

The impact of the Fed's interest rate hikes from 2023 to 2025 on financing for small and medium-sized enterprises in the United States

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Abstract. From 2023 to 2025, the Federal Reserve implemented its most aggressive rate hikes since the 1980s to confront high inflation, pushing the federal funds rate above 5%. This drastic tightening significantly disrupted financing conditions for U.S. Small and Medium-sized Enterprises (SMEs). This essay aims to apply the monetary policy transmission theory to analyze SME financing issues, and add new practical evidence for studies about how macro policies change individual firms' operating choices. The research relies on three methods: literature sorting, official data collation and case analysis. It sorts out how Fed rate hikes affect U.S. SMEs, lists specific driving factors and explains the transmission paths behind these influences. According to the collected data, the continuous rate hikes greatly raised borrowing costs for SMEs, hitting a nearly 20-year high, and meanwhile made it harder for small firms to get sufficient loans. The negative impacts are not evenly distributed: different industries, firm sizes and regional businesses suffer to different degrees. Besides, policy effects showed an obvious lag starting from 2024 to 2025, and many small firms face huge risks when refinancing expired loans. At the end of this paper, this study puts forward matching suggestions for government supportive policies and internal financing adjustments of SMEs to ease their current capital shortage problems.

Keywords: small and medium-sized enterprises, financing costs, financing availability

1. Introduction

SMEs are the fundamental support of the U.S. economy, accounting for over 99% of businesses and more than half of total employment. They also play an irreplaceable role in encouraging technological innovation, stabilizing economic growth and easing social employment pressure. For these companies, financing is a critical factor that directly affects their survival and growth potential. Berger and Udell point out in their classic study that SMEs operate under distinct financial growth cycles and face more severe information asymmetry and financing constraints than large corporations [1]. This means changes in the monetary policy environment tend to hit small businesses much harder.

Against the backdrop of the Federal Reserve's sustained interest rate hikes from 2023 to 2025, the financing environment for U.S. SMEs has experienced fundamental changes. Tightened traditional financing

channels, soaring borrowing costs, and increased access difficulties have become increasingly crucial issues.

When looking through existing studies about Fed interest rate adjustments, most scholars focus on overall macroeconomic changes, stock and bond market volatility, or the operation of large multinational groups. There is limited specialized research on SME financing, particularly a lack of systematic empirical analysis of the latest 2023-2025 rate hike cycle. Using literature analysis, data analysis, and case study methods, this paper examines the impact mechanisms of rate hikes on SME financing costs and availability, analyzes key challenges, and proposes operable solutions.

This study has both theoretical and practical value. Theoretically, it enriches the application of monetary policy transmission mechanisms in SME financing. Practically, it sorts out the main reasons why small firms struggle to raise funds and clarifies how tight monetary policies pass pressure down to micro enterprises. The research results can offer reference to government policymakers, commercial bank loan departments and SME operators.

2. Theoretical introduction

2.1. Background introduction to the Fed's interest rate hike

The Federal Reserve has two core policy targets: stabilizing commodity prices and realizing full employment. In 2020, the Fed's zero-interest rate policy and unlimited quantitative easing, combined with large-scale fiscal stimulus, injected massive liquidity into the market. Global supply chain disruptions, insufficient labor supply and rising global energy prices further pushed U.S. inflation to a record high.

In 2022, inflation became the primary challenge facing the U.S. economy. The Federal Reserve was forced to abandon its judgment of "transitory inflation" and instead adopted an aggressive tightening monetary policy. Although inflation started to fall from its peak in 2023, core inflation measures remained sticky, especially services inflation and wage growth, staying well above the Fed's 2% long-term target through 2024 [2]. The Fed raised rates twice in 2023 and maintained restrictive rates throughout 2024, only initiating the first rate cut in the second quarter of 2025 [2]. This "higher for longer" policy made 2023-2025 one of the longest high-rate periods in U.S. economic history.

2.2. Core theories of the monetary policy transmission mechanism

Monetary policy affects the real economy mainly through the interest rate channel and the credit channel. The interest rate channel is the most traditional transmission mechanism first proposed by Hicks [3]. Its core logic is the central bank adjusts policy rates, and financial markets pass these rate changes to all kinds of market lending rates, thereby affecting corporate investment decisions and household consumption decisions. When policy rates rise, banks' funding costs increase, which in turn raises lending rates, increasing corporate financing costs and reducing investment demand.

The credit channel, which is developed and empirically tested by Bernanke and Blinder, further explains how monetary policies change banks' lending willingness and enterprises' financial status [4]. This channel works in two ways. First, the bank lending channel argues that tight monetary policy reduces banks' loanable funds, leading banks to tighten credit standards and reduce loan supply, especially to SMEs. Second, the balance sheet channel points out that rising interest rates cause a decline in corporate asset values and an increase in interest expenses, which in turn worsen corporate balance sheets, reduce collateral values and credit ratings, making banks more reluctant to lend to them [4]. Gertler and Gilchrist provided important early evidence that small manufacturing firms respond more strongly to monetary policy shocks precisely because they have weaker balance sheets and depend more heavily on bank credit [5].

2.3. The correlation logic between the Fed's interest rate hike and the financing of SMEs in the United States

The Fed's interest rate adjustments pass pressure to U.S. SMEs through the two channels mentioned above. On the interest rate side, higher federal funds rates directly push up banks' prime loan rates, commercial paper interest rates and equipment loan costs, increasing the debt financing cost of SMEs. On the credit side, high rates lower banks' risk tolerance. To control credit risks, banks will set higher loan standards, demand more valuable collateral, shorten repayment periods and reduce the total money they lend to small firms. Caglio et al. identify collateral heterogeneity as a key amplifying mechanism: unlike large firms that pledge fixed assets, most U.S. SMEs rely on earnings and intangible value as collateral, which depreciates faster in a high-rate environment [6].

Beyond bank lending, bond yields and equity risk premiums also rise with benchmark rates [7]. However, unlike large corporations with diversified funding sources, U.S. SMEs depend predominantly on bank loans for working capital, making them far more vulnerable to rate hikes.

3. The impact of the Federal Reserve's interest rate hike on the financing of SMEs in the United States

3.1. Rising financing costs for SMEs

From 2023 to 2025, the financing cost of U.S. SMEs showed a sharp upward trend. Data from the U.S. Small Business Administration shows that the average interest rate of 7(a) loans nearly doubled compared to the pre-hike period, reaching levels not seen in almost two decades [8]. This substantial increase follows directly from the interest rate channel of monetary transmission, as the Fed raises its benchmark rate, banks pass the higher funding costs on to their business borrowers.

For SMEs relying on floating-rate loans, the impact of rate hikes is more direct. The National Federation of Independent Business estimates that around 60% of all SME loans in the U.S. use floating interest rates, and each rate increase immediately increases their interest expenses [9]. Vickery observes that credit-constrained small firms often have limited ability to manage interest rate risk through hedging or refinancing [10], so they bear the full brunt of rate increases. Larger interest payments take up most corporate profits, forcing many SMEs to cut production investment, reduce employee salaries or delay all expansion plans.

3.2. Reduced financing availability for SMEs

Besides rising borrowing costs, many U.S. SMEs also found it harder to successfully apply for loans between 2023 and 2025. The Federal Reserve regularly releases the Senior Loan Officer Opinion Survey (SLOOS) records that in early 2023, a large share of U.S. banks reported tightening lending standards for small business loans, reaching the strictest level since the 2008 financial crisis [11]. While the degree of tightening moderated somewhat in 2024, credit standards remained considerably tighter than the long-term average. This reflects a classic disequilibrium pattern documented by Atanasova and Wilson that during monetary tightening, bank loan supply contracts while SME demand for working capital persists, resulting in widespread quantity rationing rather than mere price increases [12].

Lown and Morgan demonstrate that credit standards tightening is an independent monetary transmission channel [13]. Banks not only raise rates but also impose stricter collateral requirements, shorter repayment terms and higher rejection rates. For micro-enterprises and early stage startups that lack substantial fixed assets or established credit histories, obtaining a traditional bank loan becomes nearly impossible. Many are

pushed toward more expensive non-bank financing options. This overall pattern aligns with Gertler and Gilchrist's finding that small firms bear a disproportionate burden and rely more heavily on alternative funding sources [5].

4. Core challenges and countermeasures for U.S. SMEs in financing amid the Federal Reserve's interest rate hiking cycle

4.1. Core issue: heterogeneous impacts on SMEs and risks of lagged policy effects

The damage caused by Fed rate hikes varies widely among different SMEs. By industry, capital-intensive sectors including manufacturing, construction and transportation suffer most due to their reliance on large equipment loans and long-term investment. Labor-intensive industries such as retail, catering, and daily services businesses face comparatively less financing pressure but bear dual headwinds of weakening demand and rising labor costs. Firm size is another important dimension of heterogeneity. Micro-enterprises struggle more than larger small and medium-sized firms. With less stable revenue streams and insufficient collateral, they are classified as high risk borrowers by banks during tight monetary periods. This size gradient is robustly documented in empirical research. Bougheas et al. demonstrate that firm size, age, and collateral endowment jointly determine the severity of financing constraints under tight monetary conditions, with micro-enterprises facing the steepest credit access deterioration [14]. In addition, small manufacturing firms experience sharper declines in sales and inventory following a monetary contraction, precisely because of their greater financial constraints [5].

The lagged effect of monetary policy presents another critical challenge. The impact of monetary policy on the real economy usually has a lag of 6-12 months, and the negative results of the 2023 rate hikes fully showed up in 2024 and 2025. A large number of SME loans will mature and be renewed centrally in 2025, when they will face much higher interest rates than the original loans, which may lead to an increase in debt default rates. This "refinancing cliff" could trigger a wave of defaults. Moreover, the effect of monetary tightening on default risk is asymmetric. That means tightening has a stronger impact than easing, making this lagged risk all the more concerning [15].

4.2. Proposal: government monetary policy adjustment and optimization of SMEs' financing structure

The government can combine targeted monetary and fiscal policies to ease SMEs' capital pressure. In terms of monetary policy, when the Fed starts cutting benchmark rates, it can carry out targeted loose measures, such as lowering reserve requirements for banks that issue large amounts of SME loans and expanding the discount window's support range for SME loans. The SBA can also adjust the 7(a) loan guarantee rules by raising the guarantee ratio, reducing guarantee fees, and increasing the maximum loan amount. On the fiscal policy side, tax deductions for SME interest expenses or dedicated grant programs for innovative and green small businesses would provide direct financial relief.

At the enterprise level, SMEs need to take active steps to optimize their financing structure and strengthen internal cash flow management. First, reduce dependence on short-term floating-rate bank loans and expand diversified financing channels, such as supply chain finance, equipment leasing, or equity investment where feasible. Second, enterprises need to strengthen internal financial management, improve capital use efficiency, cut unnecessary expenses, optimize inventory management, and guarantee stable operating cash flow to avoid

liquidity crunches. Finally, long-term cooperative relationships and improved credit ratings help secure more favorable loan terms.

5. Conclusion

This study centers on the large-scale interest rate tightening cycle carried out by the Federal Reserve from 2023 to 2025, and analyzes how such policies change U.S. SMEs' financing conditions, the internal transmission logic, main hidden risks and practical coping plans. The findings reveal that this tightening cycle has produced dual negative effects through interest rate channels. It has not only drastically raised financing costs, with surging interest payments severely eroding corporate profits, but also trapped many small firms in liquidity shortages, as banks shrank credit supply.

Currently, U.S. SMEs face two critical financing challenges: rate hikes bring uneven impacts on enterprises of different sizes and industries, and the lagged effects of rate hikes may trigger more concentrated refinancing risks in the future. Addressing these issues requires collaborative efforts: the government should adopt targeted supportive policies, financial institutions need to enhance services and product innovation, and SMEs should optimize their financing structures and internal management.

This research still has some limitations. The analysis of heterogeneous impacts across different industries and regions is relatively shallow, lacking detailed quantitative comparison. Future research could focus on specific industries with more quantitative methods to provide more precise guidance for SMEs.

References

- [1] Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22(6-8), 613-673.
- [2] Board of Governors of the Federal Reserve System. (2025). *Monetary policy report (February 2025)*. <https://www.federalreserve.gov/monetarypolicy/2025-02-mpr-summary.htm>
- [3] Hicks, J. R. (1937). Mr. Keynes and the "classics": A suggested interpretation. *Econometrica*, 5(2), 147–159.
- [4] Bernanke, B. S., & Blinder, A. S. (1992). The federal funds rate and the channels of monetary transmission. *The American Economic Review*, 82(4), 901-921.
- [5] Gertler, M., & Gilchrist, S. (1994). Monetary policy, business cycles, and the behavior of small manufacturing firms. *The Quarterly Journal of Economics*, 109(2), 309-340.
- [6] Caglio, C. R., Darst, R. M., & Kalemli-Özcan, Ş. (2024). Collateral heterogeneity and monetary policy transmission: Evidence from loans to SMEs and large firms. *Journal of Financial Economics*, 152(2), 103789.
- [7] Gertler, M., & Karadi, P. (2015). Monetary policy surprises, credit costs, and economic activity. *American Economic Journal: Macroeconomics*, 7(1), 44–76.
- [8] U.S. Small Business Administration, Office of Capital Access. (2025). *7(a) loan program monthly performance report*. <https://data.sba.gov/dataset/lender-activity-reports>
- [9] National Federation of Independent Business. (2025). Small business economic trends: 2023–2025 annual summary. *NFIB Research Center*. <https://www.nfib.com/research-center/small-business-economic-trends/>
- [10] Vickery, J. (2008). How and why do small firms manage interest rate risk? *Journal of Financial Economics*, 87(2), 446-470.
- [11] Board of Governors of the Federal Reserve System. (2023–2025). *Senior loan officer opinion survey on bank lending practices*. <https://www.federalreserve.gov/data/sloos.htm>
- [12] Atanasova, C. V., & Wilson, N. (2004). Disequilibrium in the UK corporate loan market. *Journal of Banking & Finance*, 28(3), 595–614.

- [13] Lown, C. S., & Morgan, D. P. (2006). The credit cycle and the business cycle: New findings using the loan officer opinion survey. *Journal of Money, Credit and Banking*, 38(6), 1575–1597.
- [14] Bougheas, S., Mizen, P., & Yalcin, C. (2006). Access to external finance: Theory and evidence on the impact of monetary policy and firm-specific characteristics. *Journal of Banking & Finance*, 30(1), 199–227.
- [15] Kim, J., Ni, S., & Ratti, R. A. (1998). Monetary policy and asymmetric response in default risk. *Economics Letters*, 60(1), 83–90.