

# Article: Rapid strengthening of the krona

**The Riksbank expects the krona to strengthen in the long term. However, a too rapid strengthening of the krona would risk halting the upturn in inflation that has begun. The fact that inflation has been low for a long time also means that a rapid strengthening of the krona in the near term could have a greater impact on inflation than normal, by way of lower inflation expectations. How expansionary monetary policy needs to be then depends on how great this risk is assessed to be.**

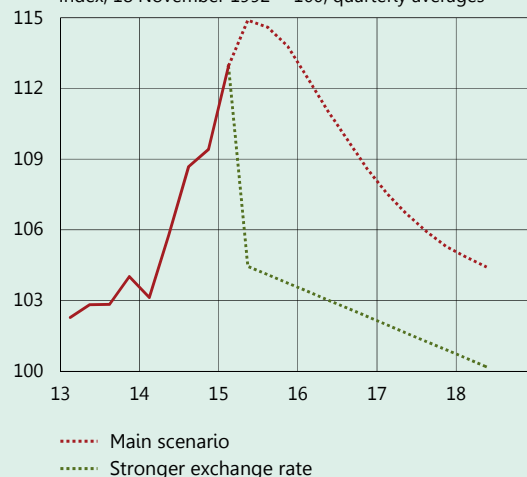
Two scenarios are presented here to highlight how a rapid strengthening of the exchange rate may affect the inflation outlook.<sup>2</sup> In both scenarios, the krona strengthens significantly during the second quarter of 2015 (see the green line in Figure 1:9). It is assumed in the scenarios that monetary policy is the same as in the main scenario. In the first scenario, the strengthening of the krona is assumed to have a limited impact on inflation expectations. The prices of imported goods and the demand for Swedish exports is lower than in the main scenario. Thus, CPIF inflation is also lower. However, the effects of the stronger krona weaken and inflation reaches 2 per cent in 2018 (see the yellow line in Figure 1:10).

However, inflation has been low in Sweden for a long time and a dramatic strengthening of the exchange rate, which occurs when inflation is still low, could have a greater impact on inflation expectations.<sup>3</sup> In the second scenario we assume instead that Swedish companies are more affected by the recent low level of inflation, and particularly by the significant strengthening of the exchange rate, when they set their prices. The inflation and wage expectations of the social partners are also affected more.<sup>4</sup> In this scenario, the strengthening of the exchange rate has a greater impact on inflation. Lower inflation expectations have a direct impact on companies when they set their prices. Lower wage increases also mean that the companies expect slower cost increases going forward and they thus raise their prices at a slower rate. In this scenario, CPIF inflation remains very low in 2015 and 2016 and then rises to approximately 1.6 per cent at the end of the forecast period (see the blue line in Figure 1:10).

In short, the scenarios show that the effects of a stronger exchange rate on inflation depend to a great extent on how inflation expectations are affected. If the impact on inflation expectations is limited, CPIF inflation will be lower than in the main scenario, but will nevertheless reach 2 per cent in early 2018. However, as inflation has been low for a

long time there is a significant risk that inflation expectations would be affected more and that the effects on inflation would therefore be substantially greater. If the exchange rate strengthens much more rapidly than in the main scenario, monetary policy would need to become more expansionary. The degree to which monetary policy would then need to be changed depends greatly on how much inflation expectations are affected.

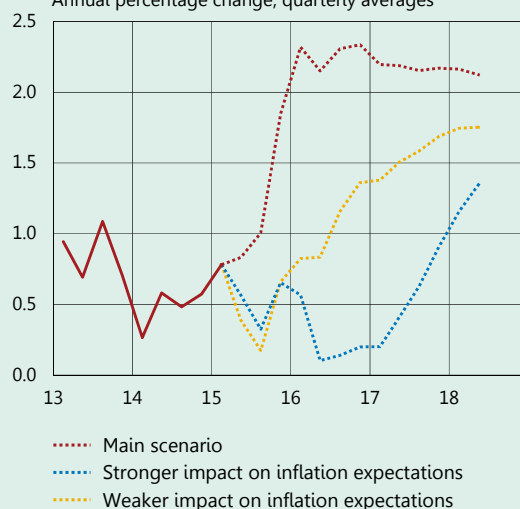
**Figure 1:9. KIX-weighted nominal exchange rate**  
Index, 18 November 1992 = 100, quarterly averages



Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.

Source: The Riksbank

**Figure 1:10. CPIF**  
Annual percentage change, quarterly averages



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

<sup>2</sup> The scenarios are designed using the Riksbank's model Ramses. For a description of the model, see Adolfson, M., Laséen, S., Christiano, L., Trabandt M. and Walentin, K., "Ramses II: Model description", Occasional Paper no. 12, 2013.

<sup>3</sup> See, for example, Ehrmann, Michael (2014), "Targeting inflation from below – how do inflation expectations behave?", Working Paper 2014-52, Bank of Canada.

<sup>4</sup> Companies and trade unions, in comparison with the first scenario, attach greater importance to the actual rate of inflation and less importance to the inflation target when they form their expectations. Consequently, a shock, for example a stronger exchange rate, has more persistent effects on inflation.