

Monetary Policy, Macroprudential Policy, and Household Debt

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Readings

- “Monetary Policy and Macroprudential Policy: Different and Separate?”
- “The Future of Monetary Policy and Macroprudential Policy”

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Topics

1. The relation between monetary policy and macroprudential policy: Different and separate?
2. Macroprudential policy, housing prices, and household debt
 - The importance of distinguishing between good and bad debt
 - A problem with Swedish macroprudential policy

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The relation between monetary policy and macroprudential policy: Different and separate?

- Monetary and macroprudential policies very different
- Different objectives:
 - “Price stability and full employment”
 - “Financial stability”
 - Definition: The financial system can fulfill its three main functions (transforming saving into financing, allowing risk management, and transmitting payments) with **sufficient resilience** to disturbances that threaten these functions.
 - The crucial part of the definition is sufficient resilience. In the future, there will unavoidably be disturbances and shocks to the financial system, very likely from unanticipated directions and of unanticipated kinds. The crucial thing is then that there is sufficient resilience to disturbances, so as to limit the probability and magnitude of financial crises.

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Different

- Different instruments
 - MP: Policy rate, communication, unconventional policies,...
 - MaP: Regulation, communication,...
- Different transmission mechanisms
 - Driving metaphor:
Not: MP accelerator and MaP brake (Borio).
 - Instead: MP steady speed, accelerator uphill, break downhill
 - MaP: Airbags activated, safety belts on
- Different responsible authorities
 - MP: Central banks
 - MaP: Central banks, FSAs, sometimes shared responsibility

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Different and separate

- Different relative effects
 - MP strong effects on inflation and unemployment; normally weak and unsystematic (varying sign) effects on financial stability
 - MaP strong effects on financial stability; normally weak and unsystematic effects on inflation and unemployment
- Conditions normally satisfied for successful separation: Nash equilibrium
 - Each policy using its instruments to achieve its objectives, taking the conduct and effects of the other policy into account
- Separation also implies stronger accountability and incentives to achieve the targets
- Examples
 - UK: Bank of England, two separate committees, MPC and FPC
 - Sweden: Riksbank MP, Finansinspektionen MaP
 - Many countries: Instruments split between authorities

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Macroprudential policy:

Importance of distinguishing good and bad credit

- Not preventing bad credit growth may have large costs
- Preventing good credit growth may also have large costs
- Only a third or quarter of credit booms end in a crisis
- Bad credit is “excessive” relative to fundamentals, due to market failures, too low lending standards, insufficient debt-service capacity and resilience of borrowers, exuberance, overvalued housing, ...
- Good credit is consistent with fundamentals (rising incomes and demand for housing, sustained falls in interest rates), appropriate lending standards, sufficient debt-service capacity and resilience of borrowers, realistic expectations, reasonably valued housing, ...

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Much is good with Swedish macroprudential policy

- Finansinspektionen (FI) has taken a series of actions to make sure that banks are well capitalized (currently 24% of RWA, 22% CET1) and very resilient in stress tests
- FI Mortgage Market Report with stress tests of households
 - Households have substantial and over time increasing debt-service capacity and resilience to house-price falls, interest increases, and income losses due to unemployment
 - LTV cap of 85% (2010)
 - Average LTV 63% for new mortgages, 55% for total stock.

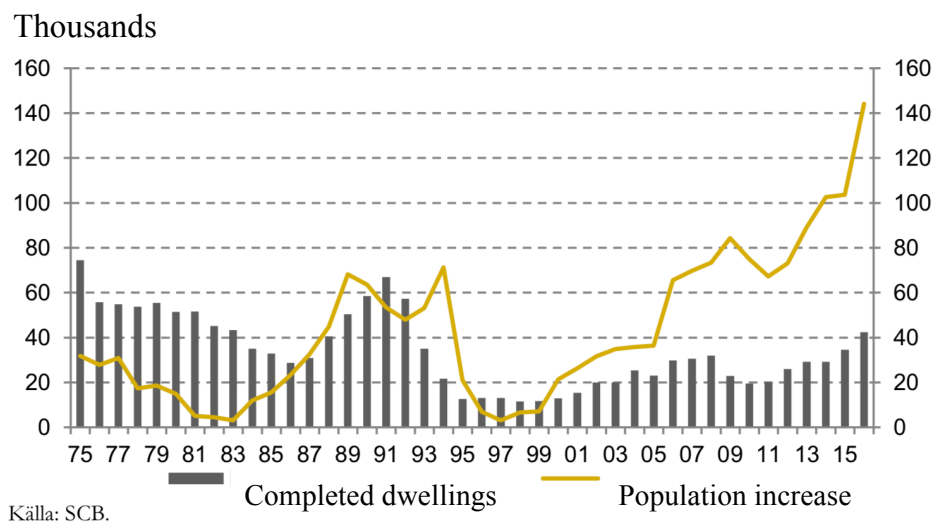
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A structural problem in housing market in the main cities

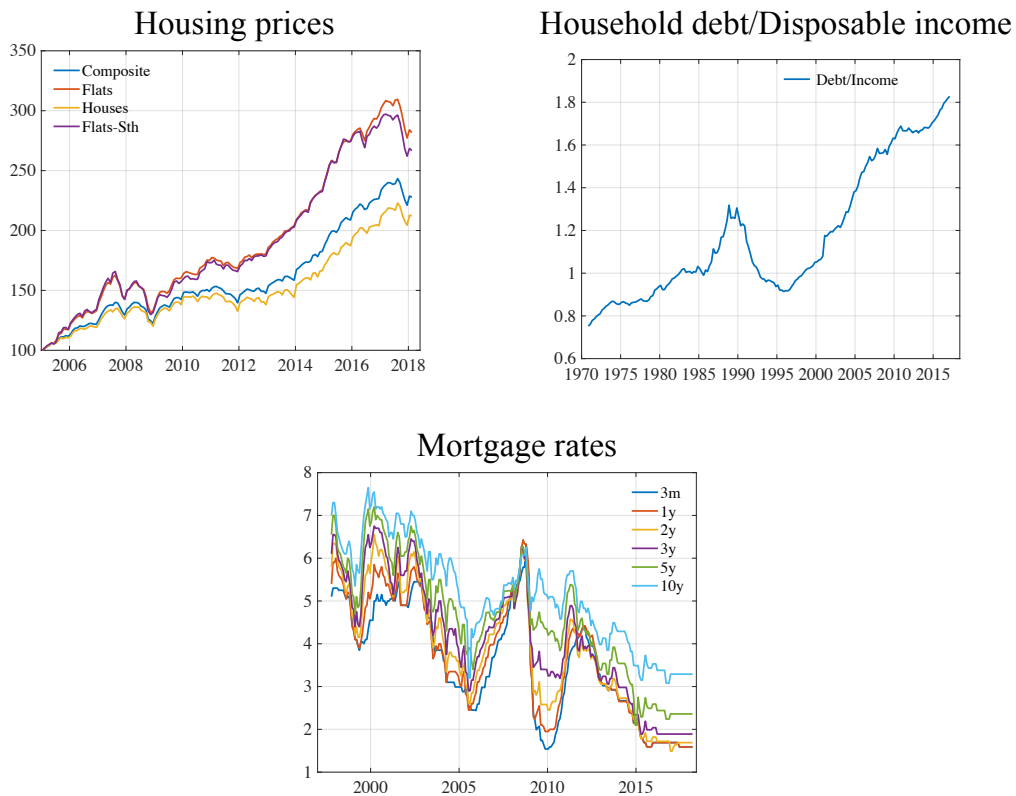
- Demand is increasing because of rapid urbanization, rising incomes, falling mortgage rates, lack of a functioning rental market (rent control),...
- Supply is insufficient because of restrictions on land use, building regulations, regional planning problems,...
- Housing prices and debt have risen

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Supply and demand of housing units in Sweden

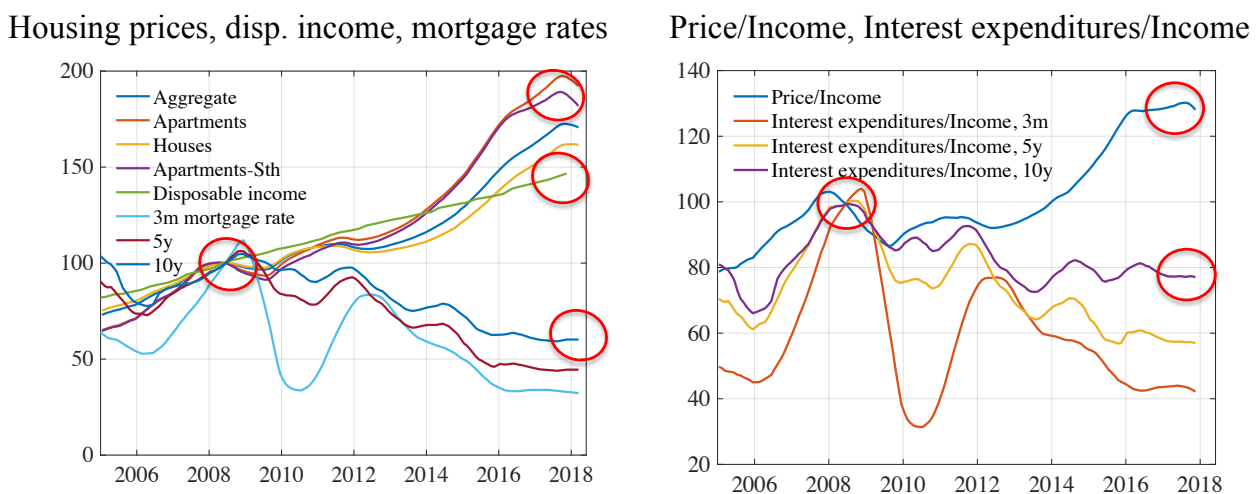


Housing prices, mortgage rates, and household debt



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Housing prices, disposable income, and mortgage rates

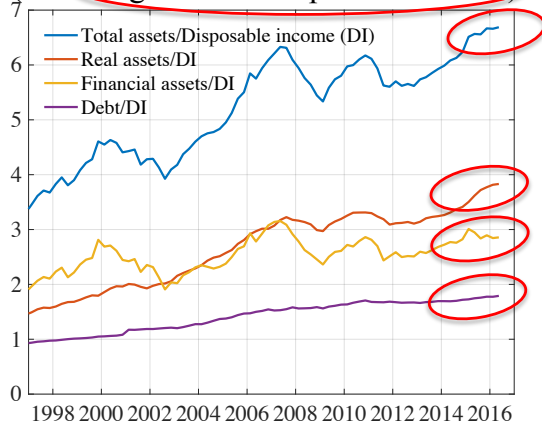


- Stock/Flow problematic (PriceTI, DTI)
- Stock/Stock (LTV) and Flow/Flow (DSTI, UCTI) better

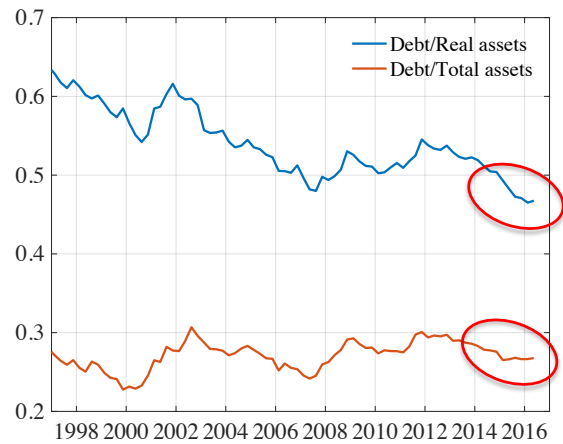
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Household assets and debt

Household assets and debt to income
(excl. large collective-pension claims)



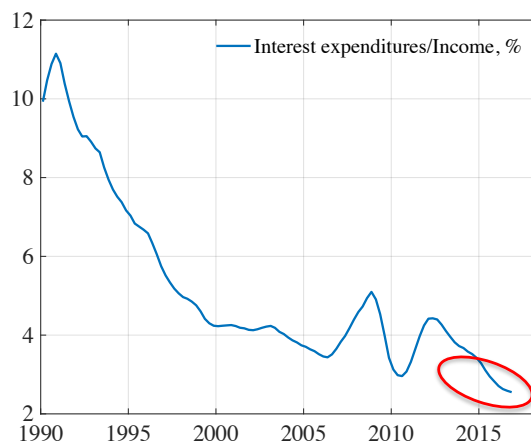
Household debt to real and total assets



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Household interest expenditures to disposable income

Interest expenditures/Income



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FI is nevertheless worried about household debt growth and housing prices

- FI tries to reduce household debt growth above income growth, by **effectively tightening lending standards** and thereby reducing credit supply
- **Introduced amortization requirements** (June 2016, March 2018), **induced and welcomed tighter lending standards of banks** (banks including amortization requirements and use high **7% interest rate** in their discretionary-income calculations and applying **new or lowered DTI caps**)
- These tighter lending standards **exclude 84% of 25-29-year-olds** from borrowing to buy an average studio in Stockholm

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FI has difficult making a case for the tightening: No/little risk to financial stability

- “FI’s judgment is **that the financial-stability risks associated with households’ debt are relatively small.**
- ... This is because the mortgage holders generally have good possibilities to continue to pay their interest and amortization also if interests rise or incomes fall.
- ...The households have also on average good margins to manage a fall in housing prices.
- ...In addition, the Swedish banks are judged to have satisfactory capital buffers if credit losses nevertheless would materialize.”

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Instead “elevated macro risk”

- FI: “Instead the risks presently associated with households’ debt mainly concern that highly indebted households may reduce their consumption substantially if (1) interest rates rise or (2) incomes fall, and that this might in turn reinforce a future economic downturn.
- ... high and rising debt-to-income ratios among many borrowers therefore imply an elevated macroeconomic risk.” [Numbers added.]

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(1) Interest sensitivity of consumption

- Hhold cash-flow more interest-sensitive with more debt
- But interest rates are endogenous, not exogenous
- In bad times, interest rates are lower, cash-flow better (different from 90s crisis and fixed exchange rates)
- High debt and variable interest rates provide insurance against bad times: An automatic stabilizer
- Stronger cash-flow channel in monetary policy, easier for Riksbank to stabilize consumption, aggregate demand (smaller policy-rater changes needed)
- Risk for recession may actually fall, not rise

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(2) **Income sensitivity of consumption 1**

- FI for support refers to **three studies of experience in Denmark** (Andersen et al. 2016), the **U.K.** (Bunn & Rostom 2014), and the **U.S.** (Baker 2017)
- But **these studies contradict FI**:
- Andersen: “our results **do not support** any interpretation of the data that involves a negative causal effect of a high debt level on subsequent consumption growth”
- Baker: “debt has **little or no independent relationship** with the [income] elasticity of spending when controlling for liquidity and the ability of households to access credit. ... Overall, these results indicate that **the primary reasons consumption responses are higher among highly indebted households are credit and liquidity constraints.**”
- Tighter lending standards **increase** credit and liquidity constraints: They may cause the problem they are supposed to solve!

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(2) **Income sensitivity of consumption 2**

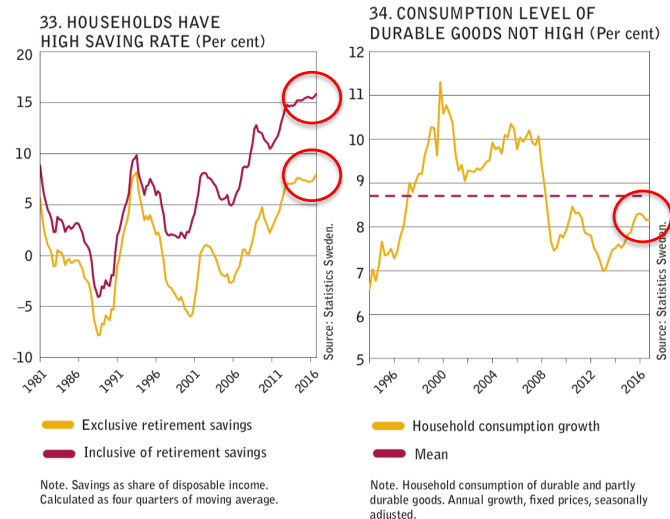
- Instead, the consumption that fell in Denmark, the U.K., and the U.S. was mainly **unsustainable overconsumption** financed by **debt increases, mortgage equity withdrawals** (MEWs), which could not continue when the crisis came
- Shows up in **low savings rate** (undersaving)
- If indication of unsustainable overconsumption financed by MEWs: Problem!
- **But no evidence of unsustainable overconsumption in Sweden**

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(2) Income sensitivity of consumption 3

No evidence of unsustainable overconsumption in Sweden

- FI: “Despite optimistic expectations and high margins between income and expenses, households are currently being **relatively cautious**. The total household **saving rate is high and has increased** even more over the past few quarters (see Diagram 33). Household **consumption of durable goods**, which is an indicator of household optimism, is **in line with the historical average** (see Diagram 34).”



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FI:s final argument in defending the policy

- The Director General (op-ed):
“Households’ debt is still increasing faster than their income and housing prices are still high.
Consequently, the need for action remains.”
- Implication: All debt growth above income growth is bad
- But debt growth above income growth is natural for several years when housing prices have risen (only a fraction of the housing stock is turned over at higher prices each year).
- And housing prices are hardly overvalued, and households are hardly over-leveraged.

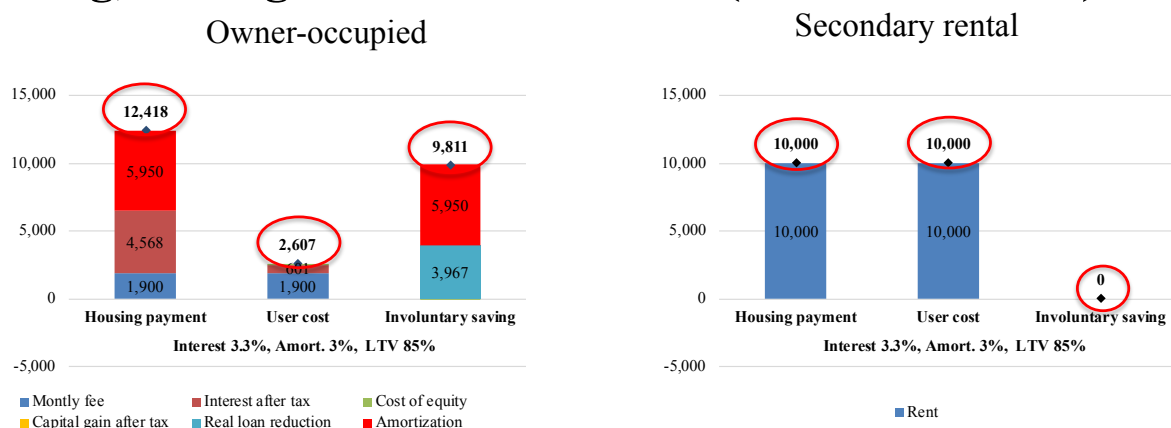
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Consequences of FI:s policy

- Large difference between housing payment and user cost, the difference being a large involuntary saving
- Debt-service-to-income ratio extremely frontloaded
- Tighter lending standards means that 84% of 25-29-year-olds excluded from borrowing to buy an average Stockholm studio
- Those excluded may have to go the secondary rental market with very high rents and short leases
- Households' resilience lower with amortization requirements (fixed payments higher share of income)
- Households have to save in the form of more housing equity instead of in a portfolio of financial liquid assets that facilitates consumption-smoothing and increases resilience

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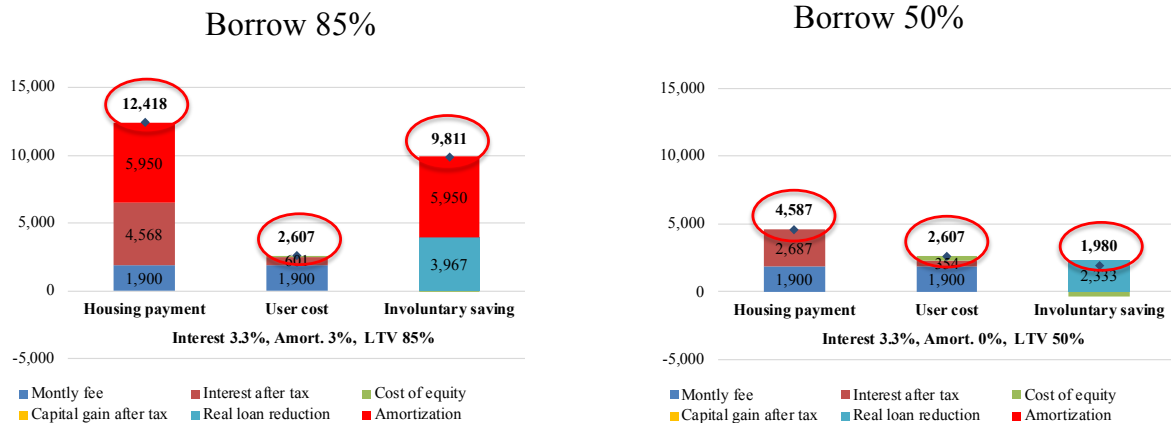
Monthly housing payment, user cost, and involuntary saving, average Stockholm studio (SEK/EUR ≈ 10)



- Large difference between high housing payment and low user cost, high involuntary saving
- Secondary rental: High housing payment and user cost, no involuntary saving

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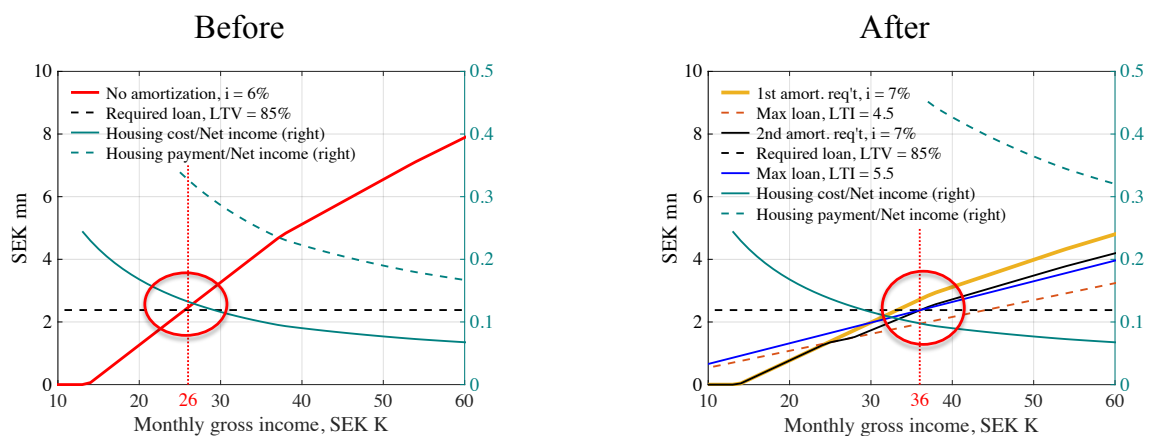
Monthly housing payment, user cost, and involuntary saving only borrow 50%



- Large difference between high housing payment and involuntary saving when borrowing 85% and 50%

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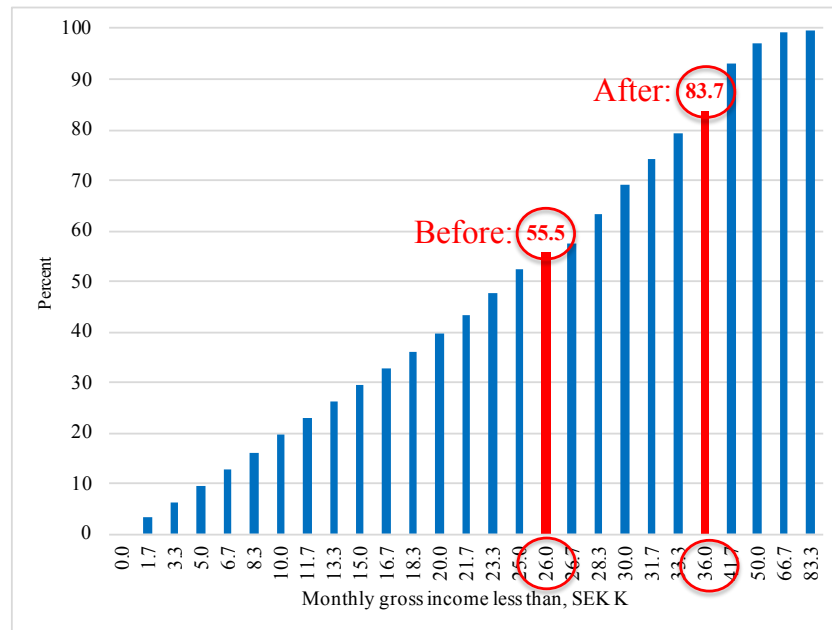
Who can borrow, before and after tighter lending standards?



- Before: Minimum income SEK 26,000
- After: Minimum income SEK 36,000

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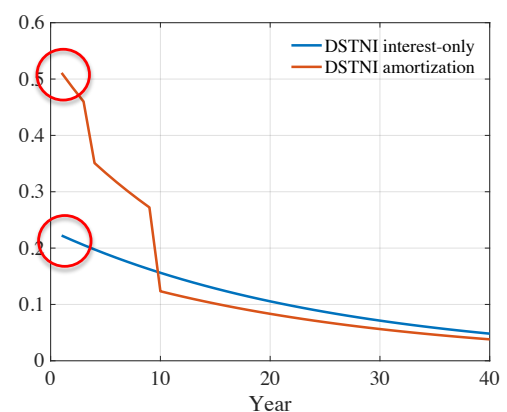
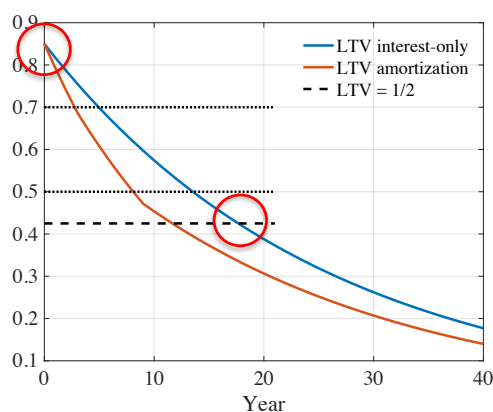
Share of 25-29-year-olds with too little income to borrow to buy an average Stockholm studio: Before and after



(SEK/EUR \approx 10)

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LTV and DSTI ratios without and with amortization



- Automatic amortization: 2% growth + 2% inflation = 4% amortization
- LTV and DSTI halve in 18 years
- Would the optimal amortization rate be larger than that?
- With amortization, extremely frontloaded debt service, borrowers less resilient

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Lessons from Swedish experience

- Important to distinguish good and bad credit growth
- Costly not to prevent bad growth; costly to prevent good growth
- Distinguishing good and bad household debt growth requires expertise in housing economics, the housing market, and household finance
- Housing and mortgage market very different in different economics: No easy generalizations. Deep analysis of a given housing and mortgage market needed
- Support of a thorough cost-benefit analysis required (including welfare and distributional effects)
- Tighter lending standards not the right solution to a fundamentally structural problem: Rising housing demand and insufficient supply
- Use the right policy for a given problem
- Governance issues
 - Committee arguably less likely to make mistakes than single decisionmaker
 - Mechanisms for evaluation and accountability
 - Use governance experience from monetary policy

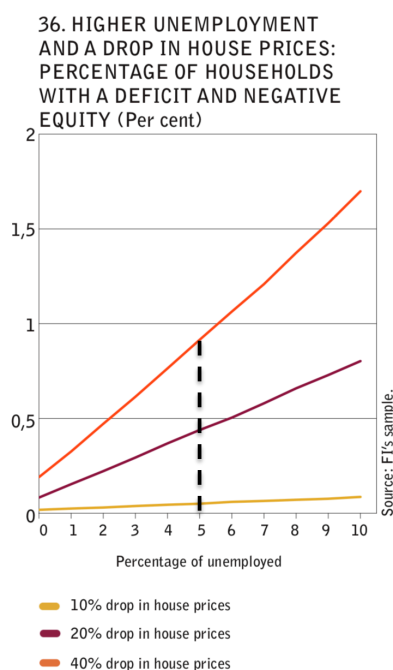
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Lessons from Swedish experience 2

- Paragraph in FI instruction (Dec 2013): FI is instructed “to take measures to counteract financial imbalances with a view to stabilizing the credit market.”
- Rubber paragraph: What is meant by “financial imbalances” (and “financial balance”) and “stabilizing the credit market”?
- An objective should be clear and not open to interpretation
- Better formulation in ESRB 2013 recommendations on intermediate objectives: “to mitigate and prevent **excessive** credit growth and leverage.”
- Comes with ESRB explanation that excessive and intermediate objectives need to be derived from **market failures**

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A stress test in The Swedish Mortgage Market 2018



- Housing price fall, negative equity
- Unemployment increase, negative discretionary income (left to live on)