

# LEANING AGAINST THE CREDIT CYCLE

---

**Paolo Gelain**

European Central Bank and Norges Bank

**Kevin J. Lansing**

Federal Reserve Bank of San Francisco

**Gisle James Natvik**

BI Norwegian Business School

## **Abstract**

How should a central bank act to stabilize the debt-to-GDP ratio? We show how the persistent nature of household debt shapes the answer to this question. In environments where households repay mortgages gradually, surprise interest hikes only weakly influence household debt, and tend to *increase* debt-to-GDP in the short run while reducing it in the medium run. Interest rate rules with a positive weight on debt-to-GDP cause indeterminacy. Compared to inflation targeting, debt-to-GDP stabilization calls for a more expansionary policy when debt-to-GDP is high, so as to deflate the debt burden through inflation and output growth. (JEL: E52, E32, E44)

---

---

Acknowledgments: This paper is part of the REFIT project at Norges Bank. Any views expressed here are those of the authors only, and do not represent the views of Norges Bank, the European Central Bank, the Federal Reserve Bank of San Francisco, or the Board of Governors of the Federal Reserve System. We thank Drago Bergholt, Leif Brubakk, Lorenzo Burlon, Jordi Galí, Matteo Iacoviello, Alejandro Justiniano, Jesper Lindé, ystein Risland, Kjetil Storesletten, Tommy Sveen, Lars Svensson, and Andrea Tambalotti for comments and suggestions. We also thank participants at various conferences, and at seminars in Norges Bank, the Federal Reserve Bank of Chicago and BI Norwegian Business School.

E-mail: paolo.gelain@ecb.europa.eu (Gelain); Kevin.j.lansing@sf.frb.org (Lansing);  
Gisle.j.natvik@bi.no (Natvik)