John Campbell

Mortgage Choice and Monetary Policy

On Thursday, May 4, John Campbell joined Markus' Academy for a lecture on the U.S. mortgage system. Campbell is the Morton L. and Carole S. Olshan Professor of Economics at Harvard University, where he has taught since 1994.

A few highlights from the discussion:

• A summary in four bullets

- Mortgages are the largest household liability, and mortgage rates are one of the main channels through which monetary policy affects the economy
- In this talk Prof. Campbell laid out "The Prosecution Case Against the U.S. Mortgage System". The traditional US fixed-rate system does not deserve the strong political support it has received.
- He argues the system has four main problems: (1) it provides a weak monetary policy transmission mechanism, (2) it worsens inequality, (3) it destabilizes the financial system, and (4) it reduces housing market liquidity and labor mobility
- The main policy takeaway is that we should move towards adjustable-rate mortgages (or automatic refinancing). We should also formalize forbearance, reform the way we finance transaction costs ("points") and consider innovative designs such as indexing the principal to inflation or to home values

• [0:00] Introduction

- Monetary policy through interest rate changes has both substitution and income effects on aggregate demand and the balance sheets of households and banks.
- With adjustable-rate mortgages (ARMs), interest rate increases hit indebted households. With fixed-rate mortgages (FRMs) interest rate hikes hurt banks more, but the effect on credit supply will depend on banks' market power over deposits.
- There are regional differences as well: in the U.S., higher interest rates hurt the banks and lower interest rates favors households. However, having different mortgage markets within a currency area may make monetary policy more challenging.

• [6:35] A prosecution case against the U.S. mortgage system

- Mortgages are the largest household liability, and mortgage rates are one of the main channels through which monetary policy affects household consumption; mortgage lending was at the heart of the global financial crisis in 2008-09 and is affecting banks in 2023.
- In the U.S. the standard mortgage is a 30-year, amortizing, fixed-rate, and with a refinancing option. Households can borrow the transaction costs ("points")

without affecting the mortgage balance by paying higher rates. They are typically not assumable.

- The U.S. system is an outlier. Other countries have ARMs with fixation periods of 1-5 years. Denmark is similar to the U.S. in having both ARMs and FRMs, but it is easier to refinance, mortgages are assumable, and there are no points.
- [12:59] 1. The U.S. mortgage system is a weak monetary transmission channel
 - The mortgage channel is not about intertemporal substitution, it is about redistribution across agents (<u>Auclert 2019</u>).
 - Rates affect monthly payments by borrowers, but also payments received by lenders. Monetary policy will have an aggregate effect if borrowers change their spending more than lenders do. This can happen due to differences in the location (home/foreign) and the marginal propensity to consume (MPC) of borrowers and lenders.
 - Mortgage channel works better with ARMs than with FRMs (see for example <u>Di</u> <u>Maggio et al 2017</u>): changes in ARM payments are linked to the short rate, apply to all borrowers, and are temporary. FRMs are linked to long-term rates, change only for new borrowers, and changes are long lasting, so lenders will adjust their consumption more (offsetting the effect on borrowers).
 - It is possible that, because of the prevalence of FRMs, the Fed has to move rates more and in a more persistent manner to achieve its goals
 - We could further improve the transmission mechanism of ARMs with forbearance provisions (which was done ex-post during the pandemic); this would affect both consumption and defaults.

• [23:44] 2. Refinancing worsens inequality

- In the U.S. refinancing requires positive home equity, adequate income, and credit score – this means the rate cuts have the weakest impact on regions with depressed home prices and high levels of unemployment.
- Refinancing also varies with borrower sophistication: can explain differences in mortgage rates paid by different racial, age, education, and income groups (<u>Andersen et al 2020</u>). The Black-White refinancing difference has been especially pronounced after 2008 (<u>Gerardi et al 2023</u>).
- Refinancing becomes a cross subsidy from the poor to the rich, as unsophisticated borrowers do not take advantage of refinancing and new borrowers obtain lower rates (<u>Campbell 2006</u>).
- Mortgage points are an odd system that worsens inequality because people who refinance do not pay the higher rates which they took on to pay the closing costs.
- This is not just an FRM problem, as ARMs can have teaser rates that adjust to a much higher "standard rate" after 1-5 years. Sophisticated people refinance and jump from teaser rate to teaser rate, leaving unsophisticated borrowers with higher rates.
- [39:41] 3. FRMs can lead to financial instability
 - The US securitization system is intended to shield banks from the maturity mismatch resulting from FRMs (think savings and loan crisis) by passing it on to

MBS investors. However this system works imperfectly, as banks like to hold MBS.

- ARMs don't have this problem and are common in countries with deposit-financed mortgage origination.
- Random variation in refinancing speed due to unsophistication creates prepayment risks. This variable duration can destabilize bond markets
- Interest rate decreases stimulate refinancing, with FRMs this will encourage maturity mismatch in banking, making it hard for the Fed to raise rates later to combat inflation (since rate hikes can bring major losses for banks).
- \circ $\;$ ARM systems instead place the burden of rising rates on households.
- [48:10] 4. FRMs can lead to lock-in effects.
 - With rising rates, borrowers with FRMs are reluctant to move (because they would have to replace a cheap mortgage with an expensive one). This lock-in effect reduces liquidity in the housing market and can prevent people from moving to better jobs.
 - But lock-in can affect movings even if rates are not going up because of fixed costs. It is not worth it to refinance a mortgage until the current fixed rate is about 1.8% below the old rate
 - Lock-in can be avoided through ARMs, assumable mortgages, or portable mortgages
- [54:19] What do people prefer? FRMs or ARMs?
 - People tend to think that in the U.S. the ARM share of mortgages is distorted due to GSEs.
 - However recent research shows the ARM share is higher in people that are borrowing constrained (lower rate permits higher current consumption), and in wealthy people that can use the mortgage to lever a financial portfolio (if rates go up you can always de-lever and pay off the mortgage)

• [58:20] Policy suggestions

- The traditional US FRM does not deserve the strong political support it has received. We would be better off for example shifting in the direction of the Canadian system with mortgage rates fixed for 5 years, not 30
- We should formalize mortgage forbearance during recessions, it can be stabilizing and can boost consumption
- Policy should favor ARMs or automatic refinancing, since refinancing hurts unsophisticated borrowers
- Points system is particularly problematic, and could be reformed without causing too many problems. Closing costs should increase mortgage balances, not interest rates
- A "regulatory sandbox" for mortgage innovation could be useful (e.g. indexing the principal to inflation or to home values)

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