

# Monetary policy and financial stability

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## Financial Liberalization, Innovation, and Stability: International Experience and Relevance for China

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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.

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## Outline and conclusions

- What can monetary policy achieve?
  - Do not ask too much from monetary policy
  - Monetary policy cannot achieve and maintain financial stability; a separate financial-stability policy (macroprudential policy) is necessary
- What is the relation between monetary policy and financial-stability policy?
  - Monetary policy and financial-stability policy are very different
  - In normal times: Best conducted separately, also when conducted by the same institution
  - But each policy should be fully informed about and take into account the conduct and impact of the other policy
- Should monetary policy lean against the wind to promote financial stability?
  - In Sweden, costs of leaning against the wind may be 250 times the benefit
  - Monetary policy should be the very last line of defense of financial stability

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## **What can – and cannot – monetary policy achieve?**

- MP can stabilize inflation around a given inflation target
- MP can stabilize overall resource utilization around a long-run sustainable rate
  - But that long-run sustainable rate is determined by nonmonetary, structural factors, not by monetary policy
  - Improving the long-run sustainable rate requires structural policies
- MP cannot solve structural problems
  - This requires structural policies

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## **What can – and cannot – monetary policy achieve?**

- MP cannot achieve financial stability
  - A separate financial-stability policy (macroprudential policy) is necessary
  - Price stability does not imply financial stability
  - Interest policy is not enough to maintain financial stability
- “Leaning against the wind” cannot solve debt problems
  - In the Swedish case, benefits of leaning against the wind may be only about 0.4% of costs (should have been more than 100% of costs to justify policy)
- Inherent flaw in leaning against the wind
  - Running inflation below a credible inflation target increases households’ and other agents’ real debt burden

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## **What can – and cannot – monetary policy achieve?**

- Jeremy Stein (2013):  
“[W]hile monetary policy may not be quite the right tool for the job, it has one important advantage relative to supervision and regulation – namely that [the interest rate] gets in all of the cracks.”
- But a modest policy-rate increase will barely cover the bottom of those cracks
- To fill the cracks, the policy rate would have to be increased so much that it would kill the economy.

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## **What can – and cannot - monetary policy achieve?**

- **Do not ask too much of monetary policy**

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## **What is the relation between monetary policy and financial stability?**

- Distinguish economic policies according to
  - (1) objectives,
  - (2) suitable instruments, and
  - (3) responsible authorities
- MP and financial-stability policy (FSP) are clearly separate policies, with different objectives and different suitable instruments, regardless of whether they have the same or different responsible authorities

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## **Monetary policy**

- Objective
  - Flexible inflation targeting: Price stability and real stability
- Instruments
  - Normal times: Policy rate, communication
  - Crisis times: Also unconventional measures, balance sheet policies, FX policy, ...
- Responsible authority
  - Central bank

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## Financial-stability policy

- Objective
  - **Financial stability:** Financial system fulfilling 3 main functions (submitting payments, transforming saving into financing, allowing risk management/sharing) w/ sufficient **resilience** to disturbances that threaten those functions
- Instruments
  - Normal times: Regulation, supervision, macroprudential policy, buffers, capital requirements, LTV caps, LCRs, NSFRs, taxes, deposit insurance, ...
  - Monetary policy cannot ensure sufficient resilience
  - Crisis times: Lending of last resort, liquidity support, capital injections, guarantees, banking resolution, ...
- Authority(ies)
  - Varies across countries: FSA, CB, banking-resolution authority, MoF, ...

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## What is the relation between monetary policy and financial-stability policy?

- Very different policies (objectives, instruments, authorities)
- In normal times: Conducted separately, also when conducted by the same authority
  - But each policy should be fully informed about the conduct and impact of the other policy and take that into account
  - Similar to MP and fiscal policy: Nash equilibrium rather than coordinated equilibrium (rather than joint optimization)
- In crisis times: Full cooperation and joint policies by FSA, CB, MoF, banking-resolution authority, ...

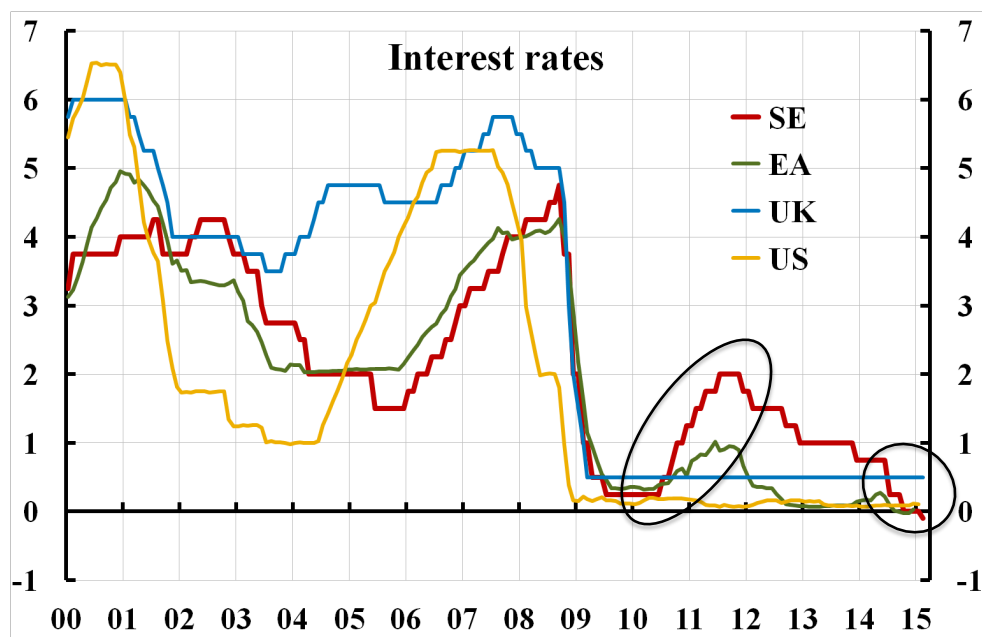
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## Leaning against the wind in Sweden

- Leaning against the wind for financial stability purposes strongly promoted by BIS (incl. latest Annual Report)
- Skepticism against leaning elsewhere, but debate continues
- Sweden a case study: Quite aggressive leaning since summer 2010, because of concerns about household debt
- Outcome now: Zero or negative inflation, very high unemployment, most likely higher real debt, negative policy rate
- Costs and benefits of Riksbank leaning?

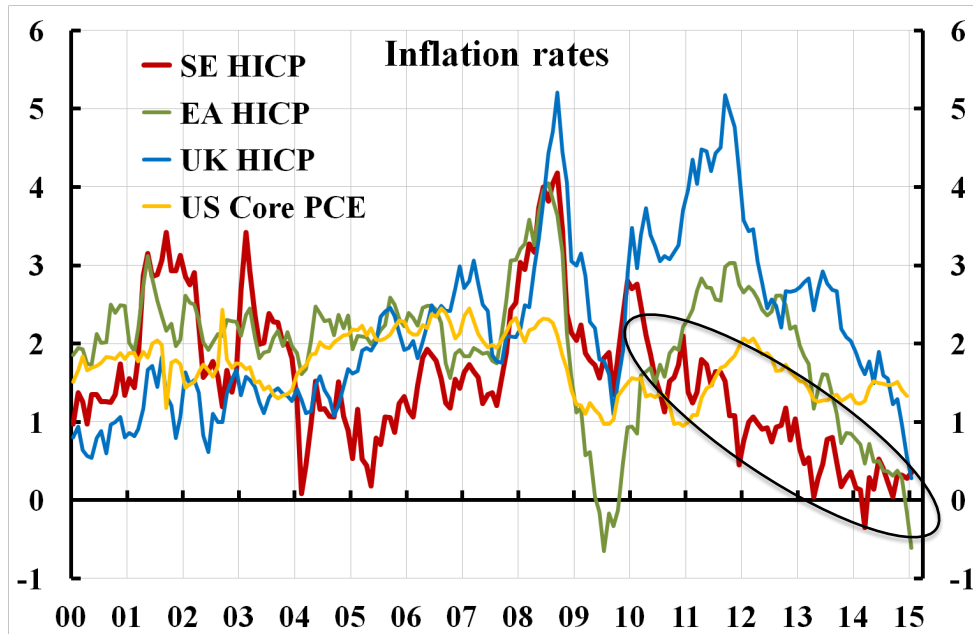
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## The leaning: Policy rates in Sweden, UK, and US; Eonia rate in euro area



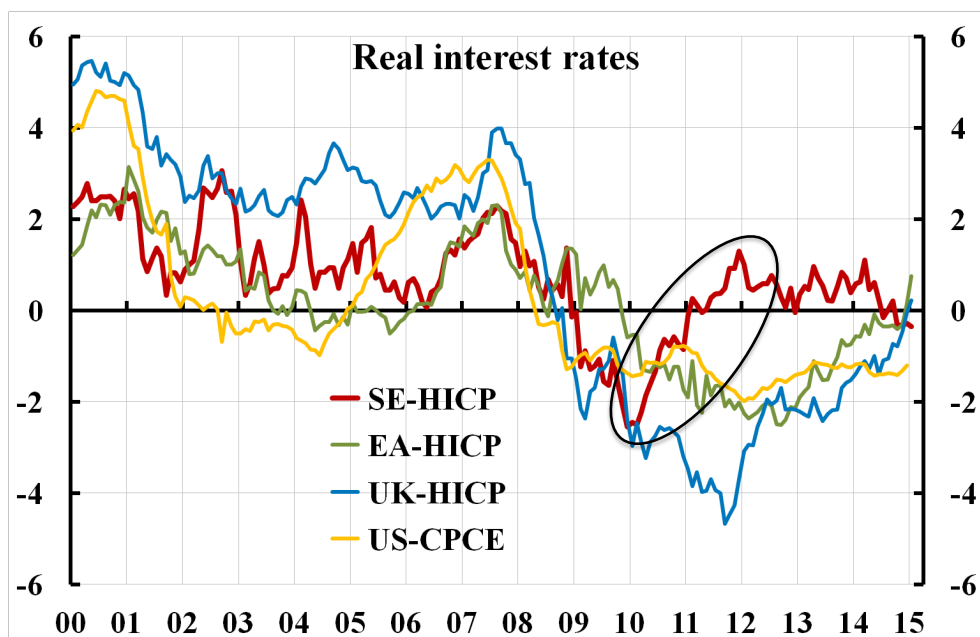
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## The leaning: Inflation in Sweden, euro area, UK, and US



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## The leaning: Real policy rate in Sweden, UK, and US, real Eonia rate in euro area



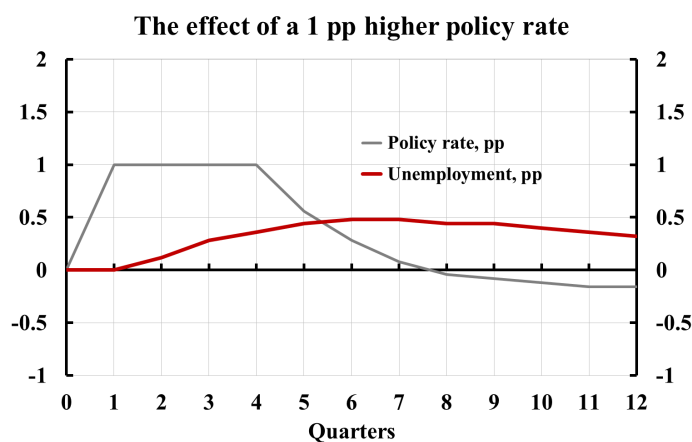
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## The Riksbank's case for leaning against the wind

- A higher policy rate (leaning) implies lower household debt
- Lower debt implies (1) a lower *probability* of a future crisis and/or (2) a less *deep* future crisis if it occurs
- **Benefit** of leaning: Better expected macroeconomic outcome in the future
- **Cost** of leaning: Worse macroeconomic outcome in the next few years
- Riksbank *assumption* (gut feeling): The benefit exceeds the cost
- Is that assumption true?
- The answer can be found in the Riksbank's own boxes in MPRs July 2013 and February 2014, plus Schularick and Taylor (2012) and Flodén (2014)
- This involves putting numbers on the cost and benefit of leaning

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



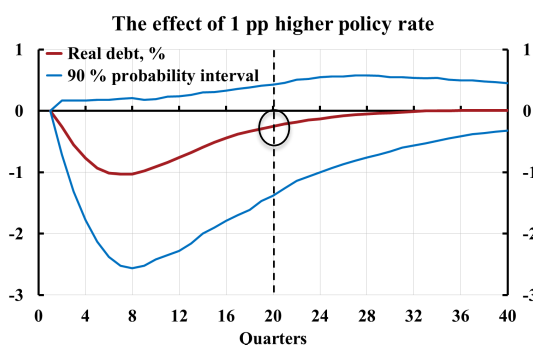
Source: MPR July 2013, chapt. 2; Svensson, post on [larseosvensson.se](http://larseosvensson.se), March 31, 2014.

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



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
- Riksbank crisis scenario, MPR July 2013, box: Assume 5 pp higher unemployment in crisis

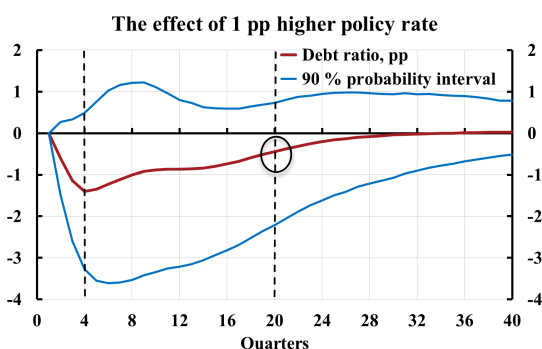
- **Benefit (1):**  
Expected lower future unemployment:  
 $0.0002 * 5 = 0.001$  pp

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

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

- Flodén (2014): 1 pp lower hhold debt ratio may imply 0.02 pp smaller increase in unemployment rate in crisis
- Riksbank MPR Feb 2014, box:



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

- 1 pp higher policy rate leads to 0.44 pp lower debt ratio in 5 yrs
- Smaller increase in unemployment in crisis:  
 $0.44 * 0.02 = 0.009$  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**

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

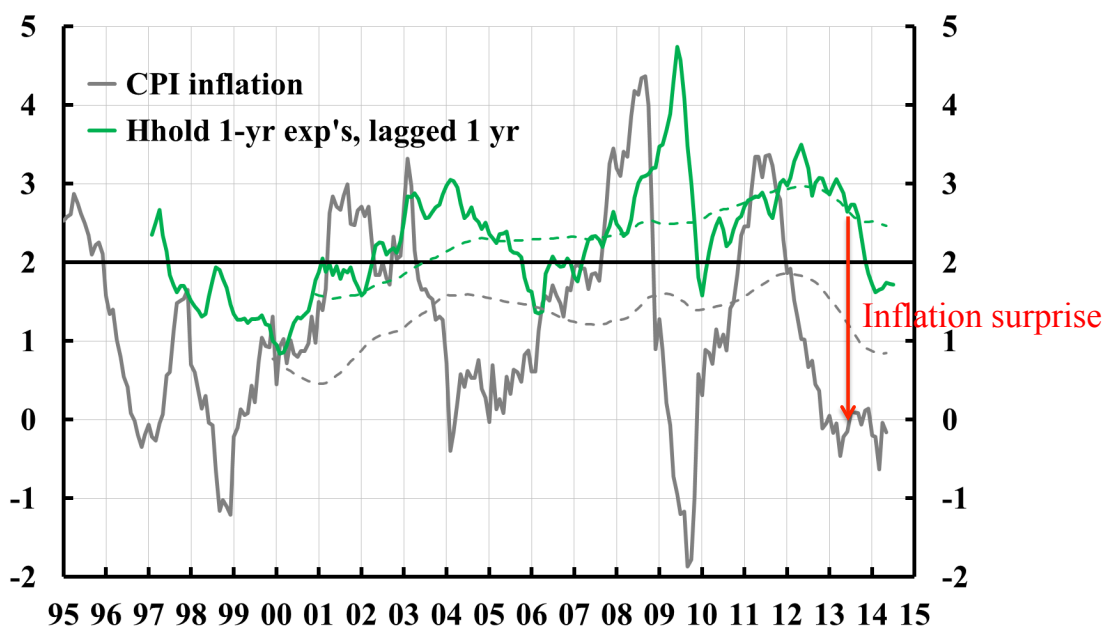
**Table 1. Cost and benefit in unemployment of 1 percentage point higher policy rate during 4 quarters**

<b>Cost:</b> Higher unemployment during the next few years, percentage points	0.5
<b>Benefit:</b> Lower expected future unemployment, percentage points	
1. Because of lower probability of a crisis	0.001
2. Because of a smaller increase in unemployment in a crisis	0.0009
<b>Total benefit, percentage points</b>	0.0019
<b>Total benefit as a share of the cost</b>	<b>Should have been &gt; 1!</b> 0.0038

- Riksbank's case does not stand up to scrutiny

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## Additional cost: Inflation below household's expectations has increased household real debt burden



Note: Dashed lines are 5-year trailing moving averages

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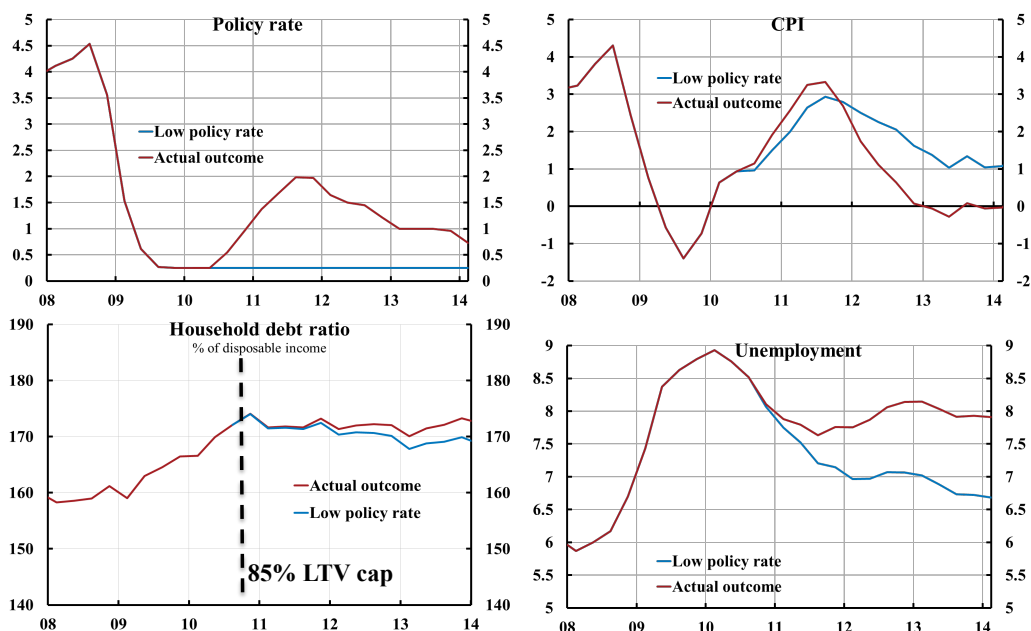
## **Conclusions**

- Do not ask too much from monetary policy
- Monetary policy cannot achieve and maintain financial stability
- A separate financial-stability policy is necessary
- Monetary policy and financial-stability policy are very different
- In normal times, best conducted separately, also when conducted by the same institution (but each policy should be fully informed about and take into account the conduct and impact of the other policy)
- In Sweden, the cost of leaning against the wind may be as much as 250 times higher than the benefit
- Also, inflation below expectations has increased real debt burden
- Monetary policy should be the very last line of defense of financial stability

## Additional slides

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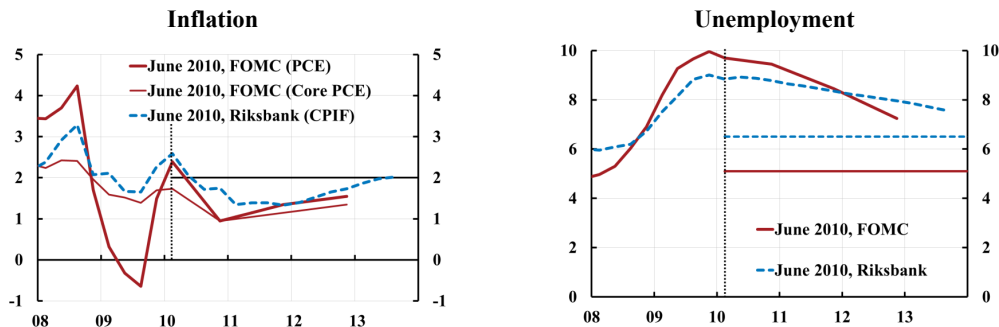
### Ex post evaluation: Riksbank policy-rate increases from summer of 2010 have led to inflation below target and higher unemployment (and probably a higher debt ratio)



Source: Svensson (2013), "Unemployment and monetary policy – update for the year 2013,"  
 Svensson (2013), "Leaning against the wind increase (not reduces) the household debt-to-GDP ratio",  
 posts on larseosvensson.se.

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

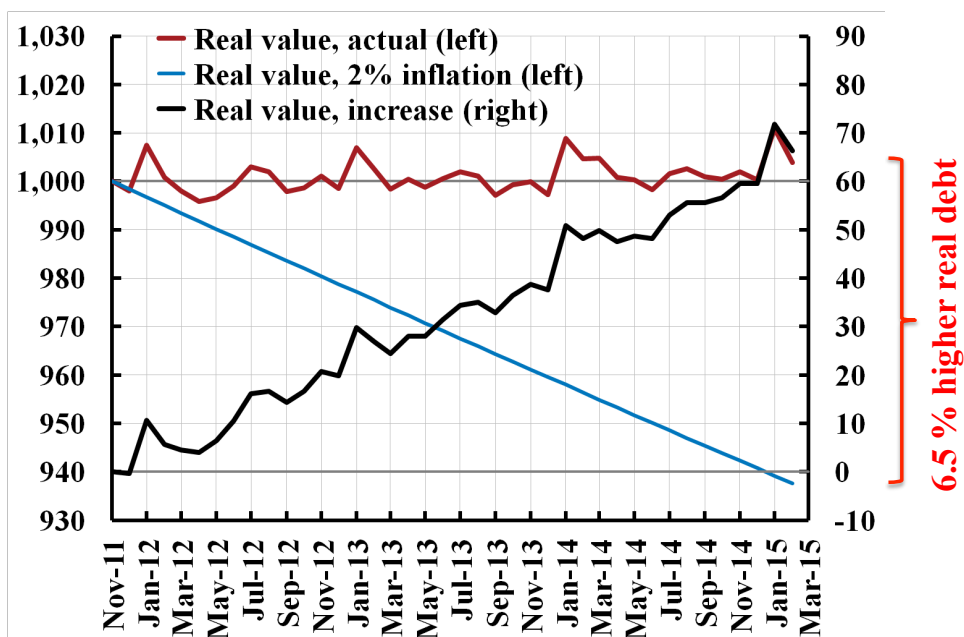


- Riksbank and Fed forecasts quite similar
- Policies very different
  - Fed: Keep policy rate between 0 and 0.25%, forward guidance, prepare QE2
  - Riksbank: Start raising the policy rate from 0.25 to 2% in July 2011
- Riksbank: Premature tightening

Source: Svensson, Lars E.O. (2011), "Practical Monetary Policy: Examples from Sweden and the United," *Brookings Papers on Economic Activity*, Fall 2011, 289-332.

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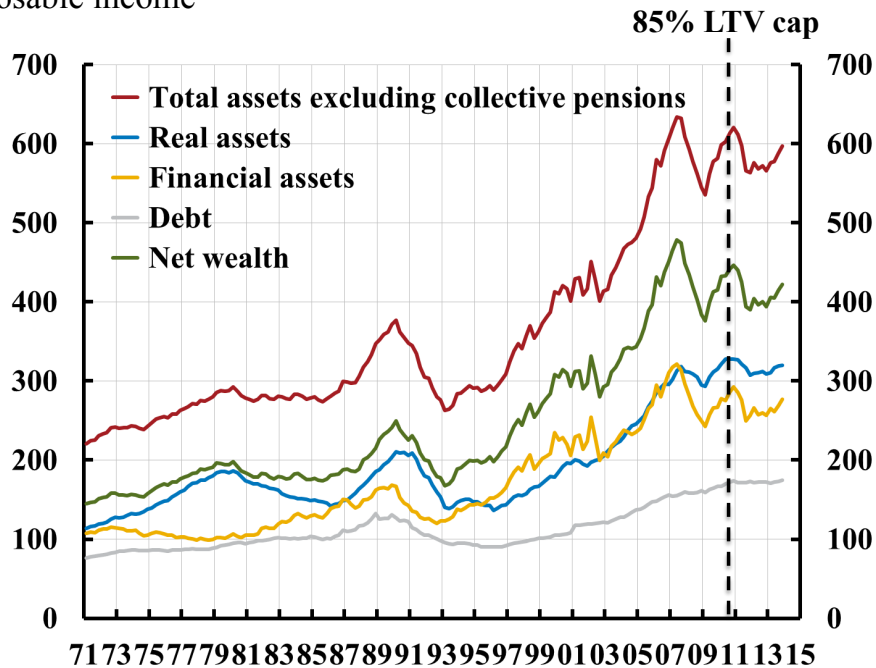
## The real value of an SEK 1 million loan taken out in Nov 2011, actual and for 2 percent inflation



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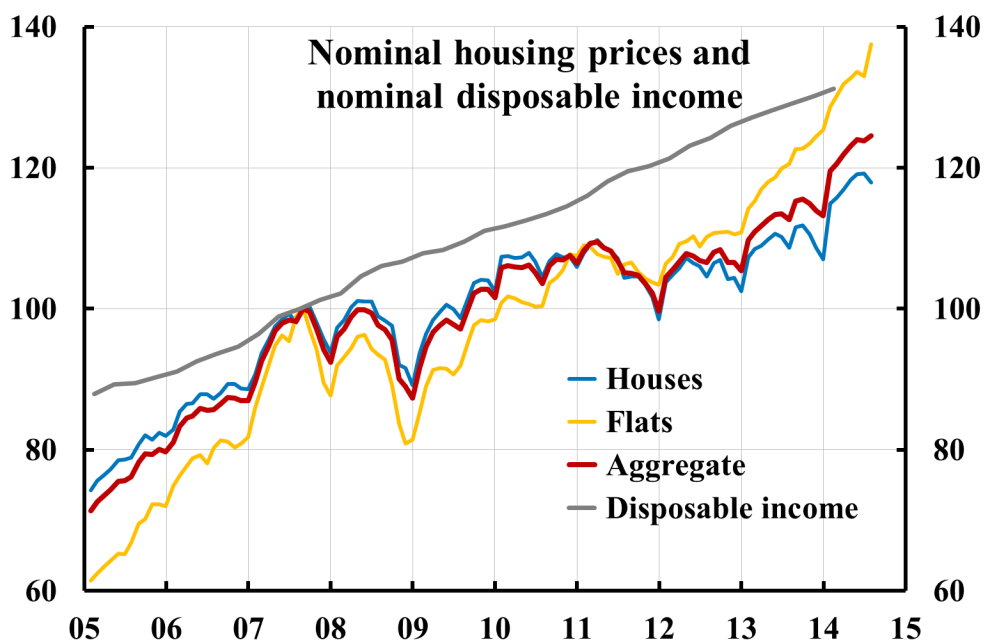
## Swedish households' assets, debt, and net wealth

% of disposable income



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## Housing prices have not increased faster than disposable income since 2007



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**The average LTV ratio for new mortgages have stabilized around 70%**

