The Role of Remittances in Financing the Current Account Deficit: The Case of Serbia

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Abstract

Migrations of the resident population in Serbia, with the Western European countries as the main destination, have influenced remittances becoming an important source of income from abroad. Relevant economic literature, as well as the influential views expressed in the international financial institutions' reports, indicate that remittances are a more stable type of inflow of funds from abroad to developing countries compared to other types of capital movements. In addition to the positive economic effects of remittances, they also play a significant role in the balance of payments deficit reduction. The subject of this research refers to the examination of the role of remittances in financing the current account deficit in Serbia. The research goal is to explore whether the importance of remittances as a factor in the balance of payments deficit reduction in Serbia increased in the period 2007-2021. The results of the research show that remittances have become an important factor in current account deficit reduction in Serbia during the observed period.

Introduction

Unfavorable economic trends in developing countries are accompanied by discouraging demographic projections. Globalization and greater mobility of people, capital, goods, and services created the conditions for accelerated migrations from developing to developed countries in the process of pursuing a higher standard of living. The intensity of migration movements from developing countries to developed economies has influenced the increase in the importance of remittances not only as a social but primarily as an economic phenomenon.

In the economic literature, the remittance flows and their economic effects are increasingly examined. Remittances are an important determinant of the successful functioning of developing countries, considering the significant sources of funds that these countries generate based on the inflow of remittances from abroad (Abduvaliev & Bustillo 2020; Sevencan, 2023). The importance of remittances for developing countries is mainly analyzed

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through the viewpoint of their impact on economic growth and unemployment.

The importance of remittances for developing countries can be also confirmed in the case of Serbia. The size of the diaspora has contributed to a significant increase in remittance inflows over the last two decades (Đukić & Bodroža, 2022). In addition to rising remittance inflows, a significant feature of the Serbian balance of payments is its stability and moderate countercyclicality. On average, remittance inflows accounted for about 8% of the gross domestic product in the 2007-2021 period (Arandarenko, 2021). During most of the observed period, the annual remittance inflows exceeded 3 billion EUR. Those inflows were higher than annual foreign direct investments net inflows in most of the observed period (Gligorić & Janković, 2015).

The importance of remittances in the Serbian case is mainly examined in the context of promoting savings and investments or their impact on the gross domestic product. However, this paper focuses on the analysis of the role of remittances as an important factor in the current account deficit financing. The paper consists of four parts. The first part provides an overview of the relevant literature. In the second part, key characteristics of remittances in the Republic of Serbia were analyzed, with special reference to the geographical structure of the inflows and outflows of remittances. The methodology and data are presented in the third part of the paper, while the results of the research are presented in the fourth part of the paper. In the final part, conclusions are given.

Literature Review

Remittances have become increasingly important for developing countries over the last few decades. The rise of the remittance inflows in developing countries triggered many research papers, focused on the examination of the impact of remittances on the macroeconomic performance of developing countries. The most noteworthy research efforts dealt with the impact of remittances on economic growth, sustainable economic development, financial stability, labor market, poverty reduction, etc. Fayissa and Nsiah (2010) analyzed the impact of remittances on the economic development of 36 African countries in the 1980-2014 period. Their results suggest that remittances stimulate economic growth in most of the observed economies, especially in those countries where financial systems were less developed so remittances represent an alternative source of investment financing. Similar conclusions

were obtained by Guiliano and Ruiz-Arranz (2009), who examined the impact of remittances on economic growth in a sample of over 100 developing countries in the 1975-2002 period. Their results confirm that remittances can improve economic growth, but primarily in countries with an underdeveloped financial system.

Meyer and Shera (2017) examined the impact of workers' remittances on economic growth in six countries with high remittance inflows (Albania, Bosnia and Herzegovina, North Macedonia, Bulgaria, Moldova, and Romania) in the 1999-2013 period. The authors used the panel analysis to show that workers' remittances have a significant impact on economic growth in the observed countries. Besides the mentioned research efforts, the positive impact of remittances on economic growth has been confirmed in Cartinescu et al. (2009), Bucevska (2022), Faini (2007), Ziesemer (2006), Chaimi et al. (2005).

Rao and Hassan (2009) point to a somewhat smaller impact of remittances on economic growth. The authors used the Solow growth model and found that remittances affect economic growth, but this impact is marginal. Barajas et al. (2009) examined the interdependence of remittances and economic growth and found that the effects of remittances on economic growth are predominantly small and often negative. Ekanayake and Moslares (2020) examined the impact of workers' remittances on economic growth and poverty reduction in 21 Latin American countries in the 1980-2018 period using the least squares method and the autoregressive distributed lag approach. The authors concluded that workers' remittances have a positive longterm effect on economic growth in most of the observed countries, while these effects are not confirmed in the short term. Lim and Simmons (2015) looked at the impact on economic growth in the case of 13 countries of the Caribbean Community and the Common Market in the 1975-2010 period. The authors failed to find a long-term relationship between remittances and real gross domestic product per capita growth in the observed economies. Their findings suggest that remittances in the Caribbean economies are mostly aimed at financing consumption needs, that is, they are not directed toward growth-stimulating projects. Similar conclusions were obtained by Gapen et al. (2009), who found that the remittance inflows contributed very little to the economic growth in developing countries. The findings of the aforementioned authors indicate that in the case of certain countries there is a negative relationship between remittances and economic growth, that is, remittances contributed to the slowdown of economic growth. Similar conclusions were reached by Karapetyan and Harutynyan (2013) in the case of Armenia, pointing out that remittances have a positive effect on economic growth in the short term, but that their negative impact is present in the long term. Sutrahdar (2020) and Lacheheb and Ismail (2020) also suggest the negative impact of remittances on economic growth.

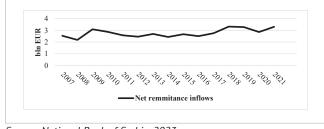
With regards to the impact of remittances on the current account, Buch and Kuckulenz (2010) highlight the positive impact of workers' remittances on the current account, indicating that remittances provide a significant source of funds, but also additional savings for economic development. However, the authors indicated that too much dependence on remittances in financing the current account deficit can worsen the overall balance of payments position. The positive impact of remittances on the current account is confirmed by Bugamelli and Paterno (2009) pointing out that workers' remittances play a significant role in financing the current account deficit. Hassan and Holmes (2015) suggested the positive implications of remittances to the current account. The authors examined the impact of net remittances on the sustainability of the current account deficit. Their research covered 47 developed and developing countries in the 1990-2011 period. Meyer and Shera (2015) analyzed the impact of remittances on the current account in Albania, Bosnia and Herzegovina, Serbia, Bulgaria, Romania, Moldova, and North Macedonia. The authors found that remittance inflows contribute to the improvement of the current account balance in the observed economies. The relationship between remittances and current account balance was also investigated by Lartey (2019). The author examined to what extent exchange rate regimes affect this relationship and emphasized the positive effect of remittances on the current account. However, the research results show that more flexible exchange rate regimes reduce the positive effect of remittances on the current account. Daianu et al. (2001) examined the role of remittances in financing the current account deficit in Romania, in the 1990-2000 period. The authors confirmed the growing importance of the remittance inflows for the Romanian economy, emphasizing that in 2000 remittances were the main source of financing the current account deficit in Romania. Salisu (2005) highlighted the presence of a positive relationship between remittances and current accounts in Sub-Saharan African countries, highlighting the important role of remittances in mitigating the problems in the current accounts of the observed countries. The importance of remittances in financing the current account deficit in African economies is analyzed by Osakwe and Verick (2009), emphasizing that inflows based on remittances reduce the current account deficit. In the 2000-2004 period, remittances financed 37% of the current account deficit on average in the observed economies, whereby in the case of Gambia, Senegal, and Togo, the inflow of remittances financed over 50% of the current account deficit. Nikolić (2006) analyzed the importance of

remittances for the Serbian economy and found that in the 2002-2005 period, an increase in the share of remittances in financing the current account deficit was evident. At the same time, the author points out that the final effects of remittances to the current account and the balance of payments, in general, depend on the proportion in which funds based on remittances are spent on the purchase of imported goods and services, which reduces their positive effects on financing the current account deficit. Đukić and Bodroža (2022) found that remittances are an important factor in neutralizing the balance of payments deficit in Serbia. The authors confirmed that in the 2010-2020 period, the inflows of remittances were sufficient to finance 78% of the current account deficit, on average.

The Dynamics of Remittances in Serbia

For developing countries, remittances represent a very significant inflow of funds (Rodima Taylor & Grimes, 2019). This is also the case with Serbia since remittance inflows exceed other types of inflows of funds, such as foreign direct investments and portfolio investments (Bukvić, 2016; Milovanović, 2021). However, remittances are also very important in the case of Serbia, because their inflows are more stable, compared to foreign direct investment inflows. By looking at Figure 1, which shows the net value of the remittance inflows in Serbia during the 2007-2021 period, it can be seen that in every year during the observed period, the annual remittance inflows exceeded 2 billion EUR, while they reached a record value in 2018 when the total inflows were slightly more than 3.3 billion EUR. The Covid-19 pandemic not only harmed the global economy but also left an unfavorable impact on the remittance inflows in Serbia, given that their level decreased in 2020, primarily due to the decline in economic activity in Western European Countries, from which most remittances are directed to Serbia.

Figure 1Annual net remittance inflows in Serbia, 2007-2021 (bln EUR)

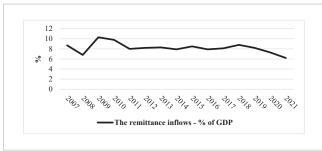


Source: National Bank of Serbia, 2023

The importance of remittances is most often expressed by their share in the gross domestic product. Figure 2

shows a relatively stable share of remittances in the gross domestic product of Serbia, given that during most of the period from 2007 to 2021, the remittances accounted for approximately 8% of the gross domestic product of the Serbian economy. The largest share of remittances in the gross domestic product was recorded in 2009 when they accounted for over 10% of the gross domestic product. Also, it should be pointed out that the years in which maximum values of absolute and relative remittance inflows are recorded differ. The highest value of the absolute inflow of remittances was recorded in 2018 (Figure 1), while the highest share of remittances in GDP was recorded in 2009 (Figure 2).

Figure 2The share of remittance inflows in the GDP of Serbia, 2007-2021



Source: World Bank, 2023

Regarding the geographical distribution of remittance inflows and outflows, some conclusions can be derived. Looking at the data in Table 1, it can be seen that the largest amount of remittances originates from Western European countries. Traditionally, the largest inflow

of remittances originates from Germany, followed by Switzerland, Austria, and France. When it comes to the remittance inflows originating from Germany, they accounted for approximately 30% of the total remittance inflow in the 2012-2021 period, with the smallest share recorded in 2014 (24.2%), while the largest share in total inflows was recorded in 2012 (31.9%). When looking at the dynamics of the remittance inflows from Switzerland, relatively continuous growth is evident in the observed period (except for 2016 and 2020), with the highest inflows recorded in 2019. At the end of 2021, the inflow from Switzerland accounted for 12.2% of the total inflow of remittances.

When analyzing the inflows from Austria (Table 1), it can be noticed that Austria was placed second in the first two years of the observed period, but in the rest of the period, a decrease in the inflows occurred. At the end of 2021, the inflows from Austria accounted for 8.3% of the total remittance inflows. By observing the remaining countries from which the major part of total remittances arrives in Serbia, it can be said that in the observed period, an increase in the inflows was reported for all countries except Sweden, where the declining trend can be identified.

When looking at the geographical distribution of the remittance outflows (Table 2), it can be noticed that in the 2012-2021 period, an increase in the outflows from Serbia was recorded. Most of the remittances coming from Serbia have been directed towards China, which is the only country among the observed ones in which the

Table 1The remittance inflows to Serbia, by sending countries, 2012-2021 period (mln EUR)

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Germany	828.5	882.7	631.0	714.4	729.1	836.3	1,016.0	1,058.9	863.0	992.6
Switzerland	324.7	343.8	378.8	441.8	424.8	494.1	535.2	547.2	409.3	443.1
Austria	436.0	475.1	234.0	259.5	235.5	240.3	303.9	289.4	278.1	302.9
France	218.1	232.4	226.4	280.1	160.8	161.3	202.2	210.4	191.2	233.5
United States	86.6	103.9	123.3	152.7	154.7	179.5	178.6	190.8	243.0	301.2
Croatia	98.1	97.2	200.8	134.8	154.9	141.7	158.8	146.7	148.1	164.3
Russia	60.8	81.9	124.8	84.0	58.3	70.7	85.5	83.6	52.2	82.4
Sweden	135.3	111.2	56.4	63.9	60.6	67.0	75.0	71.5	54.8	63.7
Slovenia	53.1	51.4	64.4	63.9	59.7	69.8	72.1	81.3	74.4	85.2
Italy	49.8	51.1	59.8	66.0	65.0	66.5	82.7	87.8	62.6	79.0
Other	307.0	425.4	504.3	594.3	584.9	631.9	822.7	748.1	743.8	887.2
Total	2,598.0	2,856.0	2,604.2	2,855.6	2,688.2	2,959.2	3,532.8	3,515.7	3,120.5	3,635.0

Source: National Bank of Serbia, 2023

Table 2The remittance outflows from Serbia, by countries of destination, 2012-2021 period (mln EUR)

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
China	30.3	48.8	36.6	40.4	32.6	26.9	22.9	23.7	29.6	29.8
Germany	14.9	13.7	15.2	17.2	19.5	21.8	21.0	25.0	30.9	33.0
United States	15.4	15.5	15.7	17.9	18.4	25.5	30.1	24.4	20.8	26.4
Italy	5.5	4.7	6.7	6.4	7.7	7.8	9.0	9.6	10.0	38.2
Canada	5.8	6.7	7.7	8.8	9.1	9.7	11.9	11.3	11.7	11.8
Great Britain	6.2	6.8	7.0	9.8	8.0	9.5	9.0	10.2	11.9	11.9
Switzerland	4.6	5.4	7.1	10.0	8.8	10.9	7.6	11.6	10.7	12.9
France	5.7	5.5	5.7	7.5	8.6	6.7	7.9	15.4	8.4	11.8
Montenegro	5.0	4.7	7.3	5.9	6.9	7.1	9.2	9.3	12.6	15.0
Austria	5.1	5.0	5.6	6.1	6.2	6.8	8.6	10.2	13.4	13.6
Other	40.1	38.1	47.4	54.5	52.7	68.1	70.1	82.0	101.7	120.3
Total	138.5	154.9	161.8	184.4	178.4	200.9	207.2	232.5	261.8	324.8

Source: National Bank of Serbia, 2023

outflows are somewhat lower in 2021 than at the beginning of the period. The outflows to Germany have more than doubled in the observed period, while a somewhat smaller increase can be identified in the case of the United States. Also, it is interesting to note that in 2021 the outflows to Italy increased significantly compared to the past annual amounts recorded in the entire period.

Methodology and Data

The quantification of remittances is a complex task, primarily because only data from the payment transactions through which the diaspora transfers funds to the residents can be used. However, a significant part of the inflow of remittances is generated through undocumented cash flows, which implies that the importance of the inflow of remittances for national economies is even greater in reality (Gligorić & Janković, 2013).

In this research, we used the data provided by the National Bank of Serbia (2023). Also, data from the World Bank (2023) were used to capture the share of remittances in the gross domestic product of Serbia. The length of the observation period is aligned with the current methodology for the balance of payments reporting, which is used by the National Bank of Serbia and corresponds to the official IMF balance of payments methodology. To identify the importance of remittances for financing the current account deficit, a comparative method and secondary data analysis were used. Accordingly, the following hypothesis will be tested in the research:

H1: The importance of remittances in financing the current account deficit of Serbia increased in the period 2007-2021.

Results and Discussion

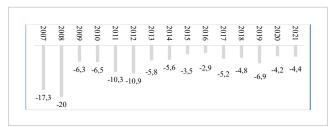
Economic policymakers are usually concerned with creating conditions for economic growth, low and stable inflation rates, and unemployment rate reduction. In addition to the aforementioned macroeconomic aggregates, an important indicator of the macroeconomic position is the current account balance, which can be a significant signal to policy creators about the current state of the economy.

In the economic literature, the question of the sustainability of the current account deficit raises a continuous debate. Regarding the size of the current account deficit, there exists no consensus, but generally, it is recommended that it does not exceed 5% of the GDP threshold (Janković & Stanišić, 2013). On the other hand, the European Bank for Reconstruction and Development emphasizes the sustainability limit of the current account deficit at 7% of GDP (Nikolić, 2006).

Regarding the sustainability of the current account deficit in the case of Serbia (Figure 3), in the initial years of the observed period, its sustainability was significantly threatened. The above was especially evident in 2008 when the deficit amounted to 20% of the Serbian GDP. After that, the current account deficit was reduced to slightly more than 6%, where it again became double-digit during 2011

and 2012. From 2013 to the end of the observed period, the share of the current account deficit in GDP was significantly reduced, so in 2018, 2020, and 2021 it was below the limit of 5% of GDP.

Figure 3Current account deficit in Serbia, 2007-2021 (% of GDP)



Source: National Bank of Serbia, 2023

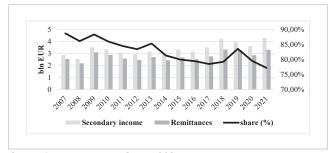
When key factors that contributed to the current account deficit are analyzed, it can be stated that the primary cause is found in persistent deficit in the trade of goods. At the same time, the balance in the trade of services has recorded a continuous increase in surplus since 2011, which affected the balance of payments deficit reduction. The largest share in the reported increase in the balance of services surplus is attributed to telecommunication and computer services, tourism services, and other business services (Janković et al., 2022).

By observing the remaining two components of the balance of payments, it can be pointed out that the primary income account harms the balance of payments, while the secondary income account shows positive effects. When it comes to the primary income account, continuous deficits have been reported, due to the outflow of income stemming from direct, portfolio, and other investments (Kovačević, 2020). On the other hand, the balance of secondary income represents the most significant component of financing the current account deficit. The secondary income recorded continuous annual surpluses in the entire period, which in most years exceeded 3 billion EUR (National Bank of Serbia, 2023).

In the structure of the secondary income, remittances account for the most significant share. Looking at Figure 4, it can be seen that the share of remittances in the secondary income account in the observed period ranged from 75% to 90%, with the obvious decreasing trend recorded. Namely, the largest share of remittances in the secondary income balance was recorded in 2007 (88.7%), while the lowest share of remittances was realized in the last year of the observed period (77.2%). Hence, it can

be concluded that remittances play an important role in supporting secondary income account surpluses.

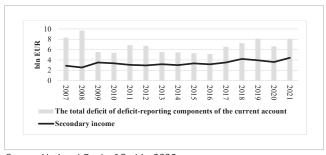
Figure 4The share of remittances in the secondary income, 2007-2021 period



Source: National Bank of Serbia, 2023

Key generators of the current account deficit in Serbia are the trade of goods and the primary income account. The surpluses recorded in the trade of services are still not sufficient to cover the deficit of the mentioned components, while the secondary income account plays a far more significant role. Looking at Figure 5, it can be concluded that the increase in the surplus of the secondary income account enabled to a greater extent the financing of the current account deficit generated by the balance in the trade of goods corrected for balance in the trade of services and the primary income account.

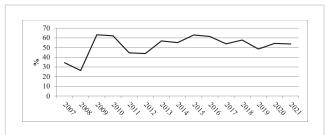
Figure 5The role of secondary income in financing the total deficit of deficit-reporting components of the current account (bln EUR)



Source: National Bank of Serbia, 2023

In 2007 the secondary income covered only a third of the mentioned deficit, while at the end of the observed period, the surplus of this account financed over 50% of the total deficit of the aforementioned components (Figure 6). At the same time, it should be pointed out that the secondary income account had the biggest role in financing the mentioned deficit in 2009 and 2015 (slightly less than 63%).

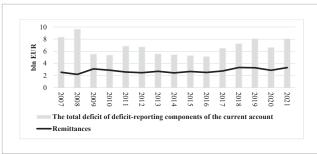
Figure 6
The role of secondary income in financing the total deficit of deficit-reporting components of the current account (in %)



Source: Authors' calculations, based on the data of the National Bank of Serbia (2023)

If the analysis focuses solely on the role of remittances as the most important component of the secondary income account, from Figure 7 it can be seen that in the observed period the importance of remittances in financing the current account deficit has increased. The net remittances realized in the observed period were not enough to neutralize the deficits of the remaining components of the current account, but due to the higher net value of remittances at the end compared to the beginning of the period, their importance in financing the current account deficit increased.

Figure 7The role of remittances in financing the total deficit of deficit-reporting components of the current account (bln EUR)



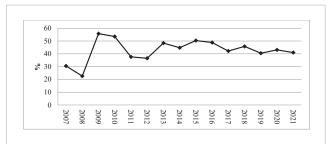
Source: National Bank of Serbia (2023)

In 2007 remittances financed slightly more than 30% of the total deficit, while in 2021 remittances were sufficient to finance more than 40% of the total deficit of deficit-reporting components of the current account (Figure 8). The greatest impact of remittances in financing the current account deficit was recorded in 2009 when the net value of remittances was sufficient to finance 55.8% of the overall deficit.

Based on the analysis carried out in the paper, it follows that the impact of remittances on financing the current account deficit in Serbia has increased in the 2007-2021 period. This can be attributed to the increase in the remittance inflows in the entire period, but also to the more

intensive reduction of the current account deficit at the end compared to the beginning of the observed period.

Figure 8The ratio of remittances and the total deficit of deficit-reporting components of the current account (in %)



Source: Authors' calculations, based on the data of the National Bank of Serbia (2023)

Conclusion

Remittances are an important source of income from abroad, and their importance is especially emphasized in developing countries. Given that significant human migrations from Serbia to developed countries have been recorded during the last few decades, remittances have become one of the most stable sources of income from abroad. In the economic literature, income stemming from remittances stands out as a more stable source of inflow of funds compared to other types of investments, especially foreign direct investments.

The research results indicate that the role of remittances in financing the current account deficit in Serbia in the 2007-2021 period increased by approximately 10%, so the research hypothesis can be confirmed. However, it is still insufficient to cover the high deficits generated primarily in the trade of goods.

The obtained results are coherent with previous empirical analyses. For example, Đukić and Bodroža (2022) found that the importance of remittances in neutralizing the current account deficit in Serbia is more pronounced compared to our research, but this can be explained by differences concerning the length of the observation period and the method of capturing the deficit-reporting components.

The main limitation of the research is reflected in the fact that only the official data concerning remittance inflows were used. It can be said without doubt that the importance of remittances in the current account deficit reduction in the case of Serbia has become much greater, but it cannot be precisely quantified since a large part

of remittances comes to the domestic economy through unofficial cash flows. The paper's contribution reflects the fact that only deficit-reporting components of the current account were used in the analysis of the capacity of remittances to offset current account remittances. This approach is far more objective than the total current account deficit approach because in this case only the deficit-reporting components that seriously burden the balance of payments structure are considered, while in the current account deficit case, both surplus and deficit-reporting components are considered.

Future research could be set more broadly so that the analysis also includes the other Western Balkans countries, for the sake of comparison. Also, since the role of foreign direct investments is especially emphasized in developing countries, it would be useful to compare the net effects of remittances and foreign direct investments on the current account deficit reduction in both the Republic of Serbia and the other Western Balkans countries.

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Vloga nakazil pri financiranju deficita tekočega računa: primer Srbije

Izvleček

Migracijska gibanja domačega prebivalstva, predvsem v razvita gospodarstva Zahodne Evrope, so vplivala na to, da nakazila predstavljajo zelo pomemben vir dohodkov iz tujine. Ekonomska literatura in tudi pogledi vodilnih mednarodnih finančnih institucij kažejo, da so nakazila bistveno bolj stabilna oblika pritoka sredstev iz tujine za države v razvoju v primerjavi z drugimi oblikami pretoka kapitala. Poleg pozitivnih ekonomskih učinkov nakazil igrajo pomembno vlogo tudi z vidika nevtralizacije plačilnobilančnega neravnovesja. Skladno s tem se predmet raziskave nanaša na preučitev vloge nakazil pri financiranju primanjkljaja tekočega računa v Srbiji, s ciljem ugotoviti, ali je v opazovanem obdobju prišlo do povečanja pomena nakazil kot dejavnika pri nevtralizaciji plačilnobilančnega neravnovesja v Republiki Srbiji. Rezultati raziskave kažejo, da so nakazila v opazovanem obdobju pridobila dodaten pomen, saj financirajo večji del primanjkljaja tekočega računa plačilne bilance v primerjavi z začetkom opazovanega časovnega intervala.

Ključne besede: nakazila, tekoči račun, plačilna bilanca, Srbija