150***	-0.490**	0.421
	-10.57	-11.32	-12.62	-15.34	(-2.69)	-1.49
Component 2		0.197***	0.157**	0.180***	-0.213	0.191
		-3.31	-2.93	-4.11	(-1.23)	-0.97
Component 3			0.156***	0.148***	-0.204	-0.0992
			-5.17	-5.61	(-0.59)	(-0.32)
2009 (Dummy)				-0.377		-0.453***
				(-1.57)		(-3.96)
2010 (Dummy)				-0.745***		-0.762***
				(-4.46)		(-5.77)
2011 (Dummy)				-0.742***		-0.838***
				(-4.26)		(-3.52)
2012 (Dummy)				-0.905**		-1.234***
				(-2.95)		(-3.64)
2013 (Dummy)				-1.050***		-1.294***
				(-3.93)		(-3.79)
Regional dummies:						
BURGAS					3.776	0.35
					-1.8	-0.15
DOBRICH					-0.179	0.16
					(-0.35)	-0.36
GABROVO					-1.255	-1.627
					(-0.85)	(-1.25)
KHASKOVO					-0.0626	-0.718
					(-0.09)	(-1.09)
KURDZHALI					-2.531*	0.0157
					(-2.41)	-0.01
KYUSTENDIL					-0.995	-0.757
					(-0.94)	(-0.81)
LOVECH					-1.119	-0.627
					(-1.17)	(-0.75)
MONTANA					-2.948*	-2.02
					(-2.49)	(-1.75)
PAZARDZHIK					-0.886	-1.1
					(-0.85)	(-1.19)
PERNIK					-0.601	-0.505
					(-0.46)	(-0.44)
PLEVEN					0.283	-0.65
					-0.35	(-0.83)
PLOVDIV					3.569***	-1.128
					-4.26	(-0.75)
RAZGRAD					-2.498*	-0.558
					(-2.29)	(-0.48)
RUSE					0.886	-0.115
					-0.89	(-0.13)
SHUMEN					-1.55	-1.978
					(-1.21)	(-1.63)
SILISTRA					-3.130**	-0.764
					(-2.91)	(-0.59)
SLIVEN					-1.828	-1.616
					(-1.92)	(-1.77)
SMOLYAN					-3.045***	-0.542
					(-3.32)	(-0.46)
SOFIYA					13.07***	-5.423
					-3.93	(-0.95)
STARA ZAGORA					1.959*	-0.949
					-2.36	(-0.91)
TARGOVISTE					-2.371*	-0.656
					(-2.11)	(-0.57)
VARNA					4.238***	-0.412
					-3.75	(-0.23)
VELIKO TURNOVO					0.147	-1.225
					-0.18	(-1.48)
VIDIN					-1.783	-0.59
					(-1.72)	(-0.57)
VRATSA					-1.402	-1.259
					(-1.48)	(-1.36)
YAMBOL					-0.624	0.209
					(-0.66)	-0.23
Constant	0.351***	0.288**	0.235*	0.816***	0.0844	1.671**
	-3.78	-3.18	-2.51	-6.44	-0.14	-2.7
lnalpha						
Constant	-0.555	-0.945**	-1.460***	-3.232	-2.650***	-20.84
	(-1.68)	(-2.77)	(-3.43)	(-1.49)	(-5.70)	(.)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	Market seeking FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.199***	0.172***	0.161***	0.159***	-0.604**	0.621
	-11.23	-10.33	-11.23	-15.28	(-3.05)	-1.8
Component 2		0.154	0.104	0.139*	-0.655**	-0.0711
		-1.75	-1.23	-1.99	(-2.90)	(-0.29)
Component 3			0.208***	0.192***	-0.0638	0.0868
			-5.71	-8.09	(-0.16)	-0.31
2009 (Dummy)				-0.466*		-0.512***
				(-2.09)		(-3.37)
2010 (Dummy)				-0.713***		-0.768***
				(-4.91)		(-5.46)
2011 (Dummy)				-0.737***		-1.038***
				(-5.15)		(-3.88)
2012 (Dummy)				-1.082***		-1.573***
				(-5.68)		(-3.77)
2013 (Dummy)				-1.174***		-1.753***
				(-3.88)		(-4.17)
Regional dummies:						
BURGAS					4.36	-0.348
					-1.79	(-0.16)
DOBRICH					0.856	1.239*
					-1.33	-2.23
GABROVO					-14.92***	-16.79***
					(-8.31)	(-11.54)
KHASKOVO					1.055	0.0859
					-1.2	-0.11
KURDZHALI					-2.317	1.186
					(-1.83)	-0.81
KYUSTENDIL					0.79	0.995
					-0.62	-1
LOVECH					-0.651	-0.0126
					(-0.56)	(-0.01)
MONTANA					-17.60***	-17.57***
					(-17.03)	(-19.33)
PAZARDZHIK					-0.085	-0.399
					(-0.07)	(-0.41)
PERNIK					-0.0704	-0.121
					(-0.04)	(-0.09)
PLEVEN					1.472	0.174
					-1.54	-0.19
PLOVDIV					4.970***	-1.45
					-4.74	(-0.76)
RAZGRAD					-2.905*	-0.279
					(-2.03)	(-0.20)
RUSE					1.772	0.409
					-1.43	-0.39
SHUMEN					-0.293	-0.978
					(-0.20)	(-0.76)
SILISTRA					-2.782*	0.458
					(-2.10)	-0.33
SLIVEN					-16.85***	-17.83***
					(-17.25)	(-21.60)
SMOLYAN					-3.433*	-0.053
					(-2.51)	(-0.04)
SOFIYA					17.17***	-7.855
					-4.5	(-1.11)
STARA ZAGORA					3.172**	-0.817
					-3.08	(-0.61)
TARGOVISTE					-2.548	-0.223
					(-1.74)	(-0.17)
VARNA					7.103***	0.581
					-4.96	-0.26
VELIKO TURNOVO					1.645	-0.316
					-1.47	(-0.28)
VIDIN					-1.153	0.406
					(-0.87)	-0.35
VRATSA					-0.668	-0.494
					(-0.51)	(-0.41)
YAMBOL					0.625	1.703
					-0.54	-1.83
Constant	-0.219	-0.265*	-0.373**	0.25	-1.553	0.543
	(-1.85)	(-2.27)	(-3.04)	-1.77	(-1.92)	-0.68
lnalpha						
Constant	-0.408	-0.727	-1.588*	-13	-2.821***	-18.07***
	(-0.82)	(-1.34)	(-2.06)	(-0.26)	(-5.21)	(-47.82)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	Efficiency seeking FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.165***	0.130***	0.125***	0.120***	-0.516**	-0.0365
	-9.16	-8.06	-8.04	-13.3	(-3.02)	(-0.10)
Component 2		0.236***	0.219***	0.220***	0.515**	0.606*
		-3.91	-3.47	-4.04	-2.65	-2.57
Component 3			0.0704	0.0708	-1.049*	-0.709
			-1.47	-1.37	(-2.31)	(-1.59)
2009 (Dummy)				-0.652***		-0.529**
				(-3.31)		(-3.09)
2010 (Dummy)				-1.002***		-0.879**
				(-3.91)		(-3.15)
2011 (Dummy)				-0.799***		-0.577
				(-3.68)		(-1.62)
2012 (Dummy)				-0.941**		-0.817*
				(-2.72)		(-1.99)
2013 (Dummy)				-0.872***		-0.871
				(-3.61)		(-1.74)
Regional dummies:						
BURGAS					6.730*	3.557
					-2.53	-1.19
DOBRICH					-2.654*	-2.302*
					(-2.41)	(-2.05)
GABROVO					-6.142***	-5.068**
					(-3.41)	(-2.91)
KHASKOVO					-2.556**	-2.338*
					(-2.67)	(-2.47)
KURDZHALI					-3.719**	-1.842
					(-2.63)	(-1.09)
KYUSTENDIL					-5.529***	-4.521**
					(-3.49)	(-2.91)
LOVECH					-3.383**	-2.467*
					(-2.82)	(-2.12)
MONTANA					-4.172**	-3.099*
					(-3.07)	(-2.16)
PAZARDZHIK					-3.000*	-2.674*
					(-2.55)	(-2.44)
PERNIK					-4.531**	-3.443*
					(-2.80)	(-2.19)
PLEVEN					-2.467	-2.357
					(-1.89)	(-1.83)
PLOVDIV					1.933	-0.234
					-1.83	(-0.12)
RAZGRAD					-4.100**	-2.407
					(-2.70)	(-1.41)
RUSE					-2.5	-2.141
					(-1.93)	(-1.66)
SHUMEN					-4.876**	-4.256**
					(-3.28)	(-2.89)
SILISTRA					-34.08***	-30.17***
					(-27.07)	(-19.36)
SLIVEN					-3.243**	-2.586*
					(-2.79)	(-2.26)
SMOLYAN					-3.808**	-2.147
					(-3.01)	(-1.37)
SOFIYA					10.07**	0.802
					-3.06	-0.1
STARA ZAGORA					-0.616	-1.503
					(-0.58)	(-1.02)
TARGOVISTE					-4.435**	-2.792
					(-3.22)	(-1.87)
VARNA					1.16	-1.095
					-0.84	(-0.51)
VELIKO TURNOVO					-3.439**	-3.454**
					(-2.98)	(-2.83)
VIDIN					-4.140**	-2.729*
					(-3.14)	(-2.04)
VRATSA					-2.504*	-1.882
					(-2.33)	(-1.86)
YAMBOL					-4.447**	-3.224*
					(-3.25)	(-2.35)
Constant	-0.405***	-0.491***	-0.504***	0.158	1.554	2.058*
	(-3.45)	(-4.01)	(-4.02)	-1.06	-1.88	-2.26
lnalpha						
Constant	-0.6	-1.002*	-1.076*	-13.56*	-12.72	-19.16
	(-1.55)	(-2.22)	(-2.30)	(-2.49)	(-0.55)	(.)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	Resource seeking FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.294***	0.288***	0.319***	0.350***	-1.087*	-50.72***
	-7.51	-6.64	-6.14	-7.27	(-2.13)	(-88.77)
Component 2		0.0626	0.217	-0.0588	-1.891	-51.94***
		-0.26	-0.85	(-0.25)	(-1.65)	(-20.89)
Component 3			-0.658*	-0.570**	-3.606*	-19.29**
			(-2.09)	(-2.92)	(-2.46)	(-2.59)
2009 (Dummy)				0.587**		-7.679***
				-2.94		(-4.73)
2010 (Dummy)				0.144		3.747
				-0.34		-1.54
2011 (Dummy)				-0.243		29.49***
				(-1.33)		-11.03
2012 (Dummy)				-1.519***		22.05***
				(-5.72)		-6
2013 (Dummy)				0.0807		40.77***
				-0.35		-19.55
Regional dummies:						
BURGAS					23.78*	331.5***
					-2.55	-8.53
DOBRICH					-3.209	30.20***
					(-1.95)	-5.04
GABROVO					-5.279	129.7***
					(-0.80)	-4.18
KHASKOVO					-5.225	69.64***
					(-1.68)	-5.02
KURDZHALI					-18.74***	-217.7***
					(-4.45)	(-13.48)
KYUSTENDIL					-7.758	39.82
					(-1.81)	-1.63
LOVECH					-9.845**	-51.11**
					(-3.13)	(-3.05)
MONTANA					-11.63***	-68.50***
					(-4.11)	(-4.53)
PAZARDZHIK					-8.730***	-7.679
					(-4.00)	(-0.58)
PERNIK					-5.965	82.46**
					(-1.14)	-3.04
PLEVEN					15.20***	97.71***
					-4.71	-7.06
PLOVDIV					5.45	339.5***
					-1.04	-107.91
RAZGRAD					-16.59***	-153.9***
					(-4.33)	(-7.75)
RUSE					-6.675	90.22***
					(-1.50)	-4.21
SHUMEN					-7.453	75.69***
					(-1.82)	-3.42
SILISTRA					-18.35***	-202.4***
					(-4.58)	(-10.64)
SLIVEN					-8.791**	-3.473
					(-3.24)	(-0.21)
SMOLYAN					-13.98***	-189.3***
					(-5.11)	(-13.28)
SOFIYA					48.34***	1193.2
					-3.44	(.)
STARA ZAGORA					-1.943	215.7***
					(-0.43)	-14.8
TARGOVISTE					-15.40***	-130.8***
					(-4.01)	(-6.32)
VARNA					16.44	450.4***
					-1.95	-133.27
VELIKO TURNOVO					18.77***	171.1***
					-4.22	-9.79
VIDIN					-12.68***	-83.18***
					(-3.39)	(-3.65)
VRATSA					-10.06***	-28.52
					(-3.76)	(-1.69)
YAMBOL					-10.69**	-34.56*
					(-3.08)	(-2.00)
Constant	-4.227***	-4.256***	-4.402***	-4.389***	-18.91***	-141.7***
	(-6.22)	(-5.80)	(-5.31)	(-7.10)	(-6.07)	(-12.46)
lnalpha						
Constant	-128.3	-15.90***	-18.04***	-16.74***	-16.94***	-17.35***
	(.)	(-11.20)	(-20.54)	(-4.80)	(-39.85)	(-33.13)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	FDI creating above 100 jobs					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.213***	0.172***	0.165***	0.160***	-0.748**	-0.118
	-9.48	-10.07	-10.53	-6.53	(-2.75)	(-0.33)
Component 2		0.251**	0.222**	0.234***	-0.0387	-0.018
		-3.1	-2.94	-3.85	(-0.15)	(-0.07)
Component 3			0.108*	0.0959*	-0.155	0.424
			-2.03	-2.31	(-0.27)	-0.94
2009 (Dummy)				-0.678		-0.669***
				(-1.85)		(-5.49)
2010 (Dummy)				-1.151		-1.101***
				(-1.96)		(-6.03)
2011 (Dummy)				-1.2		-0.974**
				(-1.43)		(-2.85)
2012 (Dummy)				-1.161**		-1.021*
				(-2.60)		(-2.55)
2013 (Dummy)				-1.245		-0.854
				(-1.76)		(-1.90)
Regional dummies:						
BURGAS					2.635	-2.122
					-0.84	(-0.76)
DOBRICH					-2.674*	-2.106*
					(-2.52)	(-2.04)
GABROVO					-2.617	-0.425
					(-1.22)	(-0.22)
KHASKOVO					-0.506	0.127
					(-0.49)	-0.13
KURDZHALI					-3.208*	-0.538
					(-2.13)	(-0.34)
KYUSTENDIL					-17.90***	-18.68***
					(-12.01)	(-13.53)
LOVECH					-1.847	-0.271
					(-1.46)	(-0.24)
MONTANA					-17.95***	-18.87***
					(-16.35)	(-17.85)
PAZARDZHIK					-16.94***	-18.91***
					(-18.40)	(-23.24)
PERNIK					-1.977	0.0787
					(-1.13)	-0.05
PLEVEN					-1.08	-0.577
					(-0.87)	(-0.49)
PLOVDIV					3.592**	1.031
					-2.69	-0.54
RAZGRAD					-18.71***	-18.84***
					(-13.81)	(-13.80)
RUSE					0.343	1.39
					-0.22	-0.99
SHUMEN					-2.487	-1.224
					(-1.50)	(-0.79)
SILISTRA					-18.90***	-18.91***
					(-14.32)	(-13.27)
SLIVEN					-1.934	-0.732
					(-1.62)	(-0.66)
SMOLYAN					-3.983**	-1.708
					(-3.22)	(-1.20)
SOFIYA					16.76**	4.979
					-3.21	-0.68
STARA ZAGORA					2.036	1.309
					-1.44	-0.87
TARGOVISTE					-3.677*	-1.168
					(-2.27)	(-0.77)
VARNA					3.145*	0.414
					-2.07	-0.19
VELIKO TURNOVO					-1.148	-0.707
					(-0.85)	(-0.53)
VIDIN					-2.804	-0.524
					(-1.95)	(-0.39)
VRATSA					-1.724	-0.648
					(-1.54)	(-0.68)
YAMBOL					-2.19	-0.2
					(-1.65)	(-0.17)
Constant	-0.425**	-0.525***	-0.553***	0.264	0.0569	0.352
	(-3.23)	(-4.08)	(-4.19)	-0.93	-0.06	-0.39
lnalpha						
Constant	-0.0512	-0.407	-0.497	-3.152	-2.166**	-16.75***
	(-0.12)	(-0.98)	(-1.15)	(-0.40)	(-3.08)	(-16.30)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	FDI creating less than 100 jobs					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.169***	0.147***	0.139***	0.138***	-0.243	0.817*
	-12.51	-10.23	-11.65	-15.07	(-1.26)	-2.4
Component 2		0.145*	0.104	0.114	-0.286	0.247
		-2.01	-1.55	-1.95	(-1.31)	-1.02
Component 3			0.176***	0.172***	-0.413	-0.503
			-7.37	-5.98	(-1.18)	(-1.44)
2009 (Dummy)				-0.328		-0.312
				(-1.23)		(-1.47)
2010 (Dummy)				-0.494**		-0.519**
				(-2.59)		(-2.77)
2011 (Dummy)				-0.391*		-0.664*
				(-2.25)		(-2.47)
2012 (Dummy)				-0.828**		-1.394***
				(-3.27)		(-3.66)
2013 (Dummy)				-0.723**		-1.540***
				(-2.84)		(-3.64)
Regional dummies:						
BURGAS					5.823*	2.958
					-2.53	-1.15
DOBRICH					1.607*	1.924**
					-2.13	-2.7
GABROVO					-0.54	-1.746
					(-0.27)	(-0.98)
KHASKOVO					0.16	-0.962
					-0.15	(-0.87)
KURDZHALI					-1.071	1.477
					(-0.86)	-0.96
KYUSTENDIL					0.692	0.415
					-0.53	-0.36
LOVECH					-0.501	-0.392
					(-0.43)	(-0.37)
MONTANA					-1.448	-0.768
					(-1.09)	(-0.60)
PAZARDZHIK					0.393	-0.143
					-0.34	(-0.13)
PERNIK					0.4	-0.127
					-0.25	(-0.09)
PLEVEN					1.401	-0.0838
					-1.42	(-0.08)
PLOVDIV					3.656**	-1.955
					-3.09	(-0.98)
RAZGRAD					-1.034	0.744
					(-0.79)	-0.54
RUSE					0.99	-0.746
					-0.82	(-0.62)
SHUMEN					-0.798	-1.827
					(-0.56)	(-1.34)
SILISTRA					-1.692	0.622
					(-1.30)	-0.42
SLIVEN					-22.14***	-23.59***
					(-22.37)	(-24.86)
SMOLYAN					-1.934	0.754
					(-1.36)	-0.48
SOFIYA					9.517*	-12.24
					-2.54	(-1.75)
STARA ZAGORA					1.525	-2.276
					-1.41	(-1.53)
TARGOVISTE					-1.267	0.208
					(-0.96)	-0.16
VARNA					5.410***	0.0838
					-3.49	-0.04
VELIKO TURNOVO					1.187	-0.824
					-1.1	(-0.72)
VIDIN					-0.493	0.357
					(-0.40)	-0.29
VRATSA					-0.0759	-0.261
					(-0.08)	(-0.28)
YAMBOL					0.626	1.102
					-0.53	-1.01
Constant	-0.188	-0.226*	-0.308**	0.121	-1.285	0.735
	(-1.79)	(-2.06)	(-2.63)	-0.67	(-1.53)	-0.8
lnalpha						
Constant	-0.945	-1.383	-2.490**	-12.53	-3.300***	-117.3
	(-1.89)	(-1.80)	(-2.68)	(-0.23)	(-3.51)	(.)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	Low tech FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.208***	0.157***	0.149***	0.141***	-0.688***	-0.228
	-8.32	-9.5	-10.12	-19.07	(-3.29)	(-0.65)
Component 2		0.295***	0.261***	0.287***	0.233	0.266
		-4.37	-4.14	-6.2	-1.27	-1.15
Component 3			0.130**	0.122***	-0.669	-0.241
			-2.89	-3.58	(-1.31)	(-0.64)
2009 (Dummy)				-0.548***		-0.511***
				(-3.74)		(-4.15)
2010 (Dummy)				-0.964***		-0.890***
				(-6.07)		(-5.12)
2011 (Dummy)				-0.973***		-0.677*
				(-3.86)		(-2.10)
2012 (Dummy)				-1.200***		-0.886*
				(-3.89)		(-2.25)
2013 (Dummy)				-1.000***		-0.678
				(-5.75)		(-1.56)
Regional dummies:						
BURGAS					5.132	1.598
					-1.78	-0.65
DOBRICH					-2.991**	-2.588*
					(-2.91)	(-2.58)
GABROVO					-4.668**	-3.138*
					(-2.73)	(-2.05)
KHASKOVO					-1.618	-1.192
					(-1.89)	(-1.53)
KURDZHALI					-3.615**	-1.629
					(-2.76)	(-1.17)
KYUSTENDIL					-20.40***	-19.29***
					(-16.18)	(-17.36)
LOVECH					-3.054**	-1.910*
					(-2.67)	(-1.98)
MONTANA					-19.79***	-18.75***
					(-19.61)	(-20.39)
PAZARDZHIK					-18.59***	-18.31***
					(-22.73)	(-26.11)
PERNIK					-3.933**	-2.486
					(-2.72)	(-1.88)
PLEVEN					-2.307*	-1.968
					(-2.13)	(-1.89)
PLOVDIV					2.665*	0.727
					-2.44	-0.39
RAZGRAD					-20.63***	-18.98***
					(-16.14)	(-15.42)
RUSE					-1.467	-0.751
					(-1.16)	(-0.67)
SHUMEN					-4.092**	-3.184*
					(-2.83)	(-2.37)
SILISTRA					-20.60***	-18.85***
					(-16.21)	(-14.26)
SLIVEN					-2.996**	-2.142*
					(-2.73)	(-2.17)
SMOLYAN					-4.396***	-2.704
					(-3.62)	(-1.91)
SOFIYA					14.40***	5.706
					-3.71	-0.8
STARA ZAGORA					0.576	-0.00215
					-0.55	(-0.00)
TARGOVISTE					-4.934**	-3.086*
					(-3.21)	(-2.18)
VARNA					2.687*	0.598
					-2.02	-0.29
VELIKO TURNOVO					-2.619*	-2.347*
					(-2.43)	(-2.10)
VIDIN					-4.880***	-3.228*
					(-3.34)	(-2.41)
VRATSA					-3.406**	-2.625*
					(-2.62)	(-2.18)
YAMBOL					-3.579**	-2.133*
					(-2.98)	(-2.09)
Constant	-0.373**	-0.509***	-0.549***	0.16	1.132	1.421
	(-3.01)	(-3.91)	(-4.07)	-0.97	-1.52	-1.86
lnalpha						
Constant	-0.137	-0.772	-0.971*	-16.10***	-3.125**	-16.90***
	(-0.37)	(-1.71)	(-2.01)	(-8.82)	(-2.88)	(-28.24)
N	162	162	162	162	162	162

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent variable	Medium to high tech FDI					
Specification	1	2	3	4	5	6
				Year	Region	Year and region
Component 1	0.174***	0.161***	0.156***	0.159***	-0.296	0.885*
	-15.42	-12.13	-12.96	-13.77	(-1.43)	-2.49
Component 2		0.0941	0.0495	0.05	-0.516*	0.0512
		-1.33	-0.75	-0.92	(-2.31)	-0.19
Component 3			0.160***	0.158***	-0.104	-0.0415
			-6.84	-5.84	(-0.27)	(-0.11)
2009 (Dummy)				-0.331		-0.455*
				(-0.93)		(-2.41)
2010 (Dummy)				-0.599**		-0.690***
				(-2.79)		(-3.70)
2011 (Dummy)				-0.510**		-0.935**
				(-2.61)		(-3.26)
2012 (Dummy)				-0.822**		-1.512***
				(-2.96)		(-3.94)
2013 (Dummy)				-1.017*		-1.739***
				(-2.45)		(-4.09)
Regional dummies:						
BURGAS	2				4.527	0.451
					-1.82	-0.16
DOBRICH	3				1.883*	2.259**
					-2.49	-3.19
GABROVO	4				-12.40***	-14.39***
					(-6.76)	(-8.70)
KHASKOVO	5				0.97	-0.0565
					-0.89	(-0.05)
KURDZHALI	6				-0.993	2.19
					(-0.78)	-1.39
KYUSTENDIL	7				1.859	1.905
					-1.4	-1.6
LOVECH	8				0.306	0.763
					-0.25	-0.71
MONTANA	9				-0.812	0.224
					(-0.60)	-0.17
PAZARDZHIK	10				0.938	0.543
					-0.79	-0.49
PERNIK	11				1.818	1.608
					-1.11	-1.11
PLEVEN	12				2.251*	0.874
					-2.23	-0.84
PLOVDIV	13				4.493***	-1.703
					-3.69	(-0.81)
RAZGRAD	14				-0.417	1.925
					(-0.31)	-1.38
RUSE	15				2.251	0.724
					-1.78	-0.58
SHUMEN	16				0.33	-0.478
					-0.22	(-0.34)
SILISTRA	17				-1.248	1.686
					(-0.94)	-1.1
SLIVEN	18				-14.15***	-15.15***
					(-13.97)	(-15.67)
SMOLYAN	19				-1.767	1.389
					(-1.26)	-0.88
SOFIYA	20				11.59**	-12.53
					-2.89	(-1.71)
STARA ZAGORA	21				2.619*	-1.345
					-2.29	(-0.86)
TARGOVISTE	22				-0.522	1.515
					(-0.39)	-1.11
VARNA	23				6.006***	-0.115
					-3.85	(-0.05)
VELIKO TURNOVO	24				2.282*	0.296
					-2.06	-0.25
VIDIN	25				0.689	2.008
					-0.55	-1.68
VRATSA	26				0.857	0.907
					-0.88	-0.97
YAMBOL	27				1.55	2.426*
					-1.29	-2.15
Constant	-0.226*	-0.245*	-0.316**	0.181	-2.066*	0.0337
	(-2.17)	(-2.32)	(-2.83)	-0.97	(-2.37)	-0.04
lnalpha						
Constant	-1.442	-1.709	-2.489**	-3.125	-3.031***	-16.07***
	(-1.80)	(-1.88)	(-2.92)	(-1.29)	(-4.63)	(-10.42)
N	162	162	162	162	162	162

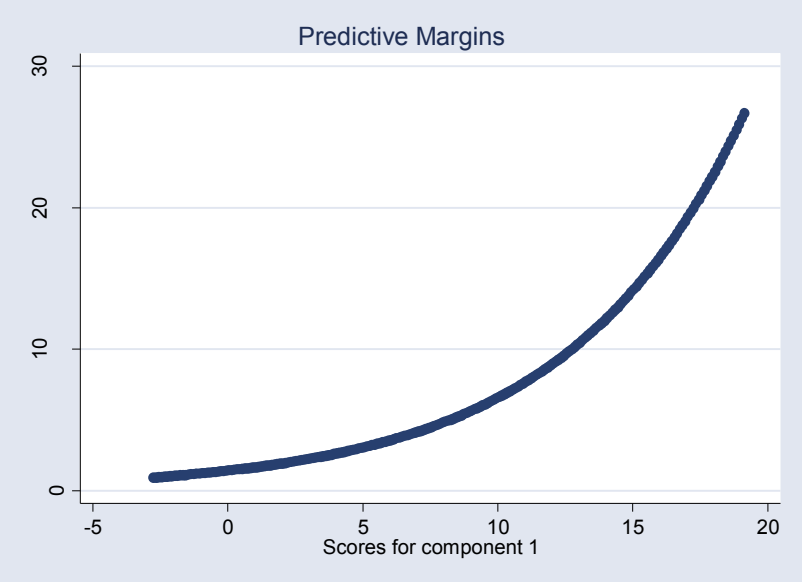
t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

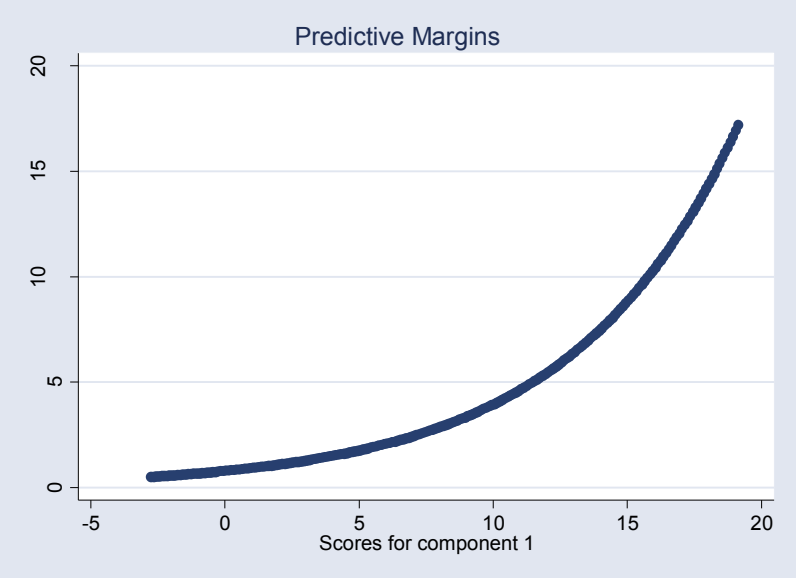
8.5 MARGINAL EFFECTS

8.5.1 Component 1

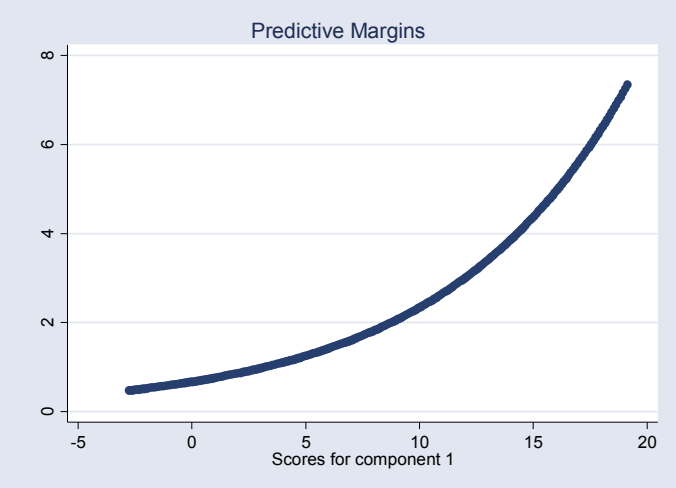
8.5.1.1 Dependent variable: Count of FDI



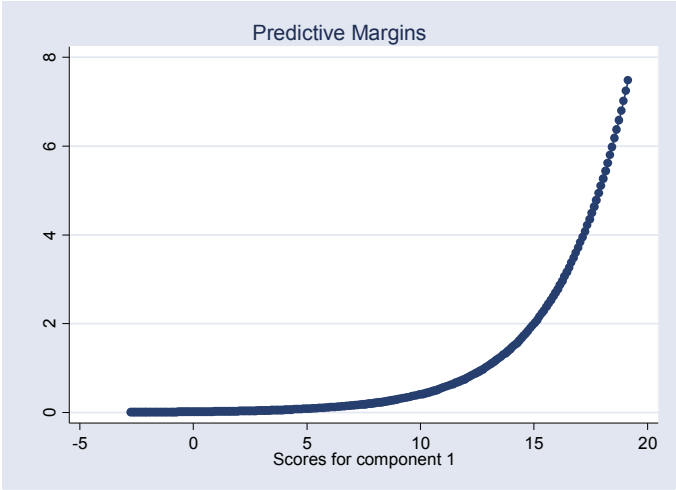
8.5.1.2 Dependent variable: market seeking FDI



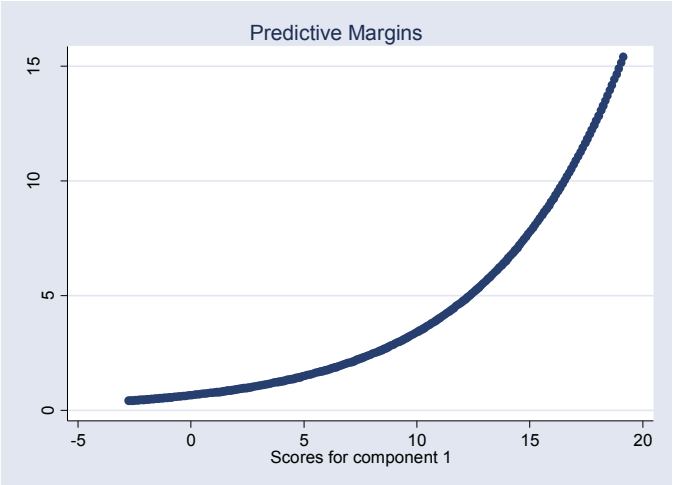
8.5.1.3 Dependent variable: efficiency seeking FDI



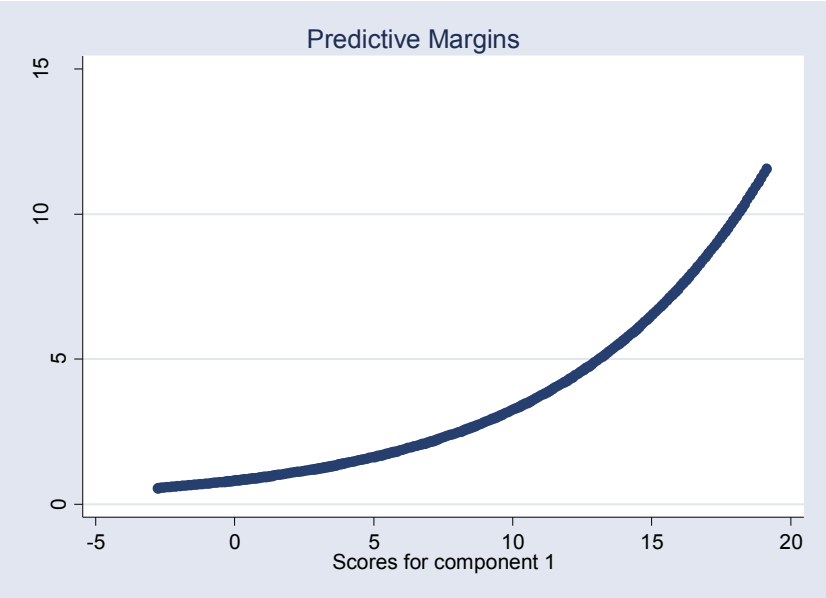
8.5.1.4 Dependent variable: resource seeking FDI



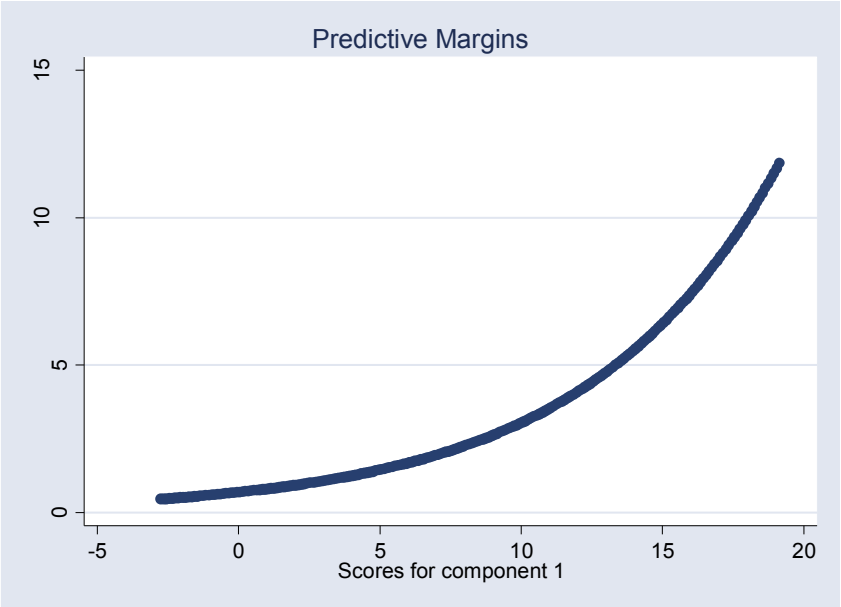
8.5.1.5 Dependent variable: FDI creating above 100 jobs



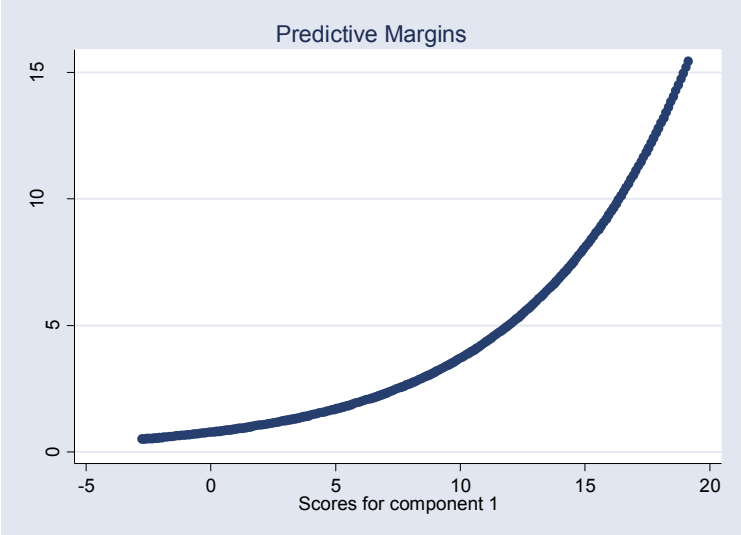
8.5.1.6 Dependent variable: FDI creating below 100 jobs



8.5.1.7 Dependent variable: low tech FDI

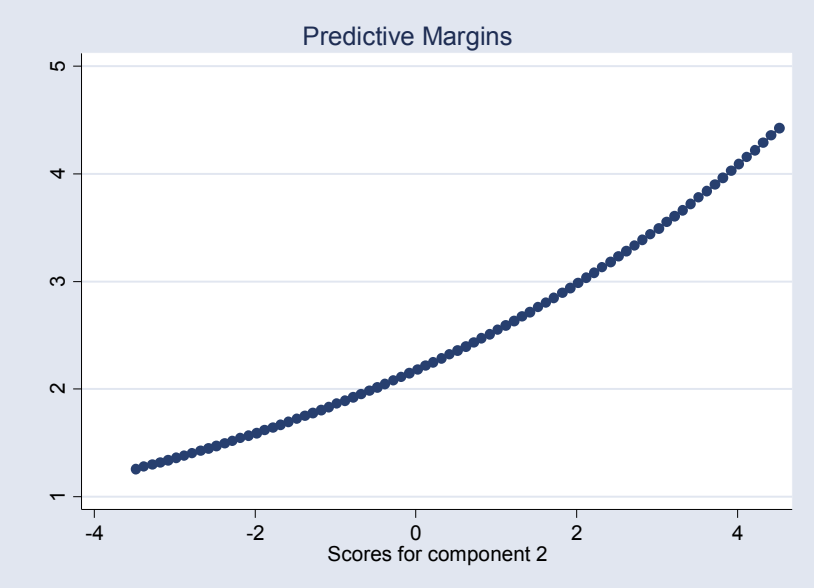


8.5.1.8 Dependent variable: medium to high tech FDI

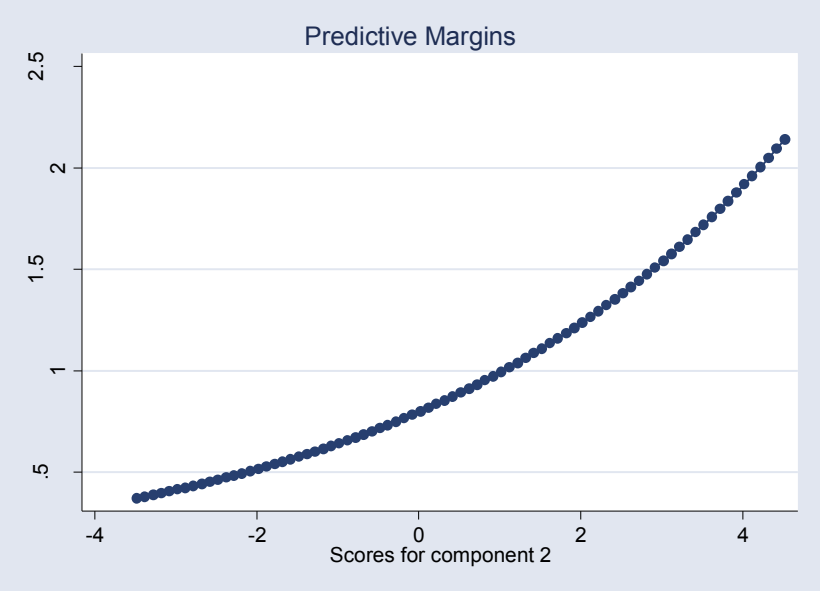


8.5.2 Component 2

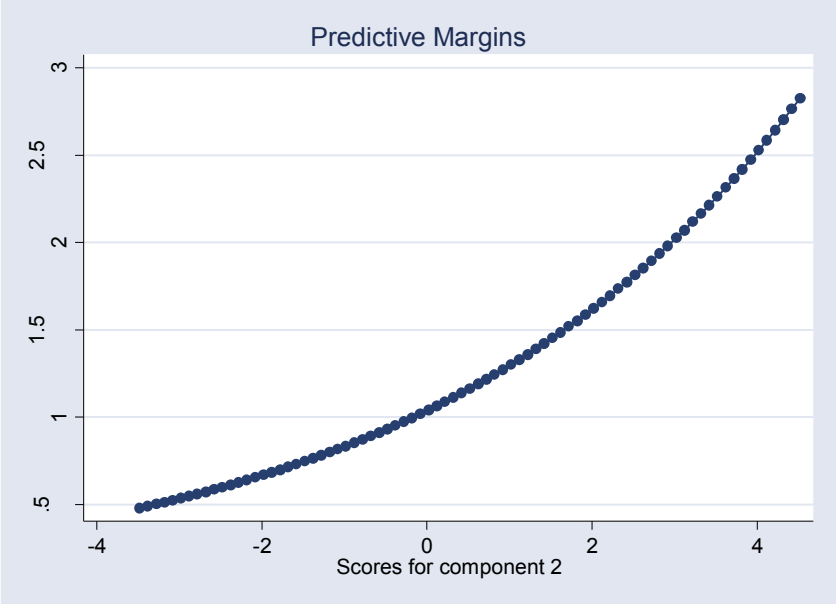
8.5.2.1 Dependent variable: Count of FDI



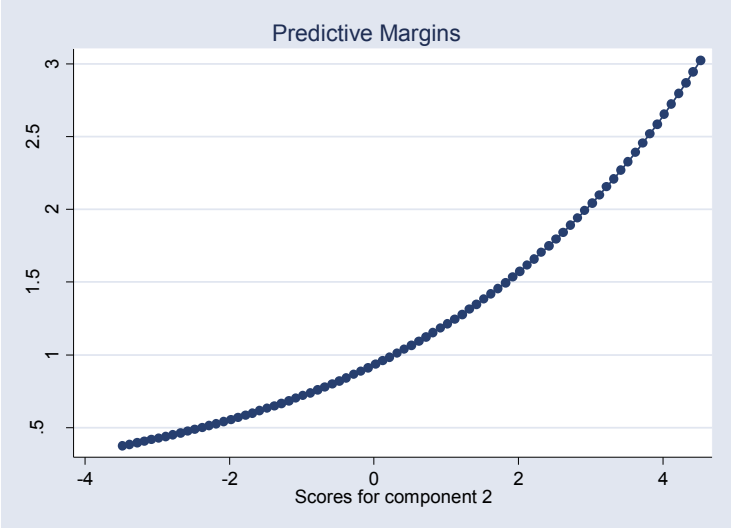
8.5.2.2 Dependent variable: efficiency seeking FDI



8.5.2.3 Dependent variable: FDI creating above 100 jobs

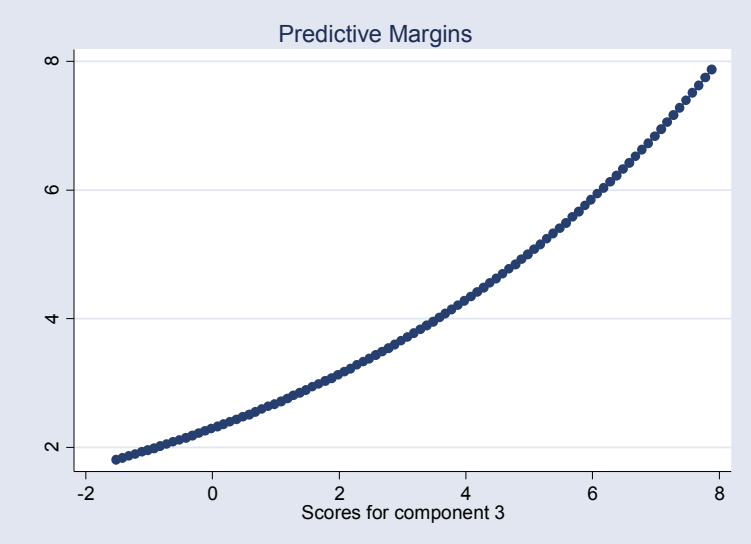


8.5.2.4 Dependent variable: low tech FDI

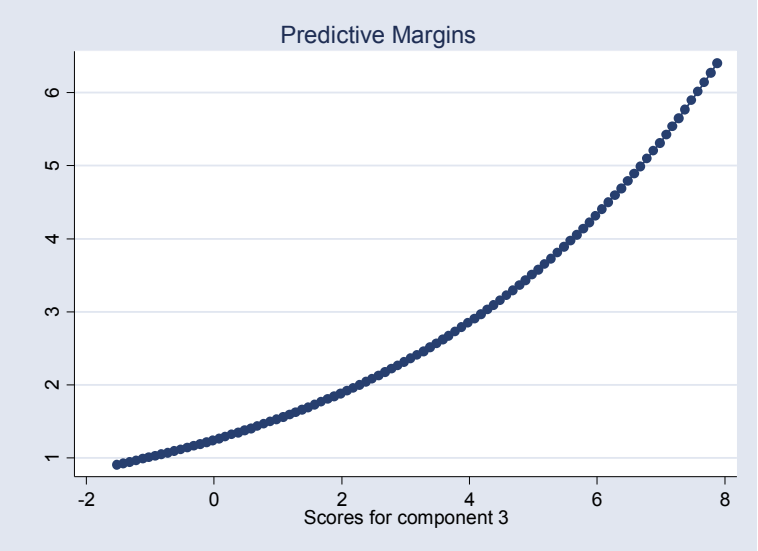


8.5.3 Component 3

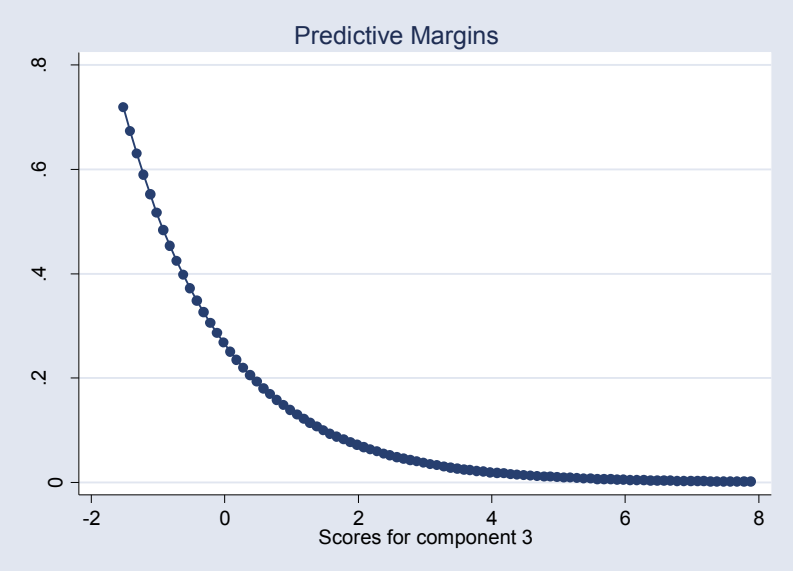
8.5.3.1 Dependent variable: Count of FDI



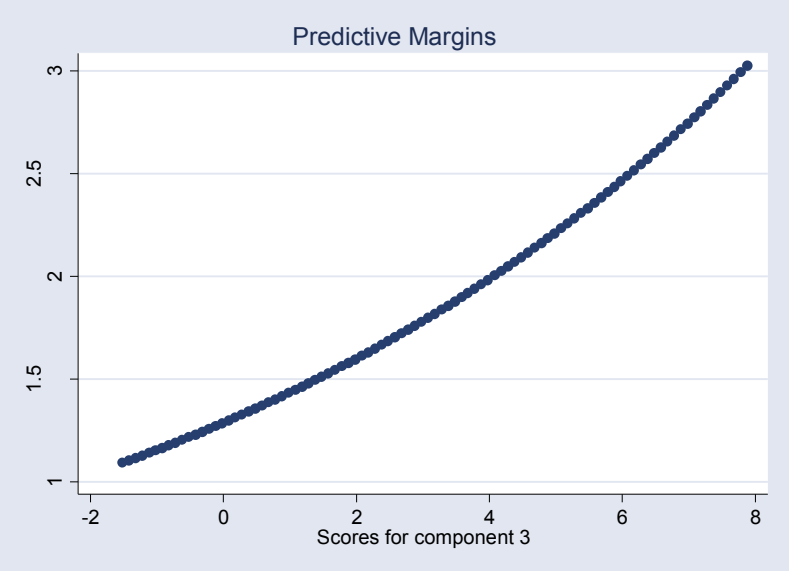
8.5.3.2 Dependent variable: market seeking FDI



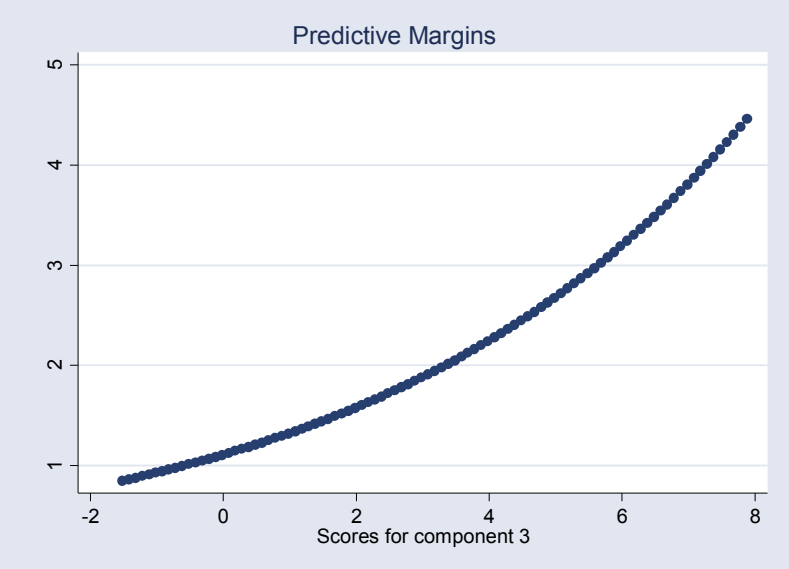
8.5.3.3 Dependent variable: resource seeking FDI



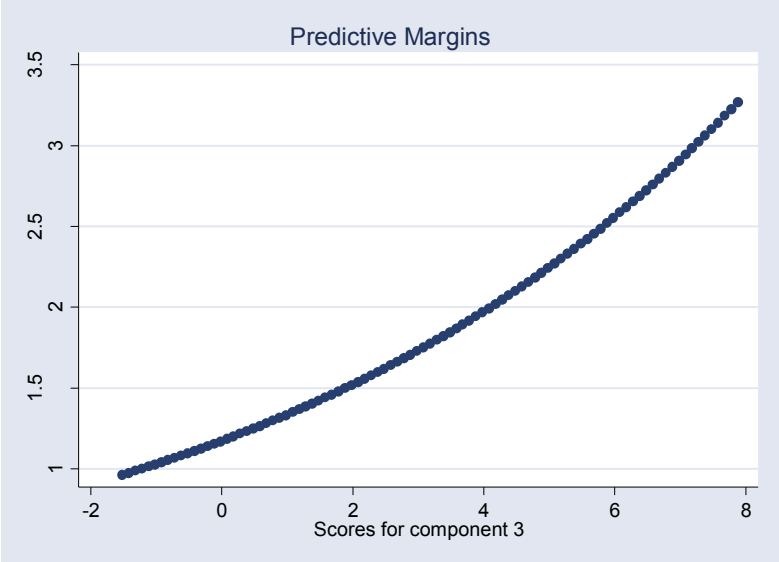
8.5.3.4 Dependent variable: FDI creating above 100 jobs



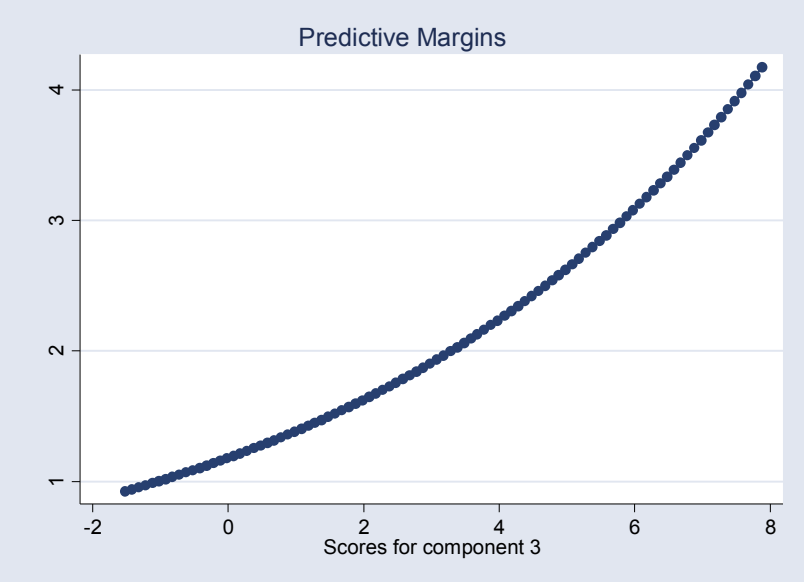
8.5.3.5 Dependent variable: FDI creating below 100 jobs



8.5.3.6 Dependent variable: low tech FDI

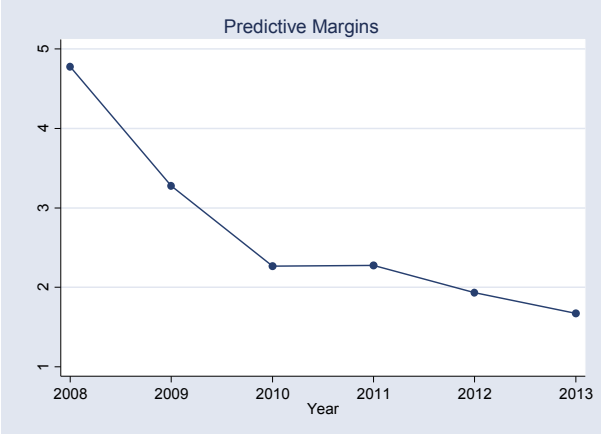


8.5.3.7 Dependent variable: medium to high tech FDI

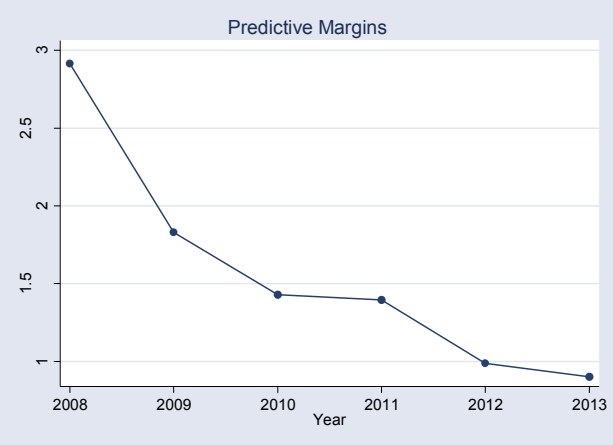


8.5.4 Year Dummies

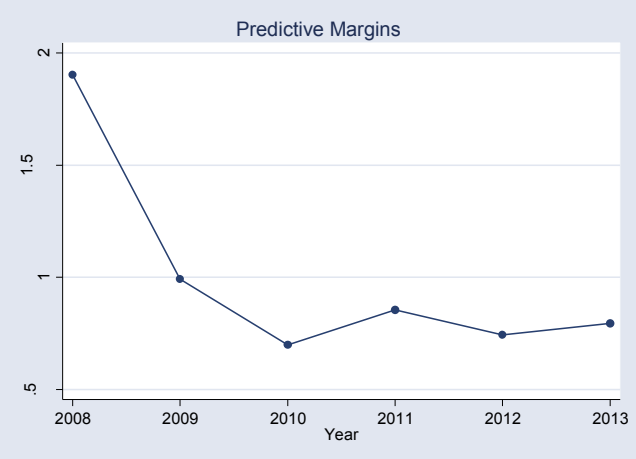
8.5.4.1 Dependent variable: Count of FDI



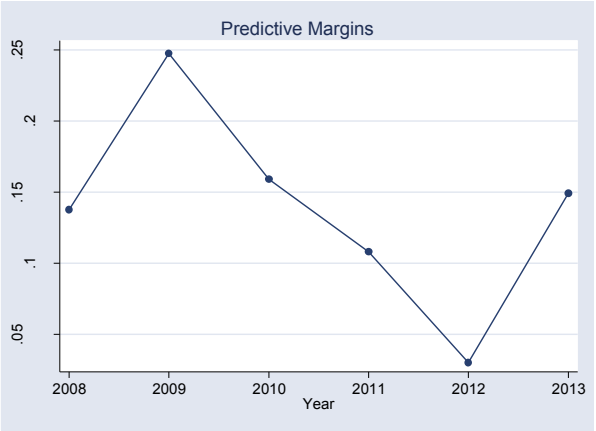
8.5.4.2 Dependent variable: market seeking FDI



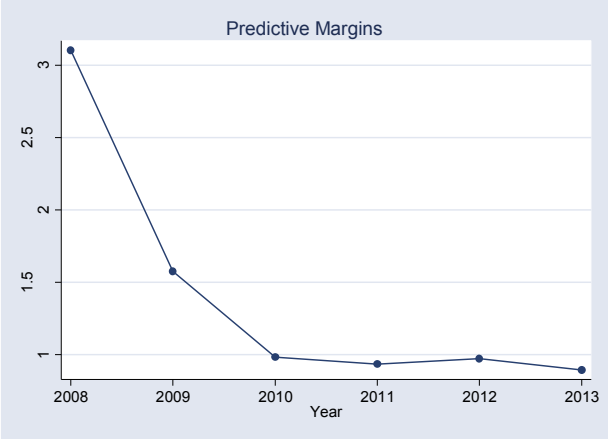
8.5.4.3 Dependent variable: efficiency seeking FDI



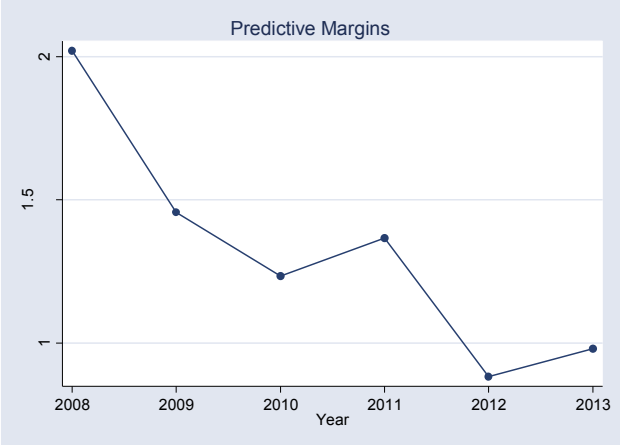
8.5.4.4 Dependent variable: resource seeking FDI



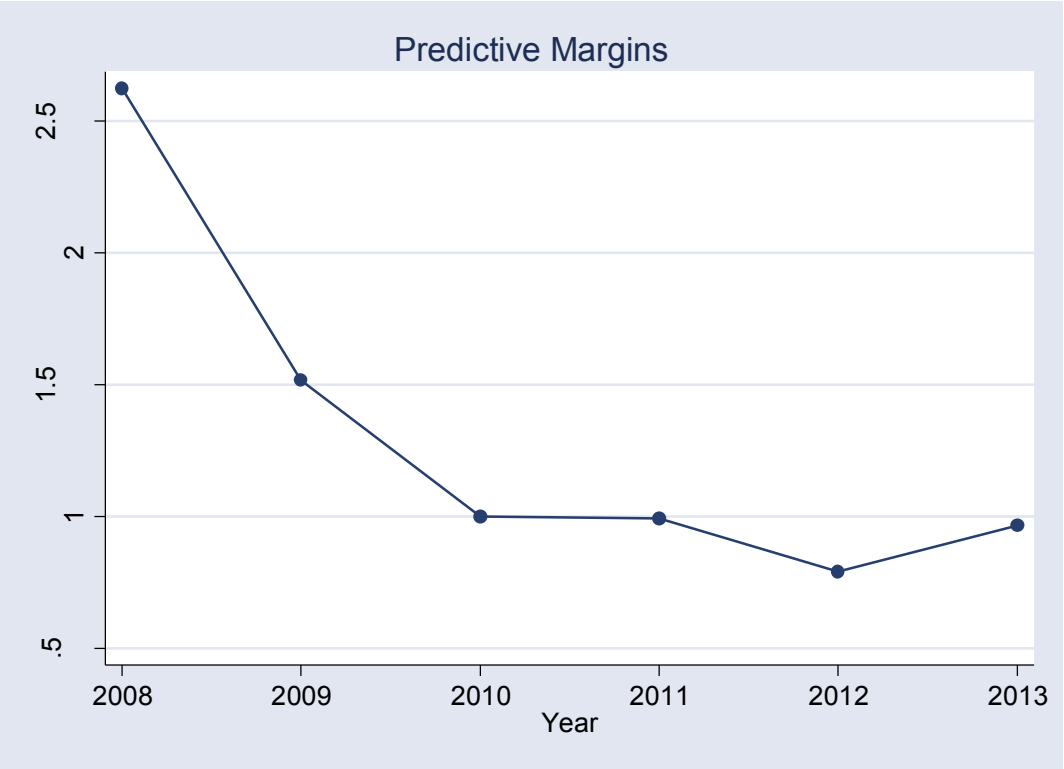
8.5.4.5 Dependent variable: FDI creating above 100 jobs



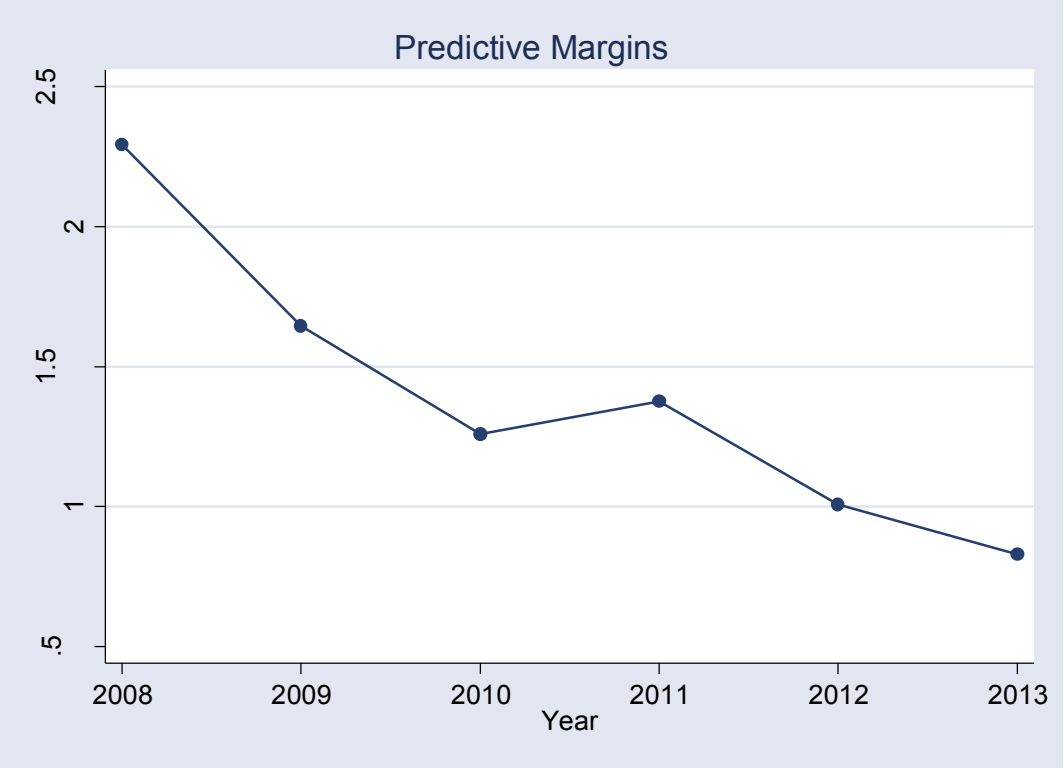
8.5.4.6 Dependent variable: FDI creating below 100 jobs



8.5.4.7 Dependent variable: low tech FDI

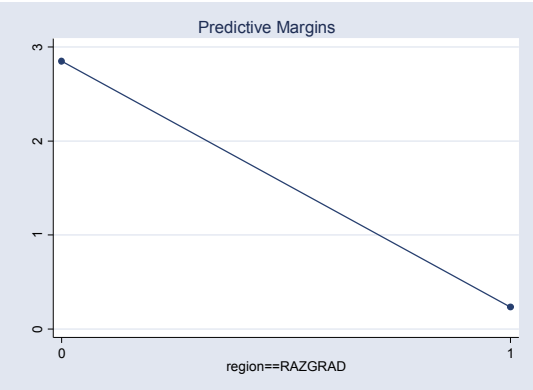


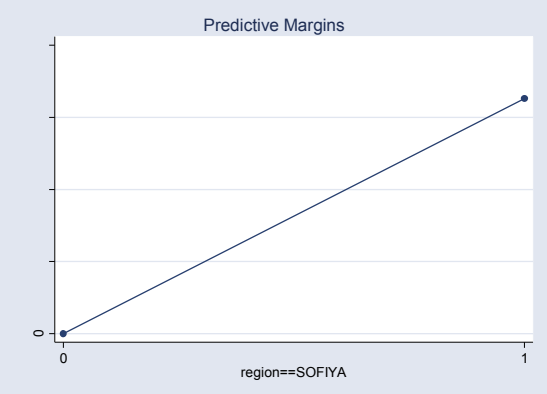
8.5.4.8 Dependent variable: medium to high tech FDI

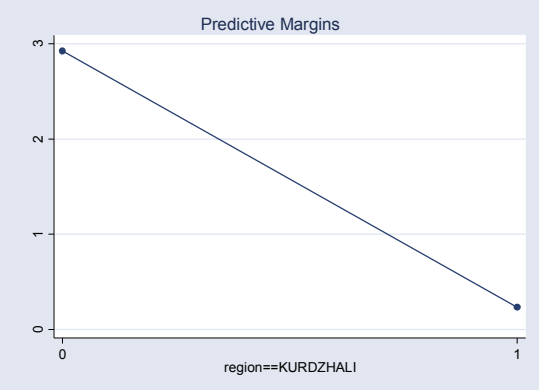


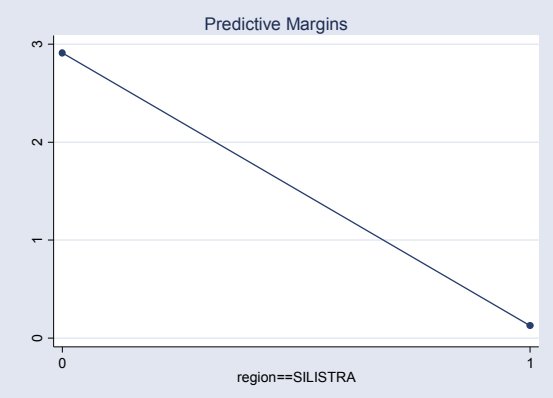
8.5.5 Region dummies

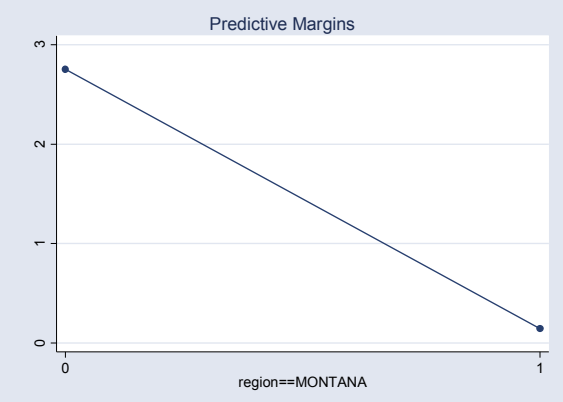
8.5.5.1 Dependent variable: Count of FDI

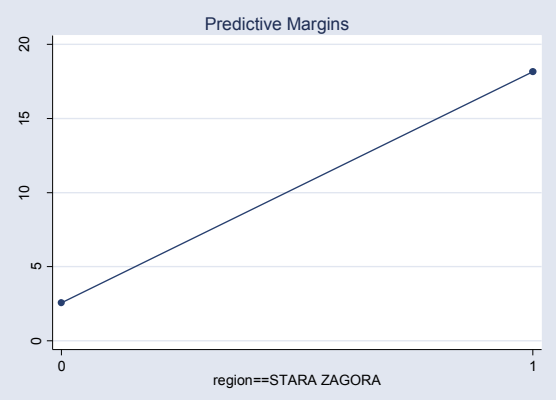


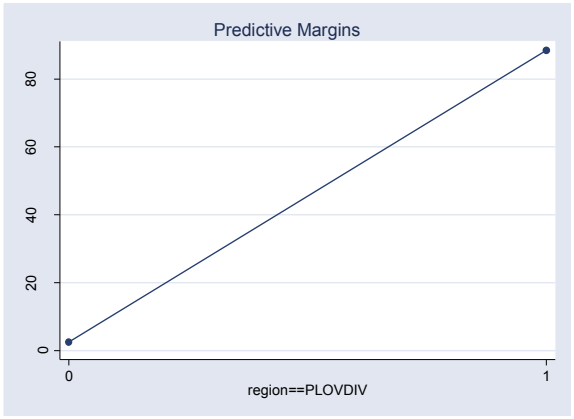


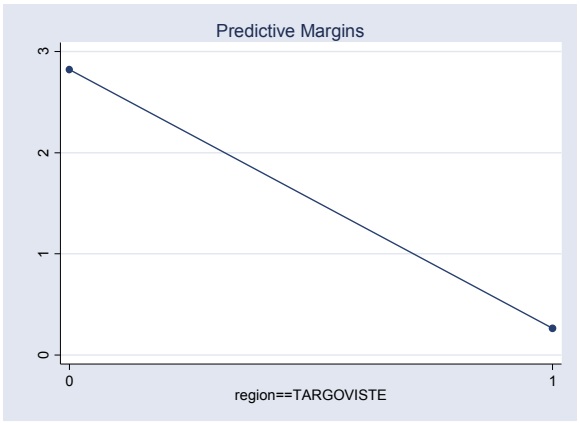


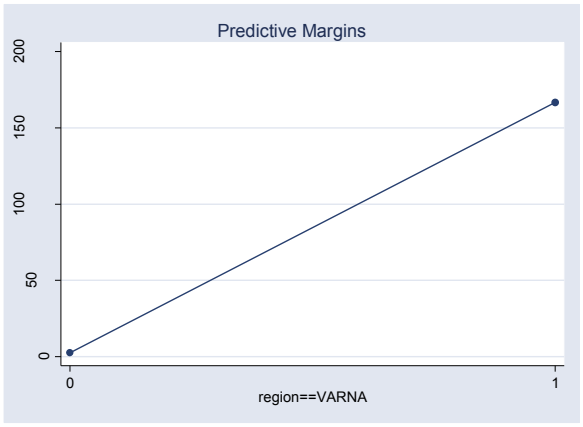


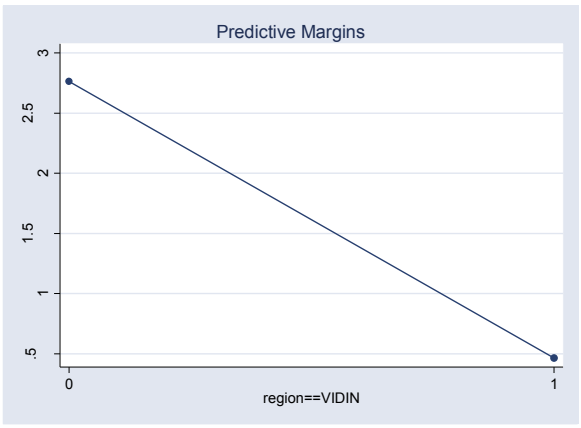




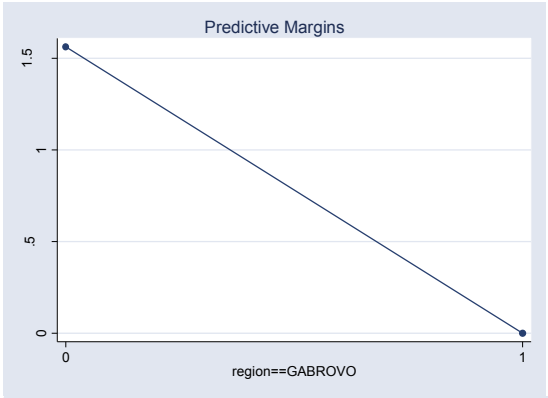


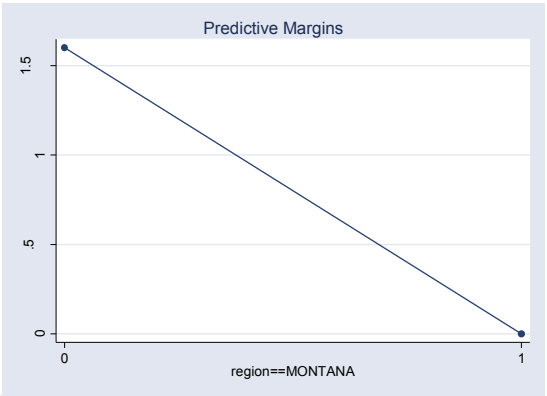


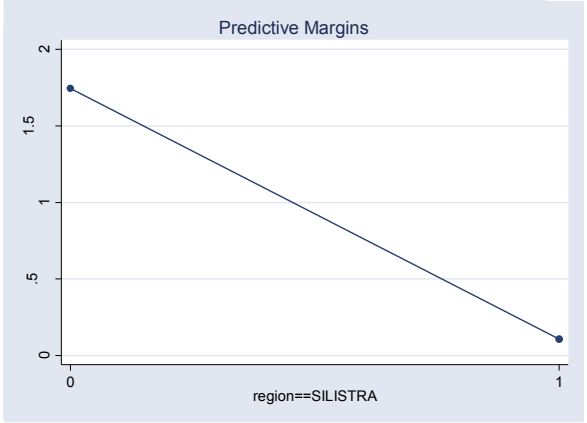


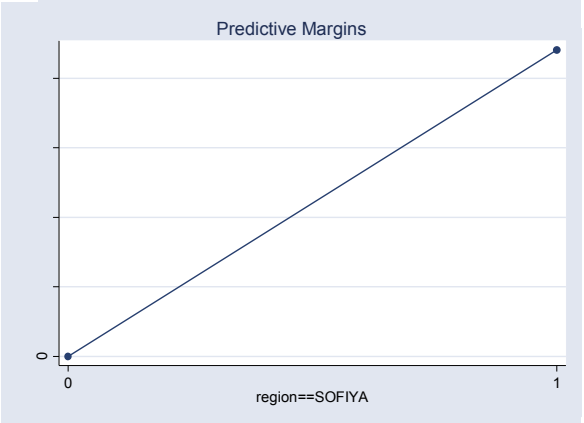


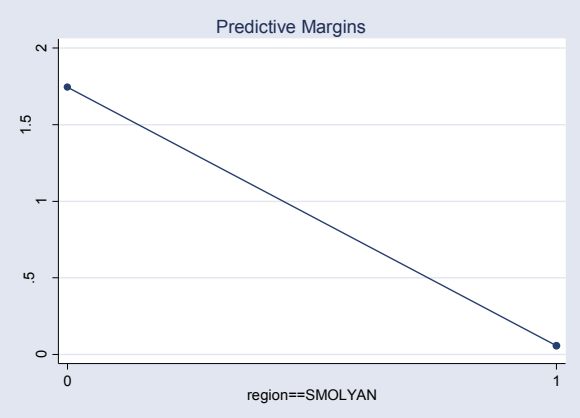
8.5.5.2 Dependent variable: market seeking FDI

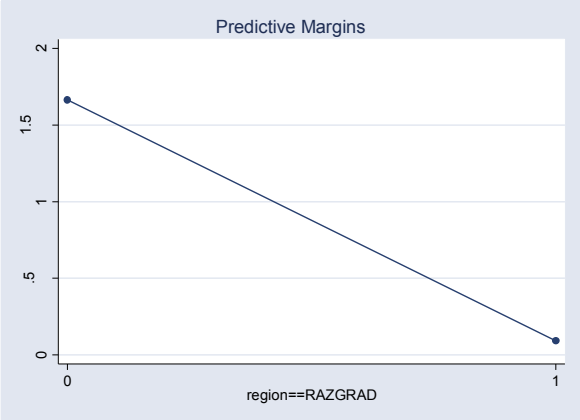


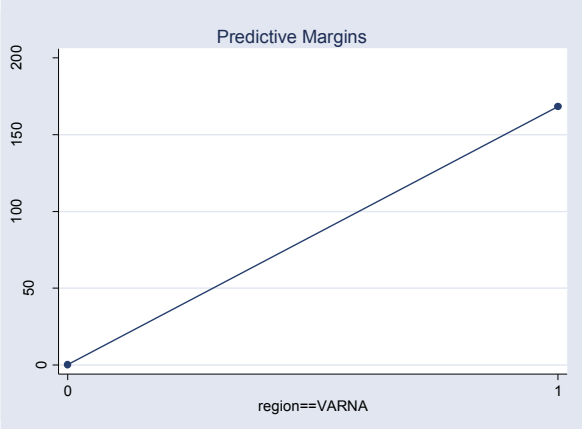


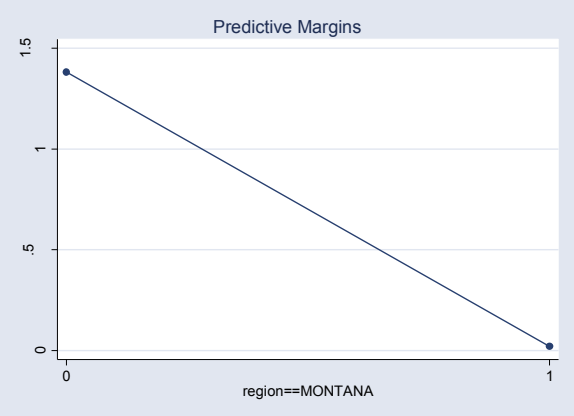


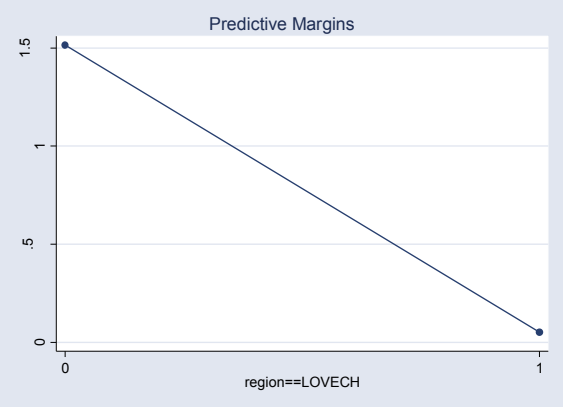



Predictive Margins
0
.5
1
1.5
2
0
1
region==SMOLYAN

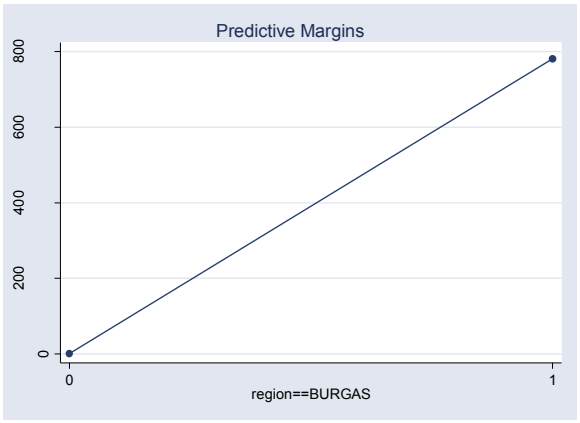

Predictive Margins
0
.5
1
1.5
2
0
1
region==RAZGRAD

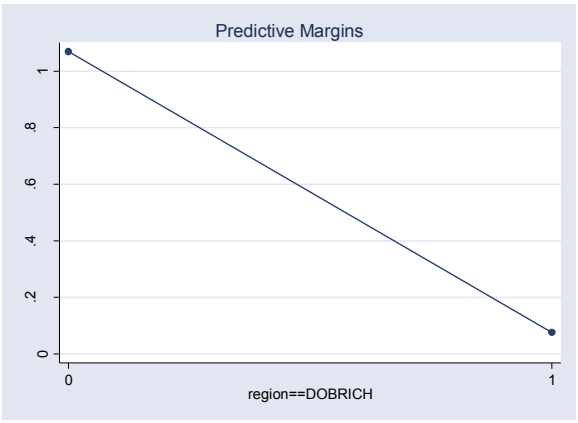

Predictive Margins
0
50
100
150
200
0
1
region==VARNA

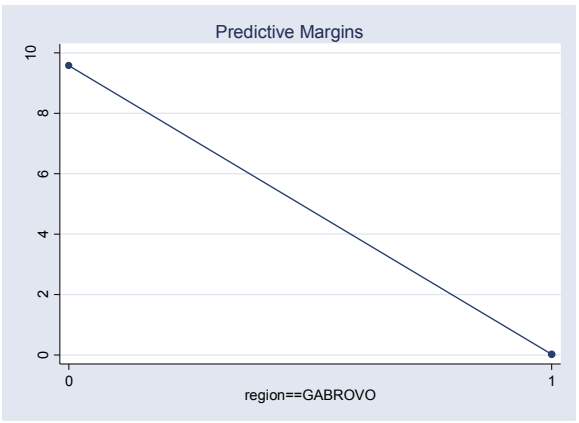

Predictive Margins
0
.5
1
1.5
0
1
region==MONTANA

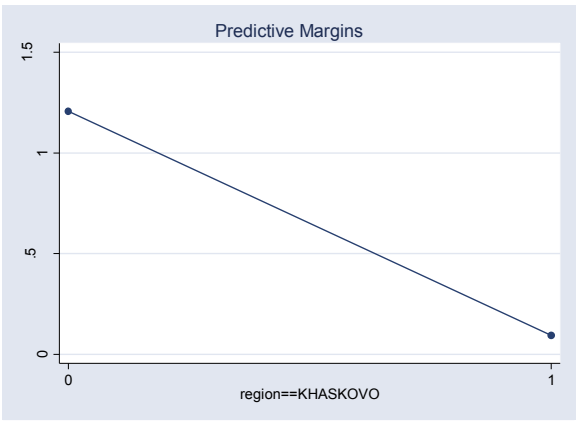

Predictive Margins
0
.5
1
1.5
0
1
region==LOVECH

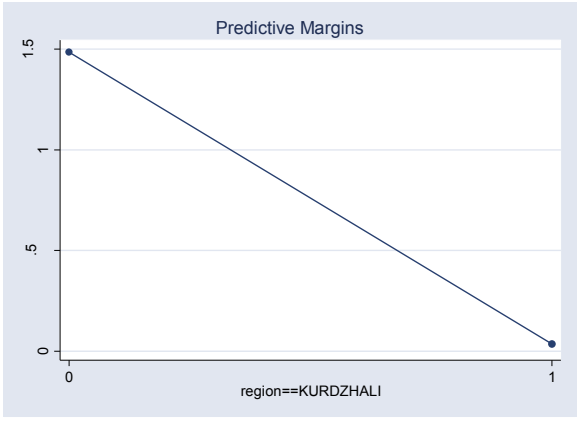
8.5.5.3 Dependent variable: efficiency seeking FDI

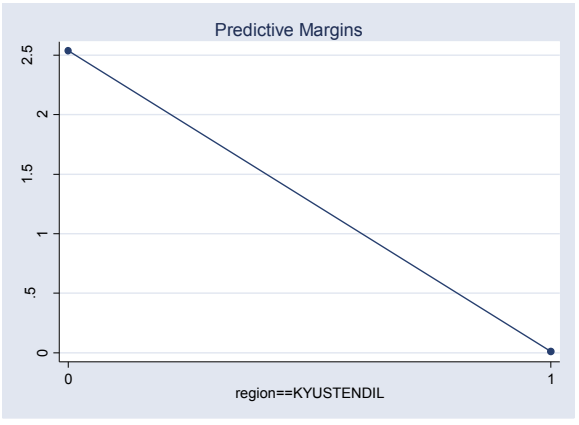


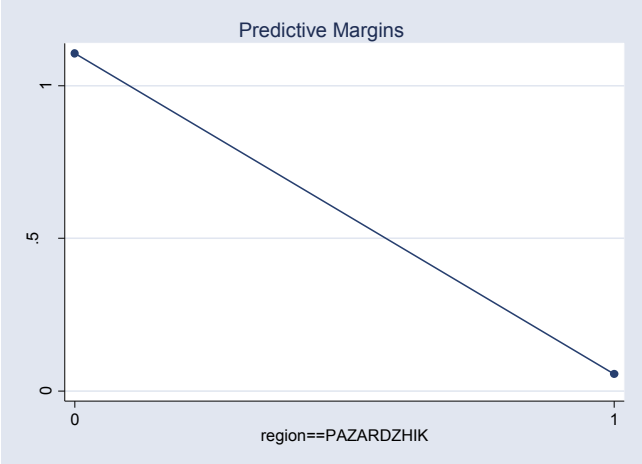


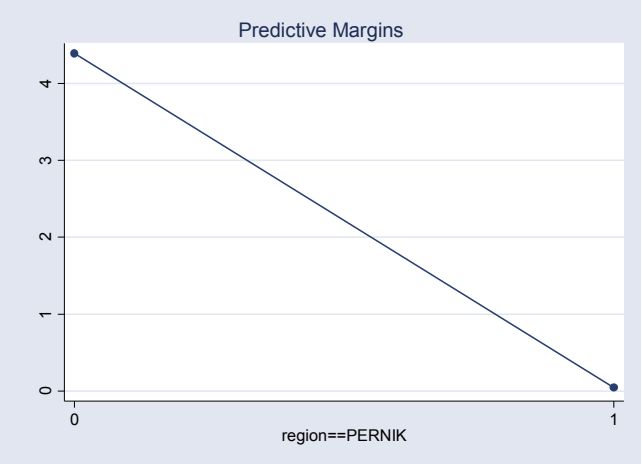


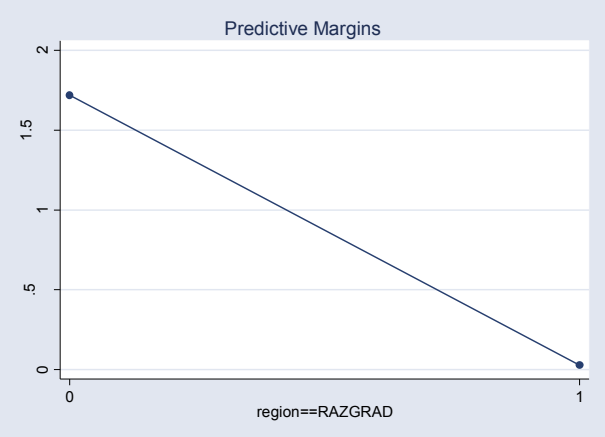


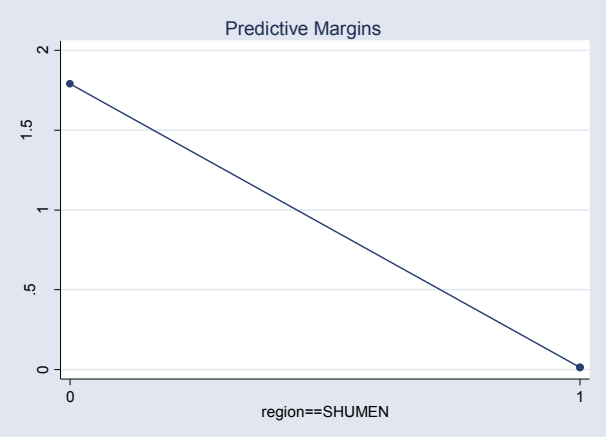


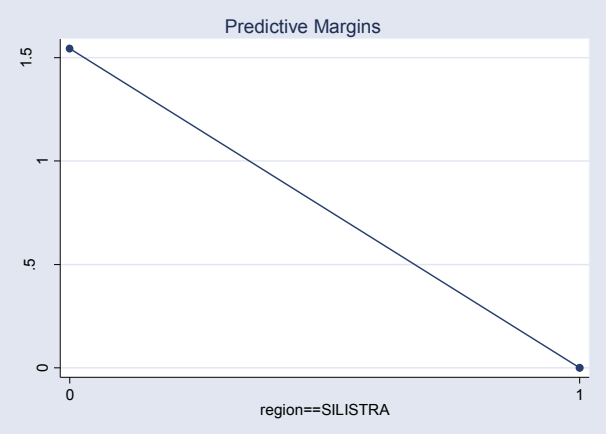


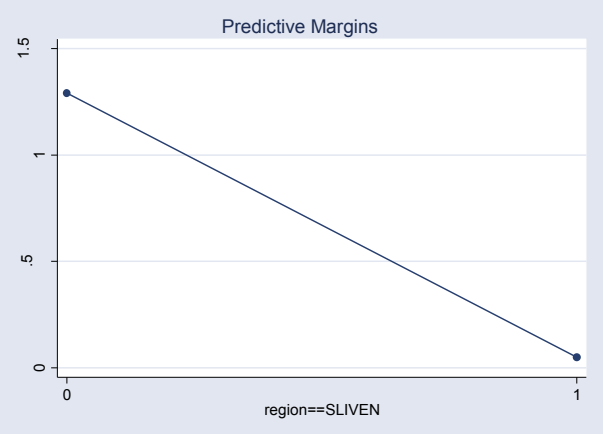

Predictive Margins
0
.5
1
0
1
region==PAZARDZHIK

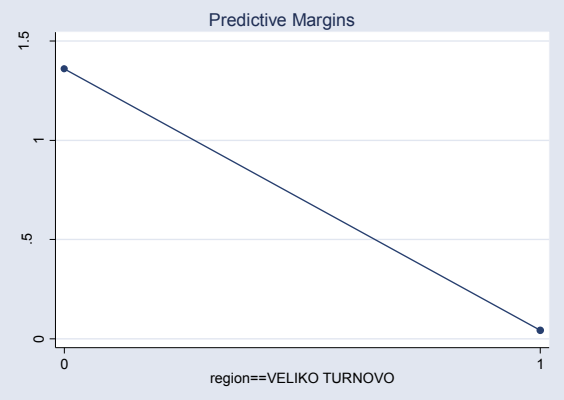

Predictive Margins
0
1
2
3
4
0
1
region==PERNIK

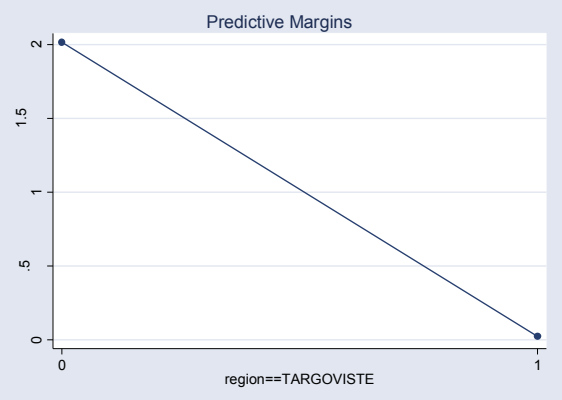

Predictive Margins
0
.5
1
1.5
2
0
1
region==RAZGRAD

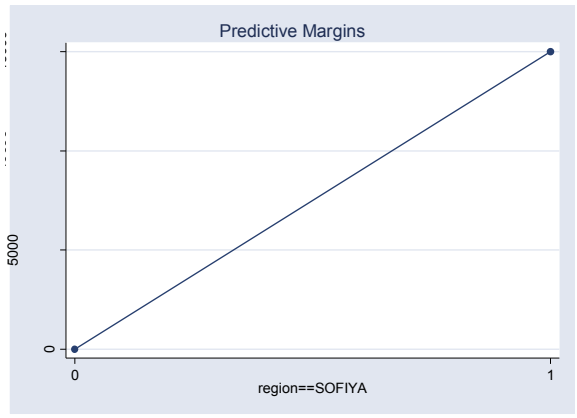

Predictive Margins
0
.5
1
1.5
2
0
1
region==SHUMEN

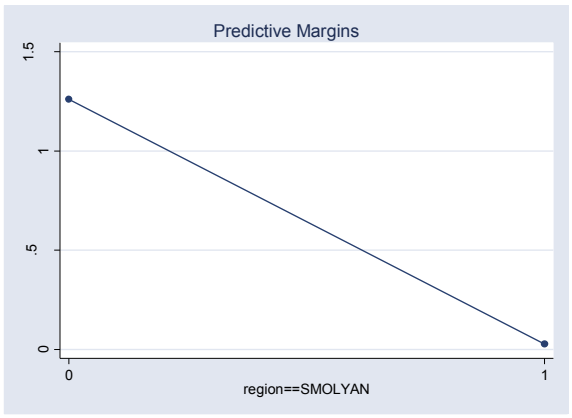

Predictive Margins
0
.5
1
1.5
0
1
region==SILISTRA


Predictive Margins
0
.5
1
1.5
0
1
region==SLIVEN

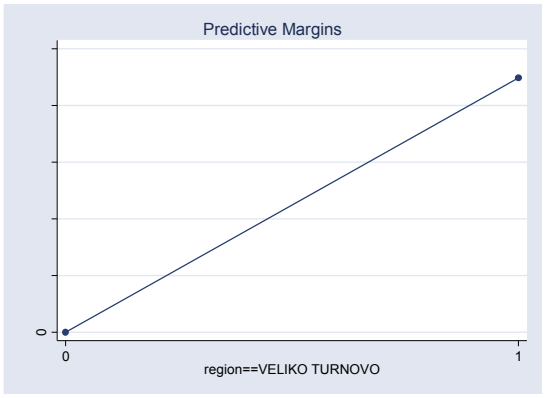

Predictive Margins
0
.5
1
1.5
0
1
region==VELIKO TURNOVO

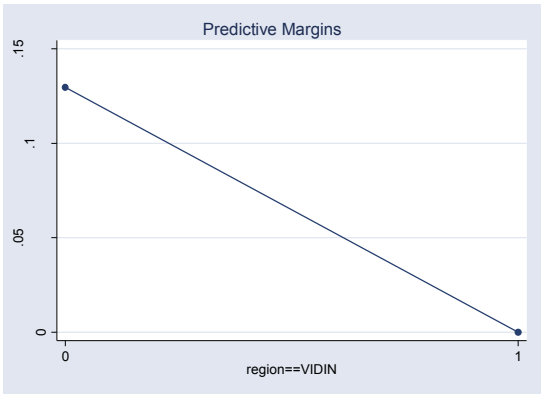

Predictive Margins
0
.5
1
1.5
2
0
1
region==TARGOVISTE

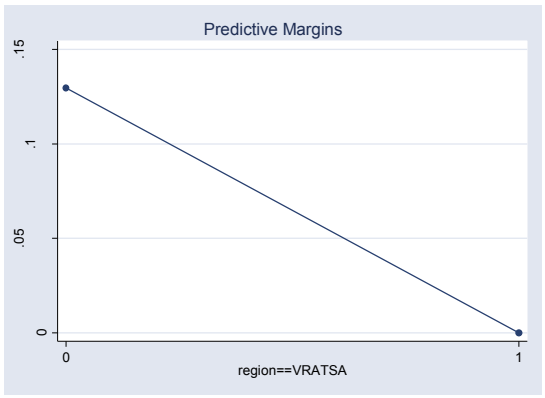


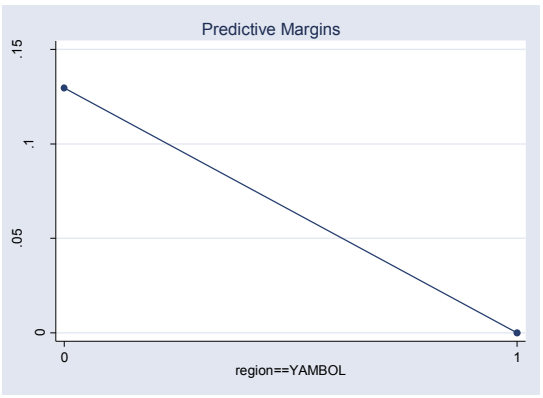


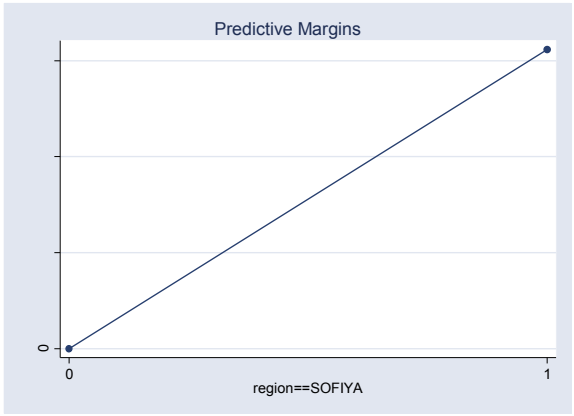
8.5.5.4 Dependent variable: resource seeking FDI

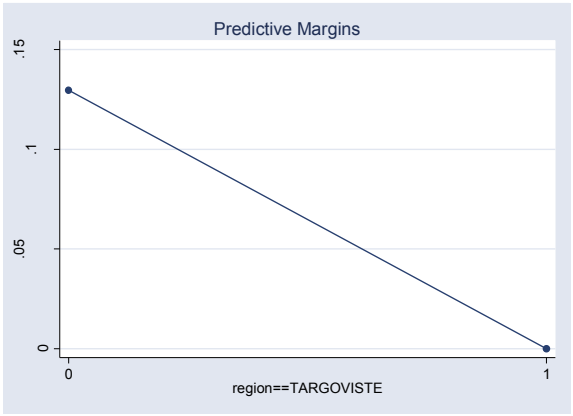


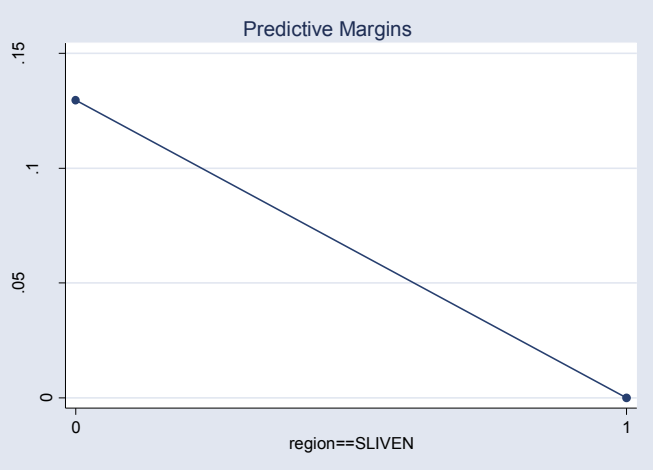


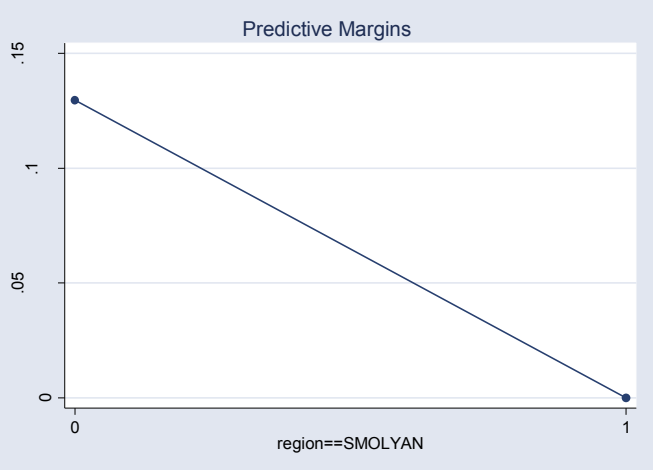


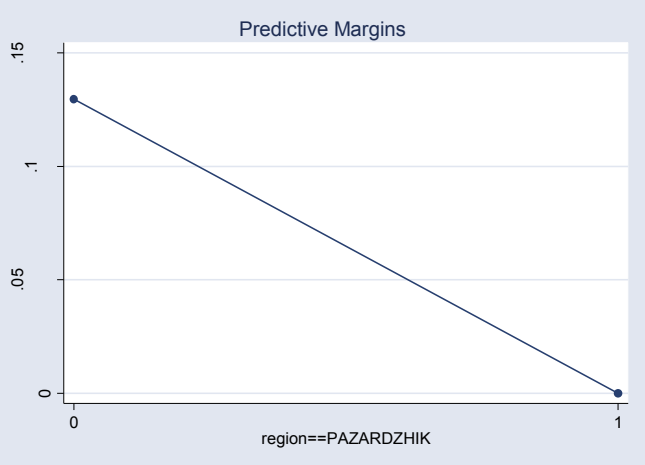


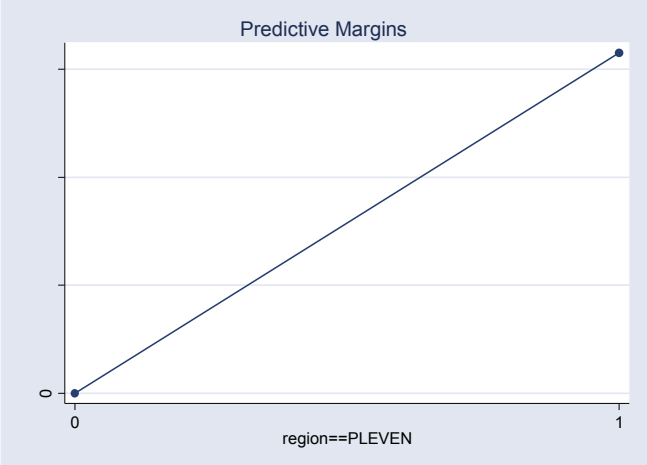


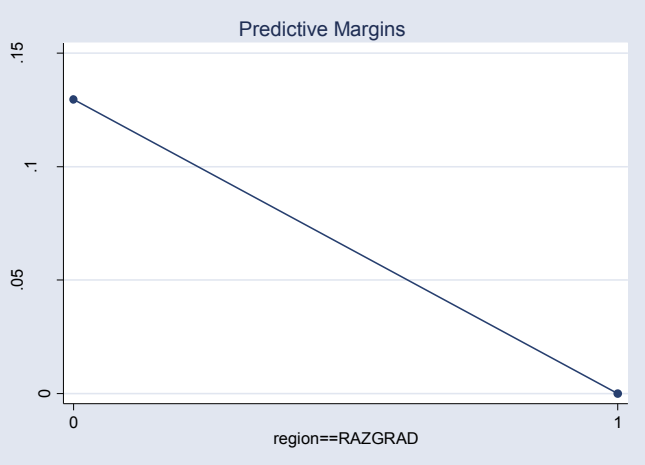


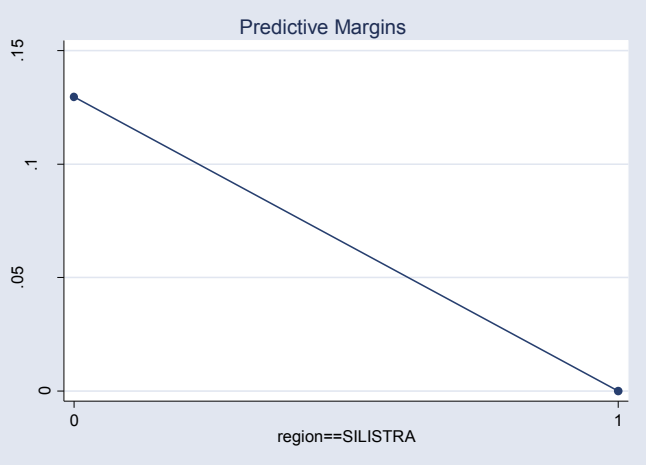

Predictive Margins
.15
.1
.05
0
0
1
region==SLIVEN

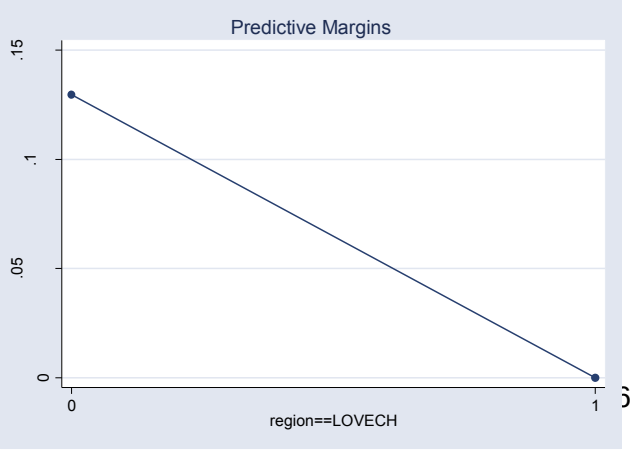

Predictive Margins
.15
.1
.05
0
0
1
region==SMOLYAN

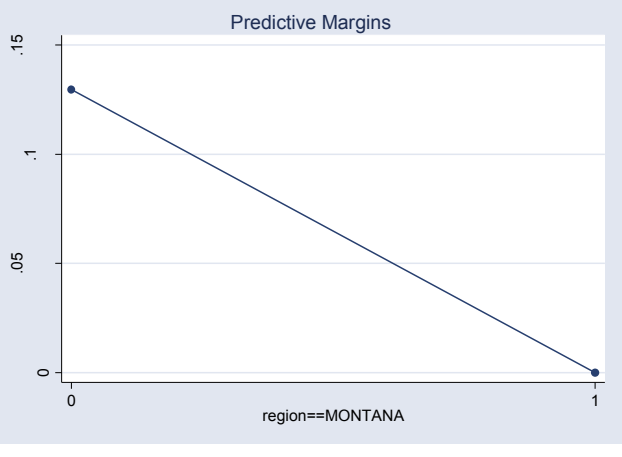

Predictive Margins
.15
.1
.05
0
0
1
region==PAZARDZHIK

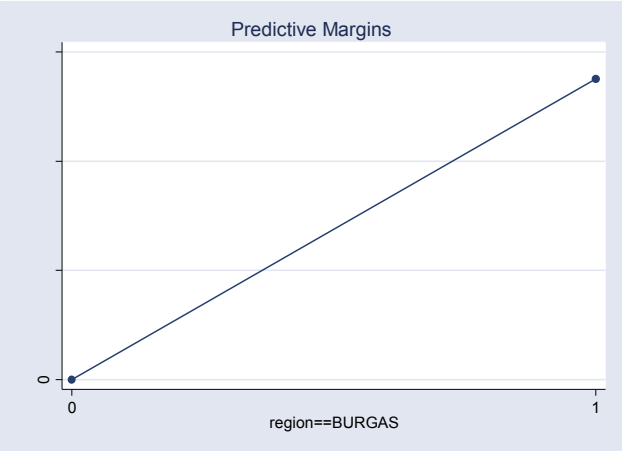

Predictive Margins
0
0
1
region==PLEVEN

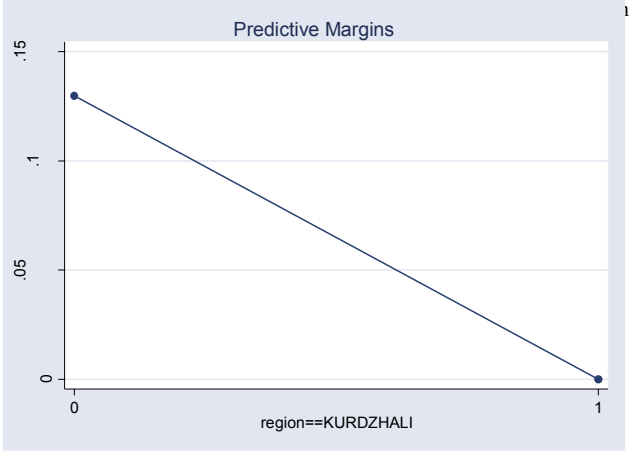

Predictive Margins
.15
.1
.05
0
0
1
region==RAZGRAD


Predictive Margins
.15
.1
.05
0
0
1
region==SILISTRA

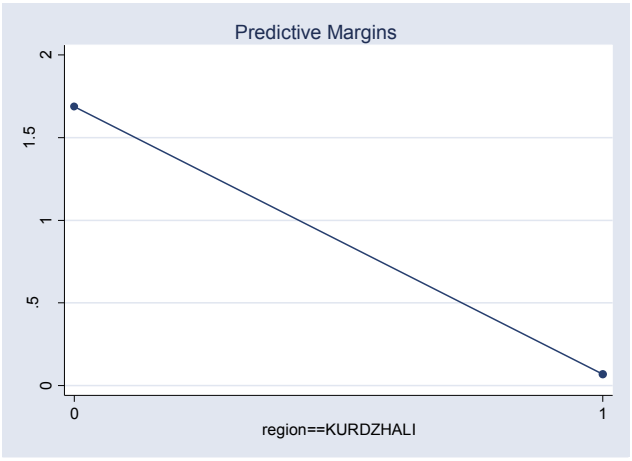

Predictive Margins
.15
.1
.05
0
0
1
region==LOVECH

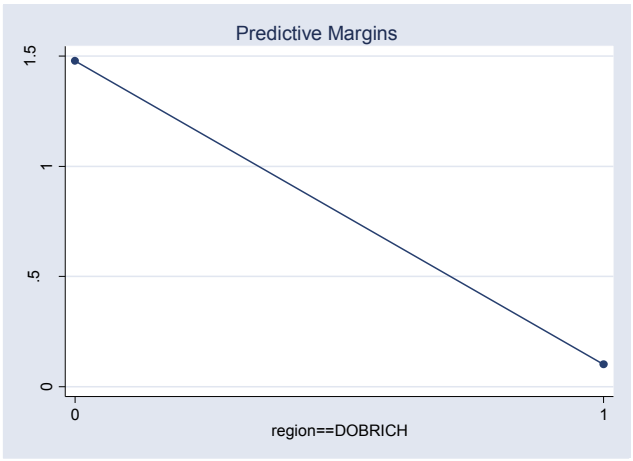

Predictive Margins
.15
.1
.05
0
0
1
region==MONTANA

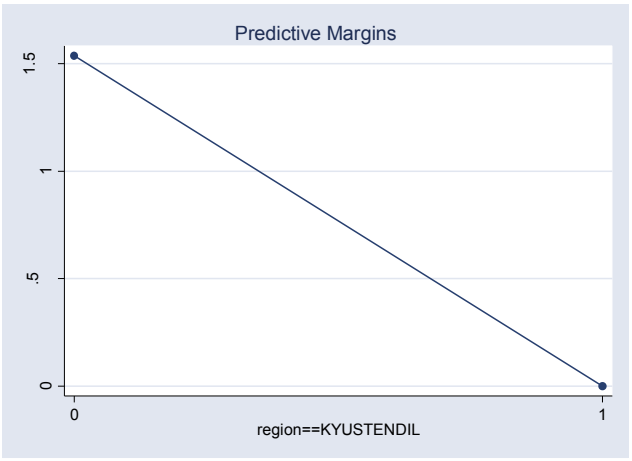


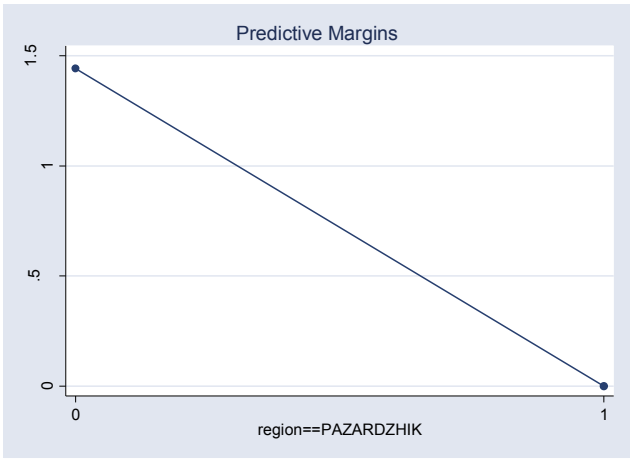


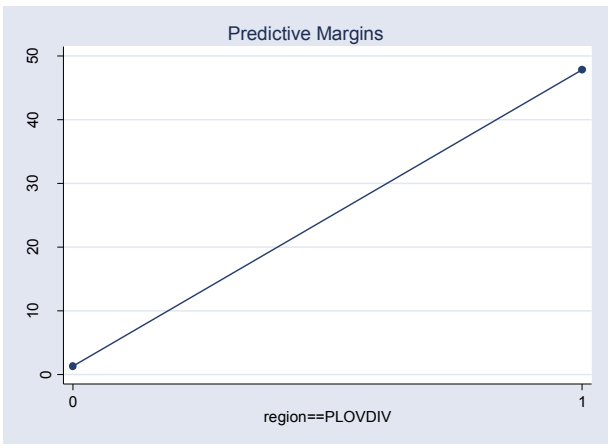
8.5.5.5 Dependent variable: FDI creating above 100 jobs

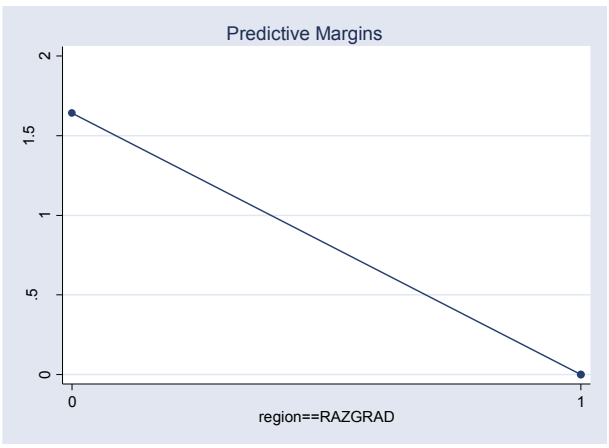


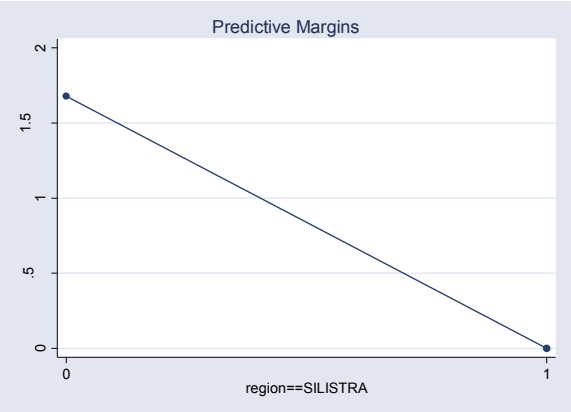


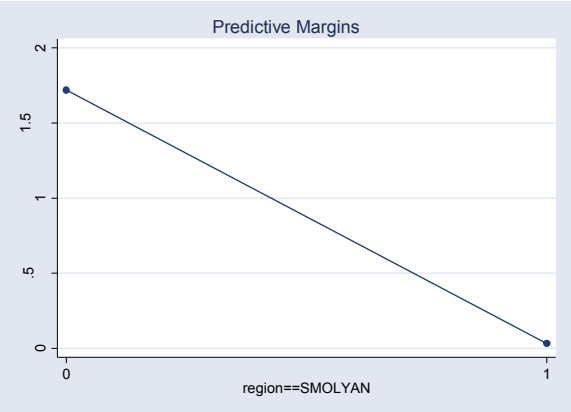


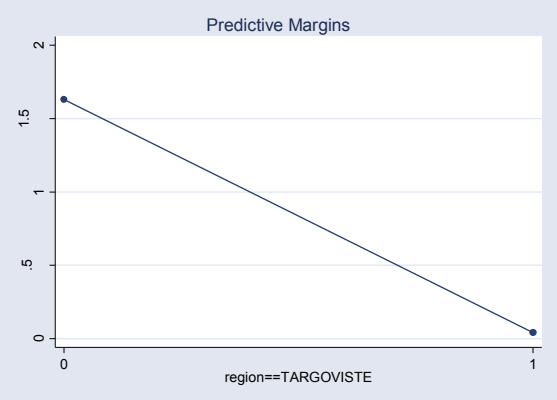


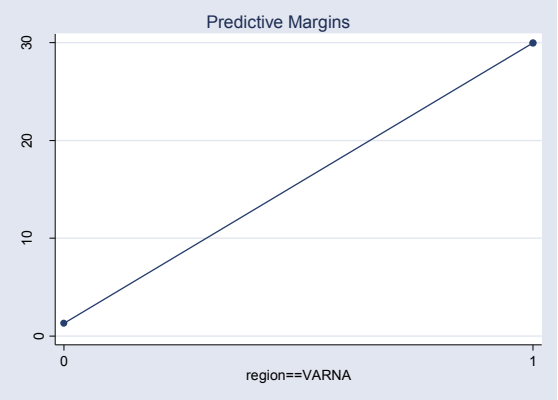


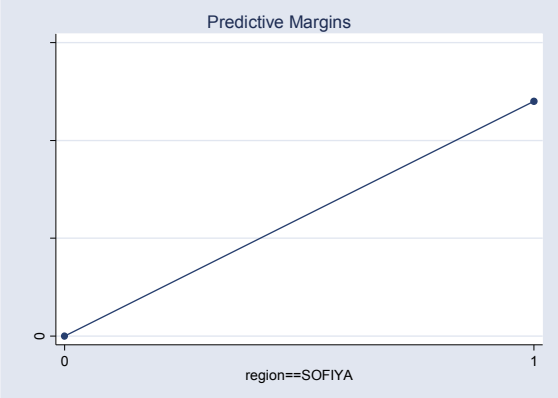




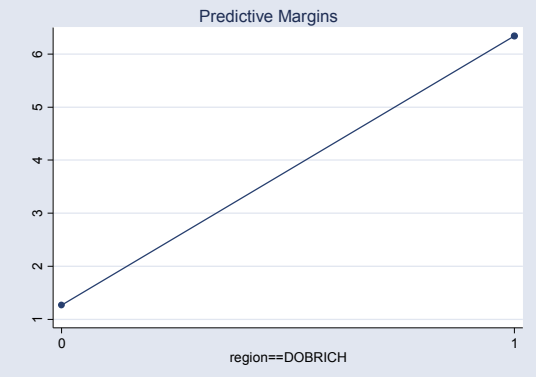


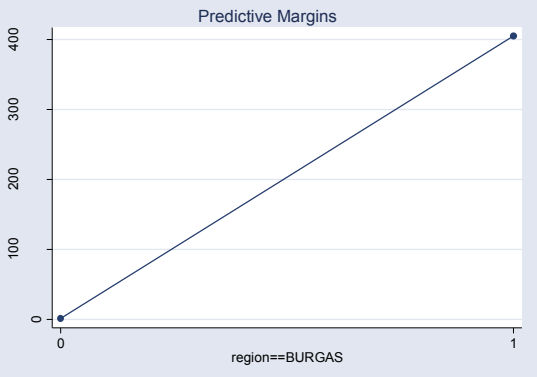


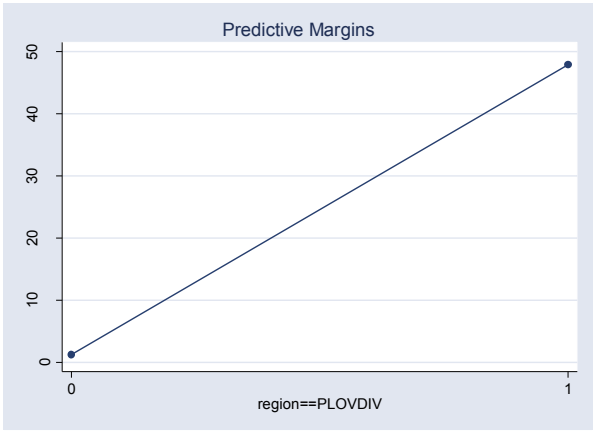


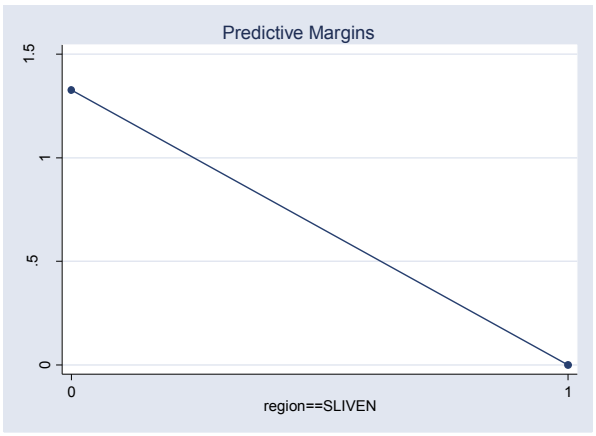


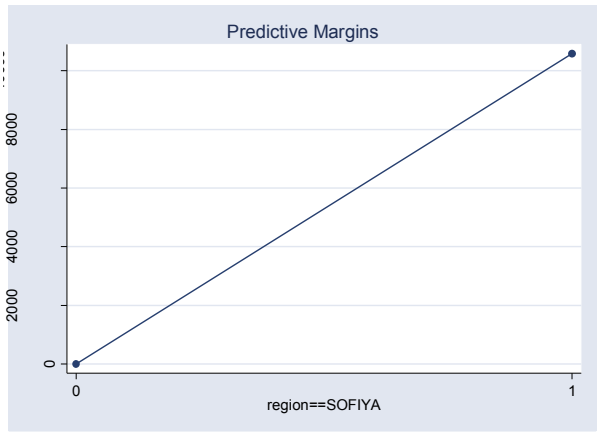
8.5.5.6 Dependent variable: FDI creating below 100 jobs

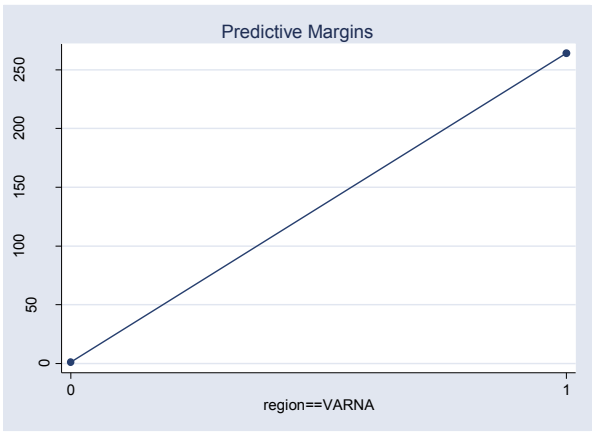




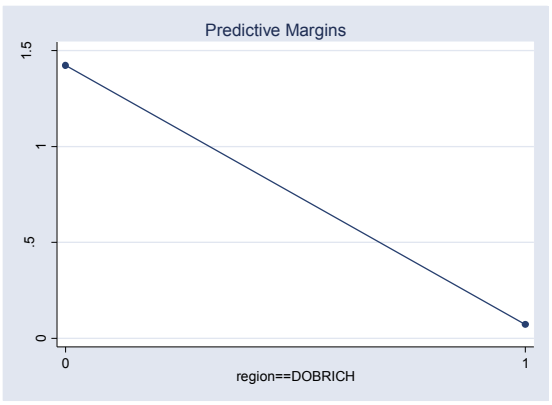


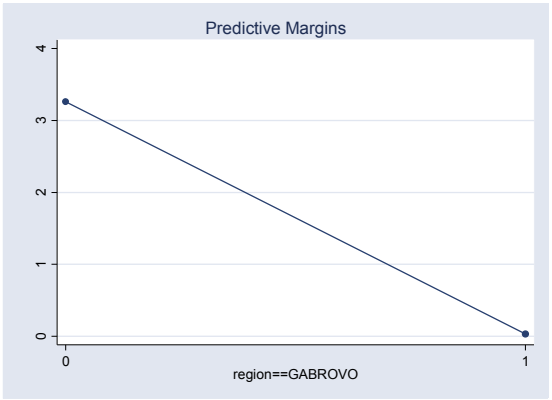


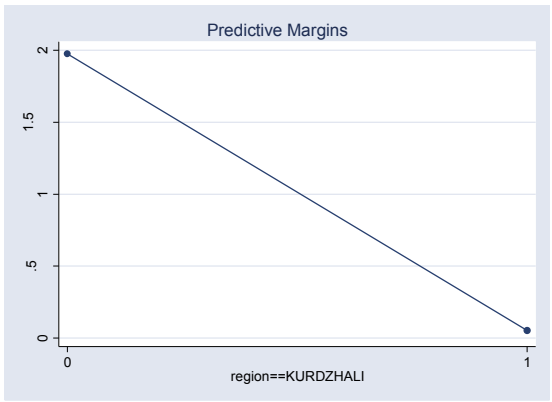


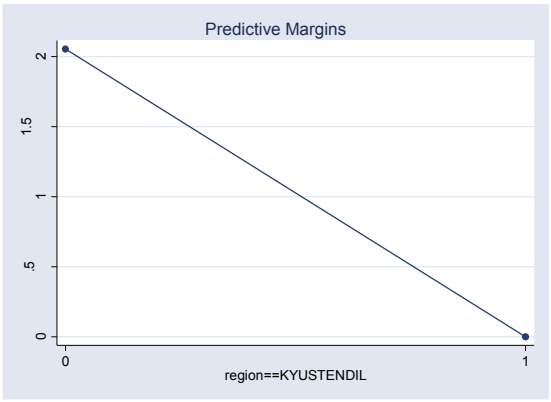


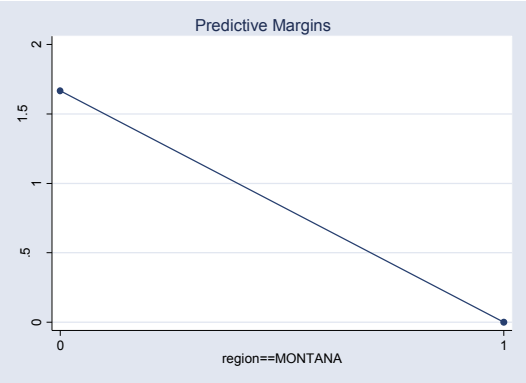
8.5.5.7 Dependent variable: low tech FDI

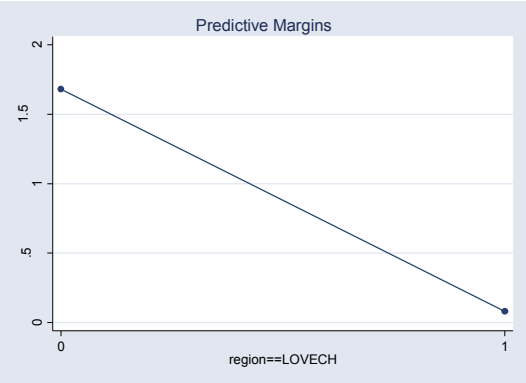




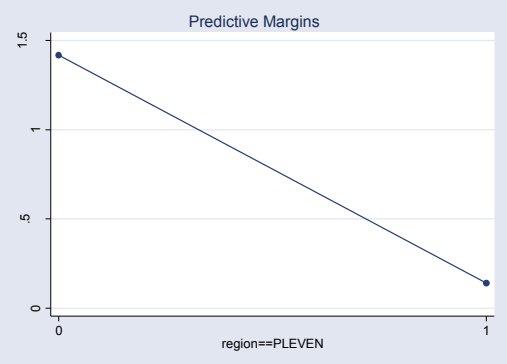


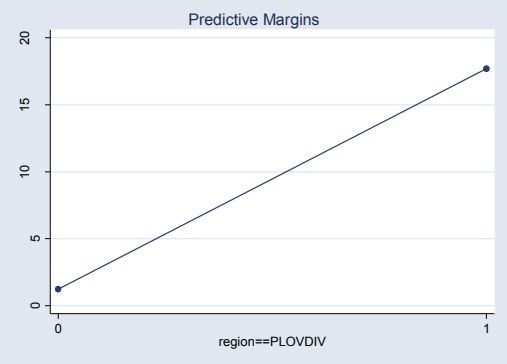


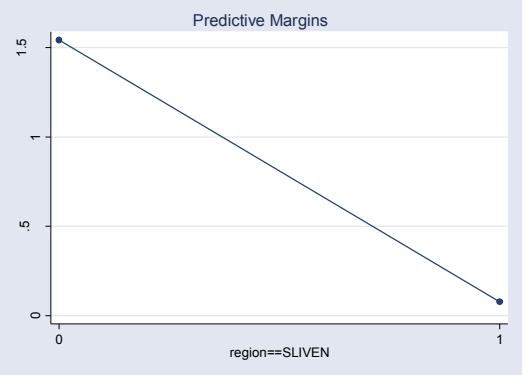

Predictive Margins
0
.5
1
1.5
2
0
1
region==MONTANA

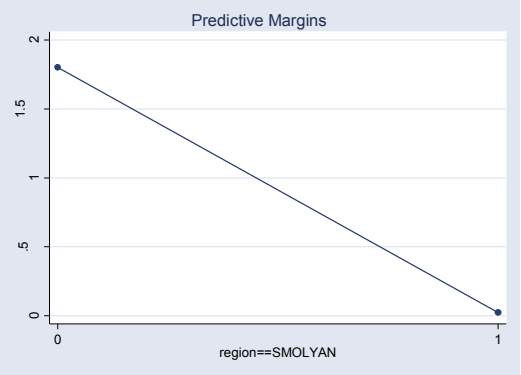

Predictive Margins
0
.5
1
1.5
2
0
1
region==LOVECH

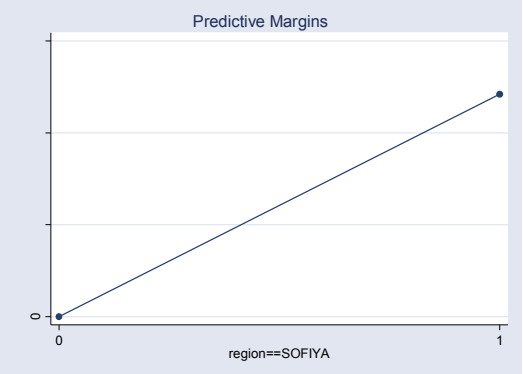
Rotterdam

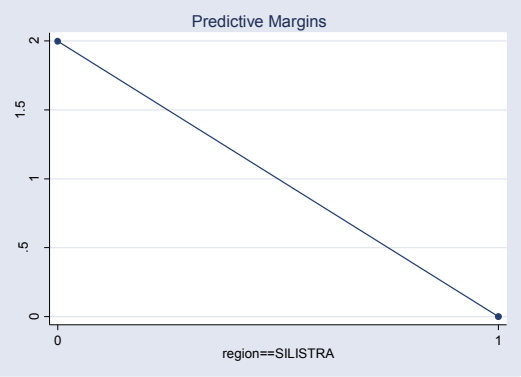

Predictive Margins
0
.5
1
1.5
0
1
region==PLEVEN

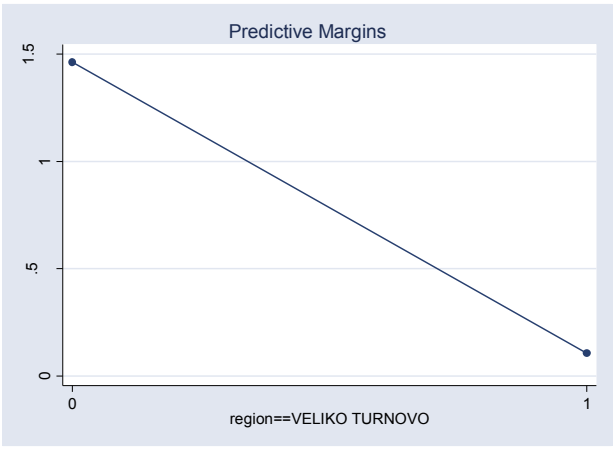

Predictive Margins
0
5
10
15
20
0
1
region==PLOVDIV

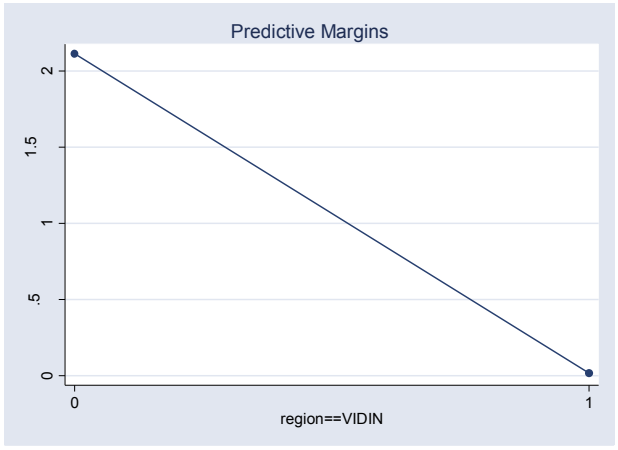

Predictive Margins
0
.5
1
1.5
0
1
region==SLIVEN

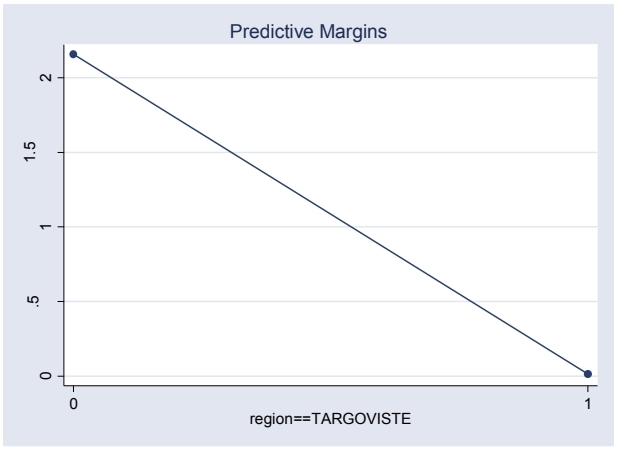

Predictive Margins
0
.5
1
1.5
2
0
1
region==SMOLYAN

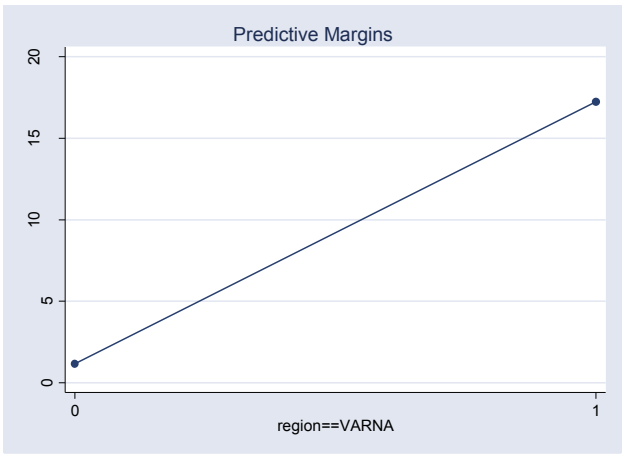

Predictive Margins
0
0
1
region==SOFIYA

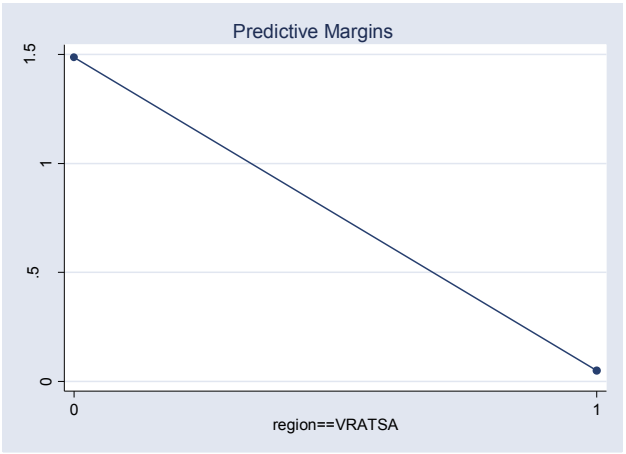

Predictive Margins
0
.5
1
1.5
2
0
1
region==SILISTRA

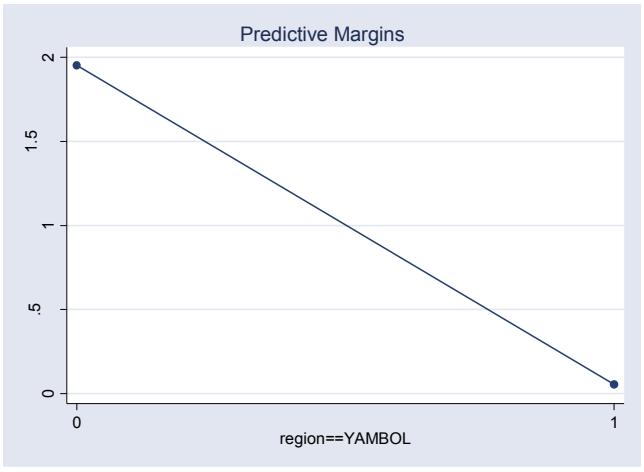




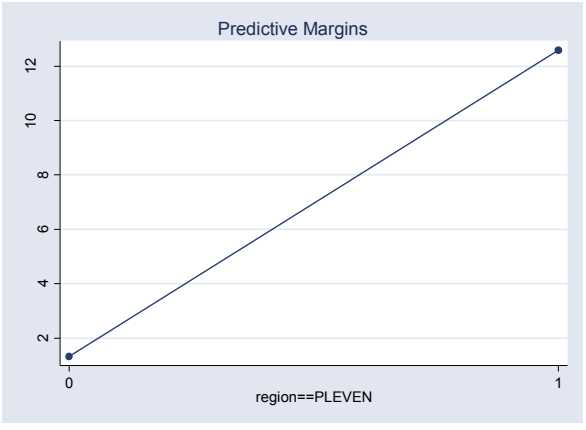


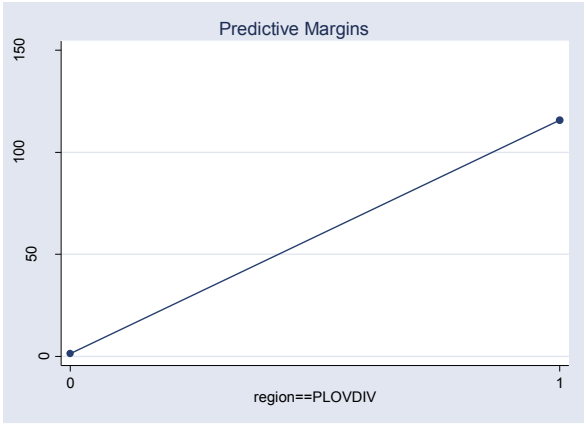


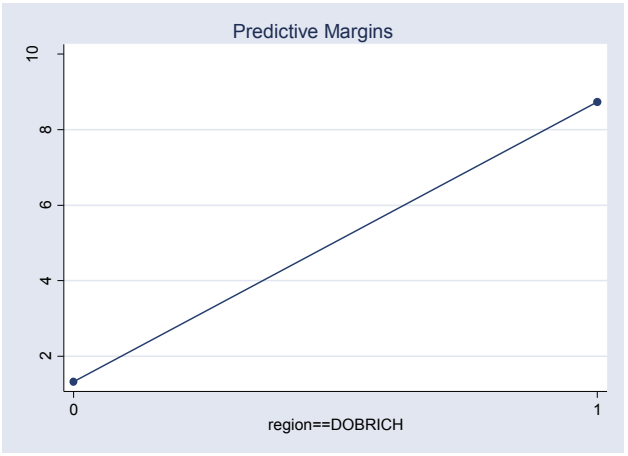


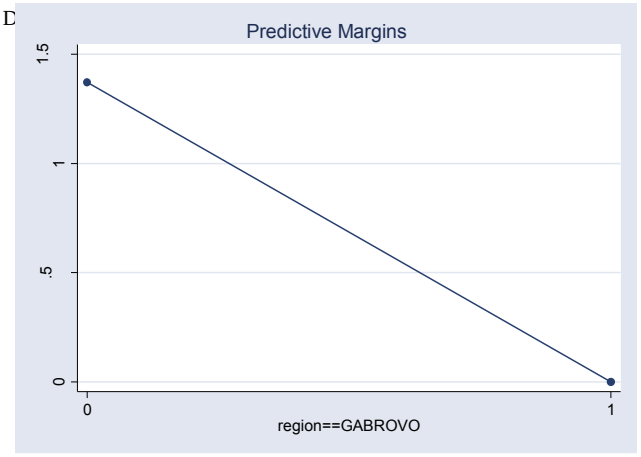


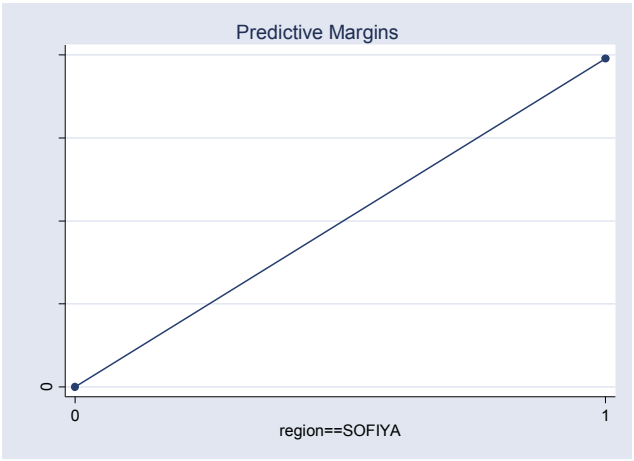
8.5.5.8 Dependent variable: medium to high tech FDI

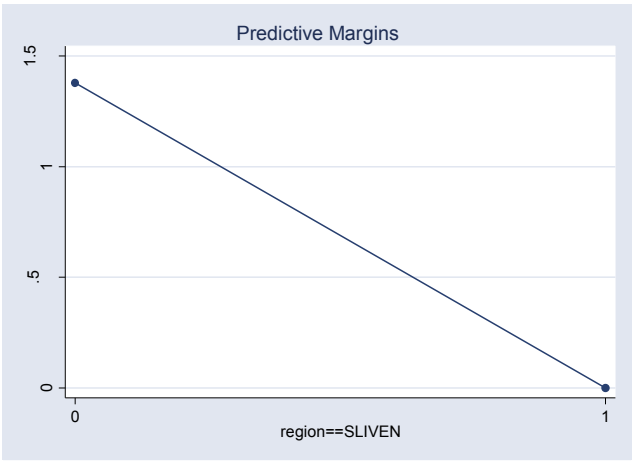


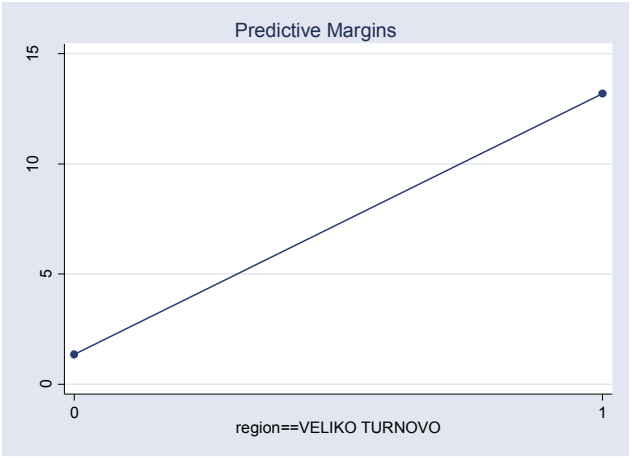


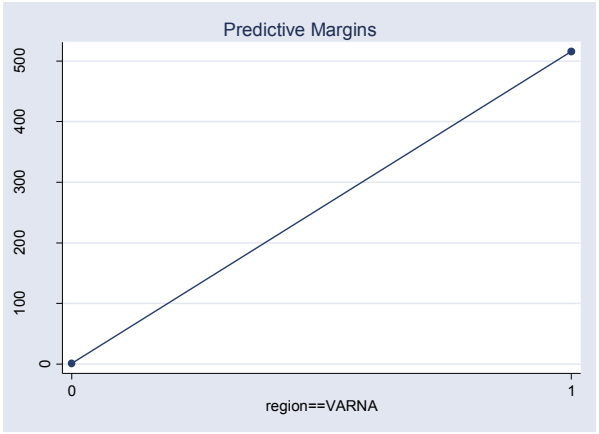

Predictive Margins
10
8
6
4
2
0
1
region==DOBRICH

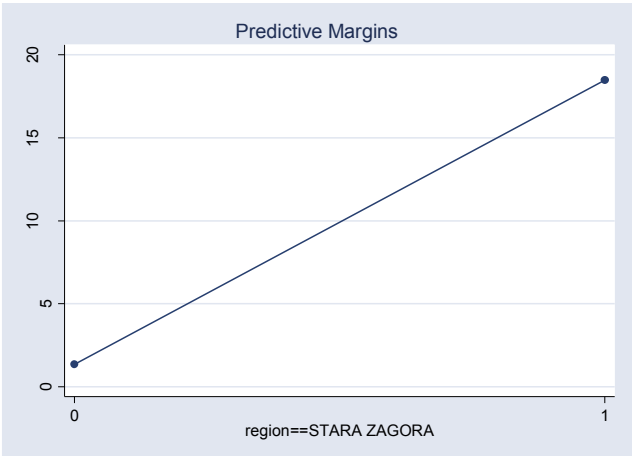

Predictive Margins
1.5
1
.5
0
0
1
region==GABROVO


Predictive Margins
0
0
1
region==SOFIYA


Predictive Margins
1.5
1
.5
0
0
1
region==SLIVEN


Predictive Margins
15
10
5
0
0
1
region==VELIKO TURNOVO


Predictive Margins
500
400
300
200
100
0
0
1
region==VARNA


Predictive Margins
20
15
10
5
0
0
1
region==STARA ZAGORA