

Exchange Rates and Economic Stability: The Federal Reserve's Monetary Strategy

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Abstract: This study looks at how the American financial and economic institutions have changed in relation to the broader global economic environment. It centers on a thorough assessment of the Federal Reserve's monetary policy trajectory throughout the previous ten to twenty years, with a focus on the introduction of quantitative easing policies and the development of communication tactics. The study analyzes how these monetary policies have adapted to various economic challenges and assesses their effectiveness. Furthermore, the research delves into the fluctuations of the U.S. dollar exchange rate and its profound implications on the national economy, including its impact on foreign direct investment and other economic indicators. Insightful information on how the Federal Reserve influences the monetary policy landscape in the US is provided by the paper's synthesis of various findings. This information is crucial for investors, financial institutions, and policymakers as they navigate the complex world of currency dynamics and global economic interdependencies.

Keywords: Fed, exchange rate, monetary policy, economy.

1. Introduction

This essay will analyze the journey from the global economy to the United States' economy and its financial systems. The focus will be on the evolution and features of the Federal Reserve's monetary policy throughout the last ten to twenty years, taking into account significant occurrences such as the quantitative easing programs and communication tactics that have influenced the flexible nature of U.S. monetary policy. Additionally, it will delve into the trends of the U.S. dollar exchange rate and its impact on the national economy. Lastly, the research will evaluate the Federal Reserve's monetary policy and its implications for the U.S. economic system.

Additionally, it provides a thorough analysis of the evolution of the Federal Reserve's monetary policy, taking into account changes to communication strategies and QE measures, in order to provide a holistic assessment of U.S. monetary policy as a whole. Furthermore, the research will examine the impact of the U.S. dollar exchange rate on the economy and offer insights into how it affects foreign direct investment and other economic metrics.

The analysis of the Federal Reserve's monetary policy provides insights into the evolving strategies that have been employed to navigate economic challenges, offering practical implications for policymakers and financial institutions. Additionally, understanding the impact of the U.S. dollar exchange rate on foreign investment can provide valuable guidance for economic policymakers and investors in the context of currency dynamics.

2. Literature review

This paper examines how, between 1989 and 2019, the exchange rate affected the rate at which 67 developed and emerging economies recovered economically. Using a cross-sectional sample of 341 economic recoveries, we first investigate the effects of nominal depreciation and real undervaluation on the length of economic recovery. According to our research, actual undervaluation and nominal depreciation both quicken economic recovery. This conclusion, however, is limited to modest undervaluation and depreciation. Second, we examine the impact of real undervaluation on the rate of economic recovery following an external shock using an interacting panel VAR (IPVAR) model. Although there is proof that an undervalued domestic currency accelerates economic recovery, its beneficial impact appears to be small. Additionally, we investigate how financial growth affects the efficiency of depreciated domestic currency in promoting economic recovery. It appears that a higher degree of financial development can mitigate the adverse impact of an overpriced currency on the rate of economic recovery, but it does not have any bearing on the impact of an undervalued currency [1].

By investigating the causal relationship between US interest rates, long-term inflation expectations, and US dollar exchange rates for a sample of eight advanced countries for the period 1980M1 to 2022M11, using a data-driven identification technique using structural vector autoregressive models. We find that in addition to US monetary policy, shocks to inflation expectations resulting from changes in fiscal credibility and sustainability concerns also have a significant impact on the exchange rate. We discover evidence that the US dollar exchange rate has responded differently to periods of monetary and fiscal dominance. Additionally, the convenience return that investors are willing to forgo in exchange for keeping US dollar assets and global risk aversion both have a significant influence on the US dollar's exchange rate [2].

In this study, we develop a mathematical model that accounts for domestic and global financial market imperfections and show how U.S. monetary policy can have significant effects on emerging markets (EMs). Financial imperfections prohibit arbitrage between EM borrowing rates and between domestic and U.S. dollar borrowing rates. Domestic “financial accelerators” amplify negative feedback effects between external conditions and financial soundness, leading to significant cross-border spillovers of shocks to U.S. monetary policy. The data provide important support for the model's prediction that uncovered interest parity violations are associated with domestic credit spreads. On the Oxford University Press website, the authors' online appendix is located directly next to the link that takes users to the online version of the final published work [3].

In addition to \$1 trillion in unrealized losses on its securities portfolio, the Federal Reserve has suffered cumulative cash losses from past monetary policy choices of over \$140 billion. The Fed System and most Reserve Banks are technically insolvent by GAAP, but Fed officials argue that their negative GAAP capital and balance sheet do not affect their ability to conduct monetary policy because they can print money to offset any size loss they may incur. The Fed's story leaves out crucial details, like the fact that the Fed's ability to print money is legally limited and that deposits kept at bankrupt Reserve Banks are unsecured liabilities that are legally at risk because there is no federal government guarantee. We calculate the current legal exposure to depositor loss as well as the GAAP capital of all Reserve Banks and the System. We examine the existing legal structure that deals with insolvent Reserve Banks. As long as depositors continue to believe that their money is guaranteed by an implicit federal government guarantee, we conclude that the framework will be disregarded and the Fed, which is technically bankrupt, will continue to run at a loss. If this confidence waiver is needed, legislative action might be needed [4-5].

While significant research has been done on the factors influencing foreign direct investment (FDI) for both rich and developing nations, relatively less has been done on this topic for developing

countries, particularly CIS (Commonwealth Independent states nations). This study looks at the components of foreign direct investment (FDI) in the Commonwealth of the Independent States from 1995 to 2018. This research specifically aims to characterize the relationship between exchange and FDI. The exchange rate, GDP, GDP per capita, inflation rate, and trade openness are the predicted factors that are found by carefully examining previous experimental and empirical commitments. The relationship between the variables is examined using regression analysis and Granger causality experiments. Test results indicate that the exchange rate has no discernible impact on the foreign direct investment (FDI) of CIS countries [6].

The primary conclusions show the macroeconomic conditions in the US, including the US public debt, US inflation, and the US dollar index, as well as the US GDP participation in the global economy with respect to China [7-8].

The six years between 1980 and 2015 were the period with the most export booms. First, because non-trade costs dominate the production function, a one standard deviation increase in the labor intensity index increases the probability of an export boom by 2.5 percentage points. Secondly, export booms are more likely to happen in industries linked to those that are already competitive, primarily in the upstream sectors. Lastly, despite the conclusion of the currency competitiveness phase, the new export volumes in those industries demonstrate ongoing patterns, indicating trade hysteresis [9].

3. The Fed's Macroeconomic Regulation and the U.S. Economy

3.1. Characteristics and summary of the monetary policy

Overnight interest rates have been nearly zero since December 2008; they are now at a "zero bound," meaning that additional reductions are not possible to boost the economy. Consequently, the Fed has attempted to carry out its constitutional duty of maximum stability in prices and employment. Congress is in charge of monitoring to make sure the Fed's Activities align with its mandate.

The Fed's balance sheet increased dramatically as a result of significant asset purchases known as "quantitative easing" (QE), as the data demonstrates, going from \$0.9 trillion in 2007 to around \$4 trillion by the end of 2013. September 2012 saw the beginning of the Federal Reserve's third round of monthly purchases of Treasury securities and mortgage-backed securities (BS), also known as "quantitative easing three," or QEIII. Unlike the previous rounds, QEII's duration and overall size have not been made public by the Fed. After announcing in January 2014 that it would buy \$30 billion in mortgage-backed securities and \$35 billion in Treasury securities per month, the Federal Reserve began "tapering off" its asset purchases in December 2013. The Federal Reserve (Fed) believes that the primary means by which quantitative easing (QE) boosts the economy are lower long-term interest rates, which in turn drive expenditure on consumer durables, residential and commercial assets. It is unclear how much QE has impacted interest-sensitive expenditure and private borrowing rates, even though mortgage rates and Treasury yields have dropped to their lowest points in decades since QE started. Opponents worry about QE's possible impact on inflation through monetary base expansion. It is debatable whether the Fed can effectively preserve price stability while discontinuing QE, even if inflation stays low for the time being. There may also be unforeseen effects. The Federal Reserve's suggested "exit strategy" for discontinuing QE is purely theoretical, and QE is unparalleled in American history.

Since rates hit the zero bound, the Fed has also modified its communication strategies. It set a deadline for when it expected the federal funds rate to remain at "exceptionally low levels" in 2011 and 2012, then gradually extended that period by two years over time. It substituted an unemployment threshold for the time horizon in December 2012. The Federal Reserve claims that because of its new communication tactics, its federal funds target is now more stimulative and that it will remain extremely low for a very long time—well past the point at which the unemployment rate falls below

6.5%. The Fed's ability to follow a predetermined policy course is hampered by uncertainty surrounding economic estimates, and it runs the risk of losing credibility if it keeps "moving the goal posts" regarding when to hike rates. Elevated interest rates, elevated inflation forecasts, or both would suggest that the Fed's nontraditional approaches were compromising its credibility; fortunately, neither has happened yet.

To sum up, the US monetary policy in the past five years has been mainly characterized by unprecedented quantitative easing measures aimed at stimulating the economy and unconventional communication strategies to manage interest rates amid uncertain economic conditions.

3.2. The trend of the US dollar exchange rate and the US economy

The Commonwealth of Independent States (CIS) is made up of developing countries that are desperately in need of foreign investment to boost their economies, seek out new ideas, acquire cutting-edge administrative skills, and create jobs for a steadily growing population. Allocating foreign capital in this way can undoubtedly play a significant role in managing difficult financial situations as well as advancing economic growth, productivity, and the quality of private enterprise. Our goal was to determine whether or not it affects FDI and offer substitute strategies for addressing exchange rate robustness or enhancing the other economic metrics (GDP, GDP per capita, CPI, and TO) that were previously discussed. Furthermore, our study provides compelling evidence that trade openness, GDP per capita, and GDP in the Commonwealth of Independent States are all determinants of FDI. Using the nine countries in our example, economic progress will largely depend on how well-positioned each country is to attract FDI [4].

First off, industries with a larger percentage of non-tradable expenses are more prone to have export surge events during the period of stable and competitive real exchange rates. More precisely, for every standard deviation increase in a higher labor intensity index throughout the six-year period from 2003 to 2008, the probability of an export boom episode increases by 2.5%. These effects are notable and economically significant, given that the unconditional chance of export surges was only 9.1% between 1980 and 2015. Second, export boom episodes are also more likely to happen in industries linked to other competitive industries that are already in existence throughout this time period (2003–2008). The probability of an export boom rises by 4% for every standard deviation increase in the sector's agnostic relatedness density index. According to this analysis, some industries—mainly those where the current productive structure guarantees a certain degree of historical capabilities—may benefit more from the exchange rate boost than others. The only sectors that can profit from the exchange rate impulse are those that are upstream of the competitive sectors, as we discover when we look at the precise connecting routes to those sectors. Businesses that use or sell technology that is identical to that of rival industries, as well as those with similar worker qualities, do not gain. Finally, we provide evidence for hysteresis effects in export-oriented industries. The exporting sectors with export surges hold their export level advantage over the other exporting sectors when the phase of real exchange rate competition ends [6].

4. The impact of the monetary policy on the U.S. economy

4.1. The impact of the Fed's policies on the US dollar

An external shock, defined as an unanticipated increase in the value of the US dollar, causes the currency to weaken in the months that follow and is linked to worse returns for investors who hold US dollar assets. We demonstrate that the convenience yield that investors are ready to pay for holding US dollar assets and global risk aversion are positively correlated with the detected external shock. Therefore, an increase in the demand for secure US dollar assets and a decrease in global risk appetite are linked to the US dollar's rise, which cannot be attributed to shocks to US monetary policy.

The way that US short-term interest rates and the US dollar exchange rate react to shocks to inflation expectations shows signs of temporal dependence, suggesting that monetary and fiscal supremacy have switched over time. When US short-term interest rates increase (down) in reaction to a positive shock to long-term inflation expectations brought on by fiscal policy, this is considered to be the sign of a monetary (fiscal) dominance regime. The US dollar exchange rate looks to be appreciating (depreciating) in this instance. It appeared that monetary domination was in place during the Volcker era. However, the US Federal Reserve changed its monetary policy to become more fiscally oriented between the late 1980s and the start of the Great Financial Crisis [7].

4.2. The impact of the Fed's policies on the U.S. economy

The endogenous currency premium somewhat offsets the customary influence of changes in the domestic policy rate on the exchange rate. The resulting "disconnect" between the exchange rate and the domestic policy rate implies that, in order to achieve a given reduction in exchange rate instability, a significantly higher level of domestic macroeconomic volatility is needed. In the future, it would be helpful to utilize a version of our model to think about the best course of action and how EM central banks can apply it in relation to interest rate policy and their creations of the foreign exchange market. In addition to traditional interest rate policy, foreign exchange interventions might have a role given the model's endogenous divergence from UIP. Future research is left to handle this extension [8].

A considerable share of the assets held by the Federal Reserve, including loans to financial institutions, allow for a swift and considerable shrinkage of the balance sheet. Purchases of commercial paper and temporary central bank liquidity swaps are short-term instruments that can be let to expire when the various facilities and programs are reduced or closed. Setting a target for the federal funds rate is the Federal Reserve's conventional method of monetary policy making, which it will be able to resume as the size of the balance sheet and the amount of excess reserves in the system drop.

5. Assessment and Examination of the Economic System and the Monetary Policy of the Federal Reserve

5.1. Evaluation of the Federal Reserve's current monetary policy

In order to explain away its massive and continuously rising operating losses, the Federal Reserve fabricates a tale that suggests they are unimportant and have no bearing on its ability to conduct monetary policy. Even without getting into the nuances of the law, it is clear how inaccurate this narrative is. The Fed has already publicly committed to keeping the securities in its SOMA portfolio until they mature, so removing the potential of regular open market securities transactions and preventing losses on its market value. Unrealized losses brought about by the Fed's lowering of interest rates and large-scale QE purchases have lost one crucial monetary policy tool from the past. Examining the legal requirements of the Federal Reserve Act in greater detail reveals that the Fed's significant and rapidly increasing operating losses may have additional implications for how it conducts its monetary policy activities. This is particularly true if increasing losses lead FRB depositors to doubt the conventional wisdom that maintains FRB deposits are infallibly safe and liquid due to the notion that the Fed has infinite capacity to produce fresh FRB deposits by printing money. The fact that FRB deposits are only guaranteed by a FRB's capital, unpledged tangible assets, and its ability to impose constrained contingent resource calls on its member institutions—rather than being guaranteed by the federal government as per current legislation—also seems to be lost on individuals [8-9].

5.2. Evaluation of the American Economic System

According to the estimations produced by the zero-truncated negative binomial regression technique, real currency undervaluation, as opposed to nominal exchange rate depreciation, may generally shorten and accelerate economic recovery. But the magnitude of this effect is not very great: The length of the economic recovery is linked to a mere 1.5% reduction with a 1 percentage point increase in the level of local currency undervaluation. This finding appears to highlight the fact that nominal depreciation, which policymakers may pursue in an effort to quicken the pace of economic recovery, may only be beneficial to the macroeconomy if it actually results in a real undervaluation of the home currency (and is not offset by higher inflation) [7].

Given the amount of uncertainty surrounding the economic prospects, one would reasonably question the applicability of using a risk management method when making decisions. While some analysts fear that these severe policies will eventually lead to inflation, our main concerns were related to the downside risk and the potential for deflation to occur. Deflation and existing debt interact horribly, which has historically been the main cause of depressions. Essentially, we were arguing that there were no pertinent trade-offs for monetary policy makers to take into account since the negative risks were so severe. Imagine that the epidemic leaves a massive deflationary crater in the middle of the economy, which must be filled by what appear to be inflationary policies [10].

Ceteris paribus, it seems to reason that a one percent gain in global central banks' gold holdings relative to the prior year would correspond to a decrease in the dynamics of the US dollar's share of global reserves relative to the prior year. This would lend credence to the idea that gold should be held by central banks as a substitute for foreign exchange reserves rather than in addition to them. Investors and central banks may see a rise in US public debt unfavorably. Due to the notable growth in value of this indicator in recent years, investors are diversifying their currency positions in case the United States becomes insolvent. The results for the American inflation rate likewise made sense. Its expansion has a detrimental effect on the US dollar's standing internationally.

6. Conclusion

To conclude, the US monetary policy in the past five years has been characterized by a series of unprecedented measures, including quantitative easing and unconventional communication strategies. The Federal Reserve's balance sheet has significantly expanded through asset purchases, and its ability to successfully manage the winding down of these purchases and maintain stable prices is uncertain. The impact of these policies on interest rates and the US economy remains unclear. Additionally, the evaluation of the Federal Reserve's monetary policy and the American economic system is subject to ongoing debates and considerations of various factors.

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