

Inflation expectations: The Swedish experience

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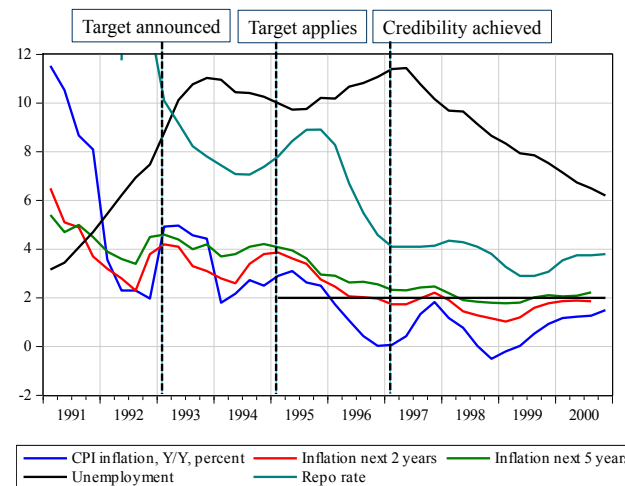
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The views expressed in this presentation are those of the author and do not necessarily represent those of the IMF or IMF policy.

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Riksbank inflation target not credible in the beginning but eventually achieved



Source: Aragon Fondkommission, Statistics Sweden.

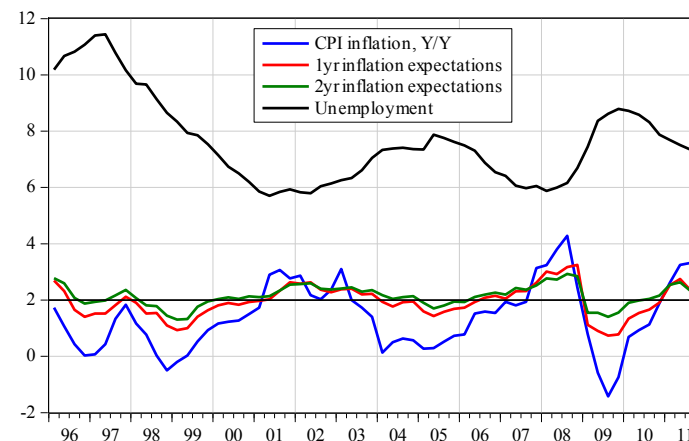
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Outline

- Inflation expectations anchored at the target: Good or bad?
- Anchored inflation expectations: Consequences of undershooting a credible inflation target
 - Increased unemployment
 - Unanticipated increase in real debt
- Do Swedes have “near rational” expectations (Akerlof, Dickens, and Perry 2000)?
 - Moderate undershooting of target (< 1 pp) doesn’t seem to shift expectations much
 - Large undershooting the last few years and debate seems to shift expectations
- Problems if credibility of inflation target lost?
- How to restore credibility?

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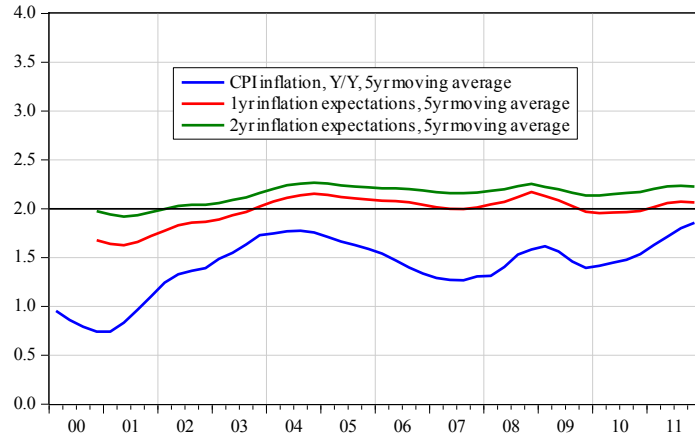
Inflation expectations well anchored to target 1997-2011



Source: Statistics Sweden.

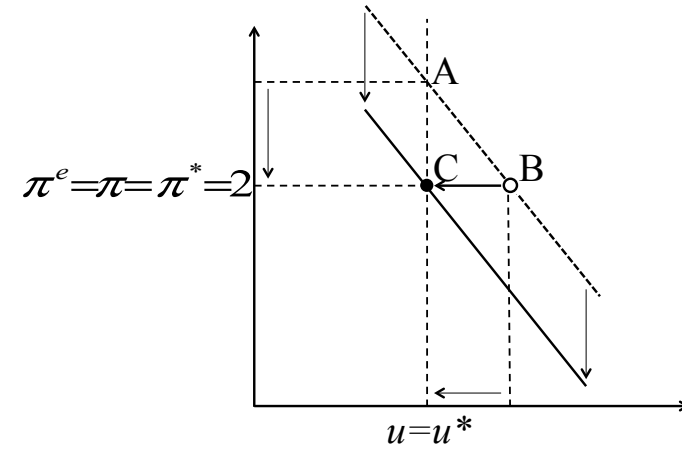
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**5-year moving averages:
CPI inflation expectations close to 2 %,
CPI inflation below 2 %**



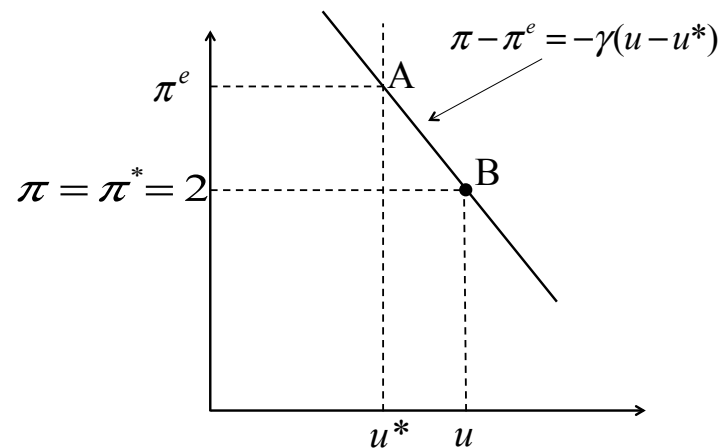
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1996: Inflation target gradually becomes credible



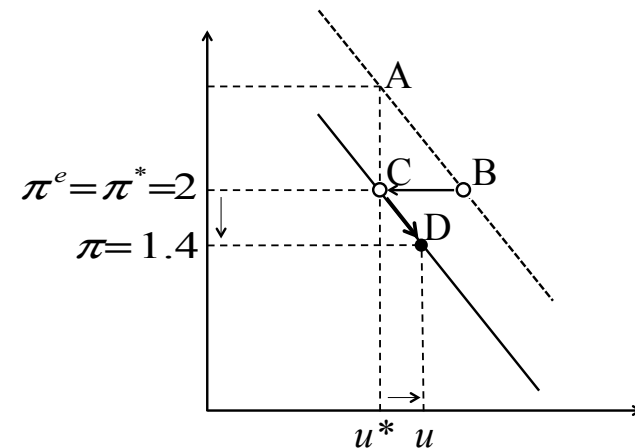
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Before 1996: Inflation target not credible, tight monetary policy, and high unemployment



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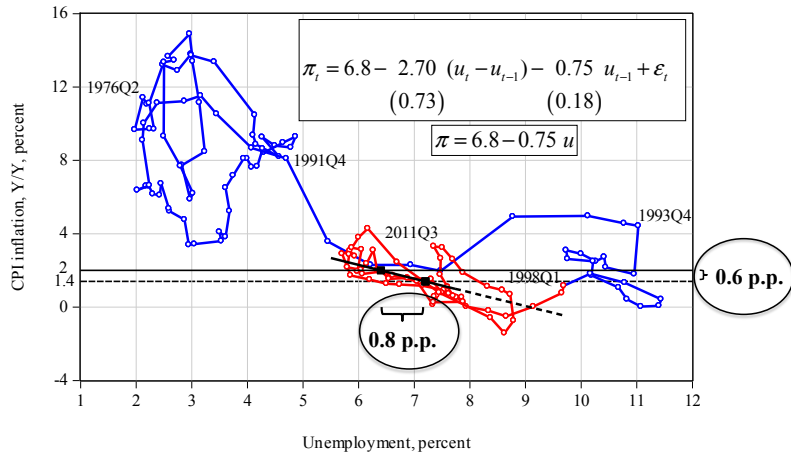
From 1997: Inflation expectations stuck at 2 %, but monetary policy still tight: Inflation too low, and unemployment too high



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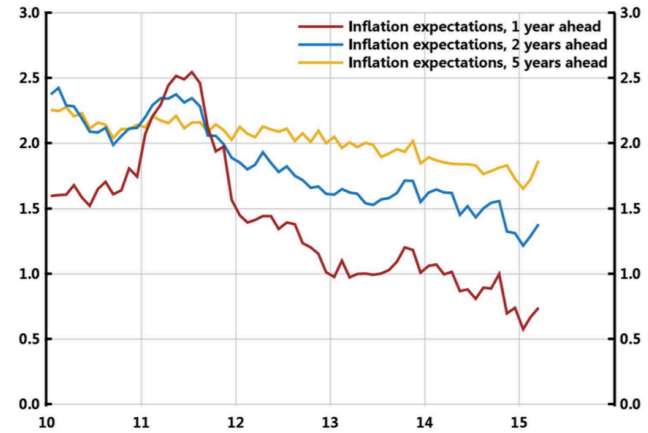
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CPI inflation and unemployment 1976-2012, and benchmark long-run Phillips curve 1997-2011



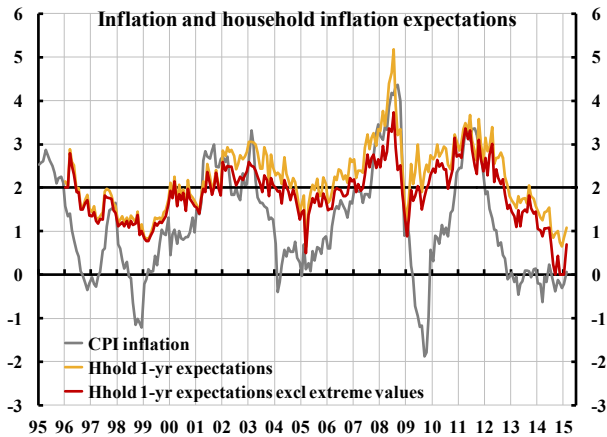
Source: Svensson (2015), "The Possible Unemployment Cost of Average Inflation below a Credible Target," *American Economic Journal: Macroeconomics* 7(1), 258-296.

Money-market participants' expectations have also drifted down. Credibility loss?



Percent. Source: TNS Sifo, Prospera.
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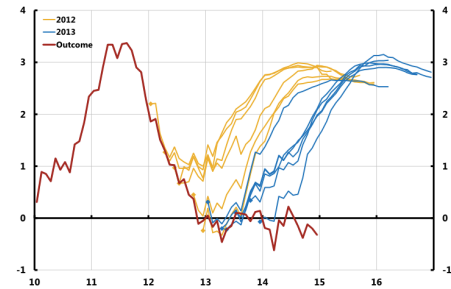
Recently, household inflation expectations have shifted down, after large undershoot and much debate and criticism of the Riksbank



Riksbank inflation-forecast credibility eroded?

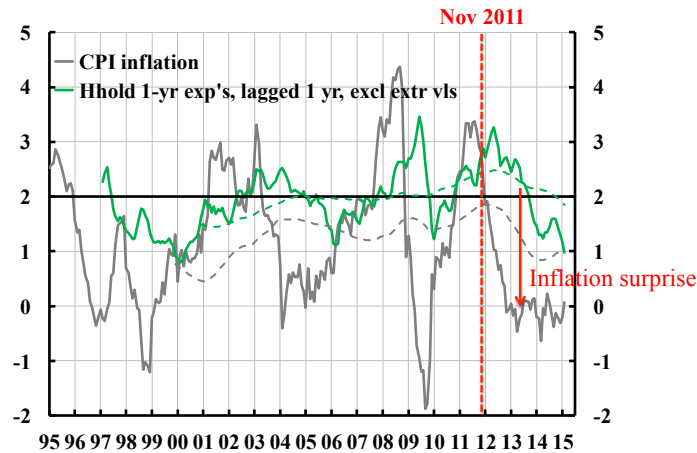
Figure 2.10. CPI, outcome and forecasts

Annual percentage change



Note: The yellow and blue lines represent the Riksbank's forecasts 2012-2013. The marks show the starting point of each forecast and may therefore deviate from the latest outcome at that point in time. Sources: Statistics Sweden and the Riksbank

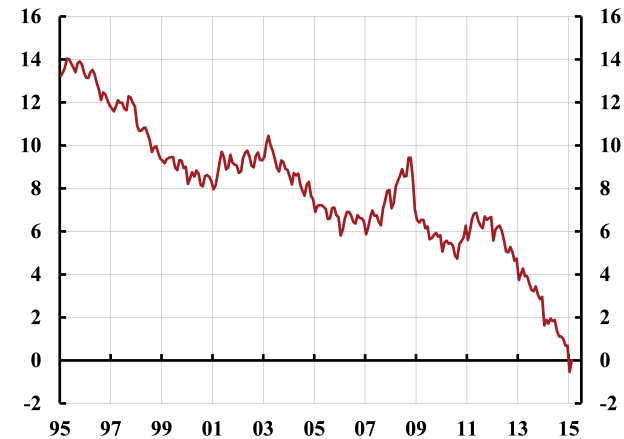
Inflation below household's expectations increases household real debt burden (Fisher deflation)



Note: Dashed lines are 5-year trailing moving averages

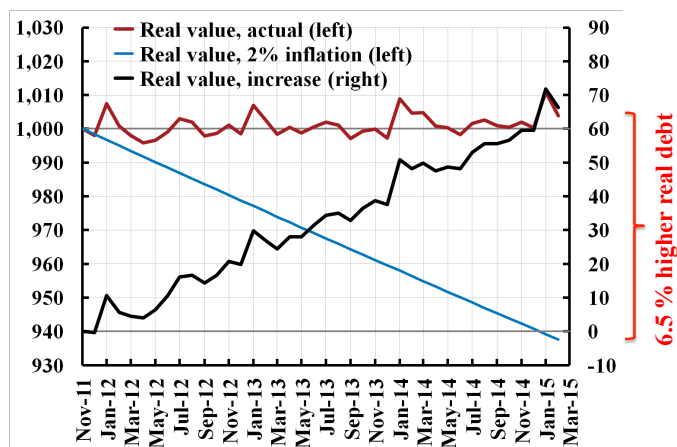
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Percent increase to February 2015 in the real value of a given loan, compared to if inflation had been 2 percent (depending on when the loan was taken out)



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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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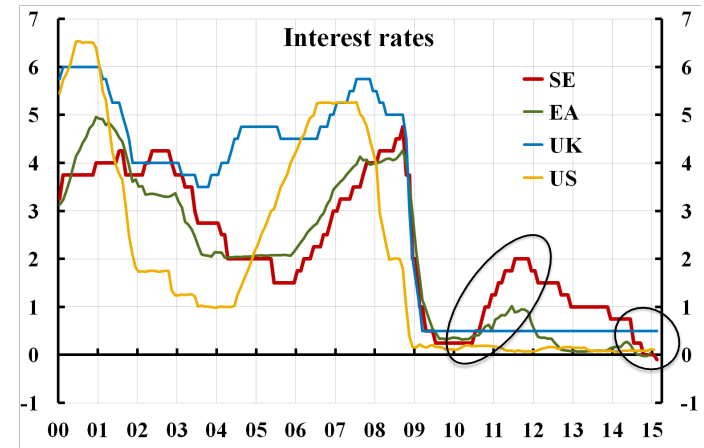
Sum up

- A credible inflation target in principle good: Allows monetary policy to stabilize real economy more
- Persistent undershooting a credible inflation target increases unemployment and household real debt burden
- Large undershooting erodes credibility of inflation target: Inflation expectations shift down
- “Near rational” inflation expectations?
- Overshooting low inflation expectations reduces unemployment and household debt burden
- But difficult to increase inflation with ELB (not ZLB) and low inflation expectations
- How difficult to meet the target and restore its credibility if credibility is lost?

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Extra slides

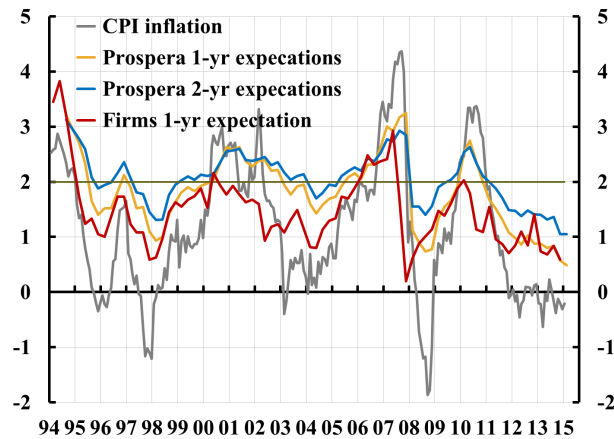
The leaning: Policy rates in Sweden, UK, and US; Eonia rate in euro area



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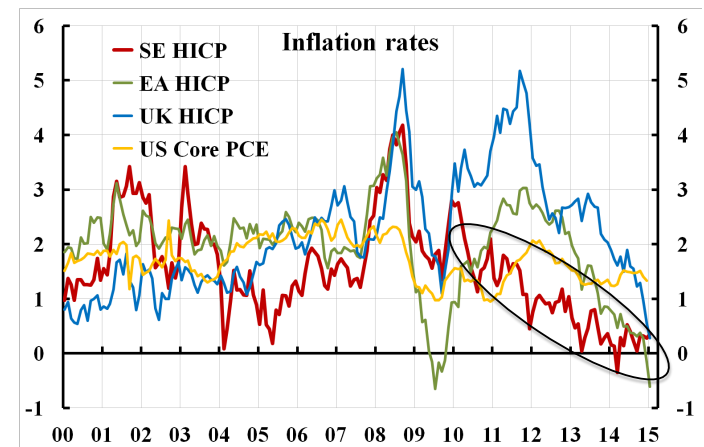
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Prospera and firms inflation expectations



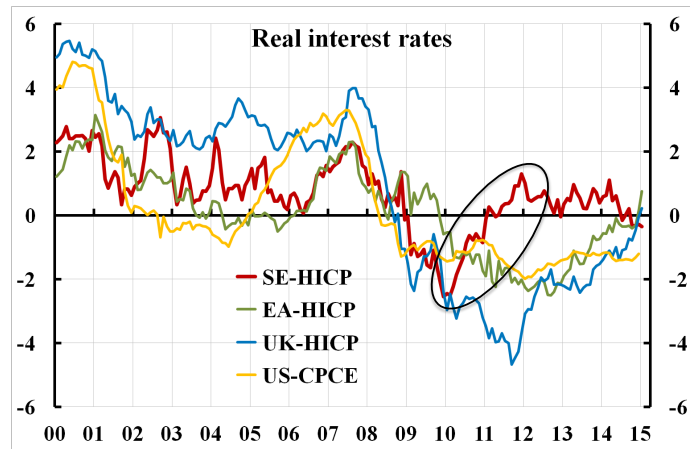
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The leaning: Inflation in Sweden, euro area, UK, and US



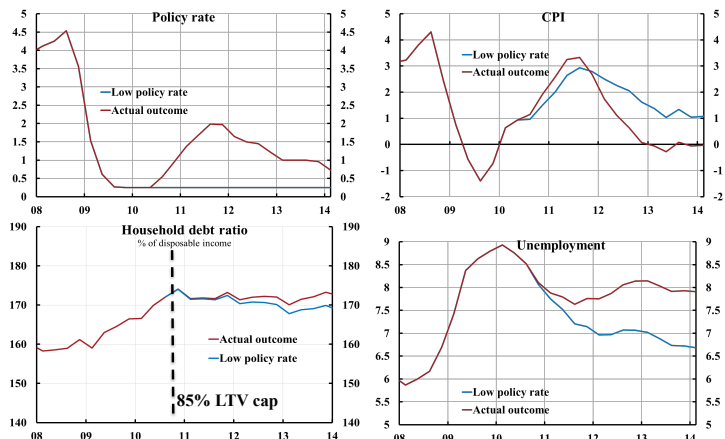
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The leaning: Real policy rate in Sweden, UK, and US, real Eonia rate in euro area



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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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