Monetary policy and financial stability

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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?

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

- 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)
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.”

- 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, …

- Authorities
  - In Sweden, responsibility is shared
    - Normal times (crisis prevention): FSA, MoF, (Riksbank)
    - Crisis times (crisis management): FSA, Riksbank, SNDO, MoF
  - Varies across countries
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?

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 – lean against the wind)

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

- Household debt is high relative to disposable income
- But debt ratio has been stable since LTV cap of 85 % in Oct 2010

Household debt-to-income ratio
(% of disposable income)

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- And debt is normal relative to assets
Is household debt and housing prices a problem? Are they at sustainable levels?

- Household debt is high relative to disposable income
- But debt ratio is stable since LTV cap of 85% in Oct 2010
- And debt is normal relative to assets
- Housing expenditure is not high (15-20% of disposable income)
- Average LTV for new mortgages has stabilized around 70%
- Housing prices have not increased faster than disposable income since 2007
- Housing prices are in line with fundamentals (disposable income, mortgage rates, tax reductions, rapid urbanization, little construction…)

And, the FSA has:

- introduced an LTV cap of 85%
- introduced higher risk weights on mortgages (25%)
- introduced higher capital requirements (16% CET1)
- proposed individual amortization plans for borrowers
- produces an annual mortgage market report, according to which

  - lending standards are high
  - households’ repayment capacity is good
  - households’ resilience to disturbances in the form of mortgage rate increases, housing price falls, and income falls due to unemployment is good

- Macroprudential tools and policy are arguably effective and good in Sweden
Riksbank’s case for leaning against the wind

- Higher debt could imply (1) a higher probability of a future crisis and/or (2) a deeper crisis if it occurs
- Hence, a tradeoff between (1) tighter policy now with lower debt but worse macro outcome now and (2) worse expected macro outcome in the future
- Worse macro outcome now is an insurance premium worth paying
- Is that true?
- The answer can be found from the numbers in the Riksbank’s own boxes in MPRs of July 2013 and February 2014, plus Schularick and Taylor (2012) and Flodén (2014)

**Benefit (1) of 1 pp higher policy rate:**
Lower probability of a crisis

- Schularick and Taylor (2012): 5 % lower real debt in 5 yrs implies 0.4 pp lower probability of crisis (average probability of crises about 4 %)
- Riksbank MPR Feb 2014, box:
  - **Benefit:** Expected lower future unemployment: 0.0002*5 = 0.001 pp
  - Compare to **cost:** Higher unemployment rate now: 0.5 pp

**Cost of 1 pp higher policy rate:**
0.5 pp higher unemployment rate in next few years

**Benefit (2) of 1 pp higher policy rate:**
Smaller increase in unemployment if crisis

- Flodén (2014): 1 pp lower debt ratio may imply 0.02 pp smaller increase in unemployment rate in crisis
- Riksbank MPR Feb 2014, box:
  - **Benefit:** Expected lower future unemployment: 0.0009 pp
  - Compare to **cost:** Higher unemployment rate now: 0.5 pp
Summarize cost and benefit of 1 pp higher policy rate

<table>
<thead>
<tr>
<th>Cost: Higher unemployment during the next few years, percentage points</th>
<th>0.5</th>
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<tbody>
<tr>
<td>Benefit: Lower expected future unemployment, percentage points</td>
<td></td>
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<tr>
<td>1. Because of lower probability of a crisis</td>
<td>0.001</td>
</tr>
<tr>
<td>2. Because of a smaller increase in unemployment in a crisis</td>
<td>0.0009</td>
</tr>
<tr>
<td>Total benefit, percentage points</td>
<td>0.0019</td>
</tr>
<tr>
<td>Total benefit as a share of the cost</td>
<td>0.0038</td>
</tr>
</tbody>
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- Riksbank case does not stand up to scrutiny

More costs: Inherent flaw in leaning against the wind:
Inflation below credible target causes negative real effects

- Leaning: Lower inflation than target
- Inflation expectations anchored at target
- Lower average inflation than expected causes real effects
- Higher unemployment
- Higher real debt for households (additional cost of leaning against the wind)
- Fisherian “debt deflation”: Inflation less than expected, rather than deflation per se

CPI inflation and household inflation expectations

Note: Dashed lines are 5-year trailing moving averages

The real value of an SEK 1 million loan taken out in Nov 2011, actual and for 2 percent inflation

- Real value, actual (left)
- Real value, 2% inflation (left)
- Real value, increase (right)

5.6% higher real debt since Nov 2011
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

Conclusions for monetary policy

- 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 central bank accountable