

## Macro Roundup Article

Headline: **Monetary Policy and Innovation**

### Article

Link: [https://www.kansascityfed.org/Jackson%20Hole/documents/9725/JH\\_Paper\\_Ma.pdf](https://www.kansascityfed.org/Jackson%20Hole/documents/9725/JH_Paper_Ma.pdf)

Author(s)	Yueran Ma and Kaspar Zimmermann
Publication	Federal Reserve Bank of Kansas City
Publication Date	August 29, 2023

**Tweet:** Historically monetary tightening has had an impact on risk capital: 100bps of tightening is associated with a 1-3pp decline in R&D; spending and a 25% decline in VC investment over the following 1-3 year period.

**Summary:** We normalize the shock to tightening by 100bps. Investment in intellectual property products (IPP) in the national accounts (NIPA) declines by about 1%. The magnitude is comparable to the decline in traditional investment in physical assets. R&D spending in Compustat data for public firms declines by about 3%. VC investment is more volatile, and declines by as much as 25% at a horizon of 1 to 3 years after the monetary policy shock. Patenting in important technologies declines by up to 9% 2 to 4 years after the shock. An aggregate innovation index constructed using estimates of the economic value of patents also declines by up to 9%. Based on estimates of the output and total factor productivity (TFP) sensitivity to the aggregate innovation index, a 9% decline in the index can contribute to 1% lower real output and 0.5% lower TFP 5 years later.

**Related Articles:** Data Update 2 for 2023: A Rocky Year for Equities

**Primary Topic:** Banking

**Topics:** Academic paper, Banking, Business Cycle, Database, Financial Markets, GDP, Monetary Policy

**Permalink:** <https://www.edwardconard.com/macro-roundup/historically-monetary-tightening-has-had-an-impact-on-risk-capital-100bps-of-tightening-is-associated-with-a-1-3pp-decline-in-rd-spending-and-a-25-decline-in-vc-investment-over-the-following-1-3-yea?view=detail>

**Featured Image Link:** <https://www.edwardconard.com/wp-content/uploads/2023/08/Panel-A-and-Panel-B-Fixed.png>