After joining the EU in 2004, came to an end an important phase of the economic development of Latvian, which opened as new opportunities, as new challenges. Accession to the EU can be viewed on the one hand, the transitional period, on the other hand, it can be characterized as the period when Latvia was standing at the new crossroads and was ready for new, fundamental alternatives. Accession of Latvia in the EU contributed to the deepening of economic integration, radically changing the situation, as in financial, as in labor markets. Since 2004 Latvian experienced both, rapid economic growth, with GDP growth exceeded 12% per annum, and a significant recession, when GDP fell by nearly 18% per year. Although the 2011 GDP of Latvia growth rose by 5%, still, the economy of Latvia is in the recovery phase after the economic crisis, the pre-crisis level of GDP has not yet been reached. Given the situation in Latvia, as well as in EU and global economic trends, it is important to assess the economic development opportunities and risks of Latvia in order to facilitate the more rapid recovery, while ensuring sustainable growth conditions in the medium term. The Sustainable Development Strategy of Latvia “Latvia 2030” has been developed in under the supervision of R.Kilis (Roberts Kilis) in 2008. It has become a highest policy planning document in the hierarchy after its adoption by the Saeima of the Republic of Latvia on June 10, 2010. “Latvia 2030” defines Latvia’s sustainable development targets in different policy areas, however, they are general and do not show target achievement opportunities (incl. finances). Moreover, Latvia 2030 does not assess in detail impact factors of the economic development of Latvia and possible alternatives (pessimistic, optimistic and real scenario).

The aim of the research: to identify key factors influencing economic development of Latvia and based on this analysis to develop possible scenarios of economic development of Latvia until 2030. To reach this target there has been evaluated the influencing factors of the economy of Latvia from the 2000th until 2011, analyzed the strengths and weaknesses, as well as estimated external environmental opportunities and threats. As the result of the analysis there have been developed four economic development alternatives (scenarios) of Latvia, by taking into account two criteria: the strength of the EU integration and economic structure of Latvia. Based on the given scenarios, there were created three possible projection for the development of the GDP of Latvia, the first of which provides a rapid restructuring of the economy to high value added sectors and strong cooperation among the EU countries, the second projection involves the gradual restructuring of the economy to high value added sectors and moderate cooperation in the EU countries others, with a relatively sharp competition with each other, while the third provides a weak economic restructuring on high value added industries, as well as the relatively poor co-operation between EU countries due to the continuing debt crisis and other problems that impede their mutual co-operation.

Methods used: For the assessment of the economy of Latvia there will be used scenario development approach (scenario matrix), as well as SWOT analysis and prognosis.

Keywords: scenario matrix, strategy development, economic restructuring, the economic crisis.

Introduction

Since Latvia joined the European Union (EU) it has experienced rapid economic growth and considerable recession, stimulated by structural, cyclical and external environmental factors. The economic crisis in Latvia was the deepest crisis within the EU. During three years (2008–2010) the overall GDP decreased per 21.3% (Central Statistical Bureau of Latvia, Statistic Database), and historically it was the largest drop, experienced by some national economy after the Great Depression in the USA where within four years GDP decreased per 29% (Weisbrot M., Ray R. (2010)). At the end of 2009 the proportion of job seekers was over 20% of economically active population, investment fell by half, budget deficit in 2009 was 1 258 million lats or 9.6% of GDP (in 2010 it fell to 974 million lats or 7.6% of GDP), the government debt rose from 1 329.8 million lats at the end of 2007 up to 5 693.6 million lats at the end of 2010, reaching 44.7% from GDP (Central Statistical Bureau of Latvia. Statistic Database). In 2009 and 2010 the total losses of banks were 1 134.1 million lats (Latvian Association of Commercial Banks). Although in 2011 the growth of GDP in Latvia reached already 5%, however, the economy in Latvia is still in the recovery phase after the economic crisis, as the pre-crisis level of GDP has not been reached yet. Development of Latvian economic is limited due to the low productivity and export intensity, dependence on imports, the low national savings rate, unfavorable investment breakdown by sector, large private and government debt burden, as well as emigration of the economically active population. One of the main problems in the economy of Latvia now is its structure which is unable to compete on a global level. The
export of goods with high added value in Latvia accounts for only 4.6% of total export (in the EU countries – on average 12%). Every year only 0.6% of GDP is spent for research and development in the private and public sectors in Latvia (in the EU countries – on average 2%, including Estonia – 1.2%) (Bitans M. (2010)). In the competitiveness ratings, regularly published by the World Economic Forum (WEF), Latvia lags far behind other new EU countries (Czech Republic, Poland, Slovenia and Slovakia) and other Baltic states. Particularly bad is sub-index score of innovations in Latvia, according to which Latvia was ranked 59th in the world in 2011/2012 (of the 142 countries considered) (Global competitiveness report (2012)). Taking into account the situation in Latvia, as well as global economic trends, the scientific problem of the article is to evaluate the development potential and risks in the economy in Latvia to promote the more rapid recovery while ensuring sustainable growth conditions in the medium term.

The aim of the research: to identify key factors influencing economic development of Latvia and based on this analysis to develop possible scenarios of economic development of Latvia until 2030. To reach this target there has been evaluated the influencing factors of the economy of Latvia from the 2000th until 2011, analyzed the strengths and weaknesses, as well as estimated external environmental opportunities and threats.

The novelty of the research: as a result of the analysis considering the strength of the EU integration and economic structure of Latvia, four scenarios for the development of economy in Latvia have been worked out, as well as three different projection for the development of the GDP of Latvia have been made.

For the assessment of the economy of Latvia there will be used scenario development approach (scenario matrix), as well as SWOT analysis and prognosis.

The scenario development approach is widely used worldwide for more than 40 years. Its founder is Herman Khan who in 1967 offered several world future development scenarios in case if nuclear war begins (Khan, H. (1967)). In the seventies and eighties Khan’s ideas were developed further by Pierre Wack, the strategist of the corporation Royal Dutch/Shell (Wack, P. (1984)). Today scenarios are widely used not only in the business world, but also when developing strategies of cities, countries and international organisations (Kleiner, A. (1999)). The scenario approach allows understand better consequences of one or other political, economic and social decision over a long period of time. Essential advantage of the scenario method is that formulating not one but several views, scenarios can serve as a basis for discussion on the desirable and possible development and create a platform on which to build social agreement on common vision of the future. Based on the scenarios, definite predictions on overall economic growth can be developed further, and the development dynamics of definite fields can be modelled (according to each scenario assumptions). The scenario approach nowadays is being used not only by business community, but also for the development of strategies for cities, countries and international organisations. For example, the vision of the World Economic Forum about the development of Russia (Russia and the World: Scenarios to 2025 (2006)) has been developed on the basis of this approach. This approach has been also used for the Estonia’s development strategy „Growth Vision 2018” (Estonian Growth Vision 2018 (2010)) and for the assessment of long-term development alternatives for the Baltic Sea region countries (Four Futures Central Baltic sea Region 2050 (2010)). The above mentioned approach makes it possible to state mostly qualitative evaluations of economic development over an extended period and to outline the possible future development alternatives and related gains and losses. Several scenarios can be determined – scenarios oriented towards a definite target (for example, what are the ways how to overcome our main competitor), crisis scenarios, scenarios based on research and agreement that are used for example to analyse future development possibilities of a definite country (K.van der Heijden (2005)). This scenario separates desirable and undesirable scenario method, where pessimistic and optimistic future development is being outlined and alternative scenario method that outlines several equally possible and desirable future development visions.

The research results illustrate, when from the four developed scenarios the most favourable scenario for Latvia would be the one which envisages strong EU country integration and cooperation (the ability to successfully solve challenges which the European Union will face over the next two decades) on the one hand, and Latvia economic restructuring towards higher added value sectors and essential productivity increase associated with the development and balance of the labour market on the other hand.

**Latvian economic development scenarios**

Efforts to identify key factors influencing Latvia’s economic development (both, domestic and external) that could allow (or hinder) achievement of Latvia’s economic development target: to achieve globally competitive and socially inclusive economy in the historically short period of time (by 2030). Global economic development trends and scenarios, possible growth of the EU member states and strength of mutual cooperation, as well as Latvia’s comparative advantages have been taken into account in determining factors that have an impact on economic development of Latvia. The development of Latvia’s long-term alternatives and scenarios took place in several stages:

1. key long-term policy programming documents of EU and Latvia had been analysed and policy directions had been evaluated;
2. scenario matrix with four alternative development scenarios had been worked out;
3. GDP projections according to respective development scenarios had been made.

When developing a set of scenarios to evaluate the Latvian economic development alternatives the approach of desirable and undesirable scenarios was applied and two main development axes or critical choices were identified, which the future vision of Latvia significantly depends on: 1) the horizontal (affecting external factors) axis which represents the further development of the European Union and the strength of the EU member state integration (ability or inability to successfully solve challenges that the European Union will face over the next two decades); 2) the vertical (affecting internal factors) axis which represents Latvian economy structure, development and balance of the labour market (associated with structural changes in Latvian
Based on these two development axes four possible development scenarios of Latvian economy future were made (see Figure 1):

1. *The East European Tiger* (effective and innovative economy with weak cooperation among the EU member states);
2. *In the Spotlights* (dynamic and rapidly growing economy, based on close cooperation among the EU member states);
3. *In the Shadow of the Past* (slowly growing economy, oriented to regional cooperation and the inner market);
4. *The Periphery of Europe* (economy, oriented to cooperation among the EU member states with “traditional”, on local resources based industry structure).

Evaluating the comparative advantages of the Latvian economy, as well as possibilities and threats of the outer environment, the possible pros and cons of each scenario were stated. *The East European Tiger* scenario positive aspects are (Kassalis E., Jekabsone S., etc. (2012)):

- Balanced and effective economy structure;
- Favourable environment for business development;
- Educated and skilful labour force;
- Many small, innovative companies that react quickly to changes in demand;
- High public and private sector investment in science and education;
- Competitive economy.

Negative aspects:

- Unstable GDP
- Unbalanced distribution of power, great influence of the old and economically strong EU member states on decision making;
- Uncoordinated transport infrastructure limits the development of transport sector and transit services;
- Political instability, conflicts of ethnic and religious character limit mutual cooperation;
- Different economic policy priorities among various EU member states;
- Currency diversity and low confidence in the euro hamper mutual payments and make them more expensive;
- Great emigration of labour force to more developed countries;
- Strong popularization of income and population stratification;
- Unbalanced increase of urbanization and regional development;
• Strong competition from the Northern states (Finland, Sweden), as well as from the big EU countries (Germany, France, Great Britain, Poland).

Scenario *In the Spotlights* positive aspects are:
• EU common market and single currency promotes cooperation and alleviates making deals;
• Single monetary policy and coordinated fiscal policy provides stable and predictable business development;
• Political stability without ethnic and religious conflicts;
• Skilful and mobile labour force;
• High productivity;
• Rapid and stable GDP increase;
• Active and innovative companies focused on high technology application;
• Close cooperation between public and private sector in science and education;
• High proportion of renewable energy use;
• Single cultural space provides wide development of creative industries;
• Diversified, export-oriented service sector;
• Widely available range of different e-services both in public and private sector;
• Port and common transport infrastructure ensures good communication among various EU countries.

Negative aspects:
• Relatively expensive and limited natural resources;
• Possible high level of unemployment, especially among low qualifies employees;
• Different transport infrastructure limits interconnections and makes transit cargo flow difficult;
• The aging population and low birth rate creates great social tension;
• „Brain” drain to more developed regions;
• Activity concentration in cities.

Scenario *In the Shadow of the Past* positive aspects are:
• Regional cooperation among neighbouring countries develop;
• Local production resource potential is used;
• Production is oriented mainly to satisfy local demand;
• Port and other transport infrastructure provides good contacts with Russia and Asian countries.

Negative aspects:
• Great influence by the old and economically strong EU countries on decision making;
• Unfavourable environment for investments and business development;
• Political instability, conflicts of ethnical and religious character;
• Slow GDP increase;
• Low productivity;
• „Depletion” of environmental and local natural resources;
• Low motivation to increase education level and improve skills;
• Great labour force emigration to the developed countries;
• Low intensity of use of new technologies.

*The Periphery of Europe* scenario positive aspects are:
• EU common market and single currency promotes cooperation and alleviates making deals;
• Single monetary policy and coordinated fiscal policy provides stable and predictable business development;
• Adequate transport infrastructure and ports ensure good possibilities for the development of transport sector and transit services;
• Political stability, without conflicts of ethnical and religious character;
• High demand for labour force;
• More even population distribution throughout the country;
• Well-organized and well-developed rural infrastructure.

Basing on the given scenarios three possible GDP growth projections in Latvia have been developed (see. Figure 2.):

1. the dynamic development projection (envisages rapid economic restructuring of the high added value sectors and strong cooperation among the EU member states which would allow Latvia to effectively use its comparative advantages and in 2030 to achieve GDP per capita according to the EU average level);
2. the real development projection (envisages gradual economic restructuring of the high added value sectors and medium strong cooperation among the EU member states with relatively sharp competition with each other);
3. and the slow growth projection (envisages weak economic restructuring of the high added value sectors, as well as relatively weak cooperation among the EU member states due to protracted debt crisis and other problems that impede their mutual cooperation).

When developing the it was assumed that the period 2012 up to 2030 can be divided into three stages:

1) The period of 2012-2014 – the time when Latvia and other European Union countries continue the struggle or overcome the instability caused by the financial crisis. Assumptions about the number of recovery years are based on the conclusions by Reinhart and Rogoff (Reinhart, C.M., Rogoff, K.S. (2009)) that on average three years are necessary for the economy to overcome the consequences of the financial crisis.

For all projections it is assumed that that real GDP growth rate during this period will be equal to Eurostat forecasts for 2011 (in Latvia 2.5% increase per year, in the EU 0.6% increase per year);

The period of 2015-2020, the envisaged in the scenarios was considered whether structural reforms are made. In all projections (scenario 1, scenario 2, scenario 3) it was assumed that the EU went back to historically observed average growth rates of 2.5% per year, but to reflect the existence of structural reforms in Latvia, according to the assumptions of each scenario,
suppositions were made about how many times the growth rates could be in each situation in Latvia. In the scenario 2 it was assumed that there is the return to the historically observed that the growth rates in Latvia are about two times higher that the EU average (5.0% per year). In the case of the scenario 1, if there are major structural reforms, it is assumed that the initial reform effect on growth rate is higher than normal (3 times higher than the EU average, 7.5% per year). In the scenario 3 it was assumed that due to the weak restructuring real GDP growth will be relatively lower than usual, only 1.5 times higher than the EU average (3.75% per year);

2) The period of 2021-2030. As in the previous stage, it is assumed that in the case of all projections the EU real GDP growth rate is 2.5% per year. In order to implement the assumption of the scenario 1 that in Latvia in 2030 income level reaches the EU average, it was calculated that during this period the real GDP growth in Latvia should be 5.55% per year, so only a little higher than usual regarding the EU average. In the case of the scenario 2 there are two times higher growth rates than the ones of the EU (5.0% per year). In the scenario 3 it was assumed that the growth rates will be 4.0% per year, that is, a little higher than in the previous period, but will remain less than two times higher than the EU average.

Table 1 shows the summary of the above described assumptions concerning the Latvia real GDP growth rates in the period from 2012 up to 2030.

Developing of Latvian GDP projections definite assumptions had been made: the geopolitical situation in the

Table 1. The Latvia real GDP growth rates (Sources: author’s calculations)

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
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<tbody>
<tr>
<td>2012</td>
<td>2.50%</td>
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<td>2013</td>
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<td>2014</td>
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<td>2016</td>
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<td>2020</td>
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<tr>
<td>2030</td>
<td>5.55%</td>
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</tr>
</tbody>
</table>

European region is basically unchanged; the EU with the defined principles of its development and expansion continues to exist, there is planned and systematic change of economic paradigms and progression to sustainable development, however, in the course of time some modification and evolution is possible; Latvia is and remains the member state of the European Union, and it actively involves in its development process.

Figure 2. Possible GDP development projections in Latvia (GDP growth % of EU average) (Sources: author’s calculations using Eurostat date basis)
Conclusions

- Evaluating the Latvia economy development alternatives the strength of the EU integration and economy structure of Latvia were considered that has resulted in four possible development scenarios: A-European Tiger, In the Spotlights, In the Shadow of the Past, and The Periphery of Europe.
- From the four developed scenarios the most favourable scenario for Latvia would be the one which envisions strong EU country integration and cooperation (the ability to successfully solve challenges which the European Union will face over the next two decades) on the one hand, and Latvia economic restructuring towards higher added value sectors and essential productivity increase associated with the development and balance of the labour market on the other hand.
- To implement the above mentioned scenario by 2030 the Latvian GDP growth in the period from 2015 up to 2020 should be on average 7.5% per year, but from 2020 up to 2030 it should be 5.55% per year which is possible if significant structural reforms are made to increase productivity. As a result Latvian GDP in 2030 reach the average EU level.
- In case the restructuring of the Latvian economy towards high added values sectors is slow, like in the EU countries due to continuing debt crisis and other problems that impede their cooperation, and the cooperation is weak, the unfavourable scenario can come true which envisions slow GDP growth, and Latvia remains in the peripheral status of Europe.

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