How Does the Federal Reserve's Interest Rate Increase Affect the Local Economy?

Zixuan Zhou*

Stamford America International School, Hangzhou, China

*Corresponding author: 24zixuanz@sais.edu.sg

Abstract. The interest rate hike has had many implications for the US and other countries such as China and Singapore. The original intent of the interest rate hike was to be able to provide some disincentive to inflation. Many studies have shown that interest rate hikes can dampen inflation to some extent, but this inevitably has a negative impact on employment and investment. Many of these effects also occur in different parts of our daily lives. Against this backdrop, this study examines the effects of interest rate increase on the U.S. domestic economy, including on inflation, finance, employment, and other transactions. Given that the relevant studies still need to be fully developed, this study can complement the relevant academic studies. More importantly, this study can help businesses and public practice by systematically presenting the impact of putting a dollar interest rate hike into practice.

Keywords: increase interest; Federal Reserve; Economy.

1. Introduction

An interest rate hike is a purposeful increase in the prevailing interest rate or rates, usually a move to achieve a specific goal. It is argued that a hike in interest rate is, at best, a stop-gap measure to curb inflation to an extent but inevitably brings adverse impacts on employment and investment. China and Singapore have had many implications from the interest rate increase. For example, in Singapore's supermarkets, the price of fruits and vegetables increase by more than 20%. And also, many impacts happen in different parts of our daily life. So this study started to research "How the Federal Reserve's Interest Rate Increase Affects the Local Economy?" This paper examines the impact of the Federal Reserve's interest rate hike and explores ways of dealing with the financial issue and decreasing loss.

2. Literature review

Numerous studies have been conducted on the Federal Reserve's interest rate. According to Quan, the Fed's interest rate policy investigates how the four interest rate transmission mechanisms that are gradually reduced may impact the stock market, hence fostering the ongoing growth of stock prices [1]. Muzhi Ji and his colleagues, on the other hand, believe that the Fed's rate hike and growing inflation would have far-reaching consequences for global stock, bond, currency, commodity, and other markets. This may be deduced from the likely gap in the performance of the US stock market, which demonstrates how the growth sector is suffering to some extent [2]. Yeva and Wray point out that the conversation over how the issues of rising inflation dominated economic policy has been at the forefront over two years ever since the Covid-19 crisis. They were particularly critical of the way in which the fiscal policy was used to stimulate demands and income. Nevertheless, the urgent call for the Federal Reserve to alleviate inflationary pressures is equally prevalent [3]. The Alexander Kurov team's result shows a significant increase in fiscal policy assumptions in reaction to stock returns during downturns and bear markets This finding supports the so-called "Fed put". [4]. According to Sri Artini and Gede Luh, other adjustments to the Fed's fundamentals os that it may explore include modifying the way it performs reverse repurchase agreements, utilizing temporary open-market operations to add or remove assets as needed to offset fluctuations in the Treasury balance, or switching to a genuine corridor way of managing interest rates. Because of the slow rate of balance-sheet shrinkage, the Fed had several years to find out how to accomplish it. The Free

Exchange column in The Economist opposes the Fed's balance-sheet decrease. QE A procedure that modifies the maturity profile of government debt. The Fed's balance sheet size relies on how long government debt will be outstanding once the obligations of the Fed and Treasury are combined. By exchanging Treasury notes for money, the Fed provides a valuable service if money is more helpful [5]. As a result of large bank reserves, the private sector is able to meet rising money demand through relatively short-term loans, such as asset-backed commercial paper. According to Mentari and L.G.S. Artini, the average abnormal return did not differ before and after the Fed raised interest rates. As a result of this scenario, Asian and European markets do not respond considerably since they are in an efficient state of half strength, where information is swiftly absorbed and reflected in stock prices, resulting in little difference in average abnormal returns between the two areas. Because of the global economy's insecurity, investors are more cautious while making investment decisions, resulting in no difference in the average abnormal return [6]. Interest rate rises of 1.75 percentage points by the Fed in 1999 and 2000 appeared to have harmed the economy and may have driven it into recession. Rising oil prices, volatile financial markets, and other factors have raised the possibility of a US recession. is no indication that inflation is causing a big increase throughout the economy, a drop in interest rates is unlikely to generate a spike in inflation. Even if the US economy avoids a recession, relaxing Fed policies now will not hurt it [7].

3. Effect analysis

3.1 Effects on Inflation

It is crucial to understand inflation since it indicates how well a nation's economy is doing. The central bank, economists, and government officials of a nation use the inflation rate as a yardstick to decide whether or not action is necessary to keep the economy healthy. When businesses create, consumers spend, and supply and demand are as close to being balanced as is practical. Each stage of the business cycle affects the inflation rate. That is the regular rise and fall of economic growth over time. The process correlates to the highs and lows of a country's GDP.

The goal of interest rate rises in the United States is to counteract the all-time high inflation rate not seen in the previous 40 years. According to the article, "Fed policymakers had now imposed six rate hikes in a row, the largest increases in interest rates since the 1980s, when inflation reached 14% and rates soared to over 20%". Inflation, on the other hand, appears to be here to stay. According to reports, the cost of goods and services in September was 8.2% more than the Fed's 2% target rate of inflation [8]. We all know that raising interest rates will cause inflation and cause house prices to rise, just as it causes the expense of other things to grow. But at the same time, the demand for the products will decrease, which means that the market forces the cost of the product to go down. And that's how the US is against inflation.

The Fed has hiked interest rates six times in a row because the cost of living problem is hurting consumer confidence and Joe Biden's political chances. This was the biggest rise in interest rates since the 1980s, when rates reached over 20% and inflation peaked at 14%. This will influence not only the US but also the whole world. As the US dollar is the transaction currency for the entire world, if we add interest to it, it will significantly impact the planet. For instance, rising food prices in the UK have caused inflation to exceed 10%, and on Thursday, the Bank of England is expected to raise its base rate by up to one percentage point to 3.25%. In order to fight inflation, the European Central Bank raised borrowing charges to 10.7%. These two huge impacts are brought by the imposition of the sharpest interest rate increase since the 1980s.

Interest rate increases will not stop at inflation. It will bring a significant impact on employment in the USA. As we have seen, large supply chain disruptions and shortages have had a negative impact on the world economy. These issues have also increased the price of production in other parts of the world. If rising manufacturing prices and low inventories are the key contributors to the US economy's high inflation, the Fed may need to boost interest rates significantly to control inflation.

Furthermore, the faster and higher the Fed raises rates, the more the economy will suffer. For example, if the price of a car rises because of covid-19 in Asia, car makers will be forced to pass these higher prices on to customers in the form of increased automobile pricing regardless of interest rates. Thus, the Fed may be forced to hike interest rates considerably.

3.2 Effects on Employment

It is noteworthy how the Federal Reserve's decision to raise interest rates has adverse effects on employment. As interest rates rise, more companies may see a drop in demand or have no way to balance their rising valuations, forcing them to limit recruitment. Thus recruitment advertisements will, in turn, decline. Technology companies such as Google, Intel, and Microsoft have set temporary recruitment bans for specific jobs because of interest rate hikes. According to the Associated Press, Google's revenue rate dropped to its weakest pace in two years in the third quarter as advertisers cut back on spending amidst mounting fears of an economic downturn. The revenue of Alphabet, Google's corporate parent, amounted to $69.7 billion in the April-June quarter, a 13 percent increase over the corresponding period of the previous year. It was Alphabet's worst growth rate since the April-June quarter of 2020 when the firm had its sole year-over-year revenue decrease. Consequently, Google's stock price plummeted from US$152 to US$86.7. What happened to Google may epitomize how many internet companies are similarly struggling to cope with the significant impact on the market value, which becomes one of the main reasons why these companies are starting to lay off their staff [9].

Intel has the same situation as Google. According to Bloomberg News, Intel is contemplating significant job layoffs that will likely number in the thousands. The releases result from decreased demand for the company's consumer chips, which is part of a more significant decline in the PC industry. The layoffs would disproportionately affect Intel's sales and marketing departments, affecting around 20% of the workers. The layoffs are expected to be disclosed "as early as this month" when Intel releases its third-quarter results report on October 27th. This slump comes when Intel is due to receive billions of dollars in investment from the CHIPS Act, which is a package of US government expenditures aimed at boosting local chip manufacturing.

According to Business Insider, Microsoft made layoffs across the company on 18 October. Nearly 1,000 jobs were affected, as claimed. The scope covers sectors such as Xbox, strategic missions, and technical organizations. Earlier in July, Microsoft had informed that it planned to cut less than 1% of its 180,000 employees and slow hiring sharply, given the risk of a looming recession. In addition, Axios confirmed that Microsoft announced layoffs in several departments of different levels, teams, and regions of the world. This move is another example of big tech companies laying off workers after early signs of slowing down and freezing hiring as the broader economy cooled.

It can be deduced that slimmer profit margins-or no profits at all-may force a corporation to rethink its budget, perhaps by reducing workers, reducing inventory, or closing entire divisions. It may be forced to raise prices, eliminate incentives, or make compensation increases to compensate for reduced profits. The Fed has issued warnings that the fight against inflation will result in economic hardship. That cost might start to affect the labor market. The unemployment rate could rise from its current level of 3.5 percent to 4.4 percent in the upcoming year, according to the Fed's September predictions. A spike in the unemployment rate of at least 0.5 percentage points is frequently a sign of a recession [10].

3.3 Effects on Stocks, Crypto, and other investments

"Early 2022, markets had pulled back," said Greg McBride, chief financial analyst at Bankrate. Interest rates have risen in expectation of the Fed Reserve's frequent rate rises to keep inflation under control. This can be seen in the S& P 500's 20% decrease since the beginning of the year, the tech-heavy Nasdaq Composite's roughly 29percentage drop, and the Dow Jones Average's 13percentage drop. As McBride pointed out, the Fed's rate rises have had a substantial influence here.

Higher interest rates have an impact not just on equities, but also on cryptocurrencies. Bitcoin has dropped 71% from it's all-time high in November, while Ethereum, the second-largest currency, has dropped 70%. "Assets that have profited the most from ultra-low bond yields see strong growth stocks with promising future profits and non-cash-flow-generating assets such as cryptocurrency facing the brunt of the market's adjustment to reality", McBride stated. "Increase in interest rates" [9]. Bitcoin and Eth values have plummeted this year as the Fed Reserve boosted interest rates. Another dip might erase the top two cryptocurrencies' recent modest gains. Bitcoin just surpassed $20,000, and Ethereum recently surpassed $1,500 for the first time since mid-September. The Federal Reserve's rate rises are part of the Fed's ongoing attempts to cool the economy and control inflation, which has driven prices to their highest levels in decades. We can witness how much interest rate increases can affect the virtual currency market once more.

Other big asset groupings' reactions have been divided. While bitcoin price sank alongside other risk assets, commodities prices soared, including oil, timber, wheat, steel, and nickel, albeit many of those gains were fleeting. Wheat prices, for example, spiked during Russia's incursion of Ukraine, but have subsequently rebounded to pre-crisis levels. Lumber prices have declined by more than half from their 52-week highs, while steel prices have fallen by more than half in the previous year. Nickel, which nearly doubled during the Russian invasion, has returned to where it was a year ago [9].

According to statistics released on September 13, 2022, consumer prices increased 8.3% year on year in August. While this rate is less than the 8.5% annual rise seen in July, it is still faster than some economists predicted. The surge comes despite efforts by the Federal Reserve of the United States to slow the economy by raising interest rates regularly. It will persuade the Fed to raise interest rates for the third time. However, despite predictions that rate-setters may apply the brakes more strongly - by a full one percentage point rate hike - this may be improbable based on which commodities went up in price. The food and housing categories showed some of the most significant rises on a month-to-month basis. Food costs rose by 0.8% in August, with eating out growing faster than purchasing groceries. Although this may disappoint customers looking for a decline in food costs, August's data suggests that the growth rate is moderating - down from more than 1% gains in recent months. The same cannot be said for housing, which increased by 0.7% in August, the most significant one-month gain since 1990.

As far as the banks are concerned, we need to know how they gain through rate hikes. Unlike short-term rates, banks pay out interest on long-term accounts at a lower rate. The difference between the yield generated by this capital in short-term notes and the interest paid to consumers is what they earn. As interest rates rise, this spread widens, making them more profitable. The best way for banks to make money is to borrow short-term and long-term to maximize their profits. Increasing the interest rate is an excellent way to make more money.

Housing and real estates are other investments affected by the interest rate hike. As rates rise, demand for housing falls since individuals cannot purchase more expensive homes, preventing house prices from growing. The fundamental rule of supply and demand is at work: prices increase due to a shortage of products. Conversely, price reduction happens when there are more available products.

4. Conclusion

Given the looming recession, the outlook for the local economy remains grim. The banking industry will benefit from higher interest rates because they can now make more money lending. However, higher rates would reduce the profitability of the rest of the world due to the increase in necessary capital expenditures. Borrowing money is getting more expensive. Therefore, buying luxury items such as mansions and cars is more expensive. Consumer spending may therefore fall, lowering demand for goods and services. When this happens, companies reduce production and lay off workers, raising the unemployment rate. In other words, raising interest rates hinders economic growth. Conversely, increases in interest rates, on the other hand, cause a decrease in inflation.

Typically, the stock market declines when the Fed raises interest rates. On the other hand, when interest rates are lowered, the stock market rises. However, no one knows how the market may react to the Fed's decision to change interest rates. The country's central bank may adjust interest rates to speed up or slow down the economy. Thus the Government is in charge of fiscal policy in this respect. To keep the economy moving along smoothly in the event of growing inflation or a recession, the Federal Reserve will undoubtedly take action. This however remains a calculated risk.

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