

Monetary policy and financial stability

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Central banking and economic policies

- Central banking: Three core functions
 - Monetary policy
 - Financial-stability policy (financial policy, micro- and macro-prudential policy)
 - Asset management
- Here: Focus on monetary policy and financial-stability policy
- Economic policies: Objectives, instruments, responsible authorities
 - Monetary policy: Objectives, instruments, central bank
 - Financial-stability policy: Objectives? (What is financial stability?), Instruments? (Which are most suitable?), Responsible authorities (One or several? Central bank?)
 - (Fiscal policy)

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Questions

- Did monetary policy contribute to the financial crisis?
 - Does monetary policy need to be reformed?
 - Should monetary policy “lean against the wind”?
 - Should tight monetary policy be used to restrict household debt and/or housing prices?
 - What are sustainable levels of household debt?
 - What are effective instruments to affect household debt?
 - Are borrowers (households and firms) and lenders (banks) sufficiently resilient to disturbances?
 - What are effective instruments to affect the resilience to disturbances of borrowers and lenders?
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Economic policies

- Distinguish economic policies according to
 - Objectives
 - Instruments
 - Authorities controlling instruments and responsible for achieving objectives
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Monetary policy

■ Objectives

- Riksbank Act: “The objective of the Riksbank’s activities shall be to maintain price stability. The Riksbank shall also promote a safe and efficient payments system.”
- Government Bill: “As an authority under the Riksdag, the Riksbank shall also, without prejudice to the price-stability target, support the goals of the general economy policy with the purpose of achieving sustainable growth and high employment.”

Monetary policy

■ Objective

- Riksbank: Inflation target of 2 percent for CPI inflation. “[I]n addition to stabilising inflation around the inflation target, [the Riksbank is] also striving to stabilise production and employment around long-term sustainable paths. The Riksbank therefore conducts what is generally referred to as flexible inflation targeting.”
- LS: “Price stability and highest sustainable employment/lowest sustainable unemployment”
“Choose policy-rate path so inflation and unemployment forecast stabilizes inflation around target and unemployment around estimated long-run sustainable rate”

Monetary policy

- Instruments
 - Normal: Policy rate, policy-rate path, communication
 - Crisis: Fixed-rate lending at longer maturities, asset purchases (quantitative easing), ...
- Authority
 - Central bank

Financial-stability policy

- Objective
 - Financial stability: The financial system can maintain its basic functions (to submit payments, transform saving into financing, and allow risk sharing and risk management) and has sufficient resilience to disturbances that threaten these functions
- Instruments:
 - Normal: Supervision, regulation, reports
 - Crisis: Lending of last resort, variable-rate lending longer maturities (credit easing), guarantees, capital injections, asset purchases, bank resolution, ...

Financial-stability policy

- Authorities
 - In Sweden, responsibility is shared
 - Normal times (crisis prevention): FSA, Riksbank, MoF
 - Crisis times (crisis management): FSA, Riksbank, SNDO, MOF
 - Varies across countries
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Monetary policy and financial-stability policy

- Different policies: Objectives, instruments, authorities
 - Do they need to be coordinated?
 - Financial stability policy failed
 - Did monetary policy fail?
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What caused the financial crisis?

- Macro conditions: Global imbalances, falling long and short real interest rates, Great Moderation, underestimation of risk, credit expansion (Bean 2009, EEA Schumpeter Lecture)

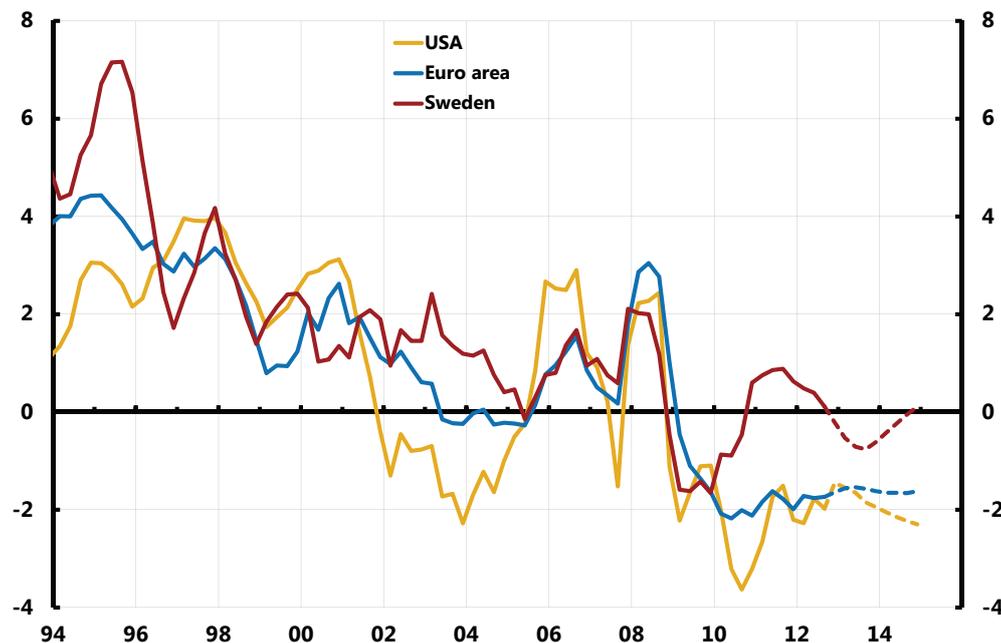
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Swedish 5-year zero-coupon real rate and single 5-year real bonds



Real 1-year policy rates for the US, Euro area and Sweden

Percent



Sources: ECB, IMF, OECD, Statistics Sweden and the Riksbank 13

What caused the financial crisis?



- Macro conditions: Global imbalances, falling long and short real interest rates, Great Moderation, underestimation of risk, credit expansion (Bean 2009, EEA Schumpeter Lecture)
- Distorted incentives: Extreme leverage levels and risk-taking, lack of due diligence, securitization of mortgages, fraud
- Regulatory and supervisory failures: Underestimation or disregard of the fragility of the financial sector
- Information problems: Complex asset-backed securities, huge hidden balance-sheet liabilities
- Specific circumstances: US housing policy, subprime lending
- Little or nothing to do with monetary policy

Lessons from the financial crisis?

- Price stability not enough for financial stability
 - Interest-rate policy not enough for financial stability (monetary policy cannot prevent financial crises)
 - It was financial-stability policy that failed, not monetary policy
 - A new reformed financial-stability policy is needed
 - Flexible inflation targeting worked fine before, during, and after the crisis (when not used to restrict household debt)
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Should monetary policy be used to restrict household debt and housing prices?

- (1) Is household debt and/or housing prices a problem?
 - Are they a threat to financial stability and/or the macro economy?
 - Is the level of household debt and housing prices sustainable?
 - Is households' resilience to shocks sufficient?
 - (2) If household debt and/or housing prices are a problem, are monetary policy and the policy rate a good instrument?
 - Are there better available instruments with less collateral damage?
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Are monetary policy and the policy rate effective means to affect household debt and housing prices?



- Household debt and housing prices correlated – most of the debt is mortgages
- What is the effect of monetary policy on housing prices?

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Are monetary policy and the policy rate effective means to affect household debt and housing prices?



- Claussen, Jonsson and Lagerwall 2011
 - Use monetary policy to keep Swedish housing prices on trend 2004-2010
 - Prevent housing prices to increase 20 % above trend
 - Requires policy-rate increase of up to 5 p.p. some years
 - Accumulated loss of GDP of about 12 percent
 - Increase in unemployment of about 6 p.p.
 - Inflation on average 3 p.p. lower during 2004-2010
 - 10 % lower housing prices requires 6 % lower GDP and 3 p.p. higher unemployment (w/ Okun coefficient of 2)
- Assenmascher-Wesche and Gerlach 2010
 - Data from 18 countries: 10 % lower housing prices requires 4 % lower GDP and 2 p.p. higher unemployment (w/ Okun coefficient of 2)

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Are monetary policy and the policy rate effective means to affect household debt and housing prices?



- Very high collateral damage: Monetary policy and policy rate not effective way to affect housing prices and household debt
- Other instruments more effective
 - Loan-to-value caps
 - Mortgage-rate tax deductions
 - Property taxes
 - Capital requirements on mortgages for banks, risk weight on mortgages
- Real house prices, household balance sheet part of real economy, structural relations
 - Monetary policy cannot normally affect the real economy and structural relations in a sustainable way

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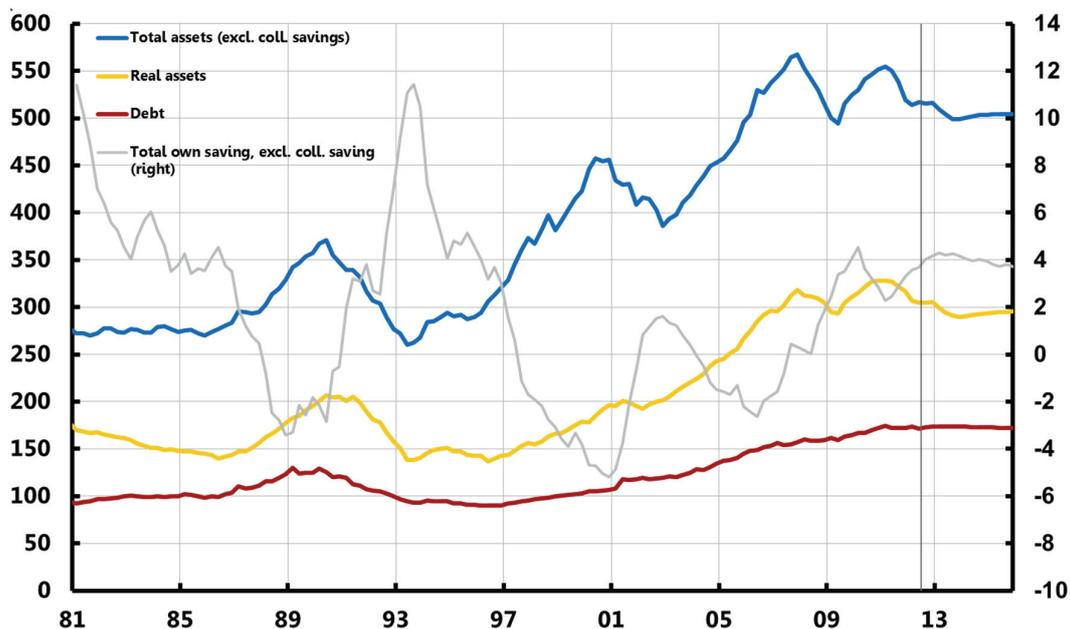
Is household debt and housing prices a problem? Are they at sustainable levels?



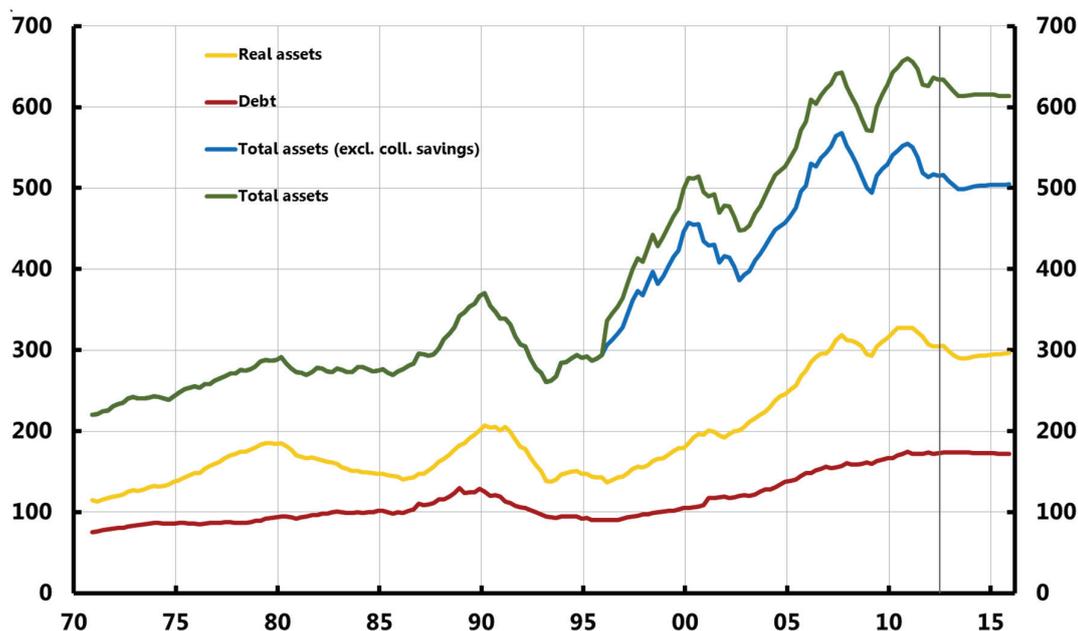
- High savings ratio and low leverage (debt 1/3 of total assets excl. coll. pensions, net wealth is 2/3, 70%)
- According to Basel III commercial banks must have minimum capital/assets 3 %

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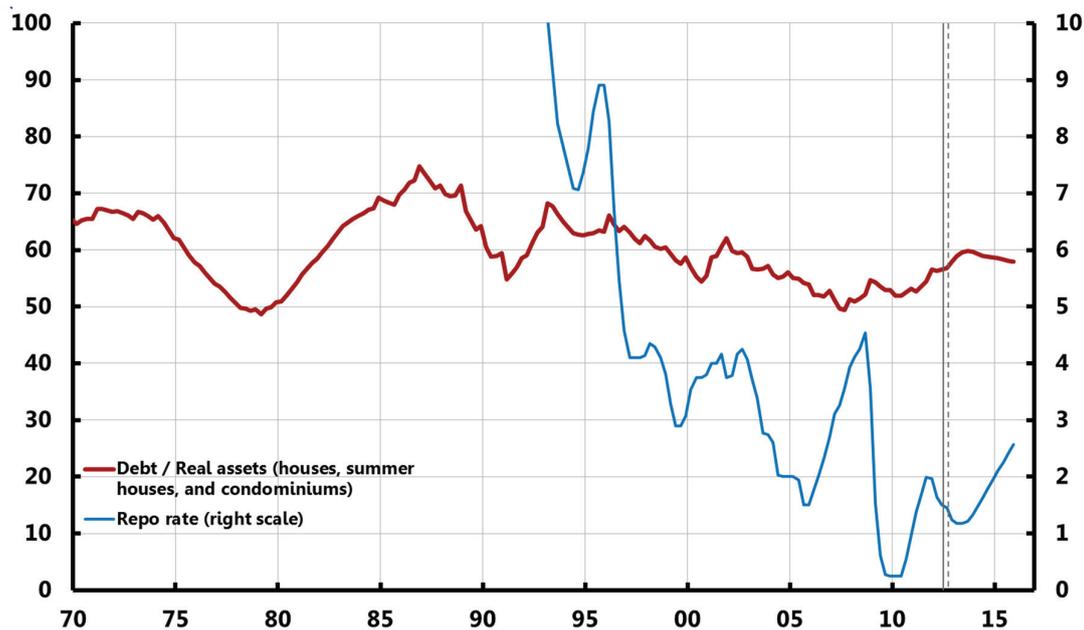
Household assets, saving (excl. coll. saving) and debt relative to disposable income



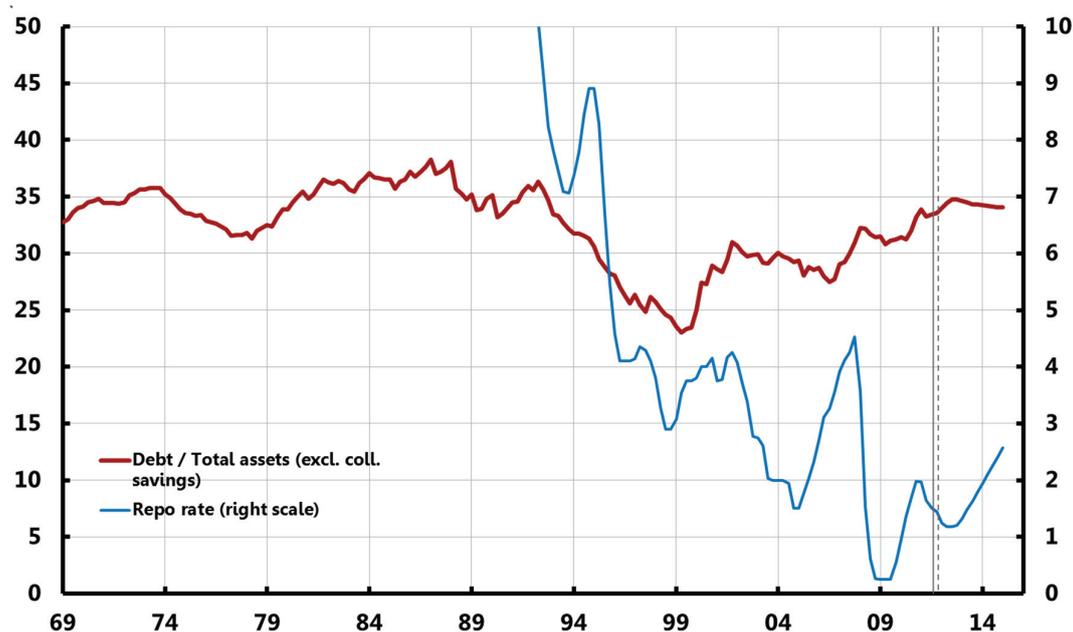
Household assets (incl. coll. savings) and debt relative to disposable income



Household debt over real assets and repo rate



Household debt over total assets (excl. coll. savings) and repo rate



Household debt over total assets and repo rate



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Is household debt and housing prices a problem? Are they at sustainable levels?

- High savings ratio and low leverage (debt 1/3 of total assets excl. coll. pensions, net wealth is 2/3)
- According to Basel III commercial banks must have minimum net wealth/capital 3 %
- Housing prices consistent with fundamentals: High demand, little construction, no construction
 - Rising disposable income, a negative trend in real mortgage rates, property and wealth taxes removed, ceiling on local housing fees, ...
 - Little construction, no construction boom
 - Ever a housing/property crisis w/o a construction boom?
 - Excess supply of housing very unlikely

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Is household debt and housing prices a problem? Are they at sustainable levels?

- Current debt/disp.inc. 170%. Sustainable?
- What net debt service (primary surplus) required to keep constant debt/disp.inc.?
- Assume high mortgage rate 7%, after tax $(1-0.3)*7 \approx 5\%$
- Assume nominal disp.inc. growth 4% (2% real, 2% inflation)
- Net debt service = $(5\% - 4\%) * 170\% = 1.7\%$ of disp.inc.
- Not pay rent (20% of disp.inc.) but utilities, garbage coll. etc.
- Debt ratio not sufficient statistic
- Whole balance sheet matters
- For macroeconomic effects, average household matter

Are borrowers and lenders sufficiently resilient to disturbances?

- Lenders (commercial banks) scrutinized in the Riksbank's Financial Stability Report: Well capitalized, Basel III requirements fulfilled in advance, resilient to shocks
- New borrowers scrutinized in Finansinspektionen (2012)
 - New borrowers most vulnerable
 - The 85% LTV cap is effective, LTVs falling for first time since 2002
 - Strong repayment capacity
 - Pass stiff stress tests: 20 p.p. rise in unemployment, 40% fall in house prices, only 10 percent of new borrowers have LTV above 100% and deficit in left-to-live-on analysis
 - More resilience than in 2010 report

Are mortgages a threat to financial stability?



- No, credit losses very unlikely
 - Full recourse, thorough credit reviews, household repayment capacity high (two working household members, unemployment insurance)
 - Very small losses even during the crisis in the early 90s

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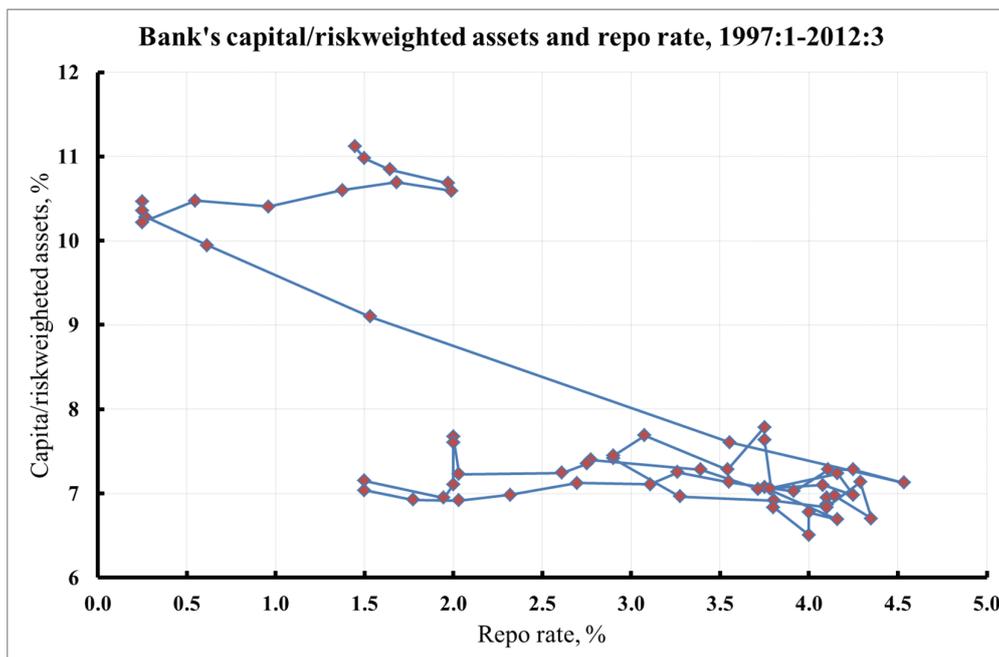
A related argument: The “normalization” argument



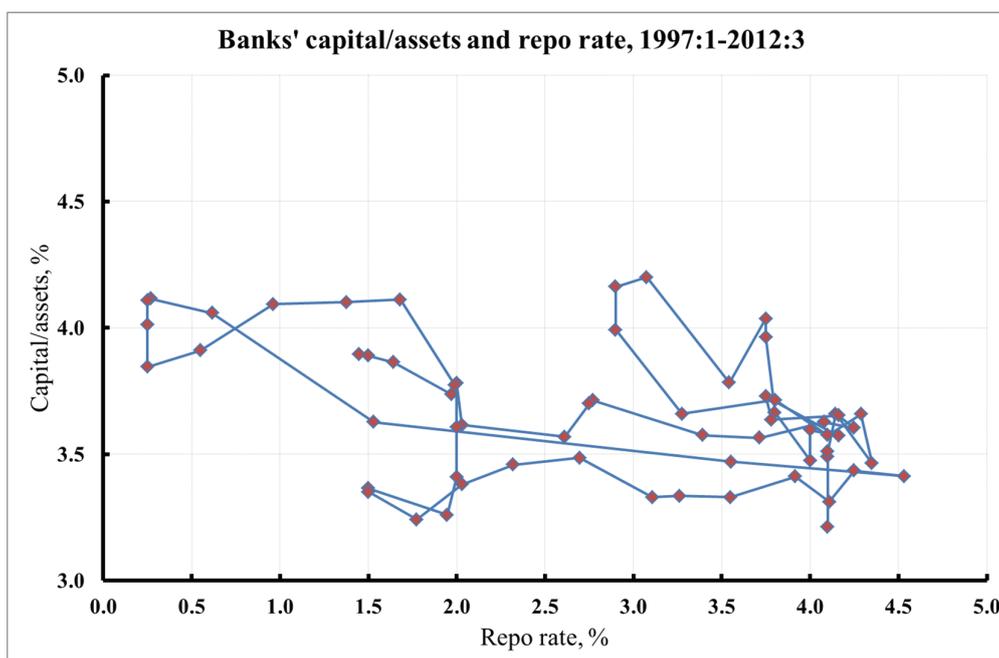
- Low levels of interest rates leads to (unspecified) financial imbalances and threats to financial stability
- Therefore, avoid low policy rate for long
- But long trend towards lower real interest rates
- No evidence that low interest rates lead to more leverage or risk-taking in Sweden
- Four commercial banks in oligopoly, no shadow-banking sector
- Leverage not correlated with the policy rate

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Policy rates and banks' leverage: a problem in Sweden?



Policy rates and banks' leverage: a problem in Sweden?



The “normalization” argument

- Even if more risk-taking: What is optimal level?
 - Literature on risk-taking channel (Adrian-Shin, Diamond-Rajan): Confusion between nominal policy rate and real interest rate
 - Monetary policy can only achieve temporary deviations of actual short real rate from neutral real rate (overall level of real rates). The latter depends on global imbalances etc, largely independent of MP
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What are effective instruments to affect borrowers’ and lenders’ resilience

- Resilience: Buffers, correct info, stress tests
 - Borrowers: Credit reviews, information, LTV caps (LTI caps), payment capacity measures, stress tests,
 - Lenders: Capital requirements: capital/unweighted assets, capital/riskweighted assets, cyclical buffer, systemic buffers, LCR, NSFR
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Conclusions for monetary policy

- Do not treat the policy rate as an additional target variable. Do not “normalize” policy rate.
- Do not treat housing prices and household debt as additional target variables
- Focus on stabilizing inflation around target and unemployment around long-run sustainable level
- Monetary policy should normally be the last line of defense of financial stability, not first line (except in special circumstances w/ very deficient financial-stability policy)
- Else poorer outcome for inflation and unemployment, less transparency, more difficult to hold Riksbank accountable