Monetary Policy Transmission with Adjustable and Fixed Rate Mortgages

Fatih Altunok, Yavuz Arslan, Steven Ongena

Discussant: Vahid Saadi IE Business School

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 - enjoy a positive market reaction
 - reduce credit less aggressively
 - experience higher interest income (in the future)

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- ▶ Bank preferences for interest rate risk
- ▶ The short term impact on interest income

 Some aggregate, macro-level evidence on stronger path-trough effects of ARM (Mishkin 2007, Garriga et al. 2017, Pica 2022)



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 Aggregate consumption more responsive to monetary policy loosening in high-ARM economies.

 Aggregate consumption declines much more in response to monetary tightening in an ARM regime



(Garriga, Kydland, Sustek, 2017)

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ARM credit channel is there, but quantitatively not so strong?!

If so, why?

Mortgage origination by non-banks increasing very rapidly.

Figure 3: Shadow Bank Market Share and the Shadow Bank Loan Multiplier

Panel (a) of this figure shows the percentage of residential mortgage loans originated by the shadow banks in the US. The dashed line shows the sample mean.



(Buchak, Matvos, Piskorski, and Seru, 2023)

Figure 1: Traditional Balance Sheet Lending Banks in the Residential Mortgage Market

Panel (a) of this figure shows the percentage of banks among the US mortgage loan originators that do not sell any residential loans in each year, and hence follow the traditional bank balance sheet lending model. Panel (b) shows the percentage of annual bank loan origination volume these traditional balance-sheet only lending banks account for in each year. While up to half of all banks do not sell any loans during our sample period depending on the year, they make up on average only around 7% of the loan origination volume. A loan is retained if it is still on the originating institution's balance sheet at the end of the year. Data Source: HMDA Data.



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- If this correlates with actual holdings, it could potentially undermine the aggregate effect size of bank ARM holdings on monetary policy path through.

Comment 1: Who holds mortgages?



Source: National Mortgage Database (NMDB), Federal Housing Finance Agency Data as of January 13, 2021

Most mortgages are held outside of bank balance sheets.

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W.B. English et al./Journal of Monetary Economics 98 (2018) 80-97



Fig. 2. Repricing/maturity gap. Note. Sample period: 1997:02–2007-02. The solid line depicts the (weighted) median repricing/maturity gap for our sample of 355 banks; the shaded band depicts the corresponding (weighted) inter-quartile range; and the dotted line depicts the (weighted) median repricing/maturity gap for the entire US commercial banking sector. The repricing/maturity gap is defined as the weighted average reported repricing/maturity time of liabilities; savings, demand, and transaction deposits are included at their contractual (that is, zero) maturity. All percentiles are weighted by bank total assets.

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- ▶ Any IV or shock for ARM? change in regulation, or perhaps change in ARM due to M&A?

Comment 3: Interest income dynamics



▶ Why the differential negative effects early on?

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- Why does it take so long for it to become positive? Some statistics on repricing periods?

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