

## SUBJECTS OF ENTREPRENEURSHIP AS COMPONENTS OF LOGISTICS SYSTEMS IN STRATEGIC INTRAREGIONS OF LATVIA

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### Abstract

After the regaining of independence in Republic of Latvia, a new period in the structural-politics of national economy, in choice of enterprise forms and business companies, in their foundation and development began. Beginning from the regain of independence, there has been no published research on these issues for about 16 year period. All studies on this topic were dedicated to separate periods, processes or regions. In the Paper format results of original research have been expounded on the development of entrepreneurship content forms in four separate urban, strategic territories: Daugavpils or Southern-Latgale, Rēzekne or Eastern-Latgale, Liepāja - Ventspils or Western-Kurzeme and Riga intra-regions. In the research the whole period since regaining of Latvia independence has been analyzed, as well as the adaption of the law package on entrepreneurship and the beginning of the real entrepreneurship activity in years 1991-1992. Substantial differences between the territories (agglomerations) and also conformities of common development have been defined. There are essential differences in the activity efficiency of entrepreneurship subjects and in the results of the work contributed. The urban influence of big cities increases. The subjects and components of logistics systems develop faster.

**Keywords:** forms of entrepreneurship, logistics, intra-regions.

### Introduction

We can point out several periods in researches on subjects and foundation forms of entrepreneurship, its composition, structure, transformation, liquidation and studies of other questions in Latvia.

Larger-scale studies in Latvia Republic in 1920-1940 were done by Ed. Balodis (1934) and A. Aizsilnieks (1968) - the time, when Latvia was a typical agrarian state with an absolute dominant of farmers house-holds, but in the trade sector developed customers co-operation system with accordant infrastructure of logistics. From the studies of this time it is already possible to see certain regional differences.

After renewal of independence in Republic of Latvia a new period in the structural-politics of national economy, in choice of forms of enterprises and business companies, in their foundation and development began (Špoģis, 1992; Špoģis et al., 1996; Torgāns, 1991; Zīle, 1997; Grūtups et al., 1995). In national economy and in forming of Gross Domestic Product (GDP) now service branches (74%) dominate absolutely, but part of agriculture is insignificant. On its turn in the group of service sectors the group of logistics branches is the second largest.

Active research work on this topic has been carried out during the last years (Jurgena et al., 2006; Jurgena, 2003; Špoģis et al., 2003; Špoģis et

al., 2004).

But these published researches are for separate periods, processes or regions. There is no published research for period of 16 years, starting from adaption of the law 'On Entrepreneurship' and the law 'On Latvia Republic Register of Enterprises' - in 1991, and the law package following these - for particular forms of entrepreneurship.

The necessity for studies on dislocation tendencies of entrepreneurship subjects is also dictated by the today's large-scale processes in dislocation of logistics infrastructure objects.

By evaluating and analyzing the regional aspect of development of industrial objects of logistics infrastructure we should draw the conclusion that they both become more powerful (tonnage, capacity, speed) pretending service of wider systems of logistics, more dedicated, more target-oriented.

Choice of service spectrum of these logistics enterprises, their dislocation and development directions are determined or substantially influenced by the placement of other entrepreneurship subjects, their composition, types of cargo transport, directions. Therefore, they can be different, for example, in Rēzekne intra-region, in Ventspils and Liepāja ports region or in Riga, but also can form powerful, universal as the new Logistic centre 'Wellmak Latvia'

operating in form of Limited Liability Company.

Therefore, our research was carried out in specially selected strategic territories with the aim to find out general and different indications and phenomena in the historical development of dislocation of entrepreneurship subjects in these territories and to evaluate forming processes of logistics systems infrastructure.

In compliance with the objective, the following tasks were fulfilled in the research:

- amount and dynamics proportion of economically active entrepreneurship subjects identified in four different intraregions as well as similar and different features or regularities in these territories;
- the quantitative development of entrepreneurship forms defined by Commercial Law analyzed in the whole period to be analyzed – 16 years – and the economical connections of their time-rows have been evaluated;
- the regional tendencies of dislocation of entrepreneurship subjects in the context of logistics infrastructure have been analytically evaluated.

## Materials and Methods

To do these tasks the following economical research methods were used:

- dynamic time-row of entrepreneurship subjects amount was created for each territorial unit (intraregion) and for each quantitative time-row the increase of its basis and chain, and speed of increase was calculated;
- for each form time-row was calculated correlative connections and development trends.

The explored strategical territorial units have been chosen by such hypothesis and conception:

- in the centre of each territory there is a city of a state importance (Daugavpils, Rēzekne, Liepāja - Ventspils, Riga) and urban influence;
- for each city and territory there are different strategic missions and economic and political environment of entrepreneurship:
  - Daugavpils is the city of industry, transport and Southern-Eastern border-line of Latvia,

- Rēzekne is the dry-land transport junction of Latgale and of European Union Eastern border-line district,
- Liepāja and Ventspils are the free-port cities of special economic area with spacious possibilities in the European Western-Eastern transport corridor,
- Riga – a metropolis with many suburbs, free-port and attractive city for foreign investors;

- activities of entrepreneurship in each intraregion from logistics aspects can change in different ways, both in absolute and in relative estimate.

In intraregions the following territories were included:

- In Southern-Latgale – the region of the Byelorussian and Russian border-line district – city and district of Daugavpils and districts of Krāslava, Preiļi, Jēkabpils;
- In Rēzekne (Eastern-Latgale) intraregion – Rēzekne city and district, and Ludza district that borders with Russia;
- In Western-Kurzeme intraregion – Liepāja and Ventspils with their districts;
- In Riga region – metropolis and Riga district, city and district of Jelgava, Bauska, Tukums, Dobeles and Ogre districts.

In general these regions cover both the Eastern border-line of European Union and strategically important components for Eastern-Western transit corridor logistics infrastructure.

To do the tasks the necessary information and data were obtained in the LURSOFT database, Eurostat, Statistical Yearbook of Latvia and in scientific publications.

## Results and Discussion

*Dynamics of entrepreneurship subjects amount in the researched urban regions (intraregions)*

Calculation results of entrepreneurship subjects amount dynamics in the whole period of their registration in Latvia in the urban regions influenced by greatest, state importance cities can be seen in Table 1.

From the Table 1 a few definite conclusions can be drawn. In the analyzed period, it is – in the two beginning years of enterprises and business companies' registration (1991-1992) the greatest activity was in Southern-Latgale or Daugavpils intraregion. It can be understood logically and can be explained, if we know the

Table 1  
**Entrepreneurial activity subjects (enterprises and business companies) amount dynamics in  
 Western-Kurzeme, Southern-Latgale, Eastern-Latgale and Riga regions in years 1991-2006**

Years	Change ratio of subjects amount basis, %			
	Southern-Latgale	Western-Kurzeme	Eastern-Latgale	Riga region
2006	63	55	44	93
2005	51	46	37	74
2004	63	43	41	66
2003	50	36	23	49
2002	37	31	24	40
2001	47	37	29	48
2000	51	38	38	51
1999	58	37	35	51
1998	54	45	42	55
1997	68	52	43	55
1996	76	49	46	55
1995	93	69	57	61
1994	173	146	106	118
1993	250	115	148	110
1992	313	255	214	154
1991	0	0	0	0

fact that Daugavpils traditionally was the centre of industry. Historically in this centre the enterprises of logistics infrastructure maintenance and forming – factories of Baltic Railway infrastructure, Access-chain factory, Fabric of Cord textiles etc. operated.

But during the next 10 years (1993-2002) there was a sharp negative base increase. Analyzing the absolute numbers, we can see that in years 1993-2002 there was tenfold decrease of newly-established enterprises amount. Obviously there was a lack of political and economical support to save and continue Daugavpils industrial traditions; therefore, initiatives of the new businessmen sharply disappeared.

During the last years of analyzed period (2003-2006) considerable progress is already visible.

If we compare data of Daugavpils intraregion with the indicators of Daugavpils city, we can draw the conclusion that the whole entrepreneurship environment concentrated mainly in Daugavpils city.

Analyzing entrepreneurship activities from the aspects of logistics infrastructure and its service, subjects amount dynamics of entrepreneurship in this region, we can conclude that logistics (transport, warehousing and connections) branches proportion here is the smallest from all four strategical regions, and it constitutes only 6.6%.

Similar dynamic processes took place in the other side of Republic of Latvia – on the coast of the Baltic Sea – strategic Western-Kurzeme. Looking into the time-rows analysis data of entrepreneurship subjects amount dynamics, the conclusion was drawn that in this region the fluctuations were yet deeper than in the South-Eastern part of the state. Substantial progress of enterprises foundation in Liepāja - Ventspils intraregion began only in year 2003 and sharp increase continued during the last years.

Very substantial particularity of this strategical intraregion opened analysis of the logistics branches enterprises dynamics: their amount in 2000-2006 years period had sharply grown and proportion exceeded by 10% which is the greatest indicator from all other researched regions.

In the region influenced by Rēzekne, decrease of establishment of entrepreneurship subjects foundation continued 12 years till the year 2003, and only the last years noticeable signs of the stabilization and development were noticed. In this intraregion, according to its strategical role in the economy of Latvia, logistics branches developed sharply, and already came to 9% from amount of entrepreneurship subjects.

In Riga and Riga region vicinity the fluctuations of entrepreneurship activities were smaller, and already from the year 2003 the

number of new enterprises increased sharply. This can be considered to be the process of entrepreneurship activities concentration and redislocation. More than 88% of all logistics branches entrepreneurship subjects in Latvia operate in this region.

*Proportion of established entrepreneurship subjects in explored intraregions*

The calculations were carried out in every explored region – registered number of entrepreneurship subjects of each year was related to this number indicator of the whole Latvia. Calculations revealed the continual increase of metropolis urban influence. The process of entrepreneurship subjects concentration and redislocation to the centre began with the year 1992, and has consistently been continuing for already 15 years. In addition, during the last two years – 2005 and 2006 – the speed of concentration increase grows. But analysis of logistics enterprises and business companies quantitative development revealed a substantial and interesting fact: - the new entrepreneurship subjects of logistics branches locate mainly in territories close to Riga.

When summarizing proportions of these four urbanized regions, it was discovered that in other 12 districts taken together the registered

enterprises and business companies make only 8 %.

The number of the newly-established enterprises on 1000 inhabitants in the explored urban regions in the beginning of nineties was more equal. In the year 1992, in Ventspils - Liepāja intraregion it even exceeded Riga proper indicator.

In addition, the tendency of development equilibrium between Riga and Liepāja - Ventspils urbanized regions is visible during the last years. In the Western-Kurzeme (Liepāja – Ventspils) urbanized region entrepreneurship subjects number on 1000 inhabitants doubled in the period from 2002 to 2006, in Riga region it increased 2.3 times, but this indicator was identically low in both Eastern border-line district intraregions – Southern-Latgale and Eastern-Latgale.

*Indicators of effectiveness*

In research macroeconomical indicators from statistical data – Gross Domestic Product (GDP), number of the employed inhabitants and the number of resident inhabitants were used. Calculated, comparable macroeconomical indicators are given in the Table 2.

Comparing the proportion of produced GDP in each region with the proportion of all registered

Table 2

**Proportion of Entrepreneurship subjects, logistics branches entrepreneurship subjects, resident inhabitants, employed inhabitants and produced GDP in the explored regions (intraregions) in Latvia, in year 2005**

Regions studied (intra-regions)	Proportion of the entrepreneurship subjects, %	Proportion of the logistics branches entrepreneurship subjects, %	Proportion of produced GDP, %	Proportion of inhabitants doing permanent job, %	Proportion of resident inhabitants, %	Number of entrepreneurship subjects on 1000 resident inhabitants
Riga (Riga region vicinity)	78.9	71.7	71.4	64.1	54.0	23.0
Western Kurzeme	5.0	8.2	7.7	7.7	8.1	12.0
Southern Latgale	5.0	5.6	6.1	9.3	12.0	4.0
Eastern Latgale	3.1	2.7	2.3	3.7	4.8	4.0
Other regions	8.0	11.8	12.5	15.2	21.1	-
In total	100.0	100.0	100.0	100.0	100.0	-

entrepreneurship subjects and logistics branches entrepreneurship subjects in Latvia the conclusion was drawn that the most powerful subjects operate in Western Kurzeme – in Liepāja - Ventspils region, where 7.7% of GDP was given by 5% of entrepreneurship subjects. Thus, the proportion of logistics branches entrepreneurship subjects is larger than the total part of GDP.

Relatively powerful enterprises and business companies operate also in Southern Latgale, where the proportion of produced GDP is considerably greater than the proportion of the registered subjects.

Comparing the proportion of individuals doing permanent job, it is possible to evaluate that Latgale businessmen have relatively low work productivity where the proportion of GDP is firmly below the proportion of employees.

In Riga region 64 % from all Latvia inhabitants doing permanent job formed 71% from the GDP of Latvia.

Interesting results were obtained comparing proportion of inhabitants and employees: - in Riga and in its urbanized region where people work, but they live in some other place (district or town), but in Latgale both intraregions (Southern Latgale and Eastern Latgale) 17% of inhabitants live there, though there is only 13% of employees which form only 8% of GDP.

In all surveyed regions the logistics and its infrastructure enterprises more often appear on the lists of outstripping growth enterprises and business companies. The development of transport services branch exceptionally stands out: cargos shipment with road transport in years 1995-2005 has grown up by 2.6 times.

*Forms of Entrepreneurship*

In the study program the objective to clarify the consequences of changes in content and legal forms of registered entrepreneurship subjects was included. Due to limited volume of the Paper only

results of regression analysis are shown in Table 3.

As seen in Table 3 Joint Stock Companies and Proprietorships have the closest connection ( $r = 0.94$ ) for subjects count dynamical changes within the years of the analyzed period.

Limited Liability Companies have different – weaker connection ( $r = 0.51$ ) Reason for it can be the changes of law norms or issue of new laws that can facilitate or vice versa – hinder the choice of Limited Liability Company form. But this indicator cannot be related to the subjects logistics systems, because in this type of fast growing enterprises and business companies the form of Limited Liability Company dominates completely.

**Conclusions**

1. In the urban intraregions studied, we can observe common features in the amount dynamics of newly-established entrepreneurship subjects: in the beginning of the analyzed period – year 1992 – a sharp increase, in the next 10 years (1993.-2002.) multiple decrease of these subjects, but they increase again in the last four years (2003.-2006.)
2. Influence of metropolis (Riga) still increases, but urban influence from other cities of Republic is also significant, as in the four studied intraregions 92% of registered entrepreneurship subjects were concentrated and only 8% remained for other 12 districts. Even bigger proportion in those are for entrepreneurship subjects of logistics branches.
3. From the point of view of Value Added the most powerful subjects are in Western-Kurzeme – in Liepāja - Ventspils intraregion, where 7.7% GDP were provided by 5% of entrepreneurship subjects.

Table 3

**In Latvia registered entrepreneurship subjects form dynamic time-rows regression equations in years 1991-2006**

Entrepreneurship forms	Correlation coefficient, r	Determination coefficient, R <sup>2</sup>	Regression equation
Joint Stock Companies	0.94	0.88	$y = 366:172^{-0.1921x}$
Individual Merchants	0.94	0.88	$y = -314:2^{+4122.7x}$
Farms	0.87	0.76	$y = 6960:80^{-0.2353x}$
Proprietorships	0.74	0.55	$y = 108:9x - 370:93$
Limited Liability Companies	0.51	0.26	$y = -387:11x + 10401$

4. In Latgale intraregions, where study was done (Southern-Latgale and Eastern-Latgale) proportion of inhabitants is 17%, but share of employees – 13% which has provided only 7% of GDP.

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