

# An analysis of the relationship between Fed interest rate hikes and financial crises in emerging market economies

**Abstract:** This paper takes the five Fed interest rate hikes and the emerging market financial crisis as the research object, tries to **analyse** the economic consequences of the Fed interest rate hikes and **discusses** whether it will lead to the outbreak of financial crisis in the emerging market economies, and **analyses** the impact of the new round of Fed interest rate hikes on the emerging market economies.

**Keywords:** international finance; Federal Reserve interest rate hike; market economy countries

## 0 Introduction

On 16 March 2022, the Federal Reserve decided at its policy meeting to raise its benchmark interest rate by 25 basis points to a range of 0.25-0.5 per cent. This decision has attracted widespread attention in the economics community, as the Fed's rate hike has traditionally been seen as an important weathervane for the global economy. Historical experience has shown that Fed interest rate hikes are often accompanied by sharp fluctuations in the global economy, such as sharp stock market adjustments, significant movements in currency values, debt risk highlights, waves of corporate bankruptcies and fiscal crises in some countries. The interest rate hike marks the beginning of a tighter cycle for the global economy, posing new challenges for economic stability and growth in all countries.

Emerging market economies have all been hit by financial crises in the past years. Although the specific background and manifestation of each crisis is different, but in-depth analysis is not difficult to find that these crises in the monetary level have shown similar vulnerability. The purpose of this paper is to systematically sort out the history of the five interest rate hikes of the Federal Reserve and deeply analyse the root causes of the financial crises in emerging market economies in recent years, with a view to revealing the intrinsic links between the two. Through this study, we expect to be able to provide valuable reference for governments and enterprises, so as to better cope with the financial risks that may be brought about by the new round of interest rate hikes and to ensure the smooth operation of the economy.

## 1 Fed rate hikes and the causes of financial crises in emerging countries

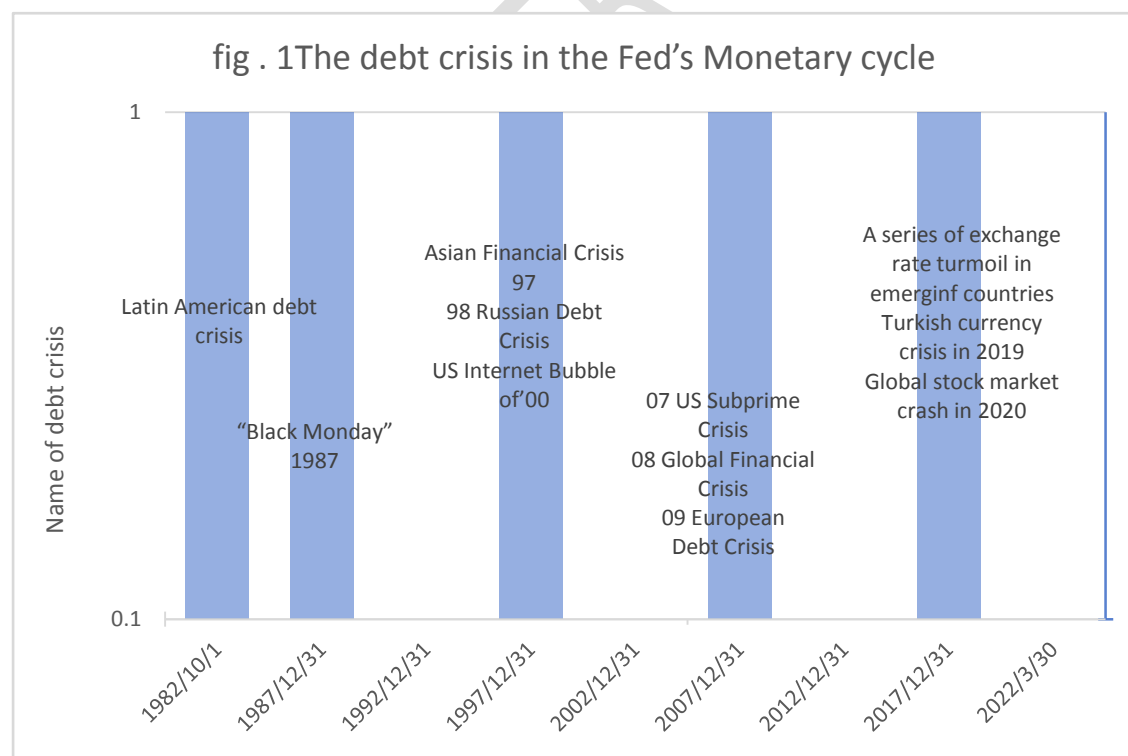
Historically, the Fed's tightening cycles have often been accompanied by severe turbulence in international financial markets, especially for those emerging economies located in Asia, Africa and Latin America, where the impact has been particularly far-reaching and heavy. Since 1982 to 2021, the Federal Reserve has implemented five rounds of monetary tightening policy, this period of the global scope of the five successive financial crises or financial turmoil, fully demonstrated the international transmission effect of monetary policy.

The Latin American debt crisis of 1982 was a notable case of international financial market volatility under the Fed's austerity policies, with emerging countries

falling into difficulties as a result of capital outflows and steeply rising debt-servicing pressures. Subsequently, the "Black Monday" stock market crash in 1987 once again highlighted the fragility of global financial markets. In the 1990s, the Asian economic crisis of 1997 and the Russian debt crisis of 1998 dealt a severe blow to emerging markets in the Fed's tightening cycle, while the bursting of the US Internet bubble in 2000, although it started in developed countries, had a global impact, and emerging countries were not spared.

After entering the 21st century, the US sub-prime mortgage crisis in 2007 rapidly evolved into the global economic crisis of 2008, in which emerging countries suffered tremendous pressure on exchange rates and capital flows. The subsequent European debt crisis, although mainly in Europe, but its negative impact on the global financial markets can not be ignored, emerging countries are also facing capital outflows and financial market turbulence. In the near future, the Turkish currency crisis in 2019 and the global stock market crash in 2020 have once again reminded us that the impact of the Fed's monetary policy adjustments on emerging countries' financial markets remains significant.

This paper will focus on the first, third and fifth rounds of financial crises closely related to the financial crises in emerging countries, and analyse in depth the background of their occurrence, the transmission mechanism, and the impact on the economic and financial stability of emerging countries, with a view to providing useful references for future policy formulation and risk prevention.



### 1.1 The first round of interest rate hikes and the Latin American crisis

Under the shadow of the stagflation crisis of the 1970s, the United States population suffered from economic hardship. At the same time, the three Latin American countries, with their rich natural resources, especially oil and commodities, were able

to develop their economies rapidly, fuelled by soaring export prices. However, the good times did not last long. 1979, Paul Volcker became chairman of the Federal Reserve, adopted an aggressive monetary policy, the Federal Funds Rate pushed up to more than 11 per cent, and then even more in 1981 to a staggering 16 per cent. This move put heavy pressure on the markets and the US economy plunged into its darkest period since the Great Depression in 1929. During this period, in addition to soaring interest rates, investment, consumption, the stock market, real estate, employment and wage levels all showed a downward trend. To add insult to injury, the rapid fall in energy prices in 1982 dealt a heavy blow to the three Latin American countries that depended on resource exports. As these countries adopted a fixed exchange rate system, the appreciation of the US dollar was accompanied by a passive appreciation of their own currencies, leading to a massive sell-off of their currencies. The government had to use its foreign exchange reserves to stabilise its currency. However, when Mexico's foreign exchange reserves were approaching the danger line, the government was unable to repay its due US dollar foreign debt, and was eventually forced to close down the foreign exchange market and declare a default on its sovereign debt. This event triggered a chain reaction, Brazil, Argentina, Chile, Peru, Venezuela and other Latin American countries have been plunged into bankruptcy, Latin American sovereign debt crisis in full swing. This financial crisis not only put an end to the rising momentum of emerging countries, but also pushed Argentina, Brazil, Mexico and other countries into the middle-income trap, causing them to repeatedly fall into crisis in the following years. At the same time, it also became a historical precedent for emerging countries to be prone to thunder when the Fed raises interest rates.

### **1.2 The third round of interest rate hikes and the Southeast Asian and Russian financial crises**

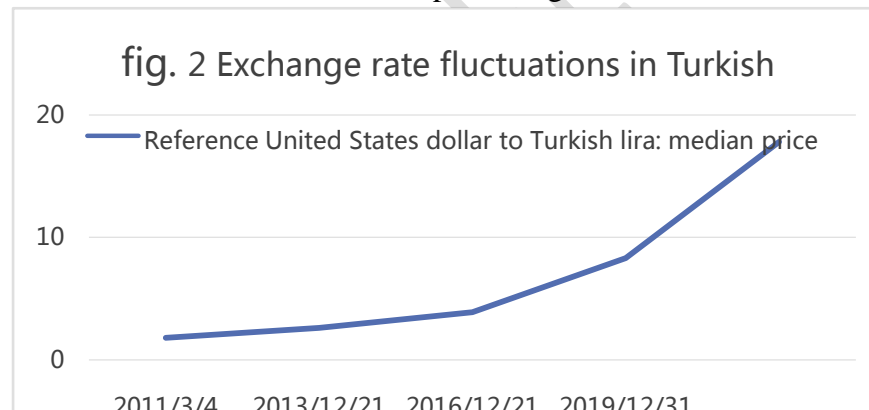
In 1994, the Federal Reserve initiated a new cycle of interest rate increases and the federal funds rate climbed rapidly, rising sharply from 0.5 per cent to a level of about 6 per cent. This interest rate level then remained stable for several years, reflecting the strong growth momentum of the United States economy. During this period, the U.S. economy was booming and market confidence was high, fuelling the continued appreciation of the U.S. dollar.

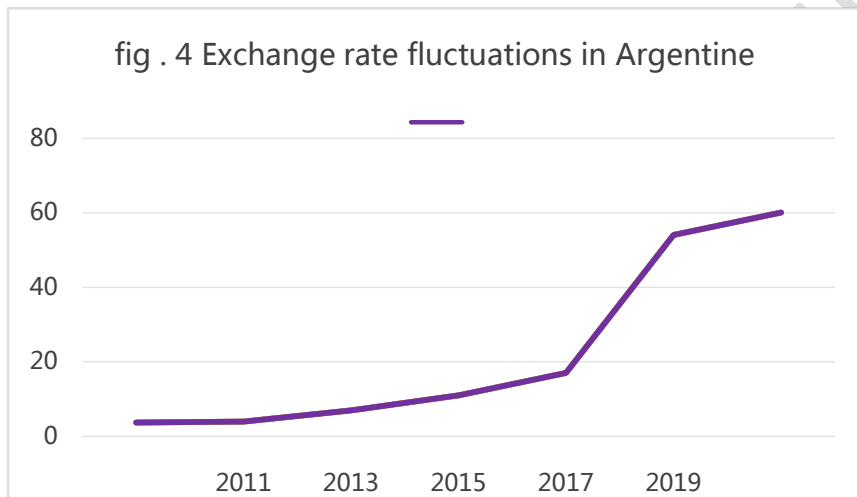
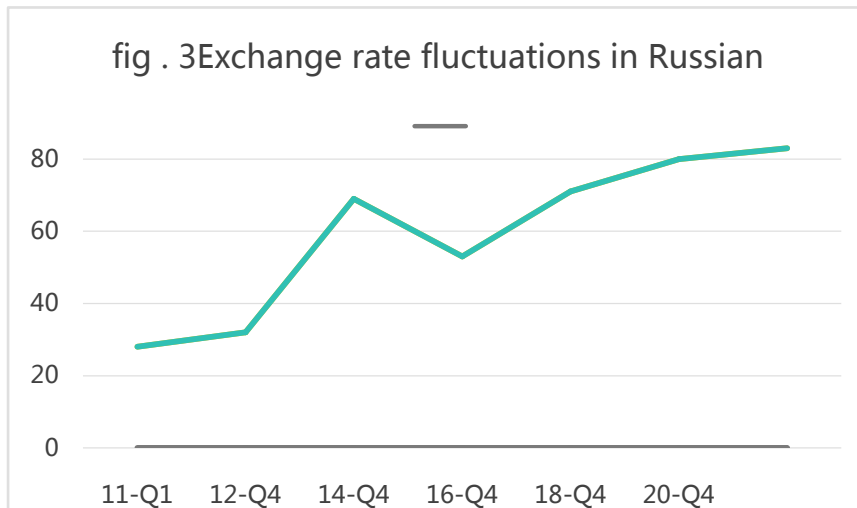
At the same time, President Clinton actively promoted the introduction of the Financial Hybridisation Act, a move that provided investment banks with broader business space and further contributed to the prosperity of the financial market. In addition, the Clinton administration also announced the opening of the Internet to civilian use, an innovative initiative that opened new doors for technological innovation and capital flows on a global scale. The implementation of these two policies attracted a large amount of international capital from emerging markets back to the United States, investing in financial securities and Silicon Valley innovation enterprises, further promoting the prosperity of the U.S. economy. However, this prosperity did not last long. 2 July 1997, the Thai government announced the abandonment of the fixed exchange rate system, resulting in a sharp depreciation of 17% of the Thai baht against the U.S. dollar, which triggered a panic in the financial

markets. Subsequently, international capital began to frantically short the currencies of Asian countries such as the Philippine peso and the Indonesian rupiah, resulting in the almost total loss of these countries' currencies. The Asian financial crisis broke out in full force, with far-reaching effects on the global economy. During this crisis, although the Chinese market retained the stability of the Hong Kong dollar, the stock market and property market suffered a heavy blow, with their market values shrinking drastically. In 1998, the risk of the financial crisis in Southeast Asia spread further to Russia, leading to the country's announcement of a sovereign debt default, and the rouble plummeted by 70% in a single day in September of that year. The crisis not only put an end to the Asian economic miracle, but also had a far-reaching impact on the global economic landscape, triggering a profound rethinking of the stability of the global economic and financial system.

### 1.3 The fifth round of interest rate hikes and a series of exchange rate turmoil in emerging countries

The 2008's year global economic crisis led to a major global central bank bailout, with the Federal Reserve continuing its seven-year-long easing policy, with the federal funds rate even dropping to near zero. It was not until 2016 that the Fed began to raise interest rates, although this time the rate hike was very slow, but the same situation happened again, in this rate hike, a series of new market economies began to have exchange rate turbulence, Argentina, Russia, Turkey's currency depreciated sharply. In the second half of 2018, the Fed raised interest rates at a faster pace, and the U.S. stock market almost collapsed, and since then, Turkey erupted into a financial crisis, and suffered a triple killing of stocks, bonds and exchange rates.



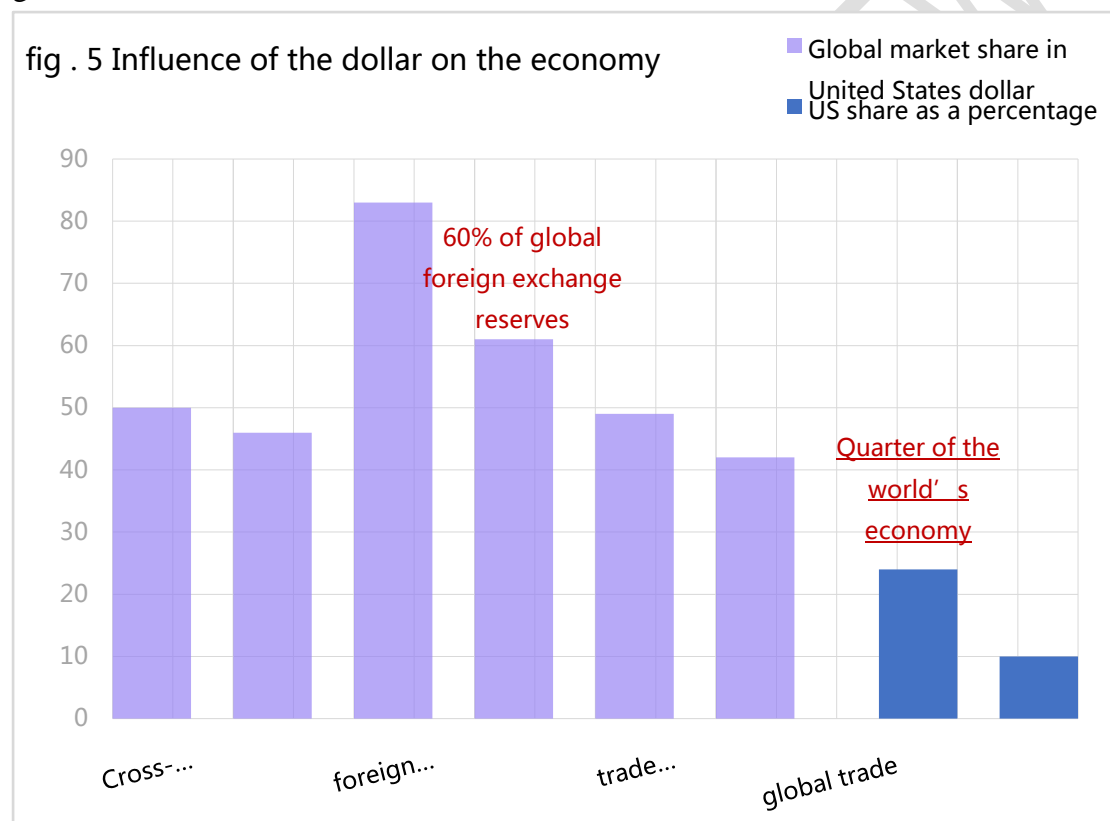


## 2 Analysis of the relationship

### 2.1 Influence of the dollar on the economy

With five interest rate hikes by the Federal Reserve, five financial crises have erupted globally, and the Fed is able to make waves in the global market because the US dollar is the world's currency. In the past four decades, the international status of the US House of Representatives has been very solid. Today, the U.S. economy accounts for 1/4 of the world's total economic volume, the dollar in the global foreign exchange reserves accounted for 60 per cent, in international settlements accounted for 80 per cent, that is to say, in today's international currency market, the U.S. dollar is almost the only currency supplier, the Federal Reserve firmly in control of the pricing power of global currencies. Every time the dollar easing period, the dollar index will fall some, but in the tightening cycle and rebound back, the dollar excessive easing, the global diffusion; the dollar excessive tightening, the global shortage of water, can be seen in the dominance of the dollar. The belief by some that the Fed is reaping the rewards by operating in an easing-tightening cycle has not yet been confirmed. While the Fed assesses global financial stability, the Fed's monetary policy serves itself to the national market rather than the international market, with the goal of achieving full employment and controlling inflation in the country. Secondly,

the dominance of the US dollar in the international currency market is actually the result of rational choices made by governments, investors, businesses, and individuals, such as the Turks who prefer to give up their local currency to hold US dollars, and the central banks of Japan, China, and Saudi Arabia who stockpile large amounts of US dollars to issue their own currencies. And we can also see that four of the five financial crises that erupted after the Fed raised interest rates occurred in the United States. Two stock market crashes, a bubble crisis, a debt crisis, does this mean that the Fed rate hikes to the global punishment or reward is indiscriminate? But excluding the United States, the financial crises during the Fed's tightening period hit emerging countries much harder than developed countries; for example, the Latin American sovereign debt crisis of 1982 pushed Latin American countries into the middle-income trap; and the Asian financial crisis of 1997 put an end to the Asian growth miracle.



## 2.2 The path of the dollar's impact on the economy of emerging countries

First, interest rate hikes by the Federal Reserve tend to lead to changes in global capital flows. As United States Treasury yields rise, capital may be more inclined to flow to the United States, leading to capital outflows from emerging markets. This is a huge challenge for countries that have gaps in their fiscal and monetary policies. It reveals that emerging countries need to strengthen their own macroeconomic management and the maturity of their financial markets to cope with the uncertainty caused by external capital flows.

Second, capital outflows may lead to currency depreciation in emerging countries, which in turn puts pressure on economic growth. In order to stabilise their exchange rates, these countries may need to adopt tighter monetary policies or capital

control measures, but this often comes at the expense of economic growth. This reveals that emerging countries need to find a balance between maintaining exchange rate stability and promoting economic growth, which may need to be achieved by deepening structural reforms and enhancing industrial competitiveness.

In addition, the Fed's interest rate hike may also increase the debt burden of emerging countries. Debt-servicing pressure on these countries may further increase due to rising borrowing costs. This reveals that emerging countries need to prudently manage their external debt, and reduce debt-servicing pressure by optimising debt structure and reducing debt costs.

At the same time, the Fed's interest rate hike may also trigger volatility in global financial markets, especially for those emerging market countries with close ties to the U.S. stock market and economy. This requires emerging countries to strengthen financial regulation and improve the robustness of their financial systems to cope with external shocks.

Dollar interest rate hikes affect the economy of emerging countries generally have four paths: 1. external debt path: when the dollar interest rate hikes, hold a large number of U.S. dollar debt of the government, corporate debt servicing costs directly increased resulting in external debt mine, Mexico in 1982, Argentina belongs to this situation, and now China Evergrande and other large-scale real estate is also faced with U.S. dollar debt defaults; 2. exchange rate path: the U.S. dollar interest rate hikes, the depreciation of the national currency, resulting in a large amount of capital outflow domestic real estate bubble collapse, the risk passed to commercial banks triggering systemic financial risks. A large amount of capital outflow domestic real estate bubble collapse, the cost of foreign debt service to further increase and mine, the risk of transmission to commercial banks triggered systemic financial risk, emerging countries are very dependent on foreign capital, capital flight is disastrous, the 1997 Asian financial crisis belongs to this situation; 3. Inflation path: the dollar hikes in interest rates, the local currency depreciated sharply, suffered a credit crisis, the people sell their currency to avoid risk, triggering Inflation, although the depreciation of the local currency will be conducive to exports, but like today's emerging countries in Turkey, Russia, a large number of commodities, technology dependent on imports, the depreciation of the local currency led to a large increase in the cost of imports, which further pushed up the price of commodities. 4. Path of interest rate hikes: the dollar hiked interest rates, followed by the hike in interest rates of the emerging countries does not necessarily defuse the risk, depending on the specific country's economic strength, if the country's economic strength is strong, Government and corporate liabilities are low, cash flow is sufficient, financial assets and real estate bubble is small, that follow the dollar together with the interest rate hike is effective, for example, robust Germany's ability to resist risk is very strong, the financial crisis in 2008, cash flow is sufficient for the German Volkswagen reverse takeover is collecting their own Porsche company; but if the country's economic strength is weak, the government, business, household liabilities are high, asset bubbles, follow the The consequence of the US dollar interest rate hike is that the debt burden of the country also increases, enterprise and household consumption shrinks,

and a debt crisis and asset bubble crisis may break out, and the financial system and the real economy suffer a full impact. Usually, Japan, the United Kingdom, Canada, Australia and the euro area have strong economic strength, it is easier to keep up with the Fed's pace, in contrast, emerging countries such as Brazil, Mexico, Argentina, Thailand, Turkey and other emerging countries are not strong enough, it will be difficult to withstand the financial risks caused by the Fed's interest rate hikes, for example, the economic growth of Latin American countries in the 1970s, the Russian economy in the first decade of the 21st century have benefited from the rise in energy prices and energy exports. Rising energy prices and energy exports of foreign exchange dividends, rather than technological progress, when energy prices fall back, economic growth came to an abrupt end, coupled with the Federal Reserve interest rate hikes, the immediate outbreak of the debt crisis, the same situation there are relying on the accumulation of foreign capital rather than the accumulation of technology in the 90's Asian economic growth, when the Federal Reserve interest rate hikes, the withdrawal of foreign capital from Asia, Asia on the outbreak of the financial crisis. To sum up, the Fed raised interest rates, the global tightening cycle, whether the outbreak of financial crises, depending on the Fed's tightening efforts and their own economic strength.

### **2.3 The strength of the impact of the Federal Reserve's interest rate hike**

Although analysing the real economic strength of a country is a complex project, it is relatively easy to judge the level of a country's economic bubble, which can be observed from the country's currency issuance. From current experience, we can tell: the more water is released, the weaker the economy is and the more likely it is to explode. As the U.S. interest rate market is a free market, the free price will have been commercial banks excessive risk-taking, then the U.S. dollar interest rate hike, the U.S. commercial banks will not be a large-scale expansion of credit, the Federal Reserve will be purchasing treasury bonds to inject water into the financial market, to inhibit the over-inflation of the U.S. monetary aggregates. But for emerging countries, many emerging countries, the exchange rate market and commercial banks are not fully liberalised, credit can easily get out of control, the 1997 Southeast Asian financial crisis, Thailand's commercial banks are the royal family's ATM, South Korea's commercial banks serve the plutocrats, the Asian financial crisis directly penetrated the fragile risk control system of such commercial banks, South Korea's foreign exchange reserves are in an emergency, the country's credit is at stake! The South Korean government urgently asked the IMF for help, but one of the conditions of the IMF's rescue was to cut the chain of interests between commercial banks and plutocrats, which directly harmed the interests of South Korean plutocrats, and South Korea's request for help failed. Currency out of control countries are the most dangerous countries, like Turkey's central bank to take a suicidal operation, in the Fed tightened the purchase of debt, Turkey successive crazy interest rate cuts, 2021 Turkish economy has been this reverse operation crushed, suffered two consecutive stock bond exchange three kill, now Turkey replaced the year Argentina became the emergency vanguard of the economic collapse of emerging countries.

### **3 Analysis of the impact of a new round of interest rate hikes on emerging**

## **countries**

A new round of Fed rate hikes in 2022 seems inevitable for the collapse of emerging countries, but in reality, every round of Fed monetary policy since 1982 has operated asymmetrically: each round of rate hikes has been smaller than rate cuts. This also shows that in the past forty, the world has actually been in a big dollar easing cycle, and historically the Fed has been very cautious in raising interest rates, and although the Fed is not necessarily concerned about the collapse of the bubble in emerging countries, it must highly value the collapse of the bubble in U.S. stocks, and in the last round of the interest rate hiking cycle, the Fed only raised to 2.5%, and the Nasdaq retreated by 8% in May 2019, and the Fed started in August to cutting rates, so it is not yet known how much it will be able to raise rates this time. In fact, the Fed is also caught in a dilemma: on the one hand, inflation is high, on the other hand, the asset bubble is very serious, the U.S. stock market is faltering, the U.S. bond short-term and long-term spreads are narrowing, and there is limited room for interest rate hikes and drawdowns. At the same time, emerging countries are also betting on the U.S. stock market first crash, thus forcing the Fed to surrender to lower interest rates.

## **4 Implications for China**

From the outside: actively promoting reform of the international monetary system is crucial to maintaining the health and stability of the global economy. Currently, the international monetary system is overly dependent on the US dollar, and this imbalance makes US economic fluctuations have significant spillover effects on the global economy. Therefore, promoting the formation of a diversified and stable international monetary system has become a common choice for many countries, including some Western countries. By supporting the inclusion of more types of currencies in the international trade and investment settlement system, risks can be effectively dispersed and the resilience of the global economic system can be strengthened. For China, accelerating the internationalisation of the RMB is not only in line with the objective law of the country's economic development, but also in line with the international community's expectation for a diversified currency system. The internationalisation of the RMB will enhance China's influence in the global economy, and at the same time help reduce the sensitivity to external currency fluctuations and enhance the autonomy of the national economy.

At the domestic level, continued optimisation of the economic structure and strengthening of risk-resistant capabilities are key to ensuring sound economic development. In addition, building a national monitoring system for economic and financial operations is equally important for identifying and preventing potential risks. Through long-term observation and tracking of economic and financial operations, risk points can be identified in a timely manner, and relevant information can be released on a regular basis to strengthen comprehensive risk management and control and ensure national economic and financial security.

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