

China-Romania Economic Relations: Recent Developments and Prospects

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The world economy is crossing the period of Great Transformations and transition towards a New World Order, dominated by the increasing role of China in the world, given the fast implementation of the technological progress (Digital and Artificial Intelligence Revolutions). This paper analyses the economic relations between China and Romania and estimates the dynamics of the potential GDP in these states by implementing standard econometric tools. The results point to the upward trend in terms of bilateral trade between China-Romania in the post-pandemic era and emphasize the potential of the development in the mid-run.

Keywords: China economy, Romanian economy, potential output, international trade

Introduction

The world economy has recently continued the adjustment phase following the outbreak of the exogenous shocks and of the overlapping supply-side shocks over the past years. In fact, the outbreak of the COVID-19 pandemic represented the start of the period of Great Transformations at the global level.

On the one hand, during this period the world is in a transition process towards new models of growth and development, in the context of the implementation of the Digital Revolution and of the Artificial Intelligence Revolution, as also reflected by Qureshi and Woo (2022).

On the other hand, the climate change turned into a priority for the policy-makers across the world following the outbreak of the coronavirus pandemic (the worst global health crisis in more than one century), according to World Economic Forum (2020).

Last, but not least, the confrontation among the largest economic blocks across the world entered an unprecedented phase in the context of the change of paradigm in terms of geo-politics, following the outbreak of the crisis in Ukraine in February 2022. Overall, the outbreaks of the exogenous shocks in the recent years corroborated with the New Industrial Revolutions are transforming the globalisation process—the transition from the globalisation of the efficiency to the globalisation of resilience (the “nearshoring phenomenon”), as reflected also by the Polish Economic Institute (2022).

The technological process is transforming the globalisation, with the prospects for the intermediate service trade to increase significantly in the coming decades, given the potential of the emerging and developing countries, as emphasized by Baldwin (2023). According to Baldwin, Freeman, and Theodorakopoulos (2023), several

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factors underpin the prospects for the global trade with intermediate services to strongly advance in the future:

- the high level of the trade barriers and the potential to remove them;
- the digital technology and the low level of regulation for these services;
- the export capacity of the emerging and developing countries and the positive prospects for the dynamics of the imports of intermediate services in the developed countries;
- the huge gap in terms of wages, between the developed and the emerging and developing states.

Considering the recent environment, full of uncertainties (but also opportunities) the voice of the emerging and developing economies at the world level consolidated on the upward trend since the outbreak of the coronavirus pandemic. According to the database of the International Monetary Fund (October 2023), the weight of these economies in the global GDP grew from 57.1% in 2019 to almost 59% in 2023 (in international dollars, at purchasing power parity). This indicator stood at 37% at the beginning of 1980s and 1990s, 43.4% in 2000, and 53.8% in 2010 (during the Great Financial Crisis, the worst economic and financial crisis at the global level since the end of the Second World War). There can be noticed the increasing role of China in the global economy, the share of the second largest economy in the world (with a nominal GDP of USD 17.8tn at the end of 2023) in the global GDP climbing to almost 19% in 2023, as can be noticed in the following chart (Figure 1).

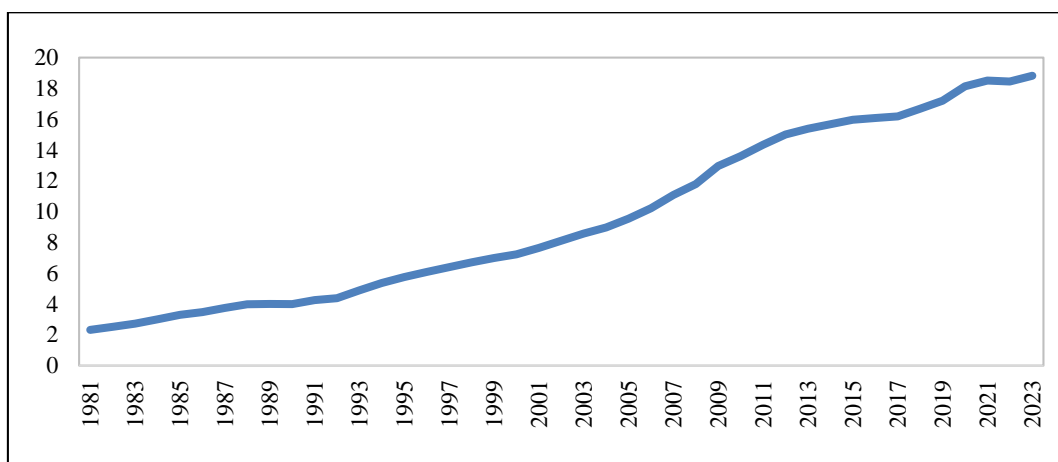


Figure 1. The weight of Chinese GDP in the world economy (%).

Source: based on the database of International Monetary Fund, World Economic Outlook, October 2023.

Several factors supported the increasing weight of Chinese economy in the global GDP in the recent years, including the domestic reforms, and the investments within the Belt Road Initiative (BRI).

On the one hand, the economic policy in China has turned the focus from the quantitative dimension to the qualitative dimension, as the second largest economy in the world reached the maturity phase, following the strong paces of growth and development over the past decades (since the Opening up Process). At present, the Beijing policy-mix is prioritizing the research & development, improvement of the education system, green economy, and the implementation of the fruits of the Digital Revolution and Artificial Intelligence Revolution in order to improve the competitiveness.

On the other hand, the internationalization process of China has continued in the recent years, despite the challenges induced by the outbreak of the coronavirus pandemic. The figures of the Green Finance and Development Centre (2024) show the increase of the Chinese BRI engagements by 18% YoY to USD 92.4bn in 2023 (cumulated volume of over USD 1tn since the launch of the program in 2013).

China-CEE/Romania Economic Relations: Recent Developments

Following the “divergent paths” period (1989-2008) emphasized by Castrillon (2022), the economic relations between China and Central and Eastern Europe countries entered a new development phase, an evolution determined by the outbreak of the Great Financial Crisis (and its consequences for the global economy and for European Union economy) and the reforms implemented in China.

On the one hand, the economy of the European Union faced a W-shape crisis in the context of the Great Recession (the private and the public sector debt crisis), with negative consequences for the potential output and spill-over impact for the CEE countries.

On the other hand, the Chinese economy emerged as the winner of the Great Financial Crisis, given the unprecedented challenges (mainly across the developed world), but also the policy-mix implemented in Beijing. According to the database of the International Monetary Fund (IMF), the weight of China in the world economy grew from 7.1% in 2008 to 11.3% in 2012.

The launch of the Initiative 16+1 in 2012 underpinned the positive economic developments between China and the Central and Eastern Europe states during the post-crisis and post-pandemic economic cycles, as reflected by China-CEE (2021a). Since the implementation of this Initiative until 2022, the volume of the exports and imports between China and the CEE countries rose by average annual paces of 8% and 9%, according to the Ministry Commerce of China. The foreign direct investments between China and the CEE countries climbed to almost USD 20bn, according to China-CEE (2021b).

The upward trend of the trade and foreign direct investments confirms the role of CEE region as the platform of the mid-run economic relations between China and European Union, a global environment dominated by unprecedented challenges. There can be noticed the dynamics of the trade flows between China and the CEE countries since the pandemic year 2020.

According to the statistics released by China-CEE Customs Information Centre (2024), the exports of China in the CEE region rose by an average annual pace of 11.5% during 2020-2023, to the record high level of CNY 730bn. On the other hand, the imports of China from the countries in the region grew by an average annual pace of only 3.6% to CNY 210bn for the period 2020-2023. Therefore, the trade gap between China and the CEE states rose by an average annual pace of 15.6% to CNY 520bn during 2020-2023, as reflected by Figure 2.

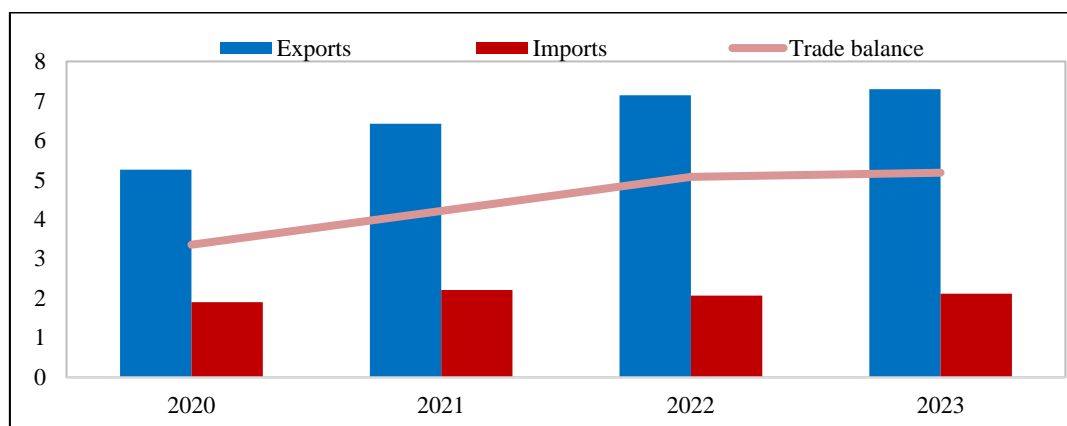


Figure 2. China-CEE trade flows (CNY, 100bn).

Source: based on the database of China-CEE Customs Information Centre (2024).

As regards the cumulated trade flows between China and Romania (the second largest economy in Central and Eastern Europe, with a nominal dimension of over EUR 320bn in 2023), there was an increase by an average annual pace of 11.4% during 1991-2023, to EUR 7.6bn, according to the database of the National Institute of Statistics of Romania (2024a).

There can be noticed the advance of the Chinese exports of goods to Romania by an average annual pace of 13.2% during 1991-2023, to EUR 6.8bn. The exports of goods of Romania to China grew by an average annual rate of 6.5% to EUR 0.9bn in the period 1991-2023. Consequently, the trade deficit with goods of Romania from the relations with China widened by an average annual pace of 21.4% during 1991-2023, to EUR 5.9bn, can be noticed from the following chart (Figure 3).

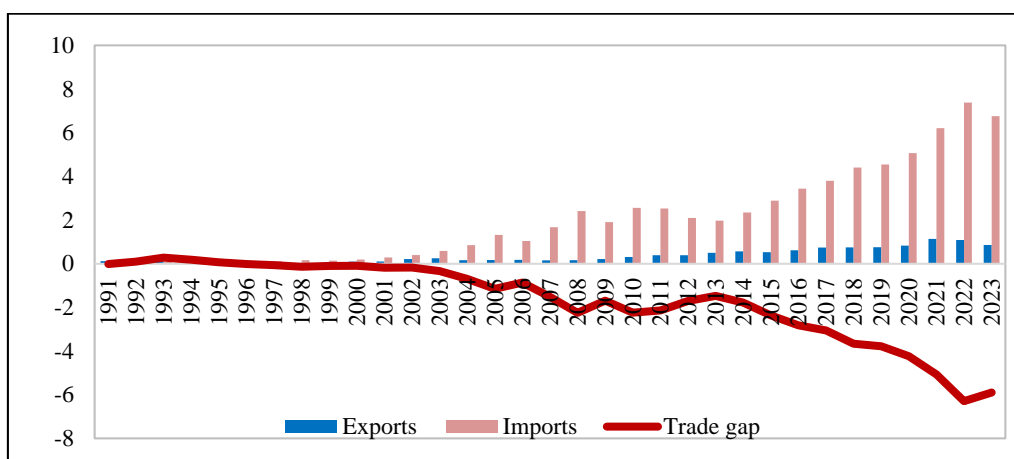


Figure 3. Romania-China trade flows (EUR, bn).

Source: based on the database of the National Institute of Statistics of Romania (2024a).

However, the share of China in the total international trade of goods of Romania declined to 3.5% in 2023, the lowest level since 2019.

Methodology and Results

This paper employs standard econometric tools and uses the database of the International Monetary Fund (IMF) in order to estimate the dynamics of the YoY pace of the potential output in China and Romania during the period 1980-2023.

In order to estimate the YoY pace of the potential GDP, the paper applied the filter developed by Hodrick and Prescott (1997). This method is based on the following relation:

$$\text{Min} \sum_{t=1}^T (\ln Y_t - \ln Y_t^*)^2 + \lambda \sum_{t=2}^{T-1} ((\ln Y_{t+1}^* - \ln Y_t^*) - (\ln Y_t^* - \ln Y_{t-1}^*))^2 \quad (1)$$

in which Y_t , Y_t^* , and λ represent the output, potential output, and the smoothness parameter (the lower its value, the closer the pace of GDP to its trend).

The results of the estimates are presented in Figure 4.

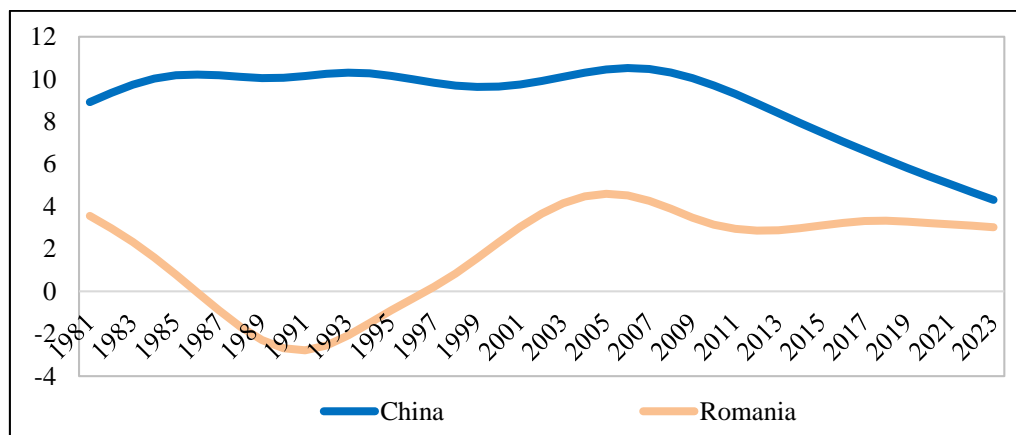


Figure 4. Dynamics of the potential output (% YoY).

Source: estimates based on the methodology, using IMF database (World Economic Outlook, October 2023).

According to the results of the econometric estimates, the YoY pace of the potential output presented similar developments in China and Romania from the end of the 1990s until 2023.

On the one hand, there can be noticed the upward trend for the YoY pace of the potential GDP during the period from the end of the 1990s until the outbreak of the Great Financial Crisis in both China and Romania. In China this indicator improved to a record high level of 10.5% in 2005, 2006, and 2007, given the entry into the World Trade Organization and its consequences (positive impact for the dynamics of the fixed investments). The YoY pace of the potential output increased to 4.6% in Romania in 2005, the year when the EU Treaty was signed (Romania joined the EU in 2007). We emphasize the improvement of the correlation coefficient for the dynamics of the YoY pace of the potential output in China and Romania during the pre-financial crisis, to over 91% for the interval 2000-2008 (the Great Moderation period).

On the other hand, YoY pace of the potential output initiated a deterioration trend in the context of the outbreak of the Great Financial Crisis in both China and Romania, as represented by Figure 4. In China the YoY pace of the potential GDP diminished from 10.5% in 2007 to 5.8% in 2019, the year before the outbreak of the coronavirus pandemic (the worst health crisis at the world level in more than one century). In Romania the YoY pace of the potential output deteriorated from 4.6% in 2005 to 2.9% in 2011, 2012, and 2013, as the Great Financial Crisis surprised the economy in an overheating mood, with high levels of the twin deficits and a strong dependence on foreign financing flows. However, the YoY pace of the potential GDP improved in Romania to 3.3% in 2019, the last year of the post-crisis cycle.

The outbreak of the exogenous shocks since 2020 (the coronavirus pandemic and the change of paradigm in terms of geo-political tensions) had a negative impact on the YoY pace of the potential output in both China and Romania. This indicator deteriorated from 5.8% in 2019 to only 4.3% in 2023 in China, according to the results of the econometric estimates, an evolution determined by several factors, including the consequences of the exogenous shocks (the sluggish growth pace of the world economy, in the context of the high level of the real interest rates in the recent quarters) and the domestic factors (the challenges in terms of real estate market and the maturity of the growth and development model). As regards Romanian economy, the YoY pace of the potential GDP diminished from 3.3% in 2019 to only 3.0% in 2023, the lowest since 2013, given the slow growth pace across the Euroland economy (the main economic partner) and the persistence of the twin deficits.

We underline the fact that the correlation coefficient between the YoY pace of the potential output in China and Romania turned negative for the period 2010-2023 (-46%).

Conclusions

The results of the analysis show that the YoY pace of the potential output in China and Romania has recently continued to be higher compared to those in the developed states, due to the strong dynamics of the fixed investments. In 2023 the fixed-asset investments rose by 3.0% YoY in China, while the fixed investments climbed by over 14% YoY in Romania in 2023, according to the data of the National Bureau of Statistics of China (2024) and National Institute of Statistics of Romania (2024b).

Furthermore, taking into account the change of the model of growth and development in China (with a focus on the new quality productive forces) and the implementation of the EU programs in Romania (Next Generation EU and the multiannual financial framework 2021-2027), the probability for the improvement of the YoY pace of the potential output in both countries in the coming years is increasing.

At the same time, the world unprecedented confrontations would probably determine an improvement of the economic relations between China and EU in the mid-run.

These elements express better prospects for the dynamics of the economic relations between China and Romania in the coming years, especially taking account the relatively low level at present. This scenario is also supported by the fact that Romania is the only one country in the Southeast Europe included in top 25 of the FDI Confidence Index for 2024 [being on the 17th place of the most attractive emerging markets for foreign direct investment, according to SEE News (2024)].

In the period Great Transformations and unprecedented challenges at the global level, there is also huge potential of development of the relations in terms of Digital Revolution and Artificial Intelligence Revolution between China and Romania, taking into account that China is a global leader, while Romania is the laggard of the European Union in terms of digital economy, according to Eurostat (2024).

References

- Baldwin, R. (2023). Globalization isn't dead, it's transforming—And that will change how we do business. I by IMD. Retrieved from <https://www.imd.org/ibyimd/videos/globalization-isnt-dead-its-transforming-and-that-will-change-how-we-do-business/>
- Baldwin, R., Freeman, R., & Theodorakopoulos, A. (2023). Deconstructing deglobalization: The future of trade is in intermediate services. *Asian Economic Policy Review*, 19(1), 18-37.
- Castrillon, D. (2022). China-CEE relations in a new era: The drivers behind the development of the platform for regional cooperation 16+1. Retrieved from [researchgate.net](https://www.researchgate.net)
- China-CEE. (2021a). About us: Cooperation between China and Central and Eastern European countries. Retrieved from china-ceec.org
- China-CEE. (2021b). Economic watch: China, Central and Eastern Europe see closer economic ties: Cooperation between China and Central and Eastern European countries. Retrieved from china-ceec.org
- China-CEE Customs Information Centre. (2024). China-CEEC customs information center. Retrieved from cceecc.org
- Eurostat. (2024). Digitalisation in Europe (2024 edition). Retrieved from europa.eu
- Green Finance and Development Center. (2024). China belt and road initiative (BRI) investment report 2023. Green Finance & Development Center. Retrieved from greenfdc.org
- Hodrick, R., & Prescott, E. C. (1997). Postwar U.S. business cycles: An empirical investigation. *Journal of Money, Credit and Banking*, 29(1), 1-16.
- International Monetary Fund (IMF). (2023). Database of world economic outlook October 2023. World Economic Outlook Database. Retrieved from imf.org

- National Bureau of Statistics of China. (2024). Statistical communiqué of the People's Republic of China on the 2023 national economic and social development. Retrieved from stats.gov.cn
- National Institute of Statistics of Romania. (2024a). Bun venit la Institutul Național de Statistică. Institutul Național de Statistică. Retrieved from insse.ro
- National Institute of Statistics of Romania. (2024b). Template comunicat presa. Retrieved from insse.ro
- Polish Economics Institute. (2022). Supply chain resilience is becoming a key trend in globalisation. Polish Economic Institute. Retrieved from pie.net.pl
- Qureshi, Z., & Woo, C. (2022). *Shifting paradigms: Growth, finance, jobs, and inequality in the digital economy*. Washington, D.C.: Brookings Institution Press.
- SEE News. (2024). Romania ranks 17th most attractive emerging market for FDI—Kearney. Retrieved from seenews.com
- The State Council of the People's Republic of China. (2024). China's GDP expands 5.2 pct in 2023, surpassing annual target. Retrieved from www.gov.cn
- World Economic Forum. (2020). We must prioritise climate change as we emerge from COVID-19. World Economic Forum. Retrieved from weforum.org