

Asset purchases: channels

@econcortex

2026-09-22

Abstract

How buying bonds with reserves can lower long rates: portfolio balance, signalling, liquidity, and what the programmes of the Fed, ECB and Bank of Japan looked like.

Large-scale asset purchases, usually called quantitative easing, are the second tool. The central bank buys long-dated government bonds or other securities from the private sector and pays with newly created reserves. Why that should lower long-term interest rates is less obvious than it looks, and the answer determines what to expect from the tool.

The irrelevance benchmark

Start from the case where purchases do nothing. If investors can hold any portfolio without cost, price assets by their expected payoffs, and treat the consolidated government's liabilities as one pool, then swapping long bonds for reserves changes the *composition* of what the public holds but not its total wealth or the fundamentals that price the bonds. Long rates are the expected average of future short rates plus a term premium, and neither moves. Something has to break for purchases to work.

Three things that break

Portfolio balance. Tobin's original insight is that assets are imperfect substitutes (Tobin, 1969). When the central bank removes duration from the market, investors who wanted that duration bid up the price of what remains, lowering the term premium. Vayanos and Vila made this precise with *preferred-habitat* investors who want specific maturities and risk-averse arbitrageurs who connect the segments; purchases in one maturity lower yields there and, through the arbitrageurs, along the curve (Vayanos & Vila, 2021). This channel operates through the *stock* of bonds held, so its effect persists as long as the holdings do.

Signalling. A central bank that has bought trillions of long bonds would lose money if it raised rates early. Purchases therefore make the low-rate promise of Forward guidance more credible, and part of the fall in long yields is a fall in expected short rates rather than in the term premium. Bauer and Rudebusch found this channel accounts for a large share of the yield response to the first Fed programme (Bauer & Rudebusch, 2014).

Liquidity and scarcity. In stressed markets the central bank's willingness to buy restores trading and compresses liquidity premia; this mattered in mortgage-backed securities in 2009 and in Treasuries in March 2020. In calm markets purchases can instead make specific securities scarce, which lowers their yields for reasons unrelated to policy.

The decomposition matters because the channels have different implications. A term-premium effect lowers long rates without changing the expected policy path; a signalling effect works through the same expectations as guidance, and it unwinds if the central bank contradicts the signal. Asset purchases: evidence shows how these were separated.

What the programmes looked like

Programme	Announced	Size and design
Fed QE1	Nov 2008, expanded Mar 2009	About 1.75 trillion dollars: 1.25 trillion agency MBS, 300 billion Treasuries, agency debt
Fed QE2	Nov 2010	600 billion dollars of Treasuries over eight months
Fed maturity extension (“Twist”)	Sept 2011	Sell short, buy long; no change in balance sheet size
Fed QE3	Sept and Dec 2012	Open-ended, 85 billion a month; tapered through 2014
Fed pandemic purchases	Mar 2020	Unlimited at first, then 120 billion a month; tapered from Nov 2021, ended Mar 2022
ECB asset purchase programme	Jan 2015	Public and private securities, 60 billion euro a month at the start; net purchases ended June 2022
ECB pandemic emergency programme	Mar 2020	Envelope raised to 1.85 trillion euro; flexible across countries
Bank of Japan QQE	Apr 2013	Doubling the monetary base in two years; from 2016 combined with Yield curve control and the exit

Two design choices recur. *Flow* purchases at a monthly pace signal continuing commitment and are easy to taper; *stock* announcements of a total front-load the portfolio-balance effect. Purchases of *private* assets (MBS, corporate bonds) work partly through credit spreads and carry credit risk that government bonds do not.

The mechanics, briefly

On the central bank’s balance sheet the purchase adds bonds to assets and reserves to liabilities. On a commercial bank’s balance sheet reserves replace bonds (or, if the seller was a fund, the bank gains reserves and a deposit). No money reaches households directly; the “printing money” description is right about reserves and wrong about spending. The central bank balance sheet takes this further, including what happens to the central bank’s profit when rates rise.

Bauer, M. D., & Rudebusch, G. D. (2014). The signaling channel for Federal Reserve bond purchases. *International Journal of Central Banking*, 10(3), 233–289.

Tobin, J. (1969). A general equilibrium approach to monetary theory. *Journal of Money, Credit and Banking*, 1(1), 15–29. <https://doi.org/10.2307/1991374>

Vayanos, D., & Vila, J.-L. (2021). A preferred-habitat model of the term structure of interest rates. *Econometrica*, 89(1), 77–112. <https://doi.org/10.3982/ECTA17440>