

Norwegian monetary policy seen from abroad

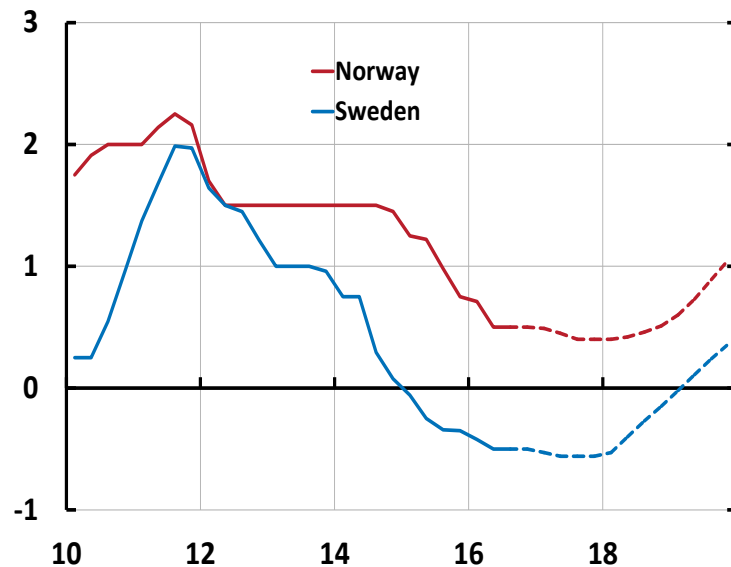
Ministry of Finance, Oslo,
16 January, 2017

Anders Vredin

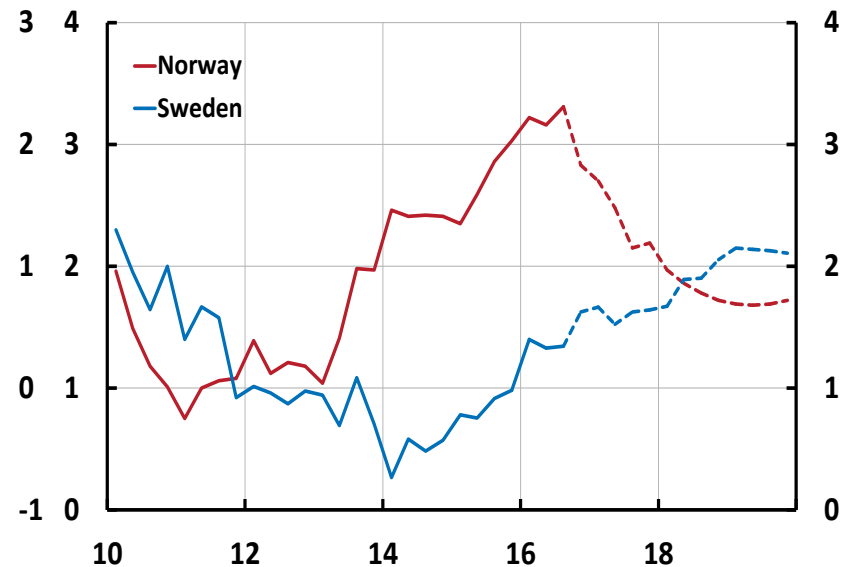
Head of General
Secretariat

Is Norway's monetary policy different from Sweden's?

Policy rate



Inflation



Note. Inflation refers to CPIF for Sweden and CPI-ATE for Norway. Broken lines are the latest forecasts published in december.

Sources: Norges Bank and the Riksbank

Are the strategies different?

Similarities

- Explicit, but flexible inflation target
- Transparency
 - Interest rate forecasts
- Small, efficient central banks
- Separate FSAs
- Fiscal rules
- Small open economies

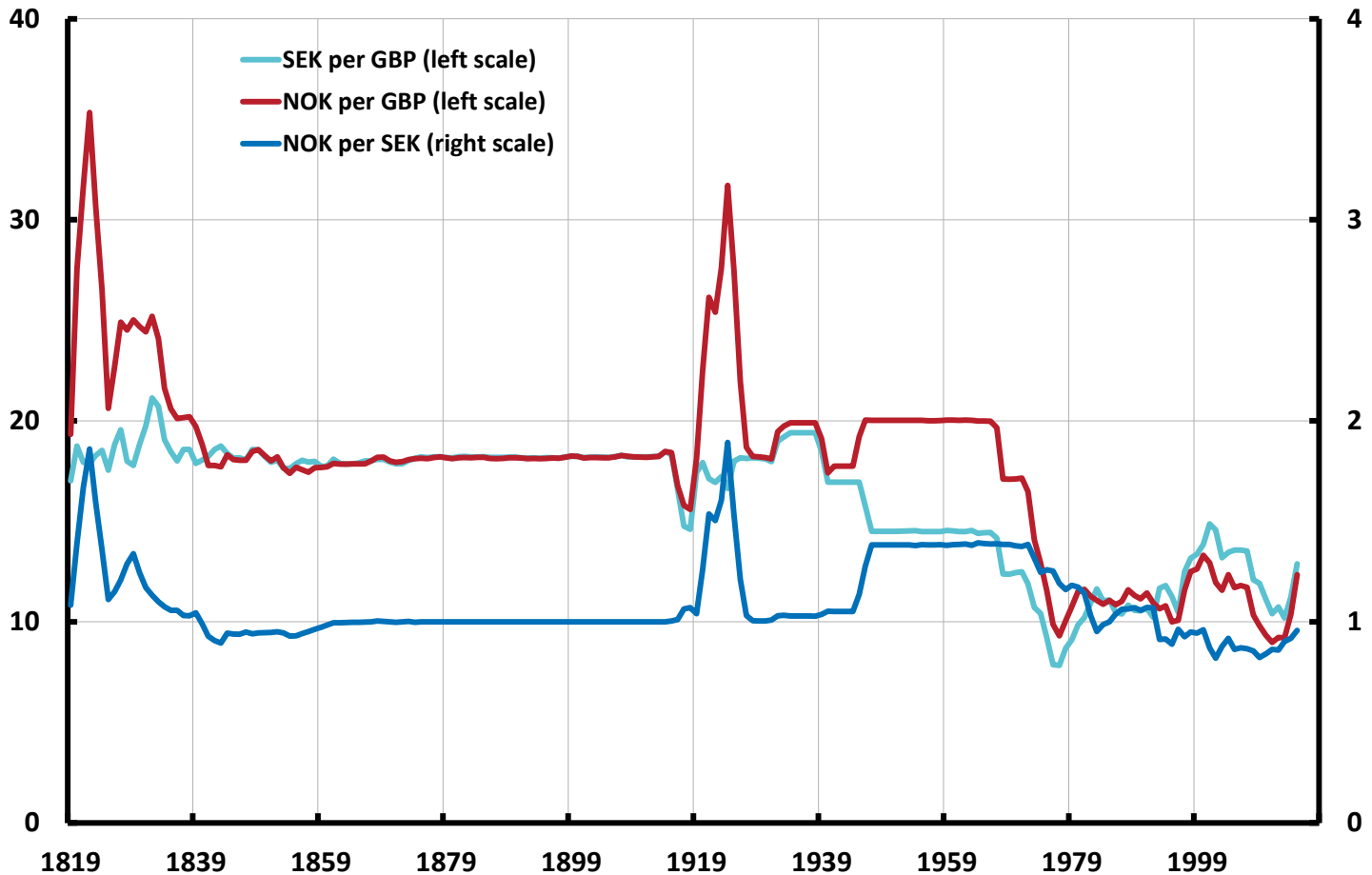
Differences

- EU
- The degree of independence
- Governance
- NB has a broader mandate
- 2,5% vs 2%
- Communication about leaning
- Oil

The NOK/SEK exchange rate currently at the same rate as in 1850...

... but both currencies have appreciated vs the GBP

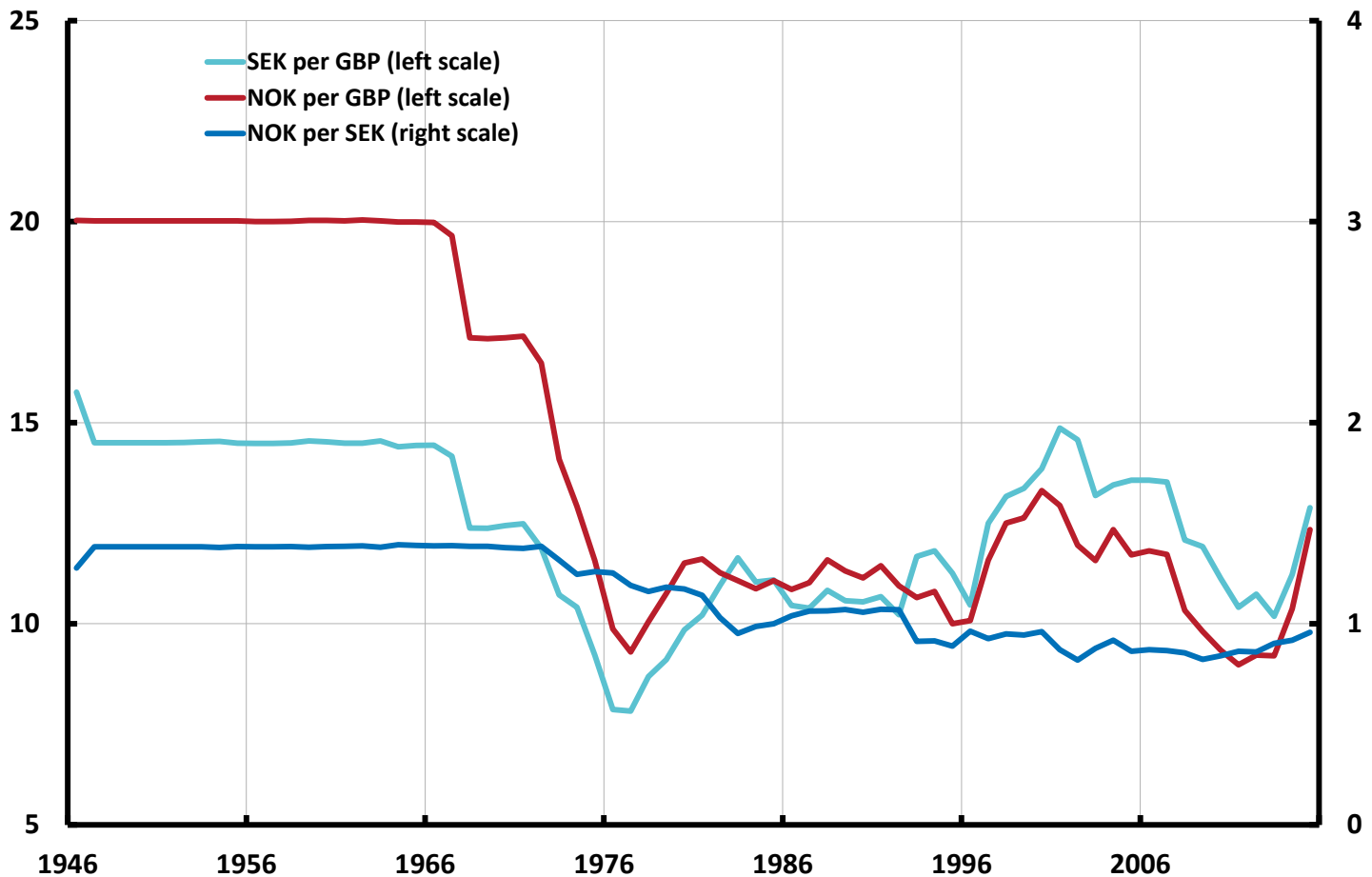
Nominal exchange rates



Sources: Norges Bank and the Riksbank

After the break-down of Bretton Woods, NOK has appreciated vs SEK

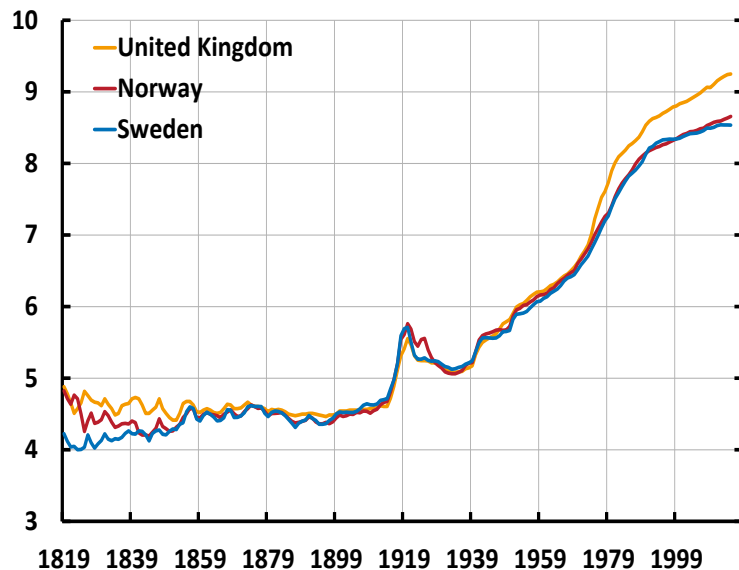
... but no trend since 1996



Sources: Norges Bank and the Riksbank

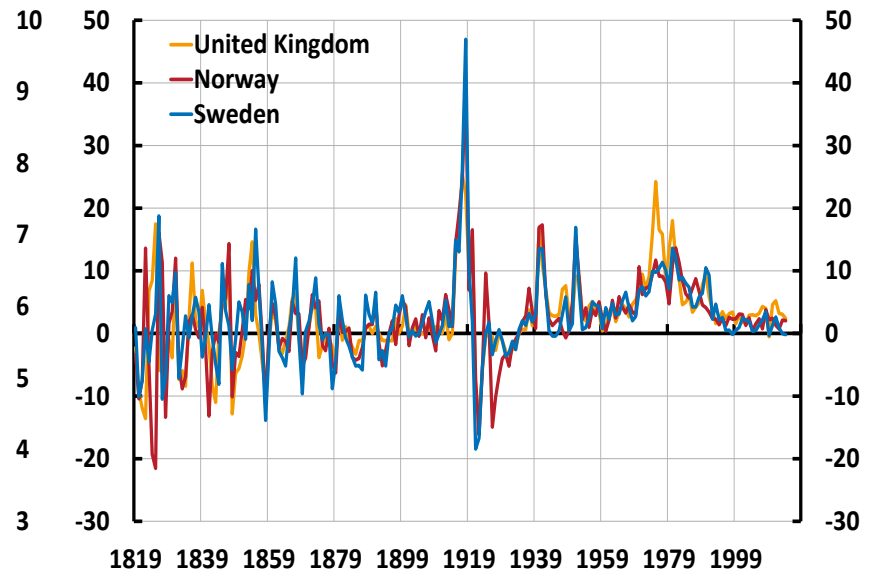
Inflation has been higher in the UK after Bretton Woods

Price level



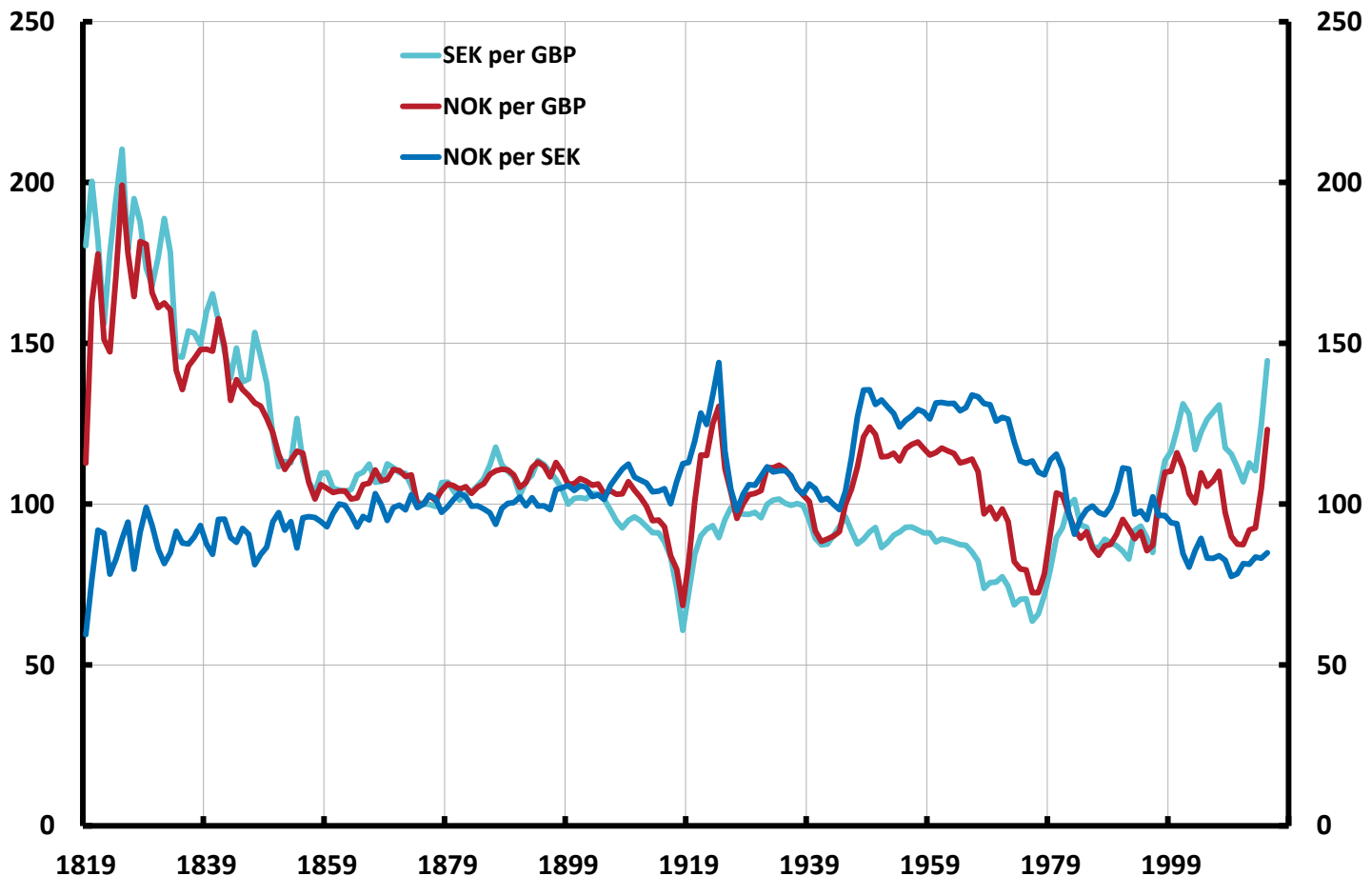
Note. The natural logarithm of index, 1875 = 100 and annual percentage change.

Inflation



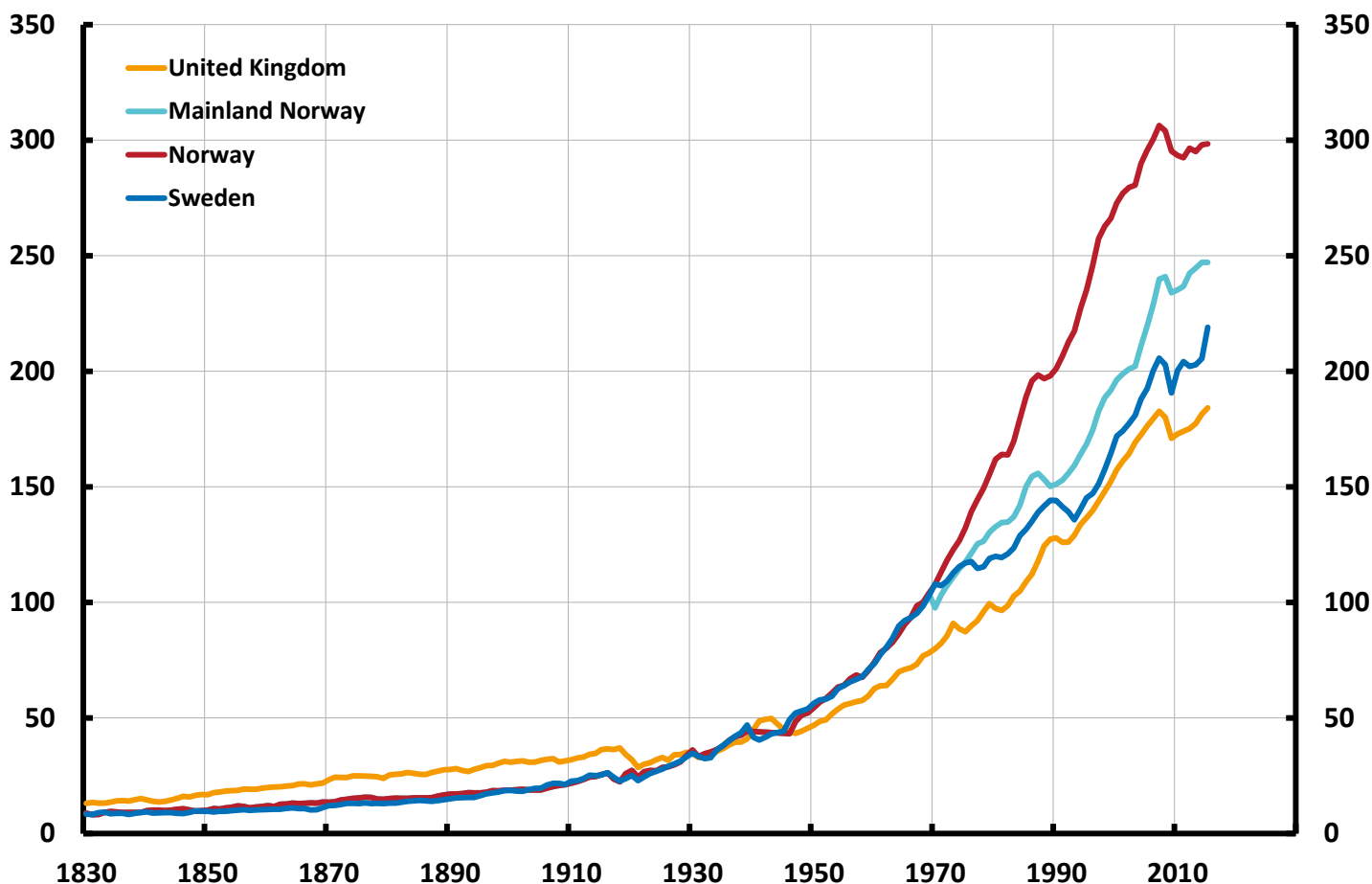
Sources: Office for National Statistics, Norges Bank and the Riksbank

In real terms, SEK was strong after WW II but has depreciated since the first oil crisis – in contrast to the NOK



Note. Nominal exchange rates and price level indices are indexed, 1875 = 100.

Real GDP per capita is around 35% higher in Norway

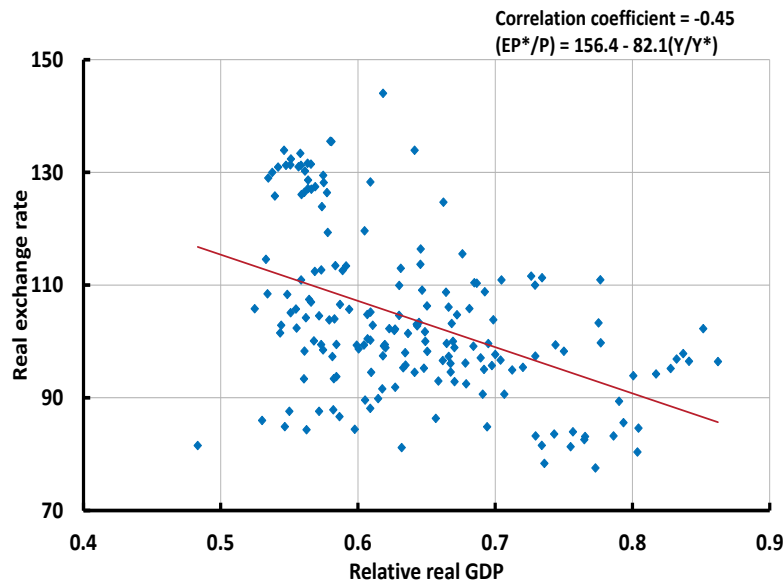


Note. Purchasing Power Parity-adjusted GDP 2010.

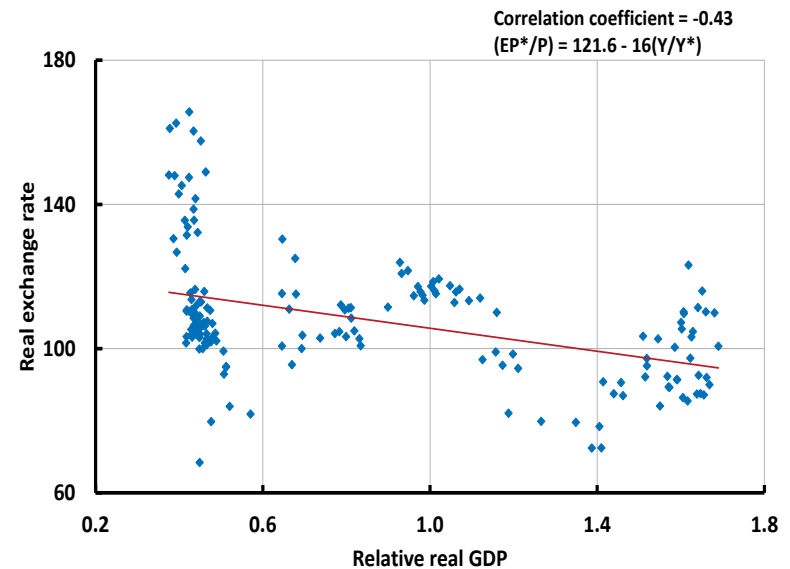
Sources: Bank of England, IMF, Norges Bank, Macrobond, Statistics Norway and the Riksbank

Higher GDP in Norway one reason behind stronger real exchange rate

Norway vs Sweden



Norway vs the UK

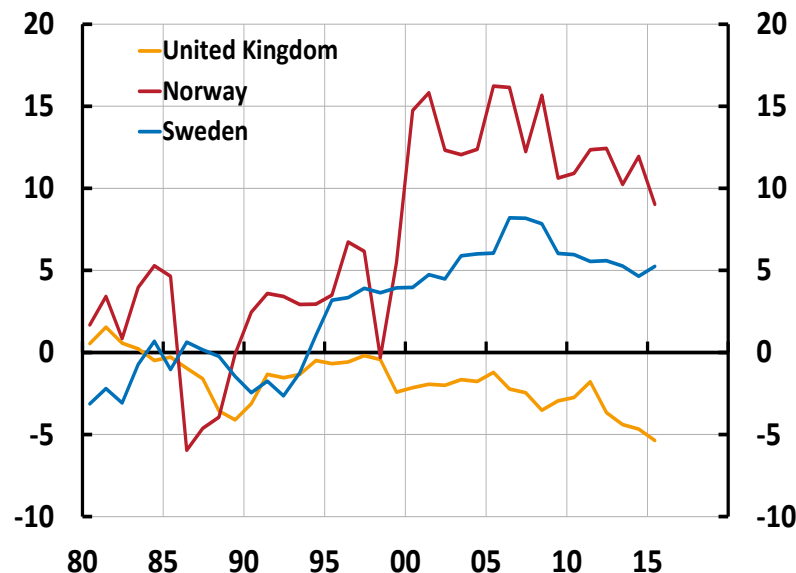


Sources: Bank of England, IMF, Norges Bank, Macrobond, Office for National Statistics, Statistics Norway and the Riksbank

Different explanations for current account surpluses in Sweden and Norway

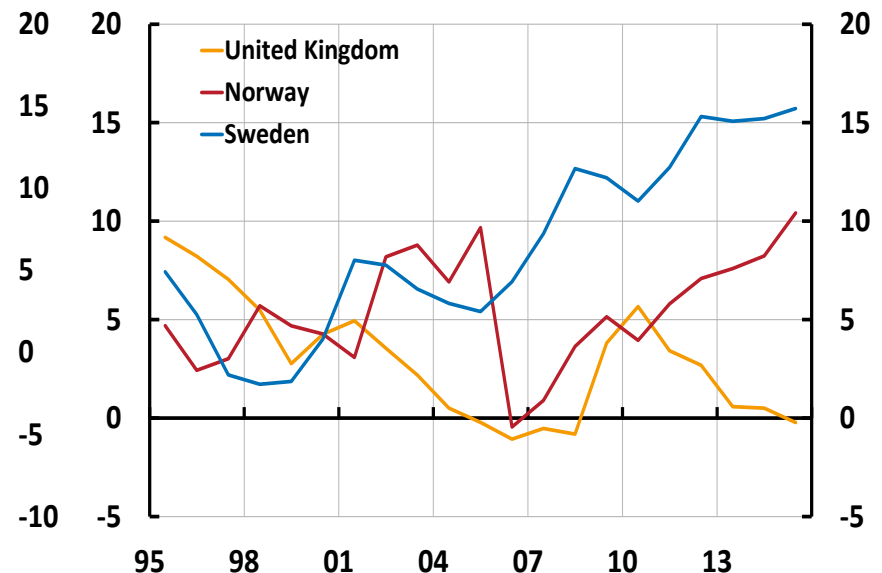
Norway: Oil production and real appreciation

Current account as share of GDP:



Sweden: high savings and real depreciation

Household savings as share of disposable income:



Note. Per cent of GDP and percentage of households net disposable income. Net household saving is defined as the subtraction of household consumption expenditure from household disposable income, plus the change in net equity of households in pension funds.

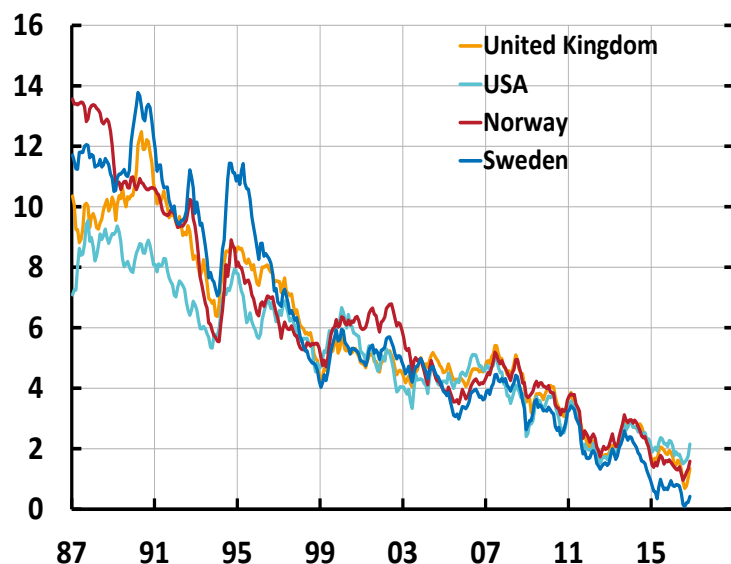
Source: IMF and OECD

Lessons for policy I:

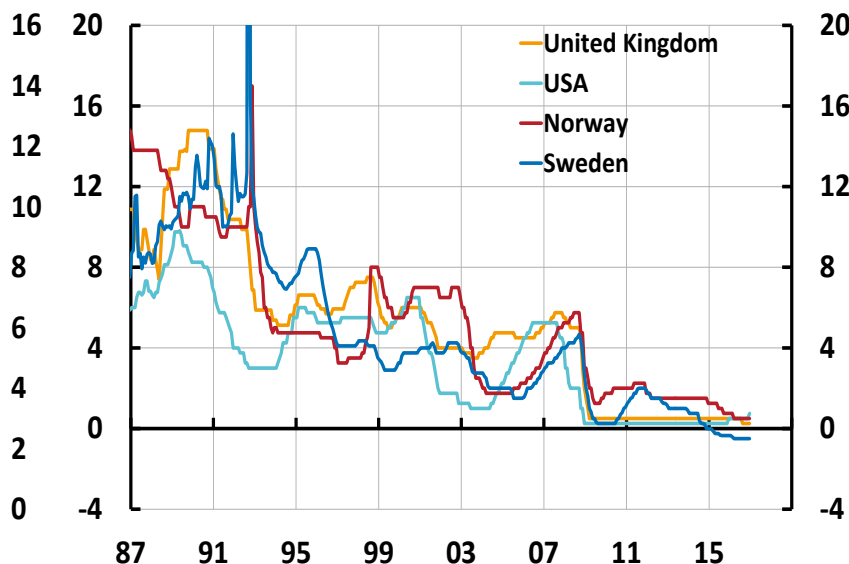
- Structural factors have generated a real appreciation in Norway and a real depreciation in Sweden since the Bretton Woods regime. The NOK/SEK rate has appreciated by around 1/3, in both nominal and real terms.
- Monetary policies affect how the change in the real exchange rate is decomposed into changes in the price levels and the nominal exchange rate.
- During the recent twenty years, the nominal NOK/SEK rate has been quite stable. Inflation has been higher in Norway. Almost like a currency union!
- Difference in inflation targets is understandable – so far.

Nominal interest rates have declined, globally...

10-year yield on nominal government bonds



Central banks' policy rates

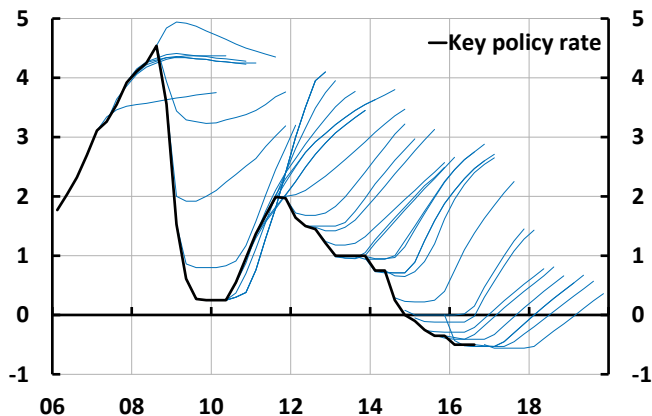


Note. Per cent. For Norway the discount rate is used 1980-1986/02, the D-loan rate 1986/03-1993/05, and Sight deposit afterwards. For Sweden the discount rate is used 1980-1986, The marginal rate 1987-1994/05 and the repo rate afterwards.

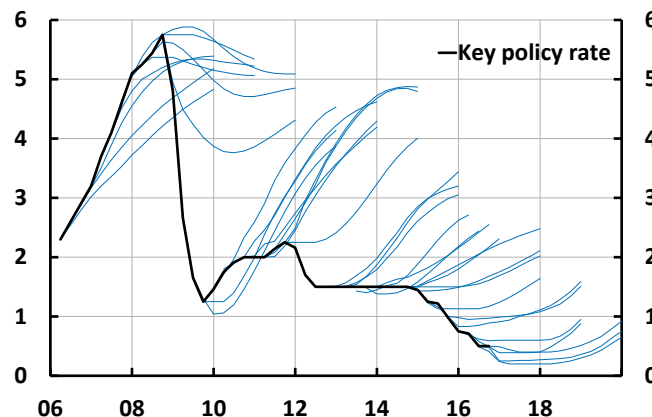
Sources: Bank of England, Federal Reserve, Norges Bank and the Riksbank

... and more than central banks have expected

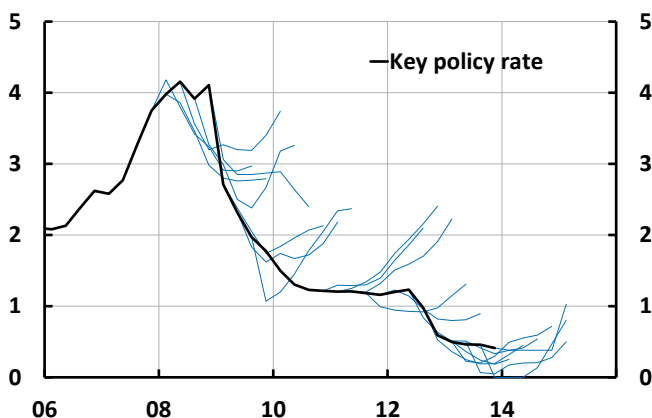
Sweden



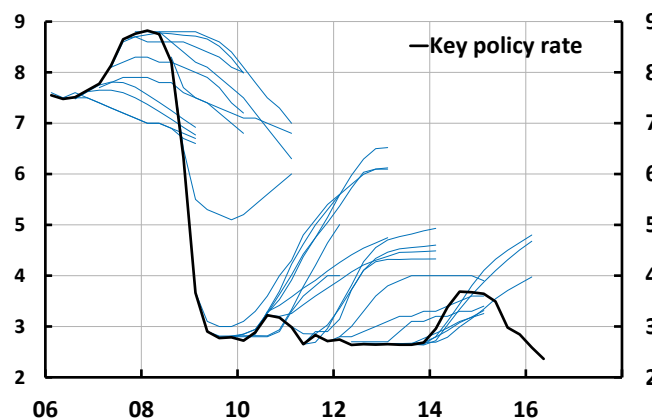
Norway



Czech Republic



New Zealand

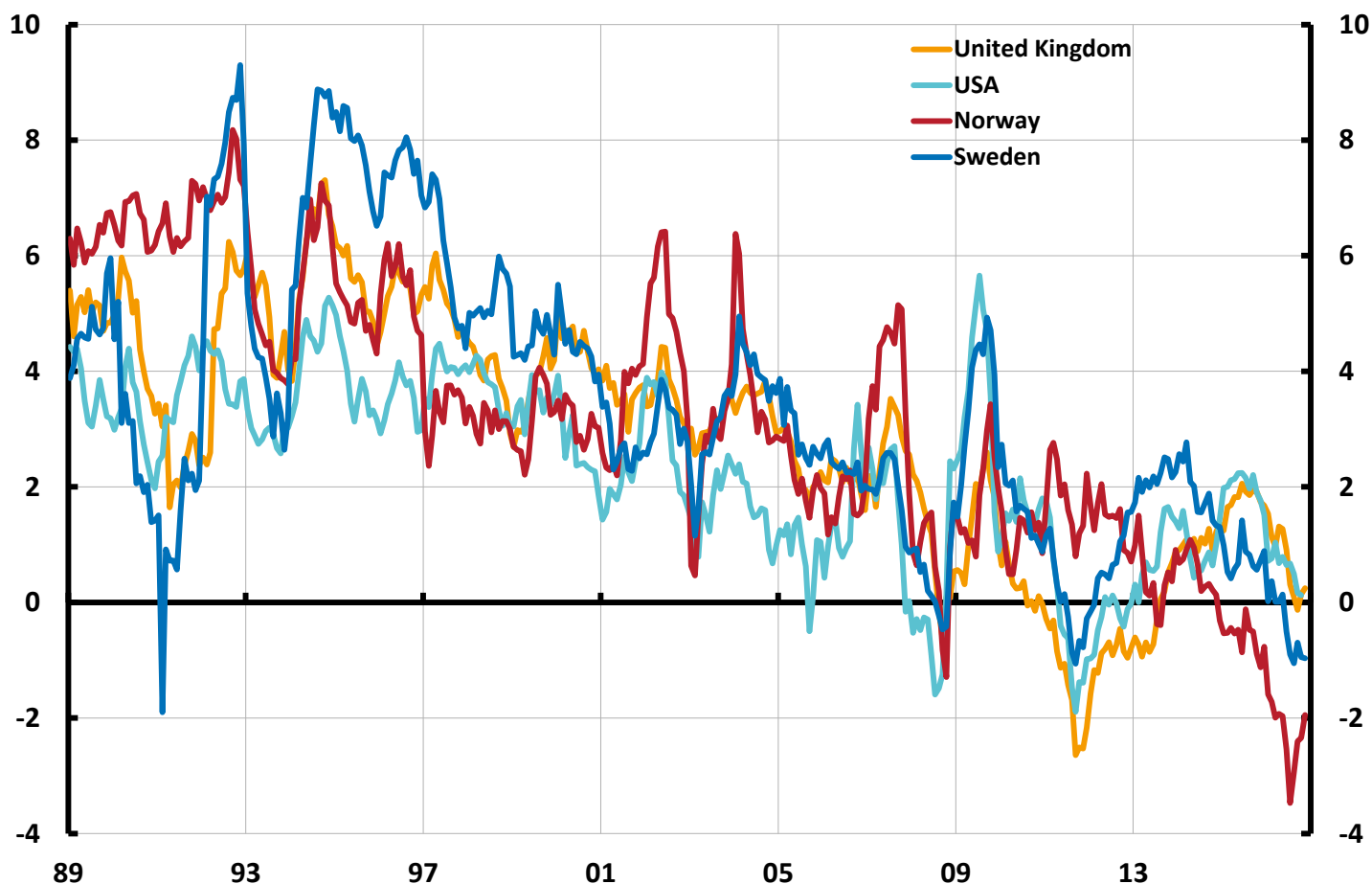


Source: Filardo & Hofmann (2014), BIS.

Possible explanations for forecast errors

- Transparent central banks make worse forecasts?
- Central banks rely on obsolete models?
- Central banks make bad judgments?
- Some global factors have kept real interest rates surprisingly low (see, Rachel and Smith, 2015; Fischer, 2016) e.g.
 - Slowdown in innovation
 - Demographic changes
 - Higher inequality
 - Perceived uncertainty
 - Less expansionary fiscal policy

Real interest rates based on the Fisher equation



Note. Per cent. Difference between 10-year yield on nominal government bonds and the CPI for all countries.

Source: Macrobond

Lessons for policy II:

- Low policy rates in Norway and Sweden are reflections of globally low interest rates – nominal and real
- Long run trends in nominal and real interest rates are strongly correlated across countries
- Higher capital mobility has presumably implied stronger correlations
- Differences in monetary policy strategies may have become less important
 - Policy strategies may have become more similar
 - Different policy choices may have smaller real effects
- The differences between Norway's and Sweden's policy choices may have been economically significant but quantitatively small

Challenges for monetary policy in both Norway and Sweden



- The definition of the inflation target
- The level of the policy rate in "steady state"
- The implications of financial stability risks
- Co-ordination with macro-pru
- Consistency of monetary and fiscal policies
- Central bank independence
 - Vis-a-vis the rest of the world; flexibility of nominal exchange rates; labor and capital mobility
 - Vis-a-vis the political system; under consideration in reviews of central bank laws
- Communication and transparency: how do we communicate uncertainty?

Extra

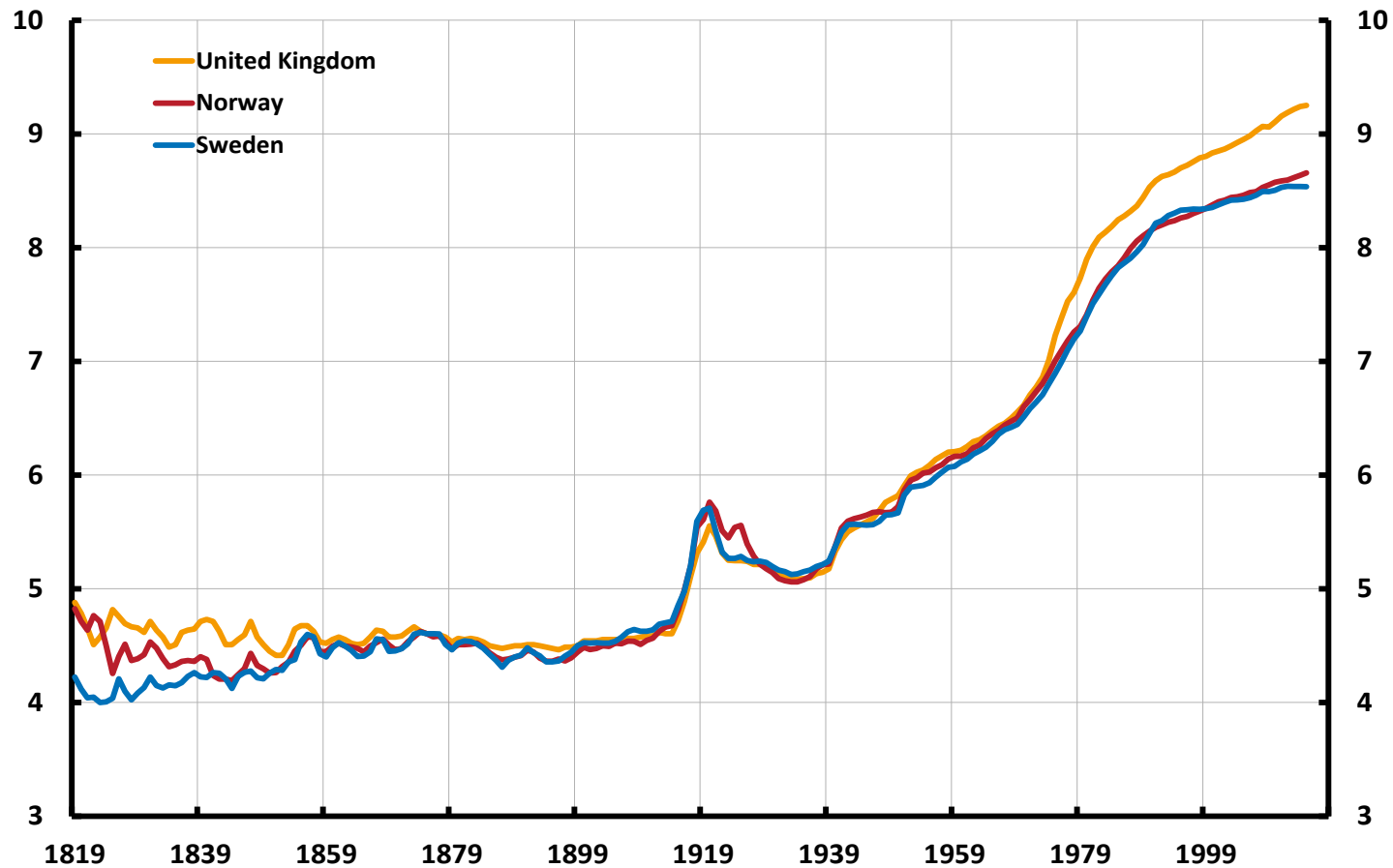
S V E R I G E S R I K S B A N K

On transparency...

"Who wants transparency when you can have magic?
Who wants prose when you can have poetry?"

Duke of Windsor,
in the TV series "The Crown"

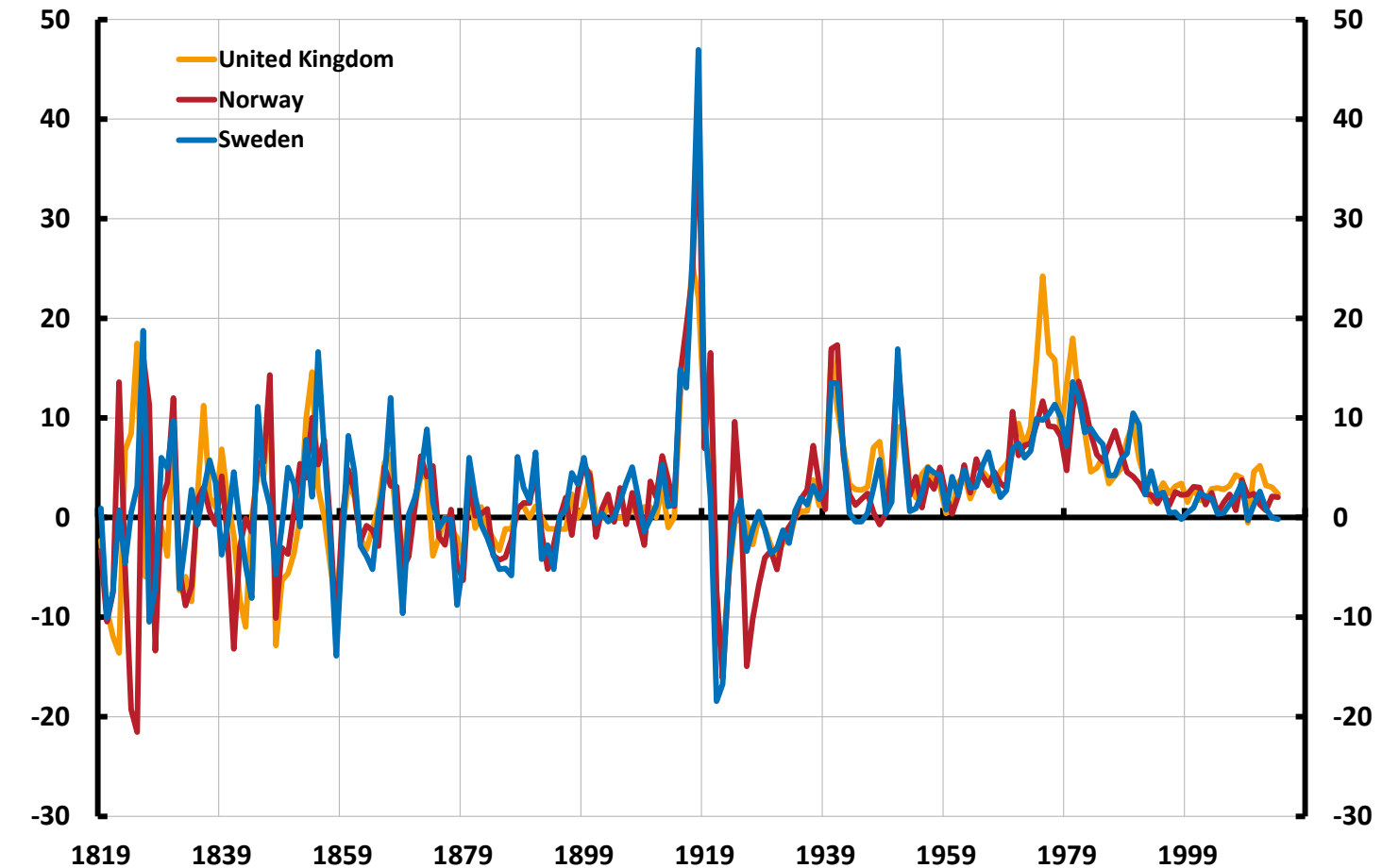
Price level



Note. The natural logarithm of index, 1875 = 100.

Sources: Office for National Statistics,
Norges Bank and the Riksbank

Inflation

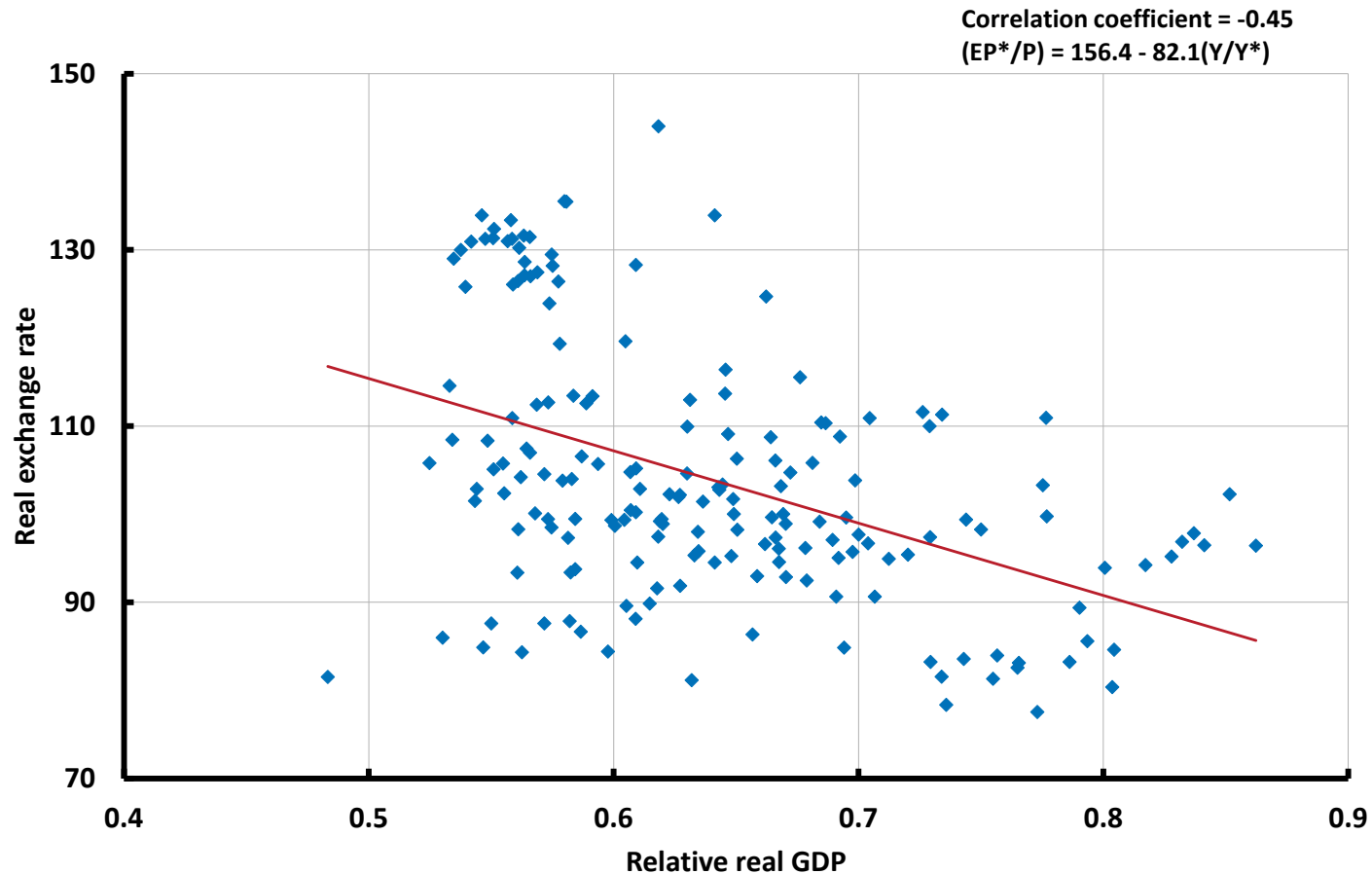


Note. Annual percentage change.

Sources: Office for National Statistics,
Norges Bank and the Riksbank

Higher GDP in Norway one reason behind stronger real exchange rate vs Sweden

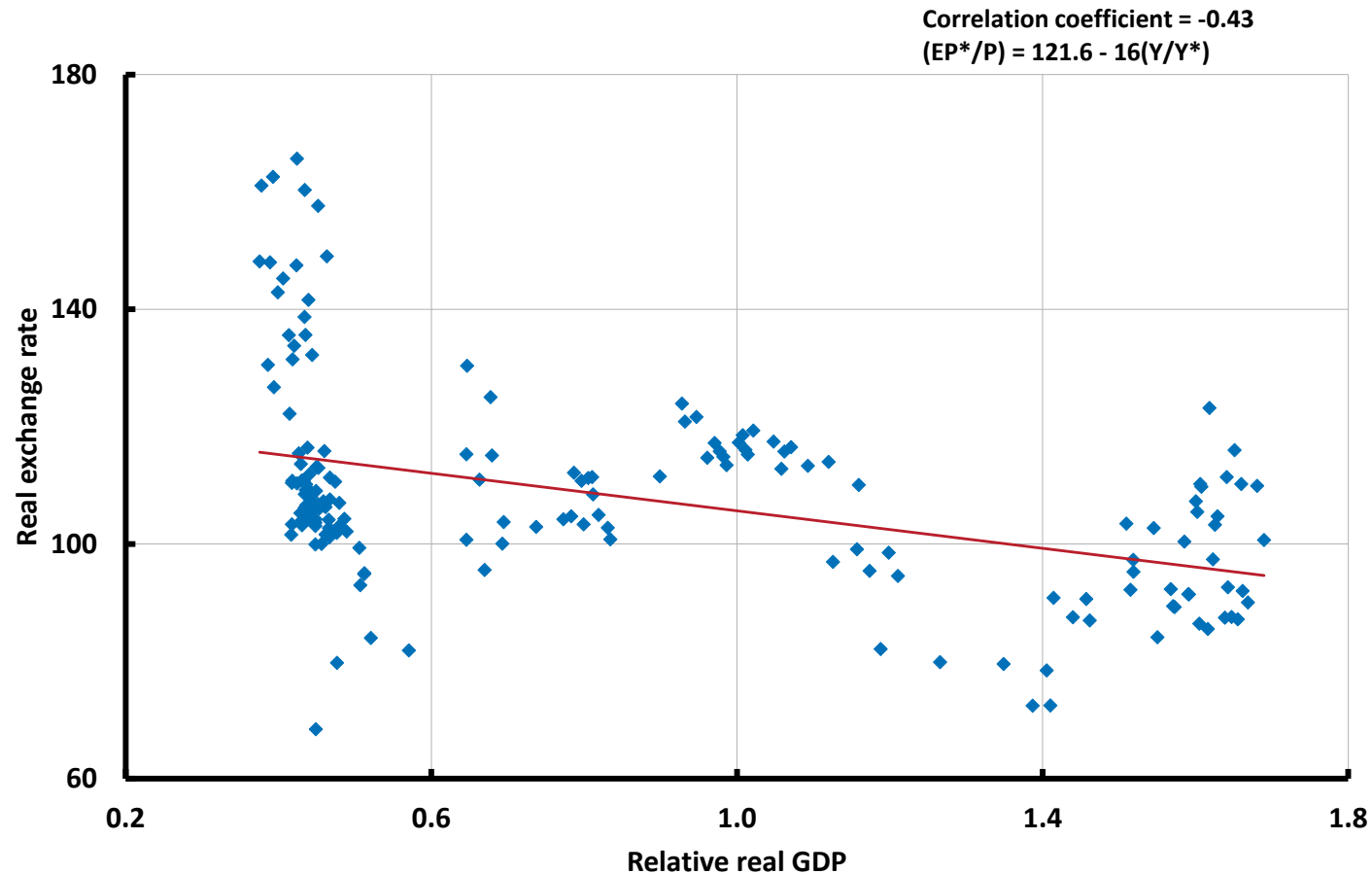
Real exchange rate and relative GDP level, 1830 - 2015



Sources: Bank of England, IMF, Norges Bank, Macrobond, Office for National Statistics, Statistics Norway and the Riksbank

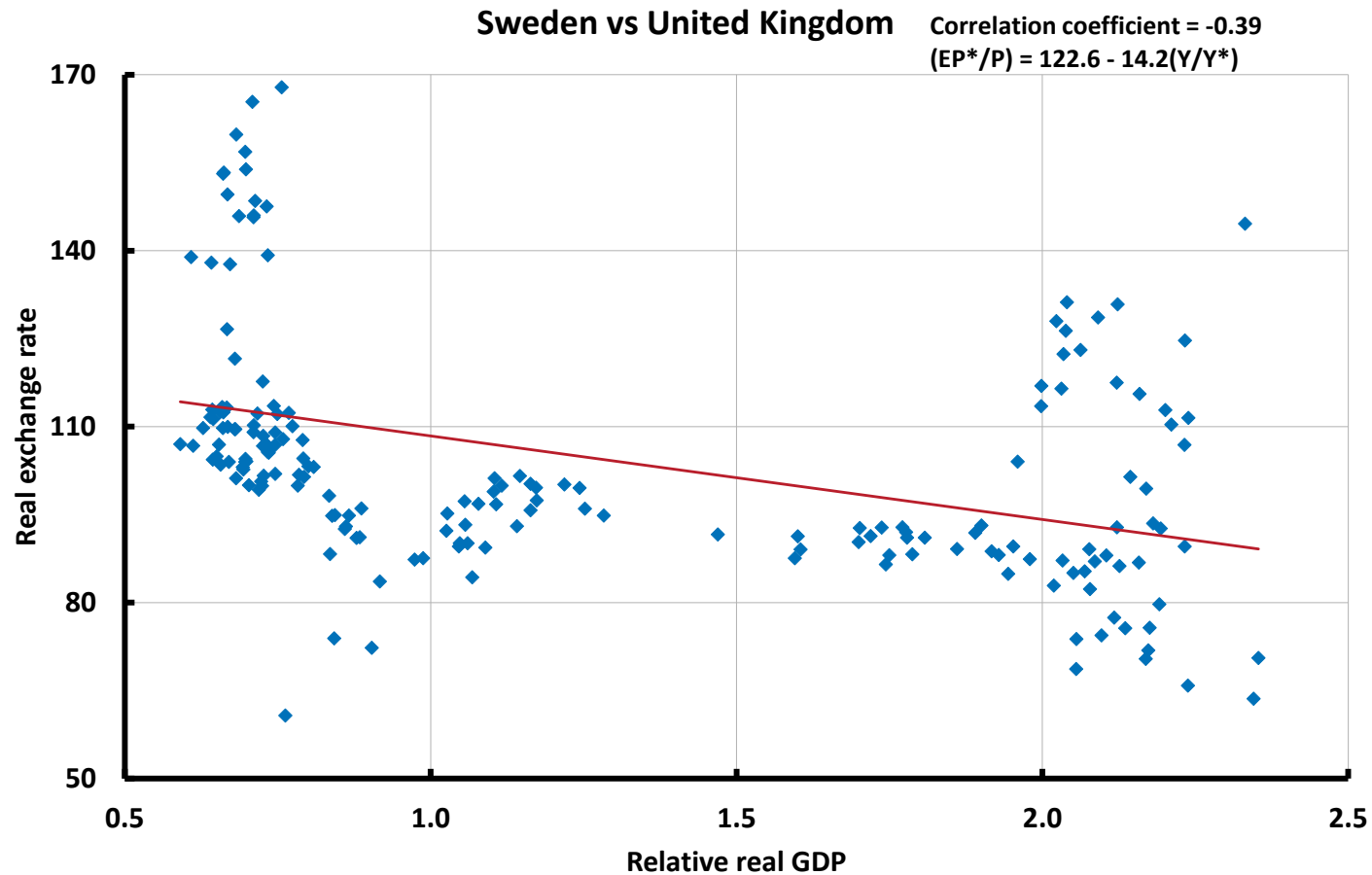
Somewhat weaker link between real exchange rate and GDP for Norway vs UK

Real exchange rate and relative GDP level, 1830 - 2015



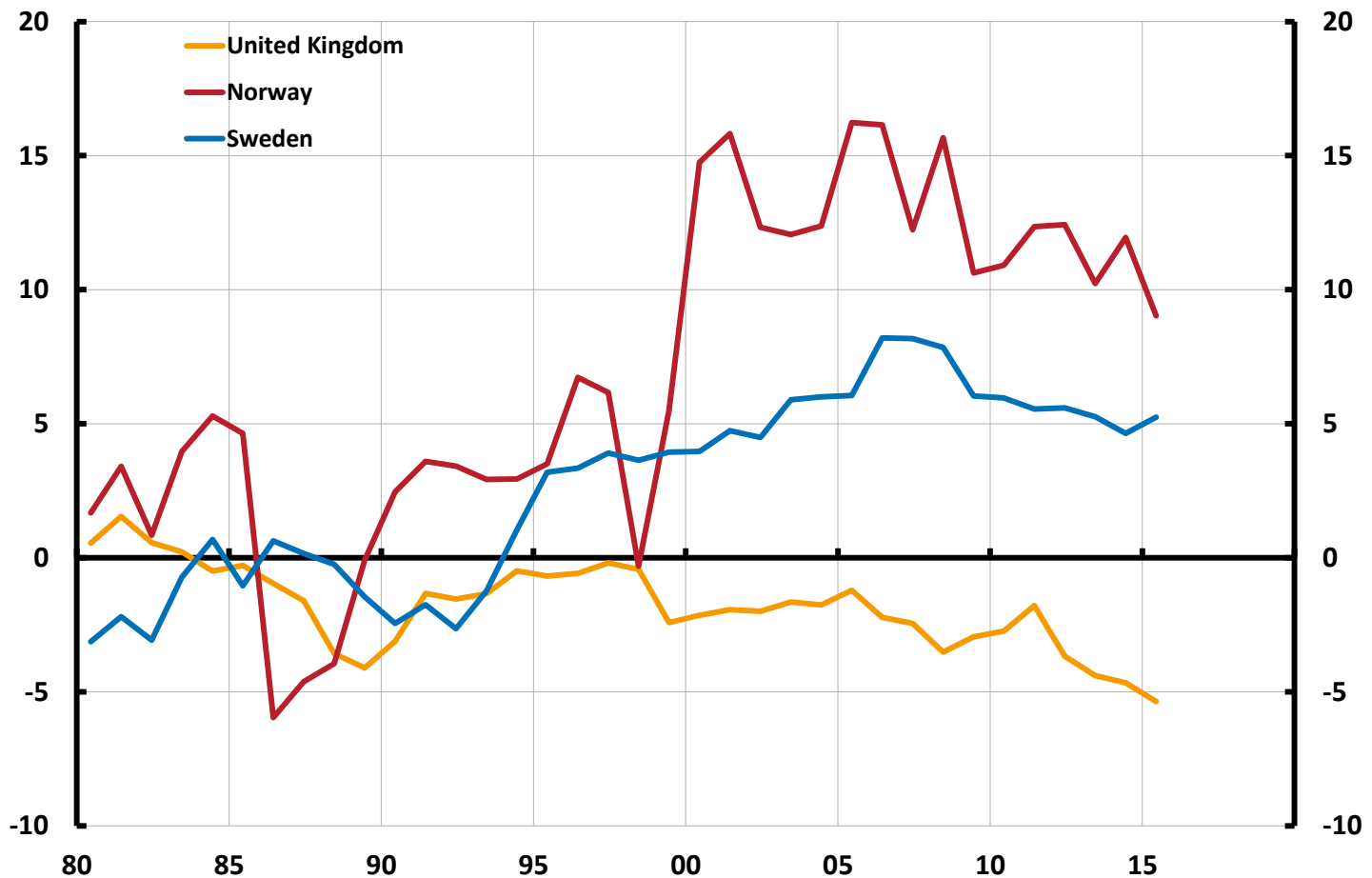
Sources: Bank of England, IMF, Norges Bank, Macrobond, Office for National Statistics, Statistics Norway and the Riksbank

Relationship between real exchange rate and GDP



Sources: Bank of England, IMF, Norges Bank, Macrobond, Office for National Statistics, Statistics Norway and the Riksbank

Oil production generates current account surplus and real appreciation in Norway

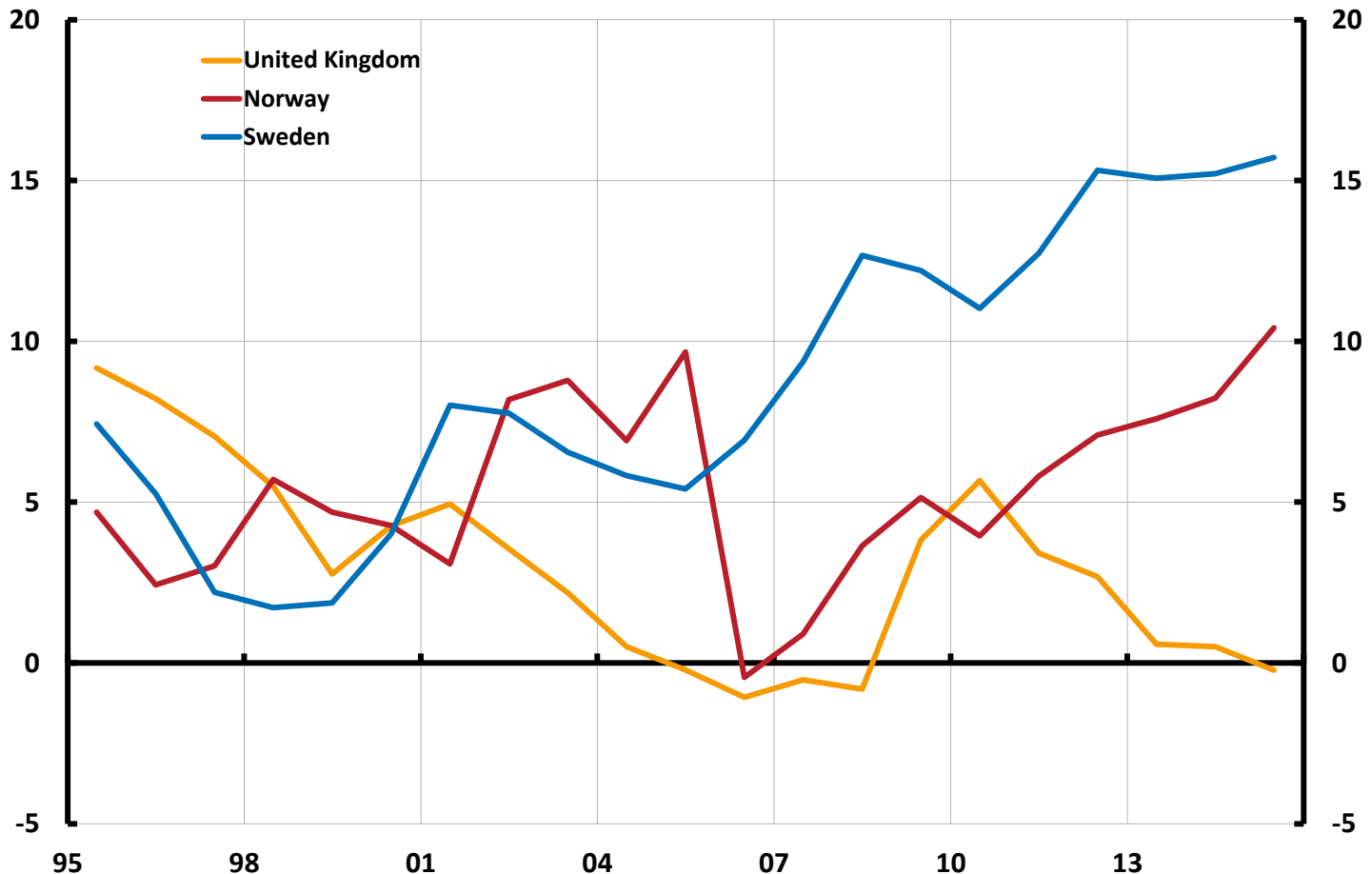


Note. Per cent of GDP.

Source: IMF, WEO

High domestic savings create current account surplus and real depreciation in Sweden

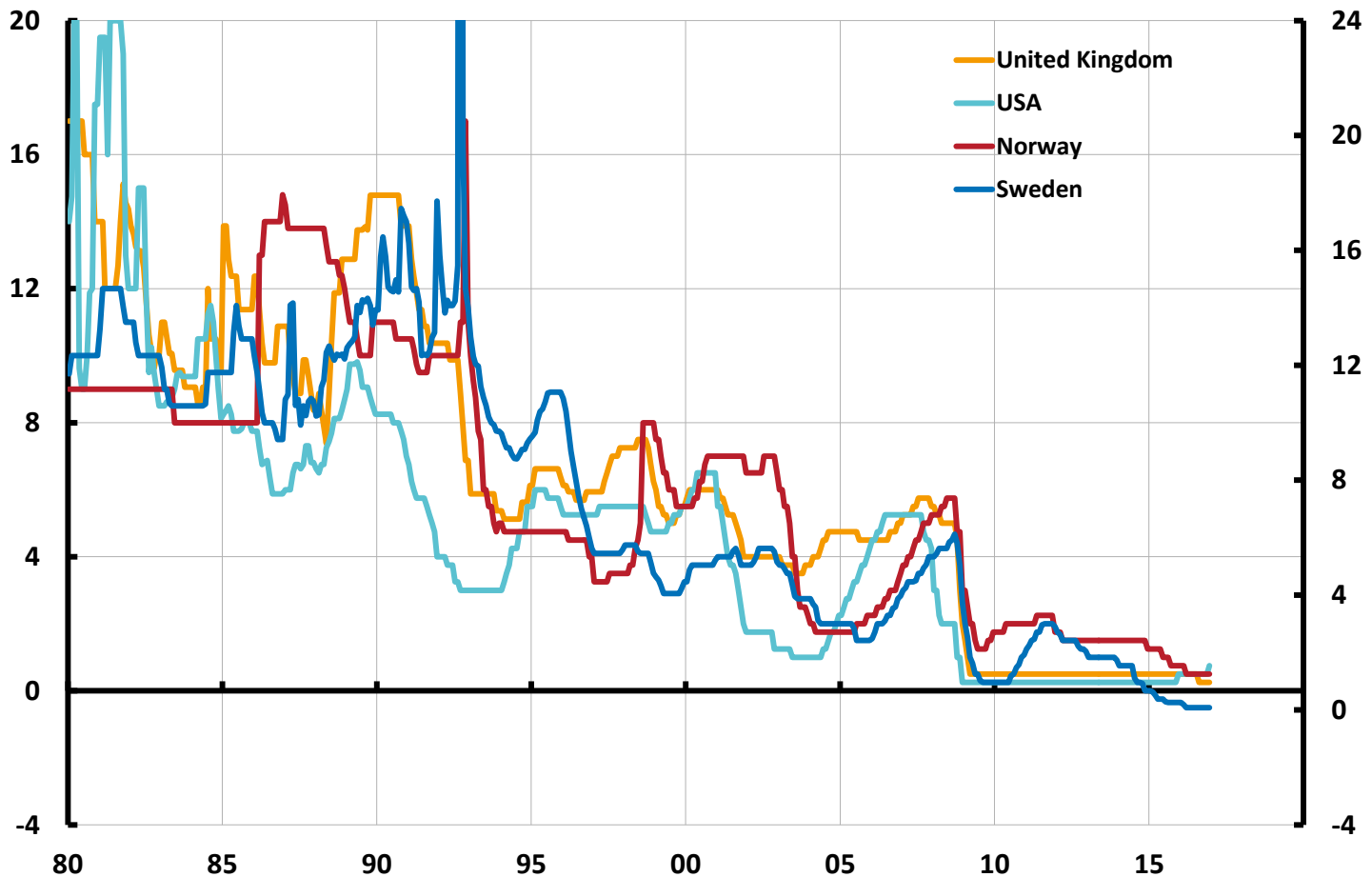
Total savings of households



Note. Percentage of households net disposable income. Net household saving is defined as the subtraction of household consumption expenditure from household disposable income, plus the change in net equity of households in pension funds.

Source: OECD

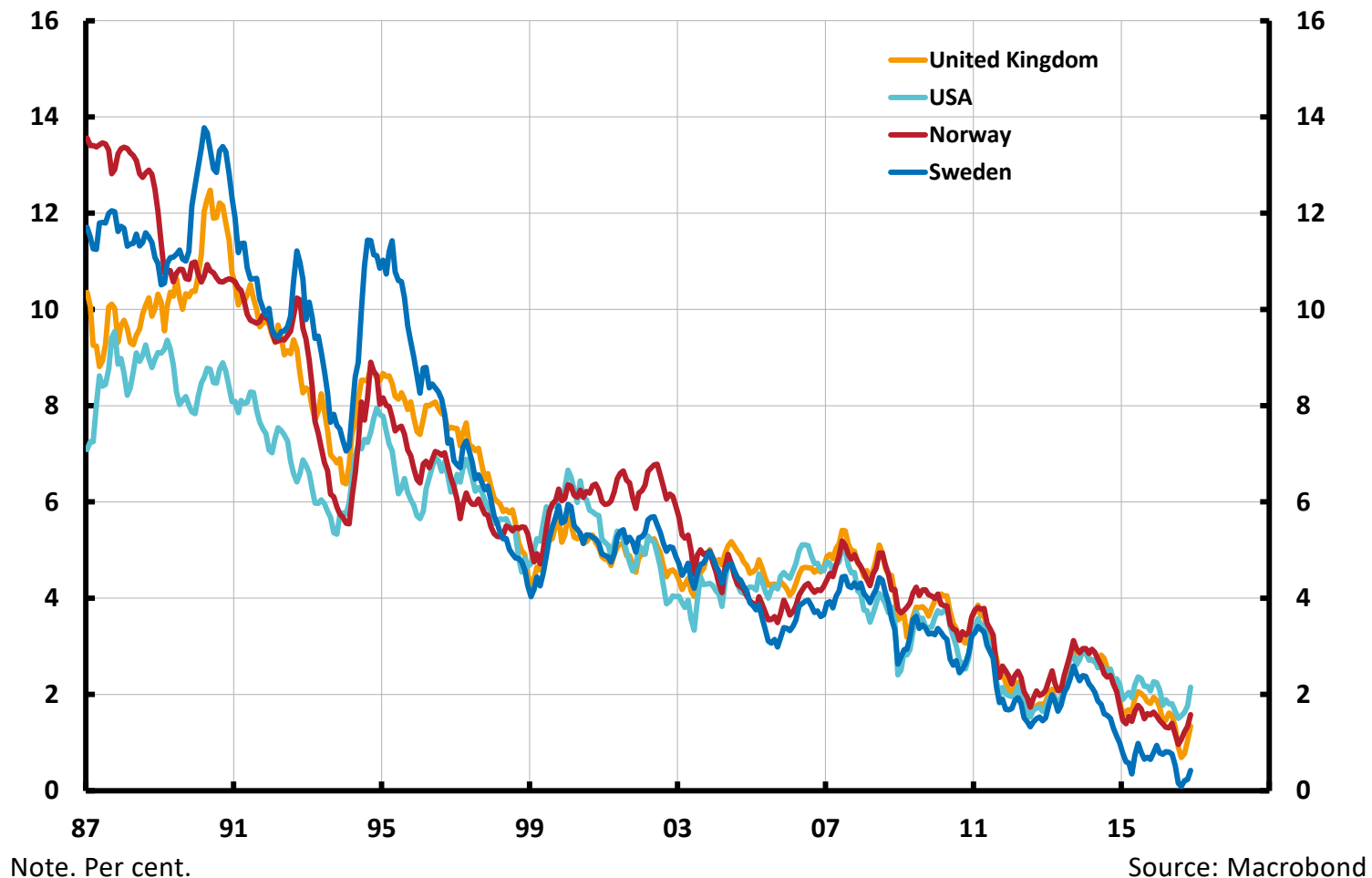
Downward trend in policy rates



Note. Per cent. For Norway the discount rate is used 1980-1986/02, the D-loan rate 1986/03-1993/05, and Sight deposit afterwards. For Sweden the discount rate is used 1980-1986, The marginal rate 1987-1994/05 and the repo rate afterwards.

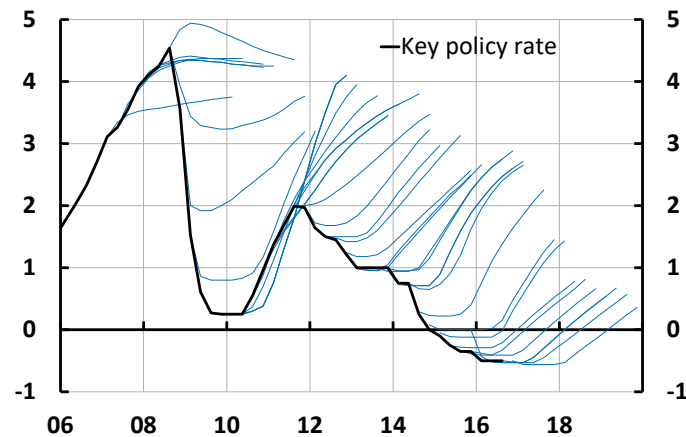
Sources: Bank of England, Norges Bank and the Riksbank

10-year yield on nominal government bonds

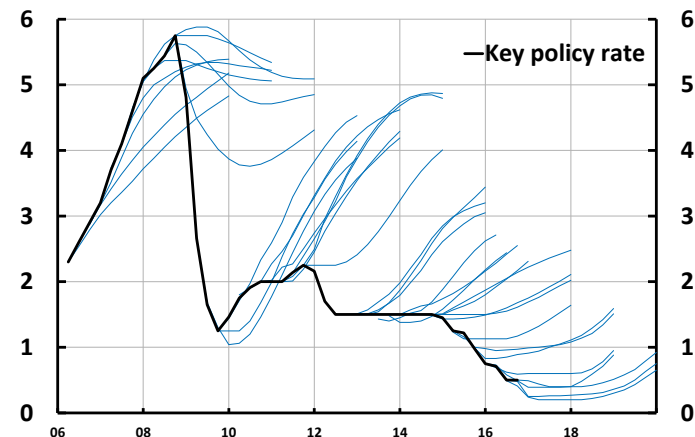


Policy rate projections by central banks

Sweden



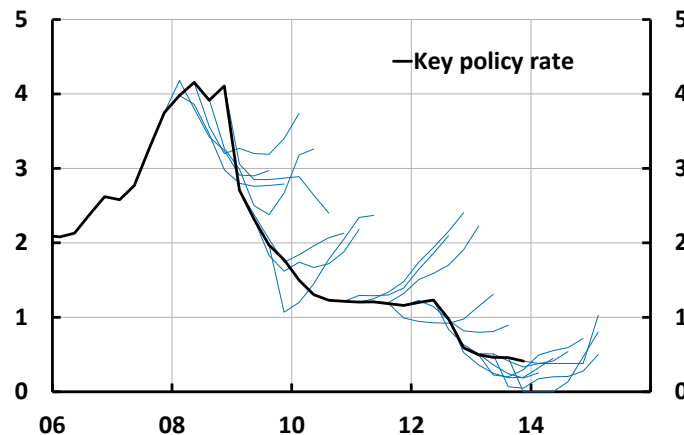
Norway



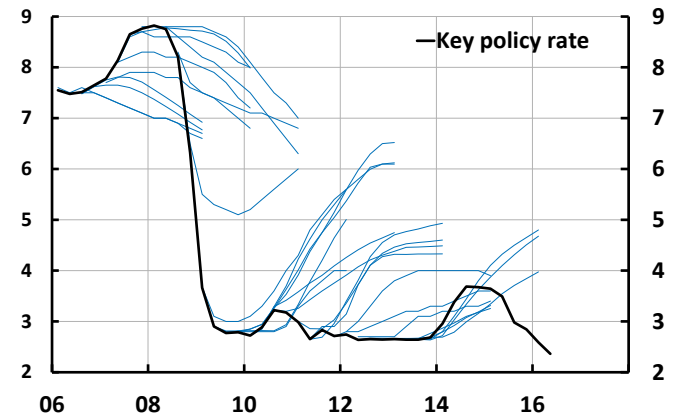
Source: Filardo & Hofmann (2014), BIS.

Policy rate projections by central banks

Czech Republic

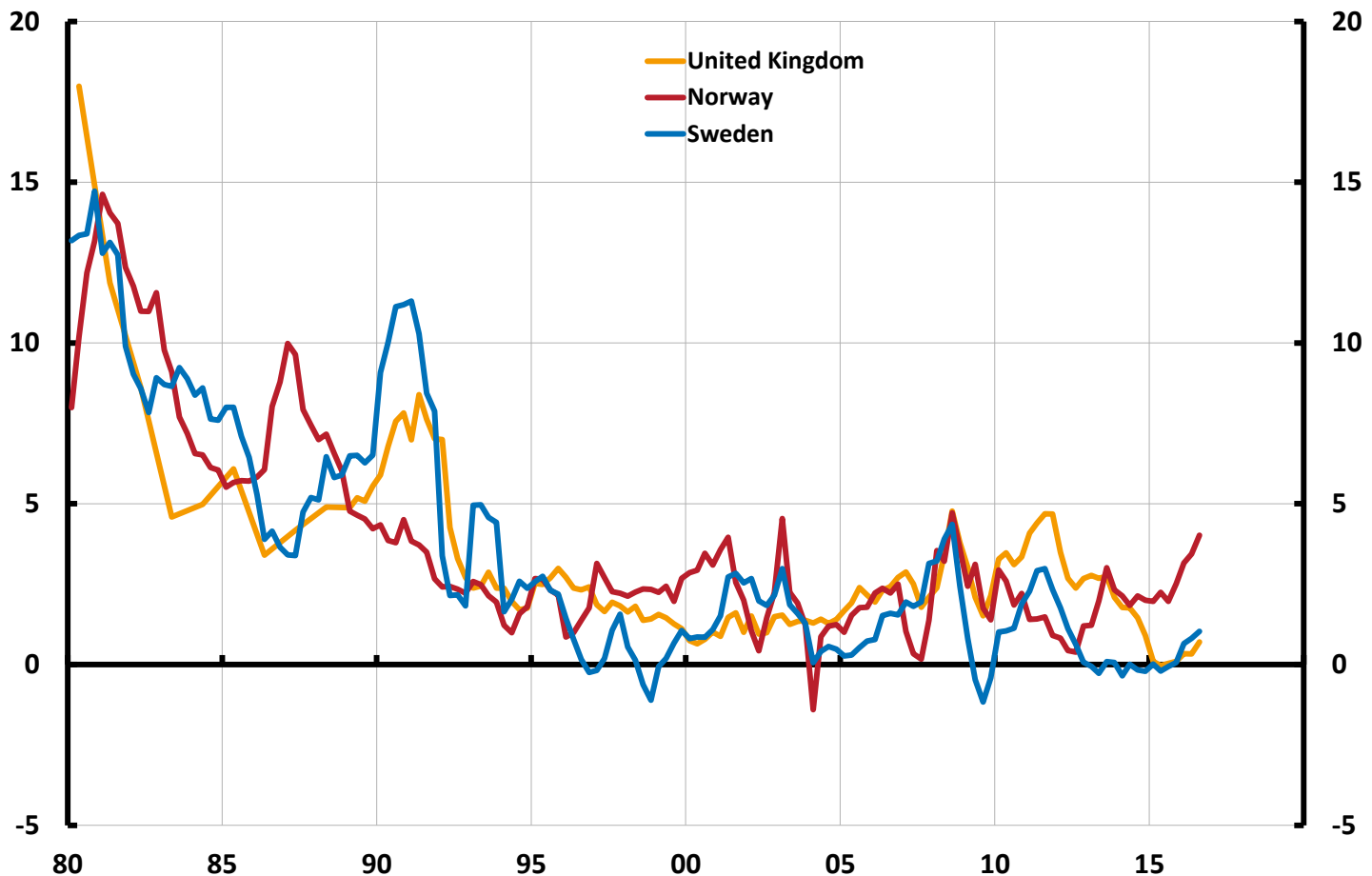


New Zealand



Source: Filardo & Hofmann (2014), BIS.

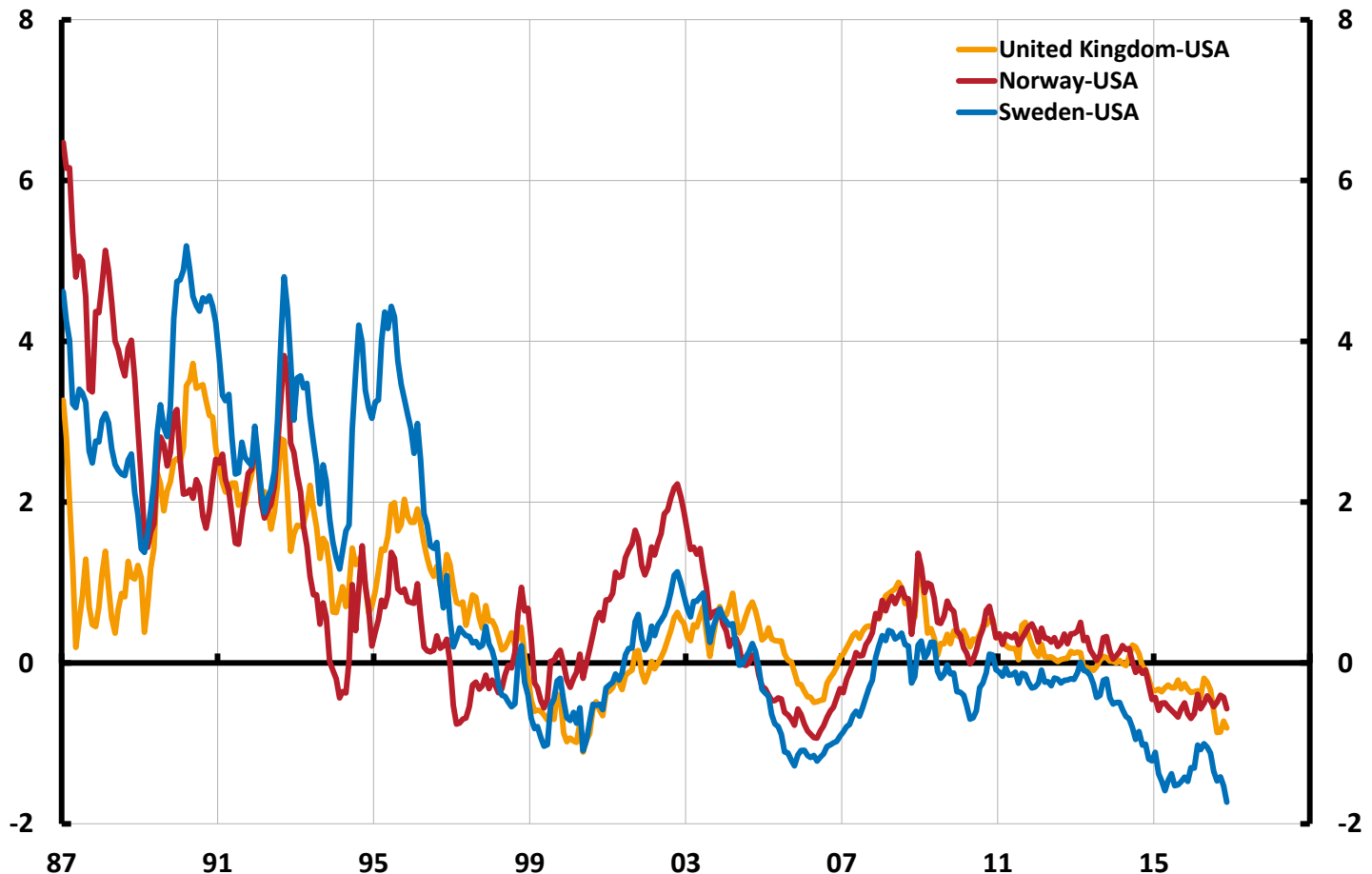
Stable inflation since inflation-targeting regime



Note. Annual percentage change. CPI is shown for all countries. Annual data is used for the UK between 1980-1988, and after that quarterly data as for the rest.

Sources: Statistics Sweden, Statistics Norway and Office for National Statistics

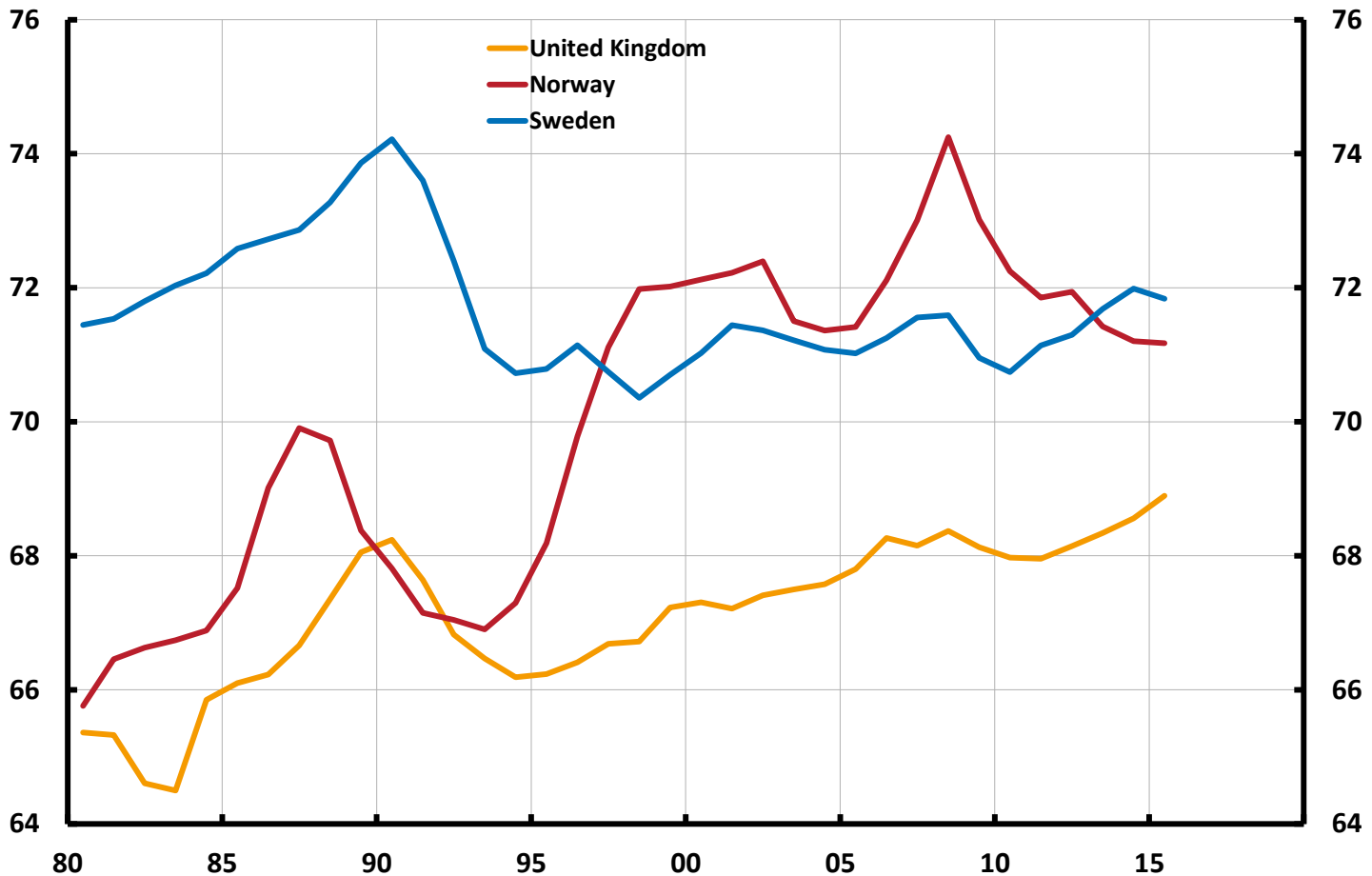
Yield differential towards USA



Note. Percentage points. The yield differential refers to 10-year nominal government bonds and is based on monthly data.

Source: Macrobond

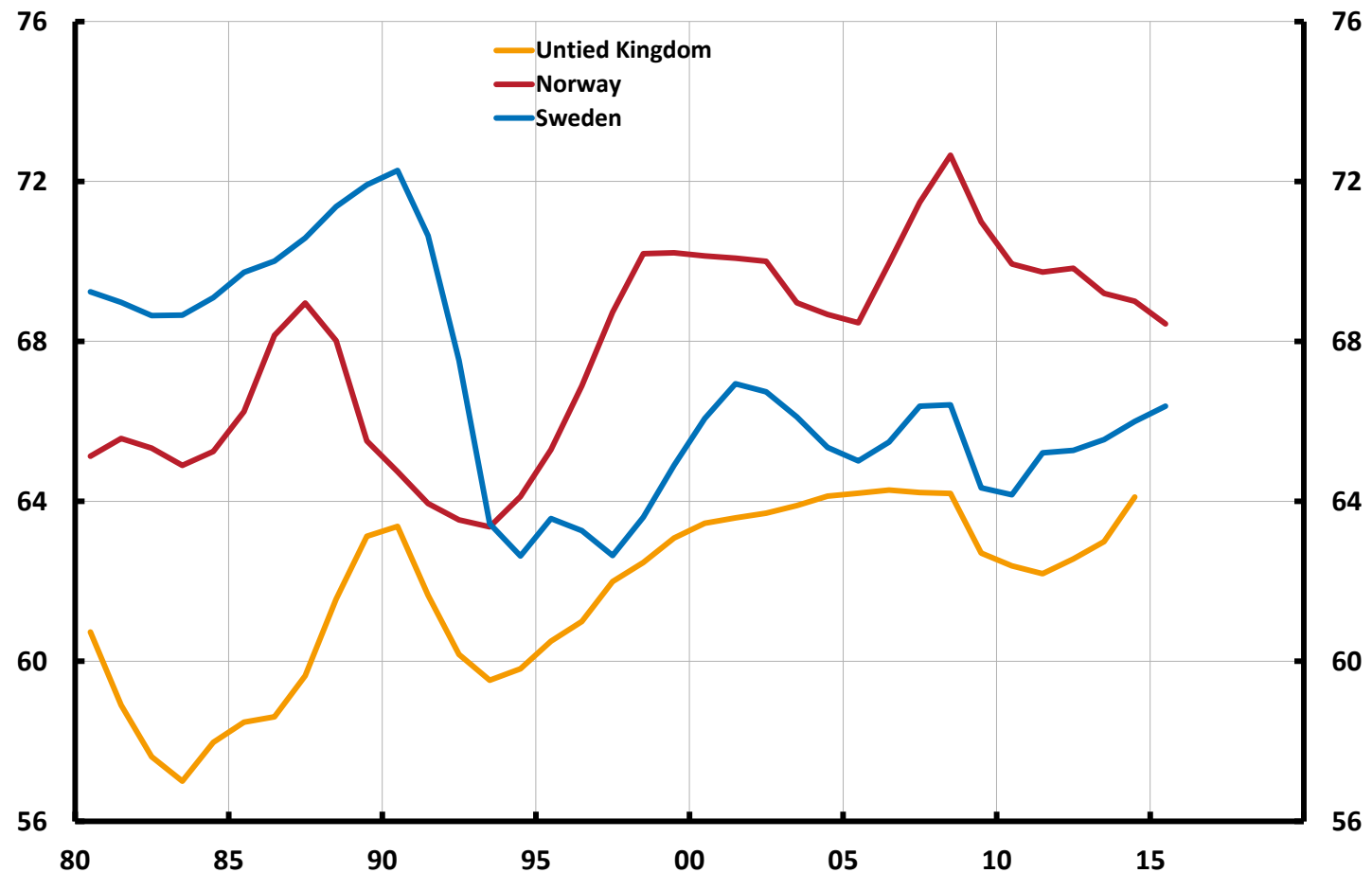
High labour force participation in Sweden and Norway



Note. Per cent of working age population, 15-74.
Calendar and seasonally-adjusted data.

Source: OECD, Economic Outlook

Employment rate



Note. Per cent of working age population, 15-74.

Sources: IMF, Office for National Statistics,
Statistics Norway and Statistics Sweden