

[Inventories matter for the transmission of monetary policy: uncovering the cost-of-carry channel](#)

CFM-DP2025-28

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This paper explores a new way in which central banks' interest rate decisions affect the economy, focusing on the role of inventories. Traditionally, economists have studied how monetary policy influences spending, investment, and inflation. However, this paper highlights an often-overlooked mechanism: how changes in interest rates alter the cost for firms to hold inventories, which in turn affects their pricing decisions and broader inflation dynamics.

When a central bank raises interest rates, it becomes more expensive for firms to keep goods in storage. This is because higher rates increase the opportunity cost of tying up money in unsold goods (instead of earning interest elsewhere), and may also raise the direct cost of borrowing to finance inventories. This is called the “cost-of-carry.”

When carrying costs rise, firms—especially those with large inventories—are more likely to cut prices to sell off stock and reduce these costs. This means that monetary policy can influence inflation not just by affecting demand, but also by changing firms' incentives to adjust prices (which is a way for them to manage their inventory).

This idea is tested on data from three major U.S. markets: those for retail goods, housing, and oil (the advantage of the latter two markets being that those enable us to measure inventories and associated prices with greater precision). We find that:

- (In the goods market:) When retailers sit on higher inventories, an interest rate hike leads to a larger drop in goods prices. This suggests that firms, when stocked up, respond to higher carrying costs by cutting their prices more aggressively.
- (In the housing market:) When there are more vacant homes (a higher “housing inventory”), landlords are more likely to lower rents in response to higher interest rates, since the cost of leaving properties empty rises.
- (In the oil market:) Oil prices are more sensitive to U.S. monetary policy when oil inventories are high, again supporting the idea that inventory levels amplify the effect of interest rates on prices.

The paper then adds inventories, and the associated “cost-of-carry” channel, to a standard New Keynesian model. The key insight is that when inventories are high, central banks have greater leverage over inflation without slack needing to open up, because the cost-of-carry channel makes firms more responsive in their pricing behavior. This translates into a more favorable sacrifice ratio and means that, in high-inventory environments, it is optimal for central banks to focus more on inflation stabilization, as the “cost” of keeping inflation close to target (in terms of lost output or higher unemployment) is lower.

In summary, the paper shows that inventories play a crucial role in how monetary policy affects prices and inflation dynamics. By raising the cost of holding inventories, higher interest rates prompt firms to cut prices more aggressively when they have more goods in stock. This cost-of-carry channel suggests that the effectiveness of monetary policy can vary depending on inventory levels in the economy—a factor that policymakers may wish to consider when setting interest rates.