

How Do Quantitative Easing and Tightening Affect Firms?



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Abstract

Quantitative easing (QE) and quantitative tightening (QT) policies have become ubiquitous over the past two decades as many central banks managed their balance sheets more actively to mitigate the effects of abrupt economic contractions. Yet, the impact of such policies on real economic activity remains elusive. In this policy brief, we summarize the findings in Eren et al. (2025) where we construct novel time series of maturity-specific balance sheet shocks that cover multiple QE and QT programs of the U.S. Federal Reserve and find that these programs have had a limited impact on firm capital and employment.

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Introduction

QE and QT programs typically involve the purchase, sale, or run-off of government bonds, aiming to influence long-term interest rates, shift portfolio allocations, and ultimately impact real economic outcomes. A key mechanism highlighted by proponents of QE policies is that changes in long-term rates, driven by central bank balance sheet actions, “displace” preferred-habitat investors from the government bond market by lowering yields, encouraging them to participate more actively in corporate debt markets where yields are relatively higher (Vayanos and Vila, 2021). This shift in investor behaviour is intended to ease financial constraints in the case of QE policies by reducing corporate bond yields, thereby supporting firm investment and employment. While the immediate effects of QE and QT announcements on financial markets are well-documented (Vissing-Jorgensen and Krishnamurthy, 2011; D’Amico and Seida, 2024), the granular transmission of these policies over time, especially to firms, remains less understood. In Eren et al. (2025) we estimate the effects of the U.S. Federal Reserve balance sheet operations on firms’ debt structure, capital and employment to shed more light on the real effects of these operations.

A new measure of unexpected maturity-specific balance sheet policy changes

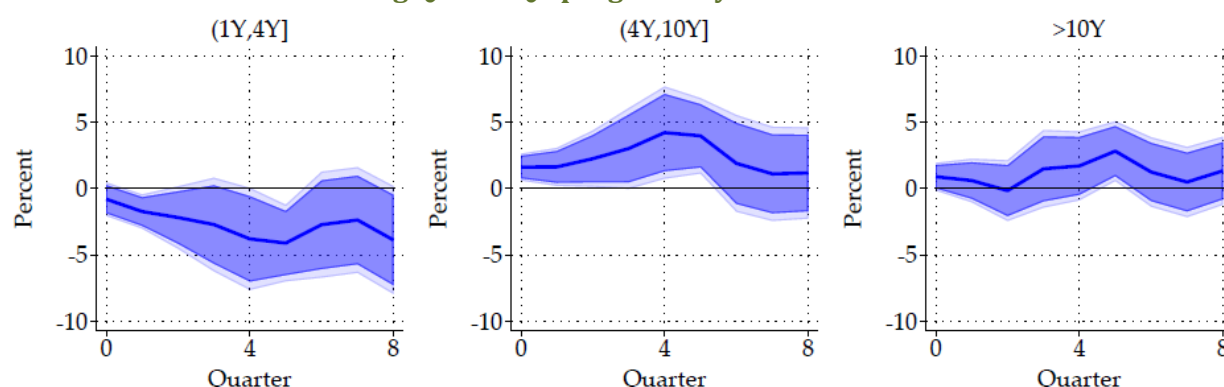
The Federal Reserve’s active purchases and reinvestments of U.S. Treasuries have varied across maturities during different QE and QT programs. During most QE programs, the Federal Reserve has actively bought Treasuries across the maturity spectrum, albeit with different weights. During QT operations, the proceeds from maturing bonds were reinvested in newly issued Treasuries, through which the Federal Reserve essentially mirrored the distribution of maturity of bonds issued by the U.S. Treasury Department. During both programs, the Federal Reserve announces the operation rule in the very beginning of each program, and surveys market participants frequently throughout the program to assess market expectations regarding the size of each operation in the following months.

In Eren et al. (2025), we isolate exogenous shocks in QE and QT programs leveraging on expectations of primary dealers regarding central bank operations and also the Treasury issuance plan by the U.S. Treasury department. We construct maturity-quarter specific shocks that are large even outside the pandemic QE, often corresponding to 1-to-2 percent of the total government debt of a maturity bin in a given quarter. We then use these shock measures in an empirical model to study how they impact the debt structure and level of debt as well as other firm-level outcomes that are relevant for the aggregate economy, such as investment, employment and spending on research and development (R&D).

Changing debt structure without much of a change in investment and employment

Figure 1 shows that the effects of central bank balance sheet policies on corporate debt differ substantially across maturities. When the Federal Reserve’s share of U.S. Treasury securities with a remaining maturity of four-to-ten-year increases, outstanding corporate bonds with the same maturity increase during four quarters following the surprise purchase by the Federal Reserve and the effect dissipates afterwards. We also find a positive impact on corporate bonds with maturities greater than ten years in response to purchases by the Federal Reserve of long-dates U.S. Treasuries, but the effect is smaller and statistically significant only in the fifth quarter after the shock. In contrast, we find that when the Federal Reserve buys an unexpectedly large quantity of Treasuries with maturities ranging from one-to-four years, firms’ outstanding bonds of that maturity decrease. We show in Eren et al. (2025), that this result is explained by a debt maturity structure change, as firms opt to reduce shorter debt outstanding and replace it with debt that has a longer maturity following central bank purchases. Interestingly, the maturity extension does not happen across all maturity bins. Firms also reduce their debt in maturities of more than ten years in response to purchase shocks in the four-to-ten-year maturity bin, which implies that the maturity extension is rather a bunching in a preferred maturity bin where most affected investors fleeing the Treasuries market concentrate.

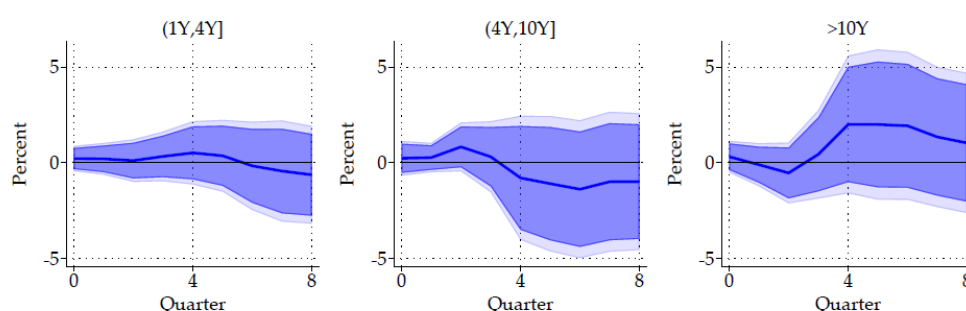
Figure 1. U.S. firms' bond debt changes depending on which maturity of U.S. Treasuries is targeted during QE and QT programs by the Federal Reserve



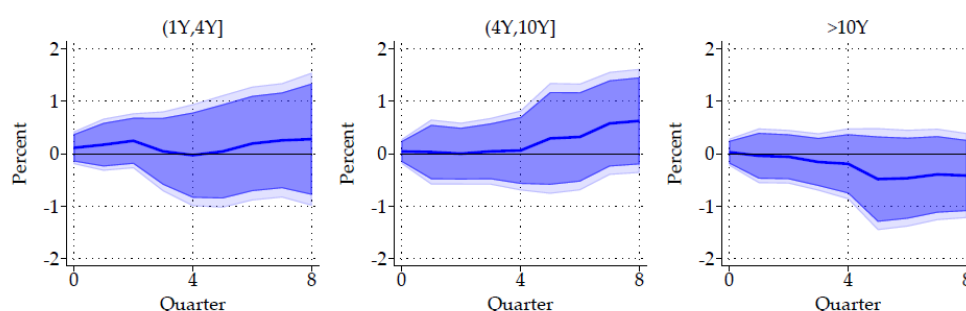
In Eren et al. (2025), we also show that most of the maturity reshuffling at the firm level occurs in terms of their bonds outstanding, as corporate term loans do not seem to respond to changes in the central bank balance sheet. This finding highlights that balance sheet policies involving government debt in the US operate mainly through the corporate bond market rather than the banking sector and is consistent with Rodnyansky and Darmouni (2017) and Chakraborty et al. (2020). Furthermore, we find that most of the results for corporate bonds are driven by investment-grade firms rather than non-investment-grade firms and that firms outside of the US also respond to changes in the Federal Reserve balance sheet by reshuffling their debt structure similarly to U.S. firms. The result on global spillovers is consistent with the special role of U.S. dollar assets in global investors' portfolios (e.g. Maggiori et al., 2020) and the significant influence of U.S. monetary policy on global financial intermediaries (Miranda-Agrippino and Rey, 2020).

Moving to firm-level outcomes, Figure 2 shows that U.S. firms do not seem to alter their capital and labour choices in response to unexpected changes to the Federal Reserve balance sheet policies. In Eren et al. (2025) we show that overall firm debt also remains unchanged following surprise changes to the central bank's balance sheet, suggesting that the debt structure changes we documented in Figure 1 are mostly about maturity reshuffling rather than about adding to the overall stock of firm debt.

Figure 2. Capital and employment do not respond to balance sheet policies



(a) The effect of shock m on physical capital



(b) The effect of shock m on headcount

Moreover, we find that interest expenses decline, and current assets increase following an unexpected increase in the Federal Reserve balance sheet, suggesting that firms opt to save any interest reduction stemming from maturity reshuffling instead of investing it. Interestingly, while physical capital of both investment-grade and non-investment-grade firms does not change materially following surprise purchases of Treasuries by the Federal Reserve, a more pronounced pattern emerges for spending on research and development. R&D spending of investment-grade firms does respond positively to central bank purchases of government bonds with time-to-maturity greater than 10 years, which is consistent with firms' active management of their asset-liability duration matching.

Policy implications

Our findings have important policy implications for central banks. They suggest that balance sheet policies primarily influence the composition of corporate debt, but that their direct impact on firm investment and hiring decisions is limited. That said, the effects are shaped by the maturity of central bank purchases and the credit quality of firms, indicating that the design of central bank balance sheet policies - especially the maturity profile of purchases - matters for their transmission. As more central banks revisit their operational frameworks, understanding the real effects of their policies should guide the decisions these institutions make regarding the policy tools they employ to achieve their mandates.

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