

INTERNATIONAL TRADE PAYMENT AND EXCHANGE RATE: THE TRADE BALANCE BETWEEN THE US AND OTHER COUNTRIES CAN IMPACT THE STRENGTH OF THE DOLLAR

Ortiqov Maxammadjon Adxamjon o'g'li

Master graduate student of Tashkent State University of Economics.

ABSTRACT

In this an explanation of the research aimed at identifying and optimizing the study methodology of the dynamics of the trade balance between the US and other countries can impact the strength of the dollar. This research analysis an increase in exports can lead to a stronger dollar, while an increase in imports can lead to a weaker dollar. The research shows in the world, 40% of global trade is invoiced in US dollar (USD), despite the fact that United State accounts for only 10% of global imports and exports depending on the general economic conditions.

Also, proposals and recommendations given on the method of regulating and organizing the formation of foreign exchange reserves in the Special Drawing Rights, as well as the influence of international trade between countries on the dynamics of the exchange rate In addition to that the dollar has also a unique role in the international payment system as main reserve and funding currency. Due to its extensive use in international trade and finance, fluctuations in the value of the dollar operate noticeable foreign spillovers, much stronger than those implied by an appreciation of the euro (the second most widely used currency in global invoicing) or the yen. All in all, the USD is a pivotal currency in international trade and finance system, and its influence is likely to continue.

Keywords: Currency Intervention, CA, Export and Import, EME, Financial institutions, Real exchange rate, Geopolitical tensions, Monetary Policy, Foreign exchange market, International Investment position, SDR, International Monetary Fund, WEO.

INTRODUCTION

The existing literature has quantifies the influence of a dollar appreciation using so called reduced-form regressions. In this way, only the *average* elasticity of the variable of interest to changes in the value of the dollar can be calculated. Nevertheless, the reason why the dollar appreciates, in other terms the original shock that has moved the USD, might also matter for the strength of pass-through. Calculate, for instance, an appreciation of the dollar induced by stronger US demand. In that case there are at least

two, opposite, effects: on one hand, because of global USD invoicing, global trade should contract, as a dollar appreciation mechanically increases the price of goods invoiced in dollars, reducing demand. However, there is another important factor that need to be accounted for when estimating the net effect of the appreciation. More demand in the US, in fact, would increase global trade and, as a results, trade volumes. While the net effect of the appreciation would then rely on the relative elasticity of trade volumes to the exchange rate and to US demand. A similar reasoning can be applied to the affect of an appreciation of the dollar induced by a monetary policy shock. In this manner, the dollar appreciates but the shock induces a contraction in US GDP, reducing further global demand and hence trade volumes. These rich dynamics are unlikely to be captured by reduced-form models, as asesed elasticity would depend on which shock dominates the empirical sample considered.

This research is that the assessment of the impact of the exchange rate on Intrenational trade has been carried out for the countries, unlike most research, where the authors tend to examine the impact of the exchange rate for the country as a whole. Understanding how the international trade impacts the economy in the countries context will allow a finer assessment of the effect of currency shocks on US economic growth, and shall enhance the calibration of monetary policy aimed at meeting the nation-wide inflation target objective.

Review of studies on the relationship between the International Trade Payment System and Exchange rate.

The impact of the International trade payment for the exchange rate dynamics on the economic activity is considered in literature rather thoroughly, while the issue remains contentious and important subject of research. In this work, I try to account for the different influences of the different shocks that bring to a dollar appreciation. Also we find that after real shock, demand and supply shocks in the US, the pass-through is positive, suggesting that the benefits of more US demand compensate a stronger dollar. The opposite is true for financial shocks. In this case the dollar appreciates but the US economy contracts leading to a reduction in global trade. We also highlight the existence of a large cross-country heterogeneity in the responses to a dollar appreciation. These differences can be explain by structural factors. For instance, after real shocks up to 60% of cross country gaps explained by financial and trade exposure to the US, trade openness and USD invoicing shares. This research is in line with the so-called dominant currency paradigm postulating that because the US dollar is used as global invoicing currency, global trade react strongly to dollar movements. Also invoicing shares, however, do not explain cross-country differences after financial shocks. So we explain this finding with the endogenous policy reaction of monetary authorities in certain nations in our example, mainly emerging market

economies (EMEs). Due to learning a US monetary policy fluctuations, when US rates increase, monetary authorities in EMEs have to increase rates as well to avoid strong capital outflows and an exchange rate depreciation. If that happens, contrary to advanced economy that keep free-floating exchange rates, while the domestic exchange rate remains stable against the US dollar alleviating the role of USD invoicing. In addition to that these results have a more deep implications for monetary policy because they show that the reactions to a dollar appreciation vitally relied on the mainly shock and, as such, also the domestic policy response should adapt.

As a result, in Export and Import. But, certain factors can reduce a positive impact of currency depreciation/devaluation. The final impact of changes in the exchange rate on the trade balance depends on the price elasticity of demand for exports and imports. Furthermore, the economy should have free production resources so that the rise in the cost of imported goods can encourage import substitution and the growth of domestic output. Otherwise, currency depreciation will accelerate inflation.

In their studies R. Mandell and M. Fleming based on the analysis of 54 cases of devaluation, conclude that it often has a negative impact on economic growth, especially in developing countries. The reason for such an impact, according to the authors, is a reduction in domestic demand and losses caused by an increase in the real value of existing liabilities denominated in foreign currency. As a result, the countries whose economy and production largely depend on imported equipment, technologies and raw materials are more vulnerable to the negative impact of devaluation.

In their research, A. Nagovitsin and E.T. Gaydar draw attention to the imperfection of the financial markets of developing countries: the lack of opportunities to borrow domestically for a long term and to borrow in national currency abroad leads to a mismatch in the currency of assets and liabilities. The underdevelopment of national financial markets also prevents entrepreneurs from effectively insuring currency risks. In this regard, the impact of the exchange rate on economic growth through the debt channel is of particular relevance to developing economies. F.Makhlup. et al. analyse the relationship between output and the exchange rate in seven developing countries: Canada, Italy, Malaysia, France, Philippines, Germany, and East Asia. All the selected countries have gone through devaluation. Based on the results of the research, the authors conclude that the devaluation has a generally negative long-term impact on economic growth in all the countries analysed, except Mexico. The research explains the positive effect for Germany by the low level of external debt in foreign currency relative to GDP. In addition to the growth of debt burden, the authors identify two more reasons for the negative impact of devaluation on economic development in the countries considered:

the inability to increase exports due to the lack of goods of proper quality;

the lack of their own full substitutes for imported raw materials and goods.

In the world, Global trade slowdown with shorting balances.

So growth in the volume of world trade is expected to decline from 5.1 percent in 2022 to 2.4 percent in 2023, echoing the slowdown in global demand after two years of rapid reach the same growth from the recession and the shift in the composition of spending from traded goods back toward domestic services.¹

Such with rising trade barriers and the lagged effects of US dollar appreciation in 2022, which made traded products more expensive for more economies given the dollar's unique role in invoicing, are also expected to asses trade growth in 2023. All in all, the outlook is for weaker trade growth than during the two pre-pandemic decades (2000–19), when it averaged 4.9 percent. Meanwhile, global current account balances—the sums of absolute surpluses and deficits—are expected to shortly in 2023, following their important increase in 2022. As showed in the IMF, the rise in current account balances in 2022 largely reflected commodity price increases brought by the war in Ukraine, which caused a widening in oil and other commodity trade balances. In the short term, global balances are expected to narrow annually as commodity prices decline. Also creditor and debtor stock positions remained historically elevated in 2022, reflecting the offsetting effects of widening current account balances and the dollar's strength, which brought valuation gains in countries with long positions in foreign currency. Overall, elevated positions are expected to moderate only slightly as current account balances narrow.

So a severe tightening in global financial conditions: In certain countries, the financial sector will restore highly weak to the realized rise in real interest rates in the next months, both in banks and in nonbank financial institution sector. Also, in a severe drifted scenario in which risks stemming from bank balance sheet fragilities materialize, bank lending facilities in the United States and other advanced economies could sharply plunged, with macroeconomic effects amplified by a number of groups. In addition to that, household and business confidence would deteriorate, leading to higher household precautionary saving and lower investment. Although, depressed activity in the most affected economies would spill over to the rest of the world through lower demand for imports and lower commodity prices. Due to in past episodes of global financial stress, a broad-based outflow of capital from emerging market and

¹ Source: IMF staff calculations.

Note: European creditors = Austria, Belgium, Denmark, Finland, Germany, Luxembourg, The Netherlands, Norway, Sweden, Switzerland; euro area debtors = Cyprus, Greece, Ireland, Italy, Portugal, Slovenia, Spain; oil exporters = Algeria, Azerbaijan, Iran, Kazakhstan, Kuwait, Nigeria, Oman, Qatar, Russia, Saudi Arabia, United Arab Emirates, Venezuela.

developing economies could happen, bringing further dollar appreciation, which would worsen vulnerabilities in economies with dollar-denominated external debt. The dollar appreciation would further depress global trade, as many products are invoiced in dollars. In an environment of elevated financial fragility, contagion could occur, with a sharp loss of investor appetite spreading across geographic regions and asset types. The market for safe assets (such as US or German government bonds) could also seize up, with reduced ease of trading amid a rush out of riskier assets. This provides a quantification of such a scenario of severe financial sector stress and concludes that, even with monetary policy responding to the decline in economic activity and inflation and even with fiscal automatic stabilizers operating, global real GDP growth in 2023 could be 1.8 percentage points below the baseline. Such an outcome would imply near-zero growth in global GDP per capita. Furthermore, the downturn in global aggregate demand would have a strong disinflationary impulse, with global headline and conventional inflation lower by about 1 percentage point in 2023. Strong inflationary impulse, with global headline and core inflation lower by about 2 percentage point in 2024.¹ The results of the research by domestic authors suggest that there is a heterogeneity between countries in the relationship among the exchange rate and the International trade payment Systems.

Country group composites.

For exchange rates, interest rates, and growth rates of monetary aggregates are weighted by GDP converted to US dollars at market exchange rates (averaged over the preceding three years) as a share of group GDP. Composites for real GDP per capita in purchasing power-parity terms are sums of individual country data after conversion to international dollars in the years indicated. But noted otherwise, composites for all sectors for the euro area are corrected for reporting discrepancies in intra-area transactions. An adjusted annual GDP data are used for the euro area and for the majority of individual countries, except for Cyprus, Ireland, Portugal, and Spain, which report calendar-adjusted data. For data before 1999, data aggregations apply 1995 European currency unit exchange rates. Also, composites for fiscal data are sums of individual country data after conversion to US dollars at the average market exchange rates in the years indicated. Composite unemployment rates and employment growth are assessed by labor force as a share of group labor force. Composites relating to

Source: IMF staff estimates.

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during February 15, 2023–March 15, 2023. Economies are listed on the basis of economic size. The aggregated quarterly data are seasonally adjusted. WEO = World Economic Outlook.

external sector statistics are sums of individual country data after conversion to US dollars at the average market exchange rates in the years indicated for balance of payments data and at end-of-year market exchange rates for debt denominated in currencies other than US dollars. In addition to that composites of changes in foreign trade volumes and prices, however, are arithmetic averages of percent changes for individual countries weighted by the US dollar value of exports or imports as a share of total world or group exports or imports (in the preceding year). Unless noted otherwise, group composites are computed if 90 percent or more of the share of group weights is represented. Advanced Economies. The 41 advanced economies. The seven largest in terms of GDP based on market exchange rates—the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada—constitute the subgroup of major advanced economies, often referred to as the Group of Seven. The members of the euro area are also distinguished as a subgroup. Composite data shown in the tables for the euro area cover the current members for all years, even though the membership has increased over time. Lists the member countries of the European Union, not all of which are classified as advanced economies in the WEO. About 40% of global trade is invoiced in US dollar, despite the United State accounts for only 10% of global imports and exports. The dollar has also a unique role in the international monetary system as main reserve and funding currency. Because of its extensive use in international trade and finance, fluctuations in the value of the dollar generate sizeable foreign spillovers, much stronger than those implied by an appreciation of the euro (the second most widely used currency in global invoicing) or the yen. Using custom-level data, for example, estimate, that a 1% US dollar appreciation leads to a 0.6% contraction in trade volumes. This elasticity is computed by means of unconditional regressions of annual changes in trade volumes on changes in the dollar exchange rate. However, much similarly to the price pass-through literature, see the source of the shock might also matter for the strength of the pass-through to trade. Consider, for instance, an appreciation of the dollar induced by stronger US demand. In that case there are at least two, opposite, effects: on one hand, because of global USD invoicing, global trade should contract, as a dollar appreciations mechanically increases the price of goods invoiced in dollars, reducing demand. However, there is another important factor that need to be accounted for when estimating the net effect of the appreciation. More demand in the US, in fact, would increase global demand and trade volumes. The net effect of the appreciation would then depend on the relative elasticity of trade volumes to the exchange rate and to US demand. Hence, a similar reasoning can be applied to an appreciation of the dollar following a monetary policy shock. In this case, the dollar appreciates but the shock induces a contraction in US GDP, reducing further global demand and hence trade volumes. These rich dynamics are unlikely to be captured by

reduced-form models, as estimated elasticity would rely on the relative importance of the different shocks in the sample consider.

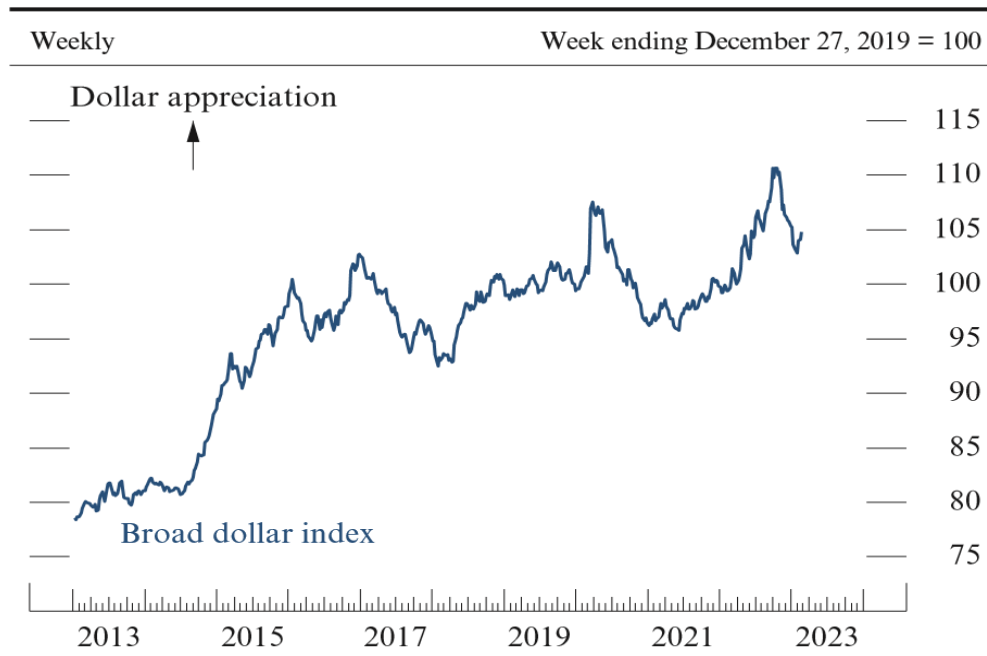
Calculating of the relationship between the exchange rate and the output in the USA

About the broad dollar index—a calculate of the trade-assessed value of the dollar against foreign currencies—continued to rise over the summer and through the beginning of the fourth quarter but, more recently, has largely reversed those increases. While widening yield differentials between the U.S. and the rest of the world and concerns around foreign growth pushed the dollar higher through October of last year, prompting several central banks, mainly in Asia, to intervene in foreign exchange markets to support their currencies. Since peaking in October, the dollar has largely retraced those gains, reflecting softer inflation data in the U.S., tighter monetary policy abroad, and better prospects for foreign economic growth. But, still, the broad dollar index remains stronger than it was in early 2021. After reaching multidecade lows against the dollar in October, the Japanese yen rebounded following the adjustment of the Bank of Japan’s yield curve control policy.

About currency conversion

So, data on external obligations are normally reported to the World Bank in the currency of repayment and are converted into a common currency (U.S. dollars) using official exchange rates reported by the IMF. Commitments, disbursements, and debt service payments (flows) are converted to U.S. dollars at the annual average exchange rate for the year. Hence, debt outstanding (disbursed and undisbursed) at the end of a given year (stock) is converted at the exchange rate in effect at the end of the relevant year. As a result, year-after-year changes in debt outstanding and disbursed may not be equal to net flows (disbursements less principal repayments); likely, changes in debt outstanding (including undisbursed debt) may not equal commitments less repayments. While discrepancies will be mainly important when exchange rates have moved

Figure 4.1.3 U.S. dollar exchange rate index



sharply during the year. Also projected debt service is converted to U.S. dollars at rates in effect at the end of December 2020.

Use of IMF credit.

Data related to the operations of the IMF are provided by the IMF Treasurer’s Department. So they are converted from special drawing rights (SDR) into dollars using end-of-period exchange rates for stocks and average-over-the-period exchange rates for flows. IMF trust fund operations under the Enhanced Structural Adjustment Facility, Extended Fund Facility, Poverty Reduction and Growth Facility, and Structural Adjustment Facility (Enhanced Structural Adjustment Facility in 1999) are presented together with all of the IMF’s special facilities (buffer stock, supplemental reserve, compensatory and contingency facilities, oil facilities, and other facilities). Moreover, SDR allocations are also included in this category. Due to the BPM6, SDR allocations are recorded as the incurrence of a debt liability of the member receiving them (because of a requirement to repay the allocation in certain circumstances, and also because interest accrues).

CONCLUSION

To wrap up, we assessed the impact international trade between countries to the exchange rate dynamics. This is particularly important given the increased openness of the U.S. economy and the noticeable decline in the degree of pass-through to U.S. import prices. Such a decline in pass-through implies that foreign exporters have become more willing to vary their markups in order to keep their local prices competitive and maintain market share in the wake of large exchange rate fluctuations. In addition to that one argument put forward by those more skeptical of the decline in pass-through is that the entry of foreign exporters associated with greater openness

should reduce markups, make them less variable, and raise the degree of exchange rate pass-through. In our framework, we find that country entry does indeed push up exchange-rate passthrough and is essential in accounting for the secular rise in the U.S. import share. However, increased entry of foreign exporters has a relatively small impact on exchange rate pass-through. The effects of higher foreign productivity and a reduction in trade costs on markup behavior along the intensive margin are much more important quantitatively and appear to explain a considerable portion of the observed decline in pass-through to U.S. import prices. All in all, it is not surprising that pass-through has declined as the U.S. economy has become more open.

REFERENCES:

1. Makhlop F. The theory of exchange rate. This volatile exchange rate. Collection of articles. Per. from English. - Moscow: Delo, 2001. pp. 28-30.
2. Mundell R. A. Capital mobility and stabilization policy under fixed and flexible exchange rates. Canadian Journal of Economics and Political Science, vol., 29, 1963. pp. 475-485.;
3. Fleming J. Domestic Financial Policies under Fixed and under Floating Exchange Rates. International Monetary Fund Staff Papers 9, 1962. pp. 369-79.
4. Engle R.F., Granger C.W.J., «Cointegration and Error Correction: Representation, Estimation, and Testing», Econometrica, 1987, Vol. 55, pp. 251–76
5. Subacchi, P. (2023), ‘From the Bretton Woods System to the Global Non-system: The Trials and Tribulations of Slow Learning’, Oxford Review of Economic Policy, 39(2), 195–209.
6. Vines, D. (2023), ‘Creating a New Sovereign Debt Reconstruction Mechanism: Why Incentives, Risk Sharing, and CACS Will All
7. International Monetary Fund, World Economic Outlook Database (GDP based on Purchasing Power Parity)
8. Swan T.W. Economic growth and capital accumulation. Economic Record (Wiley) 32 (2), 1956. pp. 334–361;
9. Organization for Economic Cooperation and Development (OECD) definition, <http://www.oecd.org>.