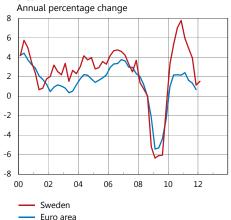
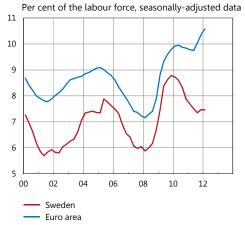
Why has inflation been lower in Sweden than in the euro area?

Figure A15. GDP growth in Sweden and the euro area



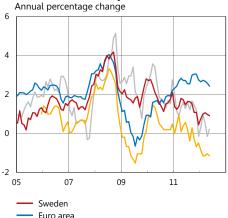
Source: OECD

Figure A16. Unemployment in Sweden and the euro area



Source: OECD

Figure A17. HICP in Sweden, the euro area, Switzerland and Norway



Note. HICP refers to the Harmonised Index for Consumer Prices. Sources: Eurostat and Statistics Sweden

Switzerland

Inflation has been lower in Sweden than in the euro area over the past year. This is despite growth being higher and unemployment lower in Sweden than in the euro area. There are several different explanations for this. One explanation is that the Swedish krona has appreciated in recent years.

Lower inflation in Sweden than in the euro area

Following the financial crisis, growth has been much higher in Sweden than in the euro area (see Figure A15). Unemployment has fallen by almost 2 percentage points in Sweden, at the same time as it has continued to rise in the euro area (see Figure A16). However, inflation is lower in Sweden than in the euro area (see Figure A17). In Sweden inflation has fallen gradually in the years following the financial crisis. In the euro area inflation fell rapidly at the beginning of the financial crisis, but has risen since the middle of 2009. In May 2012 HICP inflation (Harmonised Index for Consumer Prices) was 0.9 per cent in Sweden, but 2.4 per cent in the euro area.

Exchange rate explains large share of difference

One of the explanations as to why inflation is lower in Sweden than in the euro area is the development of the krona exchange rate. In 2008 and 2009 the krona weakened substantially, both in trade-weighted terms and against the euro, only to then strengthen towards more normal levels (see Figure A18). Sweden, unlike the euro area, is a small, open economy, and the development of the exchange rate has considerable significance for inflation. Norway, which is also a small, open economy, has seen a similar development in the exchange rate and inflation. Like the Swedish krona, the Norwegian krona weakened substantially during the financial crisis 2008-2009, and then strengthened. Inflation in Norway remained high during the financial crisis and has since fallen (see Figure A17). A further example is Switzerland, where the appreciation of the Swiss franc in recent years has had a large impact on inflation in Switzerland (see Figures A17 and A19).

Exchange rate and cost pressures reflected in different sub-groups

The way that changes in the exchange rate affect different price groups in the HICP basket depends among other things on the size of the import content in these groups. In the HICP basket the import content is large in the groups of goods (refers to industrial goods excluding energy and food) and food (refers to unprocessed food). The rate of price increase in these groups has also been very low, with falling prices in Sweden during 2011 (see Figures A20 and A21). The corresponding prices in the euro area have at the same time continued to rise. Food prices are also affected by developments in commodity prices on the world market. Figure A20 shows how the rate of price increase for food both in Sweden and the euro area begins to rise when commodity prices increase in 2006-2007. After that, commodity prices fall back and the rate of price increase on food in the euro area falls. In Sweden, however, the rate of

increase in food prices was still high, largely due to the krona weakening against the euro (see Figures A19 and A20). The impact of the weaker krona during the crisis and the strengthening that followed are perhaps even clearer in the development of goods prices (see Figure A21). Developments in prices for services, on the other hand, have recently been more similar in Sweden and the euro area (see Figure A22). As the import content in this group is less than for goods and food, prices of services are affected to a greater degree by domestic conditions, such as production costs, than by the exchange rate. Cost pressures in terms of unit labour costs have developed fairly similarly in Sweden and the euro area (see Table A2).

Low electricity prices in Sweden contribute

A further factor that contributes to inflation being lower in Sweden than in the euro area is the development of energy prices. These are affected by developments in the exchange rate. Developments in electricity prices moreover have a somewhat larger weight in the Swedish HICP than the euro area HICP. This has recently contributed to holding back prices in the Swedish HICP. During the latter part of 2011 and in 2012, electricity prices on the Nordic electricity market Nordpool have fallen heavily, when measured in euro and even more when measured in Swedish krona.

Changes in indirect taxes are also important

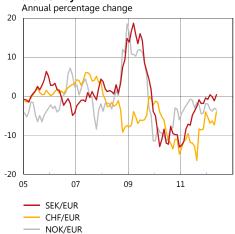
In several euro area countries they have raised indirect taxes over the past year with the aim of improving public finances. This has contributed to inflation being somewhat higher and it explains some part of the difference between HICP inflation in Sweden and in the euro area. During 2011 these tax changes contributed to increasing the difference by on average 0.3 percentage points. However, during 2012 the difference that is due to changes in indirect taxes has declined, despite the VAT on restaurants and catering services in Sweden being cut with effect from 1 January this year. According to calculations by the National Institute of Economic Research, this has contributed to inflation in Sweden becoming around 0.1 percentage points lower at the beginning of 2012.²⁵

Differences in inflation will decline in the future

The large fluctuations in the Swedish exchange rate in recent years are thus an important explanation of the difference in inflation in Sweden and the euro area. This raises the question of why the krona first weakened during the crisis and then strengthened. Sweden is very dependent on exports, and when exports fell heavily during the crisis it contributed to weakening the krona. However, developments in recent years have also shown that in periods of great financial uncertainty, less liquid currencies, such as the Swedish krona, tend to weaken as investors prefer to invest in currencies with higher liquidity. The severe weakening of the krona in 2008-2009 was probably also due to Swedish financial



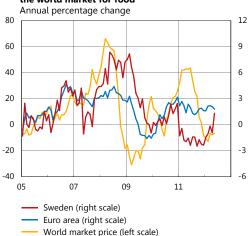
Figure A19. Exchange rate for Sweden, Switzerland and Norway



Source: Reuters EcoWin

Source: Reuters EcoWin

Figure A20. Foods in HICP and commodity prices on the world market for food

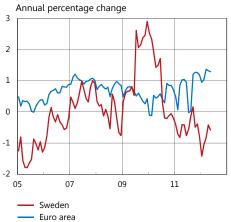


Note. World market price for food refers to The Economist's Commodity Price Index for food.

Sources: Eurostat, Statistics Sweden and The Economist

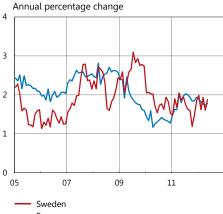
²⁵ See the National Institute of Economic Research, "Kortsiktiga priseffekter av sänkt mervärdesskatt på restaurang- och cateringtjänster" (short-term price effects of reduced VAT on restaurant and catering services), Article No 13, 2012 and The Swedish Economy June 2012.

Figure A21. Goods in HICP for Sweden and the euro



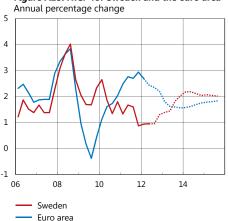
Sources: Eurostat and Statistics Sweden

Figure A22. Services in HICP for Sweden and the euro area



Sources: Eurostat and Statistics Sweden

Figure A23. HICP for Sweden and the euro area



Sources: Eurostat, Statistics Sweden and the Riksbank

assets being seen as more risky because of the Swedish banks' large exposure to the Baltic countries. The krona appreciation since the end of 2009 can therefore be regarded as implying that the unease on the financial markets mitigated at the same time as confidence in Swedish banks improved. The sovereign debt crisis in Europe has probably also contributed to increasing demand for Swedish assets, as Sweden's public finances are very strong in comparison with many other European countries.

But other factors may also have affected both the exchange rate and inflation during this period. For example, the policy rate has been higher in Sweden than in the euro area. Economic developments in Sweden have been much better, while the euro area has been hit hard by the sovereign debt crisis. The difference in inflation is expected to decline in the coming period, however. The recovery in Sweden is proceeding faster than that in the euro area, and this means that Swedish inflation is rising relatively quickly towards the target, while inflation in the euro area is falling gradually (see Figure A23).

Table A2. Inflation and unit labour costs in Sweden and the euro area Annual percentage change

	2009	2010	2011	2012
HICP, euro area	0.29	1.62	2.72	2.61
HICP, Sweden	1.94	1.91	1.36	0.94
Unit labour cost Euro area	4.1	-0.9	0.8	1.0
Unit labour cost Sweden	4.1	-1.7	-0.6	1.5

Note. The value for 2012 refers to the average until the end of May for the HICP, and to the end of Q1 for unit

Sources: Eurostat, the OECD and Statistics Sweden