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De-Dollarisation: An Inquiry into the Rise and Fall of the Dollar

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ABSTRACT

This research paper delves into the intricate dynamics of the international financial system, with a primary focus on the enduring dominance of the US dollar and the growing global movement toward de-dollarization. It traces the historical evolution of the dollar's role as the world's primary reserve currency against the backdrop of the British pound's decline, examining both the factors that have sustained its prominence and those contributing to its diminishing influence.

With a deep dive into the geoeconomic context since the 1970s, the paper highlights the undeniable benefits the United States has reaped from its dollar-centric system, often at the expense of other nations, whether industrialised or developing. It scrutinises the strategic use of the dollar as a tool for achieving geopolitical objectives, as seen in sanctions imposed on various countries.

Furthermore, the research assesses global efforts to de-dollarize the international economy, evaluating the pros and cons of this endeavour. It explores potential scenarios for the dollar's future in relation to emerging currencies like the Chinese renminbi and the euro, as well as the feasibility of a global currency basket.

In addition to payment modes, the paper explores means of payments that play pivotal roles in global cross-border transactions. It underscores the factors driving changes in payment infrastructure and their implications for the dollar and other currencies in transactions.

Drawing from secondary research and critical discourse analysis on de-dollarization, this paper synthesises fragmented insights into a coherent narrative, facilitating a holistic understanding of the global economic paradigm and the pivotal role played by the US dollar. In our volatile and uncertain world, it explores the potential impacts of emerging technologies, shifting geo-economics, and the rise of non-Western powers on all stakeholders in the financial realm.

Keywords: *de-dollarisation, international economy, global currency.*

I. INTRODUCTION

The king dollar is being challenged by its hegemonic influence on global economic and

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financial markets. De-dollarisation –opposite of dollarisation which essentially means in an international economy, the dollar, primarily a national currency of the US, would perform all functions of money, namely, medium of exchange, unit of account, and store of value– has gained traction, particularly since the Global Financial Crisis of 2008, which exposed the vulnerability of US economy to the entire world, thereby convincing rest of the world that dollar is not all sacrosanct (Annamaria Kokenyne, Jeremy Ley, and Romain Veyrune 2008). Recent attempts by the US to use the dollar as an economic and financial tool to achieve its geopolitical ends, as happened in the case of sanctions over Russia, China, Iraq, Iran, and several others, have further pushed the Asian world to de-hyphenize their economies from influence and fluctuation induced by dollar.

In this critical essay, we attempt to narrate a coherent and comprehensive story of how money operates in an international economy, how the dollar came to achieve such prominence as a global reserve currency in the backdrop of collapsing sterling and subsequently we analyze what are those factors which allow the dollar to continue to be a global currency. We analyze the geoeconomic context of the dollar's hegemonic rule since the 1970s and how the US has unequivocally benefited from this dollar-dominated –perhaps denominated– system at the expense of the rest of other industrial nations and the developing world. While coming to an end we explain the global efforts to de-dollarize the global economy, its pros, and cons, futility, and utility, and examine the future of the dollar vis-a-vis Chinese renminbi, euro, and combination of a global basket of currencies. A petro-dollar link has also been tried to take into account which influences and gets influenced by the dollarisation of the global economy. We also –hypothetically– present a picture of a world where none of the actors benefited from the hegemonic currency and see how global societies would operate in such an environment.

We felt that this topic is suitable for the purpose of the final assignment primarily because of two reasons. One, we believe that financial technologies influence the lives of people across societies. International payment models such as SWIFT, systems through which dollars spread throughout the world impact the developmental prospect of countries in quite visible ways and either hinder or promote the growth of certain countries over others. Two, in an increasingly VUCA (Volatile, Uncertain, Complex, and Ambiguous) world where valuations matter more than value, the systematic understanding of the cross-border flow of money is very important because it not only impacts the central bank balance sheet or finance ministry’s pockets, it also helps us allow to think why a certain type of financial capital is more valuable than others, essentially pointing out the difference between dollar-denominated and nondollar assets. This impacts government, corporations, startups, and overall society in unimaginable ways.

We, mostly rely on secondary research for this essay but a fair amount of self-analyses and critical examination of the dominant discourse with respect to de-dollarisation has been done.

This is an attempt to combine all fragmented pieces of research into a coherent story, which though assumes multiple scenarios, allows us to think about the global economic paradigm in the overt or covert role of the dollar in a holistic manner.

II. How money operates in an international economy?

Elementary monetary economics teaches that within a single economy, money fulfills three basic functions—it serves as a medium of exchange, a unit of account, and a store of value. An international currency used among economic agents—that is, persons engaging in financial transactions—in multiple economies serves the same functions. It is used to settle international payments, it is used to fix prices, and it is held as a liquid asset for international transactions (Tavlas, George 1998). These roles are separable from each other but to a great extent use of currency in one role increases its chances of being used for other purposes. A very good example of this can be those small Persian Gulf nations which until 1974 set their oil prices in dollars but required payment in sterling. However, there is a slight difference in how money operates in domestic/ national settings and at the international level.

To make it more clear let's explicitly lay out the role of the dollar as an international currency.

Function of money (Dollar)	Private	Official
Medium of exchange	Vehicle	Intervention
Unit of account	Invoice	Peg
Store of value	Banking	Reserve

The dollar is used as a medium of exchange in private transactions, or “vehicle,” and is also bought and sold by central banks, thus making it an “intervention” currency. Trade contracts are sometimes denominated in dollars, making it an “invoice” currency, and the par values for exchange rates are sometimes stated in terms of the dollar, which makes it serve as a “peg.” Finally, private agents hold liquid dollar-denominated assets “banking” role-and central banks hold the dollar as a reserve (Tavlas, George 1998). However, to understand how the Dollar or any other singular currency that comes to dominate the international markets we need to move beyond this traditional understanding of international money which will lead us to the new theory of international money.

The new theory of international money propounded by Swoboda (1969), Cohen (1971), McKinnon (1979), and Kindleberger (1981), says that frictions –costs of transacting, costs of calculation– cause agents to use national monies as international media of exchange, units of account, stores of value; economies of scale lead them to concentrate on only a few-often only one-currency for these purposes. In a global scenario, the choice of international currencies is mainly a market-driven process, money's functions as a medium of exchange and a unit of account tend to predominate over its function as a store of value and lead to the use of a single international currency or, at most, several international currencies (Bonga W.G, Chiminya J, Chirowa F & Mawire-Van Strien F, 2014). This new theory of international money helps us much in understanding how –previously pound sterling– dollar came to be recognized as the global currency.

To understand this more precisely (Krugman 1980) makes a distinction between the structure of payments and the structure of exchange, where the structure of payments means the actual amount of money that both countries owe to each other and the structure of exchange means what currency they make this payment to each other.

III. How dollar become a global currency?

(A) Medium of exchange function:

Let us understand this through the following illustrative example.

Consider first a world of three countries, A, B, and C. They have national currencies α,

B, and γ.

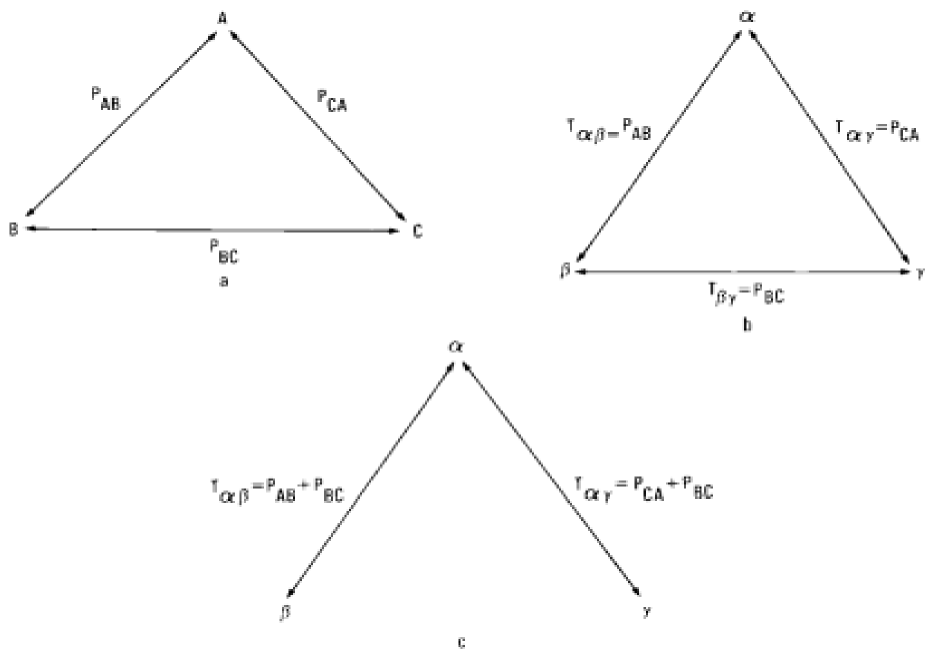


Figure A illustrates as the structure of payments in this world: P AB, P BC, and P CA are the final demands for foreign exchange flows, measured in the same (arbitrary) units; they are assumed to be bilaterally balanced. If all the countries are actively trading with each other then, transactions between them should look like Figure B where the volume of exchange transactions in each market will equal the final payments, and the volume of exchange transactions in each forex market between countries will equal the final payments. But suppose that A is much more important a trading and investment partner of B and C than either is of the other; that is, PAB, PCA >> PBC. Then it will be cheaper to trade beta (B)'s and y's indirectly, through the vehicle of the α, and the structure of exchange will collapse to that illustrated in figure c, where there is no active B (beta)-y (gamma) market. An important point to note is that this channeling of transactions between B and C through A's currency itself swells the markets in that currency, reinforcing its advantage (Bilson and Marston, 1984).

This is exactly what happens in the real world. In the real world, one country is always a dominant trade partner as compared to others and it requires payment in its currency. Hence the demand for the currency of one country is always more as compared to other countries. Because of this, other countrys' currencies get traded cheaper and subsequently get traded only for the dominant country's currency.

Now if we expand this scenario to multiple countries, a similar thing will happen where active currency trading markets between less strong countries will vanish and all countries will come to trade in one dominant currency when they trade with or invest in each other. This helps us explain the rise of the sterling to an extraordinary position of dominance at a time when Britain, though the economic leader, was far from having the sort of preeminence that, say, the United States had in 1950 (Tavlas, George 1998).

(B) Unit of account function:

By using money, individuals reduce the amount of information that they must acquire and process, and the number of transactions in which they need to engage. Money, in its capacity as a transmitter of information, performs a function analogous to that of an international language. The use of language by just one person, of course, is of no social value. The greater the number of people who speak a language, the more it can facilitate communication. The same is true of money. A currency hardly functions as a useful unit of account and medium of exchange if only a single person uses it. The utility of money depends, in part, on how many others use it. When an Arab exporter who does not speak Italian sells crude oil to an Italian importer who does not speak Arabic, the transaction may well be conducted in English and denominated and settled in U.S. dollars. Thus, the use of the dollar in the transaction leads, as does the use of English, to economies of communication in transmitting the information. The more popular a currency is, the more useful it is to those who hold it. Furthermore, even if individuals should have the incentive to switch to another currency, they would have to convince many other agents to make the same switch before it would become worthwhile to do so (Tavlas, George 1998). One of the reasons the pound sterling was still widely used internationally years after the United Kingdom lost its status as the top economic force in the world is because of this "switching cost."

By this time it must be clear that the unit of account function and medium of exchange function are positively correlated to each other and both of them together enhance the credibility of the dollar as –the third function of money– a store of value.

Let's now look at the extent to which the world economy has been dollarized and what those things allow it to sustain following this we should analyze the forces of change in the dollarized world and focus on de-dollarisation efforts.

IV. Dollarisation of the global economy – causes, determinants, and evaluation

(A) Causes:

The pound sterling was the global currency for a long time before the dollar could replace it completely post-WW2. After the war, the US held 50% of the world's gold, and since the currencies were pegged against the gold dollar automatically started to assume more value as compared to its counter currencies. The fall of Bretton Woods though hurt the dollar for a temporary time, the dollar had made its entry into global markets to the extent that its own weight would carry it.

It must be clear that the currency of a country that is important in world markets will be a better candidate for international money than that of a smaller country. And, the use of a currency as international money itself reinforces that currency's usefulness, so there is an element of circular causation (Bilson and Marston, 1984). Though the size of America's economy as a portion of the global economy has come down from 40% in 1960 to 24% in 2020, it still consists quarter of the global economy. US export consists of 10% of the total export market which makes it a fairly large economy in the world despite the fact that China has grown from 4% to 16% from 1960-2020 and its export share of global exports is more than that of the US.

But apart from the switching cost, we mentioned there are other 3 indicators that are important for a currency to become a global currency. They are namely confidence in its value and, therefore, in the issuing country's inflation performance, confidence in the political stability of the government, and the presence of deep financial markets that create international demand for that currency, allowing banks and investors to invest in safe and liquid assets (Eduardo Levy Yeyati; Alain Ize 2005). United States has consistently managed to keep inflation under control apart from certain strong turbulence through which the entire world had to go and the US by the rhetoric of establishing democracy has been successful in gaining credibility on the political stability front. US financial markets are one of the deepest financial markets in the world for both primary and secondary commodities. Hence the US could provide all the factors that make a currency international. The Chinese government though has seen massive economic growth has not been able to garner the world’s trust on the political stability front, nor do they have free financial markets because of capital controls and stringent regulation on foreign capital.

Another important reason why the dollar could become the global currency has to do with which currency invoices are being generated. Invoices are generated in exporters' currency in an ideal world but the following data shows that much of the world’s trade invoices are being generated in dollars which in return strengthens its unit of account function.

	Share of Domestic Currency Used to Invoice:		Share of Exports to United States Invoiced in Dollars
	Exports	Imports	
Germany	86.9	42.0	36
Japan	—	—	94
France	68.3	31.5	52
United Kingdom	73.0	—	44
Italy	—	—	68
The Netherlands	50.2	31.4	81
Canada	—	—	87
Belgium	47.7	25.4	78
Sweden	66.1	25.8	27
Austria	54.7	24.7	—
Denmark	54.0	24.0	—
Finland	15.5	—	—

The share of invoices in dollars in various counties' trade (2015)

Japan which is a highly industrialized economy itself generates almost all the invoices in dollars and not in yen. The same goes with other countries which increases the global acceptability of dollars as a unit of account.

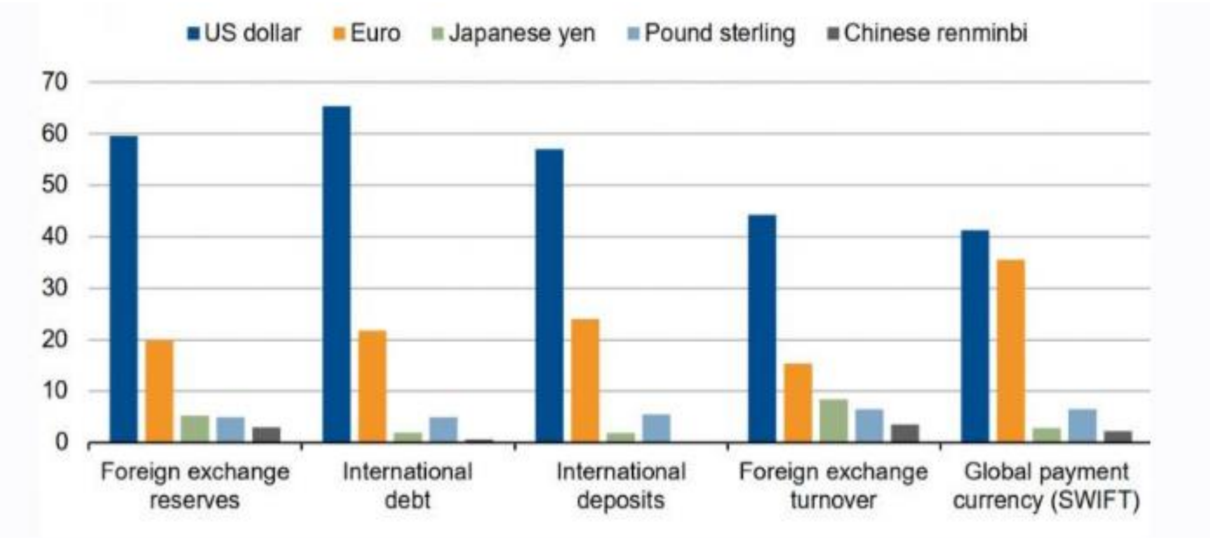
The USD is used as a global intervention currency by most central banks across the world also strengthens the credibility of the dollar and this virtuous (vicious?) cycle of the dollar gaining weight because of its existing value continues.

(B) Determinants

Dollarization refers to the use by the residents of one country of assets (or liabilities) denominated in another country's currency (Balino, 2003) and can take many forms. There are several different types of dollarization. Financial dollarization involves the substitution of local currency assets or liabilities for foreign currency assets or liabilities. Real dollarization involves the indexation of domestic transactions to the exchange rate. Transaction dollarization or currency substitution means that the dollar (or another foreign currency) is used as a means of payment in domestic transactions (Annamaria Kokenyne, Jeremy Ley, and Romain Veyrune, 2009).

There are multiple ways of analyzing whether a currency is truly international or not. Most important the share of that reserve in various central banks reserves, what percentage of international debt is denominated in that currency, and what percentage of global payments are set in that particular currency.

The following chart compares various important global currencies on such metrics.



The dollar is the most valued currency by all central bakers since more than 60% of all foreign exchange reserves are held in dollars followed by 20% in euros. More than that almost 70% of foreign debt is denominated in dollars which gives the dollar extraordinary weightage as a currency of investment. Much of the global payments settlement happen in dollar but this is the area where the process of de-dollarisation is happening at the fastest pace among other as we shall see later.

So dollar truly looks like an international currency since all the major financial activities in the world, cross borders, are happening in dollars. While the decrease or increase in its extent can be argued separately, it's indisputable that the dollar is playing the role of global currency.

(C) Evaluation

Now let us analyze whether the global presence of USD is for good or for bad and if any of these or both then for whose.

a. Benefits received to the US

The tangible benefits to the U.S. of issuing the world's principal reserve currency have been significantly eroded by the greater actual or potential competition from other currencies, such as the euro and the yen, and by America's shrinking share of the global economy. A great deal of U.S. currency is held abroad, which amounts to an interest-free loan to the United States (Bernanke, Ben 2016). Simply by creating money, the US earns $20 billion in seigniorage every year. Additionally, the US government may refinance its debt at a low rate thanks to the reserve currency position, which also gives it leverage when it comes to international affairs.

b. Cost to the world

Dollarization limits the effectiveness of monetary policy (Ize, Levy, Yeyati, 2005). Dollarized countries lose part or all of their seigniorage. The loss in revenues depends on the degree and type of dollarization and could be large for economies with high currency substitution. Dollarization reduces the efficiency of payments. Foreign banknotes are not always adapted to local business needs (small transactions), and the monetary authorities of dollarized countries cannot control the quality of the banknotes in circulation. Partial dollarization increases balance sheet risks. Direct exchange rate risks resulting from currency mismatches in banks' balance sheets may render the banking system more vulnerable. Further, indirect credit risks related to a devaluation arise if there is substantial dollar lending to nonhedged borrowers (Annamaria Kokenyne, Jeremy Ley, and Romain Veyrune 2009).

c. Tool to achieve geopolitical ends:

The US has imposed economic sanctions on many countries particularly Russia, china, Turkey, Iran, Iraq, and many Gulf countries. These sanctions range from denying access to dollars to the country to removing them from US or Western led payment settlement systems. For example, Russia getting banned from SWIFT– an international payment settlement platform, devaluing the dollar-denominated treasuries of particular nations.

This has led to what many have called a financial war. In order to protect themselves against geopolitical concerns, where the US dollar's standing as a reserve currency might be used as an offensive weapon, some central banks are about to "de-dollarize." Therefore, the conflict in Ukraine and the ensuing economic sanctions will force central banks to reconsider their reliance on the dollar. Hence there are two global concerns about the dollar. One that dollar could more permanently become an overt political tool — a concern shared especially by China, but also beyond Beijing and Moscow. Second, the US decision to use the currency as part of a more aggressive form of economic statecraft puts extra pressure on Asian economies to choose sides (BLOOMBERG, 2022). Some central banks are poised to "de-dollarize" in order to defend themselves against geopolitical issues where the US dollar's status as a reserve currency might be used as an offensive weapon. Central banks will therefore be forced to reevaluate their reliance on the dollar as a result of the war in Ukraine and the subsequent economic sanctions.

Out of all the concerns shared above, there has been a development of the school of thought that says that the hegemonic role of the dollar in the international financial system ought to be limited if the rest of the world has to maintain its economic independence and save itself from the mutual vulnerability caused by the mismanagement by fed or fluctuations in US's economic policies. Hence a shared idea of making global financial architecture function through multiple currencies– at least through many currencies having equal share– has been gaining prominence. And the idea of de-dollarisation finds its birth in this school of thought. Going forward we will try to catch some of the developments in de-dollarizing the world economy, the costs and benefits associated with it, and understand how viable this project is.

V. De-dollarisation: developments, cost–benefits, and evaluation

De-dollarization entails a mix of macroeconomic and microeconomic policies to enhance the attractiveness of the local currency in economic transactions and to raise awareness of the exchange-risk-related costs of dollarization, thus providing incentives to economic agents to de-dollarize voluntarily (Annamaria Kokenyne, Jeremy Ley, and Romain Veyrune, 2009). It may also include measures to force the use of the domestic currency in tandem with macroeconomic stabilization policies. Two significant setbacks to the dollar system have mostly forced people to look outside of the currency. First off, the financial crisis of 2007–2008 provided evidence that the Western banking system may not be as stable as once thought. Second, the US has used its dollar power to impose sanctions on more than 30 nations as part of its hybrid war. From Iran to Venezuela, several of these nations have looked for financial systems other than the US-dominated one in order to carry on regular business.

(A) Recent cross-country developments towards de-dollarisation:

In the previous decade attempts to move their respective country's dependence away from the dollar have taken place in many of the states. The establishment of BRICS by Brazil, Russia, India, China, and South Africa is an illustration of this urgency to 'discuss the parameters for a new financial system'. The creation of a BRICS payment system as an alternative to West-dominated SWIFT is a clear indication of that.

The US started to sanction Russia in 2014, and in 2018, it intensified its trade battle with China. As a result, several sanctioned governments had already started to create systems of dollar-free commerce out of need. Vladimir Putin, the president of Russia, demanded that the oil market be de-dollarized at that time. Moscow quickly started to sell off its dollar holdings while keeping its assets in gold and other currencies. By 2020, less than 50% of China and Russia's bilateral trade was done in dollars, down from 90% in 2015.

After the 2014 US sanctions, Russia created the System for Transfer of Financial Messages (SPFS), which is mainly designed for domestic users but has attracted central banks from Central Asia, China, India, and Iran. In 2015, China created the Cross-Border Interbank Payment System (CIPS), run by the People's Bank of China, which is gradually being used by other central banks (Vijay, Tricontinental 2022).

As part of their concern over 'currency power', many countries in the Global South are eager to develop non-dollar trade and investment systems. Brazil's new minister of finance from 1 January 2023, Fernando Haddad, has championed the creation of a South American digital currency called the "sur" in order to create stability in interregional trade and to establish 'monetary sovereignty' (Vijay, Tricontinental, 2022). With various central banks across the globe eager to launch their own CBDC (Central bank digital currencies), the dollar is likely to receive further blows. The high inflation in the US in the past 1 year since the pent-up demand due to covid induced lockdown is creating downsides for the dollar.

The overall impact of all these has been the dollar losing its strategic depth in terms of global economic engagement. The share of reserves held in US dollars by central banks dropped by 12 percentage points since the turn of the century, from 71% in 1999 to 59% in 2021 (IMF report 2022). Along with that dollar-denominated bond sales by non-financial companies have dropped to a record low of 37 percent of the global total in 2022.

(B) Delinking petro-dollar and its role in de-dollarisation

At this first China-GCC summit, Xi urged the Gulf monarchs to 'make full use of the Shanghai Petrol and Gas Exchange as a platform to conduct oil and gas sales using Chinese currency'. Earlier this year, Saudi Arabia suggested that it might accept Chinese yuan rather than US dollars for the oil it sells to China. Russia has signed a rupee-rouble exchange agreement with India to allow the commerce of Russian oil in both countries' currencies bypassing the dollar. If the link between petrol and the dollar is broken, then there are significant chances that economic agents across the countries would have the right incentives to move their finances away from the dollar and fight the switching cost.

(C) Potential downsides of de-dollarisation efforts:

If the dollar has to be replaced it would be ideal if a group of currencies replaces the hegemony of one single currency. But the main difficulty in this is certain countries though big in size don't want their currencies to go on to become international currencies. Japan is the best case of this where despite being a significant global economic power it has not allowed the Japanese yen to go global after the defeat it faced in the 1980s when the yen was playing an important role in international trade. Because of such tendencies, certain currencies are more likely to replace the dollar than others i.e. Chinese renminbi RMB. An effort by China for the internationalization of the renminbi has not had adequate traction but if the secular decline of the dollar continues then the only currency after the Euro to replace would be RMB.

(D) Likely impact of de-dollarisation in the short and long term:

This part represents the author's own contribution to the dominant discourse about de-dollarisation.

The author is of the belief that true de-dollarisation is going to be a very long and protracted process that will be complicated by the rise of digital currencies, a blockchain-based decentralized currency, and changing geopolitical realities. We need to take into account that hasty de-dollarisation would create more harm to the global economy than good. In short term, sudden dumping of dollar assets by adversarial central banks will also pose balance sheet risks to them as it will erode the value of their overall dollar-denominated holdings.

In long term, the authors of this piece argue that the renminbi RMB or any other single currency is unlikely to replace USD as a global hegemonic currency but the significant rise of two Asian power India and china, India's increased proximity with the west and partial –perhaps neutral– engagement with Russia, the asymmetry between India and china in financial spheres favoring china and in strategic sphere favoring India, the simultaneous rise of BRICS nations and spillover of decentralized monetary system on all these things would create a curious case of multipolar forex market where at least 5 currencies –Canadian dollar, USD, RMB, euro, Japanese yen– would get traded and accepted in near about similar proportions. This claim comes from certain historical evidence where one currency went on to replace another in a slightly sluggish span but where other global alternatives were not available. The disruption of World War I led to a permanent reduction in the sterling's role, while the gradual relative decline of Britain's importance in the world was reflected not in a smooth decline in the sterling's role but in surprising persistence followed by abrupt collapse ((Bilson and Marston,1984). In today's world, the secular decline of the dollar would be coupled with the rise of several other currencies including but not limited to RMB, Canadian dollar, Yen, and Euro which would be further complicated by the rise of digital, decentralized currencies. The BRICS nations have a very strong, long-term political and economic motive to develop a financial system that is not dependent on the dollar, and work is already underway in this direction. In terms of purchasing power parity, the BRICS countries make up one-third of the global economy and 40% of the world's population. With the addition of Saudi Arabia, BRICS would include two of the biggest oil consumers, China and India, as well as two of the biggest oil producers, Saudi Arabia and Russia, boosting the likelihood that mutual oil sales might be valued in local currencies. This paves the way for the gradual growth of a parallel financial system that isn't denominated in dollars, aiding the countries in expanding their various domains of influence.

Currently, the USD accounts for around 60% of central banks' foreign exchange reserves and 70% of all trade on the planet. The psychological component of the USD's relationship with "safe-haven" assets is also there, and just like with previous habits, individuals continue to think of the currency as a relatively risk-free investment. Since the USD serves as both a "store of value" and a "means of exchange," fulfilling the fundamental purposes of money, the world will continue to favor it in light of this psychological bias(shukla sachchidanand,2022). Hence, the fall of the dollar, although imminent would be protracted.

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