

Original Paper

doi [10.15826/recon.2022.8.2.008](https://doi.org/10.15826/recon.2022.8.2.008)

UDC 330.354, 330.356

JEL F43, O47, R11



Impact of external and internal factors on China's economic growth

B.A. Kheyfets^{1,2}, V.Yu. Chernova³ ✉¹ Institute of Economics of the Russian Academy of Sciences, Moscow, Russia² Financial University under the Government of the Russian Federation, Moscow, Russia³ People's Friendship University of Russia, Moscow, Russia; ✉ veronika.urievna@mail.ru

ABSTRACT

Relevance. China is the dominant trading partner for many countries of the world. The new plan for the Chinese economic development in 2021–2035, based on the “double circulation” model, has become the subject of vigorous debate.

Research objective. The study aims to identify China's economic growth drivers before and during the COVID-19 pandemic and evaluate the impact of external and internal factors on China's economic growth, taking into account future strategic changes.

Data and methods. To identify the growth factors of GDP, we used a factor model based on GDP components by spending and the data provided by the State Bureau of Statistics of the PRC for 2007–2020.

Results. Over the past decade, the contribution of GDP components that shape domestic demand has been steadily reduced. The decline in the share of net exports in GDP growth was replaced by the fluctuations in the external and domestic demand shares in the subsequent periods. The evaluations show that in 2020, 1% of 3.56% of China's economic growth in GDP (in national currency) was provided by net exports and 2% of 3.56% was provided by an increase in gross capital formation.

Conclusions. The increase in the contribution of net exports to GDP growth was caused not only by the growth of exports with a slowdown in the growth of imports but also by the redistribution of the shares of all factors and primarily by the sharp reduction in the share of the contribution of household expenditures to consumption. To promote domestic circulation through personal consumption, it is necessary for China to lower the savings rate, solve the problem of income inequality, and increase disposable income per capita.

KEYWORDS

economic growth, domestic market, double circulation, GDP components, Domestic consumption, export, import, international trade

ACKNOWLEDGEMENTS

The publication was supported by the grant for young scholars to carry out fundamental research in social sciences and humanities, R.1-F/S-2021, RUDN University Grant Support System in 2021.

FOR CITATION

Kheyfets, B.A., & Chernova, V.Yu. (2022). Impact of external and internal factors on China's economic growth. *R-economy*, 8(2), 94–105. doi: 10.15826/recon.2022.8.2.008

Влияние внешних и внутренних факторов на экономический рост Китая

Б.А. Хейфец^{1,2}, В.Ю. Чернова³ ✉¹ Институт экономики РАН, Москва, Россия² Финансовый университет при Правительстве РФ, Москва, Россия³ Российский университет дружбы народов, Москва, Россия; ✉ veronika.urievna@mail.ru

АННОТАЦИЯ

Актуальность. Китай является доминирующим торговым партнером для многих стран мира. Предметом бурных дискуссий стал новый план развития экономики Китая на 2021–2035 годы, основанный на модели «двойной циркуляции».

Цель исследования. Исследование направлено на выявление драйверов экономического роста Китая до и во время пандемии COVID-19 и оценку влияния внешних и внутренних факторов на экономический рост Китая с учетом будущих стратегических изменений.

Данные и методы. Для выявления факторов роста ВВП использовалась факторная модель, основанная на компонентах ВВП по расходам и данным, предоставленным Государственным бюро статистики КНР за 2007–2020 гг.

КЛЮЧЕВЫЕ СЛОВА

экономический рост, внутренний рынок, двойное обращение, составляющие ВВП, внутреннее потребление, экспорт, импорт, международная торговля

Результаты. Анализ показал, что в течение последнего десятилетия участие компонентов ВВП, формирующих внутренний спрос, неуклонно снижались. Выявлено, что снижение доли чистого экспорта в росте ВВП сменилось колебаниями долей внешнего и внутреннего спроса в последующие периоды. Проведенные оценки показывают, что в 2020 г. 1% из 3,56% экономического роста ВВП Китая (в национальной валюте) обеспечен чистым экспортом и 2% из 3,56% – обеспечены ростом валового накопления капитала.

Выводы. Рост доли вклада чистого экспорта в рост ВВП вызван не только ростом экспорта при замедлении темпов роста импорта, но и перераспределением долей всех факторов и, прежде всего за счет резкого сокращения доли вклада расходов на потребление домашних хозяйств. Для стимулирования внутреннего обращения за счет личного потребления, в Китае необходимо снизить норму сбережений, решить проблему неравенства доходов, увеличить располагаемый доход на душу населения.

БЛАГОДАРНОСТИ

Издание поддержано грантом для молодых ученых на выполнение фундаментальных исследований в области социальных и гуманитарных наук, Р.1-Ф/С-2021, Система поддержки грантов РУДН в 2021 году.

ДЛЯ ЦИТИРОВАНИЯ

Kheyfets, B.A., & Chernova, V.Yu. (2022). Impact of external and internal factors on China's economic growth. *R-economy*, 8(2), 94–105. doi: 10.15826/recon.2022.8.2.008

内外因素对中国经济增长的影响

海菲茨^{1,2}, 切尔诺娃³ ✉

¹ Российский институт экономики, Москва, Россия

² Российский федеральный университет финансов и экономики, Москва, Россия

³ Российский университет дружбы народов, Москва, Россия; ✉ veronika.urievna@mail.ru

摘要

现实性: 中国是世界上许多国家的主要贸易伙伴。中国基于“双循环”的2021-2035年新经济发展计划，一直是人们讨论的焦点。

研究目标: 研究旨在确定COVID-19之前和期间中国经济增长的驱动因素，并评估外部和内部因素对中国经济增长的影响，同时考虑到其未来的政策发展。

数据和方法: 为了确定GDP增长的驱动因素，我们使用了中华人民共和国国家统计局提供的2007-2020年的数据以及GDP支出部分的因子模型。

研究结果: 分析表明，在过去十年中，国内需求部分在GDP中的参与度一直在稳步下降。结果显示，净出口在GDP增长中所占份额的下降被后续时期内外部需求份额的波动所取代。据估计，2020年中国GDP（以本币计）3.56%的经济增长中有1%来自净出口，3.56%的2%来自资本积累增长。

结论: 净出口对GDP增长的贡献上升，不仅是由于出口的增加和进口的放缓，而且还由于各要素份额的重新分配，尤其是家庭消费支出的急剧下降。为了通过个人消费拉动国内内需，中国需要降低储蓄率，解决收入差异问题，增加人均可支配收入。

关键词

经济增长，国内市场，双循环，GDP组成部分，国内消费，出口，进口，国际贸易。

供引用

Kheyfets, B.A., & Chernova, V.Yu. (2022). Impact of external and internal factors on China's economic growth. *R-economy*, 8(2), 94–105. doi: 10.15826/recon.2022.8.2.008

Introduction

According to the new strategy, which was officially announced in March 2021¹, for its development, China will primarily rely on “internal circulation”, an internal cycle of production, distribution, and consumption with support through innovation and modernisation of the national economy. To implement such ambi-

tious plans, China has all the prerequisites. China is a giant consumer market with 1.4 billion people, and its fast-growing middle class is at least 400 million people. China has the most complete industrial supply chain in the world and the most complete industrial supply chain according to the UN International Industrial Classification (Yang et al., 2021; Kuzmin & Romanova, 2021).

The double-circulation strategy is based on a model in which “internal circulation” is a major focus of interest, while “external circulation”

¹ Moore MS Advisory. (2021). An Analysis of China's 14th Five-Year Plan, 2021. Retrieved from <https://www.msadvisory.com/news-updates/march-2021/an-analysis-of-china-14th-five-year-plan>

remains an additional source of growth². The focus on the double circulation as a paradigm highlights the priorities of a new development model, in which internal circulation is tackled as the main driver of development. Internal and external circulation are used to mutually reinforce each other for achieving higher GDP growth rates (Jia, 2021) in the context of resource scarcity or restrictive environmental factors (Yasinskii & Kozhevnikov, 2022).

China's dual circulation strategy aims to ensure a more sustainable growth in the long term, irrespective of factors beyond the government's control³. Domestic circulation implies reforms on both the demand and supply sides. On the demand side, the goal is to increase domestic consumption expenditures and enhance investment in the key infrastructure (for example, digitalisation-related, the Internet of Things, etc.). On the supply side, the purpose of the reform is to encourage Chinese industrial companies to become less dependent on foreign supplies and resources, while maintaining the role of exports as an additional growth driver⁴.

Over the past decade, China has managed to halve the share of its goods and services exports, and thus its economy has become less dependent on exports. However, the final consumption expenditure in 2019 was 55.78% compared to the peak of 67.4% in 1983. This is extremely low compared to other major emerging economies, such as Brazil and India (85.7% and 70.4%, respectively) and advanced economies, such as Canada, Germany, and the United States (79%, 72%, and 82%, respectively). The share of consumption by households in China in gross domestic product (GDP) is particularly low, i.e. 39.08% in 2019 (Grieger, 2020).

China is the dominant trading partner for many countries of the world⁵ including the

² Hongbin, Q., Xin, E., Song, S., & Nag, M. (2020). China's New Five-Year Plan. Retrieved from <https://www.research.hsbc.com/C/1/1/320/zqTmqCp>

³ Hass, R. (2021). How China Is Responding to Escalating Strategic Competition with the US. Retrieved from <https://www.brookings.edu/articles/how-china-is-responding-to-escalating-strategic-competition-with-the-us/>

⁴ Tang, F. (2021). What is China's Dual Circulation Economic Strategy and Why Is It Important? Retrieved from <https://www.scmp.com/economy/china-economy/article/3110184/what-chinas-dual-circulation-economic-strategy-and-why-it>

⁵ Ghosh, I. (2020). How China Overtook the US as the World's Major Trading Partner, Visual Capitalist. Retrieved from <https://www.visualcapitalist.com/china-u-s-worlds-trading-partner/>

EU⁶, Russia⁷, and even the United States, despite the trade war between these countries⁸. The new plan for Chinese economic development in 2021–2035, which is based on the “double circulation” model, has become the subject of vigorous debate⁹. Researchers' interest in China's economic reforms can be inspired by three main reasons. First, given China's huge role in global trade, even a small change in China's economic growth and trade policies could have enormous consequences for other countries and the global economic system¹⁰. Second, other countries could also benefit from China's current previous successful experience in reforming its economy. Third, China was the only major economy to report positive economic growth in 2020 amid the COVID-19 pandemic¹¹.

These reasons provide the background for this research, whose *aim* is to examine the contribution of external and internal factors to the Chinese economy growth before and during the COVID-19 pandemic. This aim has determined the following *objectives*: to establish the role of export growth rates in accelerating the Chinese economy; to identify the key constraint on internal circulation; and to show the impact of external factors of economic growth on the use of the potential of China's domestic market.

This study assesses the contribution of the four selected components to GDP dynamics in order to clarify whether the dependence of the Chinese economy's growth is mainly on exports or whether GDP growth has become largely determined by internal factors, and exports have started to play a less significant role. This supposition represents the core hypothesis to be tested in the study.

⁶ Eurostat. (2021). EU27. Trade by SITC Product Group. Retrieved from https://ec.europa.eu/eurostat/databrowser/view/EXT_ST_EU27_2020SITC_custom_192433/bookmark/table?lang=en&bookmarkId=91f8be98-d920-44a5-9e3a-67a8b-d4cba67

⁷ Rosstat. (2021). Customs statistic of foreign trade of Russia. Retrieved from <http://stat.customs.gov.ru>

⁸ Buchholz, K. (2021). China Reemerges as Biggest Trading Partner of the U.S. Retrieved from <https://www.statista.com/chart/20366/trade-volume-top-us-trade-partners/>

⁹ Yongding, Y. (2020). Dual Circulation Strategy Continues China's Push to Open up. Retrieved from <https://www.scmp.com/comment/opinion/article/3103643/dual-circulation-strategy-continues-chinas-push-open>

¹⁰ Congressional Research Service. (2019). China's Economic Rise: History, Trends, Challenges, Implications for the United States. Retrieved from <https://fas.org/sgp/crs/row/RL33534.pdf>

¹¹ Yeung, K. (2020). China is Only G20 Country Expected to See Positive Economic Output This Year, OECD Says, South China Morning Post.

Theoretical framework

The transition to a double circulation policy is interpreted as a measure of confronting the global economic recession caused by the COVID-19 and the consequences of the trade war between China and the United States (Liu, 2021; Garcia-Herrero, 2021), as a response to rising trade protectionism as well as the implementation of the long-planned restructuring of the Chinese economy (Su & Liang, 2021). Other studies argue that shifting the focus of the Chinese development model to the domestic market is not an entirely new idea (Zhu & Kotz, 2010; Saad et al., 2021; Wang & Piesse, 2013; Perskaya & Revenko, 2020). It has been applied for the past 15 years but has only been achieved to a limited extent¹². China has undertaken attempts to change the economic growth model since the mid-2000s, and its efforts especially intensified after the global financial crisis of 2007–2009, when exports ceased to play a leading role in economic growth (Koopman et al., 2008; Zhu & Kotz, 2010; Wang et al., 2019).

The transition to an economy driven by domestic demand has already begun: Wolf¹³ argues that switching from predominantly external growth factors to internal ones began around 2015, but this process is unfolding at a slow pace and may be completed only by 2025. China has an advantage over many other countries that have tried at various times to rely on factors of internal growth such as the domestic consumer market, resources, human capital, and so on. It has a very large domestic economy, which means that most of its growth can be provided by domestic resources¹⁴, and the world's largest domestic market.

Horn et al. (2010)¹⁵, Zhu and Kotz (2010), Saad et al. (2021) analyzed the impact of export dynamics on the Chinese economy growth rate and note a decline in the role of exports in China's

economic growth. After the world's financial crisis, export growth ceased to be a dominant factor and, in the context of a slowdown in world trade, could not provide stable and high growth rates of the Chinese economy. At the same time, the double-circulation policy is not a policy of isolating China from the rest of the world (Lomanov, 2021). It aims at the mutual strengthening of domestic and external demand and represents a generalization of China's historical practice in terms of its economic interactions with the rest of the world (Changhong & Hongkui, 2021).

To analyse the role of exports in economic growth, experts use the export share in GDP (Gabriele, 2006; Kalaitzi & Chamberlain, 2020), the share of net exports in GDP (Humnath et al., 2022), growth in exports, and net exports in GDP (Subasat, 2002). However, according to Koopman et al. (2008), these indicators distort the role of exports: indicators of the total volume of exports overestimate the role of exports; and indicators of net exports (total volume of exports minus the total volume of imports) underestimate the role of exports. Nevertheless, the listed indicators are widely used in research (Humnath et al., 2022), which is facilitated by the availability of statistical data for their calculation. Other representative indicators, including DVAE (domestic value-added exports), are not so widely used because statistical agencies usually do not divide the total volume of imports into parts, one of which is used for domestic needs (production, investment, and consumption), and the other one for the subsequent export of goods and services, which complicates the calculation of the DVAE indicator.

Despite a rather large number of publications on China's transition to the double-circulation policy, the role of external and internal factors in ensuring the GDP growth of the Chinese economy during the COVID-19 pandemic still remains understudied.

Method and data

The research consists of the following stages: collecting statistical data for calculations; assessing the growth rate of the four GDP components; establishing the share of each component's contribution to GDP dynamics; and analyzing the dynamics of external and internal factors of GDP growth.

To analyse the role of GDP components in its growth, the formula for calculating GDP by spending is used:

¹² Congressional Research Service. (2019). China's Economic Rise: History, Trends, Challenges, Implications for the United States. Retrieved from <https://fas.org/sgp/crs/row/RL33534.pdf>

¹³ Wolf, M. (2018). The Chinese Economy is Rebalancing, at Last. Financial Times. Retrieved from <https://www.ft.com/content/b54cda40-3659-11e8-8b98-2f31af407cc8>

¹⁴ Moody, A. (2020). Strategy set to fit into new era of globalization. China Daily. Retrieved from https://global.chinadaily.com.cn/a/202012/15/WS5fd7f38ca31024ad0ba9bc96_2.html

¹⁵ Horn, J., Singer, V., & Woetzel, J. (2010). A truer picture of China's export machine, McKinsey Quarterly. Retrieved from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/a-truer-picture-of-chinas-export-machine>

$$GDP_i = C_i + I_i + G_i + NE_i \quad (1)$$

where GDP_i is GDP in the i -st period; C_i , final consumption expenditure; I_i , gross capital formation (investments); G_i , public spending; NE_i , net exports.

The GDP growth rate can be determined by the formula as follows:

$$\begin{aligned} \frac{GDP_i - GDP_{i-1}}{GDP_i} &= \frac{C_i - C_{i-1}}{C_i} \cdot \frac{C_i}{GDP_i} + \\ &+ \frac{I_i - I_{i-1}}{I_i} \cdot \frac{I_i}{GDP_i} + \frac{G_i - G_{i-1}}{G_i} \cdot \frac{G_i}{GDP_i} + \\ &+ \frac{NE_i - NE_{i-1}}{NE_i} \cdot \frac{NE_i}{GDP_i}. \end{aligned} \quad (2)$$

Then the contribution of the growth of the first component, final consumption expenditures (R_c), to GDP growth can be determined as follows:

$$R_c = \frac{C_i - C_{i-1}}{C_i} \cdot \frac{C_i}{GDP_i} = \frac{C_i - C_{i-1}}{GDP_i}. \quad (3)$$

The contributions of all the other components can be determined in a similar way:

– the contribution of growth in gross capital formation to GDP growth (R_I):

$$R_I = \frac{I_i - I_{i-1}}{I_i} \cdot \frac{I_i}{GDP_i} = \frac{I_i - I_{i-1}}{GDP_i}; \quad (4)$$

– the contribution of public spending growth to GDP growth (R_G):

$$R_G = \frac{G_i - G_{i-1}}{GDP_i}; \quad (5)$$

– the contribution of net export growth to GDP growth (R_{NE}):

$$R_{NE} = \frac{NE_i - NE_{i-1}}{GDP_i}. \quad (6)$$

Factor models based on GDP components by spending are widely used in the analysis of GDP growth by statistical offices, in particular the U.S. Bureau of Economic Analysis¹⁶. An advantage of this approach is the availability of the initial data for the calculation published annually by the statistics bodies.

Assessment of the role of GDP components makes it possible to clearly see what factors (exter-

nal or internal) determine economic growth and assess the share of each component's contribution to GDP growth. The analysis of the dynamics of the listed indicators was carried out on the basis of open data of the National Bureau of Statistics of China¹⁷ and World Bank¹⁸ databases.

Results and discussion

China's exports and imports as a percentage of GDP began to decline in 2006–2007. In 2006, the export of goods and services exceeded 35.3% of GDP, and imports 28.8%, while in 2019 exports decreased to 17.47% and imports to 14.52%. As a result of the decrease in exports by almost two times (1.96 times) and the decrease in imports by 1.65 times, there was a significant reduction in the share of net exports in GDP from 8.66% in 2007 to 1.15% in 2019. Imports accounted for only 14%, while exports increased to 17.65%¹⁹.

Analysis of the growth rates of the four key GDP components shows that over the past decade, the components that form domestic demand have been steadily declining. A decline in the export and import growth rates in 2010–2015 occurred at a swift rate in comparison with domestic factors. Since 2017, after a two-year period of increased growth in imports and exports, the growth of Chinese exports and imports continued to slow down. The outpacing slowdown in imports in comparison with exports led to an increase in the net export growth rate in 2019 (Fig. 1).

A significant increase in net exports in 2020 is due to an increase in exports by 4% and a decrease in the growth rate of imports by 0.7%. It should be noted that in previous years, export growth rates were 5% (2019), 7% (2018), and in 2006 and 2007, 23% and 20%, respectively. The highest export growth rates were recorded in 2010 (130%) after the decline during the global financial crisis with export growth rates dropping to 81%.

China's export and import fluctuations in the period after the global financial crisis affected the dynamics of net exports and their growth rates from negative values in 2009 to high positive values in 2015, due to a significant drop in imports (by 13.3%) with a more modest decline in exports (by 1.88%).

¹⁷ NBS. (2021). National Bureau of Statistics of China. Retrieved from <https://data.stats.gov.cn/english/easyquery.htm?cn=C01>

¹⁸ World Bank. (2021). Retrieved from <https://data.worldbank.org/indicator>

¹⁹ World Bank. (2021). Retrieved from <https://data.worldbank.org/indicator>

¹⁶ BEA. (2022). Gross domestic product, fourth quarter and year 2021 (Second estimate). <https://www.bea.gov/news/2022/gross-domestic-product-fourth-quarter-and-year-2021-second-estimate>

Analysis of the role of GDP components shows a decrease in the share of the contribution of growth in income to government consumption, sharp fluctuations in the share of the contribution of growth to gross capital formation, the largest drop in which occurred in 2015, and its decrease in subsequent periods. A particularly sharp decline in the share of this component in GDP occurred during the 2020 pandemic, when consumer spending became a brake on China's GDP growth (Fig. 2).

The increase in the contribution of net exports to GDP to 28.43% was caused not so much

by the growth in exports (by 4%), but by the redistribution of the shares of all factors and, above all, by the sharp reduction in the contribution of household expenditures to consumption. As a result, net exports (28%), along with gross capital formation (56%), were the key growth drivers of the Chinese economy during the 2020 pandemic. In other words, 1% of 3.56% of China's economic growth (in local currency) in 2020 was ensured by the growth of net exports, and 2% of 3.56% of China's economic growth (in national currency) in 2020 was linked to the increase in gross capital formation.

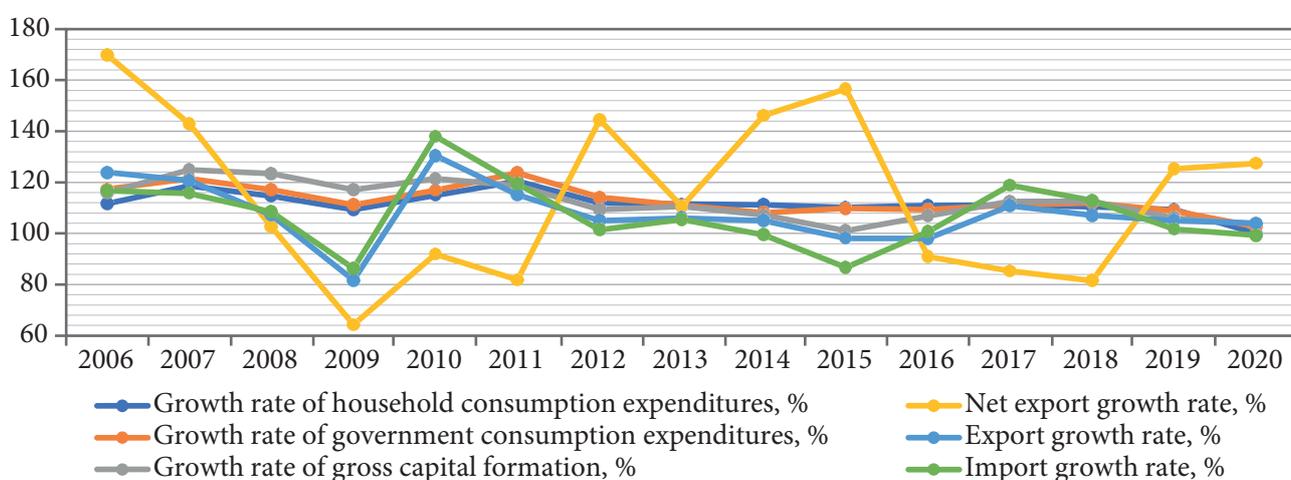


Figure 1. Growth rates of GDP components, export and import volumes in the Chinese economy in 2006–2020

Source: National Bureau of Statistics of China.

Retrieved from <https://data.stats.gov.cn/english/index.htm> (Access date 14.06.2021)

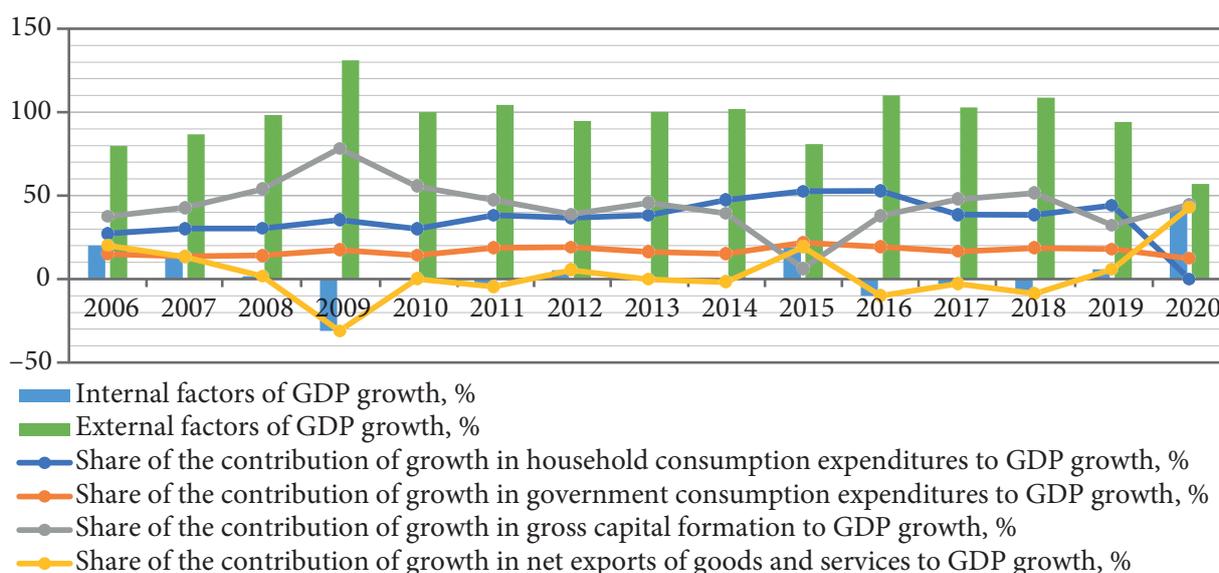


Figure 2. Change in the contributions of growth components to China's GDP growth in 2006–2020

Source: National Bureau of Statistics of China.

Retrieved from <https://data.stats.gov.cn/english/index.htm> (Access date 14.06.2021)

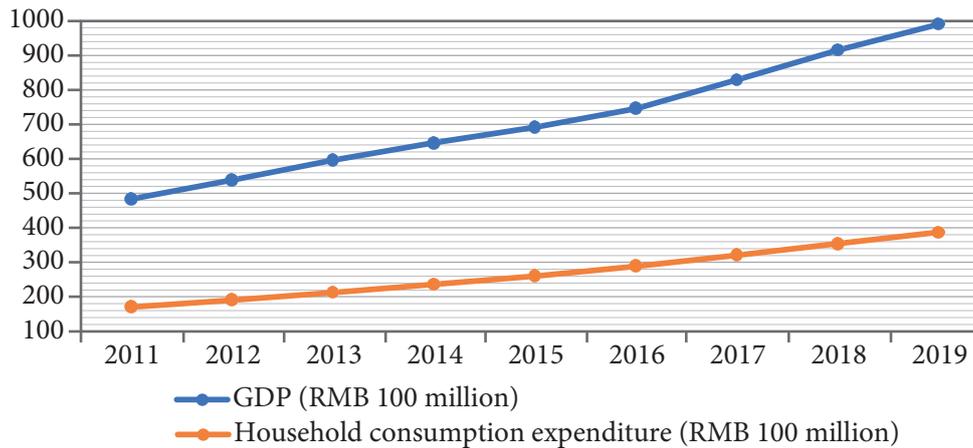


Figure 3. Chinese household expenditure dynamics associated with consumption in 2011–2019

Source: National Bureau of Statistics of China.

Retrieved from <https://data.stats.gov.cn/english/index.htm> (Access date 14.06.2021)

The growth in exports in 2020 is caused by an increase in global demand due to the partial recovery of the economies of the world's countries after a global lockdown due to the spread of the COVID-19 pandemic. China's total trade was US\$ 1,358.6 billion in Quarter 4 of 2020, up 11.4% year-on-year and 8% on a year-to-year basis. The exports of medical supplies and teleworking equipment, including laptops and tablets, as well as imports of commodities, metal ore, and agricultural products provided the key drivers of China's trade growth²⁰.

Despite the two-fold decline in China's exports as a percentage of GDP, the dependence of the Chinese economy on export dynamics remains high. In 2020, China's export volume amounted to 12% of the global export volume (for comparison, in the USA it was 9% and in Germany 7%)²¹. In the context of the long-term slowdown in world trade, it impedes further growth of the Chinese economy.

An increased focus of the Chinese authorities on the expansion of domestic demand has been happening against the background of the domestic consumption recovery's lagging behind the recovery of exports and investments. According to the World Bank, the tendency for the growth

rates of household expenditures on consumption to lag behind the growth rates of GDP has been recorded in China for a long period (Fig. 3). Moreover, household consumption expenditures as a percentage of GDP fell from 48% in 1991 to 34% in 2010. In 2019, household consumption expenditures in China remained relatively low compared to developed countries, by 1.74 times lower compared to the same indicator in the United States and by 1.35 times lower than in the EU countries on average and below the level of countries with emerging economies, such as Brazil and India (85.7% and 70.4%, respectively)²².

China has a very high savings rate (about 45% on average), especially among the urban population (Fig. 4). According to the data published by the National Bureau of Statistics, per capita disposable income in China is 30,733 yuan, equivalent to 43% of GDP per capita (in developed countries, it exceeds 60%, in most developing countries, it is around 50%). In addition, China has a higher level of income inequality than most developed countries; the Gini index is 0.468 in 2018, which is one of the highest among the largest economies in the world (Han & Si, 2020).

Analysis of the impact of export dynamics on the Chinese economy growth rates in Horn et al.²³,

²⁰ Sun, S., & Wu, G. (2021). China's Economic Recovery in the Fourth Quarter Beats Estimates, Ending 2020 with an Annualized Growth Rate of 2.3%. Retrieved from <https://www.ualberta.ca/china-institute/news/the-latest/2021/february/q4-economic-update.html>

²¹ National Bureau of Statistics of China. Retrieved from <https://data.stats.gov.cn/english/index.htm> (Date accessed 14.06.2021)

²² National Bureau of Statistics of China. Retrieved from <https://data.stats.gov.cn/english/index.htm> (Date accessed 14.06.2021)

²³ Horn, J., Singer, V., & Woetzel, J. (2010). A truer picture of China's export machine, McKinsey Quarterly. Retrieved from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/a-truer-picture-of-chinas-export-machine>

Zhu & Kotz (2010), Saad et al. (2021) shows that the dominant role of exports has declined since the global financial crisis. International trade and exports could not provide sustainable economic growth for the Chinese economy. Exports began to determine China’s economic growth to a much lesser extent than other factors, which necessitated a change in the economic development model and provided the initial stage of the transition to an economy oriented towards domestic consumption (Saad et al., 2021) which is called “double circulation”. The decline in the role of foreign trade is quite natural.

External factors, especially uncertainty in the U.S.-China relations in the face of global value chain restructuring, hampered the recovery of the global economy and, consequently, China’s exports and imports (Huang et al., 2021; Huang et al., 2021). Not a single country primarily focused on external demand, let alone a country with such a large and fast-growing economy as China, can maintain high sustainable growth rates during a recession in the world economy (Zhu & Kotz, 2010). According to Wolf²⁴, the transition of the Chinese economy from external growth factors to internal ones, which began in the middle of the second decade of the 21st century, may finally take shape by the middle of the third decade.

Indeed, as this research has shown, in the first years after the global financial crisis, domestic factors began to play a more significant role in China’s economic growth, while the role of net exports in economic growth declined. However, this redistribution is not stable and fluctuates. The results showed that during the pandemic, it was the export growth rate that played a decisive role in the acceleration of the Chinese economy, and household consumption spending provided the main constraint.

In 2020, China became the largest consumer market by overtaking the United States. The behavioral pattern of Chinese households has a decisive effect on the dynamics of domestic consumption (Gribova, 2021). However, household consumption remains below 40%, and China’s household savings rate is one of the highest in the world. Total household savings in China are 36.14% (according to 2016 data, as a percentage of household disposable income), and in the USA, Great Britain, and New Zealand, this figure is 6.99%, 1.74%, and 0.02%, respectively (Saad et al., 2021). Low consumption of the population is a key problem in China in stimulating domestic demand²⁵. Insufficient household consumption is partly due to imperfect financial markets, culture,

²⁴ Wolf, M. (2018). The Chinese Economy is Rebalancing, at Last. Financial Times. Retrieved from <https://www.ft.com/content/b54cda40-3659-11e8-8b98-2f31af407cc8>

²⁵ Siwei, C., & Meihan, L. (2020). China's Latest Economic Buzzword: Demand-Side Reform. Retrieved from <https://asia.nikkei.com/Spotlight/Caixin/China-s-latest-economic-buzzword-Demand-side-reform>

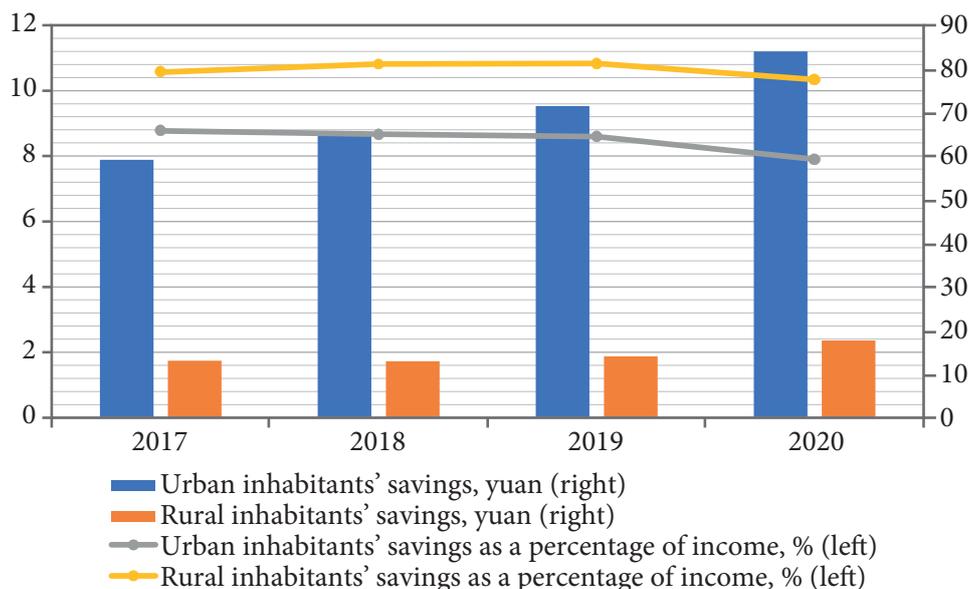


Figure 4. Dynamics of urban and rural inhabitants’ savings of China in 2017–2020

Source: National Bureau of Statistics of China.

Retrieved from <https://data.stats.gov.cn/english/index.htm> (Access date 14.06.2021)

customs, and habits of Chinese consumers. There is no doubt that culture is one of the reasons for such a high savings rate. More importantly, a significant part of the Chinese inhabitants have to rely on their strengths upon retirement, to receive health services when necessary, to obtain education, and to acquire home ownership, which makes the population put money away.

Insufficient pension provision of the population may become a serious obstacle to increasing domestic consumption in the context of the rapidly aging nation (Yuan, 2020). China's highly fragmented pension system divided into more than 2,000 pools separately managed by local governments, contributes to rising income inequality for retirement-age people²⁶.

High levels of income inequality have increased further during the pandemic. During the pandemic in China, the number of billionaires increased by 257. Overall, China currently has 878 billionaires, the US now has about 700, while in 1999 there was not a single billionaire in China²⁷. However, most of China's population is made up of low-income households that still do not want to spend or cannot spend²⁸. The widening gap in income and spending between the rich and poor during the pandemic was one of the reasons for the generally sluggish growth in consumption in China.

Economic growth can only be sustainable in the long term when poverty is substantially reduced (Breunig & Majeed, 2020). Over 40 years of reforms, China has enjoyed great success in economic and social development. According to the World Bank experts, however, the complete eradication of poverty has not been achieved. For upper-middle-income countries, the poverty line is \$5.50 a day, while the Chinese government used the poverty line for lower-middle-income countries. According to the World Bank criterion, 80 to 90% of Chinese people are considered poor today. Nonetheless, the elimination of extreme poverty is China's outstanding achievement.

²⁶ Huang, J. (2019). Public Resentment is Rising Over China's Pension Crisis. Retrieved from <https://www.voanews.com/east-asia/public-resentment-rising-over-chinas-pension-crisis>

²⁷ Li, J. (2020). China Is Rapidly Producing New Billionaires despite Covid-19. Retrieved from <https://qz.com/1919974/china-created-a-record-number-of-billionaires-despite-covid-19/>

²⁸ Zhang, Z. (2021). What to Expect as China's Economy Enters 2021. Retrieved from <https://www.china-briefing.com/news/china-2021-economic-outlook-foreign-investor-expectations/>

Thus, in order to encourage domestic circulation through personal consumption, China needs to reduce the savings rate to below 35%. The savings rate reduced to below 35% is necessary to boost domestic circulation²⁹ and may solve the problem of income inequality (Kakwani et al., 2019), and increase disposable income per capita. Post-retirement Chinese population faces pressure on their modest retirement income from health care, home ownership and other factors (Chen et al., 2020). Improvements in the social protection system, reforms in the field of health care and education will contribute to the reduction of the savings rate.

In October 2020, the Chinese leadership issued an action plan to expand domestic demand and increase consumption (Hong et al., 2020). It lists measures in four main areas, such as promoting online access to offline services, developing new service models, streamlining the consumption of physical goods, and enhancing support for manufacturers. To stimulate consumption, a number of targets were set, such as scaling up consumption, increasing consumption levels, and improving consumption patterns (Xiong et al., 2021). Measures to promote domestic demand include tax cuts to increase disposable income, increased government spending and increased investment, which also shape the domestic demand. Despite the measures taken, sluggish domestic demand remains a bottleneck in the development of the Chinese economy.

To increase domestic circulation and stimulate the labour market, the Chinese government in 2020 encouraged travel between provinces within mainland China during the 2020 summer break. This measure successfully supported the service sector, where new jobs were created, allowing more people to increase their consumption spending.

Conclusion

China's double circulation policy is a strategic balance between external and internal circulation depending on external threats and internal capabilities³⁰. During the pandemic, when domestic demand could not become the mainstay and

²⁹ Bin, X. (2021). Dual Circulation, Consumption Stimulation or Regional Economic Integration... Which is the Way Forward for China's Economy in 2021? Retrieved from <https://www.ceibs.edu/new-papers-columns/dual-circulation-consumption-stimulation-or-regional-economic-integration-which>

³⁰ Sheng, A. (2021). Dual Circulation is a Strategic Process, not a Theory. Retrieved from <https://www.eastasiaforum.org/2021/01/20/dual-circulation-is-a-strategic-process-not-a-theory/>

economic growth driver, the role of external demand increased. The exports of medical supplies and teleworking equipment, as well as imports of commodities, metal ores, and agricultural products, were the key drivers behind China's trade growth. Export growth in 2020 was caused by the partial recovery of the global economy after the lockdown. During the pandemic, it was the export growth rate that played a pivotal role in the acceleration of the Chinese economy, while household consumption spending became the main constraint.

Analysis of the dynamics of the growth rates of the four main components of China's GDP shows that over the past decade, the components that shape the domestic demand have been steadily declining. The decline in the growth rate of exports and imports from 2010 to 2015 occurred at a faster pace in comparison with domestic factors.

Since 2017, after a two-year period of increased growth in imports and exports, the growth of Chinese exports and imports continued to slow down. The estimates show that in 2020, 1% of 3.56% of China's economic growth in GDP (in national currency) is provided by net exports and 2% of 3.56% is provided by an increase in gross capital formation. Therefore, the support of external factors of economic growth can ensure the use of the potential of the internal market. Domestic demand can become the new engine for China's economic growth.

The study demonstrates the factors behind the growth of the Chinese economy during the COVID-19 breakdown. China's experience in ensuring high rates of economic growth amid external constraints is of undoubted interest to many countries and will be useful for developing strategic development plans.

References

- Breunig, R., & Majeed, O. (2020). Inequality, poverty and economic growth. *International Economics*, 161, 83–99. <https://doi.org/10.1016/j.inteco.2019.11.005>
- Changhong, P., & Hongkui, L. (2021). Research on the scientific connotation of new development pattern. *China Finance and Economic Review*, 10(3), 3–24. <https://doi.org/10.1515/cfer-2021-0014>
- Chen, B., Yang, X., & Zhong, N. (2020). Housing demand and household saving rates in China: evidence from a housing reform. *Journal of Housing Economics*, 49, 101693. <https://doi.org/10.1016/j.jhe.2020.101693>
- Gabriele, A. (2006). Exports of services, exports of goods, and economic growth in developing countries. *Journal of Economic Integration*, 21(2), 294–317. <http://www.jstor.org/stable/23000614>
- Garcia-Herrero, A. (2021). What is behind China's dual circulation strategy. *China Leadership Monitor*, 69 (Fall). <https://doi.org/10.2139/ssrn.3927117>
- Gribova, N.V. (2021). Chinese household consumption: Main trends and pandemic factor. *National Strategy Issues*, 64, 33–59. https://doi.org/10.52311/2079-3359_2021_1_33
- Grieger, G. (2020). China's Economic Recovery and Dual Circulation Model. EPRS (European Parliamentary Research Service). PE 659.407.
- Han, H., & Si, F. (2020). How does the composition of asset portfolios affect household consumption: evidence from China based on micro data. *Sustainability*, 12(7), 2946. <https://doi.org/10.3390/su12072946>
- Hong, Y., Yang, J., & Xu, Z. (2020). The strategy of the mutual promotion of domestic and international circulation of China: Analysis of SWOT and countermeasures and suggestions. *2020 Management Science Informatization and Economic Innovation Development Conference (MSIEID)*, pp. 418–424. <https://doi.org/10.1109/MSIEID52046.2020.00089>
- Huang, K.X. D., Li, S., & Tian, G. (2021). Chinese economy under the new “dual circulation” strategy: Challenges and opportunities – A summary of the Annual SUFE Macroeconomic Report (2020–2021). *Frontiers of Economics in China*, 16(1), 1–29. <https://doi.org/10.3868/s060-013-021-0001-0>
- Huang, X., Yu, P., Song, X., & Chen, H. (2021). Strategic focus study on the new development pattern of ‘dual circulation’ in China under the impact of COVID-19. *Transnational Corporations Review*, 14(2), 169–177. <https://doi.org/10.1080/19186444.2021.1959822>

Humnath, P., Devkota, M.L., & Banjade, D. (2022). Exports and imports-led growth: Evidence from a small developing economy. *Journal of Risk and Financial Management*, 15(1), 11. <https://doi.org/10.3390/jrfm15010011>

Jia, K. (2021). Accelerating the construction of a new development pattern with the domestic circulation as the mainstay and mutual promotion of dual circulation. *Journal of Chinese Economic and Business Studies*. <https://doi.org/10.1080/14765284.2021.1929785>

Kakwani, N., Li, S., Wang, X., & Wu, S. (2019). Social tensions in a growing China. *The Manchester School*, 87(2), 228–258. <https://doi.org/10.1111/manc.12250>

Kalaitzi, A.S., & Chamberlain, T.W. (2020). Exports and economic growth: Some evidence from the GCC. *International Advances in Economic Research*, 26, 203–205. <https://doi.org/10.1007/s11294-020-09786-0>

Koopman, R., Wang, Z., & Wei, S.J. (2008). *How Much of Chinese Exports is Really Made in China? Assessing Domestic Value-Added When Processing Trade is Pervasive*. National Bureau of Economic Research. 49 p. <https://doi.org/10.3386/w14109>

Kuzmin, E., & Romanova, O. A. (2021). Coverage of Production Chains in Cooperation Industrial Enterprises. *Lecture Notes in Information Systems and Organisation*, 44, 87–96. https://doi.org/10.1007/978-3-030-73261-5_9

Liu, X. (2021). Research on the construction of a “dual circulation” development pattern. *Journal of Frontiers of Society, Science and Technology*, 1(2). <https://doi.org/10.23977/jfsst.2021.010211>

Lomanov, F.V. (2021). Circulation versus isolation. *Russia in Global Affairs*, 19(3), 8–20. <https://doi.org/10.31278/1810-6439-2021-19-3-8-20>

Perskaya, V.V., & Revenko, N.S. (2020). “Made in China 2025”: China’s experience of supporting national development challenges. *Asia & Africa Today*, 7, 19–25. <https://doi.org/10.31857/S032150750010100-2>

Saad, J., Yu, B., Liangyan, T., & Dong, W. (2021). The ‘dual circulation’ development model of China: background and insights. *Rajagiri Management Journal*. <https://doi.org/10.1108/RAMJ-03-2021-0016>

Su, L., & Liang, J. (2021). Understanding China’s new dual circulation development strategy: A Marxian input-output analysis. *Review of Radical Political Economics*, 53(4), 590–599. <https://doi.org/10.1177/04866134211021971>

Subasat, T. (2002). Does export promotion increase economic growth? Some cross-section evidence. *Development Policy Review*, 20(3), 333–349. <https://doi.org/10.1111/1467-7679.00175>

Wang, W., Weaver, N., & Xue, N. (2019). Challenges for the Chinese Economy in the New Era of Development. *Journal of Chinese Economic and Business Studies*, 17(1), 1–7. <https://doi.org/10.1080/14765284.2019.1582225>

Wang, X., & Piesse, J. (2013). “The micro foundations of dual economy models”. *The Manchester School*, 81(1), 80–101. <https://doi.org/10.1111/j.1467-9957.2011.02263.x>

Xiong, J., Tang, Z., Zhu, Y., Xu, K., Yin, Y., & Xi, Y. (2021). Change of consumption behaviours in the pandemic of COVID-19: Examining residents’ consumption expenditure and driving determinants. *International Journal of Environmental Research and Public Health*, 18, 9209. <https://doi.org/10.3390/ijerph18179209>

Yang, J., Kumar, V., Ekren, B., & Kuzmin, E. (2021). Understanding the Role of Digital Technologies in Supply Chain Risks Management. *Lecture Notes in Information Systems and Organisation*, 44, 133–146. https://doi.org/10.1007/978-3-030-73261-5_13

Yasinskii, V.A., & Kozhevnikov, M.Y. (2022). Double circulation: A growth model for the Chinese economy in the next fifteen years. *Studies on Russian Economic Development*, 33, 118–125. <https://doi.org/10.1134/S1075700722010154>

Yuan, R. (2020). Financial Sustainability of the Pension System in China: Impact of Fragmented Administration and Population Ageing. Retrieved from: <https://findanexpert.unimelb.edu.au/scholarlywork/1477537-financial-sustainability-of-the-pension-system-in-china--impact-of-fragmented-administration-and-population-ageing>

Zhu, A., & Kotz, D. (2010). The dependence of China’s economic growth on exports and investment. *Review of Radical Political Economics*, 43(1), 9–32. <https://doi.org/10.1177/0486613410383951>

Information about the authors

Boris A. Kheyfets – Doctor of Economics, Professor, Chief Research Associate, Institute of Economics of RAS; Professor, Financial University under the Government of the Russian Federation (32, Nakhimovskiy Av., Moscow, 117418; 49, Leningradskiy Av., Moscow, 125167, Russian Federation); Scopus Author ID: [57194977918](#); ORCID: [0000-0002-6009-434X](#); e-mail: bah4l2@rambler.ru

Veronika Yu. Chernova – Doctor of Economics, Associate Professor, Department of International Economic Relations, RUDN University (6, Miklouho-Maclay St., Moscow, 117198, Russian Federation); Scopus Author ID: [57191925715](#); ORCID: [0000-0001-5951-9091](#); e-mail: veronika.urievna@mail.ru

ARTICLE INFO: received *January 20, 2022*; accepted *April 11, 2022*

Информация об авторах

Хейфец Борис Аронович – доктор экономических наук, профессор, главный научный сотрудник, Институт экономики РАН; профессор, Финансовый университет при Правительстве РФ (Российская Федерация, 117418, г. Москва, Нахимовский пр-т, 32; 125167, г. Москва, Ленинградский пр-т, 49); Scopus Author ID: [57194977918](#); ORCID: [0000-0002-6009-434X](#); e-mail: bah4l2@rambler.ru.

Чернова Вероника Юрьевна – доктор экономических наук, доцент кафедры международных экономических отношений, Российский университет дружбы народов (РУДН) (Российская Федерация, 117198, г. Москва, ул. Миклухо-Маклая, 6; Scopus Author ID: [57191925715](#); ORCID: [0000-0001-5951-9091](#); e-mail: veronika.urievna@mail.ru.

ИНФОРМАЦИЯ О СТАТЬЕ: дата поступления *20 января 2022 г.*; дата принятия к печати *11 апреля 2022 г.*

作者信息

海菲茨·鲍里斯·阿罗诺维奇 – 经济学全博士, 教授, 首席研究员, 俄罗斯科学院经济研究所; 教授, 俄罗斯联邦政府财政金融大学 (俄罗斯联邦, 邮编: 117418, 莫斯科市, 纳希莫夫大街32号; 邮编: 125167, 莫斯科市, 列宁格勒大街49号); Scopus Author ID: [57194977918](#); ORCID: [0000-0002-6009-434X](#); 邮箱: bah4l2@rambler.ru.

切尔诺娃·维罗妮卡·尤里耶夫娜 – 经济学全博士, 国际经济关系系副教授, 俄罗斯人民友谊大学 (俄罗斯联邦, 邮编: 117198, 莫斯科市, 密克鲁哈-马克拉伊街6号; Scopus Author ID: [57191925715](#); ORCID: [0000-0001-5951-9091](#); 邮箱: veronika.urievna@mail.ru.