

## The Central Bank raises rates by 50 bps, signals further hikes

The Central Bank of Iceland decided to hike rates by 50 bps in August, for the second time this summer. The MPC signaled further hikes, the speed and magnitude of which depend on how the inflation outlook develops in the near term. The largest uncertainties are related to the effects of recently signed wage agreements as well as developments in global commodities markets. With an increasing interest rate differential concerns over a potential new wave of carry trade have been voiced. Although the Central Bank does not seem to factor the interest rate differential directly into its monetary policy decision the governor hinted it would like certain restrictions on such capital movements to be imposed.

## Back to the future in the business cycle

Economic conditions in Iceland are starting to remind us of 2003-2004 so we decided to compare the data. Many economic indicators, such as debt levels, growth in GDP subcomponents and unemployment, are indeed in a similar spot as they were a little over a decade ago. However, the growth expected ahead seems to be built on a more solid foundation than debt expansion.

## What is driving inflation expectations?

Given Iceland's history of rampant inflation, and the fact that the Icelandic króna is the world's smallest currency, it's understandable that inflation expectations play a larger role in our economy than in many others'. It has proven very difficult for the Central Bank to anchor inflation expectations, so what is the main driver of inflation expectations? According to the data the main driver of expectations for the near future is the recent past.

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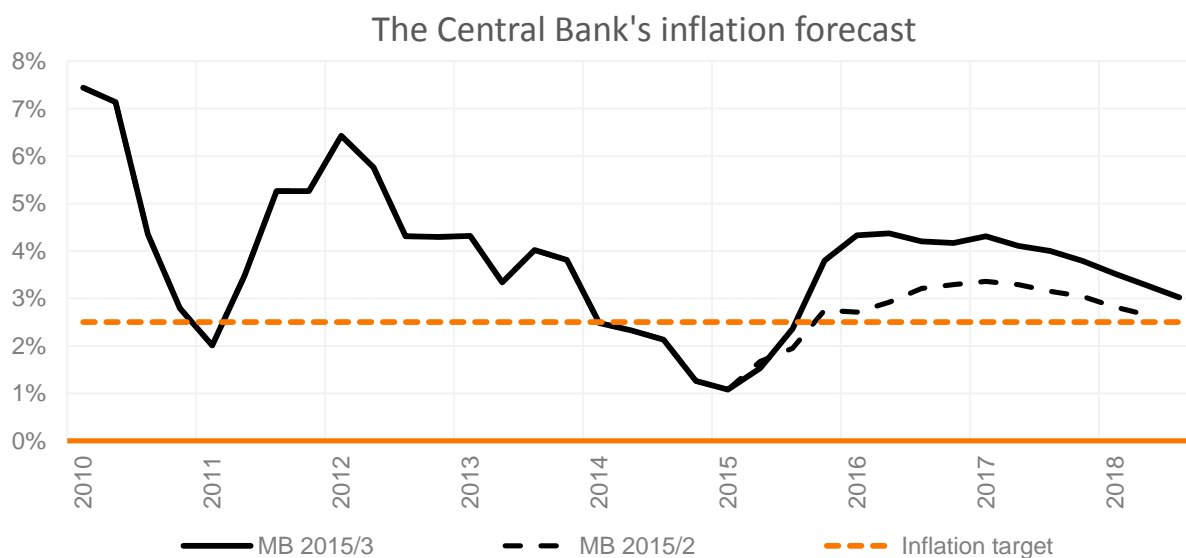
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## The CBI raises interest rates by 50 bps, signals further hikes

On August 19 the Central Bank's monetary policy committee (MPC) decided to raise rates by 0.5 percentage points, changing the key rate on seven-day term deposits to 5.5%. Some felt that the MPC's stance was less hawkish than in June, although worries about price pressure resulting from wage negotiations were still apparent. The CBI revised its inflation forecast considerably upwards in its latest Monetary Bulletin since wage increases in recently signed wage agreements were beyond the CBI's base scenario in May. Currently, the Central Bank believes that inflation will reach target (2.5%) in Q3 2015 and that it will stay above 4% on average in 2016.

It was interesting to see the inflation forecast revised substantially upwards and a somewhat softer tone at the same time. Granted, rates had already been raised by 50 bps in the meantime, but the latest statement indicated more of a „wait-and-see“ attitude instead of the very firm guidance in June when the committee stated that it was clear that rates would be raised considerably in the coming quarters.



Source: The Central Bank of Iceland

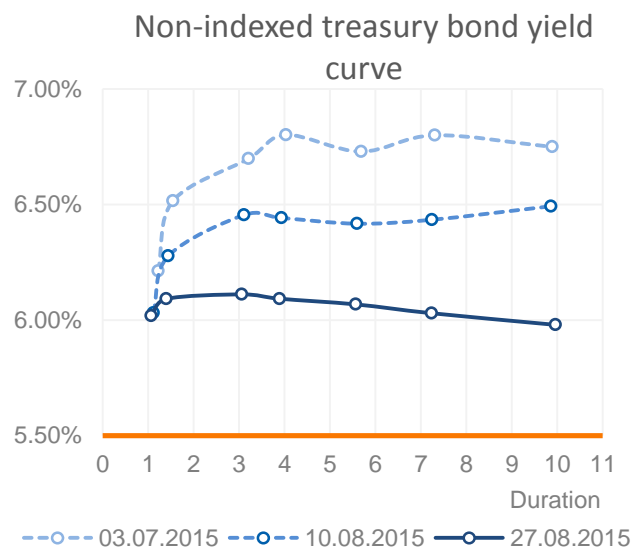
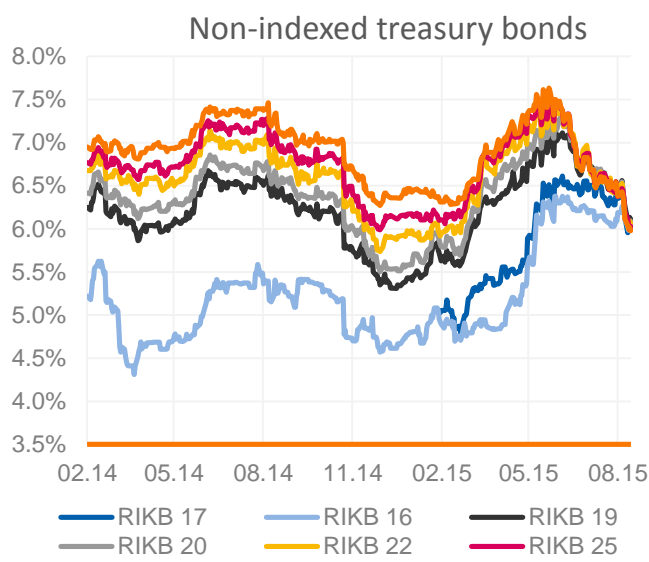
The Central Bank governor reiterated that there was vast uncertainty surrounding the forecast, specifically due to the yet unknown final effects of wage agreements; companies could streamline their production or increase productivity instead of raising prices. He also mentioned commodities prices as a large uncertainty, as well as the terms of trade and the general outlook in the global economy. The Bank now also predicts higher unemployment than it did before, lower investment and slower economic growth, which certainly justifies a softer tone.

Market expectations indicate that rates might be raised by 25-50 bps until the end of the year. Three interest rate decisions remain in 2015: in September, November and December. The MPC's statement indicated that the Central Bank's upcoming interest rate decisions would depend in part on whether other tools would be used to contain demand pressures, without specifying which tools exactly. However, in a press Q&A the Central Bank governor implied that constraint in government finances could support monetary policy by promoting price stability via decreased demand.

### A new wave of carry trade could influence the ISK

As the interest rate differential between Iceland and other countries increases we can expect the interest of carry traders to be raised. The governor addressed concerns about the potential rapid growth of carry trade, which has the potential to influence the ISK exchange rate and bond market yields. Without providing any details he hinted that a proposal would be put forward in the coming months imposing some restrictions on certain capital movements, such as a tax or a required minimum holding period for certain securities. In that sense, it seems like the Central Bank is not factoring the interest rate differential directly into its rate decisions, but that they would like to be able to limit the carry trade nonetheless.

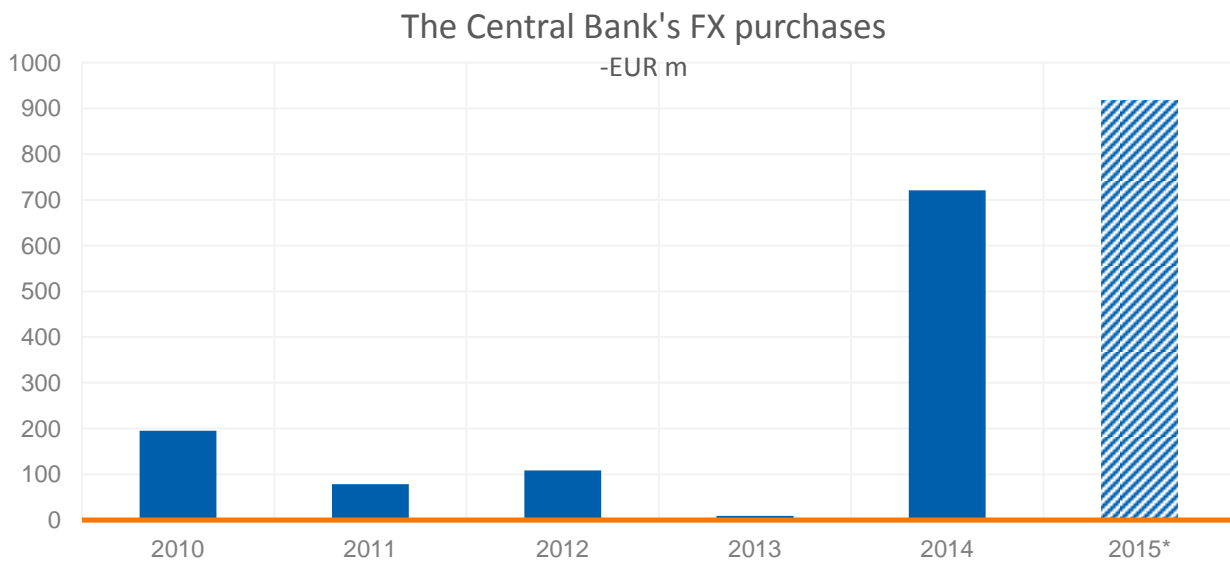
The yield-to-maturity on non-indexed treasury bonds has been declining rather rapidly over the past few months, while inflation expectations have been rising, at least according to the CBI. In addition, the Central Bank has signaled further hikes so one would have expected that to be reflected in the yield curve shifting upward. Conversely, yields have declined, mostly on the longer end, to such an extent that the yield curve has become slightly downward sloping. Foreign investors have added to their government bond holdings over the past few months so the theory is that the change to the yield curve is mainly due to increased demand from foreign investors, not inflation expectations.



Source: Kodiak

## The CBI prepares for the lifting of capital controls

The Central Bank continues to accumulate FX reserves at record speed. Last year the CBI purchased over EUR 700m in the interbank market. The amount this year has already reached over EUR 900m. The Bank's net reserves now amount to over ISK 156bn (total reserves stood at ISK 620bn on July 31).



Source: The Central Bank of Iceland, \*CBI EUR purchases until mid-August 2015

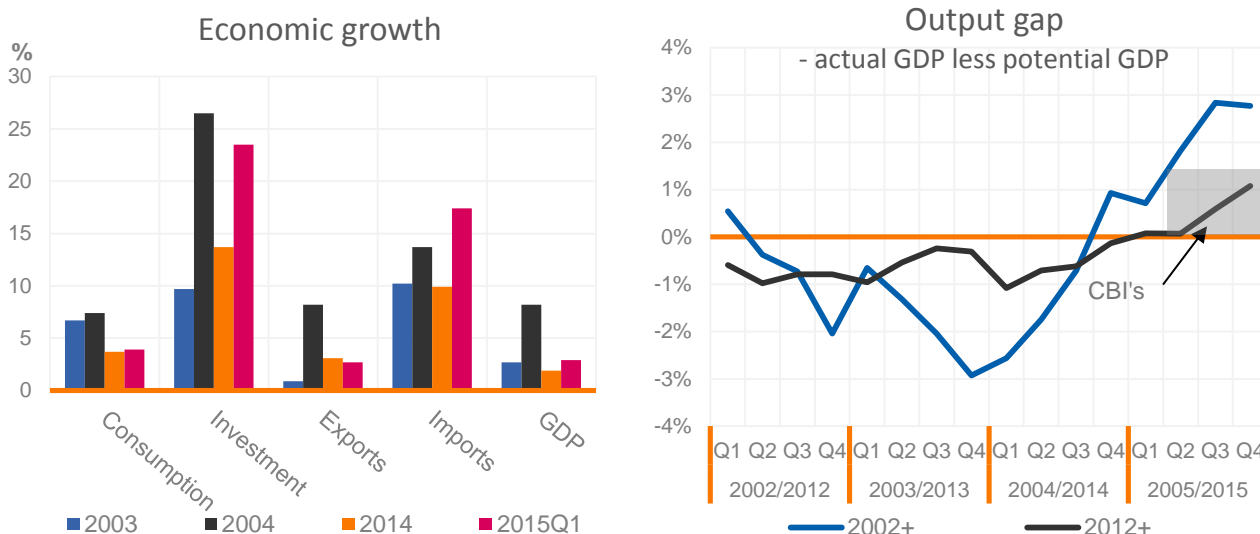
Concerns have been voiced regarding the resulting expansion of the money supply. The Bank's purchases are also putting pressure on the exchange rate; it is safe to assume that the króna would be stronger without the CBI's intervention. The question is: when will the reserves be large enough? When the CBI withdraws from the market the impact on the exchange rate is likely to be noticeable.

## Back to the future in the business cycle

Most economic indicators point to healthy growth in the Icelandic economy in the coming years. Investment and consumption are picking up, households and firms have deleveraged substantially and the Treasury plans to pay up debt rapidly in the coming quarters. Economic circumstances are starting to remind us of 2003-2004 in many ways so we decided to compare the data.

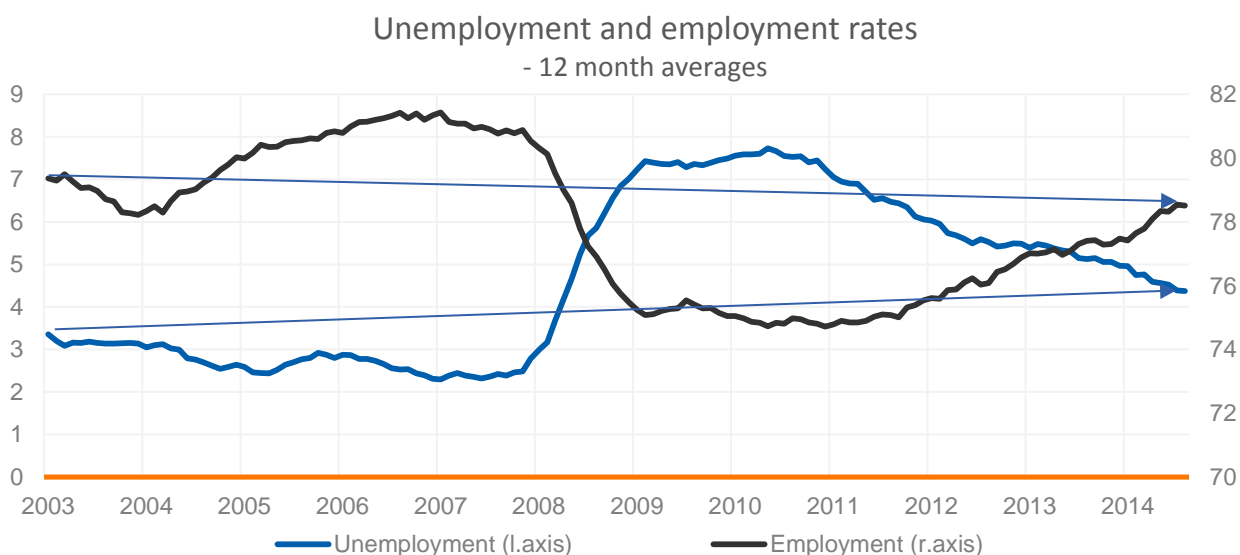
Economic growth has picked up recently. In 2014 GDP growth measured at 1.9% and in Q1 2015 it was 2.9%. Arion Research currently expects 3.7% growth in 2015, 3.6% in 2016 and 3.4% in 2017. Subcomponents of growth have been growing similarly in the two periods, although overall growth was considerably higher in 2004 (8.4%). Investments and imports grew rapidly in Q1 as they did in 2004.

The Central Bank estimates that the output gap closed in the first half of 2015, while historical data suggests it last closed mid-2004. The troughs and peaks of the cycle are not as exaggerated this time around. The tourism sector is a major contributor to current GDP growth and is providing much needed diversification for the Icelandic export sector.



Sources: The Central Bank of Iceland, Statistics Iceland

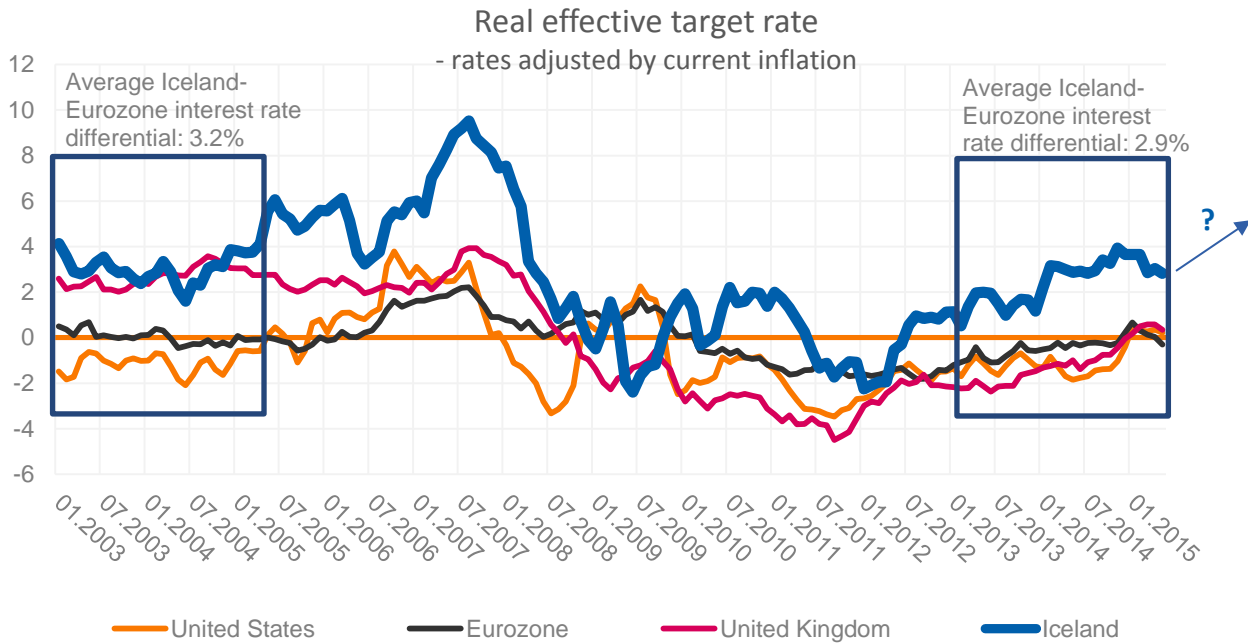
In 2002-2004 public debt as a percentage of GDP was close to 60-70%, while it is closer to 90% today. It is projected that public debt will decrease rapidly, depending on the amounts that will be collected from the failed banks' estates as well as the feasibility of paying up marketable debt securities from a monetary policy perspective. The equity position of households and companies is very much alike to what it was in 2003-2004. Corporate debt is even lower now than it was in 2004, 110% of GDP as opposed to 120% of GDP. Consumer sentiment has not measured higher since early 2008; it is still under its 2003-2004 average. The labor market continues to improve; the 12-month average of measured unemployment currently stands at 4.4%, while it was at 3.2% in May 2003.



Source: Statistics Iceland

## An increasing interest rate differential attracts carry trade

Before the financial crisis hit massive amounts of foreign currency flowed across the border, partly due to carry trade. The inflow was mostly in the quarters leading up to the crisis, but the interest rate differential between Iceland and other countries, especially the US and the eurozone, was already quite large in 2003. The average real effective target rate differential between Iceland and the eurozone was 3.2% in 2003-2004. Since mid-2013 it has been around 3% on average. The Central Bank has indicated a firm monetary policy stance going forward and if a stronger exchange rate manages to contain inflationary pressures the real interest rate differential could increase further.

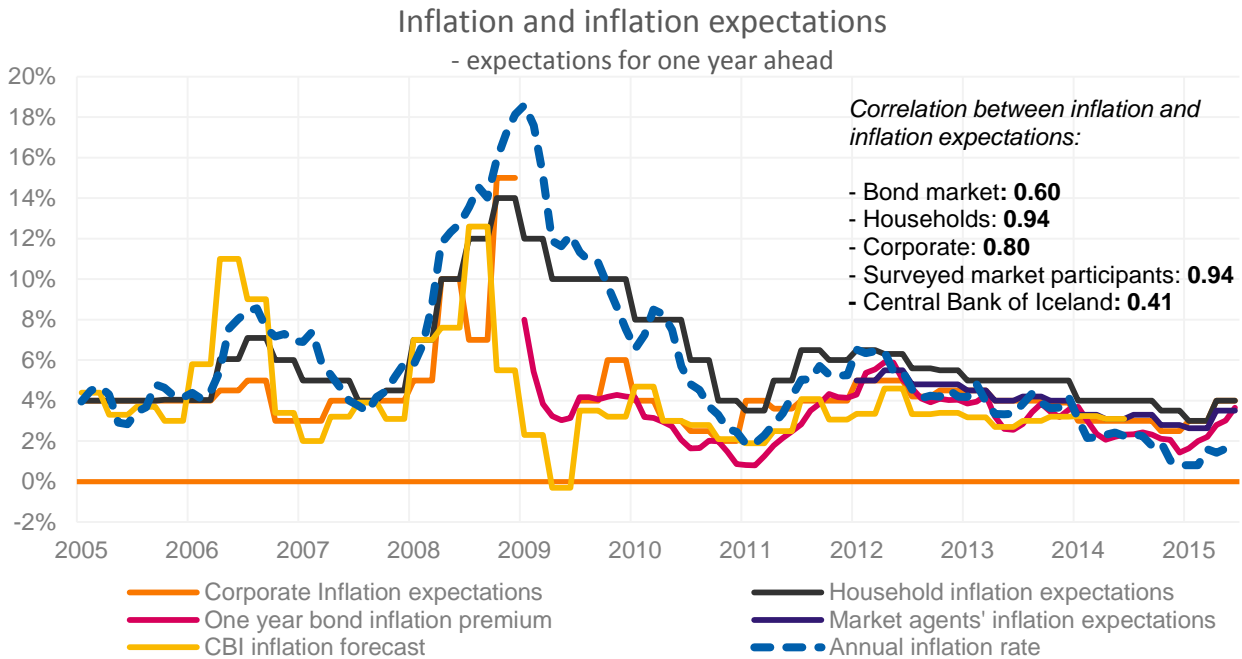


Source: The Central Bank of Iceland

Even though various indicators are pointing towards a rather rosy growth outlook (especially compared to most other developed economies) it looks like we are still not close to the overheating that began in 2003-2004 and peaked in 2007. The financial sector is not expanding rapidly, asset prices are not rising at nearly the same rate, debt levels have been decreasing in all sectors and the economy is much more diversified with the blossoming tourism sector. Let's say there is good reason for cautious optimism as we enter a period of higher economic growth.

# What is really driving inflation expectations?

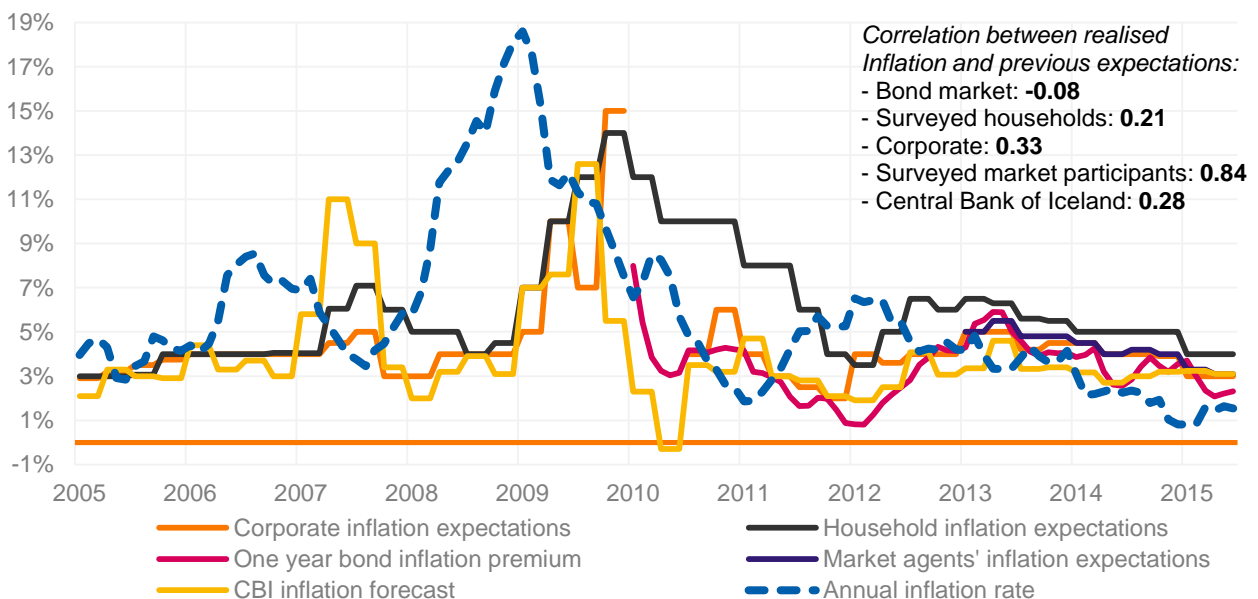
Inflation expectations play a larger role in the Icelandic economy than perhaps in many other economies given our small currency and long history of rampant inflation. Is there a pattern to how these expectations are formed? How do they measure up to reality? Changes in the price level have a noticeable effect on short-term inflation expectations as can be seen in the graph below (that is to say inflation expectations are not firmly anchored). The correlation between measured inflation and one-year inflation expectations is between 0.41 and 0.95, being the lowest at the Central Bank and the highest among surveyed households and market participants.



Sources: The CBI's Monetary Bulletin, Arion Research, Inflation expectations from the CBI's surveys.  
Inflation premium in the bond market is calculated by CBI, monthly average

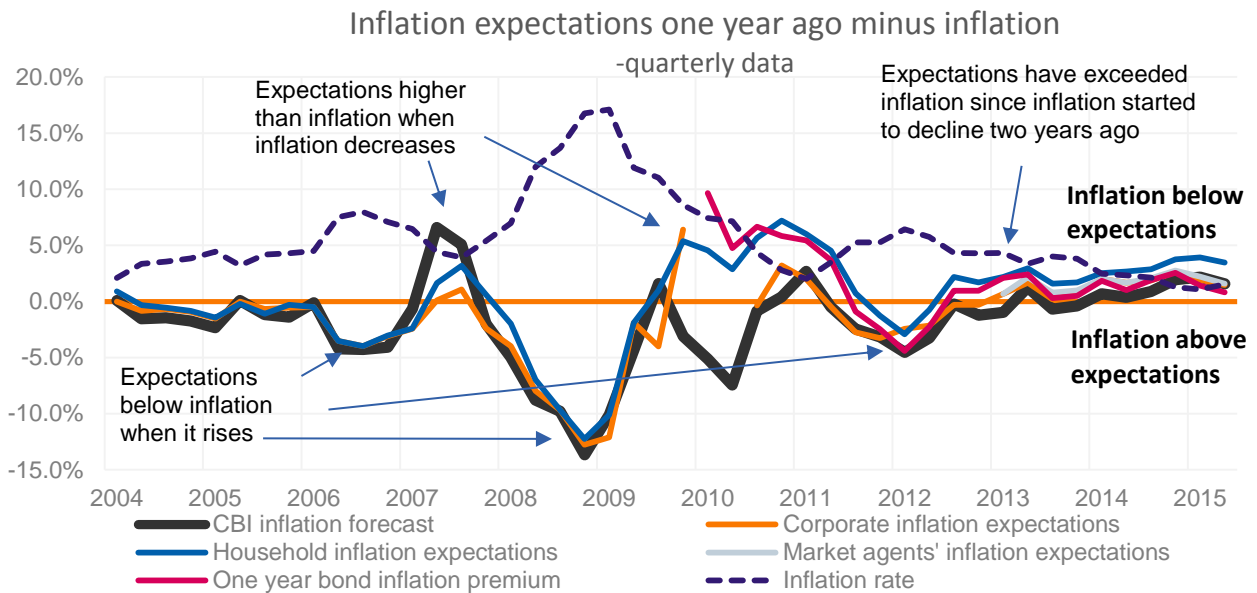
When comparing expectations for inflation one year ahead and measured inflation one year later, however, it is apparent that the correlation is not very high. The Central Bank's forecasts are no exception there either. The bond market seems to be the worst predictor with a slightly negative correlation while others show a positive correlation of 0.21-0.84, with the correlation between inflation and surveyed market participants being the highest. Those particular surveys have only been performed for the past three years, however, so a larger sample is needed in order to draw a meaningful conclusion. To sum up, current inflation drives expectations in Iceland, and expectations are not a good predictor for the future. In other words: inflation expectations are not very self-fulfilling in Iceland.

## Inflation compared to one-year inflation expectations a year earlier



Sources: The Central Bank's Monetary Bulletin, Arion Research

By graphing the deviations of expectations from reality a pattern emerges depicting the unpredictability of sudden changes in inflation. Sharp increases in inflation are almost always unpredictable a year in advance as inflation is consistently underpredicted in those cases. Any sharp deviations in the price level tend to be due to unforeseen events, such as a sudden depreciation of the exchange rate. Sharp increases generally lead to predictions overestimating inflation a year later. The picture below demonstrates three rather clear examples of this in the past 10 years.



In the Eurozone, inflation expectations have been somewhat firmly anchored at 1-2% ever since the euro was introduced. Even following inflation shocks, such as when inflation spiked in 2008 as well as during a deflationary period in 2009, inflation expectations remained in that interval. This has not been the case in Iceland. Anchoring inflation expectations remains one of the most important tasks of the enforcers of monetary policy. With a tiny currency and a long history of high inflation, we wonder whether they will succeed anytime soon.