SCIENTIFIC REVIEW

Serbia-China Bilateral Trade Relations: Major Challenges and Opportunities

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ABSTRACT

Considering the growing presence of China in Serbia and deepening the overall bilateral relations, the main objective of the paper is to analyze the major trends and changes in the bilateral merchandise trade between both countries. The paper also focuses on exploring the main challenges as well as determinants for enhancement of trade relationships in the upcoming period. The total trade between Serbia and China has been steadily growing over the last decade. The value of total trade in 2019 compared to 2010 is increased twice, the value of imported and exported goods grew twice and almost 45 times, respectively. Despite the rapid growth, the Trade Intensity Index shows that trade between Serbia and China is under-represented, implying there is a space for improvement.

Some obstacles hinder trade relations between Serbia and China. One of the main challenges stems from the fact that China shares its influence in Serbia using investments rather than trade. On the other side, Serbia does not have enough capacity to meet Chinese market demand, which is among other things a result of the domination of low value-added products in the total Serbian exports. In order to overcome the obstacles, Serbia should focus on its comparative advantage as well as attracting the Chinese investment in the strategically important sectors. Furthermore, it is essential for Serbia to develop a strategic approach to trade policy towards China, which implies better promoting of export growth, relevant support of Serbian exporters as well as more active engagement around trade matters during official negotiations with China.

Key words: bilateral trade, exports, imports, Serbia, China, trade intensity index

JEL Classification: F1, F14

INTRODUCTION

Over the past decade, Serbia has committed itself to the development of relations with China. Belgrade has become open to many types of cooperation with Beijing, especially after the establishment of a strategic partnership in 2009. The strategic partnership was strengthened and expanded in 2013 through involvement in BRI initiative, respectively 17+1 mechanism (formerly 16+1). With a particular focus on the transport sector at the beginning, the partnership was deepened by the extensive government to government funding from a variety of state-owned Chinese banks (Bastian, 2017). Namely, the strategic partnership contributed to the conclusion of a series of investment and framework agreements and the implementation of joint projects in the Serbian energy, transport, agricultural and other sectors, as well as in the field of scientific and cultural exchange and cooperation (Dimitrijević, 2016). In

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addition to existing projects, in 2019 Serbia signed several agreements with China, i.e. memorandums of understanding, on future cooperation in the field of innovation and infrastructure, such as co-operation projects in the construction of the Belgrade subway, the establishment of a joint industrial park, the construction and modernization of railway sections near to the border with Northern Macedonia, etc. (The Government of Republic of Serbia, 2019).

Deepening cooperation between Serbia and China also led to the enhancement of bilateral trade relations. The volume of trade has increased significantly, more than twice over the past ten years. But, despite the rapid growth, the economic cooperation between Serbia and China has been a small part of the economic exchanges with the world of both countries (Babić, 2016). Moreover, there were certain obstacles hampering bilateral trade relations.

One of the main challenges stems from the fact that China is strategically oriented to the long-lasting expansion of exports of domestic products and imports of energy and mineral resources. So that Serbia, due to the weak capacities as well as significant differences in economic power, has no possibilities to impact substantially to the development of trade flows. As a result, the trade relationship between the two countries appears to be running in one direction only. Furthermore, it is hindered by the lack of any formal legal basis, including the absence of free trade agreements and similar arrangements (Hartwell and Sidlo, 2017). Finally, the fact that China shares its influence in Serbia using investments rather than trade can be highlighted as an important challenge.

Considering the growing presence of China in Serbia and deepening the overall bilateral relations, as well as the fact that trade, in general, has a positive and significant impact on economic growth and could enhance economic cooperation between countries, we decided to focus on the analysis of the major trends and changes in the bilateral trade of goods between Serbia and China. Also, the aim of the research was to investigate the main obstacles and opportunities for enhancement of trade relations between the two countries.

The research, based on the conducting of comprehensive analysis of bilateral trade flows, would enable a better understanding of the development of the trade relations between Serbia and China and more appropriate planning of the future steps towards improving the current situation and eliminating main obstacles.

LITERATURE REVIEW

Literature review regarding trade relations between both countries is relatively scarce. This is not surprising bearing in mind the fact that Chinese investments (both FDI and loans) have attracted much more attention during the last decade. Series of research studies was focused primarily on the issues of investments as well as implementation of the different infrastructural and energetic projects.

A great deal of research is devoted to the deepening economic collaboration between China and CEE countries especially in the context of the BRI initiative or 17+1 platform (Turcsányi, 2014; Vangeli, 2017; Musabelli, 2017; Steinbuka, Muravska and Kuznieks, 2018; Tianping, 2015; Jakóbowski, 2016). Some authors (Liu, 2013, Song, 2018) focus on the basic characteristics of China-CEE cooperation and problems China and CEE countries face in this regard, highlighting non-homogeneous conditions in the region following by diversified demands and pressure from EU as main challenges which should be tackled. However, the majority authors have been investigating the deepening cooperation between China and CEE countries through the prism of Chinese investment projects, mapping the Chinese investment flows and types of involvement, as well as analysis of motivations of the Chinese companies’ penetration to the CEE region, etc. (McCaleb and Szunomár, 2017; Éltető and Szunomár, 2016; Jacoby, 2014).

When it comes to bilateral relations between Serbia and China, many authors indicate that in terms of project implementation, Serbia became Beijing’s key partner in the region of Western
Balkans (Tonchev, 2017; Vladisavljev, 2019; Yan, 2019; Hackaj, 2018; Song, 2018). Under Holzner and Schwarzhappel (2018) Serbia is the prime target of Chinese construction contracts, i.e. almost half of the projected amounts are earmarked for construction there. More than half of the projected construction costs are budgeted for transport and slightly less for energy projects, while a minor contract is dedicated to a (communication) technology project (Holzner and Schwarzhappel, 2018).

Trade aspects with regard to CEE countries and China bilateral relations are investigated by Xin, (2012); Jacimovic, et al. (2018); Matura, (2019); Szunomár, Liisi and Leonte (2020), and others. The authors generally came to the conclusion that despite deepening bilateral cooperation, trade relations remain relatively low, leading to the increasing trade deficit.

Only a few authors conducted a comprehensive analysis of bilateral trade relations between Serbia and China with deeper insight in challenges and opportunities for its development (Jelisavac Trošići, Stojanovići-Višić and Petrovići, 2018; Jacimovic, et al., 2018).

Bearing in mind that there is relatively scarce research on this topic, the paper could contribute to the literature by widenig the existing knowledge.

METHODOLOGY

The conducted analysis is descriptive and based on secondary data. The period from 2010 to 2019 is observed, although on several occasions references to the first half of 2020 are made. Data on merchandise trade by the Standard International Trade Classification (SITC) are collected from the Statistical Office of the Republic of Serbia and from the UN Comtrade database. Data are in current U.S. dollars.

Trade intensity index (TII), the simple technique developed by Brown (1948) and Kojima (1964), was used in the research as well. Indices of Trade Intensity are calculated using UN Comtrade data. The TII approach evaluates bilateral trade status based on both a country’s global trade status and its trade partner’s economy size TII, helping identify how intensively the countries are trading with each other (Chen and Li, 2014).

Besides the analysis of statistical data, the review of relevant literature was conducted, and information on various actors and issues related to the foreign trade of the Republic of Serbia and China was examined.

TRENDS IN BILATERAL TRADE

According to official data of the Statistical Office of the Republic of Serbia, in 2019, the total trade between Serbia and China reached 2.8 billion dollars, with an increase of 25.6% compared to 2018. The volume of imports grew by 16%, while the volume of exports increased by 259%. The trade deficit amounted to almost 2.2 billion dollars (a rose by 5%), and China was the country Serbia had the largest deficit with. During the period from 2010 to 2019, trade exchange between Serbia and China has been steadily growing, The trade deficit also significantly rose over the same period in some regards obscuring the fact that Serbia has been increasing its trade with China. Although the value of goods imported from China grew two times, exports increased almost 45 times in the same period. The coverage ratio of imports by exports rose to 13.2% in 2019, compared to 0.6% in 2010, but still remains at a very low level.
In the first half of 2020, exports increased by 36.1%, while imports grew by 24.4%. It is noteworthy that China was one of the few countries with which trade growth was recorded. Moreover, the trade growth rate with China was the most significant compared to other countries. An explanation could be the fact that China, after coronavirus pandemic shutdowns relatively fast returned to full production, taking the advantage of manufacturing re-openings and consumer demand. As a result, after the turbulence in the first three months, trade showed a slight recovery in the second quarter, and the exports have risen during three straight months (The State Office of China, 2020). Following the latest data, this trend continued in September and October 2020. Being one of our major traded partners, China has become an engine of bilateral trade with Serbia. An improving of mutual relations (mostly given to China's assistance to Serbia over coronavirus) has consequently contributed to fostering trade between both countries.

When it comes to Serbia’s main trading partners, China has a leading position that has been improving over the past decade. However, this is the case primarily in terms of imports. In 2020, China ranked second (just behind Germany) with a share of 12.5% in Serbia's total imports, which is an improvement by one place compared to its position a year before. China was the fourth most important trade partner in 2010, accounting for 7.2% of Serbia's total imports.
In terms of exports, China is not yet among Serbia’s top 10 trading partners. Namely, China ranked 20th in 2020, while in 2010 it occupied 29th position. It is not surprising taking into account a huge trade deficit Serbia has with China. However, the improvement of the position instils a dose of optimism.

**COMPOSITION OF EXPORTS AND IMPORTS**

According to the standard International trade classification, during the last decade, Serbian import from China referred primarily to computers, broadcasting equipment, polyacetals, and raw aluminium. On the import side, the leading product group in 2019 was telecommunication equipment, followed by automatic data processing machines, apparatus for electrical circuits etc. (Figure 3). It is evident that the import structure has remarkably changed during the last ten years. Apart from automatic data processing machines, which remained one of the main patterns of imports, lower value-added goods like footwear, baby’s carriages and toys, etc. were imported in 2010.

**Figure 2.** Serbia’s major trading partners (share in total imports, 2020, %)
*Source: authors’ calculations based on the Statistical Office of the Republic of Serbia*

**Figure 3.** Commodity structure of imports (per cent of total, 2010, 2019)
*Source: authors’ calculations based on the Statistical Office of the Republic of Serbia*
It is essential to mention that despite its minor share in total imports compared to the main groups of products, the volume of imports of some products has grown significantly compared to 2010: Road motor vehicles, n.e.s. (by 205 times); Rails and railway tracks construction material, of iron and steel (by 42 times); Stone, sand and gravel (increase by 30 times); Civil engineering and contractors’ plant and equipment (by 17 times); Other machinery and equipment for particular industries and parts thereof n.e.s. (by 10.5 times); Rotating electric plant and parts thereof, n.e.s. (9.3 times); Rubber tyres, tyre treads or flaps & inner tubes (by almost six times); Articles of rubber, n.e.s. (by 6.5 times); Pig iron, spiegeleisen, sponge iron, iron or steel granules and ponders and ferro-alloys (by 6.3 times).

Serbia’s exports during the period from 2010 to 2019 have been overwhelmingly in commodities, including iron and lead ore and sawn and rough wood. In 2018 exports of copper increased dramatically (in previous years the value of copper exports was negligible), and large quantities of copper were exported in 2019 as well. Precisely, the share of copper reached a remarkable 80% of total exports to China, definitely taking the lead in the export structure. This enormous growth was a consequence of the conclusion in July 2018 of the agreement on the acquisition of RTB property in Bor with the Chinese company "Zijin Mining Group".

Besides copper, there are some groups of products which have also recorded significant growth in terms of exports volume in the period 2010-2019: Meat of bovine animals, fresh, chilled or frozen (2000! times compared to 20111); Fixed vegetable fats and oils, 'soft', crude, refined or fractionated (1300 times); Polymers of ethylene in primary forms and Polymers of styrene in primary forms (both more than 1000 times); Wood manufactures, n.e.s. (1000 times); Wood, simply worked, and railway sleepers of wood (447 times); Stone, sand and gravel (427 times); Parts and accessories of the motor vehicles (72 times).

![Figure 4. Commodity structure of exports](https://example.com/figure4.png)

**Source:** authors’ calculations based on the Statistical Office of the Republic of Serbia

Despite the absence of the official data related to the product groups or products imported from and exported to China in the first half of 2020, it could be assumed based on information from the news and media, that Serbia has been imported epidemic prevention supplies, medical and telecommunication equipment (these groups of products have generally had the major share in Chinese exports in first six months of 2020). On the export side, copper and agricultural

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1 Data for 2010 is not available
products have most probably had the largest share. Such a conclusion stems from the fact that, based on the latest information of Ministry of finance (MFIN, 2020), Zijin Bor Copper was second-largest exporter in 2020. When it comes to the agricultural products, as director of the Division for Strategic Analyses, Services and Internationalization at the PKS, Mihailo Vesovic, declared, despite the challenges occurred due to the COVID-19 pandemic, Serbia managed to increase the export of food products to China by 50 per cent (Xinhua News Agency, 2020).

**TRADE INTENSITY INDEX**

Since with the help of an analysis of trends in trade, one cannot get the full idea about the intensity of trade between the two countries, Trade intensity index (TTI) was used in the research as well.

The TII approach evaluates bilateral trade status based on both a country’s global trade status and its trade partner’s economy size TII, helping identify how intensively the countries are trading with each other (Chen and Li, 2014).

The index can be defined as a certain quantity share exports of a country to its partner divided by the quantity share exports of the world to its partner (World Bank, 2010).

The mathematical definition of TII is:

$$T_{ij} = \frac{x_{ij}}{X_i} \div \frac{x_{wj}}{X_w}$$

Where $x_{ij}$ and $x_{wj}$ are the values of country i’s exports and of world exports to country j and where $X_i$ and $X_w$ are country’s total exports and total world exports respectively.

If the index is equal to one, it means that there is a higher degree of trade intensity between two given nations. Hence, if the index close to zero, it indicates that there is a lower intensity of trade relations. The index numerically greater than one implies over-representation of one nation in the other nation’s exports/imports. Vice-versa, if estimation of the index is less than one, then it infers under-representation.

**Table 1.** Trade intensity index between Serbia and China, 2010-2019

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<td>TTI</td>
<td>0.008</td>
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<td>0.018</td>
<td>0.005</td>
<td>0.009</td>
<td>0.015</td>
<td>0.017</td>
<td>0.035</td>
<td>0.043</td>
<td>0.152</td>
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*Source: authors’ calculations based on UN Comtrade database*

It could be concluded based on the data in the Table 1 that, despite the trade intensity index has been increasing during last five years reflecting that Serbia has strengthened the trade relation with China, Trade intensity index value is still low and close to zero. It implies that trade between Serbia and China is under-represented, and there is a space for improvement.

**DISCUSSION**

Concerning previous analysis, authors tried to identify main challenges facing trade relations between Serbia and China. The ways of addressing these challenges as well as opportunities for the enhancement of bilateral trade were also examined.

**Main challenges in trade between Serbia and China**

As it has been already mentioned, one of major obstacles is huge trade deficit, which has been constantly growing in last ten years. The explanation lies in the fact that given its small size and lack capacity to meet the Chinese market demand Serbia can hardly conduct reciprocal trade
cooperation with China. The lack capacity is reflected, for instance, in domination of low value added products in the total Serbian exports, as well as low technology-intensive products in the structure of industry exports by technology intensity (which is presented almost half of total industry exports of Serbia).

Although bilateral relations between Serbia and China hit the highest level in recent years in many areas, including politics, economy, culture, security, etc., the economic relations resulted primarily in the conclusion of different investment projects (which were mostly loans). In other words, trade relations were to some extent neglected, while investments attracted much more attention. Bilateral trade has been developing almost spontaneously (as a result of deepening collaboration), with no substantial government interventions. Hence, the Serbian government should develop a more appropriate strategic approach to the fostering of bilateral trade relations, primarily focusing on promoting export growth. Serbia would also use a politically driven warming up of bilateral relations and apart from the attracting of Chinese investment, should make efforts to initiate negotiations on the trade enhancement matters as well.

Market access barriers and unfair competition are often indicated as problematic issues not only for Serbian, but for exporting companies all over the world entering the Chinese market. Barriers means existence of the subsidies, equity restrictions on foreign investments, lack of transparency and unfair treatment, lack of uniformity of regulations. Government procurement practices are also one of the main trade barriers, since China's procurement system is characterized by unconsolidated procurement-related laws (i.e. the existence of two laws the Tendering and Bidding Law and the Government Procurement Law) and shortcoming in implementing regulations. Although, it is important to mention that China proposed major revisions of its Tendering and Bidding Law (TBL) in December 2019. “The proposed revision would improve the transparency, conduct and fairness of tendering activities and move the Law closer to GPA requirements in certain areas and less so in others. The revision would establish public bidding (bidding is open to all) as the main tendering method, rather than invitation to bid (the entity undertaking the tendering process invites certain persons to submit a tender) and imposes more requirements on use of the latter” (Grier, 2020).

Serbian companies might be impacted by the delay in the implementation of agreements, which is primarily related to the obtaining of the permissions for exports of goods to China. It takes usually several months before permissions, certificates and all related documents are obtained and the implementation of the agreement starts. For instance, the several agreements on exports of dairy products and pork meat were signed in 2019. But only two companies "Mlekoprodukt" from Zrenjanin and "Mlekara Ub" received certificates for the export of milk to China in August 2020, while other three companies Imlek, Meggle Serbia and Somboled received the Chinese government’s approval for the export of their products in the end of October 2020 (SeeNews, 2020). An initial plan to start export pork meat to China at the beginning of November 2019 was also several times postponed due to the delay in the Chinese inspection visit and in signing of the agreement on phytosanitary protection. Namely, as Branislav Nedimovic, Minister of Agriculture of Serbia, declared in June 2019, the two sides still need to sign an agreement on phytosanitary protection, adding that the first Chinese inspectors are expected to arrive in Serbia (Xinhua, 2019). So far, the authors have not been able to find information that would confirm that this agreement was eventually signed, or any updated information related to the situation with export of pork meat.

In a broader context, situation on a global market may also greatly influence the economic cooperation. Since countries are becoming increasingly interconnected and interdependent, some changes or distortions in the global market can hinder trade of any of them. The good

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2 Agreements enabling the export of pork and dairy products to the Chinese market were signed by Serbian Agriculture Minister Branislav Nedimovic and the Deputy Minister of the General Administration of Customs of China, Zhang Jiwen in June 2019, in Belgrade (Serbian Monitor, 2019).
example could be the COVID-19 pandemic which has gravely wounded the world economy, including global trade (under the WTO (2020), the 14.3% quarter-on-quarter decline in world merchandise trade was recorded in the second quarter of 2020), as well as trade flows between China and other countries.

**The opportunities for the enhancement of bilateral trade**

When it comes to the opportunities for fostering bilateral trade, the market size and demand of the Chinese consumers should be primarily considered as an essential issue. In this regard, there is definitely space for improvement, especially in terms of diversification of Serbian exports. The growing Chinese investment could be very helpful in this regard. Serbia should attract investment in the strategically important sectors, which could stimulate the improvement the technology content of export products and producing of goods with higher value-added (Halilbašić, Muamer, Snježana Brkić, and Vedrana Bosić, 2015), which in addition to other benefits, is also of great importance for export growth (Baranenko and Đukić, 2012). Hence, investments in machinery, automotive, IT, and chemical sectors should be promoted.

Key sectors could potentially be those with a comparative advantage. Based on the comparative advantage index and using UN Comtrade data Chen and Chengyu (2016) revealed, that Serbia, for instance, in terms of industry sectors is more competitive in the following industries: Tobacco, Paper and paper products, Beverage, Food processing, Non-ferrous metal smelting and rolling processing, Printing, record media and replication and Transportation equipment.

Furthermore, investments in agriculture and food industry also have a growth potential, occupying a significant place in Serbian exports (Jelisavac Trošić, Stojanović-Višić and Petrović, 2018).

It is worth taking into account that cooperation with China could enable Serbia for easier involvement in international production through "global value chains" (global supply chains) led by Chinese companies, which would contribute to increased productivity, more intensive international trade and economic growth. In addition, this could further boost the expansion of mutual economic cooperation, but also cooperation with other countries (Dimitrijević, 2017).

**CONCLUSION**

Economic relations between Serbia and China, including bilateral trade, have been steadily growing over the last decade. The value of total trade in 2019 compared to 2010 significantly increased, the value of imported and exported goods also grew by several times. This trend has continued in the first half of 2020 as well. However, there are a number of challenges which prevent faster and more effective development of bilateral trade relations. Main obstacles are the huge trade deficit and low capacity of Serbian market following by considerable share of products with low value-added in total export. Focusing on investments rather than trade, the absence of a strategic approach in trade policy, delay in the implementation of agreements, etc., also prevented the faster development of bilateral trade relations.

Concerning the main challenges as well as the fact that trade between the two countries is continuously under-represented, authors have tried to identify the opportunities towards improving the current situation and enabling fostering of the bilateral trade in the upcoming period. Namely, the size of the Chinese market, as well as rising Chinese demand, leave plenty of room for improvement. By attracting investments in the industries and sectors where Serbia has a comparative advantage or export growth potential, Serbia could diversify and consequently increase its exports to China. Furthermore, it is essential for Serbia to develop a strategic approach to trade policy towards China, which implies better promoting of export growth,
relevant support of Serbian exporters as well as more active engagement around trade matters during official negotiations with China.

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