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The Analysis and Countermeasures of US Dollar Exchange Rate on China\'s Import and Export Trade

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Abstract: This paper investigates the intricate relationship between the Chinese exchange rate and the US dollar, particularly amidst a low-growth economic environment and the potential impact on trade dynamics. Set against the backdrop of the 2008 financial crisis, concerns have arisen over China's substantial dollar-denominated debt stock and the possibility of a sell-off that could devalue the US dollar and impact the global economy. As the post-Covid recession is expected to weaken the US dollar, this study aims to explore potential US countermeasures to maintain the currency's strength. The analysis suggests that China should transition from an export-led development strategy to a more domestically focused approach, promoting industrial modernization, implementing strategic economic adjustments, and enhancing the management and regulation of foreign exchange reserves. Active participation in East Asian monetary cooperation and the establishment of a regional monetary system in East Asia are also recommended. The paper highlights the influence of the US dollar exchange rate on China's import and export trade, illustrating how fluctuations in the exchange rate impact trade volumes and different sectors. To mitigate these effects, China should concentrate on developing advanced industries, modernizing traditional sectors, accelerating new urbanization, and stimulating domestic consumption. Additionally, the government should optimize the external trade services system by reducing burdens on enterprises, deepening tariff facilitation reforms, and supporting small and medium-sized enterprises. In conclusion, comprehending the complex relationship between the Chinese exchange rate and the US dollar is crucial for maintaining global trade stability. Implementing the recommended countermeasures can assist both countries in overcoming economic challenges and fostering mutually beneficial trade relations. By carefully navigating the dynamics between these two currencies, governments can strengthen their economies and contribute to a more stable and prosperous global trade environment.

Keywords: Us-China relations, Exchange rate policy, Pegged exchange rate, Chinese Yuan, Exports.

Introduction

China has long been one of the key holders of US dollar denominated debt. During a 2008 visit to Beijing, Hank Paulson, the Fed chair had been confronted by the Chinese minister of finance, with a warning that was the Freddie Mac and Fannie Mae problem not solved by the end of the year, Beijing would be forced to sell most of the US treasury bonds, flooding the market making them worthless. Such an event would have undoubtedly sent the US dollar into a freefall and with it the whole global economy, what had an impact for all over the world (Csiszárik-Kocsir et al., 2013, 2016a, 2016b; 2021; Csiszárik-Kocsir & Varga, 2017; Garai-Fodor et al., 2016, Garai-Fodor & Csiszárik-Kocsir, 2018a, 2018b).

These events can be triggered if a delicate economic balance is offset by an endogenous or an exogenous factor. Since the Chinese Yuan became pegged to a basket of currencies that includes the US dollar, it appreciated in value 5 times between 2005 and 2013. (Congressional, 2008; Fodor, 2022) At the current exchange rate peg, there has been an excess demand for yuan. For a long time, the Chinese central bank kept the peg in place by building up foreign reserves by purchasing US dollars in return for new Yuan. The Chinese central bank holds US securities, specifically treasury bonds and commercial mortgage rate securities (MBSs) (Garai-Fodor et al., 2022) It is within the interest of other developed nations for the pegged Yuan to stary weak, as it ensures a steady flow of exports and cheap imports. The current US trade deficit with China is 380 billion USD according to the census website (Bureau, 2019). Since China is a net exporter of goods it can therefore maintain a trade surplus, which would make the Yuan stronger (Fodor, 2022). However, to avoid it losing a competitive advantage, it must be kept within a struct corridor. The Chinese government then either inflates or deflates the Yuan through currency and asset purchases.

In this paper we assess how China influences the US dollar exchange rate in a low growth economic environment.(Garai-Fodor & Csiszárik-Kocsir, 2018) The post-Covid recession that is about to set in Europe and in the US will likely weaken the US dollar. The aim of the paper is to determine a set of countermeasures how the US can maintain its strength.(Pervez et al., 2022). Based on the study we find that that China needs to modify its development strategy from an export-oriented to a to domestic market; promote industrial upgrading; implement more economic strategic adjustments to reduce the impact of these negative effects on the civil economy, including to keep the foreign exchange reserves within an favorable size and improve the administration and regulation of foreign exchange reserves. In addition, China should more and more actively participate in east Asian monetary cooperation and construct a regional monetary system in east Asia. (Fodor, 2023; Foldi, 2015).

Method

The Analysis of US Dollar Exchange Rate on China's Import and Export Trade

On the whole, the total amount of silk goods and clothes imported by the us from China in 2005 increased by 50.4% compared with that in 2004, exceeding us $20 billion. This may have something to do with the improvement of domestic economic conditions in the United States, such as the increase of employment rate and the increase of per capital hourly salary. It might also be affected through the rise of domestic prices and the reduction of the average import and export prices. According to Kato, (2015) because China trades with many countries in US dollars, the exchange rate of the US dollar affects China's trade. (Kato, 2015) Since reform of China's exchange, China's monthly trade volume increased by 23.35% on average until the end of 2005, but the growth rate showed signs of slowing down (Hilland & Devadoss 2013). For example, the monthly trade volume decreased by 2% on average in August, September and October of 2005. (Csiszárik-Kocsír & Garai-Fodor, 2018) (Garai-Fodor et al., 2023) (Garai-Fodor, 2022).

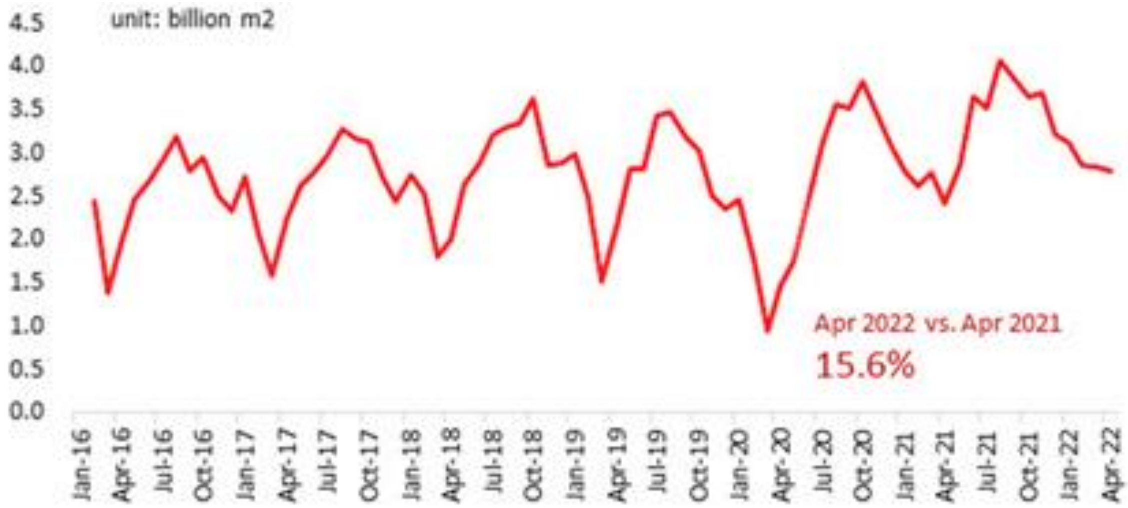

Figure 1. US textile and apparel imports from china by volume. Source: new clothing marketonline.com

It is a challenged issue for Chinese companies that are heavily related to the stable fluctuation of exchange rate between US dollar. Chinese corporations and enterprises are about to face long-last, unpredictable exchange rate fluctuations, which will bring a certain degree of difficulty to corporate decisions (Zhang et al., 2008). China's experience on the path of floating exchange rates is still shallow, and there are still many places to learn and learn from.(Szemere et al., 2021).

Figure 2. Foreign direct investment in China. Source: Chinese ministry of commerce

The fluctuation of exchange rate affects FDI through the channels of relative production cost and wealth effect, while the change of FDI will affect the macro-economy of the investor and the host country through the industrial structure, trade and employment (Molnár & Csiszárik-Kocsir, 2022, 2023; Molnár et al., 2023; Fan et al., 2009). The currency appreciation of the foreign direct investment countries makes the cost of the export-oriented enterprises higher than that of the export counterpart countries, while the cost of production in the export counterpart countries expressed in the domestic currency decreases. When the difference between the domestic production cost induced by the exchange rate appreciation and the local production cost in the export counterpart countries is greater than the precipitation cost of the direct investment in the export counterpart countries, the foreign direct investment may occur. In this way, the profits of export-oriented enterprises in FDI countries can be increased. Under the expectation of continuous appreciation of exchange rate, the outflow of foreign direct investment will be further increased to avoid the comparative cost disadvantage brought by exchange rate appreciation and obtain the necessary market share and profit (Buckley, 2009; Loblin et al.,2017)
China is increasingly dependent on international trade for labor employment, imports and exports, and the transfer of excess capacity. The dependence on foreign trade increased from 44% in 2001 to 60% in 2003 and over 70% in 2004. In the 9.5% GDP growth in 2005, the contribution rate of net export reached 3.6%. Exports directly created more than 100 million jobs. The textile trade directly employed about 20 million people and indirectly employed about 100 million people. 90% of domestic DVD production and 60% of mobile phone production are exported. In 2004, China produced 5.9 billion pairs of shoes and 130 million DVDS, it is accounting for more than 60 percent and 50 percent of world sales respectively. China has become heavily dependent on international sales. (Sun & Heshmati, 2010; Csapó et al.,2018). China is a country that has great demand for raw materials imports as the world factory. The change of its exchange rate in local currency will immediately influence the domestic price level. The heavier the dependence on import, the greater the impact. (Baranyai et al., 2022).

The Countermeasures of US Dollar Exchange Rate on China's Import and Export Trade

According to incomplete statistics, 110 million households, including more than 34.7 million enterprises, indicate that China has the largest consumer market for various production and a huge consumer market for means of living (Zipser et al., 2021).

First, the development of advanced industries, innovative formats and optimized business models is a very fast-growing market. The statistical data from 2015 to 2017 show that the average annual growth rate of the new kinetic energy index for economic development has reached 28%, and the added value of the new industries, new formats, and new business models has reached 15.7% of GDP.

Second, the transformation and upgrading of traditional industries, especially traditional manufacturing, is a market with huge potential. At present, the total assets of industrial enterprises above designated size exceed 110 trillion yuan. According to normal equipment upgrades and upgrades, it is a very large market in itself.

Information technology, as the driving force of modern economic and social development, has profoundly affected China's economic and social development. At present, whether we can seize the historic opportunities brought by the development of informatization and take advantage of the situation to accelerate the transformation and upgrading of China's industrial structure is a key issue related to China's move towards a world economic power. (Földi & Medveczky, 2015).

Third, China's new urbanization is accelerating. There are now more than 600 cities nationwide, more than 100 are cities with more than 1 million population. Last year, the urbanization rate of the resident population reached 59.58%. For one percentage point increase in the urbanization rate, nearly 14 million people have transferred from rural to urban areas. This not only increases the investment in urban public service facilities, but also releases huge consumer demand for clothing, food, shelter, and transportation. Complementing the shortcomings of development, speeding up the transformation of shantytowns, speeding up the transformation of old urban areas, etc., will further unlock huge potential markets. (Goboly & Foldi, 2022).

Fourth, the consumption level, consumption capacity, and consumption awareness of urban and rural residents are constantly increasing. For example, old-age care is a service industry to be vigorously promoted in the next step, and child care is also a very large industry with a very large demand. Currently, there are more than 200 million private cars, and hundreds of millions of refrigerators, TVs, washing machines, etc., and there is a huge market for updating and popularizing them every year. New technologies such as household appliances and automobiles are now developing rapidly, new products are being continuously launched, and the rate of updates will accelerate. (Földi, 2015).

Industrial Upgrading

At present, the US's trade sanctions against China are gradually shifting from anti-dumping and countervailing measures to low-end products, to investigating the use of intellectual property protection policies on high-end technology products. In 2017, 78% of the intellectual property investigations initiated by the United States were directed at China, and China has now become the number one target of intellectual property investigations in the United States. The background of this round of trade war is Trump's political war in order to obtain the midterm elections, and to cater to the trade war launched by voters. It is also Trump's order to gain more benefits in China (requires the opening of China's financial, automotive, and Internet fields) Bargaining chips.

Figure 3. Source: OECD calculations based on the world bank global economic monitor database

In the face of aggressive US sanctions, China needs to work hard to improve the international competitiveness of Chinese companies. Speeding up industrial upgrading and improving the competitiveness of domestic industries are the best counterattacks to trade conflicts. And China should take the initiative to choose a specific open market at the right time, which can give China more initiative instead of passively opening the market without preparation. Market opening is an inevitable choice in history, and it is also the only way for China to develop into a strong country.

In the face of the strategic direction of industrial structure transformation and upgrading, the adjustment of the industrial structure at this stage cannot follow the traditional planned economic method of adjusting the investment structure, but we must grasp the two levers of innovation and market. Among them, there are two main market mechanisms: one is market selection, and the other is survival of the fittest. Structural adjustment is what the market has to do. The market can do as much as possible to the market, the government does not contract, the role of the market is the survival of the fittest. Especially rely on the market to eliminate backward production capacity, rely on the market to create pressure for innovation. Of course, the adjustment of the industrial structure cannot be left to the market alone. The government still has a role to play. What is the role of the government? It is to support innovation, especially to support industrial innovation, and support the development of strategic emerging industries.

Foreign Trade Service System

The government should use various economic levers such as tax, finance, credit and interest rate to optimize the framework of foreign trade. Relevant reforms and regulations should try to sortedly reduce the burden on foreign trade enterprises and import and export charges; continuously deepen customs facilitation reforms; accelerate the improvement of fiscal and taxation financial policies to support foreign trade development. Especially, the establishment and improvement of the service system for small and medium enterprises should be led by the government or the competent government department, and the optimal allocation of resources to maximize the benefits of foreign trade services for small and medium enterprises. Mobilize all sectors of the society to actively participate in the supply of SMEs' foreign trade services to achieve diversification of supply.
The realization of supply diversification should also depend on social intermediary organizations, industry associations and other social groups. Government alone will inevitably cause waste of resources and inefficiency. Industry associations and organizations have strong professionalism and have unparalleled advantages in collecting information, analyzing, and integrating information.

Conclusion

The second biggest economy sees a 7% year over year contraction of exports. China's exports fall, this causes ripple effects. The China exports data shows weak numbers. If it wasn't for exports to Russia, the numbers would have been lower. China's exprts to US are down 18%, 25% down in the EU (citation here). China was expected to carry the world economy forward particularly coming out of COVID-19. The PBOC has a 5% GDP growth target. This is lower than the double-digit growth in the past decade. State owned banks are cutting interest rates to save the economy. The PBOC doesn't want to overstimulate, but the US and Europe are slowing down. Heading into 2023 Europe and Non-Us exposures became attractive from a valuation standpoint. China has a catalyst to start double-digit growth again like the corporate reforms. There is a structural underway for non-us securities. China maintains a trade imbalance by artificially keeping the currency weak. Chinese manufacturers sell 50 million dollars’ worth of Microwaves into the US. A US software producer sells a 20million dollars’ worth of software in China. If there would be a floating exchange rate, the supply of USD would be much greater than the demand for dollars, so the dollar would be weaker, and Yuan would be stronger. The PBOC doesn't want this to happen, they artificially create demand for dollars to keep it strong. They print Yuan and convert it into dollars. This weakens the Yuan and strengthens the dollar. The dollars are lent out, thereby it increases supply of loans. The increase in the supply of dollars that can be lent - it lowers the cost of borrowing dollars. This lower borrowing costs - this means that the interest is less. As debt becomes cheaper (interest rates are lower) this pushes aggregate demand. To keep the trade imbalance and the currency pegged, the PBOC prints money, converts it to US dollars, lends it to the US government and consumers and this buys more Chinese good. The Chinese Yuan is one of the most traded currencies on foreign exchanges. As Russia has been hit by financial sanctions and its banks have been cut off from the international SWIFT systems, its access and indeed, the need to trade is US dollars and US dollar denominated assets diminished. Russia now does more business with China. Moscow became the third largest offshore market for offshore Yuan transactions. When it comes to global payments, the Yuan is still behind the USD and the EUR.

Scientific Ethics Declaration

The authors declare that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the authors.

Acknowledgements or Notes

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References

Buckley, P. (2009). *Foreign direct investment, China and the world economy.* Springer.

Bureau, U.C. (2019). International trade, united states census bureau. Retrieved from https://www.census.gov/foreign-trade/balance/c5700.html).

Csapó, L. A., Czikkely, M., & Földi, P. (2018). Az információ menedzsment szerepe az okos városok vállalatfejlesztésében és kontrollingjában. *Controller Info*, *6*(4), 27–35.

Csiszárik-Kocsir, Á., Fodor, M., & Medve, A. (2013). The Hungarian youngsters attitude towards the financial decisions based on a questionnaire research. *Macrotheme Review: A Multidisciplinary Journal of Global Macro Trends, 2*(5), 47-57.

Csiszárik-Kocsir, Á., Garai-Fodor, M., & Varga, J. (2021). What has become important during the pandemic? – reassessing preferences and purchasing habits as an aftermath of the coronavirus epidemic through the eyes of different generations. *Acta Polytechnica Hungarica, 18*(11), 49-74.

Csiszárik-Kocsir, Á., & Varga, J. (2017). Financial knowledge, skills and investment practice in Hungary - results based on a primary research. *Macrotheme Review, 6*(4), 10-20.

Csiszárik-Kocsir, Á., Varga, J., & Fodor, M. (2016b). A pénz helye és értéke a mindennapi pénzugyi gondolkodásban egy kutatás eredményei alapján. *Korszerű szemlélet a tudományban és az oktatásban. Gazdaságtudományi szekció. Zborník medzinárodnej vedeckej konferencie,* 73-83.

Csiszárik-Kocsir, Á., Varga, J., & Garai-Fodor, M. (2016a). The value based analysis of the financial culture. *The Journal of Macro Trends in Social Science, 2*(1), 89-100.

Fan, J. P., Morck, R., Xu, L. C., & Yeung, B. (2009). Institutions and foreign direct investment: China versus the rest of the world. *World Development, 37*(4), 852-865.

Fodor, M. (2022). *Constructing Hungarian American ethnic identity in intergenerational memory narratives*. https://engagedscholarship.csuohio.edu/hungarianconferences/spring2022/allspring2022/3/

Foldi, P. (2015). A kisvállalkozások tőkeszerkezeti problémáinak gyakorlati modellezése. *Controller Info, 3*(1), 8–15.

Foldi, P. (2015). Relation of the capital structure and profitability based on literature. *Studia Mundi - Economica, 2*(2), 61–69.

Foldi, P., & Medveczky, B. (2015). Tőkeszerkezet és jövedelmezőség összefüggéseinek elméleti bemutatása és értelmezése a KKV szektorban. *Controller Info, 3*(1), 52–57.

Garai-Fodor, M. (2022). The impact of the coronavirus on competence, from a generation-specific perspective. *Acta Polytechnica Hungarica, 19*(8), 111-125.

Garai-Fodor, M., & Csiszárik-Kocsir, Á. (2018b). Miért fontos a pénzügyi ismeretek oktatása a Z generáció véleménye alapján?. *Polgári Szemle, 14*(1-3), 107-119.

Garai-Fodor, M., & Csiszárik-Kocsir, Á. (2018a). The validity of value-based consumer behavioral models in the financial consciousness of the Z generation. *On-Line Journal Modelling The New Europe, 27*, 107-131.

Garai-Fodor, M., Szemere, T. P., & Csiszárik-Kocsir, Á. (2022). Investor segments by perceived project risk and their characteristics based on primary research results. *Risks, 10*(8), 159.

Garai-Fodor, M., Varga, J. & Csiszárik-Kocsir, Á. (2016). The value based analysis of the financial culture. *The Journal of Macro Trends Iin Social Science, 2*(1), 89-100.

Garai-Fodor, M., Vasa, L., & Jäckel, K. (2023). Characteristics of segments according to the preference system for job selection, opportunities for effective incentives in each employee group. *Decision Making: Applications in Management and Engineering, 6*(2), 557-580.

Goboly, B. M., & Földi, P. (2022). Volkswagen group marketing, economic and financial analysation. In *Proceedings of FIKUSZ Symposium for Young Researchers* (pp. 603-621).

Hilland, A., & Devadoss, S. (2013). Implications of Yuan/Dollar exchange rate for trade. *Journal of International Trade Law and Policy. 12*(3), 243-257.

Kato, A. (2015). Effects of exchange rate changes on east asian technology-intensive exports. *The Journal of International Trade & Economic Development, 24*(6), 809-821.

Löblin, J., Földi, P., & Széphegyi-Jónás, A. (2017). Examination of economic indicators influencing export performance of selected countries between 2006-2016. In *Fikusz 2017 - Symposium for Young Researchers: Proceedings, 157,* 223–233.

Molnár, A., & Csiszárik-Kocsir, Á. (2022). Forecasting economic growth with the Hungarian composite stock market index – a granger causality test. *Acta Polytechnica Hungarica, 19*(8), 205-227.

Molnár, A., Csiszárik-Kocsir, Á. (2023). Forecasting economic growth with v4 countries' composite stock market indexes – a granger causality test. *Acta Polytechnica Hungarica, 20*(3), 135-154.

Molnár, A., Vasa, L., & Csiszárik-Kocsir, Á. (2023). Detecting business cycles for hungarian leading and coincident indicators with a Markov switching dynamic model to improve sustainability in economic growth. *Decision Making: Applications in Management and Engineering, 6*(1), 744-773.

Morrison, W. M., & Labonte, M. (2008). Economic issues and options for U.S. trade policy. *Currency Interventions, Fluctuations and Economic Issues*, 1. Retrieved from https://www.everycrsreport.com/reports/RL32165.html

Pervez, H., Ali, Y., Pamucar, D., Garai-Fodor, M., & Csiszárik-Kocsir, Á. (2022). Evaluation of critical risk factors in the implementation of modular construction. *Plos One, 17*(8).

Sun, P., & Heshmati, A. (2010). *International trade and its effects on economic growth in China*. IZA Discussion Paper No. 5151, Available at SSRN: https://ssrn.com/abstract=1667775 or http://dx.doi.org/10.2139/ssrn.1667775

Zhang, Y. J., Fan, Y., Tsai, H. T., & Wei, Y. M. (2008). Spillover effect of US dollar exchange rate on oil prices. *Journal of Policy modeling, 30*(6), 973-991.

Zipser, D., Seong, J. & Woetzel, J. (2021). Five consumer trends shaping the next decade of growth in China: Greater China, *McKinsey & Company*, *11*, 21.

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