

Radukić, Snežana; Marković, Milan; Radović, Milica

Article

The Effect of Food Prices on Inflation in the Republic of Serbia

Journal of Central Banking Theory and Practice

Provided in Cooperation with:

Central Bank of Montenegro, Podgorica

Suggested Citation: Radukić, Snežana; Marković, Milan; Radović, Milica (2015) : The Effect of Food Prices on Inflation in the Republic of Serbia, Journal of Central Banking Theory and Practice, ISSN 2336-9205, De Gruyter Open, Warsaw, Vol. 4, Iss. 2, pp. 23-36,
<https://doi.org/10.1515/jcbtp-2015-0007>

This Version is available at:

<https://hdl.handle.net/10419/217573>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0/>

DE GRUYTER
OPEN

UDK: 336.748.12(497.11)

DOI: 10.1515/jcbtp-2015-0007

Journal of Central Banking Theory and Practice, 2015, 2, pp. 23-36

Received: 2 April 2015; accepted: 20 April 2015

Snežana Radukić ***Milan Marković ******Milica Radović ****** University of Niš,
Faculty of EconomicsE-mail:
snezana.radukic@eknfak.ni.ac.rs** University of Niš,
Faculty of Economics*** University of Union,
Faculty for legal and business
studies, Novi Sad

The Effect of Food Prices on Inflation in the Republic of Serbia¹

ABSTRACT: In the Republic of Serbia, food accounts for a significant share in the consumer price index through which the inflation is statistically expressed. Therefore, in considerations of the basic factors of increase in the general price level, a special emphasis is placed on the specific features of the market of agricultural-food products. The aim of this research is to peruse the effect of the characteristics of the food market in Serbia on the inflation rate. High volatility of food prices is present because of the instability of this market, mainly due to seasonal fluctuations of supply and the effect of natural factors. Bearing in mind that the increase in food prices is the main determinant of the increase in the inflation rate, the indirect state control is very important so as to maintain price stability. Special importance is attached to the following instruments of economic policy: commodity reserves, storage policy, and fiscal and foreign trade policy.

KEY WORDS: food market, volatility of food prices, consumer price index, economic policy, inflation, the Republic of Serbia.

JEL classification codes: E31, E58, Q11

¹ *Acknowledgements:* The paper presents a research within the project number 44007 supported by the Ministry of Education and Science of the Republic of Serbia.

1. Introduction

According to the basic market legalities, lower aggregate supply in relation to aggregate demand of goods causes an increase in the general price level. When we analyse the food market, we can notice that the imbalance between supply and demand often occurs. Discrepancy, i.e. instability in Serbia has usually occurred because of faster increase in demand over supply, i.e. because of natural and other factors that have influenced supply limitation. The characteristics of this market are very important when considering the basic determinants of inflation. The point is that unlike the demand for the basic agricultural food products, which is primary, mass and unpostponable, their supply varies because of the combination of factors of price formation on the food market. With the aim of perusing the influence of food prices on the inflation, we state that the share of food in the consumer price index is 34.52% (Statistical Office of the Republic of Serbia, 2013), so that the price movement of this group of products has a dominant influence on the fluctuations of the general price level. Also, price movements of food products are significantly more unstable than price movement of non-food products.

The inflation represents the increase in the general price level. It is measured by the means of the inflation rate, which is calculated in our country on the basis of the index of the increase in consumer price. The most important determinants of the increase in the general price level in Serbia are monopolistic and oligopolistic market structures, depreciation of the national currency, tax growth and specific features of the food market, which will be the main subject of this research. Inflationary effects of monopoly and oligopoly are manifested if they figure in the field of production and turnover of subsistence products. Serbia is the economy with high inflationary expectations and great import dependence because of the shortage of domestic substitutes, so that every disruption in the direction of the increase in the exchange rate is quickly transferred to inflation. When the import inputs become more expensive, it leads to an increase in production costs which directly lead to an increase in the consumer prices of products. A large number of raw materials and agricultural inputs in Serbia are imported from other countries, so that in the conditions of depreciation of the national currency, a strong effect is on inflation. Tax growth due to an increase in the tax rate or increase in tax base, also has inflationary effect. Thus the producers are discouraged, which reduces the supply of products on the market. In the research, we will dwell on the observation of the characteristics of the market of agricultural-food products in the Republic of Serbia as the factors of inflation.

The increase in food prices automatically reflects in an increase in the general price level, which leads to the conclusion that the key challenge of economic pol-

icy makers is the maintenance of stability on this market (Gregorio, 2012). The aim of this research is also to show the measures of indirect state regulation of prices, so that the economic policy makers could react in an appropriate way in case of appearance and development of inflationary tendencies due to the instability on the food market. Indirect price control includes a wide range of measures in regulation of supply and demand on the market. It is carried out by the Government and the Central Bank; it exists in all economies, and relates to the products that have the greatest influence on the inflation (Stojanović, 2009). The final aim of this stabilization function of the state is the effect on the price level, and/or the prevention of the manifestation of high inflation rate. The function of commodity reserves, as well as storage policy, will be explained in this paper. Then, the measures of fiscal policy that can also be useful in terms of matching of supply and demand will be pointed out. Foreign trade policy that positively influences the stabilization of sensitive markets will also be discussed.

2. Methodology

The consumer price index contains the standards that are related to the particular groups of products, as well as to the particular products and it is connected to monthly consumption of goods (products and services) by residents. The research proceeds from the most important component of the consumer price index in Serbia, as well as in other less developed countries. It is about the food that constitutes 34.52% in the structure of the stated index that serves for the calculation of inflation in Serbia. It automatically means that food prices are the main determinant of the total movement of the general price level. For example, an increase in the food prices of only 1% causes the increase in the inflation for 0.3452%. In Serbia, it is important to consider the important factors of the food price formation because this share is among the highest in Europe. Due to great fluctuations of food prices, the volatility of inflation (which is measured by the standard deviation) is extremely high in Serbia. By the division of the consumer price index into certain categories (groups of products), the contribution of these components to the increase in inter-annual inflation is analysed.

3. Literature Review

Several authors have dealt with the stated subject in Serbia. Djukić et al. (2009) discuss the basic characteristics of price movements of agricultural products, placing a special emphasis on monetary policy of the National Bank of Serbia

with the aim of curbing increase in the prices of this category of products. In addition, this paper aims to explain the primary and secondary effect of the increase in agrarian products on the inflation. In contrast to this paper, our research observes the food products as well, while from the standpoint of the measures of economic policy that limit the increase in the general price level, apart from monetary, it also suggests the instruments of fiscal, foreign trade and the policy of commodity reserves and storage.

The paper of the authors Milanović et al. (2011) also proceeds from the assumption that the ensuring of stable price level is important for maintenance of macroeconomic stability and carrying out the strategy of inflationary targeting. This research also favours the measures of monetary policy which influence the stability of food price with the aim of maintenance of target inflation rate. In addition to the consideration of the general price level in Serbia and neighbouring countries, the tendencies on the global level are also shown in terms of the influence of the increase in food prices on the inflation.

With regard to foreign literature, the report of FAO (2011) and other organizations in which the concept of volatility is defined is especially significant, placing the special emphasis on the prices of agricultural and food products. Sustainable production of food with high productivity has a key role in the stability of this market. Also, the determinants and consequences of volatility of food prices are analysed, and because of the volatility of the prices of primary agrarian products. Wilson (2012) also considers the volatility of the prices of agricultural and food products.

The paper of Christopher et al. (2012) shows the empirical presentation of the inflation rate movements in Tanzania, using the model for monitoring the influence of the key factors of inflation (food, energy, base inflation). It is concluded that, in addition to world food prices, domestic factors are also important determinant of inflation.

The following research IMF (2012) shows that the share of food in consumer basket is significant in underdeveloped economies, so that the increase in core inflation is mostly caused by the increase in food prices, and not by “energy inflation”.

A more detailed analysis of the factors that influence inflation caused by the increase in food prices is shown in the paper of Baek and Koo (2010). Also in the USA, this kind of inflation “food price inflation” is of increasing importance. In addition to the prices of energy and primary agricultural products, the exchange rate that influences inflation, both in the short and long term, is also introduced

into the analysis. Having in mind large contingent of import energy substances, the influence of the increase in their prices on general increase in prices is quite clear.

Berument and Sahin (2010) deal with the seasonal volatility of consumer price index on the basis of empirical research in Turkey. In some cases, the volatility of inflation is more important than the rate of inflation. This paper discusses the models and predictions of inflation. Also, Caraballo and Dabas (2013) analyzes the relationship between inflation and relative price variability in the example of Spain. The paper shows that the optimal rate of inflation is higher than that targets stayed by the European central bank, while low inflation expectations are extremely important.

Goşa and Feher (2011) emphasize that one of the main problems in the developing countries is a negative effect of the increase in food prices on the economic stability. The share of groups and particular products in the consumer price index is perused, as well as the import dependence of certain goods during 2010 and at the beginning of 2011.

The paper of Bojnec and Latruffe (2011) shows among other things, the role of fiscal policy in financing agricultural production in the case of the transition of Slovenia to a market economy. Subsidies are a powerful tool for promoting agricultural production and justify a greater number of investment decisions. Production shall be financed depending on the availability of these funds. Budgetary constraints are analysed through the model of the accelerator.

Rangasamy (2011) has researched the trends in the change of food prices in South Africa from 1980 to 2008. He has concluded that food price can create enormous inflationary pressures in the economy. Also, economic policy plays a decisive role in preventing the development of inflationary disruptions, primarily the monetary policy, which should react with the aim of maintenance of the stability of the general price level.

In the countries that are highly dependent on the food import, such as Mexico, the movement of world food prices contributes to the development of inflation. Thus Cruz et al. (2011) have analysed not only the reaction of monetary policy but also the possibility of developing the domestic agricultural production as long-term solution of the perceived problem.

4. The Effect of Food Price Movements on the Stability of the General Price Level

Agricultural and food products participate with 34.5% in the consumer price index, which represents the greatest share in regard to neighbouring countries (Milanović, Ljubić and Muminović, 2011). The share of certain groups of products in the consumer price index in Serbia is shown in Table 1. In May 2013, the new structure of index was published because of the compliance with the methodology of the EU. The share of food has been reduced for 4.2 of percentage points, and it is 34.5% (unprocessed and processed food).

Table 1: Weighting factors for derived groups of products and services of the consumer price index (in percent)

Groups of products	Weighting factors
Unprocessed food	12.6
Processed food	21.9
Industrial products without food and energy	29.9
Energy	14.8
Services	20.8
Consumer prices (IPC)	100

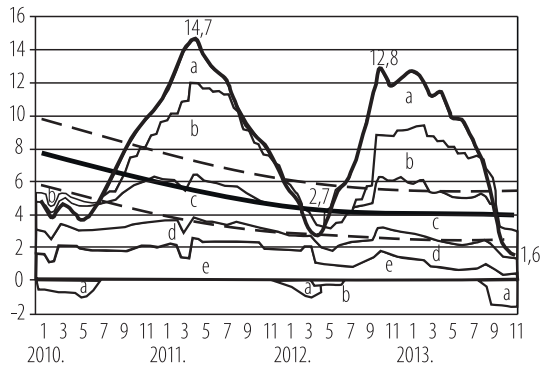
Source: The National Bank of Serbia, 2013a and the systematization of the authors.

It should be pointed that the prices of energy generating products put a lot of pressure on the increase in food prices, taking into account that the energy represents the key condition in the production of both unprocessed (petroleum) and processed food (electric energy). It is mostly about the increases in prices because of the increase in world price of petroleum, exchange rate or excises.

The increase in the prices of petroleum and petroleum products (energy substances) is directly transferred to the increase in agricultural-food products. Many researches also practically confirm direct correlation that exists between the prices of energy generating products and agricultural products (Price Volatility in Food Agricultural Markets: Policy Responses, 2011). High import dependence of products that are used as inputs in the production of food (energy generating products, raw materials, machines), at a constant increase in the exchange rate, raises the so-called cost-push inflation.

Fluctuations of food prices are very unpredictable. Due to the dependence on weather conditions, there is a high degree of volatility of the prices of agricultural-food products (Djukić, Pješčić and Vilaret, 2009). In Figure 1, we will show the cycles of inflation which occur because of the fluctuations of food price. In the periods with high rate of inflation, the key reason of increase in prices is just the increase in the prices of both unprocessed food (raw agricultural products) and processed food (and that is usually after relatively short period after the end of “poor” agricultural season). If we make comparison of the degree of food volatility among neighbouring countries, we can notice that its highest degree is recorded in our country.

Figure 1: High volatility of food price (contributions of the components of consumer price index to the increase in inter-annual inflation)



Legend:

- a – Unprocessed food
- b – Processed food
- c – Industrial products without food and energy
- d – Services
- e – Energy
- IPC inflation
- Permitted deviation

Source: The National Bank of Serbia, 2013b.

Mentioned authors distinguish primary and secondary effects of movements of prices of agricultural products on inflation. The primary effects are reflected in the direct influence of their prices on the increase in the general price level and in cost effect (because they are used as inputs in the production of industrial food products). The secondary effect implies an increase in inflation because of the increase in earnings and inflationary expectations, and because of the increase in food prices. How great this effect will be primarily depends on the credibility of the Central Bank. In the economies that are hypersensitive to inflation, workers constantly require wage increase and on the occasion of very small increase in food price. In such economies, the habit of constant increase in labour cost, i.e. earnings, is formed. Then it causes the increase in the costs of production (cost-push inflation) and the increase in consumption (demand inflation). It is about the so-called wage-price spiral which is difficult to eradicate, especially in developing countries where there is inflationary inertia (due to the increase in prices in the previous periods).

5. Specific Features of the Market of Agricultural-Food Products

Given that the prices which are formed on the food market represent the main determinant of inflation, it is necessary to consider the factors that influence supply and demand. When we talk about the food market we think of the markets of agricultural and food products. Thereby, there is an unbreakable connection between agriculture and food industry. Due to the specific features of agricultural activity, the fluctuations of food supply occur from period to period. Thus the shortage of some agricultural product causes also the deficit of the food products because the food industry is industrial branch that processes the largest number of primary agricultural products. On this basis, we conclude that the movement of prices of food products largely depends on the fluctuations of prices of primary agricultural products which represent the basic inputs in their production.

Discrepancy between supply and demand of agricultural-food products in Serbia has mainly occurred because of faster increase in demand than in supply (Djekić, 2010). Insufficient elasticity of supply and demand of agricultural products is present, so that occasional fluctuations cause instabilities in the food market. For perusing the formation of food prices, we will analyse the determinants of the formation of supply and demand on the market of agricultural products. Thereby, the key factors are those on the supply side.

When we talk about the demand for the basic agricultural-food products, we can notice that it is primary, unpostponable and mass. It is about the subsistence products that are important for life and work of the population. It is about relatively stable category. Aggregate demand for these products depends on many factors, such as: population growth, earnings, income elasticity of demand. With the reduction of income, in most cases, demand for existential goods mainly remains the same or is slightly reduced in accordance with the first Engel's law.

On the other hand, supply of these products has highly fluctuated in the previous period. It has happened because of insufficient incentive and inconsistency of the measures of agricultural policy. Incentive programs for agriculture, which have provided specific amounts of premiums, subsidies and credit support, have changed from year to year. The changes of conditions and ways of their use have occurred. All this has influenced insufficient motivation of agriculturalists for the production, which has caused the increase in prices because of output deficit in the market. Decreasing agricultural production can cause increased import of food, which will, because of the pressures on the increase in exchange rate, surely cause the increase in inflation rate. In further considerations we will analyse the

most significant negative factors that have contributed to the decrease in supply of agricultural products in Serbia.

Natural factors are the main cause of instability of the market of agricultural food products. This is because the largest part of agricultural production is done in open air. It is especially characteristic for vegetable production. Hail, storm, floods, drought are typical climatic factors that cause the decrease of yield (product shortage) and consequently, the increase in prices. The tendency of increasing of average age of active agricultural population and of abandonment of rural areas of young potential workforce will be one of limiting factors for the increase in production. Older farmers are not motivated to apply modern technical-technological achievements. Thus the productivity is reduced because of weaker breakthrough of innovations. Additional problem is non-existence of the irrigation system. Less than 5% of cultivated area in Serbia is covered by irrigation. It is a very negative fact, since it increases the dependence on natural factors.

A large number of farmlands produce only for their own use. It is primarily the characteristic of highland areas. The cultivated areas are insufficiently used, while fragmentation of parcels prevents the realization of effects of the economies of scale, the increase in productivity and effectiveness of agricultural production. All that influences insufficient supplying of the industry with inputs from agriculture and the incomplete use of processing capacities.

Inelasticity of supply of agricultural products in the short term is an important factor that must be perused while analysing this market. In that case, the scope of supply depends on the state of the existing stocks. The lower the inventory level, the less elastic the supply. In that case, one cannot react by the supply to the initial incentives on the market, which are reflected in higher prices, increased demand or income of the population. In this way, the imbalance between supply and demand further deepens. When there is a proper functioning of the system of commodity storage, the imbalances in the market can be annulled in the short term. It lasts until the existing stocks are exhausted. The supply cannot respond quickly because of long production cycles in agriculture.

6. Measures of Economic Policy in the Terms of Stabilization of the Food Market

Due to volatility of the market and food prices, the government authorities make various programs for the harmonization of supply and demand and for stopping the increase in prices. By taking the measures to increase or decrease the supply

and demand, the state indirectly influences the level of the prices of products and services on the market (Božić, 2009). The role of the state in this area is of crucial importance for the development of production, ensuring the balance between supply and demand and stability of the market.

Holders of macroeconomic policy often use commodity reserves so as to ensure the neutralization of greater fluctuations of prices and seasonal fluctuations of agricultural production. Large market distortions occurred during the previous years (especially in 2012). Disruptions occurred because of the combination of the effects of external and internal factors. On one hand, world food price recorded a turbulent growth, and on the other side, the agricultural production was several times lower compared to 2011. Commodity reserves are very powerful mechanism for bringing into harmony the supply and demand of products such as oil, wheat, sunflower, corn, meat, sugar. It is both about primary agricultural products and the food goods. Also, in the periods of lower yields, ensuring of the inputs in the agricultural production (for example the forage) is of crucial importance for agricultural producers, so as to perform the process of production smoothly. Ensuring the stable and continuous supply influences at the same time on the stability of the food market, food prices, the general price level, but also on the permanent satisfaction of consumer demand. The commodity reserves in Serbia, through the intervention sales, are important instrument for prevention of inflationary disruptions. This is because increase in the prices of agricultural products is conveyed after certain period to the increase in the prices of processed food.

Storage policy is connected to commodity reserves policy. Storage is the deposition of products (cereals, fruits, vegetables, industrial plants) and their safe keeping in accordance with the contract on storage (Božić, Bogdanov and Ševarlić, 2011). Agriculturalists dispose the goods in the warehouses and by their delivery they get the warehouse receipt as the certificate of ownership of the products. In this way, multiple effects may be achieved. Namely, agricultural producers, in the conditions of the concentration of crop because of the increased supply, would not achieve the appropriate prices. Therefore, they should delay the placing of their products on the market by their deposition in the warehouses. Later, when a good time is estimated for the presentation of the products, they may be placed on the market at much more favourable prices. Let us analyse the positive effects of this. The producers will achieve the higher income, the market will be in the state of balance during the whole year, the state will intervene less from the commodity reserves, and significant fluctuations will not occur. Policy of agricultural crediting can also be realized by this, because the warehouse receipt can serve the

agriculturalists for getting a loan at favourable interest rates for improving of the production, purchase of forage, agricultural mechanization and the like.

Through tax relief and release (fiscal policy), the producers are stimulated to increase the production, and that contributes to the processes of price stabilization. When the cost element is dominant, then the tax cut has anti-inflationary effect, with the proviso that by accompanying and additional measures of economic policy, the increased purchasing power of taxpayers is absorbed, because of the increase in real disposable income (Popović, 1997). Also, subsidies, as the instruments of fiscal policy, influence the increase in agricultural production. Subsidies are a type of state expenses that can be in the form of premiums, refunds, direct payments, credit support. However, there are also some opposing views that point out that in case of lack of incentive, agriculturalists would increase the supply of their products so as to maintain their standard of living at the same level (Varijan, 2010).

Intervening in the area of the import of goods from abroad and restrictions of the export are important measures for achieving higher level of supply of the domestic market. The measures of foreign trade policy influence the regulation of the relationship between supply and demand on the domestic food market similarly as the system of commodity reserves. Quantitative export restrictions include the quotas and contingents and their aim is to limit the export and to stabilize the food prices in the conditions of poor agricultural season. The value of goods which can be imported duty-free or at reduced tariffs is determined by manipulating tariff quotas. Further reduction of tariff rates on the imports of food from the European Union should contribute to lower degree of fluctuations of food prices.

In order to increase agricultural production, the state can provide credit facilities. If we look at the conditions for getting a loan in the banks in our country, we will see that they are very unfavourable from the standpoint of prospective borrowers. Interest rates are commercial and vary over 20% per annum. Impossibility of accessing credit is especially expressed in the present-day crisis environment. The state does not have sufficient budgetary funds for reimbursement; the banks, because of risky business, reduce credit activity that is already poor in the area of agriculture.

Seasonal fluctuation of the supply of agricultural food products is one of the main factors that influences on the stability of prices in Serbia. However, in the processes of price stabilization, the monetary authority must also pay attention to the basic factors that influence the food price: inflationary expectations, in-

ertia, the exchange rate, import costs, costs of raw materials. Due to traditional high inflation rate in Serbia, inflationary expectations are constantly present. The exchange rate and inflation are in relations of direct and mutual correlation. It is particularly present in underdeveloped economies in which there is inflationary inertia. In the countries that are highly import dependent, an increase in the exchange rate will strongly influence an increase in the food prices because of growth in input costs.

7. Conclusion

Agricultural food products are an important component in the formation of the consumer price index, so they represent the main source of the changes in the general price level. It follows that the food market is the main determinant of the stability of total (national) market. That is why the movements in this market are important while considering the basic determinants of inflation. Annual inflation rate often depends on what the agricultural season is like. Agricultural products are used as inputs in the food production. A good agricultural season enables a reduction of food production because of low prices of primary agricultural products. Thus the food price falls, as does the inflation rate. Ensuring a stable and continuous supply simultaneously influences price stability, both in the food market and in overall market (the general price level).

Measures of indirect state control of prices, which influence the curbing of inflation through the regulation of supply and demand, are shown in the paper. It is about the instruments whose aim is the stabilization of the market of agricultural-food products, which is very specific. Shortage of these products (taking into account the dependence on natural conditions and other mentioned factors) causes the increase in prices. Every minor disruption in agricultural production (supply) can create negative implications on the market stability, the general price level, and satisfaction of consumer demand. Previously stated problems can be overcome by adequate storage system and the policy of subsidies and commodity reserves. Thus the supply of products is increased and stabilized on the market, the prices are reduced, and regular and continuous satisfaction of the consumer demand, which is unpostponable and mass in the subsistence products, is enabled. It should be pointed out that in the short term, one can influence these through the measures of economic policy (indirect price control). However, in the long run, considerable investments are necessary in the area of agriculture with which the food sector is multiply connected.

References

1. Baek, J., Koo, W. (2010), „Analyzing Factors Affecting U.S. Food Price Inflation“, *Canadian Journal of Agricultural Economics*, 58: 303–320.
2. Berument M. H., Sahin A. (2010), „Seasonality in Inflation Volatility: Evidence from Turkey“. *Journal of Applied Economics*, Vol XIII, No. 1: 39-65.
3. Bojnec, Š., Latruffe, L. (2011), „Financing Availability and Investment Decisions of Slovenian Farms During the Transition to a Market Economy“. *Journal of Applied Economics*, Vol XIV, No. 2: 297-317.
4. Božić, D., Bogdanov, N., Ševarlić, M. (2011), *Ekonomika poljoprivrede*, Poljoprivredni fakultet, Beograd.
5. Božić, M. (2009), *Ekonomika politika*, Pravni fakultet – Centar za publikacije, Niš.
6. Caraballo M. Á., Dabas, C. (2013), „Price Dispersion and Optimal Inflation: The Spanish Case“. *Journal of Applied Economics*, Vol XVI, No. 1: 49-70.
7. Christopher, A., Kwimbere, D., Mbowe, W., O'Connell, S. (2012), „Food Prices and Inflation in Tanzania“. *Working Paper Series N° 163*, African Development Bank, Tunis, Tunisia.
8. Cruz, M., Sánchez, A., Amann, E. (2011), „Mexico: food price increases and growth constraints“. *Cepal review* 105: 73-86.
9. Djekić, S. (2010), *Agrarni menadžment*, Ekonomski fakultet, Niš.
10. Djukić, M., Pješčić, V., Vilaret, S. (2009), „Kretanje cena poljoprivrednih proizvoda i reakcija monetarne politike“. *Ekonomika poljoprivrede*, Naučno društvo agrarnih ekonomista Balkana, Beograd, 56 (3): 469-479.
11. Goşa, V., Feher, A. (2011), „Inflația și prețul produselor agricole“, *Lucrări științifice*, Romania, seria I, Vol. XIII (3): 5-12.
12. Gregorio, J. (2012), „Commodity Prices, Monetary Policy, and Inflation“. *IMF Economic Review*, IMF, Washington, 60 (4): 600-633.
13. Marinković, S., Popović, Ž. (2011), „Currency quasi-forward formulae with costless and costly arbitrage“, University of Niš, *Facta Universitatis, Series: Economics and Organization*, Vol. 8 (2): 181-191.
14. Milanović, M., Ljubić, M., Muminović, S. (2011), „Uticaj cena hrane na ciljanu inflaciju u Republici Srbiji“. *Ekonomika poljoprivrede*, Naučno društvo agrarnih ekonomista Balkana, Beograd, 58 (4): 547-562.
15. Miljković, D. (2003), „Mehanizam uticaja promene deviznog kursa na inflaciju“. *Ekonomski anali*, Ekonomski fakultet, Beograd, 44 (3): 149-167.
16. Ministarstvo spoljne i unutrašnje trgovine i telekomunikacija Republike Srbije (2013), *Potrošačka korpa*, <http://mtt.gov.rs/informacije/potrosacka-korpa/> (accessed 2 June 2014).

17. Narodna banka Srbije (20136), *Prezentacija guvernera o makroekonomskim kretanjima u 2013.*, http://www.nbs.rs/internet/latinica/15/konferencije_guvernera/prilozi/20131220_JT_prezentacija.pdf (accessed 10 April 2014).
18. Narodna banka Srbije (2013), *Izveštaj o inflaciji – februar 2013.* http://www.nbs.rs/export/sites/default/internet/latinica/90/90_5/inflation_februar_2013.pdf (accessed 15 February 2014).
19. Narodna banka Srbije (2013a), *Izveštaj o inflaciji – maj 2013.*, Beograd. http://www.nbs.rs/export/sites/default/internet/latinica/90/90_5/inflation_maj_2013.pdf (accessed 12 May 2014).
20. OECD (2011), Price Volatility in Food and Agricultural Markets. *Policy Responses Policy Report* including contributions by FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF. <http://www.oecd.org/dataoecd/40/34/48152638.pdf> (accessed 5 June 2014).
21. Popović, D. (1997), *Nauka o porezima i poresko pravo*, Savremena administracija, Beograd.
22. Rangasamy, L. (2011), Food inflation in South Africa: Some implications for economic policy, *South African Journal of Economics* Vol. 79 (2): 184-201.
23. Republički zavod za statistiku (2013), *Indeks potrošačkih cena u Republici Srbiji novembar 2013*, Beograd. <http://webrzs.stat.gov.rs/WebSite/repository/documents/00/01/23/23/cn11122013.pdf> (accessed 20 February 2014).
24. Stojanović, B. (2009), *Mikroekonomija*, Ekonomski fakultet, Niš.
25. Varijan, R. H. (2010), *Mikroekonomija – izdanje na srpskom jeziku*, Ekonomski fakultet, Beograd.
26. Vlada Republike Srbije (2011), *Uredba o posebnim uslovima prometa određene robe*, Službeni glasnik Republike Srbije br. 102, Beograd. http://mpt.gov.rs/postavljen/160/Ogranicavanje_marzi5.pdf (accessed 5 June 2012).
27. Wilson, N. (2012), Discussion: Causes of Agricultural and Food Price Inflation and Volatility, *Journal of Agricultural and Applied Economics*, 44 (3): 423–425.