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A Comparative Analysis of the Price Index in Transition Countries in the Time of Globalisation

Abstract: Globalisation with all its features can be divided in two segments - good and bad. When we look at the good side of globalisation, it is obvious that it has erased boundaries between countries in terms of trade, education, knowledge sharing, and other new technologies, while on the other hand, the bad side is that it has created a considerable gap between developed and developing countries, then different types of commercial, political and other conditioning, and dependence on strong, developed states. A great contribution to the negative part of globalisation was of economic instability that occurred at the beginning of this century and which consequences are still present in the world. In this article, we presented the impact of economic instability on the price index through a comparative analysis of transition countries such as Montenegro, Serbia and Croatia over a period of five years (Croatia has just recently become a member of the European Union and due to that fact it was included in this study). The survey covered price indices relating to the prices of industrial products for the domestic markets, consumer price indices, indices of the hospitality services and the prices of the agricultural products.

Key words: globalisation, price index, transition countries

JEL classification: E00, E63, F62, P22, P51

Introduction

When we talk about the concept of globalisation through different views and definitions by researchers (Giddens, 2002; Cantwell, 1995; Mols, 2003; Dale, 2005),

it can be concluded that globalisation can have two connotations. The first is that globalisation is a process of integration of the world economy achieved through various forms of international trade, financial flows and investment, exchange of services, development of technology, information and ideas across national borders while strictly controlling the labour market migration. The other connotation, maybe a little simpler and rough, presents globalisation in a way that more advanced and developed countries hold together by relying on each other while poor countries, especially countries in transition, are put in subordinate position and largely depend on the developed countries. Globalisation and technical development contributed to a process of intensifying competition, with accent that there is no just one type of competition, but many more (pricing, technology, quality etc.). Globalisation, more noticeable now than ever before, has the influence not only on making competition between states and companies, but on many other factors like bigger capital and labour force, GDP, prices, inflation... (Stupar, Matic, Todorović, Samardžić, Ristić, 2013; Amin, & Trift 1996; Cantwell & Jane 1999) Author Vujović states that “the financial crisis, as a consequence of the globalisation, has hit all segments of the global market, including production, real estate, bank loans and stock (capital) market almost simultaneously; second, the financial crisis has spread very fast to the world trade and real economy in the entire world” (Vujović, 2011). As it is known, globalisation has a very great influence on undeveloped countries and transition countries. Joining the European Union is a crucial thing for transition countries such as Montenegro, Serbia and Croatia (as countries included in this research) because the EU accession represents the starting point in diminishing dependence on developed countries, thus eliminating the second connotation stated above. Here I will present a comparative analysis of the price indices over the five-year period in the transition countries – Montenegro, Serbia and Croatia and the influence of economic instability on the price indices in the observed period.

Theoretical background

Generally, globalisation clearly shows two processes. On one hand, globalisation is led by market forces that manifest themselves either through increased competitiveness and the desire for bigger and bigger profits. On the other hand, globalisation is conditioned by technological revolution, particularly in information and communication technology and transport, which has largely erased geographical barriers and changed the relations between time and space. The flat borderless world powered by knowledge, as Friedman sees a globalized world, the victory will take those who are the fastest and smartest (Friedman, 2005). This view implicitly highlights that globalized society actually is extremely com-

petition-oriented. In fact, globalisation certainly is not a value-neutral. (Turajlić, 2009) With ongoing rapid development of information and communication technology at the time of socialism collapse, globalisation is naturally grounded in the concept of free market capitalism with a high degree of deregulation, and the neoliberal economic theory based on high confidence in the efficiency of markets and the demand for privatization of public goods. Logic and ideology of the globalisation represent a free global labour market, finance and goods (Turajlić, 2009). The aforementioned three factors largely depend on the price indices, especially when it comes to the price of goods and, therefore, the impact of globalisation and trends that have been occurring are inevitable, as is the economic instability that has taken the biggest swing on the global level as of 2008. In order to improve price indices of different products, some countries need to approach new forms of business and accept new knowledge (Radošević, Pasula, Berber, Nešković, Nernadžić, 2013; Berber, Pasula, Radošević, Ikonov, Kočić-Vugdelija, 2012; Lumpkin & Dess, 1996; Low & Macmillan, 1988; Clarida, Gari and Gertler, 2000). One of these approaches is certainly monetary policy, which is the main mechanism for inflation control (so-called targeted inflation) in a country which maintains the price index stability. Reference interest rate is one of the main monetary policy instruments discussed in this article. The interest rate of transition countries implemented in the main open market operations (currently in reverse repo transactions, and/or repo transactions in securities) is with the transaction maturity of one week. Other instruments of monetary policy that have a supporting role and contribute to a smooth transmission of influence of the reference interest rate on the market, and which contribute to the development of financial market are presented as:

- open market operations,
- required reserve,
- credit and deposit facilities (standing facility) , and
- intervention in the foreign exchange market (NBS, 2012).

Some authors emphasize that the monetary policy of targeted inflation was introduced in the early 1990s (Svensson, 2002). Authors Jonas and Mishkin (2003) emphasize the following reasons why some countries introduce monetary policy of targeted inflation:

- ensuring a credible monetary policy,
- providing for independence of the central bank monetary policy, while maintaining full responsibility for its operations,
- reducing social and economic costs (by reducing inflation).

In order to create prerequisites for the introduction of the monetary policy of targeted inflation Žigman and Lovrinčević emphasize that it is necessary to provide:

- sustainable public finances,
- knowledge of the transmission mechanism between monetary policy instruments and inflation,
- a developed financial system,
- independence of the central bank with the aim of maintaining price stability as the primary task,
- capacity for good judgment and forecasting of inflation,
- transparent and credible monetary policy (Žigman & Lovrinčević, 2005).

As each production and service systems have their own processes, monetary policy also consists of processes defined as the monetary policy transmission mechanisms through which monetary policy affects macroeconomic aggregates (aggregate demand, production and prices). The transmission mechanism is expressed through a variety of channels that allow the determination of the most efficient set of monetary policy instruments and the choice of the beginning of its application (NBS, 2012). The knowledge of the transmission mechanism of monetary policy is a prerequisite for the successful implementation of the policy of inflation targeting. The usual transmission channels of the monetary policy are (Mishkin, 1996):

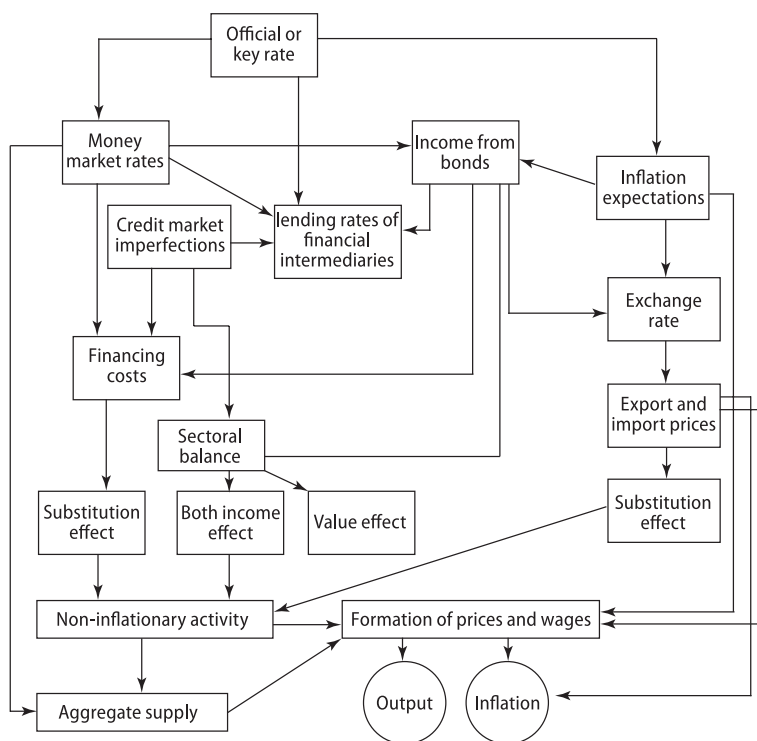
- interest rate channel – when it comes to the interest rate channel, as opposed to the traditional approach where interest rates only affect business decision-making, the modern approach is that the interest rate affects investment decisions of the wide public (housing loans and consumer durables). In addition to making decisions on spending, the importance of real interest rates and long-term interest rates is also emphasized. The conclusion follows the logic of the traditional approach, with the expectation that lower real short-term interest rates lead to a decline in the long-term real interest rates.
- exchange rate channel – in the system of the floating exchange rates more attention is paid to the effects of monetary policy on exchange rates that affect exports and aggregate output. In developed market economies, when domestic real interest rates fall, deposits in a national currency also decline, while deposits in foreign currencies grow. As a result, the value of the national currency reduces (depreciation), the value of the domestic currency is lower than the foreign goods, which causes a rise in net exports and aggregate output (Lučić, 2011).
- equity price channels – so-called Tobin's Q, a theory of James Tobin about possible effects of monetary theory on economics via stock prices. Q is the

ratio of enterprise market value and the cost of the capital replacement. If Q is high, the market price of an enterprise is high relative to the replacement value, and a new factory or capital equipment is cheaper in relation to the market value of the enterprise. Conversely, when Q is low, the company will not purchase new investment goods because the market value of the company is low in relation to the replacement value (Summers, 1980).

- credit channel – due to the asymmetric information in the market, monetary policy affects banks and their lending activities and the assets balance of companies and households through the credit channel. The credit channel is powerful in countries where borrowings are made mainly through the banking system, whereas in systems with developed financial markets it has more powerful effect on small and medium-sized enterprises (SMEs) rather than on the large ones because the latter can access the securities market (Lučić, 2011). There are two types of credit channels (bank lending channel and balance sheet channel).

A more detailed presentation of the monetary transmission is given by Berkus, Figure 1.

Figure 1. Channels of monetary transmission according to Berkus (1998)



Since the impact on inflation is the primary aim of monetary policy, this article gives an overview of inflation in transition countries, with the emphasis on future variations in this segment as potential business opportunities or threats to the price index segment. Figure 2 shows the inflation rate in the Republic of Serbia where the darkest part of the band represents the probability of inflation decline in the range of 10%. Each of the following shades includes 10% probability so that the entire projection range shows 90% of the projection probability. According to the NBS report, inflation in July 2012 was above the upper target limit, and in December 2012 it reached 12.2%. The growth of the inflation rate was the result of economic turbulence, not only on the supply side (food prices, administrative prices and an increase in consumption tax), but also on the demand side (fiscal expansion and strong depreciation). In response to rising inflation, the National Bank of Serbia increased the restrictiveness of the monetary policy during 2012 by raising the interest rate and intervening in the foreign exchange market. It relied on the exchange rate channel and the channel of inflation expectations as the most powerful channels of monetary transmission. After the reference interest rate was decreased at the beginning of 2012, this rate was raised six times during the same year. As a result of an increased restrictiveness of the monetary policy, inflation started to decline and it is expected that it will be within the target in 2013 (NBS, 2012).

Figure 2. The projection of inflation in the Republic of Serbia (NBS, 2012)

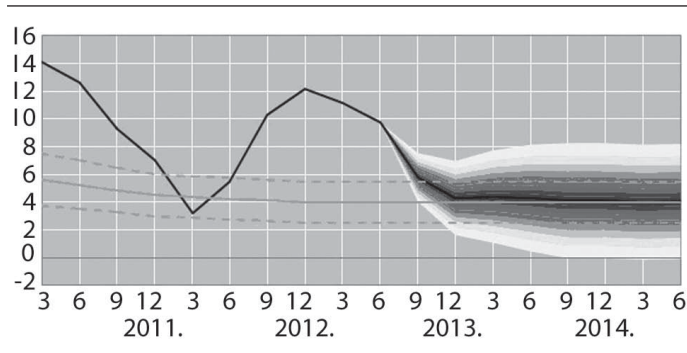


Figure 3 shows quarterly projections in the Republic of Croatia. According to the CNB report, it is obvious that there was a slowdown in the CPI inflation at the beginning of 2013. The slowdown occurred against the background of a very weak domestic demand and a slight decline in unit labour costs. In the middle of the year, there was a fairly high annual growth of the inflation rate of 5.2%,

which was mainly due to the government administration decisions (abolition of the zero VAT rate and an increase of some goods' and services' prices). After the government intervention, there was a slowdown in inflation and the annual rate of change dropped to 1.6%. Relatively low and stable CPI inflation is expected until the end of 2013. It is estimated that the average annual inflation rate will slow down from 3.4% in 2012 to 2.6% in 2013 (CNB, 2013).

Figure 3. The inflation projection in the Republic of Croatia (HBS, 2013)

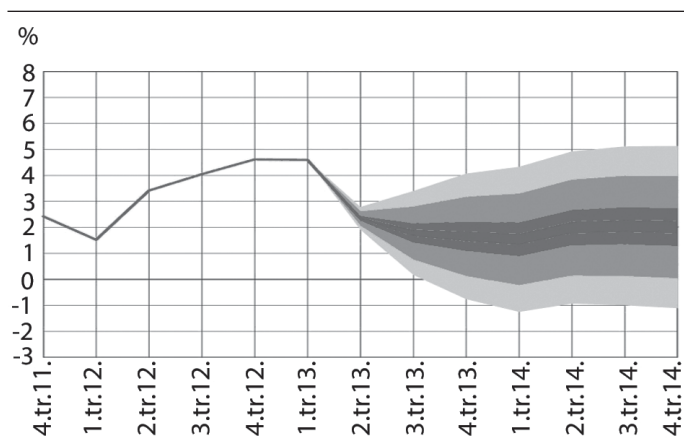
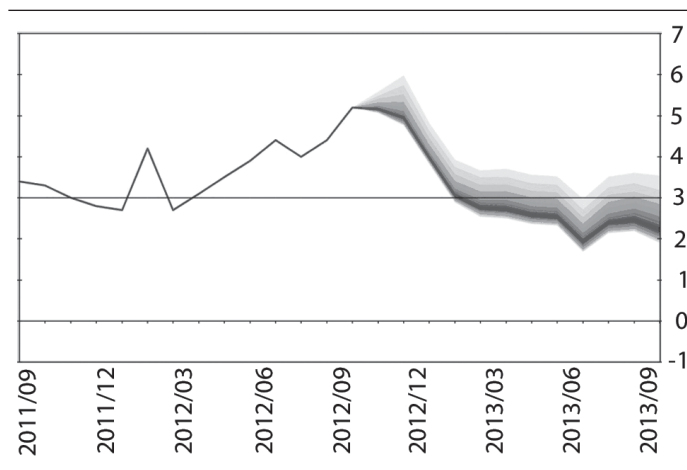


Figure 4 shows the projection of inflation in Montenegro. Based on the Central Bank of Montenegro (CBCG) report, inflation in 2012 was on an increase. For example, the annual inflation was 4% in August 2012 as a result of the growing prices of energy and food products and due to administrative measures. The annual inflation in 2012 was projected at the level of 4%, while the average CBCG projection was 4.75%. Negative trends in Q1 2012 were primarily conditioned by significantly lower actual revenues than the planned ones. It is estimated that the CPI inflation in 2013 will range from 1.7% to 6% over the year. According to the report, it is possible to conclude that at the end of 2012 inflation was in the range from 4.7% to 6%. At the same time, predictions are that inflation will range between 1.9% and 3.5% at the end Q3 2013 (CBCG, 2012; Ministry of Finance of Montenegro, 2012).

Figure 4. The projection of the inflation in the Republic of Montenegro (CBCG, 2012)

Besides inflation, the impact of globalisation and all their components on the price indices (the producers' prices of manufactured products, consumer prices, the prices of hospitality services and agricultural products) is the subject of this study and comparative results of individual countries in transition are shown further on in this article.

Methodology and analysis of the results

As stated earlier, the research includes three countries in transition: Montenegro and Serbia, as countries in the Balkan region aiming to join the European Union, and the Republic of Croatia as a country in transition that entered the EU in 2013. The comparative analysis covers the prices of industrial and agricultural products, consumer price indices and indices of hospitality services. Data on the prices of industrial products were obtained from the information on specific business facilities at one-month level for a certain number of products. The industrial product price index (IPPI) includes allowances, if a seller gets any, while the same price does not include discounts nor value added tax. Price indices for agricultural products are defined on the basis of data on the volume of sales of agricultural products while the hospitality price index is created on the basis of data on provided hospitality services. "The Consumer Price Index represents the retail price index used to measure inflation as the deflator of final consumption of the households." (Statistical Yearbook of Serbia - SYS, 2012) The CPI is calculated using a single formula for all three countries under the formula:

$$I = \frac{\sum \frac{P_n}{P_0} \cdot W_0}{\sum W_0} \quad (1)$$

and the formula for products that are not compared with the base products formed by collecting data:

$$I = \frac{\sum i_{n-1} \cdot \frac{P_n}{P_{n-1}} \cdot W_0}{\sum W_0} \quad (2)$$

where:

I_{n-1} – base index,

P_n – average price in the current month,

P_{n-1} – average price in the previous month,

P_0 – average price in the base month and

W_0 – the value of the sold quantities in the base period.

Figure 5 shows price indices for the Republic of Serbia, that is, the variations of the price indices over the five-year period.

Data shown in Figure 5 reveal that the greatest impact of the economic instability on the price index of agricultural products was particularly evident between 2008 and 2009 when the decrease amounted to 24.3%. When we look at the services price index, there was an increase until 2009, followed by a notable continuing decline in the price index of this business area. Although 2009 can be considered as the pivotal year in all areas, this cannot be said for the services sector in Serbia. Consistent variations in the price indices for the Republic of Serbia over the five-year period were seen with the consumer and industrial price indices which showed decline after 2008 with the tendency of continuous growth (SYS, 2012). In Figure 6 shows the variation of prices in Montenegro.

Figure 5. Variation of the price indices in the Republic of Serbia in five-year period

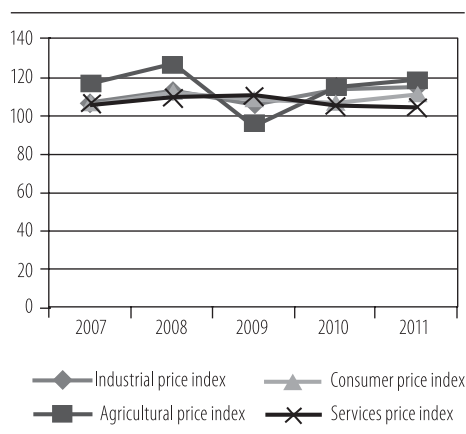


Figure 6. Variation of the price indices in Montenegro in the five-year period

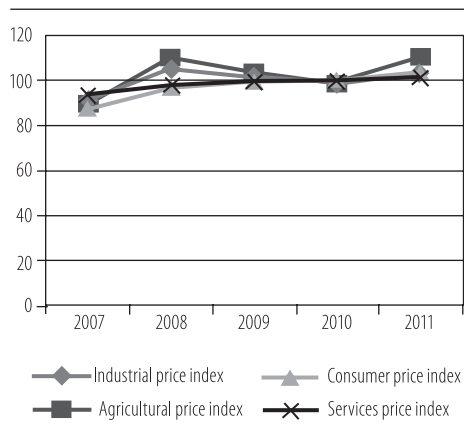
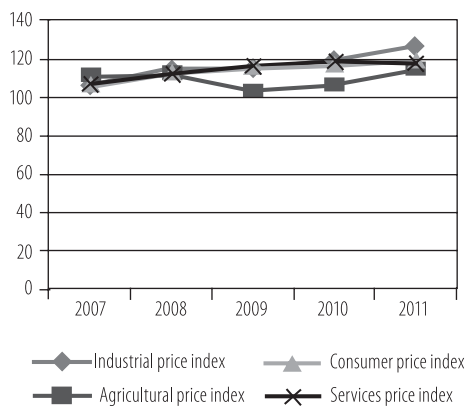


Figure 7. Variation of the price indices in the Republic of Croatia in five-year period



Reviewing the price index in Montenegro, it can be seen that economic performance had been on an uptrend during 2008, but the following two years were very unfavourable for the Montenegrin economy in terms of industry and agriculture until 2010 when slight increase in these branches has started. Unlike industry and agriculture, the consumer price index and the services price index recorded increases even at the time after the major impact of economic instability in 2008. If we take a look at the peaks in Figure 6, the most noticeable upsurge recorded the agricultural price index, 13.5% between 2010 and 2011 (Statistical yearbook of Montenegro - SYM, 2012). Figure 7 shows the variation of prices in the Republic of Croatia.

The Republic of Croatia is the only country in transition from the Balkans that joined the European Union in 2013. It recorded a fairly continuous growth in almost all surveyed areas. If we look at the consumer, services and product price indices, we can see that there was an ongoing growth even during the peak of the economic crisis between 2008 and 2010. Although the growth in this period was small, positive trends in most countries, apart from Serbia and Montenegro, cannot

be ignored. In contrast to the consumer, service and industrial price indices, the highest variation was recorded by the agricultural price index. A downtrend in this area had been evident even before 2007 and it lasted until 2009 when this index started recording a continuous increase (Statistical Yearbook of Croatia - SYC, 2012).

The overview of the price indices and the comparative analysis of the price indices in Serbia, Montenegro, and Croatia show significant differences. When we look at the price index of agricultural products, it can be seen that Serbia and Montenegro have approximately the same variations as opposed to Croatia that has experienced increase not before 2009 and that is slowly picking up pace in this area primarily due to the accession credits that were extended to the EU accession state in that period. When we analyse the industrial price indices, we can see a constant upward trend in Croatia, while increases in the Republic of Serbia and in Montenegro were recorded as of 2009 and 2010, respectively. The hospitality price index was on a continuous increase in the observed five-year period in Montenegro, and especially in Croatia. This trend can be connected to the marine tourism that is highly developed in these two countries and it represents a very important economic sector in both countries. Unlike Croatia and Montenegro, Serbia had recorded growths in this area until 2009, followed by a negative trend and in the next period, according to the available data. The consumer price index recorded the same trend in the observed sample and available data.

Conclusion

The aim of this article was to give a comparative analysis of the price indices of industrial production, agricultural products, consumer goods and services. The comparative analysis covered the transition countries in the Balkan region such as Montenegro and Serbia on one side, and also Croatia, as the only country in transition that recently joined the European Union, on the other side. The first two countries also aspire to the same goal as Croatia with a view to getting access to new markets, new European funds, new knowledge, technologies and the like. The purpose of the comparison is the presentation of examples of a good practice that would help the neighbouring countries to overcome problems in their economies and policies and turn around negative sphere of business into a positive one. The price indices as some of the indicators of economic performance point to positive and negative trends over years and beg the questions of what needs to be changed in order for them to improve, whether through new fiscal policies, the introduction of a new tax system and the like. Only by implementing good practices in similar countries, Serbia, Montenegro and Croatia can improve their price indices in different areas. One of the ways for reaching this is to explore the best practices of the neighbouring countries and through the various forms of cooperation projects.

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