

The Spillover Effect of US Monetary Policy: A Literature Review

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Abstract: In an era of globalization, the interconnectedness of financial markets means that monetary policy decisions in one country, particularly the United States, can have significant global repercussions. This interconnectedness necessitates a deeper understanding of how US monetary policy influences economic conditions worldwide. This paper reviews the impact of US monetary policy through various channels on advanced and emerging countries differently. The research finds that US monetary policy involves an element of uncertainty. In advanced countries, this uncertainty primarily influences the term premium component of yields, whereas in emerging countries, it affects the expected component of yields. Furthermore, the impact of US monetary policy shocks varies with the business cycle, having a larger effect when growth is weak outside the US. Different channels of spillover include interest rate differentials, exchange rate movements, capital flows, financial market reactions, and changes in risk perception and sentiment. For advanced countries, significant impacts are seen in interest rate spillovers, exchange rate dynamics, financial market volatility, and global trade and economic growth. In emerging countries, the effects are pronounced in exchange rate channels, capital flows, financial stability, term premium, risk perception, and local monetary conditions. Solutions include strengthening financial regulation, diversifying economic structures, building foreign exchange reserves, managing capital flows, improving monetary policy frameworks, fostering regional cooperation, promoting long-term investment, and enhancing data transparency.

Keywords: Monetary Policy, Spillovers, Financial Market, Literature Review.

1. Introduction

The global financial landscape is heavily influenced by the monetary policy decisions of the United States, given its status as the world's largest economy and the US dollar's role as the dominant international reserve currency. The reach of US monetary policy extends beyond its borders, affecting economic conditions in both advanced economies and emerging markets, which is so-called spillover effect. Investigating the spillover effect is crucial for policymakers worldwide, for the increasing complexities of maintaining economic stability in an interconnected global economy.

US monetary policy spillover occurs through various channels, including interest rates, exchange rates, and capital flows, and it can amplify or mitigate economic fluctuations in counterpart countries, influencing their growth prospects, inflation rates, and financial stability. In advanced economies, US

monetary policy change often affects financial markets and long-term interest rates, while in emerging markets, the immediate impacts are more likely to be seen in exchange rates and capital flows.

This paper aims to summarize existing research on the spillover effect of US monetary policy, highlighting its different impacts on advanced and emerging economies. By examining the mechanisms through which spillovers occur and their consequences, the review provides a comprehensive understanding of how US monetary policy decisions reverberate globally.

This paper's research is significant for understanding the broader implications of US monetary policy on global economic stability and financial markets, providing valuable insights for policymakers and financial analysts. Additionally, it serves as a comprehensive reference for future researchers studying the international transmission of monetary policy effects.

2. Channels of Monetary Policy Spillovers

US monetary policy influences the global economy through several interconnected channels. Understanding these channels is essential for comprehending the full extent of the spillover effects. The primary channels include interest rate differentials, exchange rate movements, capital flows, financial market reactions, risk perception and investor sentiment.

2.1. Interest Rate Differentials

One of the most direct channels is the impact on global interest rates. When the Federal Reserve changes its policy rate, it alters the interest rate environment not only domestically but also internationally. Advanced economies with integrated financial markets often see immediate adjustments in their own interest rates in response to US policy changes. For example, a hike in US interest rates can lead to higher yields on government bonds in other developed countries as investors seek comparable returns [1]. This adjustment can affect borrowing costs, investment decisions, and overall economic activity in these countries.

2.2. Exchange Rate Movements

US monetary policy also significantly impacts exchange rates. An increase in US interest rates typically leads to an appreciation of the US dollar as it becomes more attractive to investors. This appreciation can have various effects on other economies. For advanced economies, a stronger dollar can make their exports cheaper and more competitive, potentially boosting their trade balances. Conversely, for emerging markets, a stronger dollar can lead to the depreciation of their currencies, increasing the cost of dollar-denominated debt and potentially leading to inflation pressures.

2.3. Capital Flows

Changes in US monetary policy can lead to substantial shifts in capital flows. Lower US interest rates often result in capital outflows from the US to higher-yielding investments in other countries, leading to asset price inflation and increased investment. Conversely, when the US raises interest rates, capital tends to flow back to the US, leading to capital outflows from other countries [2]. This can create liquidity shortages, increase borrowing costs, and result in financial instability, particularly in emerging markets that rely heavily on foreign capital.

2.4. Financial Market Reactions

Global financial markets are highly interconnected, and US monetary policy decisions can trigger widespread reactions. Stock markets, bond markets, and commodity prices worldwide respond to

changes in US interest rates and policy signals [3]. For instance, an unexpected rate hike by the Federal Reserve can lead to market volatility, with stock indices falling and bond yields rising globally. These market reactions can have real economic consequences, affecting wealth, consumer confidence, and corporate investment.

2.5. Risk Perception and Sentiment

Beyond these direct channels, US monetary policy also influences global risk perception and investor sentiment. Uncertainty about the direction of US monetary policy can lead to increased risk aversion among investors, resulting in capital flight from perceived riskier assets and markets, exacerbating financial instability in vulnerable economies. Conversely, clear and predictable US monetary policy can help stabilize global markets by reducing uncertainty and fostering a more favorable investment climate.

3. The Influence of the Spillover Effect of US Monetary Policy

3.1. For Advanced Countries

For advanced economies, the spillover effects of US monetary policy are multifaceted and significant, influencing financial markets, exchange rates, and macroeconomic stability. These countries, characterized by more developed financial systems and greater economic integration with the global economy, experience impacts through various channels.

3.1.1. Interest Rate Spillovers

In advanced economies, changes in US monetary policy are quickly transmitted to financial markets, particularly through the interest rate channel. When the Federal Reserve adjusts its policy rate, it influences global yield curves, leading to adjustments in long-term interest rates in other advanced economies. For example, a US rate hike typically results in higher bond yields in Europe, Japan, and other developed markets. This transmission occurs because investors seek comparable returns across markets, and changes in US rates alter the relative attractiveness of different investments [4].

Higher interest rates in advanced economies can have several effects, including increasing borrowing costs for households and businesses, potentially dampening consumption and investment. Additionally, higher yields can attract capital inflows, appreciating the local currency, which might affect export competitiveness. Central banks in these economies often have to adjust their own monetary policies in response to US policy changes to maintain economic stability.

3.1.2. Exchange Rate Dynamics

US monetary policy significantly impacts exchange rate dynamics in advanced economies. A tightening of US policy, characterized by higher interest rates, generally leads to an appreciation of the US dollar. This appreciation affects the exchange rates of advanced economies, with their currencies often depreciating relative to the dollar. While a weaker currency can boost export competitiveness by making goods and services cheaper for foreign buyers, it can also lead to import inflation by raising the cost of imported goods [5].

For instance, the European Central Bank (ECB) and the Bank of Japan (BoJ) closely monitor US monetary policy because of its implications for the euro and yen, respectively. These central banks may adjust their own policies to counteract undesirable currency movements and maintain price stability. The interplay between US policy and exchange rates highlights the interconnect of advanced economies and the need for coordinated policy responses.

3.1.3. Financial Market Volatility

Advanced economies are highly integrated into global financial markets, making them susceptible to volatility induced by US monetary policy changes. An unexpected shift in US policy can lead to sharp movements in stock prices, bond yields, and other financial assets. For example, a surprise rate hike by the Federal Reserve can trigger a sell-off in global equities, as higher interest rates increase the discount rate applied to future earnings, reducing stock valuations.

Bond markets in advanced economies also react to US monetary policy. Higher US rates can lead to higher yields on government and corporate bonds in other developed countries, as investors demand more risk premium. This can increase borrowing costs for governments and corporations, affecting fiscal policies and corporate investment decisions.

3.1.4. Global Trade and Economic Growth

US monetary policy spillovers can influence global trade patterns and economic growth in advanced economies. A stronger US dollar, resulting from tighter monetary policy, can make US exports more expensive and less competitive, potentially benefiting other advanced economies that export similar goods and services. However, weaker demand in the US, driven by higher interest rates, can reduce overall global demand, negatively impacting export-oriented economies [6].

Moreover, global business cycle plays a crucial role in determining the magnitude of spillover effects. During periods of weak global growth, the impacts of US monetary policy can be more pronounced, exacerbating economic downturns in other advanced economies. Conversely, during periods of robust global growth, these effects may be mitigated by stronger domestic demand and resilient economic activity.

3.2. For Emerging Economies

Emerging markets are particularly vulnerable to the spillover effects of US monetary policy due to their relatively smaller and less diversified economies, higher reliance on external financing, and often less developed financial systems. The transmission of US monetary policy to these markets operates through several key mechanisms.

3.2.1. Exchange Rate Channel

One of the most significant channels through which US monetary policy affects emerging markets is the exchange rate. When the US Federal Reserve adjusts interest rates, it influences the relative attractiveness of US assets. A hike in US interest rates typically leads to capital outflows from emerging markets as investors seek higher returns in US, causing a depreciation of local currencies. This depreciation can lead to higher import prices, inflationary pressures, and a potential tightening of domestic monetary conditions as central banks in emerging markets may raise their own interest rates to defend their currencies.

3.2.2. Capital Flows and Financial Stability

Changes in US monetary policy can lead to volatile capital flows, which pose substantial risks to financial stability in emerging markets. For instance, during periods of US monetary tightening, emerging markets often experience capital outflows, leading to a reduction in foreign exchange reserves and increased pressure on local banking systems. Conversely, during periods of US monetary easing, there can be an influx of capital, which might lead to overheating of asset markets, increased leverage, and potential bubbles [7].

3.2.3. Trade and Economic Growth

US monetary policy significantly influences trade and economic growth in emerging economies through various channels. Changes in US interest rates can lead to capital flow volatility, impacting exchange rates and trade competitiveness. When the US tightens its monetary policy, emerging economies often face capital outflows, currency depreciation, and higher borrowing costs, which can hinder investment and economic growth. Conversely, an expansionary US monetary policy can attract capital inflows, potentially causing currency appreciation and trade imbalances. These fluctuations can disrupt the economic stability of emerging markets, making it crucial for their policymakers to develop strategies to mitigate adverse effects and maintain sustainable growth.

3.2.4. Term Premium and Risk Perception

Emerging markets often face higher term premiums on their debt, reflecting the additional risk perceived by investors. US monetary policy uncertainty can exacerbate these premiums. When the Fed signals a potential change in policy, it can lead to increased risk aversion among investors, who may then demand higher yields on emerging market debt to compensate for perceived risks. This can increase borrowing costs for these countries, complicating fiscal management and potentially leading to higher debt burdens.

3.2.5. Policy Responses and Local Monetary Conditions

Central banks in emerging markets are often compelled to respond to US monetary policy changes to maintain macroeconomic stability. For instance, they may adjust their own interest rates, intervene in foreign exchange markets, or implement capital controls. These measures can have significant impacts on domestic economic conditions, often leading to a delicate balancing act between supporting growth and maintaining financial stability.

4. Relevant Solutions

4.1. Strengthening Financial Regulation and Supervision

Emerging markets need to enhance their financial regulatory frameworks to manage the risks associated with volatile capital flows. Strengthening banking supervision, improving risk management practices, and ensuring sufficient capital buffers can help mitigate the impact of sudden capital flow reversals. Developing robust macroprudential policies is also crucial in addressing systemic risks and ensuring financial stability.

4.2. Diversifying Economic Structure

Reducing dependence on external financing and diversifying economic structures can make emerging markets more resilient to external shocks. By promoting domestic financial market development, enhancing industrial diversity, and investing in human capital, these countries can reduce their vulnerability to the vagaries of international capital flows and global economic cycles.

4.3. Building Adequate Foreign Exchange Reserves

Accumulating adequate foreign exchange reserves provides a buffer against capital flow volatility. These reserves can be used to stabilize the local currency, manage liquidity, and reassure investors during periods of financial turbulence. However, maintaining high reserves should be balanced against the opportunity cost of holding large amounts of low-yielding assets.

4.4. Implementing Capital Flow Management Measures

Capital flow management (CFM) measures, such as capital controls and transaction taxes, can be effective tools for stabilizing financial conditions. These measures should be designed to be flexible, transparent, and temporary, aimed at mitigating excessive capital flow volatility without discouraging long-term investment. Coordination with international organizations and adherence to global standards can enhance the effectiveness and credibility of CFM measures.

4.5. Enhancing Monetary Policy Frameworks

Emerging market central banks should aim to enhance their monetary policy frameworks to better respond to external shocks. This includes improving the transparency and communication of monetary policy decisions, adopting more flexible exchange rate regimes, and developing tools to manage liquidity effectively. Strengthening the credibility and independence of central banks is also vital in maintaining investor confidence and ensuring effective policy implementation.

4.6. Regional Cooperation and Integration

Regional cooperation and economic integration can provide additional support to emerging markets facing external shocks. By fostering regional trade agreements, financial cooperation mechanisms, and policy coordination, emerging markets can create a more stable and supportive environment for economic growth. Initiatives such as regional development banks and swap lines can provide additional financial resources and stability during periods of stress.

4.7. Promoting Long-Term Investment

Encouraging long-term investment, both domestic and foreign, can help stabilize capital flows and reduce volatility. Policies that promote infrastructure development, improve the business climate, and ensure legal and regulatory stability can attract sustained investment [8]. Additionally, developing local capital markets can provide alternative financing sources and reduce reliance on external financing.

4.8. Improving Data Transparency and Market Information

Access to reliable and timely data is crucial for managing economic and financial stability. Enhancing data transparency and improving market information can help policymakers, investors, and market participants make informed decisions. Initiatives to improve statistical capacity, adopt international reporting standards, and enhance communication can build trust and reduce uncertainty.

5. Conclusion

This paper primarily explored the various channels through which US monetary policy spills over into other economies, with a particular focus on its influence on both advanced and emerging markets. The spillover effects of US monetary policy on emerging markets are multifaceted and significant, influencing exchange rates, capital flows, trade balances, and economic growth. Emerging markets, due to their structural characteristics and economic dependencies, are particularly sensitive to changes in US monetary policy. As such, they must adopt a comprehensive and proactive approach to mitigate these effects. Strengthening financial regulation, diversifying economic structures, building adequate foreign exchange reserves, and implementing effective capital flow management measures are critical steps. Additionally, enhancing monetary policy frameworks, promoting regional cooperation, encouraging long-term investment, and improving data transparency are essential for increasing

resilience against external shocks. Ultimately, the effectiveness of these measures depends on their timely implementation and the ability of emerging markets to adapt to the evolving global economic landscape. By adopting a multifaceted strategy, emerging markets can better navigate the challenges posed by US monetary policy spillovers and achieve sustainable economic growth and financial stability. However, this paper has not deeply explored the role of political factors in moderating these spillover effects or utilized advanced econometric methods to analyze nonlinear impacts. Future research could focus on the interplay between US monetary policy and geopolitical developments, as well as employ machine learning techniques to predict and analyze complex spillover patterns.

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