

# THE IMPLEMENTATION OF STRUCTURAL REFORMS IN SLOVENIA AND READINESS TO THE NEW ECONOMIC AND FINANCIAL CRISIS

Master student **Nataša MAJCEN**  
New University Ljubljana, Slovenia  
[pitija30@gmail.com](mailto:pitija30@gmail.com)

Professor PhD **Vito BOBEK**  
University FH Joanneum Graz, Austria  
[vito.bobek@fh-joanneum.at](mailto:vito.bobek@fh-joanneum.at)

Associate Professor PhD **Tatjana HORVAT**  
Faculty of Management, University of Primorska, Slovenia  
[tatjana.horvat@fm-kp.si](mailto:tatjana.horvat@fm-kp.si)

## Abstract:

*The last economic and financial crisis from 2008 to 2014 hit Slovenia harder than most other EU Member States. The aim of the paper was to find out in which state Slovenia emerged from the crisis and to determine the current situation with the help of secondary sources. We compared Slovenia with seven EU member states from Central and Eastern Europe (CEE) Eastern Europe, which were most similar to our former political and economic system and which joined the EU in the same year as Slovenia (Czech Republic Estonia, Latvia, Lithuania, Hungary, Poland and Slovakia). We analysed the main socio-economic aspects of the development and on this basis we drew conclusions and guidelines for the future development of Slovenia. We paid special attention to innovation and technological development and examined them in more detail. We used indicators from the international statistical database and data from international surveys to make a comparison between Slovenia and comparable EU Member States from the EU-28 CEE and the EU-28 average. We found that despite accelerating economic growth over the last five years, Slovenia has not eliminated most of its structural deficits and macroeconomic imbalances. To sum up, given the above-average GDP growth, driven mainly by increased foreign demand, Slovenia has forgotten that economic expansion is a cyclical phenomenon and will therefore run out of time for structural changes that will contribute to sustainable and stable economic growth.*

**Key words:** Socio-economic development, structural reforms, macroeconomic imbalance, innovation, technological development.

**JEL classification:** O10, O20, O30.

## 1. INTRODUCTION

The past economic and financial crisis, which lasted from 2008 to 2014, has hit Slovenia hard. According to Svetličič (2015, 203), the reasons for this severe blow lie in the conviction that Slovenia would be moderately affected by the crisis, as it has few "toxic" US securities, and in the underestimation of the migration of the crisis from the financial to the real sector. Also neglected is the fact that globalization and technological opportunities have significantly reduced the international transfer of business cycles. Slovenia has felt the effects of the financial and economic crisis more strongly than other comparable member states of the EU (European Union) from Central and Eastern Europe (CEE - Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland and Slovakia), as the implementation of urgent structural changes has been postponed. These include:

- State withdrawal from the corporate sector or more efficient management of state enterprises;
- Improvement of the business environment for SMEs too slow;
- Increase the share of high-tech exports in total exports.

After the Juglar cycle (7-11 years) a new crisis is just around the corner. Given the high share of public debt, gross domestic product (GDP) and the structure of the corporate sector, Slovenia is poorly prepared for the new financial and economic crisis. The political orientation of the governments in the years 2012-2020 only reflects the urgent implementation of structural change. The fact that Slovenia is now roughly at the level of the year before the crisis or that economic growth has not reached pre-crisis levels until the end of 2017 (Development Report, 2018, 12) is cause for concern. There has been no concrete implementation of structural change, although Slovenia felt the effects of the last crisis more than other comparable EU-7 - CEE members, not least despite the current favorable economic situation throughout the EU, rapid growth and the recovery of employment.

To provide a comprehensive overview of the situation in the country after the end of the economic crisis, the paper focuses on Slovenia's socio-economic development. A country's progress cannot be measured by the level of GDP per capita alone. In addition to GDP per capita, contemporary research also includes indicators of quality of life, which complement the picture of the real world and indicate that the situation in the country is improving or deteriorating.

On the basis of previous research, the paper will cover, in addition to Slovenia, seven CEE countries that are members of the EU (EU-7 - CEE) and will attempt to prove or disprove the main hypothesis. At the same time, we will highlight the fundamental macroeconomic imbalances and structural deficits that have brought Slovenia to its present situation.

In this paper, the authors try to answer the fundamental question: Has Slovenia made enough significant structural changes in the period 2014-2018 and is better prepared for the new crisis than in 2008? So, the empirical part will be based on the following hypotheses (H):

- H 1: Despite the commitments made and the strategies defined, the percentage of state ownership in the real sector has not been sufficiently reduced in the period 2014-2018.
- H 2: Exports of goods and services relative to GDP in 2014-2018 are still growing behind the comparable EU-7 - CEE.
- H 3: High-tech exports as a share of total exports in 2014-2018 are growing more slowly than in other comparable EU-7 countries - CEE.
- H 4: Slovenia lags behind all other comparable EU-7 CEE countries in terms of foreign direct investment as a share of GDP in 2014-2018.
- H 5: The 2020 Action Plan for Improving Entrepreneurial Environment and Supporting Entrepreneurship with a view to improving the economic regulation of SMEs has not been followed since 2014, although immediate action has been proposed for most of the measures. We are lagging behind EU-7 - CEE behind.
- H 6: Labor costs in Slovenia are still higher than the EU-7 - CEE average which further contributes to lower productivity growth after 2014.
- H 7: Slovenia is still lagging behind the other EU-7 - CEE after 2014, which is due to the strength of banks. Indicators such as the share of non-performing loans in total loans (NPL share), the capital adequacy ratio (CAR) and the average return on equity (ROE rate) are therefore assessed.

## 2. RESEARCH METHODOLOGY

The paper uses various research methods, interweaving both qualitative and quantitative research methods. The theoretical part will be based on the study of empirical findings of other authors, domestic and foreign literature in the field of structural adjustment dynamics and socio-economic development of Slovenia until 2014. We will compare the situation of Slovenia with the situation in the comparable EU-7 - CEE using the descriptive method. A historical method will be used for investigation, interpretation and causal description.

Empirical research is conceived as a quantitative method in which we verify secondary data obtained from international and domestic collections by regression analysis. Special attention is CEE paid to the correlation between the dynamics of structural adjustment and the dynamics of

socio-economic indicators of Slovenia's development compared to the EU-7. The hypotheses will be tested by regression analysis and comparison of secondary data. The data on variables are obtained from databases of the OECD, European Commission, Heritage Foundation, WEF, the IMF, the World Bank, Eurostat and WIPO. The results are presented in graphs and tables and the inductive method is used for the final conclusion of the analysis.

Hypotheses will be tested using different methods:

- H1: "The percentage of state ownership in the real sector has not been sufficiently reduced in 2014-2018 despite the commitments made and strategies implemented". We will verify this by means of compilation and comparison methods.
- H2: "Exports of goods and services in relation to GDP in 2014-2018 are still behind comparable EU-7 - CEE." Eurostat and SURS (Statistical Office the Republic of Slovenia) compared the correlation of GDP trends with the trends of total exports in each country. We will discuss the available data for comparable EU-7 - CEE and data for Slovenia. We will then compare the results obtained. The data will be collected for the period 2014-2018.
- H3: "The share of high-tech exports in total exports in 2014-2018 is growing slower than in other comparable EU-7 - CEE", is verified by a regression analysis of secondary data from EC, Eurostat, WEF, SURS. The analysis is compared with the correlation dependence of the development of total exports with the trends in high-tech exports in each country. We will cover the available data for comparable EU-7 CEE and Slovenian data. We will then compare the results obtained. The data will be collected for the period 2014-2018.
- H4: "Slovenia has lagged behind all other comparable EU-7 - CEE countries in terms of foreign direct investment as a percentage of GDP over the period 2014-2018", we will test with a comparative methodology, where we will compare secondary data obtained in EC (The European Commission) and OECD databases. . We will compare FDI as a percentage of GDP in Slovenia with other comparable EU-7 - CEE countries.
- H5: "After 2014, the Action Plan Program for the Improvement of Entrepreneurial Environment and Supporting Entrepreneurs – 'Enterprises 2020' was not followed in terms of improving economic regulation for SMEs, although immediate action was proposed for most of the measures. We are lagging behind the EU-7 - CEE." We will examine this with the methods of description and comparison, the first part of which will compare the targets set with the level achieved. In the second part, we will use the comparative methodology to compare the indices obtained from the World Bank website (The World Bank, 2018). We will cover several different indicators and compare them. The data will be covered for the period 2014-2018 for Slovenia and comparable EU-7 - CEE countries.
- H6: "Labor costs in Slovenia are still higher than the EU-7 - CEE average which further influences the lower productivity growth after 2014. We will test the comparison method on the basis of indices obtained in EC bases.
- H7: "After 2014, Slovenia still lags behind the other EU-7 - CEE in terms of banking strength. We will assess indicators such as: the ratio of non-performing loans to total loans (NPL ratio), the capital adequacy ratio (CAR) and the average return on equity (ROE). We will use the comparative method of the indices obtained in EC bases. The data will be collected for the period 2014-2018.

### 3. RESEARCH: ANALYSIS OF KEY ASPECTS OF SOCIO-ECONOMIC DEVELOPMENT IN SLOVENIA COMPARED TO THE EU-7 CEE STATES AND THE EU AVERAGE AFTER 2014

In addition, we compared Slovenia with seven EU member states from Central and Eastern Europe (CEE) Eastern Europe with the main socio-economic aspects of the development.

#### a. Economic freedom

Economic freedom is measured on the basis of 12 quantitative and qualitative factors, which are divided into four broad categories or pillars of economic freedom (The Heritage Foundation, 2019):

- the rule of law,
- size of government,
- the effectiveness of the rules,
- open markets.

Each of the twelve economic freedoms within these categories is rated on a scale from 0 to 100. The total score for a country is calculated by averaging these twelve economic freedoms, each of which is given equal weight (The Heritage Foundation, 2017).

**Table 1. Economic freedom of Slovenia, EU-28 and EU-7 - CEE (points, 0 = min., 100 = max.)**

	2014	2015	2016	2017
<b>SLO</b>	62.7	60.3	60.6	59.2
<b>EU-28</b>	68.8	69.0	69.0	69.4
<b>EU-7 – CEE</b>	70.0	70.9	71.1	71.8

Source: Index of Economic Freedom, The Heritage Foundation, 2014 – 2017 and own calculations.

According to the Heritage Foundation, Slovenia was below the EU-28 average and also below the average of the observed EU-7 - CEE Member States. Economic freedom has even deteriorated, reaching its lowest level in 2017 (59.2 points). Slovenia ranked lowest in the areas of fiscal health (6.1 points), government spending (28.6 points), financial freedom (50 points) and fiscal freedom (58.7 points). Such a poor ranking is certainly influenced by the high national debt and the high taxation of labor. Of the EU-7 - CEE Member States compared, Estonia achieved the best results in the area of fiscal health (99.8 points), Lithuania in the area of public expenditure (64.1 points), Czech Republic and Estonia in the area of financial freedom (80 points) ) and Lithuania in the area of fiscal freedom (86.9 points).

Economic freedom in Slovenia increases as the ownership of state-owned enterprises decreases. However, radical changes will be needed in government spending. On the scale of economic freedom, Slovenia scored 28.6 points in 2017, while Lithuania, the highest scorer among the EU-7 - CEE Member States, scored 64.1 points.

#### b. International competitiveness

Every year the World Economic Forum (WEF) measures the short and long-term factors influencing international competitiveness. In this way, it contributes to the design of global, regional and industrial programs.

**Table 2. Global competitiveness of Slovenia, EU-28 and EU-7 - CEE (value, 1 = min., 7 = max.)**

	2014	2015	2016	2017
<b>SLO</b>	4.2	4.3	4.4	4.5
<b>EU-28</b>	4.7	4.7	4.8	4.8
<b>EU-7 – CEE</b>	4.4	4.5	4.5	4.5

Source: The Global Competitiveness Report 2014–2015; 2015–2016; 2016–2017; 2017–2018; and own calculations.

The table shows that Slovenia's global competitiveness has increased from 2014 to 2017, and in 2017 it ranks 48<sup>th</sup> out of 137 countries with a value of 4.5. Slovenia is still behind the EU-28

average, but has captured the EU-7 - CEE average. The WEF data show that in 2017 Slovenia lagged the most in financial market performance (3.4 points), labor market efficiency (4.1 points) and market size (3.4 points). On the scale of global competitiveness, Slovenia is eight places behind the pre-crisis level. In order to achieve greater global competitiveness, Slovenia needs to improve financial market development, labor market efficiency, and confidence in public institutions and policies.

### **c. Role of state in the economy**

In this section, we will test hypothesis H1, which reads: "The percentage of public ownership in the real sector has not sufficiently decreased in the period 2014-2018, despite the commitments and strategies established".

For 2014-2018, we will focus on the area of state property in the real sector. In accordance with the 2013 EC recommendations, Slovenia submitted the Evaluation of the National Reform Program (National Reform Program State Property Act for Slovenia, 2014 p. 7) and the Stability Program (2014). Both contain information on progress and planned government measures. On the basis of this information, an assessment has been carried out by the Commission. In its working document "Assessment of the National Reform Program and The 2014 Stability Program for Slovenia", the EC Commission points out that the degree of state ownership and influence in Slovenia is a serious obstacle to improving the adjustment capacity of the real economy. "State-owned or state-controlled enterprises account for one-sixth of value added in Slovenia and are linked to a complex network of domestic banks, insurance groups and non-financial corporations. Mutual ownership and the degree of government influence in Slovenia pose significant risks to public finances, both directly and indirectly through guarantees, as state-owned or state-controlled enterprises continue to make losses and are highly indebted. Optimal corporate governance, inefficient state subsidies, political interference and hidden private interests are the main reasons for the poor performance of enterprises and the lack of interest in the business environment for foreign direct investment and the instability of the banking sector." (Assessment of the National Reform and Stability Program 2014 for Slovenia, p.13).

After two turbulent years (2013 and 2014), during which policy on the withdrawal of the state from the ownership of state-owned enterprises was uneven, the area of corporate governance and the role of the state in the real sector began to stabilize. With the transfer of responsibilities, powers, rights and duties from SOD (Slovenian Compensation Company) to SSH (Slovenian Sovereign Holding), which is the legal basis of the ZSDH-1 (Slovenian Act on Sovereign Holding Companies), the management of state capital investments began, separate from day-to-day policy. The SSH must follow the principles of due diligence, accountability, independence, transparency and economy in its investment management, which is also laid down in the Regulation on the Strategy for the Management of State Capital Investments. The strategy, which divided the investments into strategic, significant and portfolio investments, enabled SDH and DUTB (Bank Assets Management Company) to privatize the companies. By adopting the amended Law on Measures of the Republic of Slovenia to Strengthen the Stability of Banks, it contributed to more efficient restructuring of debtors. The provision that at least 10% of the estimated value of the acquired assets must be sold annually has been retained (Development Report 2018, p. 52). In 2015, the Commission called for strong policy measures and specific monitoring because of the disproportionately high share of state ownership in the banking sector (50%). In 2017, Slovenia has been also reminded of the very high proportion of state ownership in the insurance sector (60%). Slovenia has been also reminded in 2018, after two rejected attempts by a foreign insurance group to increase its stake in Sava Re, that maintaining a high level of government involvement in the real sector increases the risk to financial stability. Of particular concern was the percentage of government debt, which peaked at 83.1% of GDP in 2015. Although declining, the outlook for public finances is poor, mainly due to non-enforced reforms such as health and pension. Education is a strategic area of development (Nastase and Hodoroba, 2011, 53). In the future, further action will be needed to improve the long-term sustainability of public finances, including measures in the

areas of fiscal governance and the business environment, including the reform of health care financing, which has already been seriously delayed in 2018 (Poročilo o državi – Slovenija 2018, 2018, str. 4–29).

#### **d. Exports of goods and services (as% of GDP) and share of high-tech exports in total exports**

In this section, we test hypothesis H2: "Exports of goods and services as a percentage of GDP in 2014-2018 still lag behind the comparable EU-7 - CEE", as well as hypothesis H3: "The share of high-tech exports in total exports in 2014-2018 is growing more slowly than in other comparable EU-7 - CEE".

**Table 3. Exports of goods and services (percentage of GDP) in Slovenia and EU-7 - CEE, 2014-2018, (in %)**

	2014	2015	2016	2017	2018
<b>SLO (%)</b>	76.2	77.1	78.0	83.2	85.4
<b>EU-7 – CEE (%)</b>	76.1	75.0	75.2	76.7	76.1

Source: Exports of goods and services, Eurostat, 2019, and own calculations.

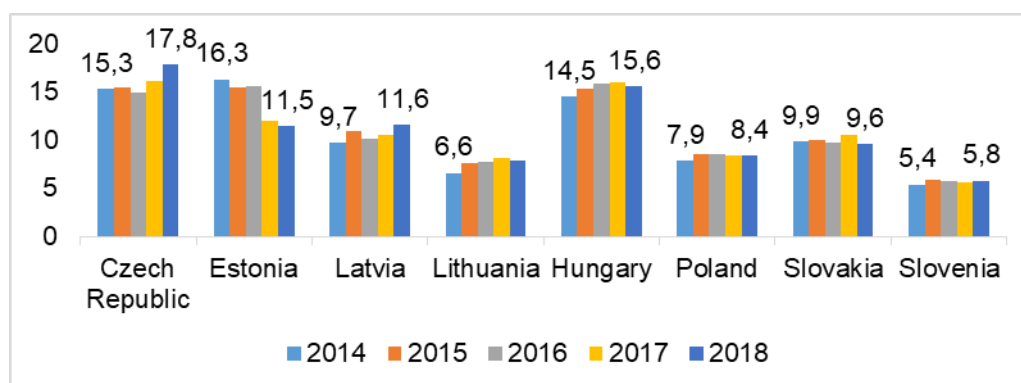
Exports to Slovenia increased steadily after the first two bad years at the beginning of the economic and financial crisis period (2008-2009), and for 2014 we find that it reached the average of EU-7 Member States - CEE. In 2015, it exceeded the average level of the Member States compared and remained so until 2018. Among the EU-7 CEE, that are above the average value of Slovenian exports (80 percent) during the observation period, is Hungary (88.22 percent) and Slovakia (94.38 percent), while Poland, the Czech Republic and others are lagging behind. In Slovenia, which has a small open economy, the share of exports in GDP is growing rapidly. Between 2013 and 2016, it was among the top six EU-28 countries, ahead of most new members. Slovenia's overall market share in its main trading partners in 2018 exceeded pre-crisis levels, with strong growth also in markets that are less important for Slovenian exports. The regional dispersion of exports is increasing, which is particularly important given the decline in demand during the last crisis.

**Table 4. High-tech exports (percentage of total exports) in Slovenia and EU-7 - CEE, 2014-2018, (in percentage)**

	2014	2015	2016	2017	2018
<b>SLO</b>	5.4	5.9	5.7	5.6	5.8
<b>EU-7 – CEE</b>	11.5	11.9	11.8	11.7	11.8

Source: Hi-tech exports, Eurostat, 2019, and own calculations.

According to Eurostat, the level of high-tech exports in 2015 was the highest in Slovenia, but by 2018 it had fallen by 0.1 percentage point. The average rate in the EU-7 - CEE has fallen by 0.1 percentage point since 2015, when it was at its highest, and thus increased by only 0.3 percentage points since the beginning of the observation period, while in Slovenia it increased by 0.4 percentage points. Looking at the average of the compared EU-7 - CEE, the thesis that the share of high-tech exports in total exports is growing more slowly in Slovenia than in the comparable countries can be rejected. Looking at them individually, however, most of the comparable Member States recorded higher growth over the period under review. Over the period 2014-2018, Slovenia has been overtaken by Czech Republic with 16.3%, Latvia with 19.6%, Lithuania with 19.7% and Hungary with 7.6% growth over the period 2014-2018, where Slovenia recorded growth of 7.4%.



**Graph 1. Growth of high-tech exports (percentage of total exports) in Slovenia and EU-7 - CEE, 2014–2018, (in %)**

Source: Hi-tech exports, Eurostat, 2019, and own calculations.

The low share of high-tech exports in total exports indicates the country's low competitiveness and has a major impact on attracting foreign investors.

#### e. Inward foreign direct investment

We will test hypothesis H4, which reads: "Slovenia in terms of inward FDI is behind all other comparable EU Member States from the CEE". Foreign direct investment (FDI) is an important engine of economic growth as it has many positive effects on the national economy (e.g. job creation and thus reduction of unemployment, new knowledge, new technologies, efficient allocation of resources, more harmonious regional development, additional tax revenues, participation of Slovenian companies in the supply networks of transnational corporations). Foreign direct investment stock amounted to EUR 13.7 Billion at the end of 2017, which is EUR 704.3 Million or 5.4% more than at the end of 2016. Among the investment countries, EU Member States dominated with a total of 84% at the end of 2017 (Tuje neposredne investicije, MGRT, 2018).

During and immediately after the crisis, FDI was crucial for the recovery of the Slovenian economy due to the inability to borrow by a large part of the domestic companies (Jaklič, Koleša Rojec 2017, pp. 69-71). In the past, foreign investors were at a disadvantage compared to domestic investors. With 2018, this has changed since the adoption of the new Investment Promotion Act. This law guarantees equal treatment of all companies, regardless of whether they are domestic, mixed or foreign companies (Kaj prinaša nov Zakon o spodbujanju investicij, 2018).

**Table 5. FDI in Slovenia and EU-7 - CEE, 2014-2018, (% in GDP)**

	2014	2015	2016	2017	2018
<b>SLO</b>	31.5	34.4	37.1	38.0	39.1
<b>EU-7 – CEE</b>	87.0	86.7	94.4	87.0	78.5

Source: Direct investment, Eurostat, 2020, and own calculations.

In 2018, Slovenia recorded the lowest share of foreign direct investment in GDP among the EU-7 - CEE, which was the lowest throughout the period under review. Hungary still has the largest share in 2018 (163.1 percent).

**Table 6. FDI in EU-7 - CEE, 2014–2018**

	2014	2015	2016	2017	2018
<b>Slovenia</b>	31.5	34.4	37.1	38.0	39.1
<b>Czech Republic</b>	77.3	75.8	78.4	78.3	77.5
<b>Estonia</b>	103.1	97.3	98.8	95.2	92.7
<b>Latvia</b>	56.5	59.5	58.3	59.8	55.5
<b>Lithuania</b>	41.2	42.6	44.6	44.2	43.4
<b>Hungary</b>	217.2	221.0	259.3	210.6	163.1

<b>Poland</b>	51.5	48.1	50.6	49.6	47.8
<b>Slovakia</b>	62.0	62.8	70.9	71.4	69.2
<b>EU 7 - CEE, total</b>	608.8	607.1	660.9	609.1	549.2
<b>EU 7 - CEE, average</b>	87.0	86.7	94.4	87.0	78.5

Source: Direct investment, Eurostat, 2020, and own calculations.

Indirect reasons for the deterioration in FDI could also be found in barriers to trade and investment. The OECD uses the FDI index to measure restrictions or barriers to FDI. It measures the four main restrictions for FDI (About the Index, 2019):

- restrictions on foreign capital,
- review or approval mechanisms,
- restrictions on the employment of foreigners in key positions,
- operating restrictions - return of capital or land ownership.

In addition to FDI, a number of other factors are measured, including the way FDI rules are implemented. Until recently, one of the main obstacles was the high level of state ownership in the corporate sector.

#### **f. Business environment in Slovenia**

According to the Doing Business survey, Slovenia ranks second in the second half of the 189 and 190 world economies during the observation period. In the entire observation period Slovenia is also far behind the CEE EU-7 average, with Poland and Hungary achieving the 29<sup>th</sup> best result in 2018 (The World Bank, Doing Business 2018, 2018, pp. 166 and 186).

**Table 7. Credit terms in Slovenia and EU-7 - CEE, 2014–2018, (ranks)**

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>SLO</b>	109,0	90,0	126,0	133,0	105,0
<b>EU-7 – CEE</b>	28,7	23,1	26,1	26,7	40,1

Note: Country rankings of 189 countries in 2014-2016 and 190 countries in 2017-2018.

Source: Doing Business 2014–2018 and own calculations

Despite the progress made since 2017 in the area of access to finance, as reported by Slovenian SMEs, there are still many obstacles due to lack of financial literacy and lack of support in applying for bank loans, public financial incentives and the use of alternative sources of finance. SMEs also report on the availability of finance for companies that were least used in Slovenia in 2017, i.e. financial incentives (Financial Incentives 2015-2020, 2015) and equity. In addition to the complex application procedures, funding from the Slovenian Enterprise Fund, SID bank and other institutions supporting SMEs is limited. The EC proposes the development of other support measures that could stimulate the stock market as an alternative to this financing, especially for fast growing companies (Country Report - Slovenia, 2018, pp. 29-30). The EC welcomes the decision of the Slovenian Government in 2017 approving the program (Key Elements Financial Instruments Programming Period 2014-2020, 2014) under which the Fund will be managed by the SID Bank. Slovenia, together with some Central European Member States, Austria, Hungary, Czech Republic Slovakia (Slovenian Enterprise Fund, 2017), also participated in the creation of a cross-border fund of funds (EUR 80 million) to increase capital investment in SMEs. The Slovenian Enterprise Fund invested EUR 8 million (Country Report - Slovenia 2018, p. 31). In 2018, three important amendments to the Act on Foreign Direct Investment and the Internationalization of Enterprises were added to promote foreign investment in Slovenia (National Reform Program 2018, p. 17): (i) equal incentives for domestic and foreign investors, (ii) definition of the procedure for supporting investments of strategic importance for the country; and (iii) priority for sustainable investments.

With the deterioration of the business environment for SMEs due to the worsening access to bank loans in times of economic growth, it can put Slovenia back on the same path it took in the last crisis. The Bank of Slovenia reports on the high guarantees required by banks to protect SMEs. They are also faced with a lack of financial and investment skills and support in applying for bank

loans, public financial incentives and alternative financial resources (Poročilo o državi – Slovenija 2019, p. 25). In order to minimize these losses, a more active involvement of local actors is necessary (Nastase et al, 2011, 54).

#### **g. Labor market efficiency**

"Labour costs in Slovenia are still higher than the EU-7 - CEE average which has an additional impact on the lowest labor productivity growth after 2014," reads hypothesis H6, tested in this section.

Slovenia also lost its competitive advantage over the rest of the EU-7 - CEE due to high labor costs. According to IMAD, this gap started to narrow and relied solely on a reduction in employee benefits between 2012 and 2013, and in 2017 Slovenia's cost competitiveness improved as productivity growth exceeded wage growth. Unit labor costs are falling faster in the tradable sector, but in non-tradable sector they are still above pre-crisis levels (by 4.7 per cent). Maintaining cost competitiveness is important to further increase productivity growth (Poročilo o razvoju 2018, 2018, p. 73).

**Table 8. Cost of hour of operation in Slovenia and EU-7 Member States - CEE, 2016-2018, (EUR / hour)**

	2014	2015	2016	2017	2018
<b>SLO</b>	/	/	16.8	17.6	18.1
<b>EU-7 – CEE</b>	/	/	9.0	9.8	10.6

Note: / = data not available. Cost of working hours in EUR for the whole economy (excluding agriculture and public administration) in companies with 10 or more employees.

Source: Labour costs annual, Eurostat, 2019, and own calculations.

The high cost of working time continues to have a negative impact on Slovenia's business environment and competitiveness. If Slovenia's operating costs in 2018 are below the EU average (30 EUR/hour), this will be the opposite if compared to the EU member from the CEE, where they are well ahead. The cost of working hour in Slovenia in 2018 was more than 70 per cent higher than the average of the compared EU-7- CEE. Given that the highest cost of working hour in the observed Member States is EUR 12.6 per hour in the Czech Republic, this is still 30.4 per cent lower than in Slovenia.

This difference is also a source of productivity growth. It used to exceed wage growth, but in the non-tradable sector its level remained lower than before the crisis. In 2017, the tradable sector ended up about 15 percent above pre-crisis levels (Development Report 2018, p. 15). Real labor productivity in Slovenia in 2018 is 46 per cent below the average of the observed EU-7 CEE and has fallen by 40 per cent since the beginning of the observation period. It only rose sharply in 2017, driven by productivity growth in the non-tradable sector (construction).

**Table 9. Real labor productivity per person in Slovenia and EU-7 - CEE, 2014 - 2018, (in %)**

	2014	2015	2016	2017	2018
<b>SLO</b>	2.5	1.0	1.2	1.9	1.5
<b>EU-7 – CEE</b>	1.6	1.5	1.3	3.0	2.8

Note: Provisional value for Poland for 2018 (4,8).

Source: Real Labor, Eurostat, 2019, and own calculations.

In the post-crisis period, the low productivity was caused by the deteriorating allocation of production factors and the high level of corporate borrowing before 2008. In addition to low domestic demand, many firms were over-indebted, which exacerbated the productivity decline during the crisis and slowed down the recovery from the end of the crisis. IMAD identifies the achievement of the targets set in Slovenia Development Strategy as a challenge, which will be achieved mainly by improving the long-term growth of value added; these targets relate to knowledge, innovation, research and development (R&D).

### h. Financial market conditions

The poor corporate governance of banks in the past period has had an impact on the weakening of the banking system in Slovenia and on the weakening of the business environment and competitiveness of Slovenia. Hypothesis H7 will test whether Slovenia will still lag behind all EU-7 - CEE member states after the end of the crisis.

**Table 10. Share of non-performing loans by total loans in Slovenia and the EU-7 average - CEE, 2014-2018, (in %)**

	2014	2015	2016	2017	2018
<b>SLO</b>	22.8	17.9	12.3	9.2	7.4
<b>EU-7 – CEE</b>	8.6	6.8	5.6	4.6	4.4

Note: There is no data for the Czech Republic for 2014 and 2015.

Sources: Country Reports 2014–2018 for Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia 2018, and own calculations.

A high proportion of non-performing loans (22 per cent of total loans) continued to threaten the financial stability of Slovenian banks after the end of the crisis. Increasing this share has reduced lending activity and thus hampered economic recovery and development. Compared to the average of the peer countries, the share of non-performing loans in Slovenia was even 166 per cent higher in 2014, while it had fallen sharply by 2018, but is still 70 per cent above the average of the peer countries. Estonia has the lowest percentage in 2018 (1.8 per cent) and Poland the highest (7.1 per cent).

"The situation in the Slovenian banking sector has improved significantly. Thanks to the improved macroeconomic environment and sound policy measures, the banking sector has recovered strongly since 2014. The share of non-performing loans has fallen sharply since June 2018 and now stands at 7.4 percent, down from 11.4 percent a year earlier. At the same time, yields have risen and the average capital adequacy ratio is solid (18.8 percent in June 2018) despite renewed credit growth. The partial privatization of NLB in 2018 and the plan to privatize Abanka in the first half of 2019 are important measures to ensure the long-term viability of the banking sector" (Poročilo o državi – Slovenija 2019, 2019, p. 12).

The better return on equity also contributed to an improved situation in the Slovenian banking sector, which was even negative in 2014 (-2.5%).

**Table 11. Return on Equity in Slovenia and the EU-7 - CEE average, 2014-2018, (in %)**

	2014	2015	2016	2017	2018
<b>SLO</b>	-2.5	3.5	7.8	9.1	11.5
<b>EU-7 – CEE</b>	5.1	7.7	11.2	9.9	11.6

Sources: Country Reports 2014–2018 for Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia 2018, and own calculations.

The return on equity increased sharply over the period under review and reached the average of the observed Member States. The EC states in its Country Report - Slovenia 2019 that BAMC has generated cumulative cash flows of EUR 1.5 billion since its establishment until October 2018, which corresponds to 72 percent of all assets transferred. With sales from 2017 to 2018, it generated an annual return on equity of around 27 percent. Such high profitability is questionable in the future, if not earlier, when the provisions expire. Particular attention is being paid to possible new impairments that will gradually arise from new loans. The Commission therefore recalls that new sources of revenue and cost controls will have to be found in the future (Poročilo o državi – Slovenija 2019, str. 23).

"The equity ratio shows the solvency of the banks. It is an indicator of the banks' ability to absorb losses. The higher the ratio, the more banks can absorb losses without jeopardising their solvency." (European semester thematic factsheet, Banking sector and financial stability, 2017,p. 1).

**Table 12. Slovenia's capital ratio and EU-7 CEE average, 2014–2018, (in %)**

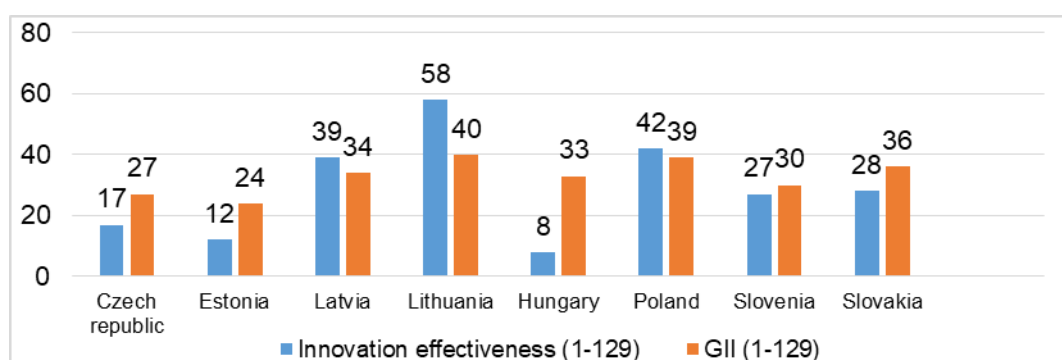
	2014	2015	2016	2017	2018
<b>SLO</b>	17.9	18.6	19.1	18.1	18,8
<b>EU-7 – CEE</b>	24.9	25.0	20.7	20.2	20.4

Sources: Country Reports 2014–2018 for Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia 2018, and own calculations.

According to the data collected in the annual reports, we have found that Slovenia is improving the ratio against most EU-7 Member States from the CEE. In 2018, only Estonia with 31.1 percent and Latvia with 22.4 percent is ahead of it.

### i. Innovation

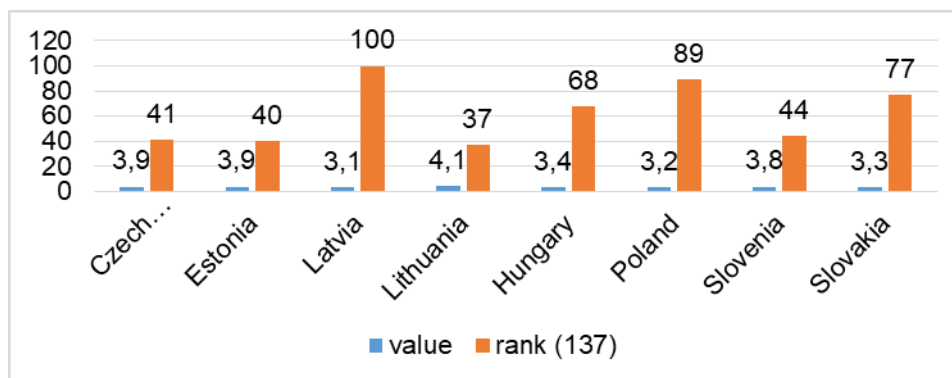
WEF and the World Intellectual Property Organization - WIPO, which also measure innovation performance as part of the UN. The former with a global competitiveness index - GCI, the latter with a composite global innovation index - GII (The Global Innovation Index, 2016, p. 49).



**Graph 2. Innovation efficiency and GII, Slovenia and comparable EU-7 CEE, 2018 (ranks, 1 = max., 129 = min.)**

Source: Global Innovation Index 2018: Rankings, 2018, p. XX–XXI.

While the GII, with 80 indicators divided into seven groups, measures innovation in currently 129 countries, the GCI covers 140 countries and its composition. In 2018, Slovenia has moved up two places in the Global Innovation ranking compared to last year, ranking 30<sup>th</sup> out of 129 countries and 19<sup>th</sup> out of 39 European countries. In the group covering knowledge and technology outcomes, Slovenia stands out by three indicators: (i) patents by origin (12<sup>th</sup> place), (ii) Quality Certificate ISO 9001 (9<sup>th</sup> place) and (iii) scientific and technical articles, where it ranked third worldwide. Slovenia also performed well in the creative product group, occupying 16<sup>th</sup> place overall, and the institutional sector (19<sup>th</sup> place) also stands out, with 14<sup>th</sup> place in the business environment. Slovenia achieved the best result in terms of corporate sector investment in R&D (5<sup>th</sup> place) (The Global Innovation Index 2018 Slovenia). Given the relatively good Innovation Efficiency Index 2018 (The Global Innovation Index, 2016, p. 50), we are also interested in how the economy uses newly developed technologies or the findings of scientific institutions. Are knowledge and application development in the economy sufficient in terms of inputs? Knowledge-based firms attach great importance to the link between the public research sector and the economy. The WEF indicator shows how universities and industry cooperate. We will compare the assessment with the other EU-7 - CEE.



**Graph 3. Cooperation between universities and industry, Slovenia and EU-7 from CEE, 2018, (grade, 1 = min., 7 = max.) (Ranks, 1 = max., 137 = min.)**

Rating: 7 = strong collaboration, 1 = not cooperating.

Rank: 137 countries

Source: Global Competitiveness Report 2017–2018.

According to The WEF Global Competitiveness Report 2017-2018, cooperation between universities and industry in the group of compared Member States is best in Slovenia, Estonia, Lithuania and Czech Republic. Of the 137 countries, Slovenia ranks 44<sup>th</sup> with a score of 3.8. The stronger the cooperation (score 1) between the three stakeholders (scientific institutions - higher education - industry - private sector), the more likely it is that innovations will be successfully transferred from scientific institutions to an economy where they will be commercialized or contribute to the creation of value in products or services. In Slovenia, the Center for Technology and Technology Transfer (CTT Innovation Transfer), which operates within the Jozef Stefan Institute, and the Consortium for Technology Transfer from JRO to Economy, play a key role in the transfer of knowledge and innovation to the economy.

#### 4. RESULTS AND DISCUSSION

In testing the first hypothesis, we found that the share of state ownership in the real sector has decreased in the post-crisis period, but not enough, especially in the insurance sector, which remains above average. The adoption of the State Capital Investment Management Strategy enabled SSH and BAMC to privatize state-owned companies. The restructuring of the banking system was followed by the merger of some banks and the privatization of Nova KBM, but by 2015 the share of state ownership in the banking sector was one of the highest in the EU (50%). After the completion of the demanding process of privatization of NLB in 2019 and the sale of Abanka Celje this share has decreased, while the ownership rate in the insurance sector is still too high (2017 - 60%). The state-owned companies are mainly in the energy, transport, traffic and infrastructure sectors. The hypothesis is confirmed.

As the export rate had an impact on the growth and generation of the country's total income, in 2015 Slovenia exceeded the EU-7 – CEE average, with only Hungary and Slovakia ahead. We have to bear in mind that Slovenia is a small country and, due to its size, can have higher exports share in GDP than the developed larger countries. Despite the geographical fact, Slovenia has exceeded the EU-7- CEE average in terms of exports in relation to GDP. This result does not confirm the second hypothesis.

The survey found that the share of high-tech exports in total exports grew only very slowly in the post-crisis period (2014-2018 by 7.4 percent) and is still far below the EU-7 – CEE average. The latter largely overtook Slovenia in this area during the period under review, including Czech Republic with growth of 16.3%. Hypothesis 3 "The share of high-tech exports in total exports in the period 2014-2018 is growing more slowly than in other comparable EU-7 - CEE" is confirmed.

In the past, one of the main obstacles to foreign direct investment has been the oversized role of the state in the real sector. With the restructuring of the corporate sector in Slovenia, this has started to increase (at the end of 2017 5.4% higher than in 2016 - EUR 13.7 billion). Compared to the EU-7 - CEE, however, the situation is not so exciting. In 2018, Slovenia accounted for 38.9% of foreign direct investment in GDP, while Hungary had 163.1%. CEE In terms of the share of FDI in GDP, Slovenia is far behind the EU-7 – CEE average (49% lower share). This confirms the fourth hypothesis.

The SPOT system (SPIRIT Slovenia, Government of the Republic of Slovenia) enables entrepreneurs and potential entrepreneurs to do business with the state quickly and easily, to register a company electronically and also to contribute to increasing competitiveness in regional integration, information and consultancy in general. Slovenia is regarded in the EU as a country with an over-regulated system and a too low level of digitisation, but does not apply to a country with a favourable business environment. The "Enterprise 2020" strategy with the proposed measures has not fully achieved its purpose. Micro, small and medium-sized enterprises, which are crucial for sustainable development and economic growth, have been undervalued in Slovenia or have not facilitated their activities in the post-crisis period. The greatest progress has been made in facilitating the registration of a company, and there have not been three key areas in which progress has been made. According to the World Bank, SMEs often report obstacles to access to finance, particularly in terms of facilitating access to credit (112<sup>th</sup> out of 190 countries). Compared to 2018, Slovenia has even decreased (105<sup>th</sup> out of 190 countries). We also recorded poor results in the area of obtaining building permits (120<sup>th</sup> out of 190 countries) and in the area of legal security of companies, where in Slovenia the enforcement of contracts takes 1160 days and the OECD average for high income economies is 528.4 days. Slovenia lag far behind all comparable EU-7 - CEE countries in terms of obtaining credit, as well as in terms of legal certainty, where Estonia (7<sup>th</sup> out of 190 countries) has the best results (Doing Business, Measuring Business Regulations, obtaining credit, WB, 2019). The fifth hypothesis is confirmed.

Labor costs in Slovenia are still much higher than the EU-7 - CEE average (by more than 70%), which has an additional impact on lower productivity growth, which is 46% below the average in peers. The over-indebtedness of Slovenian companies, the poor allocation of production factors and low domestic demand have all contributed to a sharp drop in productivity and a long-term recovery in the post-crisis period. We confirm the sixth hypothesis.

Thanks to the improvement in the macroeconomic environment and the policy measures taken, Slovenia has achieved a significant reduction in non-performing loans (over 66%), the average capital adequacy ratio is solid and the capital ratio has also improved. Compared to the EU-7 – CEE average, the proportion of non-performing loans as a percentage of all loans is still below its average (41%), but the trend indicates a further decline. For the other two indicators, Slovenia has come very close. The ratio is less than one percent behind and the average return on equity is just over 7 percent. The seventh hypothesis is partially confirmed.

## 5. CONCLUSION

The paper examines Slovenia's socio-economic development after the crisis. Since GDP is no longer the only measure of the country's progress, a number of indicators have been included in the quantitative and qualitative analysis of secondary data, which indicate that the situation in the country is deteriorating or improving.

In 2014, Slovenia started to recover after one of the largest GDP declines in the EU and a longer recession than in most EU-28 countries. Sustainable and long-term economic growth should then begin with the implementation of structural changes, the reduction of macroeconomic imbalances in key sectors and the elimination of structural weaknesses in the Slovenian economy. The answer to the fundamental question of whether Slovenia has implemented sufficiently significant structural changes in the post-crisis period and whether the country is now better prepared for the new crisis than before, was obtained with the help of seven hypotheses, for which

we checked the secondary data qualitatively and quantitatively. The appearance of the unpredictable environment caused by the constant social, political and economic changes, it puts inevitably the management in the position of decisive search of new managerial ways for improving their professional performance (Turi, 2016).

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