

# **Lumpy R&D and the Great Twins: The Great Moderation and Great Recession**

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## **Abstract**

We document that R&D investments are lumpy, with a heavy representation of innovative firms that either do not adjust or make a spike adjustment in R&D expenses. Moreover, the fraction of firms making significant adjustments to R&D spending is pro-cyclical. We then develop a medium-run business cycle model with heterogeneous innovative firms and fixed adjustment costs, featuring lumpy R&D. By fitting the model to the data, we uncover the 'Great Twins': the Great Recession is partly caused by the preceding Great Moderation. We present micro- and macro-level evidence that supports the Great Twins hypothesis. Finally, we discuss the policy implications.