Industrial Development Latvia and its Major Cities and Towns

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Abstract. The article deals with the development trends and problems of industrial sector in Latvia and its major cities and towns. In Latvia, there is a marked difference between the levels of economic development of separate administrative areas. The inequality exists between different regions and local governments in terms of incomes and economic activity as well as availability of the services that create distinctly different quality of life for population in various territories. The article shows that in Latvia and its major cities the industrial sector is developing and the manufacturing industry output continues to increase.
Keywords: industries, development, cities, interaction, GDP.

1. Introduction

In the National Development Plan of Latvia for 2014 – 2020 is stated aim to decrease the inequality that exists between different regions and local governments in terms of incomes and economic activity. As pointed Stiglitz (2011) structural transformations are the crucial factors for creating successful economic strategy. We can see that cyclical and the structural problems are closely related. So, structural changes are extremely required for sustainable development of Latvia and its regions, mainly towards increasing the share of production/ industry in national economy.

Object of research – industry in Latvia and its major cities and towns. Subject of research – industrial development and its role in Latvia and in its major cities and towns. Methods applied – comparison, structure and dynamics analysis, evaluation on intensity.

A study allows the assessment the historical development of Latvian industry and its role in national economy from the 19th century to the present day. In this article also an analysis of industry in the regional dimension is carried out – research of industrial development and the results of the industrial sectors in Latvia major cities and towns is made.

2. Role of industrial sector in the national economy

More than two centuries ago the Industrial revolution took place in the world and starting with the 18th century transformed the daily lives of people, the world's economy and overall development. Factories developed in the cities, so providing people with jobs and creating a new economic and social life for city dwellers and they became become more dependent on the will of the employers than earlier when working in the countryside. The states began to support and protect the workers and provided a variety of social services. As a result of the Industrial revolution, new professions appeared and the number of population increased as well as stratification of society took place and the standard of living improved in the less developed countries.

In Detroit, the most significant industry is the automotive industry. Cars are produced and sold. The revenue received leaves a positive impact on the city's economy. The workers spend their earnings primarily on shopping, visiting doctors, buying new places of residence, etc. The rising demand for cars promotes the development of the construction industry. Then the cycle repeats. The incentives from the automotive sector have a multiplier effect on the economy [1, p. 464]. On the other hand, strong trade unions and unreasoned city's tax policy can destroy its economy. At present, the powerful city which was oriented on the development is declared bankrupt. However, from the results obtained in this study, we can build "parallels" with the Latvian economy - manufacturing plays a significant role for the development of other sectors.

3. Roots of industrial development in Latvia

In Latvia, like all over the world, industrialization started in the 19th century. Its capital Riga became one of the largest industrial centres of northern Europe. The region Sarkandaugava developed into one of the first and largest industrial areas in Riga.

At the beginning of the 20th century, such industries as metal working, mechanical engineering, electrical engineering, chemical and textile industry, and woodworking were the major industries in Latvia. In about 30% of enterprises, with more than 100 workers in each, the number of workers comprised approximately 80% of the total number of workers. They produced roughly 79% of the total industrial output. The industrial enterprises were mainly located in Riga (> 70%) and Liepaja (~ 12%). The global economic crisis of 1900 – 1903 also affected the Latvian industry. Production declined sharply, worsening the living conditions of workers. In Riga alone during the crisis the number of unemployed reached 10 thousand which meant that every sixth worker was unemployed. However, already in 1909, Latvia's industry experienced a boom. In 1913, compared to 1900, the number of industrial enterprises increased 1.6-fold. At the beginning of the 20th century, the number of workers in Latvia comprised more than 60 thousand, but in 1913, approximately 110 thousand. [2]

In 1920 – 1940, the industrial production in the Republic of Latvia had to be created from scratch. Although, prior to World War I, Latvia was one of the largest industrial areas of the Russian Empire, after the evacuation of most of Latvia's industrial enterprises to the interior of Russia, production was actually stopped in Latvia. The new economic conditions required different type of industry that would be able to ensure the local consumption needs. First of all, food and light industry had to be developed. Latvia's domestic market consumed about 80% of the total industrial production. The government encouraged small and medium-sized businesses by granting loans. Metalworking and chemical industries, which played an essential role in the pre-war times, were not restored to the previous level, as it called for major investment. Forestry, wood and paper industries rapidly increased their production for local consumption and export. In 1923, paper industry ranked first and approximately 20% of all workers in Latvia were employed in this sector. Latvia exported paper, plywood, lumber, matches, rubber products, etc. From 1920 – 1929, the value of industrial products increased approximately 4 times. Successful development was stopped by the global economic crisis that began in the late twenties. At the beginning of the thirties, it also affected Latvia, led to the decline in production and some enterprises even suspended their operations [2].

After the World War II, the Latvian SSR experienced rapid growth of the industry, which was mainly concentrated in Riga. The existing companies, such as VEF, Riga Railcar factory, Riga bicycle factory, etc. were expanded. 216 new enterprises were established. In the fifties, the output of industrial production increased 3.6 times. In the period from the sixties to eighties, large enterprises were also built in Daugavpils, Valmiera, Olaine and Ventspils. Such industries as mechanical engineering, metalworking, electrical and chemical industries experienced particularly rapid development. Workforce and raw materials were imported to support forced industrialization. In 1985, the Latvian SSR ranked sixth in the industrial production output, in the USSR, although its territory occupied only 0.3% of the total territory of the USSR. [2]

4. Latvia's industrial situation in the nineties of the 20th century

After regaining of independence, in the early 90s of the previous century, Latvia experienced political and economic changes. People lacked knowledge and experience to work successfully in a market economy.

Latvia's industry, which for approximately 50 years had been a component of the planned economy of the Soviet Union, faced difficulties. The raw material resources and markets of the former Soviet Union were lost. However, the obsolete equipment and technologies hampered making products that could meet global market demands. The situation was aggravated by the slow and poorly organized privatization of state enterprises, which was actually started only in 1995. Thus, industrial production declined sharply, causing unemployment. [2]

In the nineties of the 20th century people's shopping habits changed and they chose to buy imported goods for which they "starved in Soviet times." It was also

one of the reasons why a large proportion of manufacturing companies went out of business and their products were replaced by the imported goods "wrapped in bright paper".

Of course, it is incorrect to believe that there was a complete industry "crash". Industrial production continued, but to a considerably less extent than in the previous years. The situation is described in the Report on Economic Development of Latvia of December, 1999 [3]. “Do all capital-intensive industries thrive in Latvia? The answer is not straightforward. To an extent, as it was during the Soviet era, probably not. Firstly, the former markets were lost. It was problematic to capture new markets with old equipment and technologies. Secondly, the capital-intensive sectors required proper markets. In such cases, Latvia’s small market acted as a disincentive to investments. Thirdly, the placement of Soviet industry sometimes was not chosen because of economic benefits, but politically subjective motives. In Latvia, high qualified workforce and employee job performance played an undeniable role. That is why, within the framework of the military industrial complex, such specific industries as precise mechanical engineering developed. For the development of such industries today, the main limiting factors are old technologies and narrow and unstable markets. In the future, capital-intensive industrial development may be associated primarily with a focus on the broader and more stable markets and new technologies. In Latvia, some advantages should be found with the aim to attract large investments and encourage the investors, or if such advantages do not exist, they should be created. These might include the availability and quality of natural and labour resources, favourable business environment, etc.”

Since 1996, industrial output has been increasing; most rapidly it grew in 1997 - about 17%. Latvian industry was adversely affected by the economic crisis in Russia. Due to the decrease of export opportunities at the end of 1998, Latvia’s industrial output had to be cut. From the second quarter of 1999, it begins to rise slowly, but is still below the pre-crisis level.

Evaluating by the value added structure in manufacturing, in 1997 - 1999, the food industry (on average 35%) accounted for the most part of it, wood working (on average 15 %), light industry (on average 12%) and metals and metal products (on average 11%). In the other sectors of industry, the value added share comprises less than 10%. Evaluating the output growth rates in 1997 - 1999, the biggest declines were observed in 1999, when the total industry volume decreased by 8.7%. Cross-section of industries shows that the most significant declines occurred in the chemical industry (26.5 %), food industry (13.3%) and machinery and equipment industry (12.1 %). In other sectors, the production rates decreased by 1 % - 8.7 %. In 1999, the only sector, in which the production volumes increased, was woodworking. In the period under consideration, this industry has become a leader, concerning the share of export in the production output, which constitutes on average 91 %. However, it is not possible to draw strong conclusions about the export market or the size of the internal market as an industry guarantor of

stability, because, for example, in 1999, food industry production as mentioned above decreased by 13.3%, and on average 20% of production was exported, while the chemical industry production decreased by 26.5 % and the share of exports, in the output of this sector, comprised on average 65%. It is evident that both the domestic and foreign markets leave an impact on the development of the industry and different industries react to the existing changes with different sensitivity.

5. Development of industry of Latvia in the 21st century

Latvia has been an independent country for over 20 years and nearly 10 years a member-state of the European Union. In recent years, the community has actively started to demand new work places and improve living standards.

Evaluating the formation of the economic crisis and the relatively slow recovery of the countries from the crisis, we consider that structural transformations are the crucial factors aggravating the situation. The significance of the production and the agricultural sectors decreased, while the role of the financial area significantly increased. The cyclical and the structural problems are closely related. At present, the issue is of how to restore the balance, ensure stable demand and restore normal level of employment, similar to the Keynesian action plan after World War II. Creating the economic strategy, we should be aware that any structural changes and their successful implementation depend on the health and education sectors, which in most countries are financed by the budget, which due to the economic crisis is strictly limited. [4]

Taking into consideration the positive multiplier of the industrial sector mentioned above, one of the ways to foster the economic development and promote the general welfare is the industrial development. The information on the structure of the Latvian economy in the period of 2000 - 2012 is presented in Table 1.

Table 1

Structure of national economy (by value added, %) [5]

Year / Industry	2000	2005	2008	2009	2010	2011	2012
Agriculture, forestry	4.5	3.9	3.0	3.8	5.0	5.1	5.0
Manufacturing industry	14.4	12.9	10.8	10.8	13.3	14.1	14.5
Other industries	4.2	3.3	4.3	4.9	5.3	5.2	5.1
Construction	6.8	7,0	10.1	8.0	5.3	5.4	6.1
Trade, accommodation and catering	18.5	21.6	18.8	16.9	17.3	17.6	17.9
Transporting and storage	9.5	10.5	8.1	11.1	11.4	12.3	12.1
Other commercial services	25.1	25.7	28.4	27.5	27.2	26.3	26.1
Public services	17.1	15.1	16.5	17.0	15.2	14.0	13.2
Total	100	100	100	100	100	100	100

During the period under consideration, the sector of other commercial services had the largest share of value added, followed by trade, catering and accommodation and public services. Service industries collectively account for on average 71% of the value added produced in the economy.

The data in Table 1 show that the tendency of the share of the industrial sector is variable. In recent years, the share of value added in the total value has increased. Evaluating the structure of economy, it is necessary to determine whether the sectors, in which quick profit is crucial (e.g., the financial services), or the industries with a focus on sustainable development, perhaps, even with a very low percentage of return, comprise the most part of value added. In Latvia, the soft areas comprise the largest part of the GDP, therefore, increasing the risk for sustainable growth. To stop the activities in these areas is very simple, if they cease to bring the investor the desired return.

In the context of dependence of Latvia's economy and its sectors on the economic situation in other countries, we should also evaluate the dynamics of foreign investments in Latvia, see Fig. 1. It reflects not only the potential for developing the economy, but also the relative attractiveness of the economy and its sectors concerning ROI.

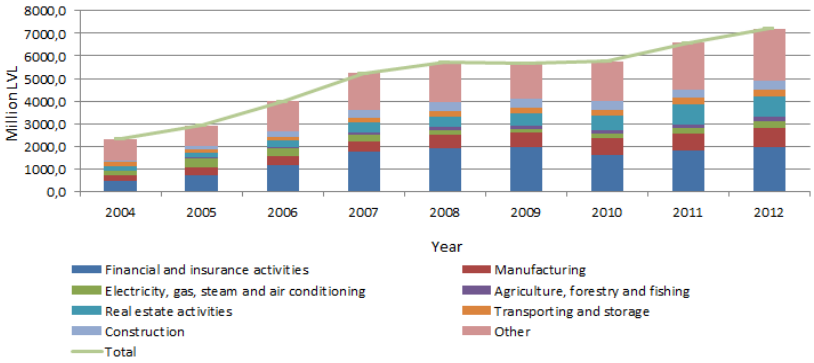


Figure 1 Foreign direct investments and their structure in Latvia (in the end of the year, million lats) (compiled by the authors based on [6])

Thus, assessing the breakdown of foreign direct investment by sectors, it is evident that in the period under consideration the manufacturing industry, constitutes a relatively small portion of the total, on average 11%, but in absolute terms, the investment volume is increasing. In 2012, the investment volume was of about 206% higher than in 2004.

Although, in Latvia the number of industrial enterprises from 2005 to 2011 tends to increase (according to [7]), the number of the persons employed in the industry has declined. It should be noted that the reduction of the number of persons employed was affected by the economic crisis in 2008 - 2009, due to the

sharp drop in demand for goods. It is also demonstrated by the increase in the number of employed in 2010 - 2011. However, reduction of the number of persons employed may be also explained by the fact that the technologies that are used in industry are renewed and improved. The innovation survey in 2008 – 2010 shows that the largest number of economically active enterprises has been in the manufacturing sector. In terms of the proportion of economically active enterprises of all businesses, the largest share was in the financial and insurance sector (44%), while the manufacturing sector was the second largest - 32% of the total number of enterprises, see. Fig. 2.

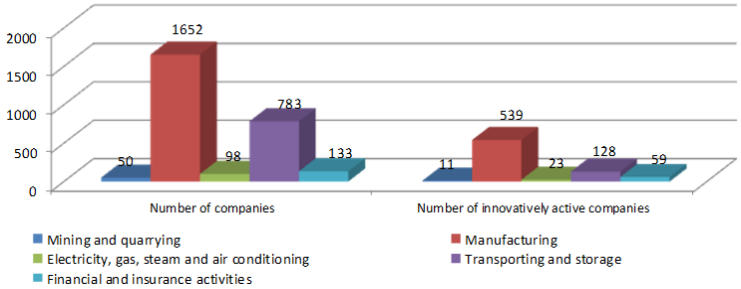


Figure 2 Number of companies and innovatively active companies in Latvia in 2008 – 2010 (compiled by authors on the basis of [7])

It is likely that, the innovation activities provided an opportunity to reduce the number of employed not by reducing the volume of production. In 2001 – 2012, value added in manufacturing has increased by an average of 11% per year, with the exception of 2009, when there has been a decrease of 18%, confirming the effect of the global economic crisis. The conclusions are made on the data presented in [7]. Thus, innovation activities have also contributed to the situation, described in Table 1 that the share of the value added in manufacturing in the total structure of the economy increased in 2008 - 2012.

Referring to the positive impact of the industrial sector on the national economy, mentioned in part 1, and considering the employee remuneration and assuming that the innovation activities increase not only the productivity, but through increased value of the product, also leave a positive effect on the employee remuneration, we compared the average gross monthly wages and salaries of the persons employed. For tracing the situation the comparison of data of three sectors is presented, see Fig.3.

The data obtained relate to the analysis of the economic structure and the amount of foreign investments. The impact of the industrial sector on the Latvian economy, compared to the individual service sectors, is relatively small. However, the data presented in Fig. 3 show, that investments in innovation have been effective, because comparing the average gross wages and salaries of persons

employed in the manufacturing industry sector with those in Latvia; we see that the differences in the levels are decreasing.

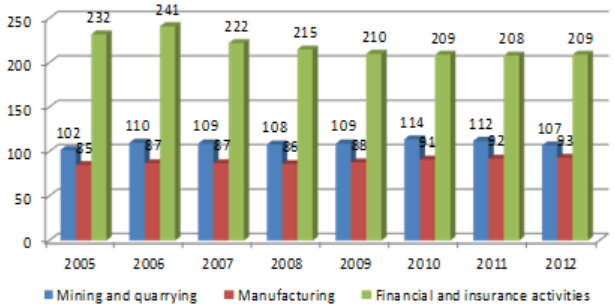


Figure 3 Average monthly gross wages and salaries by kind of industry in 2005 – 2012, % of Latvia's average indicator (compiled by authors on the basis of [7])

6. Industrial indicators in the biggest cities and towns of Latvia

In Latvia, there is a marked difference between the levels of economic development of separate administrative areas. As stated in the National Development Plan for 2014 - 2020 [8], the inequality exists between different regions and local governments in terms of incomes and economic activity as well as availability of the services that create distinctly different quality of life for population in various territories. This is confirmed by data on manufacturing industry output in major cities of Latvia. In the period from 2001 to 2012, on average 61% of the Latvian total manufacturing industry output was produced in seven major Latvian cities, Table 2.

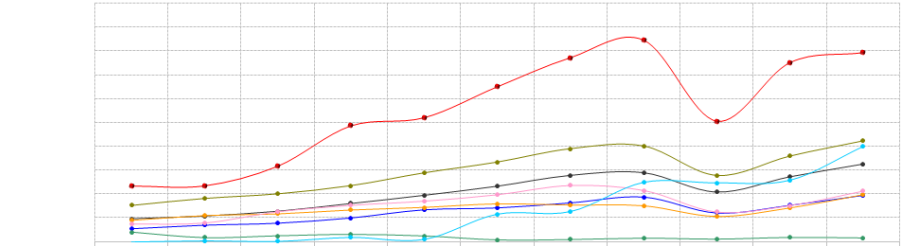
Table 2

Output of manufacturing industry production (% of the total production in Latvia) [9]

Year	Riga	Daugavpils	Jelgava	Jurmala	Liepaja	Rezekne	Ventspils
2001	47.5	3.1	2.6	0.7	8.2	1.3	0.3
2002	50.4	3.3	2.9	0.7	7.5	1.2	0.3
2003	47.7	3.1	2.6	0.7	8.6	1.6	0.2
2004	45.1	3.2	2.4	0.7	10.6	1.5	0.4
2005	45.8	3.4	2.2	0.5	9.5	1.4	0.2
2006	44.5	3.0	2.0	0.2	10.0	1.4	1.0
2007	43.5	2.8	1.7	0.2	10.0	1.4	0.9
2008	43.0	3.1	1.6	0.3	10.5	1.2	1.6
2009	41.1	2.8	1.6	0.3	8.7	1.0	2.2
2010	41.3	2.6	1.6	0.3	9.8	0.9	1.8
2011	40.9	2.8	1.8	0.2	8.7	1	2.3
2012	39.9	2.7	1.9	0.2	10.1	0.9	2.6

According to data in Table 2 it can be concluded that the highest proportion of the manufacturing industry output in comparison to the total production in Latvia is recorded in Riga. which is also the largest industrial centre in Latvia. In 2002, a little more than half of the total manufacturing industry output of Latvia was produced in Riga. However, starting from 2003, a decreasing tendency on average 1.05% per year was observed (with the exception of 2005 and 2010). Another city, where the output on average is 10% of the total production in Latvia, is Liepaja, which is followed by Ventspils and Daugavpils, the second largest city of Latvia and the largest city of Latgale. We see that Riga and Liepaja remain to be the main industrial centres of Latvia. like it was at the beginning of the 20th century.

The analysis of data of manufacturing industry output in LVL per capita in Latvia and the largest cities of Latvia, shows that, in 2011, the highest rate was recorded in Liepaja, which is about 2.4 times higher than the national average, followed by Riga with LVL 2,382 per capita and Ventspils with LVL 2,254 per capita, see Fig. 4.



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Latvija	616	677	785	961	1 146	1 354	1 600	1 660	1 222	1567	1855
Rīga	917	1 076	1 181	1 367	1 657	1 901	2 205	2 266	1 598	2037	2382
Daugavpils	389	468	514	633	818	861	974	1 106	745	919	1144
Jelgava	579	686	725	813	872	953	926	909	667	860	1160
Jūrmala	312	187	229	261	226	135	144	175	154	191	179
Liepāja	1 358	1 360	1 805	2 721	2 905	3 607	4 267	4 665	2 827	4155	4382
Rēzekne	493	518	773	918	1 014	1 158	1 369	1 257	767	913	1240
Ventspils	89	112	101	192	146	719	778	1 440	1 429	1488	2254

Figure 4 Manufacturing industry output in lats per inhabitant in 2001 – 2011 [9]

Most of the locally manufactured goods are exported. In the local market goods manufactured in Latvia constitute on average LVL 731 per capita, while exports account for on average LVL 1,136 per capita. Evaluating the breakdown of the share of output per capita in 2011, we see that the total export constitutes 60.8% of production, while domestic markets account for 39.2%, Riga accounts for a smaller share of exports (57.7%). In other cities of Latvia, the share of exported goods is higher than in the country, as a whole, with the highest of 87.4% in Liepaja (the impartiality of conclusions is restricted by the lack of information on the breakdown of realization of locally manufactured goods in Jurmala and Rezekne).

7. Conclusions

According to the analysis made it is possible to conclude that, although the service sector constitutes the largest share of value added in the Latvian economy, still the role of the industrial sector is increasing. The stability of the industrial sector is certified by growing inflows of foreign investments.

Most of the economically active Latvian companies work in the manufacturing industries. Investment in innovation has been effective because the productivity of the persons employed in the industry has increased. It is certified by the decrease of the number of persons employed which occurred simultaneously with the increase in the value added in the industrial sector and wage and salary growth of the persons employed and reduction of the differences of the average earnings in the country.

On the whole, in Latvia and its major cities the industrial sector is developing and the manufacturing industry output continues to increase. In the past 10 years, Ventspils showed essential growth of manufacturing industry output in lats per capita, however, in the period under consideration, the highest average (in absolute terms) was reached in Liepāja, which also experienced the biggest share of exported products.

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