

DOES THE INTERACTION BETWEEN ENTREPRENEURSHIP AND UNEMPLOYMENT EXIST?

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Abstract

Foreign authors maintain (Faria, Cuestas, Mourelle, 2008; Parker, 2004) that entrepreneurship is one of the main life-force of modern economics growth, the fundamental task of which is to influence unemployment as much as possible. However, in practice, often consequences of unemployment prevent starting own business and is a problem for existing businesses. On the other hand, the unemployment can compel a person to start own business and in this way help him to evade unemployment risk.

The article analyses interaction between entrepreneurship and unemployment not only on the grounds of universally accepted effects of “Schumpeter” and “Refugee” but also stresses the importance of economical and cultural factors. The interaction between unemployment and entrepreneurship in Lithuania is analysed by using cross-correlation method. The analysis encompasses historical data during 1998-2007 years. Interdependence between three indications of entrepreneurship level and eight comparison economical indicators is assessed by using a lag of 4 years. Statistically meaningful interaction between entrepreneurship and unemployment in Lithuania was estimated ($R^2 = 0,4458$) which, according to authors opinion, was determined by cultural factors such as differences in labour market, regional characteristics of the country and religion.

Keywords: interaction between entrepreneurship and unemployment, economical and cultural factors, cross-correlation method.

Introduction

Problem relevancy. The interaction between entrepreneurship and unemployment foreign scientists (Carlsson, 1992; Acs ir Audretsch, 1993) began to study back in 1970 – 1980 years. When mass production came to an end, managerial economy also approached as entrepreneurial economy by such authors as Audretsch and Thurik (2002), R. Thurik (2003) came over. Technological changes, globalisation, knowledge economy, deregulation, changes in labour supply, variety of demand, market fragmentation and instability of economy determined changes in industry structure in many countries which caused the importance of small and medium sized businesses grow. On the other hand, the factors influenced the level of unemployment in one or the other way. According to C. J. Lange (2000), unemployment and loss of social status had a positive impact on entrepreneurship not because business can be profitable in its nature but because it becomes the only viable income-generating option in the labour market.

Scientific literature broadly analyse and stress the existing interrelationship between entrepreneurship and unemployment, however, there is no accord what is the interaction of these phenomena and how, i.e. in what methods or ways, it can be determined. The authors (Audretsch, Thurik, Carree, 2001; Stel, Thurik, Verheul, Baljeu, 2007; Baptista, Thurik, 2007 and others) analyse if there is an interaction between entrepreneurship and unemployment (effects of “Schumpeter” and “Refugee”) in practice, meanwhile for empirical calculations they recommend to use such mathematical methods as two-equation and (VAR) (vector auto-regression model) models. The results of mathematical models conveyed their limitation in putting them into practice: interaction between entrepreneurship and unemployment cannot be accurately determined not having assessed the economical situation of the country, culture or individual characteristics of the country (for example tourism infrastructure, historical specialization in trade, services and agriculture, capital endowment and others).

Object of the article – the interaction between entrepreneurship and unemployment.

Aim of the article – to determine interaction between entrepreneurship and unemployment in Lithuania by using cross correlation method.

In order to reach the aim, the following **tasks** were set:

- 1) to analyse interaction between entrepreneurship and unemployment;
- 2) with reference to limitation of methods used to determined interaction between entrepreneurship and unemployment, to analyse the influence economical and cultural factors;
- 3) to apply cross correlation method when assessing the interaction between entrepreneurship and unemployment in Lithuania.

The methodology of research encompasses classified analysis of literature, mathematical statistical methods (cross correlation, linear regression).

Keywords: interaction between entrepreneurship and unemployment, economical and cultural factors, cross correlation method.

Theoretical and empirical substantiation of interaction between entrepreneurship and unemployment

While analysing the interaction between entrepreneurship and unemployment (Remeikienė, Startienė, 2008), it was determined that interdependence between entrepreneurship and unemployment in foreign literature is analysed through a two-way communication, i.e. "Schumpeter's" („*Entrepreneurial*“) effect – entrepreneurship reduces unemployment and "Refugee" effect, while unemployment encourages entrepreneurship (Verheul, Stel and Thurik, 2006; Thurik, Carree, Stel, Audretsch, 2007). In analysed literature, other concepts to describe unemployment/entrepreneurship relationships can be found: "recession-push or unemployment-push" and "prosperity-pull" effects (Parker, 2004; Johansson, 2000; Muehlberger, 2007). Other authors (Cowling, Bygrave, 2003) person's decision to start own business in order to get rid of unemployment status bases on the microeconomic theory of labour supply and of consumer choice theory, implying that individuals actively participate in the labour market, if: 1) the more benefit will gain from the work (such as income, employment status), compared with the benefits obtained from the leisure, 2) the lower income will get from the sources of unemployment; 3) the lower the income from their employment.

According to the recession/unemployment push effect, unemployment reduces the opportunities to obtain gainful occupation and the expected income from employment, thus the person is "pushed" into the business. According to foreign authors (Ritsilä, Tervo, 2002) "Entrepreneurship is not their dream, but rather the lesser of two" evil ", the other" evil "being the present unsatisfactory situation." On the other hand, companies go bankrupt in the economic downturn, however, at the same time increasing the availability of used second-hand capital equipment, reducing the number of entry barriers. Unemployment consequences for entrepreneurship are proved by scientific researches, which found that unemployment is positively associated with the business start-up activities, i.e. increased unemployment promote starting own business (Blau, 1987, Evans and Leighton, 1990, Evans and Jovanovic, 1989 and Blanchflower and Meyer, 1994).

Under the "prosperity pull" assumption individuals will own the business, if the country's economic and business conditions will allow, thus reducing the unemployment rate. Assumption emphasizes that individuals tend to become self-employed when unemployment is low since a chance to return to wage labour are higher (Muehlberger, 2007). However, it is worthwhile to mention that the "prosperity pull" effect dominates at the national level (Ritsilä, Tervo, 2002). If in the country prevails high unemployment rate, entrepreneurs face reduced demand of products or services. This reduces the revenue accruing from entrepreneurship, and capital availability, which leads to increasing the risk of bankruptcy. In this way, individuals are "pulled out" of business because the company's bankruptcy case becomes a higher risk than the gainful employment. Studies (Lucas, 1978; Jovanovic, 1982) found that there is an inverse relationship between entrepreneurship and unemployment (high level of unemployment is associated with a low level of entrepreneurship), i.e. unemployed people do not have the necessary expertise to start-ups and do not have intrinsic properties of the entrepreneur. Article authors claim, the prevailing controversial opinions of scientists about entrepreneurship/unemployment interaction issues are still in debate.

In recent years, empirical studies carried out in order to answer the question "Can the enterprise reduce the level of unemployment and could unemployment boost the business?" present ambiguous results.

In order to answer the question, two-equation model or VAR was used to carry out empirical studies in 23 OECD countries, Japan, show the apparent results: "Schumpeter's" effect exists, i.e. entrepreneurship reduce unemployment (Thurik, 2003; Thurik, Verheul, 2002; stel, Stunberg, 2004; Audretsch, Carey, Thurik, 2002; Care, Stella, Thurik, Audretsch, 2007). However, in countries such as Portugal (Baptista, Thurik, 2007; Baptista, Preto, 2006), Spain (Golpe, Stella, 2007; Thurik, Verheul, 2002) and the United Kingdom (Thurik, 2003) the chosen mathematical models could not clearly assess the interaction between entrepreneurship and unemployment due to prevalence of the different types of entrepreneurship, and the exclusion of economic and cultural factors from the calculations. For example, in Portugal is different from the OECD countries of its specific entrepreneurial characteristics: a decrease in the agricultural value and the growth of the services sector has led to the emergence of "subsistence" entrepreneurship, which is associated with a very slight growth in the number of firms, therefore, has little influence on the employment. For example, in Spain and the nature of entrepreneurship, the economy and culture is very different from other countries, therefore, the mathematical methods are not able to determine the effects of interaction.

Uhlaner and Thurik (2003) highlight the importance of economic and cultural factors assessment in the relations between entrepreneurship and unemployment.

Economic and cultural factors – underestimated communication in chains between entrepreneurship and unemployment

Blau (1987) noted that the basic economic factors such as technological change and industrial structure lead to the development of the country. Structural changes reduce benefits of large companies and create better opportunities for small and medium-sized businesses to become more independent from the influence. Meanwhile, Parker (2004) maintains that the external technological changes may have no influence on the unemployment rate, if the employees are able to adapt to changing working conditions. If technological changes become the reason of work ease, unemployment is only one of the slow adjustment to labour market characteristics.

According to Dennis De (2001) unemployment as a further factor was assumed to lead to more start-ups. However, this assumption is not justified in empirical studies conducted in Europe. Various social programs to help the unemployed integrate into the labour market and in particular to start up a business have not been very successful. In Germany, only 3 percent of the unemployed discussed the possibility to start a business, only 1 percent of them determined for this step. According to the German Federal Labour Office the main reason for this is that entrepreneurship does not fit into the life plans of most unemployed.

Other authors (Uhlaner, Thurik, 2003; Parker, Robson, 2004), analyzing own business factors, such as tax rates, competition and the participation of women in the labour market, form an opinion that the unemployment rate, however, may be treated as one of the reasons encouraging to start-up the business. Furthermore, assessing trends of new business start-ups it is suggested to note the variation in the dynamics of economic indicators: entrepreneurship decrease with an increase in per capita GNP, female labour force participation, and the relative importance of manufacturing. Entrepreneurship increase with an increase in the relative importance of the service sector (ACS, Audretsch and Evans, 1994).

In most cases, studies deal with links between entrepreneurship (measured by certain indicators - established / number of firms in a given period) and unemployment (measured in some indicators - the number of unemployed, the unemployment rate). However, the entrepreneurial relationship with other economic indicators is also analysed. In order to decide on interdependence between entrepreneurship and unemployment, the economic-social environment in which companies establishes (liquidate) should be investigated. Environment can be assessed through a number of economic indicators (GDP, inflation, exports, earnings, imports, etc.). Moreover, there remains a high level of unexplained variation across countries when only economic variables are taken into account. Thus, more recently, researchers have also looked toward cultural factors to explain this variation (Uhlaner, Thurik, 2003).

In previous studies, the authors of the article classified the factors influencing entrepreneurship and unemployment, where cultural factors encompass: national and regional characteristics, differences across countries, religion, the difference between different levels of hierarchy and individuals, the relationship between individuals and his or her associates, the division between gender roles and values in society, the division of time, uncertainty avoidance; economic group - GDP, business cycles (economic recession, economic growth), economic transition, tax system, trade (export/import) policy, unemployment and its history, regulation and monetary policy, labour market or industrial adjustment, employment and income levels, availability of capital and so on (Remeikienė, Startienė, 2008).

Country and regional characteristics of studies in countries such as Lithuania (Vetlov, Virbickas, 2006), Czech Republic (Dufek, 2003), Switzerland (Filippini, 1998), Serbia (Aradarenko, Jovičić, 2007), Finland (Tervo, 2006) found that unemployment in regions/rural areas is significantly higher than in major cities. The extent of the prevalence of entrepreneurship is analyzed in detail assessing the economic situation and level of development of individual countries. According to Parker (2004) there is a great diversity in the level of entrepreneurship rates across countries. Entrepreneurship rates are higher on average in developing than developed countries. According to various statistics for the 1960-2000 year, in four countries (Japan, France, Norway and Spain) the number of businesses has declined steadily, but in the United States, Canada, Mexico, Italy, United Kingdom, the Netherlands and Australia during the same period the level of entrepreneurship has remained relatively constant. Contrary to the above-mentioned, in the Asian countries (Philippines, Indonesia, Nepal) entrepreneurship rates were surprisingly high. To the question "Why are entrepreneurship rates so high in developing countries?" still trying to answer more than one scholar (Parker, 2004; Tamvada, 2007, Kolla, Vincze, 1999).

Both Lithuanian and foreign authors (Remeikienė, Startienė, 2008; Tamvada, 2007) maintains, that the particularly important role carry out religion and gender gap in the labour market when analysing the influence of cultural factors to entrepreneurship and unemployment. Until now, little is known how religion can influence the choice of person's profession, but tests carried out (Audretsch, Boente, Tamvada, 2007) in India showed that religion shapes the entrepreneurial decision. In particular, some religions, such as Islam and Christianity, are found to be conducive to entrepreneurship, while others, such as Hinduism, inhibit entrepreneurship. In addition, the Caste system is found to be an obstacle to become an entrepreneur. Individuals belonging to a backward Caste exhibit a lower propensity to become an entrepreneur. Religion is often an obstacle in the labour market. European Monitoring Centre on Racism and Xenophobia data (2006) show that in some EU countries the unemployment rate of Muslims is very high. For example, in the United Kingdom Muslim unemployment rates higher than those of other religions, both among men and women. In Ireland 2002 census showed that 11 per cent of Muslims were unemployed, while the national average for unemployment is only 4 percent.

Discrimination studies show that Muslims suffer discrimination and have few employment opportunities. For example, in the United Kingdom, the BBC broadcast a radio program in 2004 carried out a test with 50 companies, which sent the applications of work of six-invented candidates, whose names are allowed to predict that they were British, Africans, or Islam. White men candidates (25 percent) could be expected to be invited to interview more often than black men (13 percent), and candidates on behalf of Muslim (9 percent) have the least chance (European Union Agency for Fundamental Rights, 2008).

Gender stereotypes formed during the long decades, where the role of women is seen in the family, can be treated as one of the major obstacles to the integration of women into the labour market and at the same time to start their own business (Remeikienė, Startienė, 2008). The existing gender gap and stereotypes hamper the country's economic development, thus adversely affecting entrepreneurship, increase the level of unemployment.

In summary, it can be argued that for the identification of interaction between entrepreneurship and unemployment is not enough to include the business and the unemployment rate into the mathematical calculations, it is necessary to consider and evaluate the national economic (business cycles, GDP, international trade, immigration, wage rates, etc.) and cultural (religion, gender gap, regional and country characteristics, cultural differences, etc.) conditions.

The assessment of interaction between entrepreneurship and unemployment in cross-correlation method: Lithuanian case

Although for the identification of interaction between entrepreneurship and unemployment foreign authors apply the two equations and VAR methods, the cross-correlation method was chosen for the determination of existing relationships in Lithuania. Lack of data (Lithuanian Department of Statistics provides data of both established and closed firms in the annual data only since 1998) and very long periods of survey indicators (data of one year can be compared only with data of other years) lead to the choice of the cross-correlation method (Box, Tiao, 1975), which is calculated using the correlation coefficient r_k :

$$r_k = \frac{\sum_{t=1}^{n-k} (y_t - \bar{y})(x_{t+1} - \bar{x})}{\sum_{t=1}^n (y_t - \bar{y})(x_t - \bar{x})} \quad (1)$$

- k - shift;
- n - the number of observations (total);
- y - endogenous (dependent) variable;
- x - exogenous (independent) variable;
- t - time.

To assess the economic factors affecting the interaction between entrepreneurship and unemployment, the country's economic indicators were included into the cross-correlation. In their studies, the authors (Audretsch, Thurik, Carrey, 2001; Stel, Thurik, Verheul, Baljeu, 2007; Baptista, Thurik, 2007, etc.) usually use a rate reflecting the level of entrepreneurship - the number of existing enterprises. In order to assess the level of entrepreneurship in Lithuania accurately, both relative and absolute differential values are included into the analysis. Therefore, the method evaluates interdependence between three indicators of entrepreneurship level -

the number of enterprises, established enterprises minus the number of closed enterprises, and the number of established enterprises with a ratio of the number of enterprises – and eight comparable indicators (nominal GDP at current prices, million Litas; GDP compared with the previous period, the index, percent; GDP per capita (the prices of that days), Litas; average monthly gross earnings, Litas; exports billion, Litas; imports, billion, Litas; inflation, percent (compared with last December) and the unemployment rate, percent) during 1998-2007 year period. It was also calculated an inverse relationship for the same indicators. 216 dependencies total tested, i.e. for each endogenic variable y and 72 dependences tested.

Table 1 contains only those variables whose values are statistically significant, i.e. significantly correlated with each other with 95 percent probability. The standard error of correlation of the calculated values is 0.31623.

On the grounds of foreign literature (Golpe, Stella (2007), Thurik, Verheul (2002) and etc.) analysing the interaction of the unemployment and entrepreneurship, time lag (time lag = 4) was included into the cross-correlation calculation. Baptiste, Thurik (2007) recommend including the longer time lags in to the study, because the influence of entrepreneurship on is not instantaneous, i.e. it may take few years to develop the company and employ new people. Geroski (1995) claimed "Even successful entrants may take more than a decade to achieve a size comparable to the average incumbent."

Table 1. Cross-correlation of economical indicators

Lag Value	Response Variable Name (<i>endogenous variable, y</i>)	Input Variable Name (<i>exogenous variable, x</i>)	Correlations
0	The number of enterprises, units	Average gross monthly earnings, LTL	0,63355
0	The number of enterprises, units	Level of inflation, %	0,64697
2	The number of enterprises, units	Export, million, LTL	0,65383
4	Established enterprises minus the number of closed enterprises, units	GDP index, %	0,66831
-4	Established enterprises minus the number of closed enterprises, units	Average gross monthly earnings, LTL	-0,66840
-4	Established enterprises minus the number of closed enterprises, units	Level of inflation, %	-0,84979
1	The number of established enterprises with a ratio of the number of enterprises, units	Nominal GDP, mill. LTL	-0,66017
2	The number of established enterprises with a ratio of the number of enterprises, units	Nominal GDP, mill. LTL	-0,67651
1	The number of established enterprises with a ratio of the number of enterprises, units	GDP index, %	-0,89146
1	The number of established enterprises with a ratio of the number of enterprises, units	GDP per capita, LTL	-0,65968
2	The number of established enterprises with a ratio of the number of enterprises, units	GDP per capita, LTL	-0,67366
2	The number of established enterprises with a ratio of the number of enterprises, units	Average monthly earnings, LTL	-0,63896
-2	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,68452
-1	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,72924
1	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,80182
2	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,74195
3	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,73571
1	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,68292
2	The number of established enterprises with a ratio of the number of enterprises, units	Export, million, LTL	-0,69110
1	The number of established enterprises with a ratio of the number of enterprises, units	Unemployment level, %	0,64919
2	The number of established enterprises with a ratio of the number of enterprises, units	Unemployment level, %	0,78906

Table 1 should be interpreted as follows: zero or the current year means that the endogenous of 1998 (y) is compared with exogenous variable of 1998 (x), "-4" is a shift four years ahead (y of 1998 is compared with x of 2002, i.e. how the future x relates to the past y), "+1" is a shift one year back (x of 1998 is compared with y of 1999, i.e. how the past x relates to future y), etc.) the number of enterprises significantly correlated with the average gross monthly earnings, inflation and exports; the number of established enterprises minus closed ones with the GDP index of gross earnings, exports and inflation; the ratio between the number of established enterprises with a number of enterprises correlation values were statistically significant with nominal GDP, the GDP index, GDP per capita, average gross monthly earnings, exports, imports and the unemployment level.

In order to get more specific results for each given value, regression of reliability R^2 was calculated (Kvalseth, 1985). The results obtained showed that by the regression line can be explained only seven of the twenty-one statistically significant deviations (see Figure 1-6).

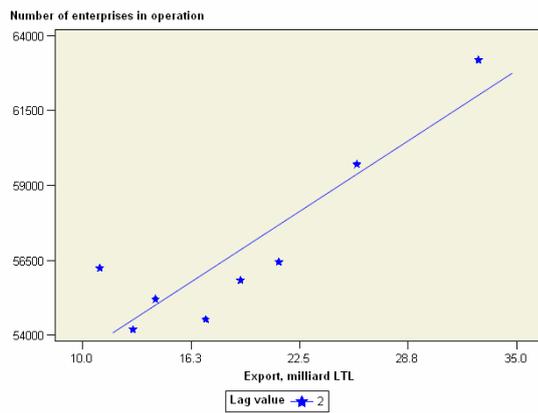


Figure 1. Number of enterprises in connection with export, $R^2=0,8065$, when lag value 2

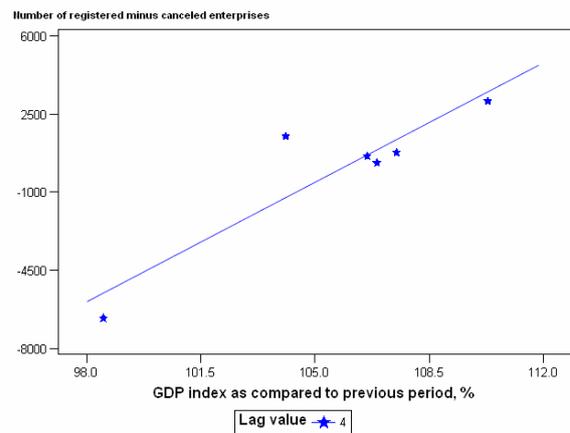


Figure 2. Number of enterprises minus number of closed ones in connection with GDP index, $R^2=0,8306$, when lag value 4

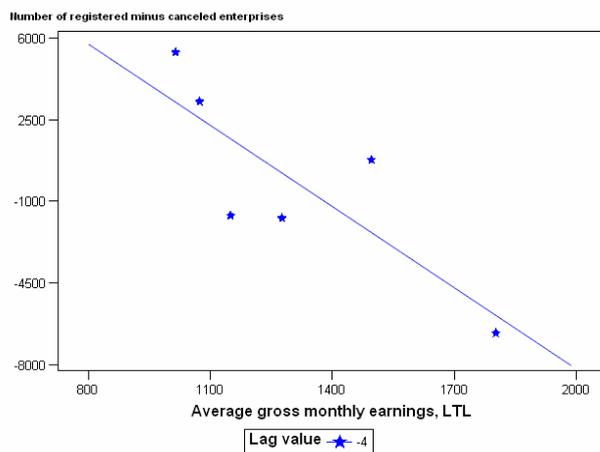


Figure 3. Number of enterprises minus number of closed ones in connection with gross earnings, $R^2=0,6676$, when lag value -4

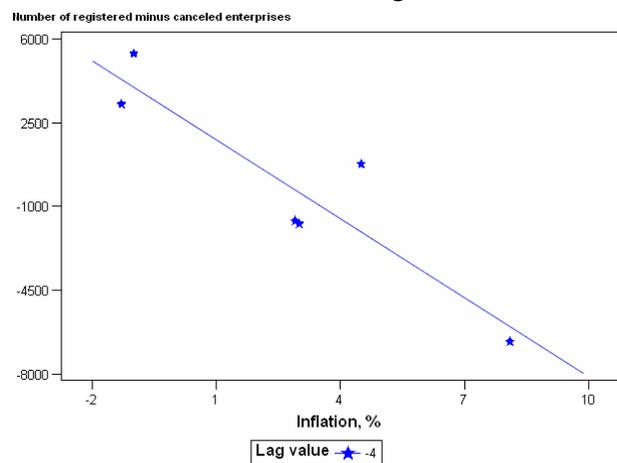


Figure 4. Number of enterprises minus number of closed ones in connection with inflation level, $R^2=0,8345$, when lag value -4

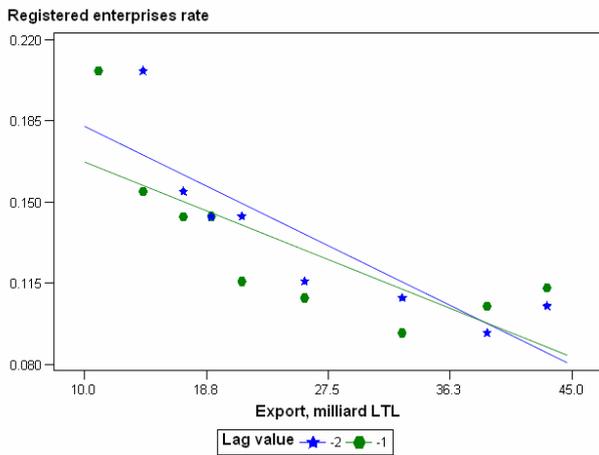


Figure 5. The number of established enterprises with a ratio of the number of enterprises in connection with export, $R^2=0,7389$, when lag value -2 and $R^2=0,6017$, when lag value -1

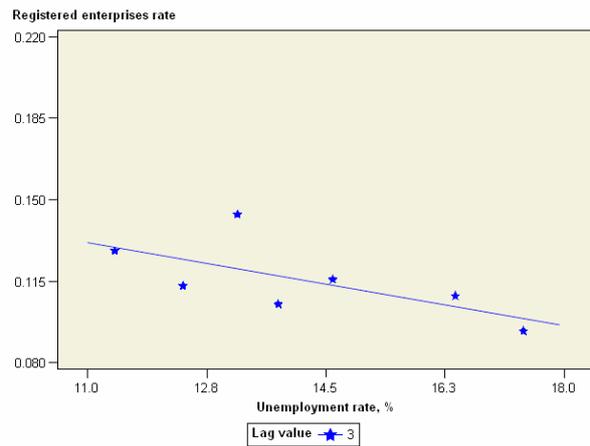


Figure 6. The number of established enterprises with a ratio of the number of enterprises in connection with unemployment level, $R^2=0,4458$, when lag value 3

In summary, the emphasised interaction between entrepreneurship and unemployment exists in practice.

The results obtained showed that the level of enterprise establishment or closing in is affected by such economic indicators as inflation ($R^2 = 0.8345$), exports ($R^2 = 0.8065$, $R^2 = 0.7389$, $R^2 = 0.6017$), average gross monthly earnings ($R^2= 0.6676$) and GDP ($R^2= 0.8306$). Unfortunately, the unemployment rate among statistically significant economic factors had least on the extent of the entrepreneurship ($R^2= 0.4458$).

Statistically significant interaction between entrepreneurship and unemployment in Lithuania can be explained on the basis of such cultural factors as gender gap in the labour market, the regional characteristics of the country and religion.

In 1998 – 2007, Lithuania, unlike in other EU countries, women's unemployment was lower on average by 1.8 percent than that of men, but men's average employment rate was higher by 5.2 percent than that of women. The success study of the small and medium enterprises (SME), initiated by Eurostat (Lithuanian Department of Statistics, 2007), in principle, explain the existing gender gap in the labour market: starting your business 11.32 percent of women and 5.76 percent of men did not participate in the labour market and did not have a paid activity, while 5.30 percent of women and 3.11 percent of men were unemployed, registered in unemployed stock. Level of gender segregation by major economic activities and professions remains stable and high: the business and the labour market are dominated by men and women in the same sectors. In business set up even 90.99 percent of men choose the construction sector, 84.93 percent of them choose transport, warehousing and communications, 81.84 per cent - the whole industry, 74.11 percent - industry and services, while women dominate in hotel and restaurant business (53.17 percent), brokered financing (56.25 percent). In the period analysed most men chose the construction or industry or related occupations (on average 158.55 thousand and 103.23 thousand of men), for women services was the most attractive (on average 476.34 thousand women).

Over the last decade, the majority of the investment was directed to the most urbanized regions of Lithuania, and therefore a number of depressive regions with especially low employment rate were formed. Lithuanian scientists (Šileika, Andriušaitienė (2006), Andriušaitienė (2005)) highlight the negative impact of depressive regions of Lithuania on employment and business. Andriušaitienė (2003) maintains that the rural and urban areas of the unemployed seek work much longer, because the job offer is significantly lower than in larger cities, which limits their opportunities to start their business because of relatively low level of education and lack of entrepreneurship. Such demographic factors as significantly greater percentage of persons of retirement age in depressive regions of the country, young people and skilled workforce migration, the low qualification of the labour force worsen the situation of depressive regional labour market and become a serious obstacle to business development.

Analysing links between entrepreneurship and religion, scientists (Carswell, Rolland (2007); Pruskus (2002)) showed that the Protestant support for business creation, and therefore the most successful

entrepreneurs in the world considered to be Protestant. Unfortunately, according to the Lithuanian Department of Statistics data for 2007, Lithuania had the most common rites of the Roman Catholicism (a total of 714 religious communities), which in ancient times and in the long history of the Christian Church thought of trade and business as a "low", "beastly," "sinful" things. The Old Testament and Christianity science of the propertied classes formed a negative image of the entrepreneur (V. Pruskus, 2002).

In conclusion, the relationship between the light relation between entrepreneurship and unemployment lead to gender gap, the regional characteristics of the country and religion.

Conclusions

In conclusion, the following conclusions can be made:

1. The interaction between entrepreneurship and unemployment is essentially determined by the person's position of the labour market. An examination of the mutual relations between entrepreneurship and unemployment show that both in theory and practice, there is a "push" (unemployment encourages to take business) and "pull" (business reduces unemployment) effects, and their influence on the economy is conditioned upon the business cycles.
2. According to results of empirical researches carried out in various countries, determining the links between entrepreneurship and unemployment, the economic and cultural factors affect accuracy of the results. Such factors as gender gap, religion, cultural differences, the economic situation in the country are regarded as the most important ones, and their exclusion from the study of interdependence of entrepreneurship and unemployment can be a reason for the failure of the study.
3. Interaction of entrepreneurship and unemployment in Lithuania was assessed by the methods of cross-correlation and the regression reliability coefficient, the results of which show that this relationship exists, although the level of entrepreneurship is more affected by factors such as inflation, GDP, exports and earnings. Light interdependence between entrepreneurship and unemployment justify such cultural factors as gender gap, the regional characteristics of the country and religion.

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