

# FX Ringside

Wednesday 17 April 2019

## The SEK is cheap, but not as cheap as you might think

For several years until the financial crisis in 2008 the EUR/SEK was stable around 9.00 and the interval 9.00-9.25 was then established as a normal krona exchange rate against the euro. When the krona is now trading close to 10.50 against the euro, it would suggest that the krona is considerably undervalued. The general perception is that the krona weakness in recent years is linked to the extreme Riksbank policy with NIRP, extensive government bond purchases and an open mandate to intervene in the foreign exchange market to counteract a stronger SEK. But in fact there might also be structural reasons for the SEK depreciation in recent years, which indicates that the krona probably will have it difficult to recover to the same levels as in the past, even if the Riksbank would continue to normalize monetary policy. Our conclusion is that the SEK is cheap, but not as cheap as you might think.



**Richard Falkenhäll**  
Senior FX Strategist  
+46 8 506 23133  
richard.falkenhall@seb.se  
@Rfalkenhall

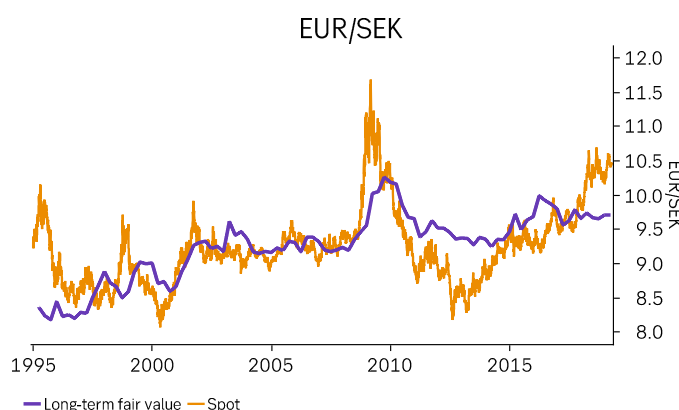
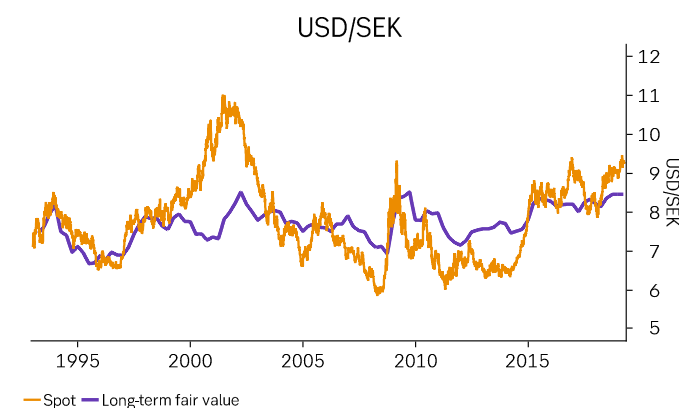
### What is the fair value of the SEK today?

There are various ways to determine the equilibrium exchange rate or the long-term fair value of a currency. Within the literature there are several different approaches. For example, the OECD applies the purchasing power parity condition (PPP) and defines the equilibrium exchange rate as the exchange rate that generates the same price level across countries. The IMF has a somewhat more theoretical approach, which is based on synchronized equilibrium in an economy, ie. the exchange rate that entails a closed GDP gap, with normal resource utilization, and a balanced current account.

We apply a more empirical approach with a fairly simple model based on four different variables to determine the long-term fair value. These factors are relative inflation, relative unit labor cost, relative terms of trade, ie relative price of exported goods relative to imported, and the ten-year real interest rate differentials. The model we use is estimated on a panel consisting of the G10 currencies using quarterly data from 1993. Previously, we applied a slightly different model specification, which instead of unit labor costs was based on relative productivity growth, but the new specification probably captures the development of a countries relative competitiveness in a better way.

According to the model estimate, the long-term equilibrium exchange rate or fair value for the USD/SEK is today close to 8.50. The model also indicates that the equilibrium exchange rate for the SEK against the USD has deteriorated steadily from around 6.90 in 2008. The negative development of the SEK's equilibrium exchange rate is explained by several factors, but a significant decline in the relative Swedish real interest rates seems to be an important explanation. Furthermore, faster growth in Swedish unit labor costs has been a negative factor for the krona relative to the dollar since 2010. In addition, Sweden's terms of trade have also deteriorated relative the US terms of trade. This has been an ongoing trend since 1995 and as a result Swedish terms of trade is about 30 percent lower today compared to the US. On the other hand, Swedish inflation has

developed roughly as US inflation, which suggests that Swedish PPP would have improved during the period as a result of a weaker nominal exchange rate against the dollar.

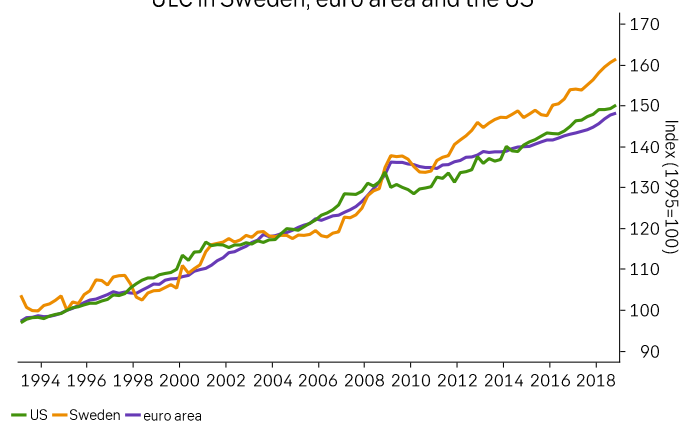


The long-term fair value of the krona has in fact developed in a similar way against the euro. According to the model calculation, the equilibrium exchange rate for the EUR/SEK is around 9.70 today and

this is significantly higher than 9.20 prior to the financial crisis in 2008 and about 8.30 in 1996. Part of the deterioration has occurred in recent years and only five years ago, in 2014, the fair value for the EUR/SEK was 9.30 according to the model calculation. The deterioration in the EUR/SEK long-term fair value is explained by the same factors as against the dollar. The Swedish relative 10-year real interest rate has fallen compared to the 10-year real interest rate in the euro area. In 1995, the Swedish 10-year real interest rate was about 150 basis points above the euro area rate and today it is just over 100 basis points below instead.

Moreover, the long-term fair value in the EUR/SEK has been pushed higher by a deterioration in Swedish competitiveness, at least when reflected by the development in the relative Swedish unit labor costs. From historically following the developments in the euro area and the US the Swedish unit labour costs have been growing at a faster pace than elsewhere since around the time of the financial crisis in 2008. To maintain the relative competitiveness it would require a weaker nominal exchange rate of the SEK than historically to compensate for that widening gap illustrated in the chart below.

ULC in Sweden, euro area and the US



Source: OECD

For the past 4-5 years, Swedish consumer price inflation has also grown faster than in the euro area, which should also result in a somewhat weaker nominal exchange rate according to the purchasing power parity (PPP) condition.

## The SEK is cheap, but not as cheap as you might think.

The krona has been under significant pressure in recent years, and most would agree it is undervalued against a number of currencies and in particular against the euro and the dollar. Particularly it seems weak when compared to the levels of around 9.00 to 9.50 against the euro, which used to be the normal exchange rate prior to the financial crisis in 2008. Current valuation is even more extreme if compared to the levels below 8.50 against the euro, where the SEK traded during the euro area crisis in 2010-2013. However, our model estimates of the equilibrium exchange rate suggest that the krona is probably not as cheap as it might first appear and a more reasonable level in the longer term might be between 9.50 and 10 against the euro. The substantial weakening of the SEK since 2013 should also be somewhat nuanced, given that it then came from levels where it probably was considerably overvalued against the euro.

As the table below shows, the krona is undervalued against a number of currencies today, but there are also some currencies such as the GBP, the NOK and the AUD that probably are somewhat undervalued against the krona. In trade weighted terms, the model suggests that the krona is undervalued by around 6% against other G10 currencies. This indicates that today's levels are not as extreme as it might first seem. Although the Riksbank can be blamed for triggering the SEK-weakness in recent years by its policy actions, the weakening seems to be partly related to deteriorating fundamentals. Should the Riksbank continue to normalize monetary policy after its initial rate hike in 2018, this is likely to trigger a slightly stronger krona but the EUR/SEK is unlikely to fall back much below 10.00 while the USD/SEK probably will trade somewhere in the 8.00 to 8.50 range.

### SEK Long-term valuation

Ccy pair	LTFV	Spot	Dev. LTFV*	12m fwd	Dev. Fwd
EUR/SEK	<b>9.71</b>	10.44	<b>7%</b>	10.48	-8%
USD/SEK	<b>8.46</b>	9.23	<b>9%</b>	8.99	-6%
NOK/SEK	<b>1.13</b>	1.09	<b>-4%</b>	1.07	5%
GBP/SEK	<b>12.46</b>	12.05	<b>-3%</b>	11.93	4%
JPY/SEK	<b>8.23</b>	8.25	<b>0%</b>	8.25	0%
AUD/SEK	<b>6.74</b>	6.64	<b>-2%</b>	6.51	3%
NZD/SEK	<b>5.68</b>	6.21	<b>9%</b>	6.09	-7%
CAD/SEK	<b>6.54</b>	6.93	<b>6%</b>	6.80	-4%
CHF/SEK	<b>7.95</b>	9.16	<b>14%</b>	9.23	-15%
SEK TWI			<b>6%</b>	-	-

\*Positive value = SEK undervalued