

The causes of and impacts of the strong dollar

Mst. Afroja Aktar¹, Md. Saidul Islam CDCS², Nilufar Yasmin Ahmed³

¹ Assistant Professor, School of Business, Primeasia University, Banani, Dhaka, Bangladesh

² SAVP, The Premier Bank Ltd. Gulshan Branch, Dhaka, Bangladesh

³ Lecturer, School of Business, Primeasia University, Banani, Dhaka, Bangladesh

Abstract

With a gain of about 18% over the previous 12 months, the US dollar is poised to surpass levels last seen 20 years ago. Since World War II, the value of the most widely used currency has risen sharply and quickly, having an impact on international trade and finance in several ways. The increase of the dollar was powered by a confluence of factors including rising commodity prices, aggressive but late US monetary policy tightening, and ongoing geopolitical crises. In inflationary and recessionary times, investors often hedge their chances with investments denominated in dollars. Developing countries like Bangladesh will have to deal with tighter financial circumstances, difficult macroeconomic management, and the procurement of foreign currency to maintain their manufacturing systems. The purpose of this article is to describe the causes and consequences of the strong dollar and what to expect. Export-led economies with a low percentage of dollar-denominated debt and substantial dollar reserves will stay ahead of others where investments, trade, and debt are problematic, either by implementing new monetary policy in accordance with physical policy or by diversifying the economy.

Keywords: Currency, USD Dollar, Monetary Policy, Inflation, Commodities, Economy

Date of Submission: 01-09-2022

Date of Acceptance: 13-09-2022

1. Introduction

The U.S. dollar has gained back a lot of the strength it had throughout the 1970s in recent years. This is not a reason for concern. The dollar is not a "problem" that calls for a "solution" from the government. The health of the dollar is a reflection of both economic and noneconomic elements. The causes and effects of the strong dollar are misunderstood by some who would like to see it decline in order to boost American exports. They also fail to understand that any initial modest trade benefits would be greatly balanced by the negative effects of a weaker dollar. A strong dollar is a reason for happiness and pride rather than a cause for worry.

The U.S. dollar, which serves as a universally accepted unit of exchange, a worldwide reserve currency, and is used to buy and sell essential raw resources, leaves its mark on every sector of the global economy. Investors settle for it as a safe haven when things get tough since it is the currency used to buy and sell essential raw resources. As a result of, among other things, anticipation that the Federal Reserve will raise interest rates more quickly than others, the value of the dollar against other major foreign currencies has reached a 20-year high.

The famous quote by John B. Connally, a former US Treasury Secretary, that the dollar "is our currency, but it's your problem" was made to the Europeans in the early 1970s. In fact, a disproportionately large number of important currencies have declined in value relative to the dollar, having significant effects on the developing world.

The main reason why the dollar is gaining is that there is high demand for dollars. The majority of economies' economic outlooks indicate a significant decline. In the meantime, the conflict in Ukraine has greatly increased geopolitical risk and market volatility. Additionally, the US Federal Reserve has rapidly raised rates as a result of historically high inflation. These and other factors are causing a flight to safety, where investors are selling their positions in Europe, emerging markets, and other places in search of safety in US-denominated assets, which must clearly be purchased with dollars.

Governments and businesses frequently borrow money in dollars. The poorer nations are put under pressure by the USD's strength because their GDP is heavily financed by dollar debt. According to the IMF, middle-income nations are facing their highest debt-service burdens in 30 years. Sri Lanka's debt is already in

default. El Salvador, Ghana, Tunisia, Pakistan, Egypt, Kenya, and Argentina are just a few of the nations where default is becoming more likely. The USD, on the other hand, protects countries holding their reserves in the USD against their own currencies. For instance, Bangladesh has 75% of its official reserves in US dollars, but they are disappearing far too quickly.

1.1 Milieu, Objective, Methodology, and Limitation of the Study

Providing information is what this paper's purpose is both a theoretical overview of how a sustained dollar appreciation can result in a persistent difficulty with global competitiveness as well as some quantitative analyses and supporting data. The paper starts by providing a straightforward measurement of the degree of sustained overvaluation, demonstrating that if there are long-term effects of sustained misalignment. Three major sources of the long-term effects of a strong dollar are then taken into consideration.

The **First** is the impact of the strong dollar on the foreign investment position of the United States, which has dramatically changed from being the world's largest creditor to a debtor.

The **second** is the impact of the overvalued dollar on how capital is distributed between sectors that compete abroad and those that do not.

Third, it's possible that foreign companies have made investments (and American companies have made withdrawals) in intangible assets like reputation and distribution networks, which has resulted in a loss of market share for the United States that cannot be made up for by simply bringing the dollar back to its previous levels. The paper's conclusion brings the data altogether.

1.2 Model specification

Based on primary data, this model can be applied. However, this paper has developed by using secondary sources of information. Nevertheless, based on concurrent analysis, this model can be thought of as a way to identify why the dollar become stronger.

$$Y = f(X)$$

Where: Y = dependent variable (Commodity Price (CP))

X = independent variable (Dollar Price (DP))

(Commodity Price (CP)) = f (Dollar Price (DP))

That is CP = f (DP)

X = (Dollar Price (DP))

CP = f (DP)

CP = $\alpha_1 + \beta_1 \text{LSS} + \mu_1$

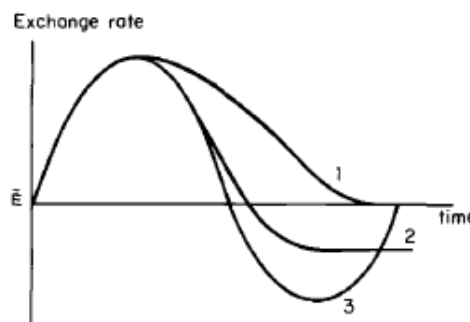
Where:

α_1 is intercept; β_1 is the coefficients of the explanatory variables

μ_1 is the stochastic variables of the model.

1.3 The Dimensions of the Potential Issue

The current account balance can always be attained at some actual exchange rate, and the budgetary restrictions will guarantee that the dollar will eventually weaken to the point where the United States can make a living abroad. The argument is that if the strong dollar has had long-term negative repercussions, those effects will manifest themselves in the exchange rate's future trajectory [Paul Kragman, 1988, *Long-Run Effects of the Strong Dollar*].



Alternative paths for the dollar.

Fig: 1

Fig:1 shows the various ways in which a brief change in the exchange rate's steady-state value could be claimed to have long-term implications. The original steady-state real exchange rate is shown as E in the figure. The exchange rate is momentarily pushed up for whatever reason. The exchange rate's future path has typically been envisioned as one similar to the path (1), which shows a steady return of the exchange rate to its long-run level. The focus of this study is on potential explanations for why the dollar might instead take a path similar to (2) or (3). If (2) the dollar falls below its starting point and enters a new steady state. In instance (3), the value of the dollar plummets dramatically from its peak, causing the compensating undervaluation that will eventually allow the steady state to be restored.

1.4 The Debt Burden

The United States' transition from a creditor to a debtor nation has been the most easily quantifiable long-term effect of the strong currency. Branson (1985) in particular emphasized the role debt accumulation plays in producing long-term implications of a short-term strong currency.

The following is a condensed version of Branson's analysis. First, at any given time, the real exchange rate of the United States will be negatively correlated with its net foreign debt because, as this debt increases, foreign investors will view the country as riskier. Considering that the ratio of foreign debt to U.S. GNP is what matters, we may phrase this as:

$$(1) \quad E = E(d,z) \quad dE/d < 0,$$

where d is the ratio of foreign debt to GNP, and z is a vector of other factors.

Let Y be the nominal interest rate, π the inflation rate, and g the growth rate of the U.S. economy. Then the growth of the U.S. debt- GNP ratio will be

$$(2) \quad d = -b + (r - \pi - g)d$$

where b is the ratio of the noninterest current account to GNP.

Finally, the non-interest current account will depend on the real exchange rate. Linearizing, we can write this as-

$$(3) \quad b = -\beta (E - \hat{E}).$$

1.5 Capital Reallocation

The second potential source of the dollar's overvaluation's long-term impacts could be the reallocation of capital away from industries that compete with imports and exports. Press reports undoubtedly indicate that several American manufacturing sectors have cut staff or moved production overseas; one would anticipate that this has led to a drop in the capital stock in these sectors. Therefore, it might take some time to reestablish the U.S. trade balance, necessitating a compensatory period of undervaluation to encourage the required investment movement. There is a good deal of journalistic evidence to support U.S. companies' significant exit from tradable sectors in the first half of the 1980s; in addition to the many complaints about "deindustrialization" and the rise of the "hollow corporation," stories about specific industries also seem to fit the theory of industry shrinkage due to competition. The shutdown of inefficient plants is repeatedly cited as being vital to the recovery of profitability in American businesses facing international competition. Therefore, it makes sense that capital reallocation would end up being a significant long-term impact of the dollar's strength.

One can create the most basic capital reallocation model by using the Neary (1978) and Mussa specific factor models (1974, 1978). In this method, a fixed amount of capital must be split between two industries; it is expensive to redistribute money, therefore it only flows gradually to the industry with the highest profitability. The simple capital reallocation model is sufficient to illustrate the issue, while it would be more realistic to simulate a capital stock that increases over time, making the decision to allocate investments at the margin rather than moving actual capital from one sector to another. Now imagine an economy with two sectors: one manufacturing marketable goods, the other nontrade able. Each sector's output is a constant-returns function of both labor and capital. While capital can be moved between sectors at a cost that rises with the rate of reallocation, labor is instantly mobile between them. Let's assume full employment in order to concentrate on the problem of capital reallocation. Finally, the trade balance will be assumed to be exogenously determined by decisions made about international investments in order to concentrate on the supply side.

1.6 Invisible Assets

Prices and installed capacity alone do not determine a company's position in the market. They also heavily rely on a company's intangible assets, like distribution networks and client loyalty. Like tangible capital,

these intangible assets can be accumulated through investment. It makes sense to assume that such intangible investment plays a significant role in global trade flows. Fundamentally, investments in reputation and other intangible assets should be handled similarly to those in more tangible assets. However, there are three reasons why they should be handled differently in practice. First, because invisible investment is difficult to explicitly quantify, its effects must be deduced. Second, since invisible assets tend to impact how consumers perceive the value of these products, and trade statistics track the flows of goods, invisible assets may manifest as fluctuations in demand rather than supply.

Finally, it appears likely that many investments in marketing, distribution, and other areas have a significant fixed cost component. A foreign company must decide whether to enter the U.S. market at a significant fixed cost or not. Due to these divergent factors, it may be necessary to treat the potential long-term implications of the high dollar that result from foreign investment and U.S. disinvestment in the intangible factors of global competitiveness separately.

2. The soaring dollar

The dollar is regarded as strong when it gains value on the foreign exchange market relative to other currencies. It is now possible to buy more foreign currencies thanks to the higher U.S. dollar.



In fact, everyone is affected by the USD's value. 90% of the \$6.6 trillion daily transactions in foreign exchange, 50% of all international debt, and 59% of all publicly stated foreign exchange reserve holdings include the US dollar (IMF data).

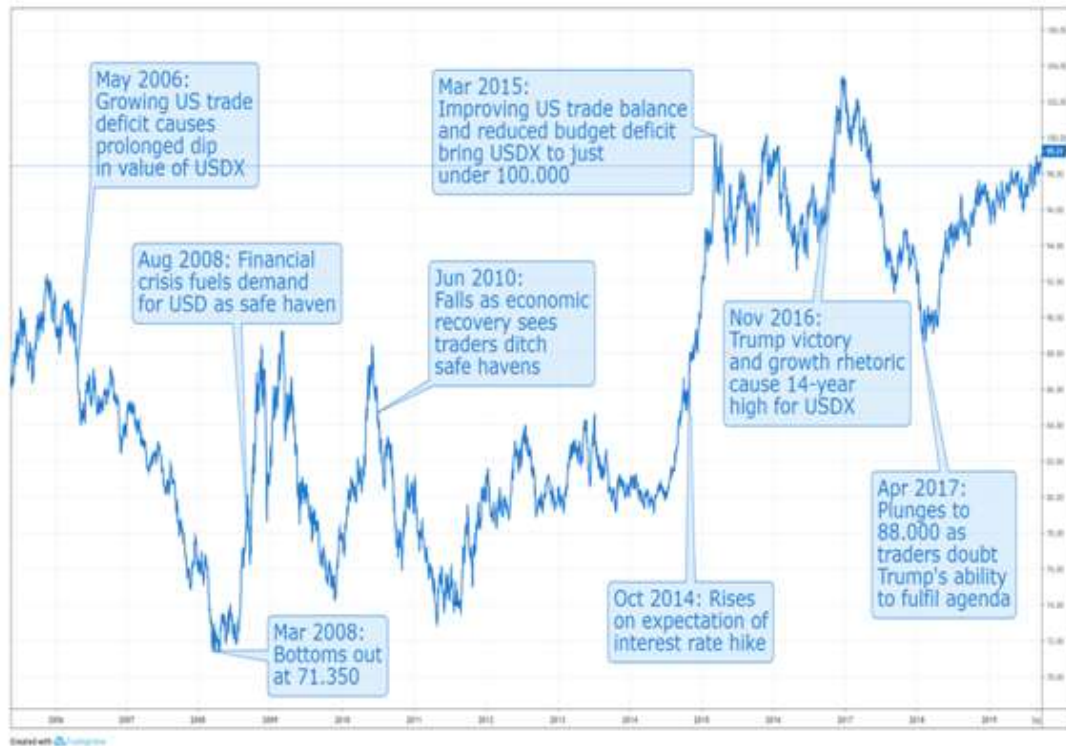
2.1 Strong Dollar Policy is not Essential!

The USD's ability to function does not depend on a "strong dollar policy." The Fed seeks to lower domestic inflation by employing domestic policies without regard to exchange rates. The Fed does not actively engage in currency markets, and the US dollar is permitted to float freely.

2.2 What is saying Dollar Index?

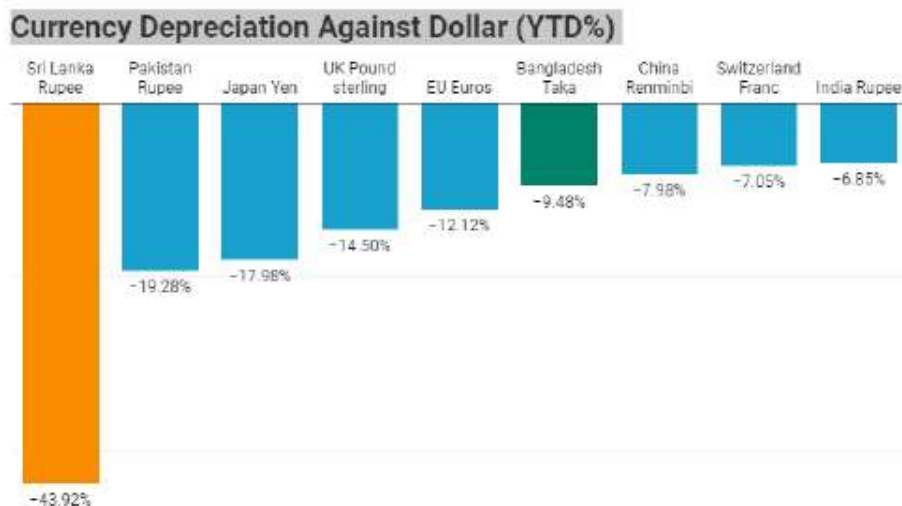
The US Dollar Index, sometimes referred to as USDIX, DXY, or USD Index, is a gauge of how much the US Dollar (USD) is worth in relation to a weighted basket of currencies used by US trading partners. The index will increase if the value of the Dollar rises relative to these currencies and decline if it falls.

2.3 The Dollar Index (DI) evaluates the dollars' worth in relation to a group of different currencies. The US dollar's gains relative to the euro, yen, pound sterling, Canadian dollar, Swedish krona, and Swiss franc account for the increase in the index. Since the 1960s, the USD has only been stronger three times: in 1969, 1985, and 2002. On August 31, 2022, it will exceed 109.



2.4 Investors Hedge Risks in Dollars despite currency depreciation

The ascent of the dollar was fueled by the simultaneous interaction of high commodity prices, a slow but aggressive tightening of US monetary policy, and ongoing geopolitical tensions. In moments of inflation and recession, investors frequently hedge their risks with investments denominated in dollars.



Source: Bloomberg

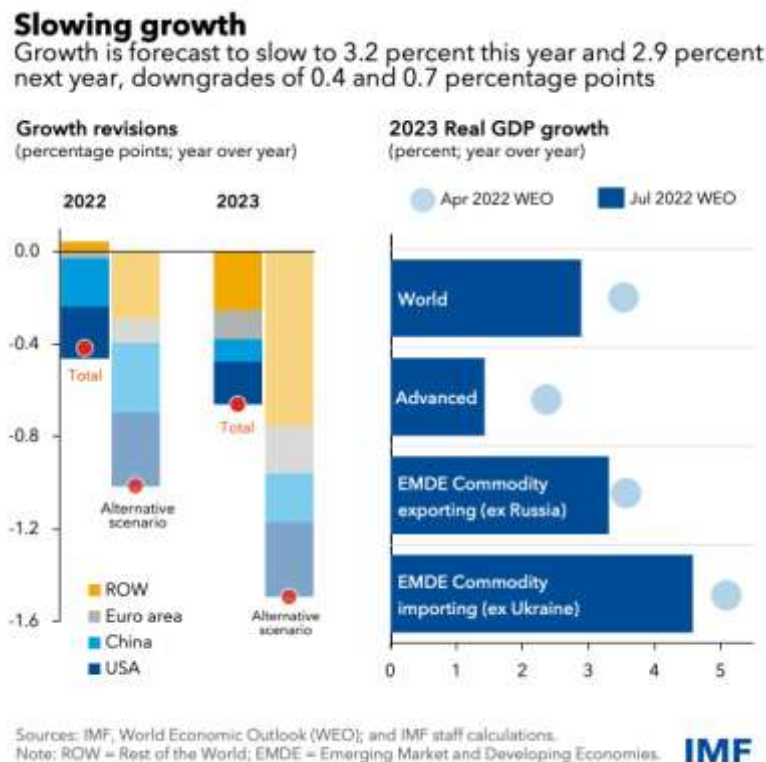
The value of the majority of other currencies has decreased, with the exception of 2022. The yen hit a 24-year low, the euro and dollar neared parity for the first time since 2002, and the British pound fell by over 12%. These three make up more than 80% of the DI basket. Yuan, the main unit of account for the Chinese Renminbi, fell by 8.8%. The worst currency devaluations in terms of the dollar have taken place in Argentina, Chile, and Colombia. All currencies in South and Southeast Asia saw varying degrees of fall. There are only a few genuine exceptions (Angola, Russia, Uruguay, Brazil).

2.5 Third wave of inflation is coming!

Energy and food used to be the two major price pressures, but now a wide range of prices, including those for various commodities and services, are also a factor. The third wave of inflation that the US may be seeing is probably being driven primarily by wages. Two years ago, the world was one of insufficient aggregate demand; today, it is one of insufficient aggregate supply. Like most central banks throughout the world, the Fed believed that pandemic pressures were only a transitory cause of inflation until understanding that it needed to be controlled, although at a price. After keeping interest rates at or around zero for the most of the pandemic, the Fed increased them more quickly than other other central banks. Since the Volcker era in the early 1980s, this rate hiking cycle is the most aggressive. According to Bank of America analysts, the Fed's relatively active monetary policy alone can account for at least half of the dollar's increase this year. The majority of the remaining half is a result of growing world uncertainty. Due to their closer financial and commercial ties, industrialized economies' levels of uncertainty are more linked.

3. International Economy Gotten Worse despite IMF forecast!

A quarterly survey of 143 countries, the World Uncertainty Index, is regarded as a key predictor of output declines. It was more than 2.5 times greater in the first quarter of 2022 compared to the first quarter of 2021. WUI increased by 48% just in the first quarter of 2022, which might slow global growth by up to 0.35 percentage points for the entire year (IMF blog). As the outlook for the global economy's growth has been worse, international investors have flocked to US Treasury bonds.



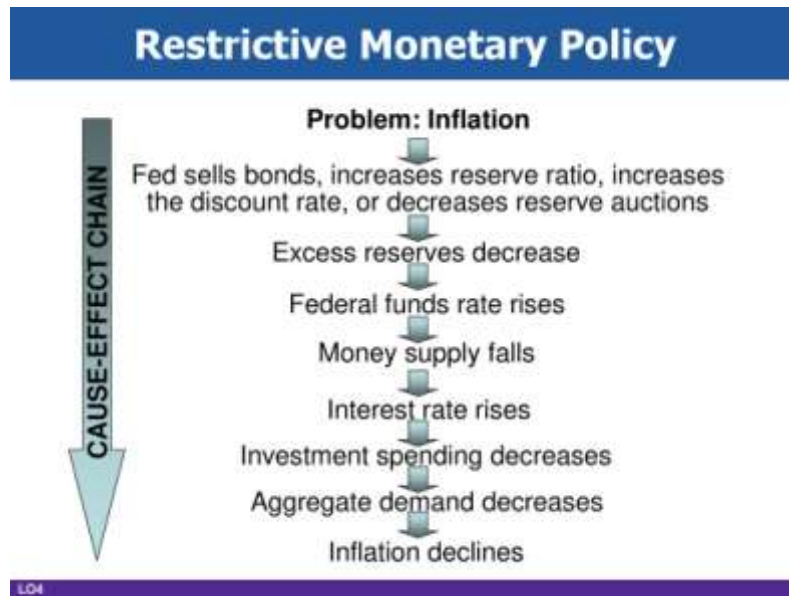
3.1 Dollar flight questionable

If the conflict in Ukraine ends, the US has a recession, the Fed lowers interest rates, and the US government undertakes fiscal consolidation—all fairly improbable events—the dollar could fall. Due to worries of one-sided sanctions, global reserve managers have recently diversified their holdings in favor of non-traditional reserve currencies, such as the Chinese yuan. The currency in which some nations are compensated for trade is currently being renegotiated. However, such efforts have slim chances of going far enough. There is no viable alternative to the dollar. The dollar has never been more firmly established. Europe lacks a comparable safe asset, and China still imposes capital controls.

3.2 Restrictive monetary policy come into force by FED

The USD could gain a little more. The Fed Chair indicated a more restrictive monetary policy "for some time" in his speech on August 26, 2022. To further address the risk of inflation, the Fed has also started quantitative

tightening. Despite these, most of the dollar's increase may already be in the past. Now, a significant rate increase from the European Central Bank is anticipated for September.



3.3 Despite the bad circumstances, profit can be jumped

Up till the uncertainties vanish and the interest rates stabilize, the profits are most likely to continue. The US is largely protected against the risks associated with energy. Demand for the USD appears to be strong as Europe braces for an energy crisis, persistent inflation pulls US interest rates higher, Japan resists rising rates, China locks down its supply chains, and other countries suffer from inflation and sovereign debt defaults. These will undoubtedly keep the USD high along with global tensions.

4. The repercussions

Beyond its source, the USD's increase has repercussions. Dollars are used to price a sizable portion of the credit, commerce, and debt involving hundreds of developing economies. Changes in exchange rates relative to the USD are frequently associated with capital flight, tighter credit conditions, and increased financial instability. According to a recent Financial Times article, "foreign investors have withdrawn money from emerging economies for five straight months, the longest string of withdrawals ever." By the middle of May this year, developing nations had lost almost \$61 billion in foreign exchange.

4.1 Global inflation due to the Strong Dollar!

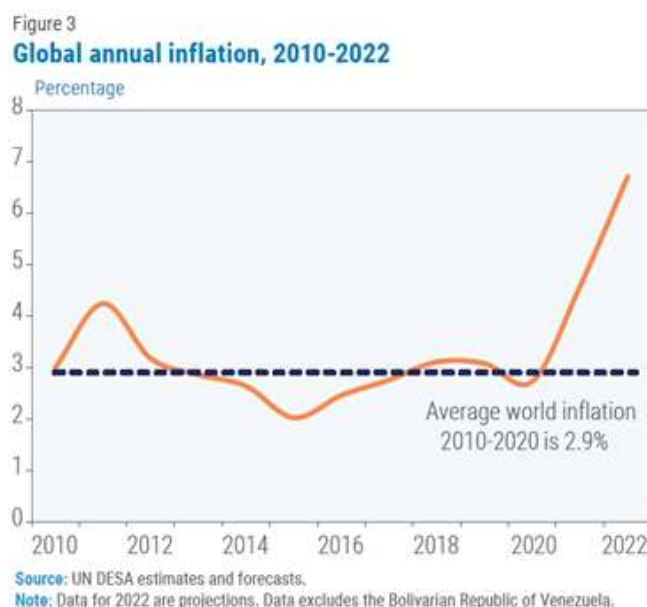
The USD fluctuates, which impacts global inflation. Following a dollar appreciation, an increase in import prices raises inflation both directly and indirectly by raising the expenses for all domestic businesses that use imported items as inputs. Oil, bread, and nickel are examples of commodities with dollar prices. These cost more in other nations money to purchase. Smaller economies suffer from inflation because of the high USD.

The U.S. dollar is at its highest level in a generation, depreciating currencies all around the world and casting doubt on the future of the global economy by upending everything from the price of international travel to the success of multinational corporations.

The dollar is the engine of the world economy. Before the epidemic, it accounted for \$6 trillion in daily activity, including everything from visitors using their credit cards to businesses making significant international investments. It makes up around 90% of all foreign exchange transactions.

The dollar frequently increases in value during turbulent times as the most significant currency in the world, in part because investors believe it to be reasonably secure and reliable. The dollar has grown recently as a result of rising interest rates, inflation, and worsening economic concerns.

Indexing the dollar against a basket of currencies from important trading partners like Japan and the eurozone is the primary method for determining the strength of the dollar. According to that metric, the dollar has increased by more than 10% this year, which is a significant change for an index that generally fluctuates by minute amounts each day. The dollar is now at a 20-year high.



4.2 The strong dollar puts a strain on the less-developed nations

This summer, the U.S. dollar has shown unprecedented strength against other major world currencies, reaching highs against the euro, the Japanese yen, and others. This has had a significant impact both internationally and domestically in the US. The decision by U.S. central bankers at the Federal Reserve to start aggressively raising interest rates to fight inflation and the movement of assets to the perceived safety of the U.S. in the face of uncertainty brought on by Russia's invasion of Ukraine are two factors that have contributed to the strengthening of the dollar, which has been increasing against other currencies since last year but increased particularly quickly this summer. Governments and businesses routinely borrow dollars. The less developed countries, whose GDP is mostly made up of US debt, are put under pressure by the higher US currency. Middle-income countries' debt payment commitments are at 30-year highs, according to the IMF. Sri Lanka has already fallen behind on a debt payment. El Salvador, Ghana, Tunisia, Pakistan, Egypt, Kenya, and Argentina are among the countries that are most likely to default on their obligations. On the other hand, the USD serves as a hedge against national currencies for nations that keep their reserves in the US currency. As an illustration, 75% of Bangladesh's stated reserves are in US dollars, yet they are depleting much too quickly.

5. Findings & Recommendation

- The US dollars' worth and commodity prices typically have an inverse connection over time. The relationship isn't exact.
- In general, commodity prices do not decline for each tick increase in the DI. The commodities used in the energy and industrial sectors, which are traded in USD and consumed globally, exhibit the strongest association over time.
- Commodity production is based on local environmental factors, yet the businesses that use these vital raw resources are spread around the world. In international trade for raw materials, in particular, goods priced in USD increase in price in non-dollar currencies when the USD increases.
- The world's assets are commodities. They engage in global trade. Foreign buyers keep their cash in USD-denominated US commodities like corn, soybeans, wheat, and oil. They have less purchasing power when the USD increases. To store their money in US goods, larger sums are needed.
- The sum of the aforementioned effects is to reduce the demand for goods. Commodity prices are further lowered by selling at any cost in order to secure USD. The level of reliance varies depending on the specific commodity. Other factors, such as changes in weather patterns, infrastructure, supply chains, and the simplicity of switching from one kind of product to another, mediate the impact of currency shifts.
- The prevailing bet on the futures markets is that the price of crude oil and natural gas would fall in 2023 compared to their monthly levels in 2022. This might result from the USD remaining consistently strong, at least in part.
- Trade prospects over the long run are mixed. In the past, when the USD has appreciated, real GDP growth rates in emerging market regions—particularly in those that are significant net exporters of commodities—have slowed down.

- A strong dollar has an influence on income because it has an opposite effect on world commodity prices, all else being equal. Through lower real income in dollars, weaker commodity prices reduce domestic demand in emerging markets. Real GDP slows down. These impacts persist despite any prospective shift in spending in favor of domestic items brought on by a decline in their currency.
- Although not directly due to sticky dollar invoicing, the increase in the value of the dollar benefits the external demand for manufactured goods exported by developing economies. When the USD real effective exchange rate rises along with the rise in the nominal effective rate, as may have been the case in the current cycle, a stronger dollar transfers demand from the US to economies across the world.
- A strong USD also increases remittances from the US to emerging economies and US visitors traveling overseas. These could be countered by rising debt loads, tighter financial conditions, evaporating foreign capital, and increased costs of importing capital and intermediate inputs.
- So, what can we anticipate? The majority of prognosticating indicators point to a noticeable slowdown in global GDP this year and the following. Diversified export-driven economies will remain ahead of others where investments, trade, and debt are problematic. These economies also have a low share of dollar-denominated debt and big dollar reserves. Developing countries like Bangladesh will have to deal with tighter financial circumstances, difficult macroeconomic management, and the procurement of foreign currency to maintain their manufacturing systems.

6. Conclusions

This paper has discussed a number of potential consequences that the recent strength of the dollar compared to the years 1970 to 1986 may have on the competitiveness of the United States. The evidence for such consequences in the instance of the United States is surprisingly thin, despite the fact that it is simple to imagine scenarios in which sustained departures of a currency from its long-run sustainable level do have long-term effects. Because the real interest rate does not significantly surpass the growth rate, the burden of stabilizing the debt-GNP ratio will not be significantly increased by the ratio's increase. There is no evidence that capital has been moved away from the manufacturing sector. Furthermore, there is no proof that the global trade flow equations have undergone unfavorable structural changes.

This does not imply that the world economy would be able to easily regain its equilibrium from the year 1980. As the United States works to balance its capital account, there may still be a capital shortage in the industrial sector. Through a relative productivity factor, the trade flow equations capture the secular fall in the equilibrium real exchange rate that persisted throughout the 1980s. The United States might be forced into a time of capital outflow and a correspondingly weak dollar—which would be our version of a debt crisis in the style of the one in the Americas—if international investors attempt to reverse their buildup of claims against the country. The main takeaway from this article is, however, cautiously optimistic: based on early data, the long-term harm caused by the strong dollar is less than one may have anticipated.

References

- [1]. Chair Jerome H. Powell (2022), Monetary Policy and Price Stability, “*Reassessing Constraints on the Economy and Policy*,”
- [2]. UN DESA estimates and forecasts (2022), World Economic Situation and Prospects, Global Economic Outlook
- [3]. IMF (2022), The World Economic Outlook (WEO) database, April 2022
- [4]. IMF (2022), Currency Composition of Official Foreign Currency Reserves (COFER)
- [5]. World Bank (2022), World Bank slashes 2022 global growth forecast to 2.9%, 08-Jun-2022, CGTN
- [6]. Thomson Reuters (2022), The World Street Journal, *Russian rouble weakens after hitting 5-year high vs euro*.
- [7]. The Economist (2022), The Economist commodity-price index
- [8]. McKinsey Global Institute (2000), Why the Japanese Economy is not Growing: micro barriers to productivity growth
- [9]. Zahid Hussain, (2022), *Causes and consequences of the strong dollar*, The Business Standard, September 2022
- [10]. Karl Russell, Joe Rennison and Jason Karaian (2022), *The Dollar Is Extremely Strong, Pushing Down the World*, The New York Times,
- [11]. Bangladesh Bank (2022), Monthly Economic Trends, Monetary Policy Department, Dhaka
- [12]. Bangladesh Bank (2022), Bangladesh Bank Quarterly, Chief Economist’s Unit, Dhaka
- [13]. IMF (2016) Special Drawing Rights (SDR) currency basket
- [14]. UN DESA estimates and forecasts (2022), World Economic Situation and Prospects, Global Economic Outlook
- [15]. The Balance (2020), Dotdash Meredith, *What to know the US dollar as the global currency*
- [16]. Paul Kragman, (1988) *Long-Run Effects of the Strong Dollar*, University of Chicago Press
- [17]. Livia Chitu, Barry Eichengreen and Arnaud Mehl (2012), *when did the dollar overtake sterling as the leading international currency? evidence from the bond markets*, Working Paper Series No 1433
- [18]. Ronald Jones (1971) R. W. Jones, “*A Three-Factor Model in Theory, Trade and History*,” in *Trade, Balance of Payments and growth*
- [19]. Baldwin, Richard, and Paul Krugman, (1986) *Persistent trade effects of large exchange rate shocks*. NBER Working Paper no.2167.
- [20]. Branson, William. (1985), *Causes of appreciation and volatility of the dollar*. In *Federal Reserve Bank of Kansas City, The U. S. dollar: Prospects and policy options*.
- [21]. Krugman, Paul, and Richard Baldwin (1987), *The persistence of the U.S. trade deficit*. *Brookings Papers on Economic Activity*.
- [22]. Krugman, Paul, and George Hatsopoulos (1987) *The problem of U.S. competitiveness in manufacturing*. *New England Economic Review*
- [23]. Mussa, Michael (1974) *Tariffs and the distribution of income*. *Journal of Political Economy* (82): 1191 - 1204.