Box 3

Current euro area interest rates from a historical perspective

In 2003 euro area short and long-term interest rates have reached values which are very low from a historical perspective. Chart A shows a long-term series of euro area nominal short-term interest rates constructed by aggregating national short-term rates from 1950 until 1998 for the countries now forming the euro area, and using euro area rates since 1999. Chart B shows a series for nominal long-term interest rates from 1970 until 1998 for the countries now forming the euro area, and euro area rates since 1999 (the lack of data of sufficient quality prevents the construction of an average euro area series for long-term interest rates before 1970).

When looking at these data, several caveats should be kept in mind, as monetary policy regimes differed significantly over time and across countries, and money and especially bond markets developed only over time. In addition, as regards short-term interest rates, before the 1960s, other instruments than interest rates were used in some countries for the conduct of monetary policy, e.g. credit aggregates. Furthermore, the data needed to be aggregated using different instruments and are thus not fully homogeneous over time. In particular, with regard to long-term interest rates, the maturities of the aggregated instruments available differ across countries and over time.

In both cases, data for Germany are added for the period before Stage Three of Economic and Monetary Union. As this country had the best track record among European countries in achieving low inflation rates over this period, and for most of the period played a pivotal role among euro area countries, it is more easily comparable with the current euro area in terms of interest rates than the past euro area averages.

As Chart A shows, the current level of nominal short-term interest rates in the euro area is the lowest since the early 1950s, which is both true when comparing it with Germany and generally for all the euro area countries. Another striking feature is that the current level of short-term interest rates is particularly low in comparison with the 1970s and 1980s. A similar conclusion is reached by looking at Chart B, as the level of nominal long-term interest rates in the euro area, which was 4.23% at end-August 2003, has also reached a very low level by historical standards.

Chart A: Nominal short-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Reuters and ECB calculations.

Notes: For the twelve euro area countries, national short-term interest rates were used until 1998. The data is aggregated using 1999 GDP weights at PPP exchange rates. From 1999 the three-month EURIBOR is used for the euro area. The national short-term rates consist of three-month money market rates, where available, and otherwise of central and commercial bank interest rates or yields on Treasury bills. For Luxembourg, short-term interest rates of Belgium are used.

Chart B: Nominal long-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Global Financial data, Reuters and ECB calculations.

Notes: For the twelve euro area countries, national long-term interest rates were aggregated using 1999 GDP weights at PPP exchange rates. The national long-term rates consist of ten-year government bond yields, where available, and otherwise of yields on instruments with the closest maturity.

The low level of short-term interest rates in the euro area, which was 2.15% at end-August 2003, is associated with inflation expectations that are compatible with price stability. This was not always the case in the past,

Chart C: Consumer price inflation in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Eurostat and ECB calculations. Notes: Before 1991 consumer price inflation rates in the twelve euro area countries were aggregated using 1999 consumer spending weights at PPP exchange rates. From 1991 HICP inflation in the euro area is used. For Germany, consumer price inflation is used before 1996 and the HICP thereafter.

especially from the second half of the 1960s until the early 1980s, when inflation was at times high and, in some cases, persistent (see Chart C), although generally to a lesser extent in Germany than in most countries now forming the euro area.

Developments in real interest rates, which are normally defined as nominal interest rates adjusted for expected inflation over the corresponding time horizon, did not necessarily mirror those of nominal short-term interest rates in the past. The computation of real interest rates based on nominal interest rates is subject to several practical and conceptual difficulties, especially in the case of long-term interest rates (see the box entitled "Key issues for the analysis of real interest rates in the euro area" on page 16 of the March 1999 issue of the Monthly Bulletin and the box entitled "Recent developments"

in real interest rates in the euro area" on page 18 of the April 2001 issue of the Monthly Bulletin). The simplest approach, and the one used throughout this box, is to use the closest available annual consumer price inflation rate as a proxy for expected inflation. While deviations may exist between expected and current inflation, this problem is often less severe when assessing developments over longer horizons.

A comparison of the current level of euro area real interest rates with past rates in either the euro area or Germany should be undertaken with even greater caution than with nominal interest rates, as the economic conditions and the financial and economic structures have changed across countries and also over time. Chart D shows the real short-term interest rate series in the euro area and in Germany since the late 1950s, while Chart E shows real long-term interest rate series in the euro area since the 1970s and in Germany since the 1950s. The picture is broadly similar when looking at both real short and long-term interest rates. The remainder of this box addresses these long-term developments and puts the current real interest rates into perspective.

The situation before the end of the Bretton Woods system in the early 1970s bears little resemblance to the current situation. Capital controls, which were applied in Europe during the Second World War, prevailed during most of the period. Although convertibility for current account transactions was generally resumed in 1958, controls on capital account transactions remained the rule rather than the exception. The effectiveness of these controls was also enhanced by restrictions on international banking and low levels of activity in international bond markets. In addition, the 1950s were characterised by relatively large swings in inflation in several countries, which affected the measures of real short-term rates. In Germany, and also to some extent in other European countries, after the stabilisation in the early 1950s, monetary policy favoured an environment of high growth and low and relatively stable inflation. Several factors contributed to this outcome, such as sound fiscal polices, the successful anchoring of inflation expectations at low values and positive productivity shocks. A significant degree of wage moderation and labour market flexibility also played a key role in the economic performance during this period.

This situation continued during the early part of the 1960s. Both in Germany and on average in the euro area, real interest rates remained low in a context of high real economic growth. Although inflation was higher than at present, it remained relatively subdued in many of the countries that now form the euro area. However, low real interest rates, which even reached negative levels on average for the euro area in a couple of years, were observed in periods of surging, and probably unanticipated, inflation in some countries.

Chart D: Real short-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Reuters, Eurostat and ECB calculations. Note: Short-term interest rates are deflated by consumer price inflation (see Charts A and C for details).

Chart E: Real long-term interest rates in the euro area and Germany

(percentages per annum; annual data)



Sources: NCBs, BIS, Global Financial data, Reuters, Eurostat and ECB calculations.

Note: Long-term nominal interest rates are deflated by consumer price inflation (see Charts B and C for details).

Later in the 1960s this situation changed. As social conflicts arose when economic growth started to decelerate and labour flexibility declined, shocks to the economy reduced growth and employment. At the same time, international capital flows became more important in the course of the decade, as international money and bond markets awakened and commercial banks started to be involved in international lending. Against this background, an acceleration of money growth in the United States during most of the 1960s created strains in the international arena in the context of the pegged exchange rates of the Bretton Woods system. The size of the dollar reserves already accumulated in many countries made the sterilisation of this monetary expansion increasingly difficult, which in turn also led to strong monetary growth in many European countries and gave rise to inflationary pressures towards the end of the decade. The Bretton Woods system ceased to exist in the early 1970s, as many countries in the system were not willing to address the external imbalances at the cost of higher inflation.

The 1970s started with overheated economies in which consumer price inflation and wages were rising. Oil price increases in the early 1970s were followed by inadequate monetary and fiscal policies in most countries. Fiscal policies attempted to counteract the negative income effects of the increases in oil prices, while the reaction of monetary policy was insufficient to keep the rise in inflation in check (see the box entitled "Lessons to be drawn from the oil price shocks of the 1970s and early 1980s" on page 21 of the November 2000 issue of the Monthly Bulletin). Although policy reactions and the economic outlook differed across countries, average real interest rates became negative in the euro area in the early 1970s and remained so for most of the decade, as inflation was not correctly anticipated. During this period, German real interest rates remained generally higher than in other euro area countries. It is clear that the oil price increases had an immediate impact on inflation. However, it is also clear that without accommodating macroeconomic policies and the consequent increase in inflation expectations, this would not have translated into an entrenched process of inflation, as beyond the very short term oil prices only feed through to inflation through second-round effects via domestic price and wage-setting, made possible by abundant liquidity.

The second oil price shock in the late 1970s was not followed by a similar reduction in real interest rates as with the first oil price shock. One reason for this was that on average, euro area wages did not increase as much as in the early 1970s in a context of very subdued growth. In fact, real wages actually declined between 1979 and 1981. However, fiscal deficits continued to increase and monetary policy in some countries did not initially react to the necessary extent. Still, on average, nominal interest rates rose to historically high levels, so high that real rates rose despite the increase in inflation between 1979 and 1981.

In the early 1980s, the monetary authorities in many euro area countries pursued a monetary policy oriented towards disinflation that contributed to the decline in consumer price inflation throughout the 1980s and beyond. Real interest rates rose steadily over that decade and into the early 1990s. This process was, however, less marked in Germany, where the extent of the disinflation required was significantly lower. Overall, the need to curb inflation expectations and re-establish price stability after the experience of the early 1970s was costly in terms of growth and employment, and real GDP growth remained rather subdued until the mid-1980s. The high economic costs of fighting inflation once it had stabilised at high levels strengthened the conviction of all economic actors to commit themselves to more stability-oriented policies later on.