

The Entry of BRICS Currency and Exit of Dollar: Evidence from International Trade Theories and Policy Implications

R, Pazhanisamy

School of Business, Galgotias University-Greater Noida-UP-India

3 January 2024

Online at https://mpra.ub.uni-muenchen.de/120538/ MPRA Paper No. 120538, posted 26 Mar 2024 14:55 UTC

The Entry of BRICS Currency and Exit of Dollar from the Global Market Evidence from International Trade Theories R.Pazhanisamy, Assistant Professor of Economics (School of Business, Galgotias University-Greater Noida –India) (E: mail: <u>r.pazhanisamy@galgotiasuniversity.edu.in</u>)

Abstract

The purpose of this paper is to explore the impact of BRICS unions' currency on the Dollar and its performances on international trade among the nations. The compound reviews of literature on the classical, neo classical and modern theories of trade reveals the non existence of research works on the multinational union currencies and its impact on the validity of the dollar and the economic gain of the nations and its influence over the trade activities for which this attempt is made. Due to lack of availability of the numerical data on the new currency and its impact over the economics through trade the graphical approach is used with the logical realistic assumptions and justified how the value of currencies of BRICS nations in international market would certainly be appreciate. It also portrays that how simultaneously the dominant dollar depreciate its value through the market forces of demand and supply changes in the global scale.

Keywords: BRICS currency, Alternative to Dollar, Gain from trade, Value of currency in the international market, Foreign Exchange Exploitation, Solutions to US sanction.

JEL Codes: E5,E44,F3,F4,F5,F10,F14,F23,F33,F36,F52,G1,G15,G21,and ,P5.

Premises and Research Gap

For more than a century the currency Dollar dominates the world. Even today about 90 percent of the international trade take place using the dollar. The global acceptance of its value and the trust among the nationals makes it international monopoly and intervene in the global socio economic, political decisions. Most of the economics particularly the third world economies and the poor countries often becomes victims of such interventions while they attempt implements development policies which move beyond the control of US thorough sanctions. Such nation's experiences vicious circle of the economy for centuries even in the accessible presence of various modern economics tools to boost the economic growth. Even the developed countries like Russia also under this sanction trap which calls for an effort to reduce the interventions of US through reducing the dollars domination. Various attempts have been made by countries across the world to bring down the dollar domination and failed due to a trust and sustainability issues. In this context to reduce the domination of dollars in international trade and ensure the independent economic policies of the nations the BRICS an intergovernmental organisation has been working an alternative currency to dollar which calls for an enquiry into the possibilities, prospects, and the implications for the monitory trade policies of nations worldwide.

Objectives:

The prime objective of this paper is to explore how much gain from trade can be achieved through using BRICS currency in the international trade. Second to explore the propagations of increasing the value of BRICS integrated currency and its reciprocal impact on the value of dollar through the market forces of supply and demand. Third to explain about to what extent the other countries in the world can escape from the implicit exploitations of dollar realise the gain from the trade through using the BRICS currency? Fourth to revalidate the existing international trade theories and its implications for the world economies, rationalise the need to join with BRICS union for national economic gain by the other countries of the world. In order to meet these objectives the following methodology is used.

Methodology

To assess the impact of the BRICS currency on the international prior to the introduction of it, the numerical data set available would be lopsided and so the graphical methods is used as it is usual in most of the economics theories which can be verified at any stage in future using the data when It becomes available.

Overview of Previous Works and Research Gap

International trade theories offer frameworks for understanding the patterns and dynamics of global commerce. From classical to modern approaches, these theories elucidate the factors influencing trade flows and provide insights for policymakers and businesses. This summary presents a concise overview of key international trade theories.

Mercantilism, originating in the 16th century, emphasizes the accumulation of wealth through a positive trade balance, advocating for protectionist measures such as tariffs and subsidies to promote exports and restrict imports (Irwin, 1996).

The Theory of Absolute Advantage, proposed by Adam Smith in 1776, posits that countries should specialize in producing goods they can produce more efficiently than others, promoting gains from trade through specialization and exchange (Smith, 1776).

David Ricardo's Theory of Comparative Advantage, introduced in 1817, extends Smith's ideas by arguing that even if one country can produce all goods more efficiently than another, both can still benefit from trade by specializing in the production of goods for which they have a comparative advantage (Ricardo, 1817).

The Heckscher-Ohlin Model, developed by Eli Heckscher and Bertil Ohlin in the early 20th century, suggests that countries will export goods that intensively use their abundant factors of production and import goods that require factors in which they are scarce, thereby explaining trade patterns based on differences in factor endowments (Heckscher & Ohlin, 1919).

The New Trade Theory, advanced by Paul Krugman in the 1970s, emphasizes economies of scale and product differentiation as drivers of trade, highlighting the role of imperfect competition in shaping international trade patterns (Krugman, 1979).

The Gravity Model of Trade, based on the principles of Newtonian physics, predicts bilateral trade flows between countries based on their economic sizes and the distance between them, highlighting the significance of proximity and economic size in trade relationships (Tinbergen, 1962).These theories offer valuable insights into the complexities of international trade providing the policy decisions and guiding strategic choices for businesses operating in the global marketplace.

Value of Currency and Gain from Trade in the Global Market

Theories of gain from trade and the value of money are fundamental concepts in international economics, shedding light on the benefits of trade and the mechanisms influencing currency values in the global market.

The theory of gain from trade suggests that countries can benefit from trade by specializing in the production of goods and services in which they have a comparative advantage and exchanging them with other nations. This concept, initially proposed by David Ricardo in his Theory of Comparative Advantage, highlights how trade can lead to increased efficiency, expanded production possibilities, and higher overall welfare for participating countries (Ricardo, 1817).

Regarding the value of money in the global market, the theory revolves around the principles of exchange rates and monetary policy. Exchange rates determine the relative value of currencies, influencing the cost of goods and services traded internationally. The value of money is affected by various factors such as interest rates, inflation rates, and economic indicators. Monetary policies, implemented by central banks, play a crucial role in influencing currency values through mechanisms like interest rate adjustments and open market operations (Mishkin, 2018).

These theories provide essential frameworks for understanding the dynamics of international trade and finance, guiding policymakers, businesses, and investors in navigating the complexities of the global economy. But failed to provide a comprehensive framework that can provide solution used to overcome the issues of nations facing the sanctions and the values of the international currencies spontaneously determined by a country for its economic benefit over the others. Such kind of framework is attempted in this work to fill the gap in research.

Assumptions and Theoretical Framework

- 1. Gain from trade is determined by the value of currency in the global market rather than the value of product traded by nations
- 2. The supply of dollar and its demand affects every country using it in trade
- 3. Every country change its currency supply depends upon the demand of it
- 4. There is no global trade union among notations to control over the value of dollar
- 5. Every country trades following the theories absolute and relative cost advantages
- 6. Gain form trade of all the courtiers in the world is implicitly exploited by USA through the adjustment with the supply of dollar to the countries.
- 7. Countries can create multinational currencies through integrations like BRICS

- 8. Multinational currencies uses block chain based electronic money from the cost and supply of it kept constant.
- 9. Every country can determine a value of its currency with a multinational currency and can get gains from trade when the value of it goes up.

The Present Work

Using the four-part diagram the central idea of the work canbe explained. The first picture explain the relationship between exchange rate any country which is determined by the demand and supply. For example id the demand is D and supply of it is S than it would be in the equilibrium T point E and the corresponding value of the currency would be at P on the Y axis with its exchange rate determined at the point of N in X axis. Suppose if the supply of the currency is increase by S1 or decrease towards S2, than its corresponding equilibrium would also move to E1 and E2 respectively if the demands unchanged and the corresponding value of currency of can be observed as increase to L along with decreasing the exchange rate to the point M when supply reduces and the same would decrease to the point Q along with the increasing exchange rate towards O while the supply increases.

Similarly demand downward shift from D to D2 will shift the equilibrium from E1 to E4 and reduce the value o the currency from P top Q with the corresponding exchange rate fall from N to M and an increase in demand from D to D1 will shift upward the equilibrium from E1 to E5 with the value of the currency appreciate to L and appreciate the exchange rate from N to O when supply unchanged. A simultaneous increase in both supply and demand of the a nations currency in the international market would shift the equilibrium to E to E7 and vice versa by keeping the value of money unchanged at point P with different exchange rates of K,N and R.

The core idea of the diagram is how the exchange rate and the value of a currency will fluctuate with the changes in the supply and demand of it. I will be shifting from E1 to E2, E3, E4, F5, F6, F7 and E8 depends upon the movement of demand and supply cause to fluctuate the currency value in between the T to Q on the Y axis and the movement of exchange rate to fluctuate from K, M up to R. So it can be cleared from the panel that by changing the supply of the international currency used for the trade US can make changes in the value of any currency and can control it as per its economic benefit.

Let's look into the second panel located on the top right side representing the gain from the trade in terms consumer, producers surpluses. For example before trade a country can be in equilibrium where the domestic demand and supply of the products meet each other at point E with equilibrium price p and output N with the consumer surplus of MDPE and producer surplus of OPE. If the same products is available in any other country it can choose to import based on the absolute and comparative cost advantage theories it can make it available at lowest price from the import at the price level Q and can meet the demand up to OR within the low production corresponding to E2 due to international trade the consumer surplus will now be enhanced from MDQ to MDTPQE2 and E1.

An additional consumer surplus of PQE2E1 and E has gained from the international trade. Similarly if there is high price of locally produced products is available in the international market as shown by the point T the country can choose to export it and gain enhanced consumer surplus from OPE to PTMDE5E6 and E with the additional gain from trade of PTE5E6 and E. But this can be realised only when the exchange rate and the value of currency in the international market unchanged. Because of the adjustment of the dollar supplied (as depicted in panel 1 located in the top left) for the international trade by US most of these both additional gains from trade would be converted into implicit gain for United State through flexible exchange rate exploitation before it is realise by the countries do trade.



The third figure located on the bottom left of the above reveals how the exchange rate exploitation can be controlled. The proposed BRICS currency uses block chain based crypto currency which uses the centralised ledger to determine and maintain the supply of it and its member countries exchange rate a more or less stable value which can only be altered by the nations participating in it.

For example if China want to increase the value of its currency it can be done only by altering its demand of it while the supply side of the currency only meet the domestic demand. It can be seen from the above bottom left panel that the increasing demand the currency in the international market while the supply of it unchanged at OM level shift the values of the currency upward from the E3, E2 and E1 corresponding to the successive increasing demands by D1, D2 and D3 which respectively determines the values Q, P and L on the Y axis.

The fourth diagram on the bottoms right side depicts how the reciprocal relationship between can be established in between the value of the dollar and the BRICS currency. It is implied that if one currency demands increases it is ultimately means that the other demand decreases. So increasing the demand of multinational BRICS currency from D1 to D2 and to D3 with increasing the value at the international market from Q to P and to L will decrease the dollar currency value reciprocally.

If it increase the value from Q to P reciprocally the value of the BRICS in the left bottom of the panel will reduce the dollar value from L to P by shifting equilibrium determined by the new demand supply of the panel from E1 to E2 on the right bottom panel and continues to P as opposite o the increasing of values on the left bottom panel. So the extent at which the demand for the BRICS currency increase equals to that extent the dollar values false and ensure free from sanction and the foreign exchange exploitation.

Implications and Scope

From the discussion above the paper compels three implications. First, there is a clear achievable and real gain from trade for all economies in the world if the BRICS currency used in international trade within the crypto currency based- block chain framework. Second the dollar value would be reciprocal to the above intergovernmental currency and would go back to domestic transactions certainly if all countries focus to reap the gain said above. Third even if the countries that are directly affected by the sanctions can be escaped from it just by joining in the BRICS and can share the joint benefit of the trade even without participating in the export and import with the other nations. Apart from this it can also enjoy the positive network externalities and can implement independent economic policies towards the growth of the nation without compiling to

any conditions. The limitations of the paper is that the challenges associated with the entry of a new currency representing the BRICS nations (Brazil, Russia, India, China, and South Africa) into the global financial system and the potential exit of the US dollar as the dominant reserve currency are explained only through the light of the theoretical and graphical implications as of now and the same should be cross verified using the empirical studies for which the complete implementations of the new currency is required.

The paper opens the scope to enquire into new possible impacts of a shifting away from the US dollar, including changes in exchange rates, trade patterns, financial markets, and geopolitical power dynamics and discussion on the broader implications for global economic governance and the prospects of Dual and multi polar global monetary system.

Conclusion

The entry of BRICS currencies into the global market and the potential exit of the dollar represent a pivotal shift in the international financial landscape. This transition underscores the growing economic influence and diversification strategies of emerging economies. As BRICS currencies gain prominence, they offer new avenues for trade, investment, and monetary stability, reducing dependency on a single currency. However, the transition must be carefully executed and managed to mitigate potential disruptions among the economies within the member countries first and around the globe next and ensure a smooth evolution towards a more sustainable trustworthy monetary system.

Collaboration, transparency, and effective policy coordination among BRICS nations and the broader international community will be essential to navigate this significant transformation successfully. This embracing currency framework holds the promise of fostering greater financial resilience, enhancing global economic cooperation, and fostering a more balanced and inclusive international monetary order and certainly will ensure more sustainable and inclusive growth across the nations.

References:

- 1. Heckscher, E., & Ohlin, B. (1919). Interregional and international trade. Harvard University Press.
- 2. Irwin, D. A. (1996). Mercantilism as strategic trade policy: The Anglo-Dutch rivalry for the East India trade. The Journal of Political Economy, 104(6), 1296-1314.
- 3. Jakhar, Babloo & Sharma etal. (2023). Literature Review on Theories of International Trade and Policies Behind Modern World Trade. Journal of Indonesian Applied Economics. 11. 75-83. 10.21776/ub.jiae.2023.011.02.6.
- 4. Krugman, P. R. (1979). Increasing returns, monopolistic competition, and international trade. Journal of international Economics, 9(4), 469-479.
- 5. Mishkin, F. S. (2018). *The economics of money, banking and financial markets*. Pearson.
- 6. Ricardo, D. (1817). On the principles of political economy and taxation. John Murray.
- 7. Ricardo, D. (1817). On the principles of political economy and taxation. John Murray.
- 8. Smith, A. (1776). An Inquiry into the Nature and Causes of the Wealth of Nations. W. Strahan and T. Cadell.
- 9. Tinbergen, J. (1962). Shaping the world economy; Suggestions for an international Economic policy. Twentieth Century Fund.