

## Social Investment Indices of Šiauliai County Municipalities' as a Precondition for Economic and Social Breakthrough

Aurimas Nausėda, Teodoras Tamošiūnas

Šiauliai University

### Abstract

Possibilities of economic and social breakthrough of seven Šiauliai county municipalities according to social investment indices have been analysed in the paper. 8 groups of indices: the number of population, the number of population in urban areas, of registered criminal offences, employed by economic activity, employed residents, pension age population, registered unemployed residents. The statistical forecasts of the mentioned indices have been calculated for 2010 and 2013 using the trend function, also in change percentage by years have been calculated.

**Keywords:** social indices, investment attractiveness, economic and social breakthrough.

### Introduction

**Research problem and relevance.** Foreign investors frequently decide about the region's attractiveness according to concrete statistical, social and economic data. In science literature the region's attractiveness is related to the creation of a positive image. An increasing of the indefiniteness business environment and changing business rules make business companies, representatives of regions' self-government find ways of achieving the ultimate goals which will provide not only advantages but also changes. A need arises to adapt to the changing environment, react to changes in order to use regions' possibilities, competitive advantages, increase of resultativeness the activity. In search for new activity methods, precise definition of future business conditions and achievements of strategic management and forecasting are important. Management scientists (Vasiliauskas, 2002; Видяпина, 2007) point out that forecasting results as well as data calculated using science methods covering the object's forecasted state in the future, alternatives and time duration for their implementation are important for companies and other organizations which aim to implement their aims, activities strategy.

Information of international financial organizations about investment attractiveness for business is important for investors. On the website of the World Bank according to the calculations of economists and using special methodology information on the exact number of days needed to set up a stock company, expenses and minimum capital (SB, 2007; SBM, 2007) is given. Data on investment possibilities in the Republic of Lithuania is given by the European Union statistics department "Eurostat". For instance, the EU entrepreneurship indices prepared by "Eurostat" in 2004 indicate that the Republic of Lithuania is two times lagging behind Romania according to the registered companies' number, also falls back behind Estonia, the United Kingdom, but there are registered more companies in Lithuania compared to the EU average (Putelytė, 2007).

Social investment indices are emphasized little in the economic and social policy of the Republic of Lithuania. The indices get less attention in the Lithuanian regional policy. In the article According to the data of the Department of Statistics by Regions and Indices databases, social indices which could have impact on the process of attracting investors to Šiauliai county municipalities' economy have been identified.

**Research aim:** to explore Šiauliai county municipalities' social investment attractiveness indices as a premise for economic and social breakthrough.

#### Tasks:

1. To explore statistical data on Šiauliai region social situation.
2. To identify social investment attractiveness indices' group.
3. To base Šiauliai county economic and social breakthrough possibilities.

**Research methods:** science literature analysis; statistical research data analysis carried out using MS Excel software; forecasts formulations according to function and percentage changes' calculation. Statistical data was taken from Statistics Department Regions' database and Indices' database, Šiauliai county municipalities' documents.

## Essentials of Theoretical and Political Investment Attractiveness Indices

Forecast of statistical indices is important for investment attractiveness. It is written in the monograph “Exports and Investments Development in Lithuania” that direct foreign investments are the state’s economic growth index, device used to achieve that growth, moreover, the aim of direct foreign investment is to have influence on the management of the company in a foreign country, to get profits (Ginevičius et al., 2005, p.157- 162). In the opinion of the authors of the monograph, it is essential to analyze and activate Lithuanian direct foreign investments analyzing the following factors: *the legislative basis* (e.g. creation of different conditions for investors in rural and urban areas, exemptions in the Free Economic Zone Law influencing investment geographical distribution), *communication possibilities* (investment concentration near the main highways, seaports and airports, railway centers in order to transport goods and services easier), *local resources* (work force, natural resources and their usage possibilities), *criminality rate* (advantage for small towns because criminality is lower there) and other factors (ibid, p.180–182). The authors of the monograph’s point out that situation is different in the city of Šiauliai as compared to other Lithuanian cities, because in the city of Šiauliai investments are concentrated not only in the city, but also in remote places, mean while other Lithuanian cities e.g. Alytus, accumulate investments strictly in their territories. Attention should be focused of the comment of the authors that on the whole of northern Lithuania is sort of separated from investors, it is a substantially agricultural region (ibid, p.190).

Scientists R. Garalienė, G. Belazarienė from Kaunas Technological University state that it is vital to stress investment attractiveness as investment conditions influence the investor who chooses an investment object for the project, company, corporation, city, region or country (Garalienė, Belazarienė, 2001). Russian scientist V. Mashkin states that it is crucial to analyze the region’s investment climate (i.e. a series of factors, which are used to attract investments to the region) and link it to the following factors:

1. Creation of effectively working infrastructure in the investment region.
2. The region’s company’s production and investment resources’ demand solvency increase.
3. Creation of conditions guaranteeing the local resources use for investments in the regional companies.
4. Integration of the regional investment market into the international markets.
5. Creation of favorable conditions to attract coun-

try’s and foreign investments to separate regions (Машкин, 2008).

R. Garalienė, G. Belazarienė point out that the regional investment climate formation helps to solve regional problems, improve the state’s economic status, attract investors. It is essential to organize in the regional investment climate preparation coordinating-consulting group, activities of which will include representatives of the regions, power, commercial structures to form and coordinate the regional investment policies. Moreover it is important calculate to the region’s investment policy indices, prepare concrete activities and their acceptance in the highest structures of the regional government structures, prepare a timetable to implement and optimize the region’s set investment activities, prepare new investment policy variants for the next budgetary year, create specialized regional organizations (e.g. funds, agencies which will help to find foreign investors and will function near the regional administration), which will coordinate investments in the region and help to implement market research covering the region’s investment, preparation of technology, methods and other steps needed for mutual work with foreign investors, and other factors (Garalienė, Belazarienė, 2001).

In the documents of the Lithuanian Government it is written about investment attractiveness creation. In 2007 the document “Investment Stimulation Programme for 2008–2013” was approved, and one part of this document is titled “Factors Influencing Lithuania’s Attractiveness for Investments” (NDIS). In nine paragraphs of the mentioned programme the following factors are mentioned: legal documents guaranteeing investments which correspond to the EU standards and create confidence in business safety; the allocated funds for the Republic of Lithuania as the EU convergence region, which will directly add to the innovation and technology development, business productivity increase, business environment improvement, etc., recognition of international financial organizations, positive evaluation of international financial institution experts that Lithuania is attractive for investment and the increase of companies’ investments while noticing possibilities to export production to other regions, etc. In the part “Factors Limiting Investments into the Lithuanian Economy” the following factors limiting investments are distinguished: worse conditions for investments than in main competitors because of direct foreign investments, lack of motivation factors, difficult, long land purchase and territory planning document preparation and coordination procedures, uncompetitive work force taxation, shortage of prepared for investors special investment land (parks, zones), where infrastructure, communication is available.

For long-term development of Lithuanian regions the following state documents are important: “Long-term Strategy of Lithuanian Economy Development until 2015”, “National Sustainable Development Strategy”, “The Territory General Plan of the Republic of Lithuania”, general plans of the counties, municipalities. Middle-term development documents are “The Strategy of the EU Structural Support Use”, regional development plans for 2007–2013, strategic plans of the towns’, cities’, districts’ municipalities. The Republic of Lithuania plans a three-year budget according to the EU budgetary plans, budget income and expenses allocation principles for a seven-year period. Lithuanian regional policy is implemented according to the Regional Development Law (LRVMĮ, 2002).

In 2007 Šiauliai University scientists together with the Šiauliai county administration employees working under the international project “SEBco” prepared informational study about 10 planned and created industrial zones. Investment attractiveness is analyzed according to economic, social and environmental indices as the premises for industrial zones’ preparation in the Document (IS, 2007).

Investment attractiveness of Šiauliai region is developed by the investment policy of Šiauliai county municipalities and business organizations in order to attract the country’s and foreign investors. Identification of investments’ positive factors using statis-

tical data, carrying out quantitative and qualitative research can improve regional politics effectiveness.

### Social Investment Attractiveness Indices of Šiauliai County

The following social investment attractiveness indices have been distinguished in Šiauliai county and its municipalities:

1. Population number change in the county.
2. Population number change in the villages of the municipalities.
3. Population number change in the urban areas of the municipalities.
4. Crime rate change in the municipalities.
5. Employed in the county by economic activity.
6. Employed number change in municipalities.
7. Pensioners age residents’ number change in the municipalities.
8. Registered unemployed number change in the municipalities.

Population number. It is the basic index and many other social indices are associated with it therefore it is important to give residents’ number change and forecasts. It was chosen from the Indices Database the population number at the beginning of the year in Šiauliai county municipalities and the forecasts have been calculated for 2010 and 2013 using trend function (Figure 1, Figure 2) and percentage changes (Table 1):

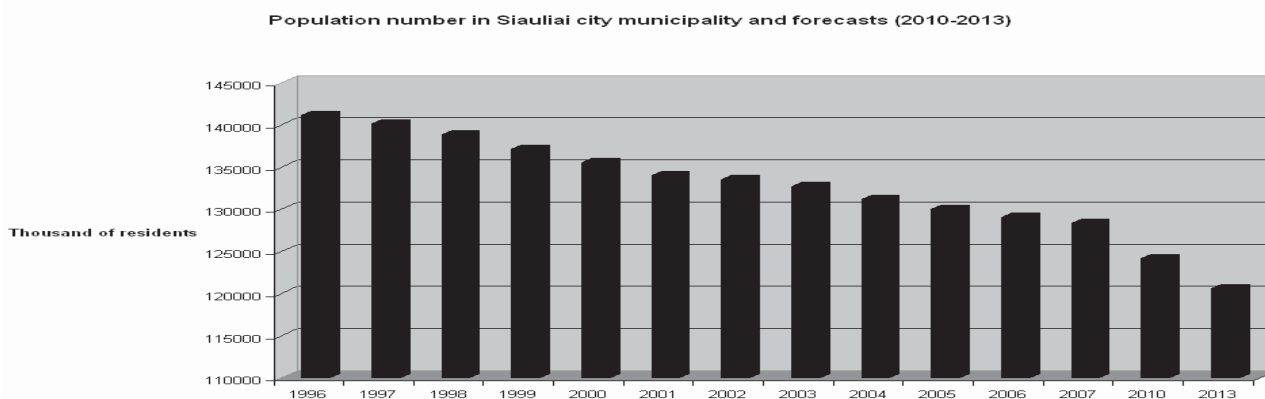


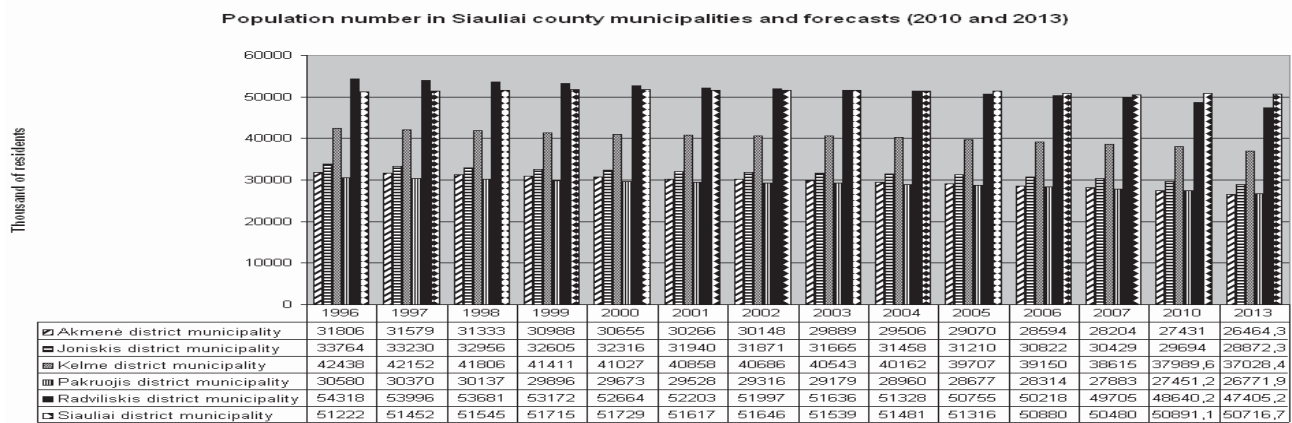
Fig. 1. Population number in Šiauliai city municipality and forecasts

Source: Database of Indicators of Department of Statistics, 2008.

Table 1, Figure 1 and Figure 2 show that the residents’ number during 7 years (2006–2013) will decrease on average by 6% in Šiauliai county. During 2001–2006 period the number of Šiauliai city residents decreased by 3.9% or by 4996 residents (ŠMEA, 2008). Table 1 shows that this town’s residents number decrease tendencies remain. Forecast could be made that during four years (2006–2010)

the residents’ number will decrease by 3.8%, and during seven years (2006-2013) by 6.5%. During 7 years the greatest residents’ number decrease (around 7.5%) will be in Akmenė district municipality.

In Šiauliai Region Development Plan of 2007–2013 it is noted that Šiauliai county residents’ change decrease rates are 60% more rapid than average of the country (ŠRPP, 2008).



**Fig. 2.** The population number change in Šiauliai county municipalities

Source: Database of Indicators of Department of Statistics, 2008.

In Table 1 population number figures are given, also forecasts for 2010 and 2013 have been calculated according to the trend function, also percentage changes in 2006–2010, 2006–2013 in different Šiauliai county municipalities are provided.

Table 1

**Population figures in Šiauliai county municipalities and their percentage changes**

Municipality	2006	2010	Change in 2006–2010, per cent	2013	Change in 2006–2013, per cent
Šiauliai city municipality	129037	124186	– 3,8 %	120613	– 6,5 %
Akmenė district municipality	28594	27431	– 4,1 %	26461	– 7,5 %
Joniškis district municipality	30822	29694	– 3,7 %	28872	– 6,3 %
Radviliskis district municipality	50218	48640	– 3,1 %	47405	– 5,6 %
Pakruojis district municipality	28314	27451	– 3 %	26772	– 5,4 %
Kelmė district municipality	39150	37990	– 3 %	37028	– 5,4 %
Šiauliai district municipality	50880	50891	+ 0,02 %	50717	– 0,3 %

*Rural area residents' change.* The decrease of this figure shows basic demographic changes in Šiauliai county. In Table 2 the county's 6 municipalities'

rural residents' number change in percent is given. Using the trend function forecasted rural residents' number for 2010 and 2013 has been calculated.

Table 2

**Rural residents' figures in the Šiauliai county municipalities and their decrease percentage changes**

Municipality	2001	2007	2010	2013	Change in 2001–2007, percent	Change in 2007–2010, percent	Change in 2007–2013, percent
Pakruojis district municipality	21660	20321	19748	19083	–6,18%	–2,8%	–6,1%
Šiauliai district municipality	37431	36745	36683	36366	–1,83%	–0,2%	–1%
Radviliskis district municipality.	28006	26838	26495	25932	–4,17%	–1,3%	–3,4%
Joniškis district municipality	18274	17372	17036	16582	–4,94%	–1,9%	–4,5%
Kelmė district municipality	26212	24655	24065	23290	–5,94%	–2,4%	–5,5%
Akmenė district municipality	11343	10745	10559	10279	–5,27%	–1,7%	–4,3%

Table 2 shows that rural residents' number decreased most rapidly and will further decrease in Pakruojis district municipality by 6% until 2013, the least decrease of rural residents (around 1% until 2013) has been noticed and will be noticed in Šiauliai county municipality. On average rural residents'

number in 6 county municipalities during 6 years (2007–2013) will decrease by 4%.

*Urban area residents' number.* Tendencies of this figure change according to the percentage change during six years (2001–2007) and during 6 years (2007–2013) are given in Table 3.

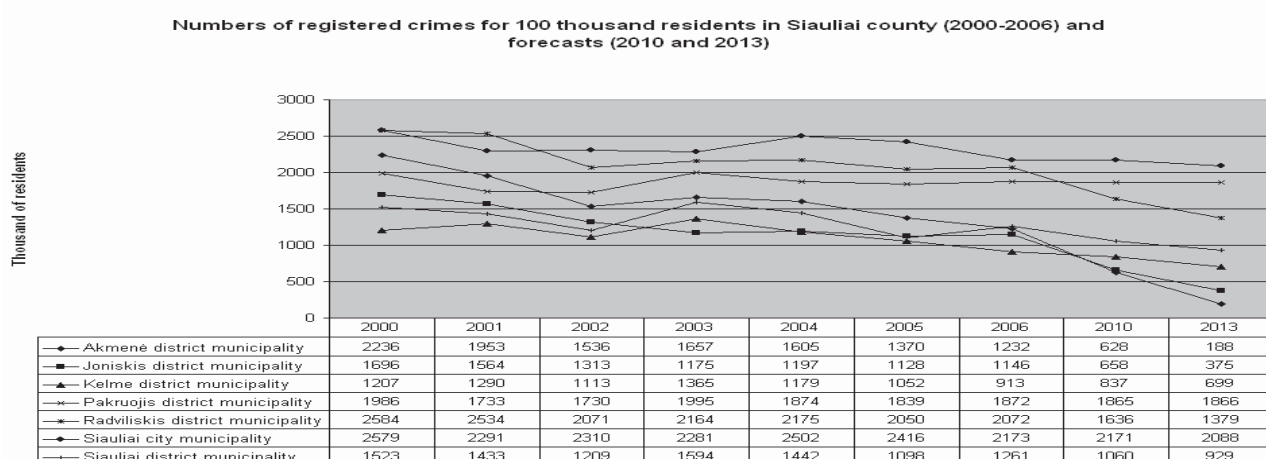
### Rural residents' figures in Šiauliai county municipalities and their decrease changes

Municipality	2001	2007	Change in 2001–2007, percent	2010	2013	Change in 2007–2013, percent
Pakruojis district municipality	7868	7562	-3,9%	7494	7362	-2,6%
Šiauliai district municipality	14186	13735	-3,2%	13490	13253	-3,5%
Šiauliai city municipality	134385	128397	-4,5%	124186	120613	-6,1%
Joniškis district municipality	13666	13057	-4,5%	12787	12482	-4,4%
Kelmė district municipality	14646	13960	-4,7%	13613	13251	-5,1%
Akmenė district municipality	18923	17459	-7,7%	16656	15853	-9,2%
Radviliškis district municipality	24197	22876	-5,5%	22021	21352	-6,7%

Table 3 shows that urban areas population figures in Šiauliai county municipalities in 2001-2007 decreased on average by 5%. A similar tendency is forecasted for 2007–2013. Only Akmenė district municipality decrease rates will be greater.

*Criminality.* Crime rate is important while forming premises about different Šiauliai county municipalities' social problems and has impact on investment attractiveness. According to the Indices database registered crime rate for 100 thousand residents in 6 Šiauliai county districts' municipalities using the trend function has been calculated crime rates for 100 thousand residents in 2010 and 2013 forecasted (Figure 3).

unicipalities' social problems and has impact on investment attractiveness. According to the Indices database registered crime rate for 100 thousand residents in 6 Šiauliai county districts' municipalities using the trend function has been calculated crime rates for 100 thousand residents in 2010 and 2013 forecasted (Figure 3).



**Fig. 3.** Registered crimes for 100 thousand residents in Šiauliai county municipalities

Source: Database of Indicators of Department of Statistics, 2008.

A more detailed crime rate change tendency is given in Table 4 because percentage change in 7 coun-

ty municipalities during 4 years (2006–2010) and during 7 years (2006–2013) has been calculated.

Table 4

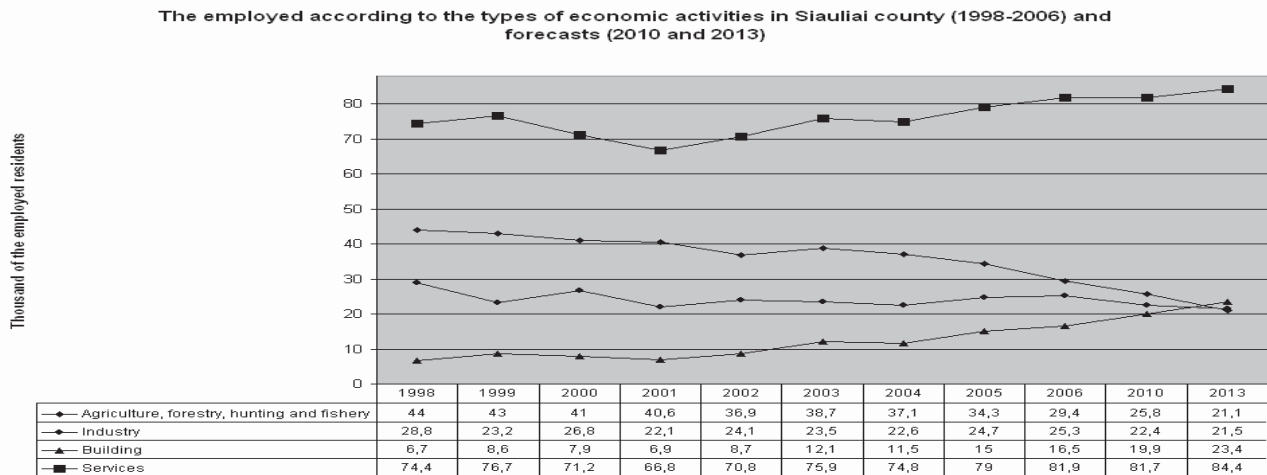
### Registered crime rate and their decrease percentage change in Šiauliai county municipalities

Registered crime rates for 100 thousand residents	2006	2010	Change in 2006–2010, percent	2013	Change in 2007–2013, percent
Šiauliai city municipality	2173	2171	-0,1%	2088	-3,9%
Radviliškis district municipality	2072	1636	-21%	1379	-33,4%
Pakruojis district municipality	1872	1865	-0,4%	1866	-0,3%
Kelmė district municipality	913	837	-8,3%	699	-23,4%
Šiauliai district municipality	1261	1060	-5,9%	929	-26,3%
Joniškis district municipality	1146	658	-42,6%	375	-67,3%
Akmenė district municipality	1232	628	-49%	188	-84,7%

Table 4 shows that registered crime figures will decrease most rapidly in Akmenė district municipality around 49% during 4 years (2006–2010). In Šiauliai city crime rate will change least as compared to other municipalities: during 4 years (2006–2010) crime rate will not practically change and during 7 years (2006–2013) according to crime rate decrease Šiauliai will surpass only Pakruojis district municipa-

lity where crime rate during the whole period will decrease particularly narrowly.

*Residents' employment by economic activity.* From the Indices Database data covering Šiauliai county residents' employment by economic activity using the trend function the forecasted values for 2010 and 2013 have been calculated (Figure 4).



**Fig. 4.** Employed by economic activity in Šiauliai county

Source: Database of Indicators of Department of Statistics, 2008.

Figure 4 shows that employed residents' number will decrease rapidly in agriculture, forestry, and fishery and will increase rapidly in services and building sector.

Calculated present and forecasted percentage changes of employed by economic activity are given in Table 5.

Table 5

**Employed by economic activity and percentage changes**

Economic activity sphere in Šiauliai county	The number of the employed, thousand			Forecasts		Percentage changes from 1998 to 2013			
	1998 year	2004 year	2006 year	2010 year	2013 year	2004–2006 year	2007–2010 year	2007–2013 year	1998–2013 year
Building	6,7	11,5	16,5	19,9	23,4	+43,48%	+20,6%	+41,82%	+249,25%
Services	74,4	74,8	81,9	81,7	84,4	+9,49%	–0,24%	+3,05%	+13,44%
Industry	28,8	22,6	25,3	22,4	21,5	+11,95%	–11,47%	–15,02%	–25,35%
Agriculture, hunting forestry and fishery	44	37,1	29,4	25,8	21,1	–20,76%	–12,24%	–28,23%	–52,05%
<b>Total</b>	<b>153,9</b>	<b>146</b>	<b>153,1</b>	<b>149,8</b>	<b>148,1</b>	<b>+4,86%</b>	<b>–2,16%</b>	<b>–3,27%</b>	<b>–3,77%</b>

Table 5 shows that constant and biggest decrease of employed is forecasted in agriculture, hunting, forestry, and fishery, while most rapid and constant increase of employed will take place as forecasted in building. Though the number of employed in industry from 2004 to 2006 increased almost by 12%, in the future there could be forecasted even 15% decrease

of employed from 2007 to 2013. Narrowly by 3% there must decrease the total number of employed in all spheres altogether from 2007 to 2013.

Statistics in Table 4 and Table 5 and forecasts enable to state that Šiauliai county rural areas residents reorient from agriculture, hunting, forestry and fishery to other economic activities, especially to ser-

vices and building. Similar processes have been experienced by Western Europe rural areas' residents due to the process of constant modernizing of agricultural technology.

*Number of employed age residents.* In Table 6 figures for 2001 and 2007 in Šiauliai county municipalities are given, calculated forecasts according to the trend function for 2010 and 2013 and calculated percentage changes.

Table 6

**The number of the employed residents and percentage changes**

Municipality	2001	2007	2010	2013	Change in 2001–2007, percent	Change in 2007–2013, percent
Akmenė district municipality	16488	16796	16999	17089	+1,9%	+1,7%
Šiauliai city municipality	82178	85047	86390	87612	+3,5%	+3%
Pakruojis district municipality	15969	16678	17159	17507	+4,4%	+5%
Radvilisškis district municipality	28444	29985	30887	31624	+5,4%	+5,5%
Joniškis district municipality	17328	18308	18886	19333	+5,7%	+5,6%
Kelmė district municipality	21525	22734	23494	24077	+5,6%	+5,9%
Šiauliai district municipality	28110	30595	31962	33195	+8,8%	+8,5%

In the Republic of Lithuania the working age is prolonged and pension age is moved further up to 65 years, therefore working age residents' change increases in all Šiauliai county municipalities. Table 6 shows that largest increase of working age residents during 6 years (about 9%) increased and will increase in Šiauliai county municipality. But in the city Šiauliai, where the largest number of working age residents could be noticed, this figure increases and

will increase little, only about 3% during 6 years.

*Pension age residents' number.* It is an important rate analyzing Šiauliai county economic and social breakthrough possibilities. Pension age residents' number forecasts for 2010 and 2013 have been calculated using linear trend function. Percentage changes of these figures for 2001–2007 and 2007–2013 have been calculated (Table 7).

Table 7

**Pension age residents' numbers and percentage changes**

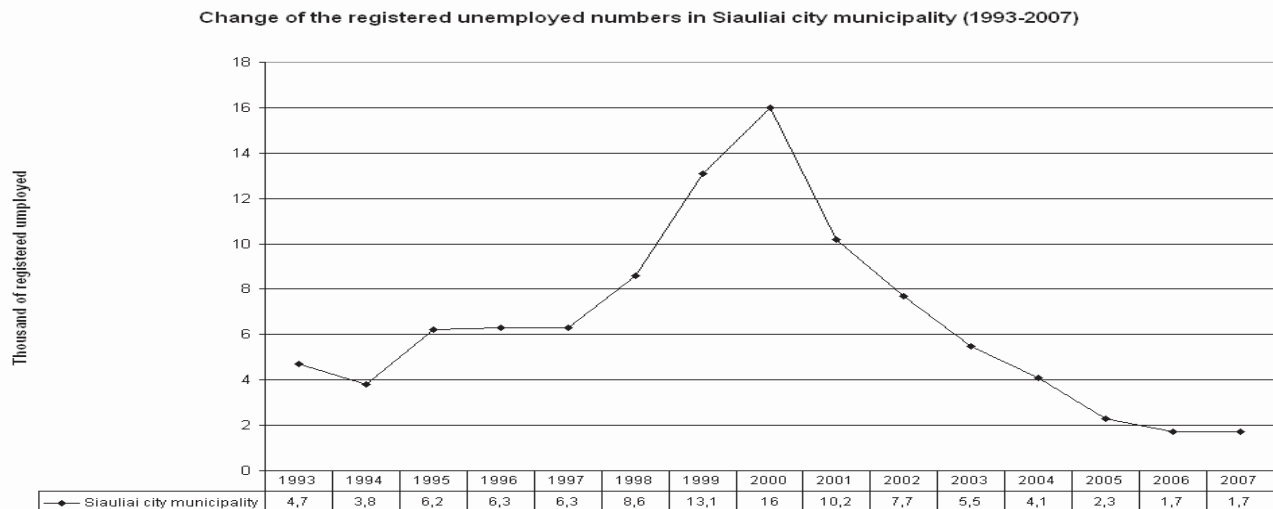
Municipality	2001	2007	2010	2013	Change in 2001–2007, percent	Change in 2007–2013, percent
Šiauliai city municipality	24061	22467	21595	20796	-11,2%	-7,4%
Joniškis district municipality	6967	6237	5886	5512	-10,5%	-11,6%
Akmenė district municipality	6548	5856	5487	5415	-10,6%	-7,5%
Radvilisškis district municipality	11794	10288	9523	8774	-12,8%	-14,7%
Pakruojis district municipality	6678	5742	5298	4844	-14%	-15,6%
Kelmė district municipality	10038	8683	7991	7312	-13,5%	-15,8%
Šiauliai district municipality	11288	10025	9362	8734	-11,2%	-12,9%

In the Republic of Lithuania pension age is moved to 65 years, so it is natural that in all Šiauliai county municipalities the number of pension age residents decreases and has a tendency to decrease. Table 7 shows that mostly during 6 years (2001–2007) pension age residents decreased in Kelmė district municipality (even 13.5%) and further during 6 years (2007–2010) and has the greater tendency to decrease (15.8%). Decrease of Šiauliai city pension age residents from 2001 to 2007 was one of the smallest as compared to other municipalities, while from 2007 to 2013 decrease is forecasted to be only around 7%.

*Unemployed number.* Registered unemployed numbers were highest not only in the Republic of Lithuania, but also in Šiauliai county municipalities about the year of 2000. Later these figures started decreasing rapidly and in 2006 in some economic activities' spheres there was a lack of human resources in some municipalities. Especially there was and still currently is a lack of lower qualification specialists in industry and business, medical institutions and other services. According to Šiauliai Labor Exchange information of August 12, 2008, the most needed occupations for specialists are: insurance agents, sa-

les managers, administrators, accountants, building engineers. Total change of unemployed registered in Šiauliai county municipalities adequately reflect Šiau-

liai city municipality registered unemployed change from 1993 to 2007 inclusively (Figure 5).



**Fig. 5.** Registered unemployed number change in Šiauliai city municipality

Source: Database of Indicators of Department of Statistics, 2008.

Registered unemployed numbers in Šiauliai county municipalities and their percentage changes are given in Table 8. Due to big unemployed numbers' change it is not expedient to apply trend func-

tion. It is likely that in the future registered unemployed number will slightly decrease, but in 2007 these figures reached practically an minimum level.

Table 8

**Registered unemployed numbers (in thousands) and their decrease changes**

Municipality	2001	2003	2007	Change 2001–2007, percent
Akmenė district municipality	4	3,2	1	-75%
Joniškis district municipality	3,2	2,2	0,9	-71,9%
Kelmė district municipality	3,9	2,8	1,1	-71,8%
Pakruojis district municipality	1,8	1,3	0,5	-72,2%
Radviliškis district municipality	4	2,4	0,8	-80%
Šiauliai city municipality	10,2	5,5	1,7	-83,3%
Šiauliai district municipality	4,3	2,8	0,9	-79,1%

Table 8 shows that in 2001–2007 registered unemployed numbers especially greatly decreased in Šiauliai city municipality even 83.3%. However, according to similar rates these figures decreased in the district municipalities.

**Conclusions**

1. In 7 Šiauliai county municipalities there has been distinguished social investment attractiveness indices groups: population number, population number in villages and urban areas, number of registered crime, employed by to economic activity, em-

ployed number change in municipalities, pension age residents' number, registered unemployed number. Analysis of the mentioned indices has been carried out, statistical forecasts have been calculated using linear trend function from seven to three years, also rate values percentage changes. Summarizing it is possible to state that Šiauliai county social indices increase the county's investment attractiveness: criminality decreases, intensive transition from agriculture to other activities of employed in the rural areas takes places, number of working age residents increases, pension age residents decrease and registered unemployed show improving the county's social situation.



2. Eight social investment attractiveness indices' group enable to estimate the possibilities of economic and social breakthrough in Šiauliai region. The region is socially favorable for foreign and state material investments: unused working age residents' potential, broad possibilities of transition of employed in agriculture to other economic activities. As other research carried out in Šiauliai region indicate the region has good conditions to set up industrial zones, develop business in the county municipalities' territory, form sociality of the rural areas' residents. The development plan of Šiauliai region for 2007–2013 shows that Šiauliai county head's administration and seven county's municipalities have ambitious plans for economic and social breakthrough assimilation of the EU structural funds.
3. One of Šiauliai region social breakthrough premises is relatively not big decrease of Šiauliai region population. Low change of population in all Šiauliai county municipalities (in Šiauliai county the residents' number during seven years from 2006 to 2013 will decrease averagely by 6%), low change of village residents (averagely village residents' number in six county municipalities will decrease from 2007 to 2013 by 4%), low urban areas residents' change (it is forecasted averagely 5% decrease in seven Šiauliai county municipalities for 2007–2013).
4. Šiauliai region economic breakthrough social premise is employed by economic activity redistribution. There is an increase of residents in building business (forecasted 42% increase from 2007 to 2013). But there is a decrease of employment in agriculture, forestry, hunting, fishery (forecasted 28% decrease of employed from 2007 to 2013). Population redistribution to more profitable economic activities improve the region's economic situation and create more favorable conditions for investments and creation of new workplaces. Residents' employment in industry and services may increase due to set up industrial parks, activities of industry and service companies operating in industrial parks.
5. Working age in the Republic of Lithuania is prolonged due to pension age movement to the age of 65, therefore in Šiauliai county municipalities working age residents' number increases and will increase according to forecasts from 2007 to 2013 on average by 5%. Accordingly, the number of pension age residents in this period must decrease by 10%. Registered unemployed numbers, which decreased practically to minimum in 2001–2007, must stabilize in all county municipalities. General working age number increase and factual lack of human resources create good conditions to develop economic activities, create new workplaces and at the same time find a job quicker.
6. Attractive Šiauliai county social investment rate is a decrease of criminality. In most Šiauliai county municipalities the crime rate (registered crimes for 100.000 residents) is significantly lower than in the city of Šiauliai. Moreover, statistics show that crime rate decreased more rapidly in the districts' municipalities than in the city of Šiauliai in 2000–2006. It enabled to forecast that crime rate for 100.000 residents in 2006–2013 will decrease by 4%, while in some districts' municipalities even by 70–80%.
7. A special situation for all five Šiauliai county district municipalities is the one in Šiauliai district. Residents number is stable here, old-time residents' number decrease is compensated by newcomers working in the city of Šiauliai. Here as well as in the city of Šiauliai and Radviliškis district registered unemployed number decreased most rapidly. In the district of Šiauliai there is forecasted the biggest increase of working age residents even around 9%. Obviously, it is easier for this district residents than for other district residents to work in the city of Šiauliai. Furthermore, this district is the most important for Šiauliai city residents' recreation, supply of ecological food products, production of small cottage industry. The assumption could be made that Šiauliai city and Šiauliai district borders are vanishing, economic and social activities in both municipalities is getting more integrated.
8. It is purposeful to identify carrying out the started research on the issue Šiauliai county municipalities' social investment attractiveness indices system linking it to the indices of Lithuanian's sustainable development strategy given in the Statistics Department Regional Database and Indices Database. Moreover, forecasting this system indice changes it is important to use not only formal statistics methods, but also pay attention to the strategic plans of Šiauliai county and its municipalities, Lithuanian regional policy, regional priorities and the European Union economic and financial policies.

## References

1. *Database of Indicators of Department of Statistics*. <http://db1.stat.gov.lt/statbank/default.asp?w=1280>. [retrieved 2008 04 24].
2. Garalienė, R., Belazarienė G. (2001). *Regiono investicinio klimato formavimas*, [http://www.lrti.lt/veikla/gar\\_region.doc](http://www.lrti.lt/veikla/gar_region.doc) [retrieved 2008 01 10 ].

3. Ginevičius, R., Rakauskienė, O. Patalavičius, G., Tvaronavičienė, R., Kalašinskaitė, M., Lisauskaitė, V. (2005). *Eksporto ir investicijų plėtra Lietuvoje*. Vilnius: Technika.
4. IS-*Informative Study "Industrial Areas in Šiauliai County"* (2007). / Compiled by Tamošiūnas, T., Dijkaitė, D., Navickas, K., Leknickienė, R., Karpavičius, H., Plaipa, A.. Šiauliai: Spektrika.
5. LRVMĮ-*Lietuvos Respublikos Vidaus reikalų ministro įsakymas dėl regionų plėtros planų parengimo ir atnaujinimo metodikos patvirtinimo*. (2002). [http://www.vrm.lt/fileadmin/Padaliniu\\_failai/RPD/Regionu\\_pletros\\_plan\\_\\_metodikos.doc](http://www.vrm.lt/fileadmin/Padaliniu_failai/RPD/Regionu_pletros_plan__metodikos.doc) [retrieved 2008 04 01].
6. NDIS-*Nutarimas „Dėl investicijų skatinimo 2008–2013 metų programos patvirtinimo“*, [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=312822&p\\_query=%D0iauli%F8%20laisvoji%20ekonomini%EB%20zona&p\\_tr2=2](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=312822&p_query=%D0iauli%F8%20laisvoji%20ekonomini%EB%20zona&p_tr2=2) [retrieved 2008 04 24].
7. NDVSI - *Nacionalinės darnaus vystymosi strategijos įgyvendinimo 2003–2004 metais ataskaita*, [http://www.sd-network.eu/pdf/resources/NSDS-Eval-Report\\_Lithuania.pdf](http://www.sd-network.eu/pdf/resources/NSDS-Eval-Report_Lithuania.pdf) [retrieved 2008 01 10].
8. Putelytė, G. *Lietuvių Verslo Genas*. (2007 06 07). *Veidas*, p. 16–20.
9. SB-*Starting a Business*, <http://www.doingbusiness.org/ExploreTopics/StartingBusiness/> [retrieved 2007 05 21].
10. SBM-*Starting a Business – Methodology*. <http://www.doingbusiness.org/MethodologySurveys/StartingBusiness.aspx> [retrieved 2007 – 03 – 09].
11. ŠMEA-*Šiaulių miesto ekonominė apžvalga*, [http://www.siauliai.lt/ekonomika/ekonomine\\_apzvalga.php](http://www.siauliai.lt/ekonomika/ekonomine_apzvalga.php) [retrieved 2008 04 15].
12. ŠRDVI - *Šiaulių regiono Darnaus vystymosi instituto įkūrimas ir plėtra*. (2005). Šiauliai: Šiaulių universiteto leidykla.
13. ŠRPP-*Šiaulių regiono 2007-2013 metų plėtros planas*, [http://www.siauliai.aps.lt/stotisFiles/uploaded/Attachments/SiauliuRegiono\\_PletrosPlanas2007\\_2013\\_LT2008154450.pdf](http://www.siauliai.aps.lt/stotisFiles/uploaded/Attachments/SiauliuRegiono_PletrosPlanas2007_2013_LT2008154450.pdf) [retrieved 2008 04 26].
14. Vasiliauskas, A. (2002). *Strateginis valdymas*. Vilnius: Enciklopedija.
15. Видяпина, В. И. (2002). Хрестоматия „Бакалавр экономики“, <http://lib.vvsu.ru/books/bakalavr02/page0190.asp> [retrieved 2007 04 04].
16. Машкин, В. (2008). Управление инвестиционной привлекательностью реального сектора экономики региона, <http://www.akdi.ru/avt-upr/invest/5.htm> [retrieved 2008 01 10].

A. Nausėda, T. Tamošiūnas

## Šiaulių apskrities savivaldybių socialiniai investicinio patrauklumo rodikliai kaip ekonominio ir socialinio proveržio prielaida

### Santrauka

Socialiniai investicinio patrauklumo rodikliai mažai akcentuojami Lietuvos Respublikos regioninėje, ekonominėje ir socialinėje politikoje. Apie regiono patrauklumą užsienio investuotojai dažniausiai sprendžia pagal konkrečius statistinius rodiklius ir socialinius, ekonominius faktus. Šiame straipsnyje remiantis Statistikos departamento Regionų, Rodiklių duomenų bazių duomenimis siekiama identifikuoti tokius socialinius rodiklius, kurie gali turėti įtakos pritraukiant investuotojus į Šiaulių apskrities savivaldybių ekonomiką.

Tyrimo tikslas – išnagrinėti Šiaulių apskrities savivaldybių socialinius investicinio patrauklumo rodiklius, kaip prielaidą ekonominiam ir socialiniam proveržiui. Straipsnyje išnagrinėti statistiniai duomenys apie Šiaulių regiono socialinę situaciją, identifikuota socialinių investicinio patrauklumo rodiklių grupė, pagrįstos Šiaulių apskrities savivaldybių ekonominio ir socialinio proveržio galimybės.

Straipsnyje analizuojamos Šiaulių apskrities 7 savivaldybių ekonominio ir socialinio proveržio galimybės pasiremiant socialiniais investicinio patrauklumo rodikliais. Išskirta savivaldybių 8 rodiklių grupė: gyventojų skaičius, gyventojų skaičius kaime ir mieste, nusikalstamumas, užimtųjų pagal ekonominę veiklą skaičius, darbingo amžiaus gyventojų skaičius, pensinio amžiaus gyventojų skaičius, registruotų bedarbių skaičius. Apskaičiuotos šių rodiklių

statistinės prognozės 2010 ir 2013 metams, apskaičiuoti procentiniai pokyčiai pagal metus.

Aštuonių socialinių investicinio patrauklumo rodiklių grupė įgalina numatyti socialines Šiaulių regiono ekonominio ir socialinio proveržio galimybes. Regionas yra socialiai palankus užsienio tiesioginėms ir šalies materialiosioms investicijoms: neišnaudotas darbingo amžiaus gyventojų užimtumo potencialas, plačios galimybės užimtųjų žemės ūkyje perėjimui į kitas ekonominės veiklos sritis, mažėjantis nusikalstamumas, intensyvus užimtųjų kaimo vietovėse perėjimas iš žemės ūkio į kitas veiklos sritis, darbingo amžiaus gyventojų daugėjimas, pensinio amžiaus žmonių ir registruotų bedarbių mažėjimas rodo gerėjančią socialinę apskrities situaciją.

Kadangi Lietuvoje darbingas amžius yra ilginamas iki 65 metų, Šiaulių apskrities savivaldybėse didėja darbingo amžiaus gyventojų skaičius nuo 2007 m. iki 2013 m. vidutiniškai 5 proc. Atitinkamai pensinio amžiaus gyventojų skaičius šiuo laikotarpiu turėtų sumažėti apie 10 proc. Registruotų bedarbių skaičius, 2001–2007 m. beveik visiškai sumažėjęs, visose apskrities savivaldybėse turėtų stabilizuotis. Bendras darbingo amžiaus žmonių skaičiaus didėjimas ir faktinis žmonių išteklių trūkumas sudaro geras prielaidas plėtoti ekonomines veiklas, kurti naujas darbo vietas ir kartu nesunkiai įsidarbinti.

Svarbi Šiaulių regiono ekonominio proveržio so-

cialinė prielaida yra užimtųjų pagal ekonomines veiklas persiskirstymas. Didėja gyventojų užimtumas statybų versle (prognozuojamas 42 proc. užimtųjų skaičiaus augimas nuo 2007 m. iki 2013 m.). Mažėja užimtumas žemės ūkyje, miškininkystėje, medžioklėje, žuvininkystėje (prognozuojamas 28 proc. užimtųjų skaičiaus mažėjimas nuo 2007 m. iki 2013 m.). Gyventojų persiskirstymas į pelningesnes ekonomines veiklas gerina regiono ekonominę situaciją, sudaro palankesnes sąlygas investicijoms ir naujų darbo vietų kūrimui. Gyventojų užimtumas pramonės ir paslaugų srityse gali išaugti dėl steigiamų apskrityje industrinių parkų, jų teritorijoje išsikursiančių pramonės ir paslaugų įmonių veiklos.

Išskirtinė iš kitų penkių Šiaulių apskrities rajonų savivaldybių yra Šiaulių rajono situacija. Čia, gyventojų skai-

čius yra stabilus, senbuvių kaimo gyventojų skaičiaus mažėjimą kompensuoja naujakuriai, dirbantys Šiaulių mieste. Čia kaip ir Šiaulių mieste bei Radviliškio rajone, 2001–2007 m. sparčiausiai mažėjo registruotų bedarbių skaičius. Šiaulių rajone 2007–2013 m. prognozuojamas didžiausias darbingo amžiaus gyventojų skaičiaus augimas – net apie 9 proc. Akivaizdu, kad šio rajono gyventojams geografiniu požiūriu lengviau nei kitų apskrities rajonų gyventojams dirbti Šiaulių mieste. Be to, šis rajonas yra pagrindinis Šiaulių miesto gyventojų rekreacijos, aprūpinimo ekologiškais maisto produktais, smulkiųjų namudinių verslų produkcija administracinis vienetas. Galima daryti prielaidą, kad Šiaulių miesto ir rajono ribos nyksta, abiejų savivaldybių ekonominė ir socialinė veikla vis labiau integruojasi.