

## REVIEW REPORT

# Serbia-China Economic Cooperation: A Balance of Payments Perspective

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## ABSTRACT

The more intensive economic presence of China in the Balkan, within the Belt and Road Initiative, has influenced China to become one of Serbia's most significant economic partners. The more dynamic economic cooperation between these economies is evident both from the perspective of foreign trade and capital flows. The focus of this study is to determine how the intensified economic cooperation between Serbia and China reflects on the domestic balance of payments position. Research results suggest that the growing economic cooperation of the observed economies negatively affects the domestic balance of payments position, both in terms of trade in goods and services and in terms of the income account sub-balance. At the same time, the increasing inflow of capital, primarily based on foreign direct investment from China, has provided financing for a significant portion of Serbia's current account deficit over the past few years. However, the ultimate effects on Serbia's balance of payments position will largely depend on whether Chinese investments in the coming period will further deepen the deficit in the primary income account.

**Keywords:** *Serbia, China, balance of payments, foreign direct investments*

**JEL Classification:** F21, F59, O57

## INTRODUCTION

The integration of the national economy into global economic flows has created a need to maintain external economic balance. This is particularly delicate for developing countries, as these economies are often faced with current account deficits (external imbalance) and relatively limited options for financing balance of payments imbalances (Dugalić et al., 2023). This is also the case with Serbia, which has faced a current account deficit since gaining its independence. The balance of payments imbalance became a particularly pronounced problem for the Serbian economy during 2007 and 2008 when the current account deficit reached record levels and exceeded sustainable limits (Kovačević, 2017). At the same time, during the global financial crisis and the public debt crisis in the Eurozone, Serbia faced a reduced inflow of foreign capital, which further complicated the financing of the current account deficit.

Finding alternative sources of external financing and financing economic development as a whole was aligned with the global expansion of the Chinese economy in the middle of the last decade (Ivanović & Zakić, 2023). Since then, more intensive cooperation between Serbia and China began, which was formalized by Serbia's accession to the Belt and Road Initiative in 2016 (Stojanović-Višić et al, 2023). This resulted in a more intensive economic presence of China in the

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domestic market, both in terms of foreign trade exchange and participation in infrastructure projects, along with an increasing inflow of capital, primarily through foreign direct investment (Marjanović et al, 2021).

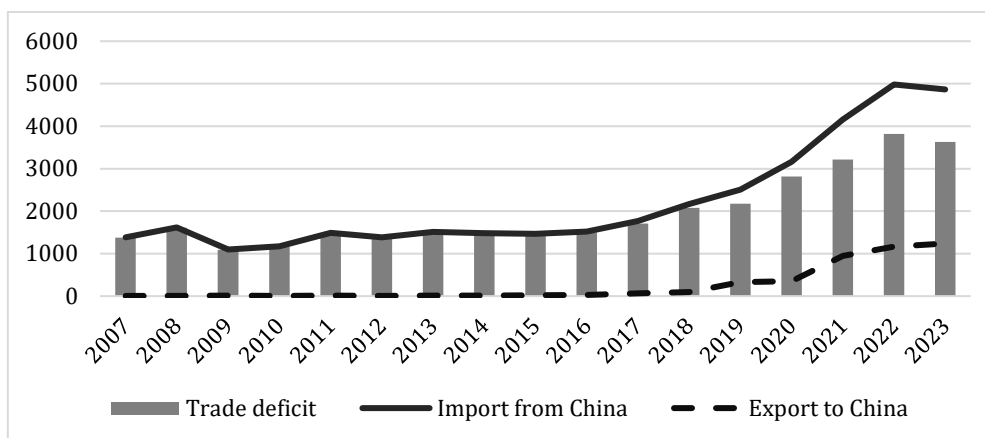
The subject of the study is based on examining how the intensified economic cooperation with China affects Serbia's balance of payments position, specifically the current account. More precisely, the study aims to determine how the economic cooperation between the Serbian and Chinese economies impacts Serbia's current account deficit by analyzing its main components. Accordingly, the research goal is to establish whether the increased economic presence of China in the domestic market has negatively affected the current account deficit. Analogously, the main research hypothesis is formulated as follows:

**H1:** *Intensified economic cooperation between Serbia and China negatively affects Serbia's balance of payments position.*

The research covers the period from 2007 to 2023 and is based on the annual dynamics of data. In line with the defined subject, goal, and research hypotheses, the paper consists of four parts, in addition to the introduction and conclusion. The first part of the paper analyzes the key characteristics of the goods trade between the Serbian and Chinese economies. The second part of the research focuses on the analysis of service exchange between the observed economies. The third part of the paper is dedicated to identifying the significance of China as a foreign investor in the domestic market. In the fourth part of the paper, the Serbian-Chinese economic cooperation is observed from the perspective of the secondary income balance, specifically the transfer of remittances as the most significant component of this sub-balance. The final part of the research presents concluding considerations.

## **CHINA-SERBIA TRADE RELATIONS**

For years, China has maintained a high level of savings and pursued a policy of currency depreciation, which means that exports and investments are the main drivers of its economic growth (Deb et al., 2019). Therefore, it is not surprising that China's economic position in global terms is largely determined by the fact that it is the world's largest exporter (Matthes, 2024). Thanks to a higher value of exports compared to imports, China ranks among the top countries with the highest current account surpluses (Beirne et al., 2021). The high and growing surpluses of the Chinese economy simultaneously negatively affect the balance of payments position of many countries, and global economic equilibrium as a whole. (Wang, 2020; Goulard, 2020). The same can be confirmed in the case of the Republic of Serbia, given the multi-year deficit in goods trade with China (Figure 1). Significantly higher import values compared to export values have resulted in the fact that during all the years of the observed period, the trade deficit with China exceeds the value of Serbian exports to China. At the same time, during the observed period, the value of imports from China increased by approximately 3.5 billion dollars, while exports achieved a somewhat modest increase of 1.2 billion dollars.

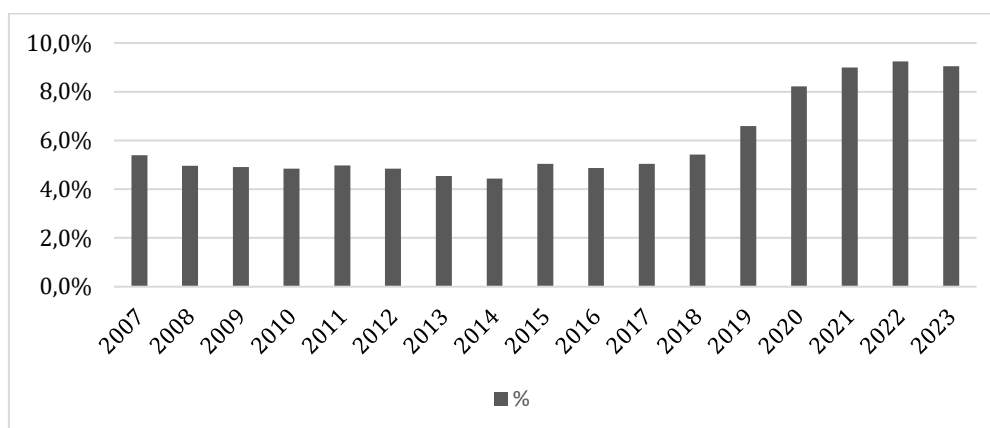


**Figure 1.** Trade in goods between Serbia and China (million USD)

*Source: Statistical Office of the Republic of Serbia, (2023)*

Observing the dynamics of the trade deficit with China, it can be noted that until 2018, the deficit was lower than 2 billion dollars, with the lowest value in 2009 (1.1 billion dollars). However, since 2018, due to faster growth in imports compared to exports, there has been a more dynamic increase in the trade deficit, which reached a record value of 3.8 billion dollars in 2022. In the same year, a record value of imports from China was recorded at 4.9 billion dollars. On the other hand, looking at the dynamics of Serbian exports to China, from 2007 to 2018, the total value of Serbian exports to China was only 272 million dollars, while in 2019 alone, goods worth 329 million dollars were exported (Zubalova et.al, 2023). During the last two years of the observed period, the value of Serbian exports to China exceeded one billion dollars, with a record value in 2023 of 1.2 billion dollars, primarily thanks to the exports of Chinese companies operating in Serbia (Serbia Zijin Mining d.o.o, Serbia Zijin Bor Copper, and HBIS Group Serbia).

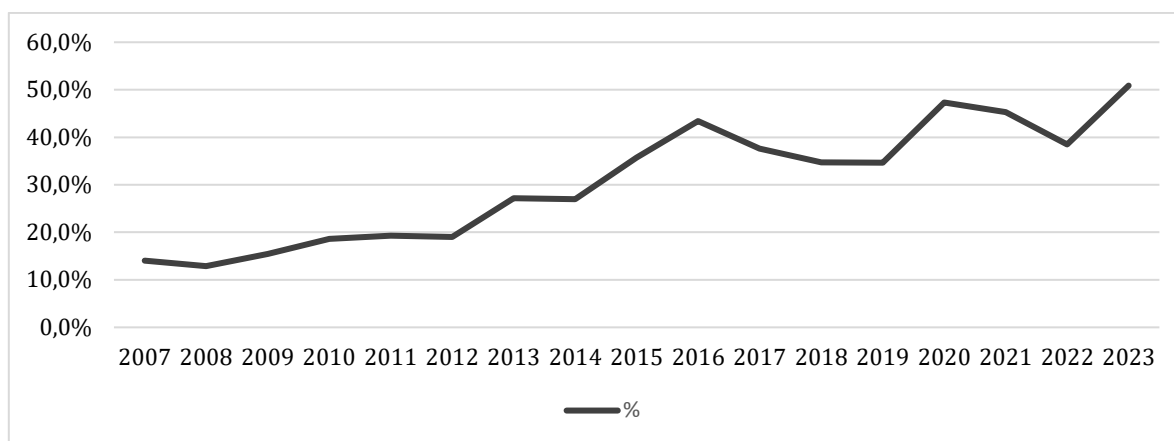
The rapid increase in imports and exports between Serbia and China has resulted in China becoming an increasingly significant trade partner in terms of goods exchange (Jovičić et al., 2020). At the beginning of the observed period, trade with China accounted for only 5.4% of Serbia's total trade. However, with the intensification of economic and political relations between the two countries since 2016, China has become an increasingly significant trading partner for Serbia, reflected in the fact that at the end of the observed period, trade with China accounted for 9% of Serbia's total trade (Figure 2). The majority of this increase can be attributed to the growing imports from China, with significant contributions from the increase in Serbian exports to China during the last two years of the observed period.



**Figure 2.** Structure of trade between Serbia and China in 2023 (%)

*Source: Authors' calculation*

From a balance of payments perspective, the fact that Serbia records a trade deficit with China is not so unfavorable, considering that this is also the case with far more developed economies. The problem lies in the fact that during the observed period, the deficit in trade with China has become the most significant cause of Serbia's overall trade deficit (Jovičić & Marjanović, 2024).



**Figure 3.** The share of the trade deficit with China in the overall trade deficit of the Republic of Serbia (in %)

*Source: Authors' calculation*

Until 2014, the trade deficit with China accounted for less than 30% of the total trade deficit of the Republic of Serbia (Figure 3). However, since Serbia formally joined the Belt and Road Initiative in 2016, this indicator has significantly increased, so that by the end of the observed period, the trade deficit with China makes up over 50% of Serbia's total trade deficit. Considering that the trade deficit is the primary cause of Serbia's external imbalance, it is inevitable that the trade deficit with China represents an important determinant of the domestic balance of payments imbalance.

Simultaneously, when observing Serbia's foreign trade with its most significant partners (Table 1), it can be noted that Serbia recorded the highest deficits with China for the majority of the observed period. Except for short-term surpluses in trade with Italy (thanks to Fiat), Serbia has a trade deficit with all other observed economies. Initially, in the early years of the observed period, the highest trade deficits were recorded with Russia, but since 2012, China has taken the lead (Vasa & Angeloska, 2020). Moreover, compared to the beginning of the observed period, Serbia has reduced its trade deficit with Germany and Russia, while the trade deficit with China has increased by \$2.2 billion. Another interesting observation is that during the last four years of the observed period, Serbia had a larger trade deficit with China than with Italy, Germany, and Russia combined.

**Table 1.** Trade Balance with the Most Significant Foreign Trade Partners of the Republic of Serbia (billion USD)

Year	Germany	Italy	Russia	China
2007	-1.28	-0.74	-2.22	<b>-1.38</b>
2008	-1.75	-1.07	-2.97	<b>-1.61</b>
2009	-1.07	-0.71	-1.62	<b>-1.09</b>
2010	-0.72	-0.27	-1.62	<b>-1.17</b>
2011	-0.82	-0.47	-1.86	<b>-1.47</b>
2012	-0.75	-0.63	-1.21	<b>-1.38</b>
2013	-0.52	0.21	-0.84	<b>-1.50</b>
2014	-0.59	0.30	-1.30	<b>-1.47</b>
2015	-0.54	0.27	-1.02	<b>-1.44</b>

Year	Germany	Italy	Russia	China
2016	-0.48	0.21	-0.71	<b>-1.50</b>
2017	-0.64	0.30	-0.59	<b>-1.71</b>
2018	-1.18	-0.66	-1.01	<b>-2.08</b>
2019	-0.97	-0.34	-1.6	<b>-2.18</b>
2020	-1.06	-0.57	-0.66	<b>-2.81</b>
2021	-1.21	-0.55	-0.81	<b>-3.21</b>
2022	-0.72	-0.62	-1.89	<b>-3.82</b>
2023	-0.55	-0.99	-0.53	<b>-3.63</b>

Source: Statistical Office of the Republic of Serbia, (2023)

Increased cooperation between Serbia and China, manifested in the growth of trade volume, has reflected in China's position as Serbia's foreign trade partner (Dimitrijević, 2017). This progress is particularly evident in terms of exports. In the initial years of the observed period, China represented a significantly less important export market for Serbia compared to the end of the observed period. Since 2016, China has become increasingly significant as an export market for Serbia, and high values of Serbian exports to China during the last two years of the observed period have positioned China as Serbia's seventh most important foreign trade partner in terms of exports of goods (Table 2).

Regarding imports, until 2015, China was the fourth most important foreign trade partner of Serbia (behind Germany, Italy, and Russia). However, since 2016, China surpassed Russia to take the third position. Since 2020, China has become Serbia's second most important foreign trade partner in terms of imports, and it is interesting to note that in 2022, the highest import value was recorded with China.

**Table 2.** Position of China as the most significant import/export partner of the Republic of Serbia

Year	Import	Export
2007	4	50
2008	4	50+
2009	4	42
2010	4	48
2011	4	36
2012	4	50+
2013	4	50+
2014	4	50
2015	4	44
2016	3	37
2017	3	30
2018	3	30
2019	3	19
2020	2	19
2021	2	9
2022	1	9
2023	2	7

Source: Statistical Office of the Republic of Serbia, (2023)

The high values of Serbian exports to China during the last two years of the observed period are primarily due to the fact that Chinese companies are the largest exporters in Serbia (Todorović & Mrdaković, 2021). Looking at the list of the top 15 exporters in Serbia during 2022 and 2023, the first three places belong to Chinese companies: Serbia Zijin Mining d.o.o, Serbia Zijin Bor Copper, and HBIS Group Serbia (Table 3). Another Chinese company (Minth Automotive Europe d.o.o.)

was also on the list of top exporters in 2023. The progress of Chinese companies on the list of top exporters was achieved in 2016 with the sale of the Smederevo Steel Plant to Hesteel (HBIS), and in 2018 when Zijin Mining Group acquired the Bor Mining and Smelting Complex. Since entering the Serbian market, HBIS Group has consistently been among the top Serbian exporters, just behind Fiat, and was the largest Serbian exporter from 2019 to 2021. However, during the last two years of the observed period, there has been a slight decline in HBIS Group's ranking on the list of top Serbian exporters, as Serbia Zijin Mining and Serbia Zijin Bor Copper have taken the lead.

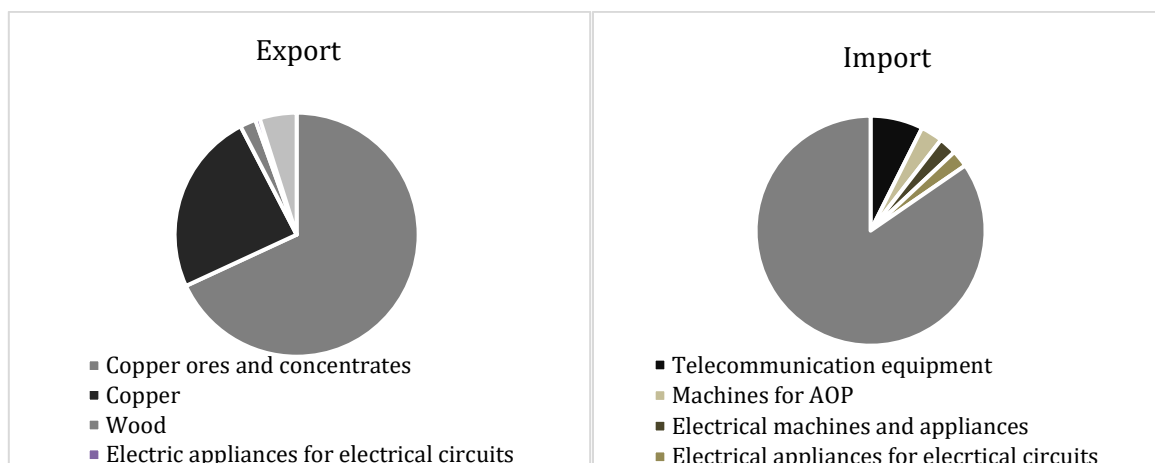
During the last two years of the observed period, the export value of these Chinese companies in Serbia has increased by \$600 million, with HBIS Group being the only one to experience a decrease in exports in 2023 compared to 2022. Additionally, in both years, the exports of Chinese companies account for approximately 40% of the total exports of the largest domestic exporters.

**Table 3.** The largest exporters in Serbia in 2022 and 2023

Rank	2022 (jan - sep)		2023	
	Name	Export value (mln eur)	Name	Export value (mln eur)
1.	Serbia Zijin Mining d.o.o	769.5	Serbia Zijin Mining d.o.o	1.152
2.	HBIS Group Serbia	679.5	Serbia Zijin Bor Copper	746.3
3.	Serbia Zijin Bor Copper	676.4	HBIS Group Serbia	549.1
4.	NIS	484.2	ZF Serbia d.o.o.	504.8
5.	Tigar Tyres	370.8	Leoni Wiring Systems Southeast	489.3
6.	Henkel Serbia	368.9	Tigar Tyres	454.9
7.	Leoni Wiring Systems Southeast	309.1	Robert Bosch	453.1
8.	ZF Serbia d.o.o.	273.2	Henkel Serbia	405.0
9.	Robert Bosch	241.8	Yura Corporation	394.3
10.	HIP	241.5	NIS	386.6
11.	Yura Corporation	233.3	Hemofarm	351.9
12.	Hemofarm	213.1	SCM Power d.o.o.	298.3
13.	Grundfos Srbija	195.7	Philip Morris	288.7
14.	Philip Morris	175.4	Minth Automotive Europe d.o.o.	277.9
15.	Gorenje	172.7	Gorenje	277.5

Source: Ministry of Finance of Serbia (2023)

Observing the structure of trade between Serbia and China based on the most significant export and import products, it can be noted that lower technological intensity products dominate the export structure, such as copper ores, concentrates, and copper itself (Zhemelinska & Hong Song, 2021). These two product categories accounted for over 90% of Serbia's total exports to China. On the other hand, when considering the import structure, consumer goods and telecommunications equipment dominate (Figure 4).

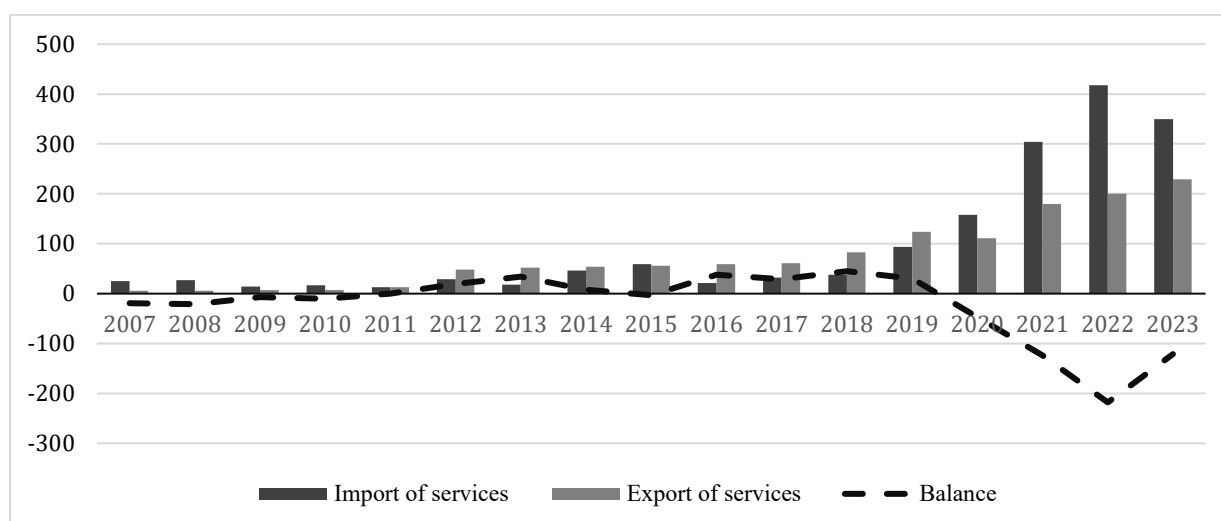


**Figure 4.** Structure of trade between Serbia and China in 2023 (%)

Source: Ministry of Finance of Serbia (2023)

## TRADE IN SERVICES

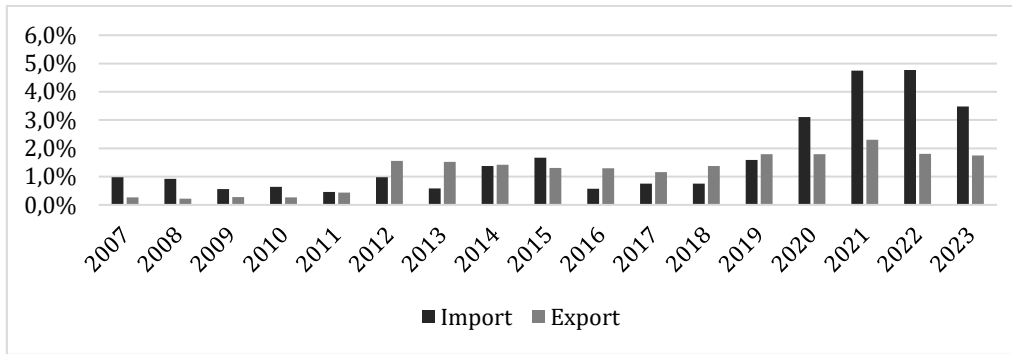
Balance of services represents an increasingly significant segment of the current account of the Republic of Serbia. Surpluses achieved in this account have over time become a very important factor in balancing the domestic balance of payments (Janković et al., 2022; Kalinović et al., 2022). In the services trade with China, Serbia has recorded deficits for most of the observed period. An exception is the period from 2011 through 2019 (excluding 2015), during which mild surpluses were achieved in the services trade. Since 2020, there has been a trend of increasing deficits in the exchange of services, with the highest deficit value in services trade with China recorded in 2022 (Figure 5).



**Figure 5.** Trade in services between Serbia and China (mln eur)

Source: NBS (2023)

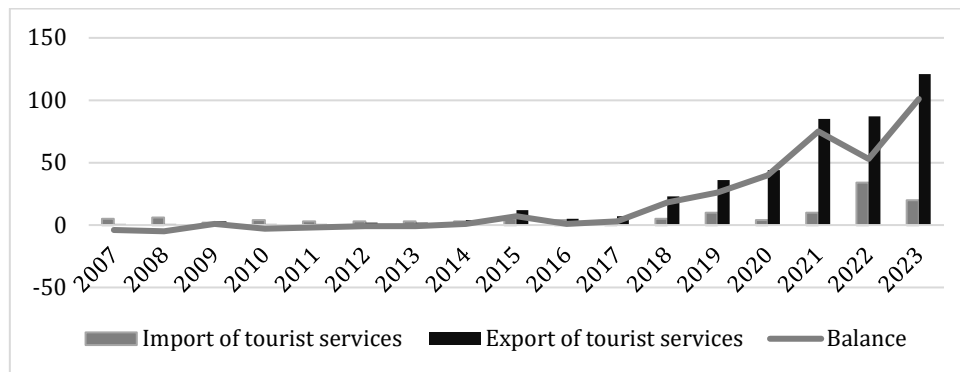
In comparison to its share in goods trade, China's share in the total services trade of the Republic of Serbia is considerably lower (Figure 6). Moreover, China's participation is higher in the import of services compared to their export. Over the observed period, the average share of China in the import of services was 1.6%, while on the export side, their average share was slightly lower at 1.2%.



**Figure 6.** The participation of China in total imports and exports of services (in %)

*Source: Authors' calculation, based on NBS (2023)*

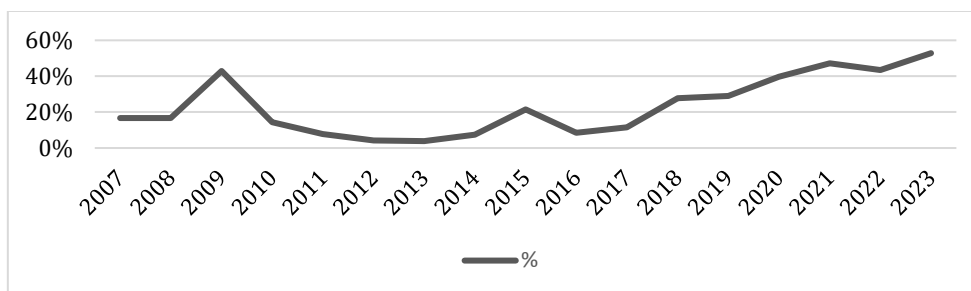
The relatively low deficit in the services trade with China is realized primarily thanks to the surpluses in the exchange of tourist services. Since 2018, there has been rapid growth in the export of tourist services to China, with the highest value recorded in 2023 - 121 million euros. Over the observed period, a surplus in the trade of tourist services with China amounts to 310 million euros.



**Figure 7.** Exchange of tourist services with China (million eur)

*Source: NBS (2023)*

Tourist services also represent the most significant segment in terms of service exports to China (Figure 8). The importance of tourist services in the total service exports to China has varied significantly over the observed period. The lowest share of tourist services in total service exports to China was recorded in 2012 and 2013 (4%), while the highest share of tourist services in total service exports to China was recorded in 2023 when tourist services accounted for more than half of the service exports to China. Over the observed period, the average share of tourist services in total service exports to China was 23%.



**Figure 8.** The share of tourist services in total service exports to China (in %)

*Source: Authors' calculation, based on NBS (2023)*

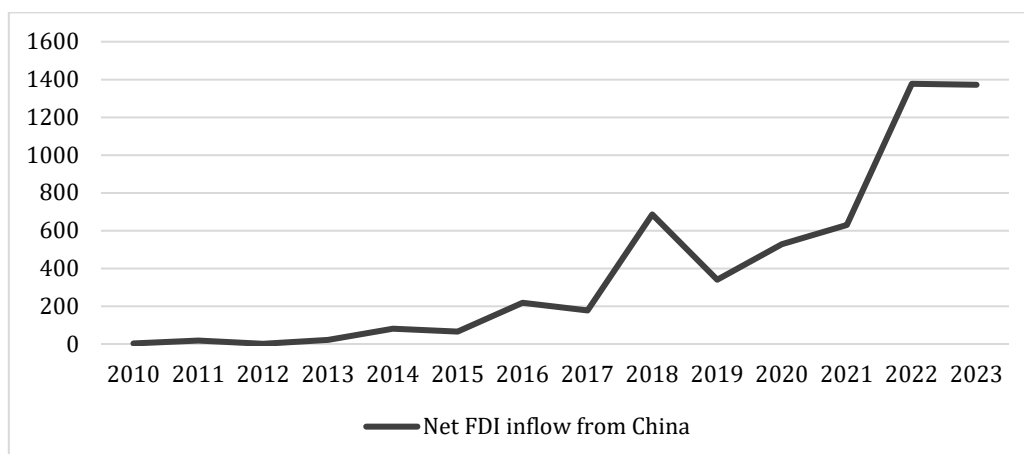


Although the deficit in services trade with China is much smaller compared to the deficit in goods trade, it is still unfavorable that there is a negative balance in this segment as well. A particularly pronounced issue is that since 2018, the deficit in services trade has been increasing, putting additional pressure on the country's balance of payments position and diminishing the positive results achieved in the services account overall. In this domain, it is desirable to create conditions for a more dynamic growth in service exports in the coming period. Given their significance in the current structure of service exports, this primarily applies to tourist services. Accordingly, possible improvements could focus on further enhancing the tourist offerings tailored to the preferences of Chinese tourists.

## THE ROLE OF CHINA AS A FOREIGN INVESTOR

Besides more intensive foreign trade, the economic cooperation between Serbia and China is also evident from the perspective of capital flows (Bugarčić et al., 2020). Since joining the Belt and Road Initiative, there has been a noticeable increase in Chinese capital inflows into the Serbian economy, both through loans and foreign direct investments (Vladisavljev, 2022). Given that the focus of this study is on analyzing Serbian-Chinese economic cooperation from a balance of payments perspective, this part will emphasize the inflow of foreign direct investments from China and their significance as a source of financing for Serbia's current account deficit.

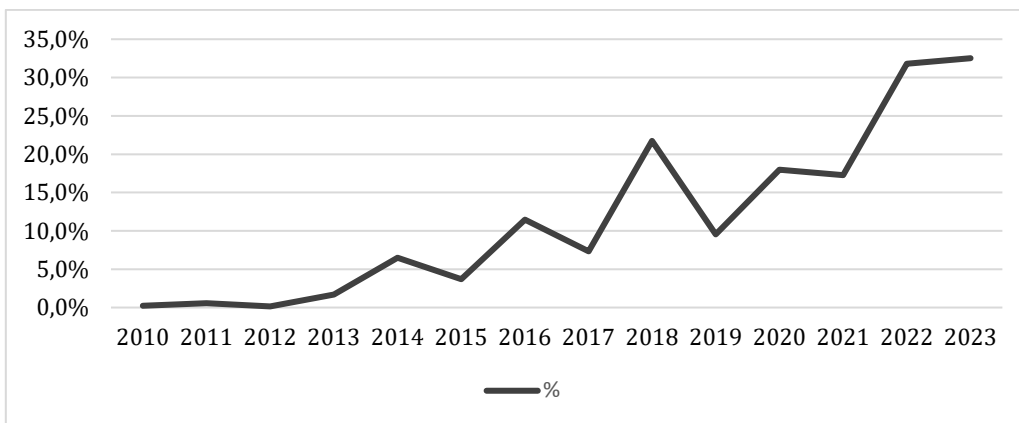
Since 2010, net inflows of foreign direct investments from China have shown significant growth. Specifically, until 2016, net inflows of foreign direct investments from China were less than 200 million euros annually. A more rapid increase in net inflows of foreign direct investments from China occurred in 2018 when the total net inflow of FDI amounted to 686.6 million euros. The record value of net inflows of foreign direct investments from China was recorded during the last two years of the observed period, with a slightly higher value in 2022 (1.377 billion euros) compared to 2023 (1.372 billion euros). Between 2010 and 2023, the total value of net inflows of foreign direct investments from China exceeded 5.5 billion euros (Figure 9).



**Figure 9.** Net FDI inflow from China (million EUR)

*Source: NBS (2023)*

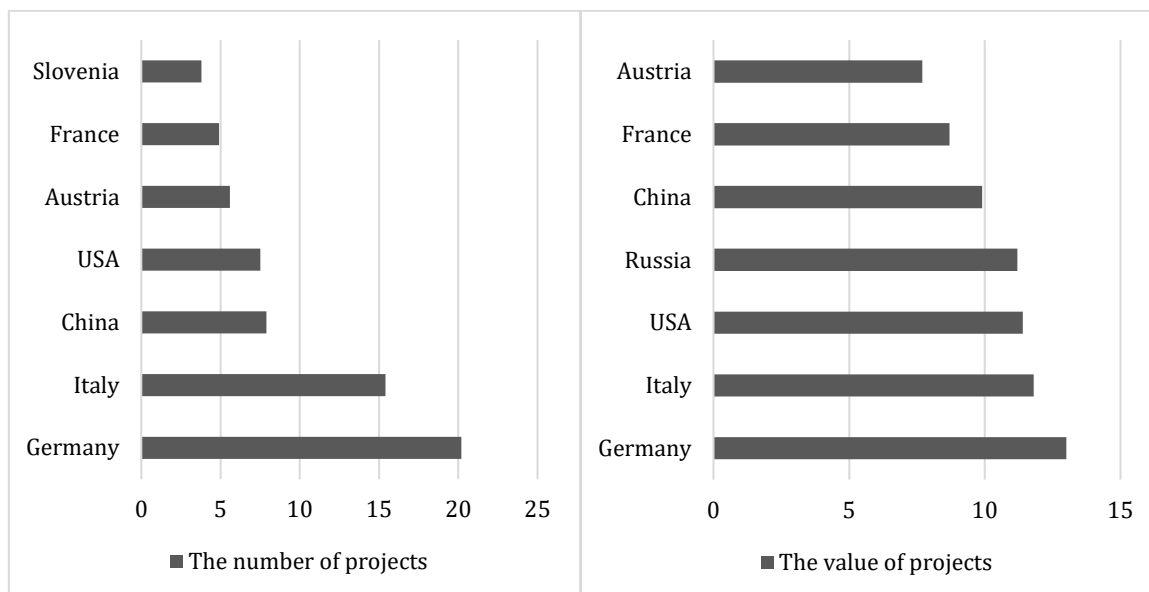
Alongside the increasing net inflow of foreign direct investment from China, the significance of China as a foreign investor in the domestic market has become more pronounced (Figure 10). In 2010, Chinese foreign direct investments accounted for just 0.2% of the total net FDI inflows in Serbia, whereas by 2023, this share had increased to 32.5%. To put it more precisely, in 2023, every third euro of net foreign direct investment inflow into Serbia came from China.



**Figure 10.** The share of net inflows of FDI from China in the total net inflows of FDI in Serbia (in %)

*Source: Authors' calculation, based on NBS (2023)*

The significance of China as a foreign investor in Serbia can be observed when looking at the geographical structure of the most significant foreign investors (Figure 11). According to the total number of realized projects, China ranks third immediately after Germany and Italy. However, when considering the value of projects (million EUR) as a criterion, China is positioned somewhat lower, belonging to the lower half of the list of the largest investors in Serbia. Apart from Germany and Italy, the United States and Russia are better positioned than China, while France and Austria are slightly less well-positioned.

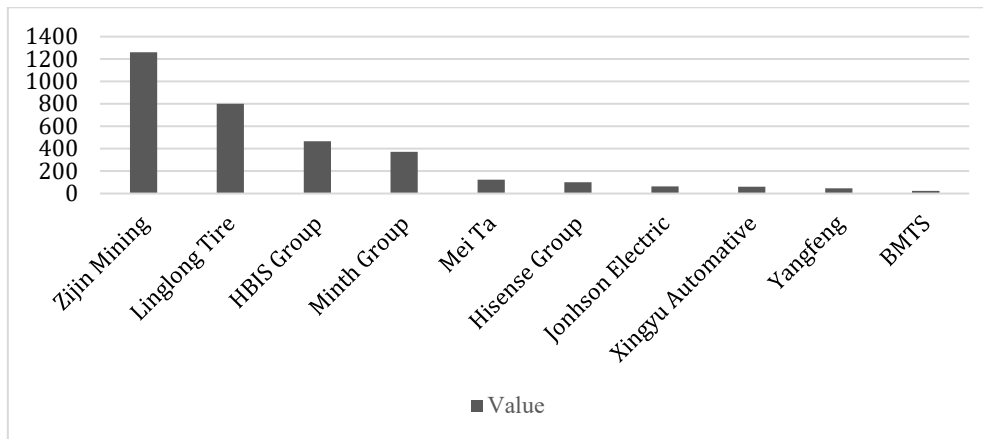


**Figure 11.** The most significant investors in Serbia

*Source: Development Agency of Serbia (2023)*

Looking at the largest Chinese investments in Serbia (Figure 12), the first position is held by Zijin Mining, which acquired the Mining and Smelting Basin Bor in 2018 (Zakić & Radišić, 2019). This is also the only Chinese investment in Serbia that has exceeded one billion euros, specifically totaling 1.26 billion euros. The second largest Chinese investment in Serbia is from Linglong Tire, with an investment value of 800 million euros, while the third position is held by HBIS Group, which acquired Smederevo Steelworks for 466 million euros in 2016 (Mitrović, 2023). Analyzing

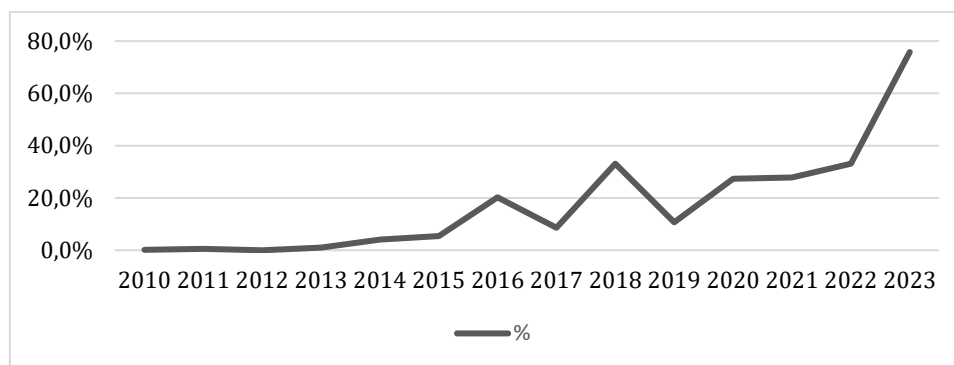
the structure of the largest Chinese investments, it can be concluded that the majority of investments were made in the form of foreign direct investments, predominantly focused on the automotive industry (Linglong Tire, Mei Ta, Minth Group, Yangfeng, Xingyu Automotive, BMTS, Johnson Electric) (Ivanović & Zakić, 2023). The total value of the top ten largest Chinese investments in Serbia amounts to 3.3 billion euros.



**Figure 12.** The largest Chinese investments in Serbia (million EUR)

*Source: Development Agency of Serbia (2023)*

The growing influx of Chinese capital in the form of foreign direct investment since 2016 is very important from the perspective of financing Serbia's current account deficit. From the standpoint of financing Serbia's current account deficit, the net inflow of foreign direct investment from China is becoming an increasingly significant source of funding for external imbalances (Figure 13). Until 2015, the net inflow of Chinese foreign direct investment provided relatively low coverage of the current account deficit (below 10%). This was influenced by both the low values of FDI inflows from China and the relatively high values of the current account deficit.



**Figure 13.** Coverage of Serbia's current account deficit by net inflows of Chinese FDI (in %)

*Source: Authors' calculation, based on NBS (2023)*

During 2016, net inflows of Chinese foreign direct investment covered one-fifth of Serbia's current account deficit, with this indicator fluctuating until 2019. However, from 2019 to 2023, net inflows of FDI from China increasingly covered Serbia's current account deficit. The largest contribution to financing Serbia's current account deficit through Chinese FDI was recorded in 2023 when these investments covered three-quarters of the deficit. However, the ultimate impact of Chinese FDI on Serbia's current account will primarily depend on the outflow of income from these investments (Kovačević, 2022; Čakajac et al., 2024). If these outflows become too high, they will further deepen the balance of payments imbalance through the primary income account

deficit. As long as inflows of foreign direct investment from China exceed the outflows of income derived from these investments, Chinese FDI will positively impact Serbia's balance of payments by financing the current account deficit. In the opposite scenario, Chinese foreign direct investment will cease to be a source of external financing and become an additional generator of balance of payments imbalance.

## THE EFFECTS ON SECONDARY INCOME

For many developing countries facing a current account deficit, the balance of secondary income is a crucial component of their balance of payments. The importance of the secondary income account for developing countries lies in the fact that these economies typically record surpluses in this account, which significantly mitigates the problem of balance of payments imbalances (Ahmed et al., 2020). Globally, over 70% of total remittance inflows are directed towards developing countries (World Bank, 2023). Additionally, remittances are a very significant source of financing for the balance of payments deficit in developing countries because they generally exhibit far less volatility compared to other sources of external financing, primarily foreign direct investments (Bucevska, 2022).

Remittances represent a very important source of foreign exchange inflow for Serbia (Jushi, et al., 2021; Đukić & Bodroža, 2022). During the observed period, the total inflow of remittances into the Republic of Serbia amounted to over 54 billion euros. On the other hand, the total outflow of remittances during the same period amounted to 3.3 billion euros. This high inflow of remittances and the positive balance in their flows are primarily a result of a strong emigrant base, primarily in Western European countries. This can be confirmed by observing the geographical structure of remittance inflows (Table 4). The largest inflows of remittances to Serbia come from Germany, Switzerland, and Austria (Čakajac et. al., 2023). Additionally, there is a significant trend of increasing remittance inflows from the United States, Croatia, Russia, and Slovenia.

**Table 4.** Geographical structure of remittance inflows into the Republic of Serbia (million EUR)

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Germany	828.5	882.7	631.0	714.4	729.1	836.3	1,016.0	1,058.9	863.0	992.6	1,373.8	1,341.4
Switzerland	324.7	343.8	378.8	441.8	424.8	494.1	535.2	547.2	409.3	443.1	681.3	636.7
Austria	436.0	475.1	234.0	259.5	235.5	240.3	303.9	289.4	278.1	302.9	503.5	500.0
France	218.1	232.4	226.4	280.1	160.8	161.3	202.2	210.4	191.2	233.5	305.6	293.5
USA	86.6	103.9	123.3	152.7	154.7	179.5	178.6	190.8	243.0	301.2	305.4	225.2
Croatia	98.1	97.2	200.8	134.8	154.9	141.7	158.8	146.7	148.1	164.3	183.4	244.3
Russia	60.8	81.9	124.8	84.0	58.3	70.7	85.5	83.6	52.2	82.4	284.3	251.1
Sweden	135.3	111.2	56.4	63.9	60.6	67.0	75.0	71.5	54.8	63.7	78.3	98.5
Slovenia	53.1	51.4	64.4	63.9	59.7	69.8	86.1	81.3	74.4	85.2	84.9	115.3
Italy	49.8	51.1	59.8	66.0	65.0	66.5	82.7	87.8	62.6	79.0	127.4	92.3
China	4.2	5.5	5.3	8.3	9.5	10.3	12.9	11.7	8.5	15.2	14.4	22.3
Other	302.8	419.9	499.0	586.0	575.4	621.6	795.8	736.4	735.3	871.9	1,086.6	1,177.1
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	5,028.7	4,997.6

Source: NBS (2023)

When it comes to remittance inflows from China, based on the data in Table 4, a relatively small amount of remittances can be observed. Between 2012 and 2023, the total inflow of remittances from China to Serbia amounted to just over 128 million euros. However, what is certainly positive is that there has been a significant increase in remittance inflows from China during this period, with a record high observed in 2023. In comparison to the beginning of the observed period, remittance inflows from China have increased more than fivefold, or by approximately 18 million euros in absolute terms.

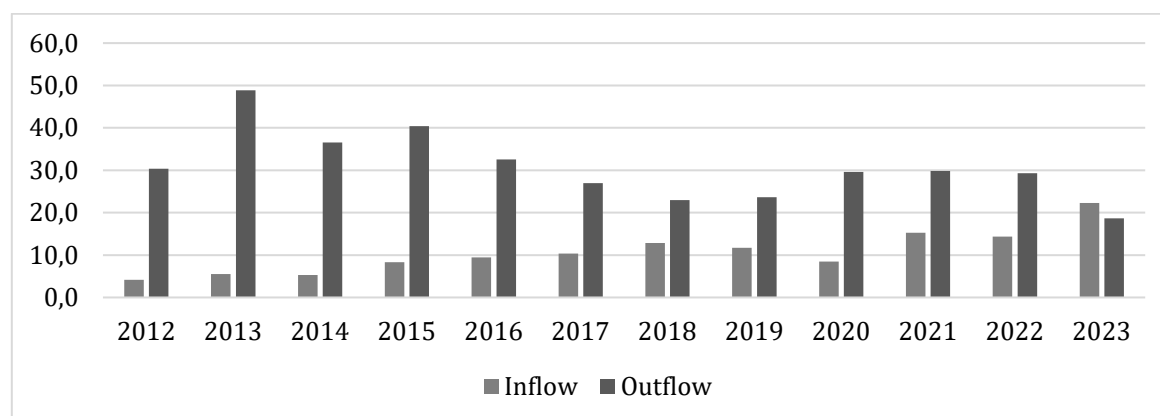
On the other hand, when considering the geographical structure of remittance outflows (Table 5), the situation is somewhat different. Throughout most of the observed period, the highest amount of remittances from Serbia was directed towards China (Čakajac et al., 2023). This can be explained by the presence of many Chinese nationals working and residing in Serbia who transfer funds to their families (Božić-Miljković & Jovičić-Vuković, 2021). Interestingly, the outflow of remittances to China has decreased over time, reaching its lowest value in 2023 at 18.7 million euros. Significant changes are also noticeable in the geographical structure of remittance outflows, as towards the end of the observed period, more remittances from Serbia are being transferred to the economies of Germany and the United States than to China.

**Table 5.** Geographical structure of remittance outflow from the Republic of Serbia (million eur)

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
China	30.3	48.8	36.6	40.4	32.6	26.9	22.9	23.7	29.6	29.8	29.3	18.7
Germany	14.9	13.7	15.2	17.2	19.5	21.8	21.0	25.0	30.9	33.0	37.3	41.8
USA	15.4	15.5	15.7	17.9	18.4	25.5	30.1	24.4	20.8	26.4	39.1	40.6
Italy	5.5	4.7	6.7	6.4	7.7	7.8	9.0	9.6	10.0	38.2	18.4	16.5
Canada	5.8	6.7	7.7	8.8	9.1	9.7	11.9	11.3	11.7	11.8	15.0	14.6
UK	6.2	6.8	7.0	9.8	8.0	9.5	9.0	10.2	11.9	11.9	21.8	19.4
Switzerland	4.6	5.4	7.1	10.0	8.8	10.9	7.6	11.6	10.7	12.9	23.4	25.9
France	5.7	5.5	5.7	7.5	8.6	6.7	7.9	15.4	8.4	11.8	15.0	13.9
Montenegro	5.0	4.7	7.3	5.9	6.9	7.1	9.2	9.3	12.6	15.0	28.1	13.0
Austria	5.1	5.0	5.6	6.1	6.2	6.8	8.6	10.2	13.4	13.6	13.8	14.8
Other	40.1	38.1	47.4	54.5	52.7	68.1	70.1	82.0	101.7	120.3	157.8	176.6
Total	138.5	154.9	161.8	184.4	178.4	200.9	207.2	232.5	261.8	324.8	399.2	395.9

Source: NBS (2023)

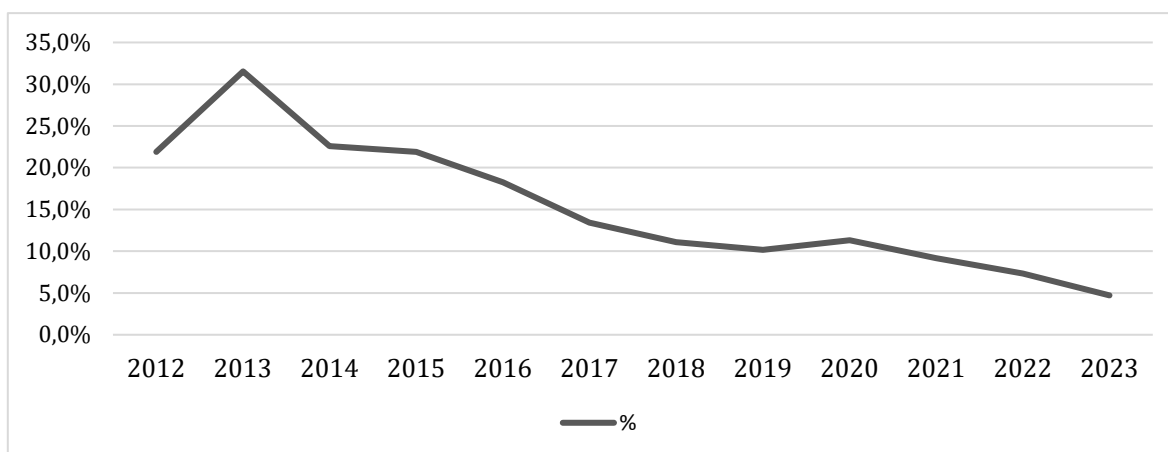
Looking at the dynamics of remittances inflow and outflow between Serbia and China (Figure 14), it can be noticed that throughout the entire observed period, more remittances were transferred to China compared to the inflow of remittances. The exception is only year 2023 when the inflow of remittances from China exceeded the transfer of remittances to this economy. In 2023, the highest inflow of remittances from China was recorded (22.3 million euros), while the highest remittances to China were transferred in 2013 – 48.8 million euros. Over the observed period, almost 370 million euros were transferred to China through remittances, indicating that a deficit was also recorded in this component of the current account (241.5 million euros).



**Figure 14.** Remittances inflow and outflow between Serbia and China (million EUR)

Source: NBS (2023)

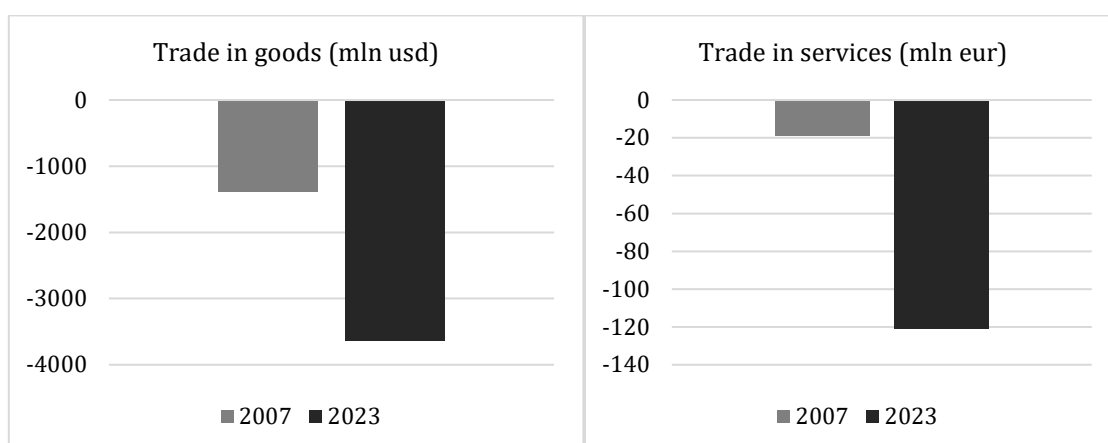
What is certainly positive is that since 2013, fewer remittances have been transferred from Serbia to China (Figure 15). In 2013, remittances transferred to China accounted for 31.5% of the total outflow of remittances, while at the end of the observed period, their share was only 4.7%. It is desirable that this trend continues in the future, meaning that higher remittance inflows from China compared to their outflow should be ensured. This can be achieved by reducing the costs of remittance transfers from China to Serbia, as well as by developing financial platforms for easier money transfers.

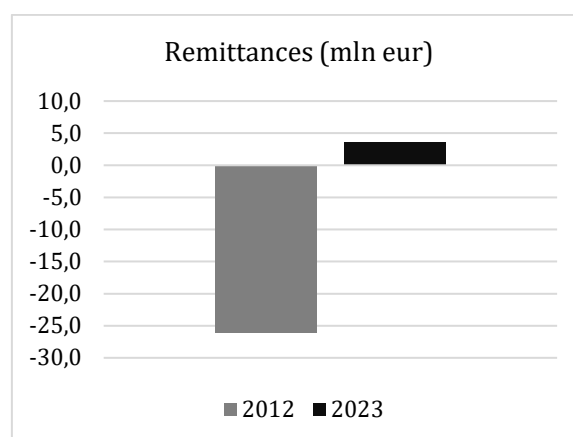


**Figure 15.** Share of remittance outflow to China in total remittance outflow from the Republic of Serbia (in %)

*Source: Authors' calculation, based on NBS (2023)*

Despite positive trends and a record inflow of remittances from China in 2023, it is unfavorable that negative effects are also manifesting in the secondary income account. When observing the geographical structure of remittance outflows, Serbia is the only country experiencing a negative balance with China. Although there is a larger transfer of remittances towards the United States, Germany, and Italy towards the end of the observed period, the inflow of remittances from these countries is significantly higher. Overall, the deficit in remittance transfers with China has negatively affected Serbia's secondary income balance, slightly reducing its significance as a primary source of balancing the domestic balance of payments position.





**Figure 16.** Effects of economic cooperation with China on Serbia's current account

*Source: Authors' calculation*

Summarizing all the above, it can be concluded that the intensification of economic cooperation with China has had a negative impact on Serbia's current account (Figure 16). The most pronounced effects have been in the area of trade in goods, where compared to the beginning of the observed period, there has been an increase in the deficit of 2.2 billion dollars. A slightly smaller increase in the deficit was recorded in trade in services, with the deficit in services trade with China increasing to 121 million euros by 2023 compared to 2007. Modest positive effects can be observed in remittance transfers, the most significant component of the secondary income account, with a surplus in remittance transfers between Serbia and China recorded at the end of the observed period. However, since 2012, a negative balance in remittance transfers with China has been recorded (241.5 million euros), which diminishes the high surpluses of the secondary income account as the most significant component of balancing the domestic balance of payments position. Despite the record influx of foreign direct investment from China in 2022 and 2023, these funds are still insufficient to fully cover Serbia's current account deficit. Between 2010 and 2023, net inflows of foreign direct investment from China averaged 17.7% of Serbia's current account deficit. Based on the above, it can be concluded that the intensification of economic cooperation with China since 2016 has contributed to a worsening of Serbia's current account deficit and has negatively affected the country's balance of payments position. Considering this, **the main research hypothesis can be confirmed.**

## CONCLUSION

By joining the Belt and Road Initiative in 2016, conditions were created for intensified economic cooperation between the Serbian and Chinese economies. Until then, China's economic presence in the Serbian economy was very modest and primarily based on the fact that China was Serbia's fourth most significant trading partner in terms of imports. However, since 2016, there has been much more dynamic economic cooperation between the observed economies, both in terms of foreign trade and the increasing inflow of Chinese capital into the Serbian economy. In terms of foreign trade, China has become one of the two most significant trading partners in terms of imports of goods and has also become one of Serbia's most significant export markets, primarily due to the arrival of Chinese companies in the domestic market, which is a key driver of export growth to the Chinese economy.

From a balance of payments perspective, it can be concluded that the Chinese economy currently benefits more from intensified economic cooperation. Despite the increasing exports to the Chinese market, there has been a significant increase in imports from China, which has led to an increase in the trade deficit between the observed economies. Today, the deficit in trade in goods with China accounts for more than half of Serbia's trade deficit. Similar trends, but of a

smaller magnitude, can be confirmed in the case of trade in services, with the deficit in services trade with China increasing by just over 100 million euros during the observed period. Partially positive developments can be observed in the secondary income account, particularly in remittance transfers, the most significant component of this sub-account. The outflow of remittances from Serbia to China has decreased year by year, unlike the inflow of remittances from China, which allowed for a slight surplus in remittance transfers in 2023. However, there is still a deficit in this area, as between 2012 and 2023, remittance transfers from Serbia to China exceeded remittance inflows from China by just over 240 million euros.

The growing capital inflows from China through foreign direct investment are certainly a positive development. Chinese investments provide increasing coverage of Serbia's current account deficit and thereby create conditions for a more relaxed balance of payments position. However, caution is needed here, as foreign direct investments can produce a negative effect in the future if Chinese investors repatriate a larger share of profits to their home economy compared to reinvesting profits in the Serbian economy. The ultimate effects on Serbia's current account will depend on the value of annual net inflows of foreign direct investment from China and the outflow of income resulting from them (primarily due to profit reinvestment in the home economy).

The presented results should be viewed through the prism of certain limitations. The primary limitation encountered by the authors is the unavailability of data for certain segments of the balance of payments for the entire observation period, such as remittances and foreign direct investments. Additionally, the research is characterized by a relatively short time period based on annual data dynamics. Furthermore, remittance transfers between Serbia and China only consider official data from the National Bank of Serbia, while a significant portion of remittance transfers may occur through unofficial channels for which data is not available. Moreover, data on the geographic breakdown of expenses for foreign direct investments are not available, which would accurately assess the net ultimate effect of Chinese foreign direct investments on financing Serbia's current account deficit. Ultimately, the research is based on qualitative methodology and descriptive statistical analysis. In future research, it would be desirable to include quantitative methodology and sophisticated statistical techniques and analyses.

Despite these limitations, it is important to emphasize that these limitations do not diminish the relevance of the obtained results. At the same time, the research provides significant implications primarily for economic policymakers in Serbia. It is undeniable that China will be an even more significant economic partner for Serbia in the future, so efforts should be made to identify opportunities to further intensify economic cooperation between the observed economies without further negatively impacting Serbia's balance of payments position. In the short term, conditions should be created to increase the export of services to the Chinese economy and facilitate easier remittance transfers from China to Serbia. This would create conditions for reducing deficits or increasing surpluses in the services and secondary income accounts. It is also desirable to create stimulating conditions for Chinese investors to reinvest a higher share of profits earned in the domestic market, rather than repatriating it to the home economy. Given the increasing inflows of Chinese capital into the Serbian economy, this would reduce expenditures on foreign direct investments, contribute to the reduction of the primary income account deficit, and simultaneously increase the importance of Chinese investments in financing Serbia's current account deficit. In the end, in the field of trade in goods, it is very difficult to expect that Serbia will be able to achieve a surplus with China in the future. From a long-term perspective, it would be desirable to change the structure of Serbian exports to China towards a higher share of technologically intensive products, as opposed to products in lower stages of processing, which are currently the most significant segment of Serbian exports to the Chinese market.



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Article history:	Received: 25.5.2024.
	Revised: 8.7.2024.
	Accepted: 9.7.2024