GRANT journal
ISSN 1805-062X, 1805-0638 (online), ETTN 072-11-00002-09-4
ročník 7, č. 2
EUROPEAN GRANT PROJECTS | RESULTS | RESEARCH & DEVELOPMENT | SCIENCE

Price development in the V4 countries - microeconomic overview

Marcel Novák[1]

[1] Department of Economics, Faculty of National Economy, University of Economics in Bratislava, Dolnozemská cesta 1, 852 35 Bratislava, Slovakia, marcel.novak@euba.sk

Grant: 1/0975/15
Název grantu: Vedecká grantová agentúra Ministerstva školstva, vedy, výskumu a športu Slovenskej republiky. Project: Macroeconomic and microeconomic effects and impacts of inflation and deflation.
Oborové zaměření: AH - Ekonomie

Abstrakt The aim of the article is to look more closely at the price development in the V4 countries and in this context, we analyze the impacts and consequences of the inflationary, deflationary pricing on a different economic subject. A comparative analysis of price developments in the V4 countries confirms divergent price developments. The volatility of the HICP components as well as the change in the methodology for reporting the inflation of the Statistical office in Slovakia is one of the reasons for the fluctuation of the price level. 2% inflation target of the European Central Bank and rising prices, the Slovak inhabitants did not lose. Nominal wages grew faster than prices (cumulatively by about 30% since 2009 compared to a rise in prices, which was cumulative by about 15%). Similar developments can be expected by the end of 2020. One of the negative effects of the relationship between inflation and wages is the development on the Slovak credit market, where low interest rates have created room for the fastest growth of loans to households and businesses in the EU, resulting in the alarming growth of Slovak indebtedness.

Klíčová slova inflation, interest rates, nominal wages, indebtedness

1. INTRODUCTION

The Slovak economy is small and open economy. Therefore, the potential shocks within the global economy will affect us (The Slovak Republic) either directly or indirectly (through the impacts on our trading partners). In the last two decades, the economy of the Slovak Republic is experiencing a turbulent period associated with global financial or the economic crisis, the recession linked to rising unemployment and the fall in GDP, deflationary price developments, but mainly the currently visible positive wave associated with the expansionary phase of the economic cycle, raise in employment, growth of GDP and its components (consumption growth, private and government investment) and inflationary pressures. Therefore, right questions are needed: how long the expansion phase of both the financial and the economic cycle will last, respectively do we have prepared risk scenarios if the global crisis recurs?

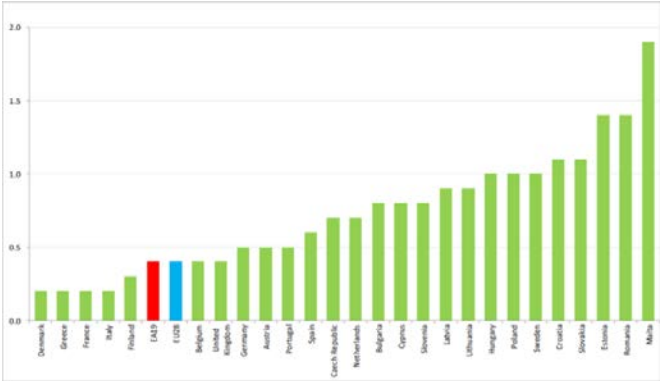
The economic cycle has its growth phase as well as the peak phase and the recession phase. The growth phase may also have a long-lasting character, according to historical experience, when GDP growth reaches the value of its potential growth. Not every slowdown ends in recession (roughly only about 1/3 cases). Whether the slowdown will be so-called soft or hard lending depends on the external situation as well as on internal policies and settings. If fiscal policy is reasonable, public debt is low, the banking sector is stable, capital well-equipped, with low share of bad credit, households and businesses are not overly indebted, then the likelihood of soft lending increases. The answer to the above-mentioned question is therefore unambiguous. The Slovak economy is stable, credit rating agencies give us a stable outlook, there is nothing to indicate that the positive wave of reflection will end. Some indicators indicate possible overheating and it may be a warning finger. Since the last crisis has come, several years have passed, and the institutions, the professional public, assure us that we are wiser to learn from the crisis, and if the next crisis comes, its impact will be so radical. The crisis recalled that good times must be used to consolidate public finances, reduce debt (especially public). This creates room for counter-cyclical action and fiscal policy in times of crises - as he (economist J. M. Keynes) thought in his work The General Theory of Employment, Interest and Money Economist. The banking sector must be healthy to resist and be able to resolve, the periods of uncertainty will cease. Overall, the smaller the macroeconomic imbalances, the easier and shorter the handling of crisis situations.

1.1 Current situation in the European Union

From a historical point of view, the current global recovery is unusual both in length and in terms of slow start and revival dynamics. This also indicates that the current phase may still persist in the short term. The current slowdown in economic growth in the euro area was caused by exports. However, the forecasts for the development of the global economy and the foreign demand of the euro area are still favorable. At the same time, sentiment indicators are still at historically high levels. The risk is the protectionist measures (if they continue and if the economic moods are hit harder) and the overall global-political tension. In the ECB's monetary policy sphere, the eurozone's economic growth slows down by stating that it closely monitors developments in inflation and the factors that affect it and evaluates the risks of its development in the forecast horizon. As mentioned above, overall HICP inflation is strongly influenced by commodity price volatility (energy and food prices). Nuclear inflation is currently in the euro area at a relatively low level of around 1%. In the ECB's forecast horizon, it is expected to increase significantly due to the strong labor market and closing the production gap. Given that the relationship between the labor market (growth in wages and employment) and the rise in prices may be weaker than expected (so far, consumption recovery wage growth is only slightly in price developments), also in the light of the current risks in the global economy, inflation developments need to be carefully analyzed and responded by setting monetary policy so that its development converges in a sustainable way towards to the target.

Regarding the economy of the SR (see Figure 1), GDP growth in 2Q18 was among the fastest (1.1% qoq). In particular, investment was dragged, but domestic demand was also favorable. Growing foreign demand, but especially JLR output, GDP dynamics will more than 4% in the coming year (contribution by JLR about 1 point). Other economies in the V4 countries achieve similar, reasonable GDP growth rates (Poland, Hungary, Czech Republic have only slightly lower growth than the SR)

Figure 1: Growth rate of GCP in the European Union (2nd quartal of 2018)



Note: data from Ireland and Luxemburg were not available in time of paper creation. Source: author, based on date from ECB.

2. COMPARISON OF PRICE LEVEL DEVELOPMENT IN V4 COUNTRIES

In the theory, inflation is known as the general increase in the prices of goods and services that are part of the consumer basket. Prices are determined by the market and, in the case of administrative prices, the entity is legally designated (state, regulator). The calculation of inflation from the point of view of SR (consumer price index) is carried out by the Slovak Statistical Office. Prices are changing in the economy and SR is recording them. As part of the consumer price index, prices may rise but also fall. Inflation targets in the form of price increases (whether point growth or interval growth) have all countries with inflation targeting. Quantification of price stability makes monetary policy more transparent. Stable price developments create a stable macroeconomic environment for economic operators that encourages investment and consumption, and thus sustainable economic growth (including wage growth). The inflation target as a price increase has many practical reasons (the most important thing is that it creates a certain pillow to minimize deflation when monetary policy instruments are more difficult to use.) It is questionable how the population would be deflated to negative interest rates on deposits. Comparison of inflation developments at a certain point in time may be distorted, for example, by time shifts between commodity price increases and regulated price decisions.

At the moment, inflation in the SR is growing faster than in the V4 countries, but in the longer term the price level of almost the least of countries (irrespective of the inflation target), so we can say that, in the context of price level growth (in the long run), Slovaks have not lost their position as nominal wages grow faster (similar developments are expected in later years). It is with respect of the pressures on the labor market, as well as with the phenomenon of convergence. In Table 1 we can see the comparison of the inflationary development among the selected economies. Price growth in Slovakia has gradually recovered since practically from the beginning of 2014 almost to the end of 2016 prices have fallen and there was an increased risk of deflation, disinflationary period. Undoubtedly, the monetary policy instruments of the ECB, supported the euro area as a whole system and those instruments have undoubtedly contributed to recovery of EU economy.

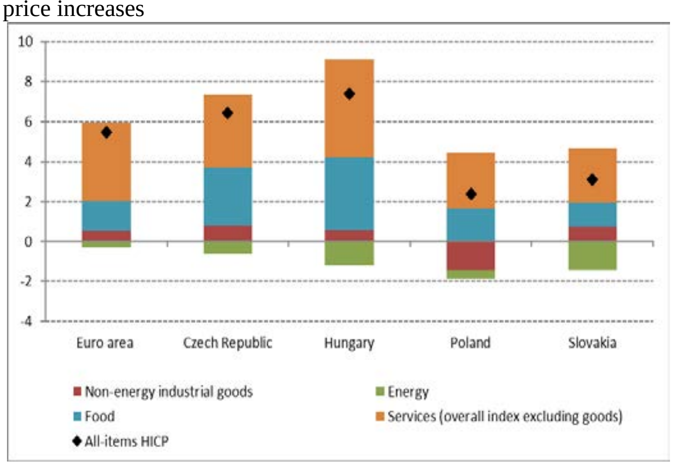
Table 1: Year-on-year increase in price level (July 2018 in %)

	EA	Czechia	Hungary	Poland	Slovakia
HICP inflation (y-o-y)	2.1	2.2	3.4	1.4	2.6
Foodstuff	2.5	0.8	3.9	1.8	**3.2**
Non-energy industrial goods	0.5	0.7	0.4	-0.4	**1.3**
Energy goods	9.5	5.1	9.8	6.8	3.9
Services	1.4	3.6	2.3	0.7	**2.8**
HICP inflation without energy goods, grocery, alcohol and tobacco	1.1	2.3	1.5	0.0	2.1

Source: Monthly Bulletin of NBS – August 2018.

Currently, the inflation in Slovakia is the highest in comparison with the V4 countries and the euro area. These differences, however, need to be seen in a longer context of price developments, since inflation is influenced, for example, by a variable regulatory policy (time shifts in commodity price developments in regulated prices) in the individual countries for the current one-year period. Methodological changes, subsidy policy, can also work here. Cumulatively, prices in the SR grew more slowly in comparison with other countries (see figure 2 and 3). Cumulative price developments suggest that as of January 2013, food prices in Slovakia have risen by at least the region. Compared to this, food prices, for example, in the Czech Republic, doubled and in Hungary even 2.5 times increased.

Figure 2: The contributions of individual compoments to cumulative price increases



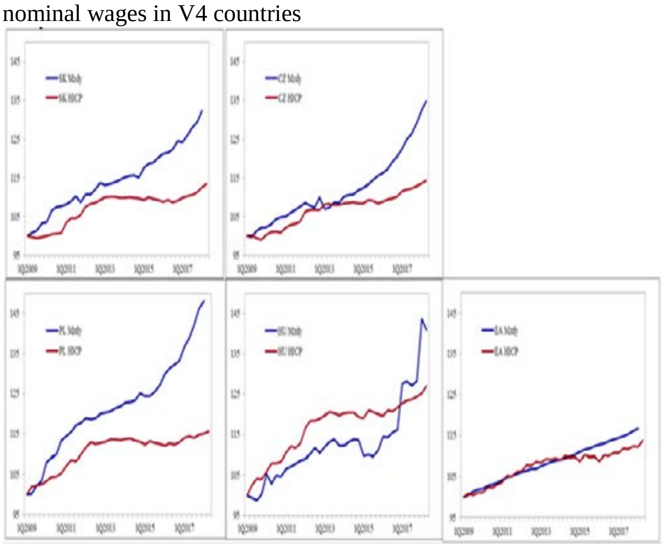
Note: January of 2013 = 100. Source: author, based on data from ECB and NBS.

In relation to inflation and wages, we have looked at developments in the V4 countries. Even in an environment of 2% of the ECB's target and rising prices, the Slovaks did not fail to do so. Nominal wages grew with faster dynamics than prices (cumulatively by about 30% since 2009 compared to a cumulative increase of about 15%). We also expect similar developments by 2020 when cumulative wages should increase by about 18% over three years and inflation by only 7.5% (from 2018 inclusive).

Figure 3: The cumulative rise in food prices

Note: January of 2013 = 100. Source: author, based on data from ECB and NBS.

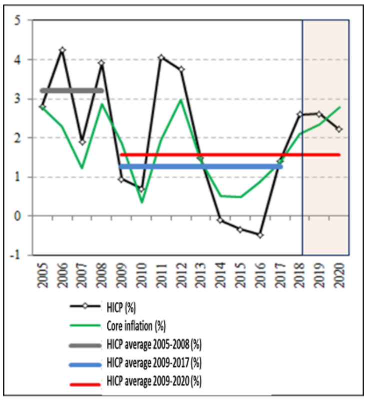
Figure 4: The comparison of relationship between inflation and nominal wages in V4 countries



Note: January of 2013 = 100. Source: author, based on data from ECB and NBS.

In the Slovak economy, inflation is measured and reported by several institutions (MF SR, SO SR, NBS). From the point of view of the NBS mandate, the main task of the NBS is to analyze inflation in relation to price developments and to estimate its possible future development at the same time. The NBS predicts price developments 5 times a year through quarterly forecasts. Then every month updates individual forecasts through instant casts (based on new data and technical assumptions) and comments on NBS inflation as part of Monthly Bulletins (it provides a total of 30 different analyzes, outputs that formed the basis of price analysis). To compare a longer period, we included a graphical analysis of the development of year-on-year inflation, Based on the figure 5, prices rose faster than the euro area - average HICP inflation for the period 2005 to 2008 was 3.2%. Average HICP inflation for the period 2009 to 2017 was 1.3%. Average HICP inflation over the period 2009 to 2020 should reach 1.6%. Inflation is currently markedly volatile (volatile). Determinants of its volatility are mainly external influences. They show up with the jump and impact of energy and food prices (see Figure 6 below).

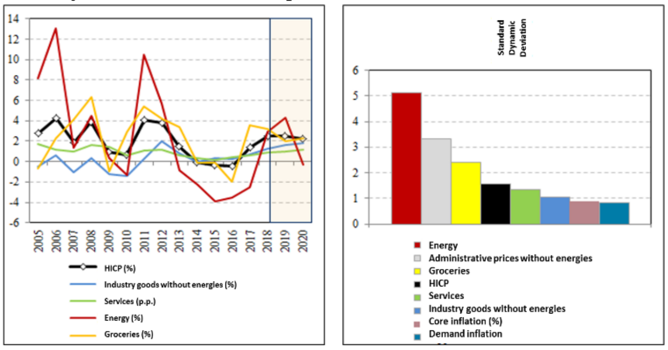
Figure 5: Year-on-Year price level development in the Slovak Republic



Source: author based on data from macroeconomic database of NBS.

Price stability in the conditions of the Slovak Republic seems to be guaranteed for a further period and also influenced the behavior of individuals and companies in the area of reception, lending on the financial market. In the next part of the paper we look at the relationship between inflation and wage growth, which led to changes in the disturbance of financial market equilibrium in the Slovak Republic. As a result of these changes, there is an increasing indebtedness of economic subjects. The consumer confidence index reached historical values, the registered unemployment rate in the Slovak Republic dropped below 6%, the nominal wages of the Slovaks grew dynamically, and the market environment constantly lowered interest rates, thus increasing the availability of loans and thus loans to households (mainly housing loans) in the first half of 2018 at a rate of 11.3% year-on-year (most in EU countries) - see Figure 7 below.

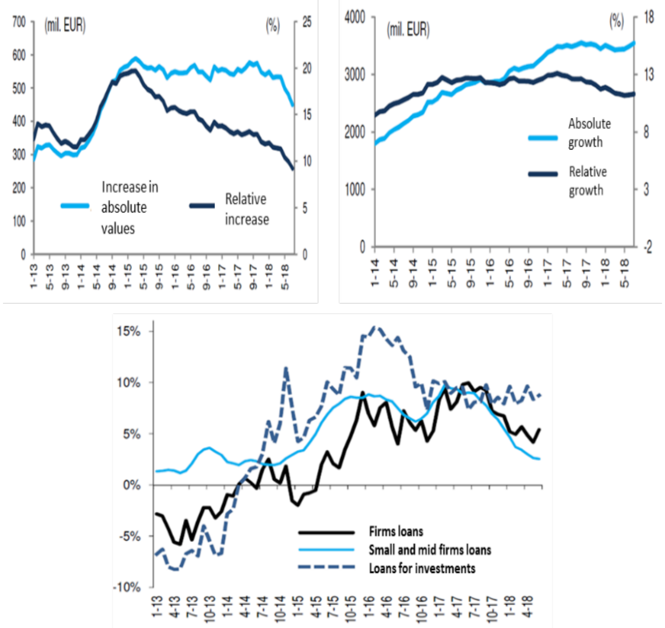
Figure 6: Development of HICP inflation in Slovak Republic – volatility of HICP and its components



Source: author based on data from macroeconomic database of NBS.

Loans in general are currently becoming more and more affordable. The average interest rate on housing loans has receded gradually to 1.5%, one of the lowest levels in the euro area. Developments in the credit market also related to the rise in real estate prices, which grew by 9% in the case of both new and older flats. The pace of price rises in the older housing market is currently stable. Due to the risks associated with the rapid growth of household indebtedness, the NBS has tightened up several loan conditions. These measures could have been one of the factors that increased clients' interest in credit as a further decline in interest rates and positive household income, as clients, in response to inadequate media campaigns, sought to obtain credit before the effectiveness of the new measures.

Figure 7: Year-on-year growth of households loans (left-up picture), consumers loans (right-up picture) and firms loans (down picture)



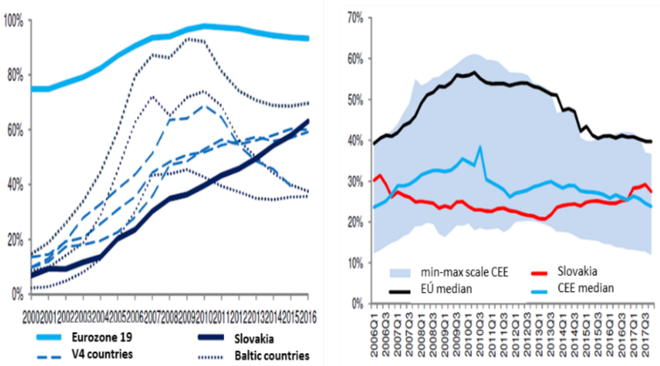
Source: author based on data from macroeconomic database of EUROSTAT, ECB and NBS.

Slovak economy is small and open economy However, the conditions will be tightened gradually over one year to avoid one-off strikes. Stressing conditions should gradually contribute to slowing growth in household indebtedness (see Figure 8). In addition, the market sought to make the most possible use of exemptions, when lending 100% of the property price. Growth in loans to businesses, which was approaching double-digit levels in 2017, has now slowed down to 5%. The slowdown in lending was most pronounced in the SME segment. However, the pace of credit growth continues to be above the EU average, despite the fact that interest rates are higher than the average. Credit activity is mainly focused on investment loans. Developments in the commercial real estate sector are characterized by strong demand and supply. Occupancy of office space and industrial parks is increasing. Too high optimism on the part of developers, investors and commercial real estate users, however, may lead to under-estimation of risks resulting from high sensitivity to the possible deterioration of the economy. The slowdown in both credit growth and corporate bond issuance also dampened the growth of corporate indebtedness relative to GDP. However, this growth is still one of the highest in the EU (see Figure 8).

The continued rapid growth of household and business indebtedness in the Slovak Republic has been the fastest in the EU for the sixth year, thus increasing the sensitivity of indebted households to potential negative economic developments.

An increase in imbalances is also seen in the real estate market, although this growth is a bit more mild. In the case of a regional outlook on real estate price developments in the Slovak Republic, we can see that more than half of the regions recorded year-on-year growth more than doubled. These negatives, even in the time of price stability, are borne by us (SR) both by the ECB and by the IMF. Even Standard and Poor's rating agency has warned that in the event of growing imbalances in the financial markets (continued credit growth), the rating of the Slovak Republic may deteriorate.

Figure 8: The idebtedness of households (left picture) and firms (right picture) in Slovakia and in selected countries of EÚ.



Source: author based on data from macroeconomic database of EUROSTAT, ECB and NBS.

3. CONCLUSION

This year is 10th anniversary since the fall of Lehman Brothers and the onset of the recession in the US and Europe, including Slovakia, which, among other things, has been particularly rising in unemployment. In response to the crisis, ten years ago, the biggest financial experiment of all time: "quantitative release" was born. Despite the initial fears of inflationary pressures that would cause quantitative easing, central bankers were worried about the other problem - how to support inflation growth, which they said was below a safe level, guaranteeing price stability in the form of declared inflation targeting. We need to look at inflation as a cash phenomenon, a number that hides both positive and negative impacts. Currently, inflation in the SR is growing faster than in the V3 countries, but in the longer term the price level has risen almost the least among these countries (irrespective of the inflation target set). This is why we can say that in the context of price level growth (in the long run) the Slovaks have not lost their position as nominal wages grow faster (similar developments are expected in the next years). This is related to labor market pressures as well as to the phenomenon of convergence. Price growth in Slovakia has gradually recovered since practically from the beginning of 2014 almost to the end of 2016 prices have fallen and there was an increased risk of deflation, disinflationary period. Undoubtedly, the monetary policy measures of the ECB, which supported the euro area as a whole, have undoubtedly contributed to this recovery. Currently, inflation in Slovakia is the highest in comparison with the V4 countries and the euro area. These differences, however, need to be seen in a longer context of price developments, since inflation is influenced, for example, by a variable regulatory policy (time shifts in commodity price developments in regulated prices) in the individual countries for the current one-year period.

Methodological changes, subsidy policy, can also work here. Average HICP inflation over the period 2009 to 2020 should reach 1.6%. Inflation is currently markedly volatile (volatile). Determinants of its volatility are mainly external influences. They show up with jump and crash developments in energy and food prices. Nevertheless, we do not forget about the opposite sides of the price growth. A stable price environment, the expansionary phase of the business cycle, creates the assumptions of almost unlimited credit growth for households and businesses. The indebtedness of economic entities in Slovakia appears to be a much more serious problem in the future as compared to the problem of price increases.

According to historical experience, not every slowdown has to end with a recession. Let us therefore make good fiscal policy in good time, try to reduce both public and private debt. Institutions that ensure and oversee price stability on the other hand must ensure a stable bank, respectively. financial sector, capital-intensive and well-equipped. Let's focus on reducing the proportion of non-repayable loans (bad credit), try to reduce the number of executions, personal bankruptcies. To teach people to think rationally, to raise the level of financial literacy and the likelihood that economic operators will suddenly find themselves in deep depression, the crisis will at least partially diminish.

References

1. CEPS. 2015. The monetary policy of the European central bank (2002-2015). [online]. 2015, Available: <https://www.ceps.eu/system/files/SR%20109%20SM%20Monetary%20Policy%20of%20the%20ECB_0.pdf>.
2. ČAPLÁNOVÁ, A. – MARTINCOVÁ, M. 2014. Inflácia, nezamestnanosť a ľudský kapitál z makroekonomického pohľadu. 1. vyd. Bratislava : Wolters Kluwer, 2014. 130 s. ISBN 978-80-8168-024-3.
3. ĎURČOVÁ, J. 2006. Inflačné cielenie v podmienkach Slovenska. [online]. 2006, Available: <http://www3.ekf.tuke.sk/work/Konferencia%20Herlany/zbornikCD/doc/Durcova.pdf>.
4. ECB.EUROPA. Statistical Data Warehouse – HICP, oil price, monthly M3. [online]. Available: <http://sdw.ecb.europa.eu/>.
5. ECONOMICSONLINE. Inflation. [online]. Available: <http://www.economicsonline.co.uk/Global_economics/Inflation.html>.
6. EUROEKONOM. 2015a. Inflácia, deflácia, dezinflácia. [online]. 2015a, Available: <http://www.euroekonom.sk/ekonomika/vseobecna-ekonomicka-teoria/inflacia/>.
7. EUROSTAT. Database – GDP and Main components. [online]. Available: < http://ec.europa.eu/eurostat /data/database>.
8. HOSCHEK, M. 2010. Hrozba novej finančnej krízy. In Finančný manažment a controlling v praxi. 2010. ISSN 1337-7574, 2010, roč. 03, č. 11, s. 656-661.
9. LENNEROVÁ, I. 2007. Inflačné cielenie v podmienkach SR. In Finančné trhy : odborný mesačník pre teóriu a prax finančných trhov. ISSN 1336-5711, 2007, č. 06.
10. NBS. Makroekonomická databáza – HDP, HICP, jadrová inflácia, peňažné agregáty, hlavná úroková miera. [online]. Available: <http://www.nbs.sk/sk/menova-politika/makroekonomicka-databaza/makroekonomicke-ukazovatele-graf>.
11. NBS. 2014. Mesačný bulletin NBS, jún 2014. [online]. 2014, Available: http://www.nbs.sk/_img/Document s/_MesacnyBulletin/2014/protected/mb0614.pdf
12. NBS. 2015. Mesačný bulletin NBS, jún 2015. [online]. 2015, Available: http://www.nbs.sk/_img/Documents/_Me sacnyBulletin/2015.pdf
13. NBS. 2016. Mesačný bulletin NBS, jún 2016. [online]. 2016, Available: http://www.nbs.sk/_img/Documents/_Me sacnyBulletin/2016.pdf
14. NBS. 2017. Mesačný bulletin NBS, jún 2017. [online]. 2017, Available: http://www.nbs.sk/_img/Documents/_M esacnyBulletin/2017.pdf
15. NBS. 2018. Mesačný bulletin NBS, september 2018. [online]. 2018, Available: http://www.nbs.sk/_img/Documen ts/_MesacnyBulletin/2018.pdf
16. NBS. 2018. Mesačný bulletin NBS, október 2018. [online]. 2018, Available: http://www.nbs.sk/_img/Docu ments/_MesacnyBulletin/2018.pdf
17. NBS, 2014 - 2018. Štatistický bulletín, Available: https://www.nbs.sk/sk/publikacie/statisticky-bulletin
18. NBS, 2014 – 2018, Správa o stave a vývoji finančného trhu. Available: https://www.nbs.sk/sk/publikacie /publikacie-dohladu/sprava-o-stave-a-vyvoji-financneho-trhu
19. NBS, 2014 – 2018. Strednodobá predikcia, Available: https://www.nbs.sk/sk/publikacie/strednodoba-predikc ia.
20. TRNOVSKÝ, K. 2014. Teoretický pohľad na defláciu. In Nová ekonomika : vedecký časopis Národohospodárskej fakulty Ekonomickej univerzity v Bratislave. ISSN 1336-1732, 2014, roč. 07, č. 04, s. 129-136.