Financial-stability policy: The Swedish experience

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The views expressed in this presentation are those of the author and do not necessarily represent those of the IMF or IMF policy.

Outline

- The institutional design of financial-stability policy in Sweden
- Actual financial-stability policy
- The Riksbank’s leaning against the wind
Institutional design of financial-stability policy

- In August 2013, the Swedish government announced new strengthened framework for financial stability in Sweden
- Clarified the roles and responsibilities of the relevant authorities
- Created a Financial Stability Council

The role of the Swedish FSA, *Finansinspektionen*

- Has main responsibility for micro- and macroprudential policy
- Controls all micro- and macroprudential instruments (including the counter-cyclical capital buffer)
- Efficiency and accountability are the reasons for the main responsibility and all instruments in one authority
- Since some political (distributional) consequences (for instance, LTV ratios), financial-stability policy ultimately the government’s responsibility (the FSA is an authority under the government).
A new Financial Stability Council

- Chair: Minister of Financial Markets
- Members: Director General of the FSA, Director General of the National Debt Office (Bank Resolution Authority), Governor of the Riksbank
- Forum for discussions between Gov’t, FSA, NDO, and Riksbank about financial stability and any need for actions
- Normally 2 meetings per year; published minutes after 2 weeks. Office and working group
- No decisions in FSC: Each authority decides within its area of responsibility
- In crises, FSC leads crisis management

FSA actions

- Micro- and macroprudential regulation and supervision
- Semi-annual Financial Stability Report
- Annual Mortgage Market Report
  - Individual data on new mortgages: Monitors and reports lending standards, debt-service capacity, borrowers’ resilience to disturbances (increased mortgage rates, housing price falls, income losses due to unemployment)
    Link to slide 38
- Introduced 85% LTV ratio in Oct 2010 (LTV stable afterwards)
- Recommended individually adjusted amortization plans
- Increased risk weights on mortgages to 25%
- Introduced 16% CET1 capital requirement for systemically important banks (Note IMF team preliminary results: 15% capital would have avoided 80% of banking crises in advanced economies since 1970)
The Riksbank

- No change in objectives: Price stability (2% CPI inflation target). Support general economic policy with the aim to achieve sustainable growth and high employment. Promote safe and efficient payment system.
- No micro- or macroprudential tools (lending of last resort during crises)
- Financial-stability department
- Semi-annual Financial Stability Report
- Active in Financial Stability Council
- Active in public debate
- Controversial aggressive leaning against the wind 2010-2012

The Riksbank’s leaning against the wind

- Quite aggressive leaning since summer 2010, because of concerns about household debt
- Outcome April 2015: Zero/ negative inflation, very high unemployment (8%), most likely higher real debt, policy rate -0.25%
- Cost of leaning: Worse macro outcome next few years (higher unemployment, lower inflation)
- Benefit: Better expected future macro outcome (less debt growth, lower probability a future crisis, less severe crisis)
- No cost-benefit analysis done before policy
- Assumption (gut feeling) that benefits are larger than costs
Policy rates in Sweden, UK, and US; Eonia rate in euro area

Inflation in Sweden, euro area, UK, and US
Real policy rate in Sweden, UK, and US, real Eonia rate in euro area

Cost-benefit analysis 1
- Consider cost and benefit in terms of unemployment of 1 pp higher policy rate for 4 quarters
- Cost: 0.5 pp higher unemployment next few years
Cost-benefit analysis 2

- Benefit 1: Lower probability of crisis
  - 0.25% lower real debt in 5 years (RB)
  - 0.02 pp lower probability of a crisis (ST), 5 pp higher unemployment in crisis (RB)
  - 0.001 pp lower expected future unemployment
- Benefit 2: Lower increase in unemployment in crisis
  - 0.44 pp lower DTI in 5 years (RB)
  - 0.009 pp lower increase in unemployment in crisis (Flodén)
  - Assume high probability 10% of crisis (ST 4%)
  - 0.0009 pp lower expected future unemployment
- Total benefit: 0.0019 pp lower expected future unemployment

Cost-benefit analysis 3

- Benefit: 0.0019 pp lower expected future unemployment
- Cost: 0.5 pp higher unemployment next few years
- Benefit/Cost $\approx 0.4\%$
- Cost/Benefit $\approx 250$

- Additional cost: Inflation below households’ expectations increases real debt burden
- The real value of a given nominal debt taken out in Nov 2011 is now more than 6 percent lower than if inflation had been 2%
Conclusions 1

- Swedish institutional design of financial-stability policy may work well
- Other designs may also work well
- Important to consider efficiency and accountability
- Avoid splitting responsibility and instruments across authorities

Conclusions 2

- Do not use monetary policy for financial-stability purposes without cost-benefit analysis
- Micro- and macroprudential policy should in most circumstances be much more effective in reducing probability and severity of financial crises
- In practice, most likely no choice but to use micro- and macroprudential policy for financial stability
- Important caveat: Economies and their financial sectors are very different. Must be analyzed individually. Never directly apply conclusions from one economy to other economies
Household debt-to-income ratio
(% of disposable income)
Household debt and assets (excluding collective pensions), % of disposable income

Swedish households' net wealth and debt relative to assets
Swedish households' interest expenditure,
% of disposable income

Household debt ratio, data revisions
Ex post evaluation: Policy-rate increases from summer of 2010 have led to inflation below target and higher unemployment (and probably a higher debt ratio)


Ex ante evaluation: Compare Fed and Riksbank forecasts, June/July 2010

- Riksbank and Fed forecasts quite similar
- Policies very different
  - Fed: Keep policy rate between 0 and 0.25%, forward guidance, prepare QE2
  - Riksbank: Start raising the policy rate from 0.25 to 2% in July 2011
- Riksbank: Premature tightening, Sweden’s 1937

Cost of 1 pp higher policy rate:
0.5 pp higher unemployment rate

![The effect of a 1 pp higher policy rate](image)

Source: MPR July 2013, chapt. 2; Svensson, post on larseosvensson.se, March 31, 2014.

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

- Schularick & 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:

![The effect of 1 pp higher policy rate](image)

Source: Svensson, post on larseosvensson.se, March 31, 2014.

- 1 pp higher policy rate leads to 0.25% lower real debt in 5 years
- Lowers probability of crises by 0.25*0.4/5 = 0.02 pp
- Assume 5 pp higher unemployment in crisis (Riksbank crisis scenario, MPR July 2013, box):

**Benefit (1):**
Expected lower future unemployment: 0.0002*5 = **0.001 pp**

**Cost:**
Higher unemployment rate now: **0.5 pp**
**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:

  ![Graph of the effect of 1 pp higher policy rate](image)

- 1 pp higher policy rate leads to 0.44 pp lower debt ratio in 5 yrs
- Smaller increase in unemployment in crisis: $0.44 \times 0.02 = 0.009$ pp
- With probability of crisis as high as 10 %, divide by 10 (Schularick & Taylor: 4 %)

**Benefit (2):**

Expected lower future unemployment: **0.0009 pp**

**Cost:**

Higher unemployment now: **0.5 pp**

Source: Svensson, post on larseosvensson.se, March 31, 2014.

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**Summarize cost and benefit of 1 pp higher policy rate**

**Table 1. Cost and benefit in unemployment of 1 percentage point higher policy rate during 4 quarters**

<table>
<thead>
<tr>
<th>Cost: Higher unemployment during the next few years, percentage points</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit: Lower expected future unemployment, percentage points</td>
<td></td>
</tr>
<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><strong>Should have been &gt; 1!</strong></td>
</tr>
</tbody>
</table>

- Riksbank’s case does not stand up to scrutiny
Inflation below household’s 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

6.5% higher real debt
Percent increase to February 2015 in the real value of a given loan, compared to if inflation had been 2 percent (depending on when the loan was taken out)

Example of a stress test in FSA’s Mortgage Market Report 2015

- Assume: (1) 10 pp increase in the unemployment rate and (2) 20% housing price fall
- Q: What share of new borrowers do then have (1) a deficit in a LTLO analysis (may have to sell) and (2) an LTV ratio > 100% (must realize a loss)?
- A: Less than 2%
- Q: What if housing prices fall by 40%?
- A: About 3%
- New borrowers are very resilient
- Old borrowers are likely to be even more resilient

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