

## IV. Monetary policy in the advanced industrial economies

### Highlights

With inflation pressures subdued during the period under review, policy interest rates were kept steady at very low levels in the major economies to help support the recovery. In the early part of the period, the Federal Reserve dealt effectively with its concerns about the possibility of an unwelcome disinflation. It kept short-term interest rates at 46-year lows and signalled to markets its intention to maintain them there for a considerable period. As the US recovery appeared to gain strength, markets' attention increasingly turned to the Federal Reserve's strategy for adjusting the policy stance to a more neutral setting. Policy in the euro area was also accommodative, although the ECB had to balance supporting a fragile recovery with its concerns over inflation, which hovered near the upper bound of the central bank's price stability range. The sizeable appreciation of the euro and regional discrepancies in economic performances posed additional policy challenges. The Bank of Japan maintained its zero interest rate, as well as its policy of quantitative easing. With deflationary pressures in Japan having moderated, progress in re-establishing more normal policy settings will be necessary and unusual challenges could emerge in the process.

In contrast, policy concerns varied more across smaller industrial economies. Some central banks lowered policy rates to help support growth, while others raised them in response to domestic demand pressures and, in some cases, risks associated with the build-up of financial imbalances.

The latter part of this chapter considers two policy issues that attracted increasing attention during the period under review. One key question is whether the current highly accommodative policy stance of the major central banks, while clearly having had a positive impact on the global recovery, could become a source of longer-term vulnerabilities. The other important issue has been central bank communication with the public. The last section reviews progress towards improving communication strategies and highlights future challenges.

### Review of developments

#### *United States*

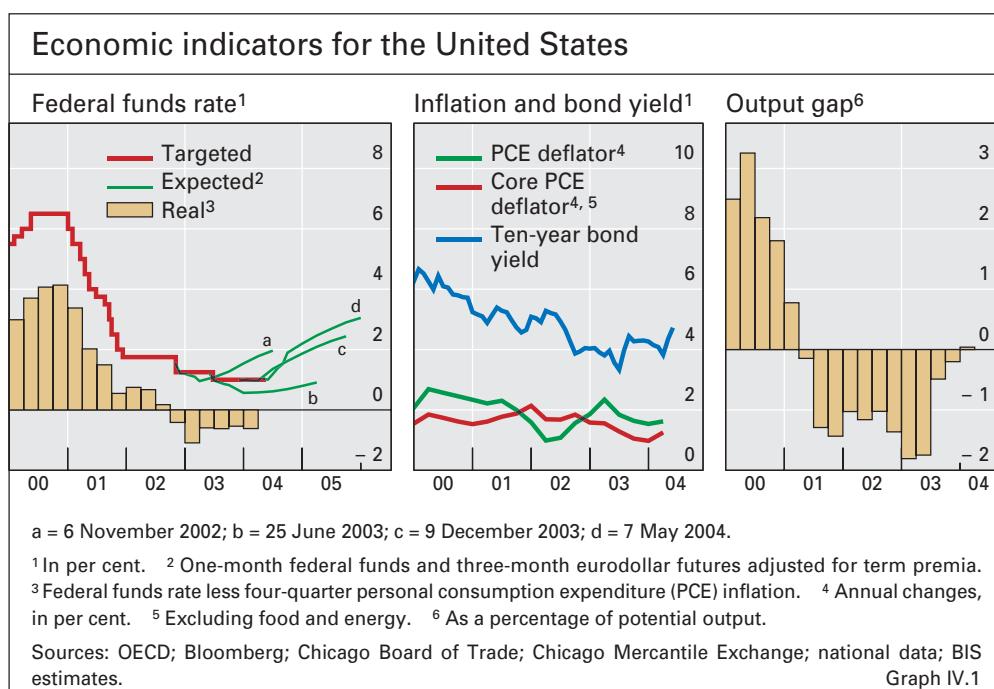
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|---|--|
| US monetary policy was highly accommodative | The Federal Reserve maintained its highly accommodative monetary policy stance over the past year, with the federal funds rate held steady at 1%. The economic backdrop was a large but rapidly shrinking degree of economic slack and low inflation. With the Federal Reserve having clearly stated its policy intention of keeping the federal funds rate low for a considerable period, the |
|---|--|

(ex post) real federal funds rate continued to be negative (Graph IV.1). As this real policy rate was well below its long-run neutral level – a gap further enlarged by recent productivity trends – the Federal Reserve indicated that at some point the policy rate would have to move to a more neutral setting. An ongoing question for the Federal Reserve throughout the period under review was whether this low policy rate remained appropriate given the economic conditions or whether tightening should begin.

One key development affecting policy deliberations during the early part of the period under review was the risk of an unwelcome fall of inflation into deflation. This perception of the risk of deflation mainly reflected the combination of low actual inflation and the lingering hangovers from the abrupt adjustment of the financial and real imbalances built up in the previous decade. However, it also reflected favourable supply side developments as large productivity gains were particularly important in restraining a more rapid decline in slack. The Federal Reserve expressed its intention to fight this possible deflation aggressively using monetary policy. It simultaneously assured the public – through the minutes of Federal Open Market Committee (FOMC) meetings, speeches by Federal Reserve officials and published research papers – that it had ample measures at its disposal to address the threat, even if the zero lower bound for nominal interest rates materialised.

Deflation risks were present early on in the period

This approach of keeping the short-term policy rate low and pursuing a complementary communication strategy also proved effective in anchoring inflation expectations above the deflation zone, holding long-term interest rates in check. It thereby promoted a favourable economic environment for aggregate demand growth. The FOMC acknowledged, however, the risks of unbalanced growth in interest-sensitive sectors and of unwelcome asset price



Policy statements reinforced low interest rate expectations

As the recovery strengthened, the focus shifted towards returning the policy stance to neutral

Parallels with the policy cycle turning point in the 1990s

developments if the low interest rate environment were maintained for too long. During the period under review, these risks were judged to be acceptable.

The Federal Reserve's communication strategy, while successful overall in avoiding the shoals of potential deflation, did face some challenges. For example, in early 2003 market participants interpreted statements from Federal Reserve officials as suggesting the possibility of even further cuts in the policy rate. This led to a decline in long-term bond yields in late spring. Against this background, the 25 basis point cut in the policy rate in June 2003 disappointed markets and contributed to a sharp upward correction across the whole term structure. This episode heightened awareness – both inside and outside the Federal Reserve – that the central bank would have to find some means of conveying its policy intentions even more clearly.

Naturally, as the recovery gained momentum, the threat of deflation faded. In this environment, the focus shifted to the upside risks to short-term inflation arising from the depreciation of the dollar, the sharp increase in commodity prices and buoyant housing prices. Such developments led to a sharper market focus on when, and how quickly, policy rates would be raised. Indeed, the Federal Reserve faced intense scrutiny of the exact wording of its press releases as the public searched, possibly unduly, for clues about how long policy rates would stay on hold. The phrase that characterised policy as being on hold "for a considerable period" received much attention. In January 2004, when the Federal Reserve changed its characterisation to "could be patient in removing its policy accommodation", Treasury yields initially rose and equity prices declined. Markets eventually came to read less into the change, seeing it more as a difference in wording than a distinction in policy thrust. By May, the FOMC judged that its policy accommodation could be removed at a "measured" pace, raising the prospect of some increase in rates in the near term.

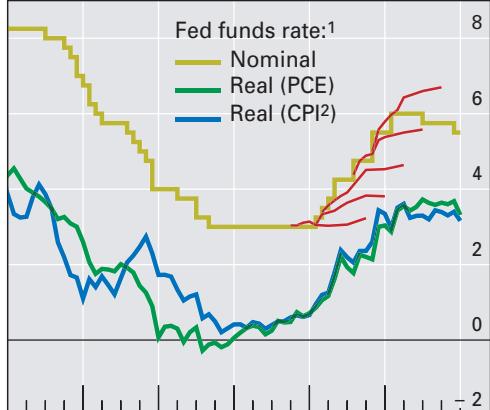
An important issue for the Federal Reserve was how best to maintain the proper balance of private sector expectations about future changes in policy rates. Given high household and corporate debt, large cumulated current account deficits and rapidly building fiscal imbalances, a fast run-up in long-term interest rates raised the risk of increased financial market volatility and overshooting. This would complicate the transition and could pose a threat to the recovery in various ways. On the one hand, it needed to keep the private sector from bidding up long rates before it would be appropriate. On the other hand, the Federal Reserve needed to keep markets from getting too far behind the curve, allowing inflationary pressures to build, since this might demand a sharp and possibly destabilising tightening of policy later. These conditions put a premium on the Federal Reserve preparing the markets adequately for future policy rate moves to prevent long rates from rising either too soon or too late.

To put such policy risks into context, it is instructive to contrast the recent situation with that at the end of 1993 (Graph IV.2). In 1993, as today, the Federal Reserve had pursued a low interest rate strategy for a considerable period, with the real policy rate hovering near zero. One reason for the low rate was that financial factors were hindering a rapid and solid recovery. By the end of 1993, however, the recovery was on track, economic slack seemed to be

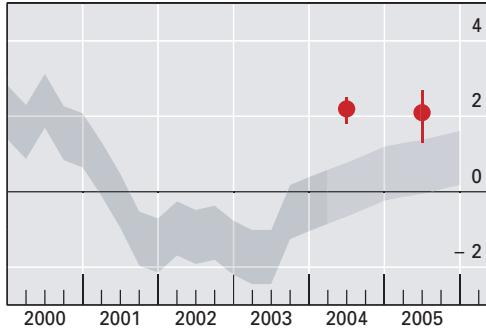
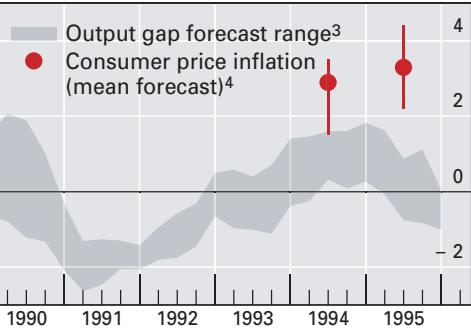
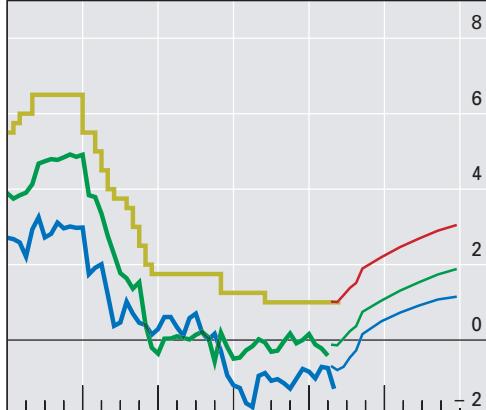
## Exit strategies in the United States

In per cent

### Early 1990s



### Early 2000s



<sup>1</sup>The thin lines represent expected rates (for an explanation, see footnote 2 of Graph IV.1). From 2004, based on futures rates on 7 May 2004 and, for real rates, deflated by the OECD's PCE deflator and CPI forecasts respectively. <sup>2</sup> CPI research data series (BLS). <sup>3</sup> Range of real-time estimates using a Hodrick-Prescott filter and GDP data vintages for the 1990s. <sup>4</sup> Made in January 1994 and May 2004 respectively. The vertical lines represent the forecast range.

Sources: Bureau of Labor Statistics (BLS); OECD; Bloomberg; Chicago Board of Trade; Chicago Mercantile Exchange; © Consensus Economics; national data; BIS estimates.

Graph IV.2

disappearing and inflation forecasts were showing an upward trajectory. Beginning in early 1994, the Federal Reserve raised rates seven times over 12 months, in steps of 25–75 basis points, giving a cumulative increase of 3 percentage points. Initially, expectations of future rate hikes lagged behind the Federal Reserve's actual policy. However, towards the end of the policy cycle, market expectations of further rate increases exceeded the Federal Reserve's eventual policy rate target. These expectations had to be reined in by the FOMC adjusting its bias language and by subsequent rate cuts. Differences, of course, do exist between the earlier period and now. On the one hand, the real interest rate has been lower in this policy cycle, implying a larger need for adjustment than previously. On the other hand, inflation expectations appear to be better anchored and the Federal Reserve has been much more transparent in explaining its actual decisions and policy intentions.

### Euro area

During the period under review, the stance of monetary policy also remained stimulative in the euro area, as indicated by low real interest rates and the

Euro area monetary policy remained stimulative ...

strong growth of broad money (Graph IV.3). As in the United States, short-term nominal interest rates in euro area countries hovered around post-World War II historical lows, contributing to low long-term government bond rates and forward swap rates.

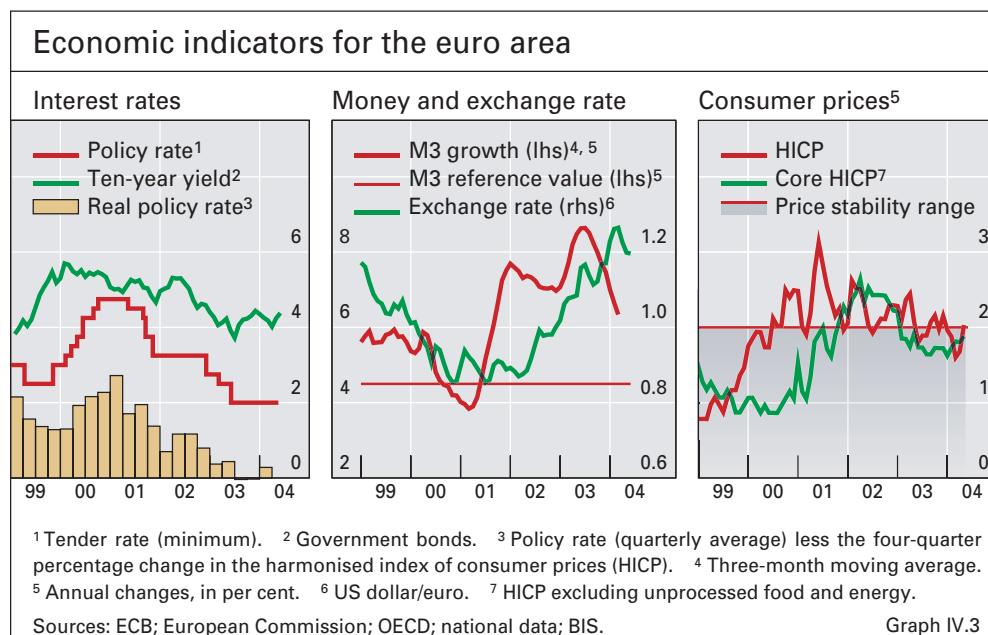
... as the recovery lost momentum ...

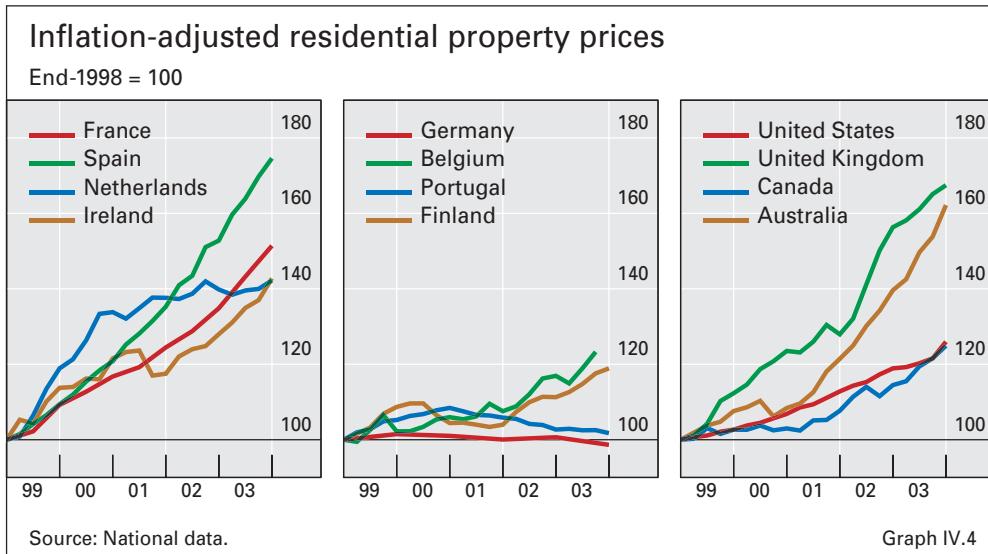
... and inflation remained near the upper end of its desired range

Policy trade-offs highlighted by the euro's appreciation

After reducing its policy rate by 50 basis points in June 2003, the ECB held it constant at 2% for the remainder of the period. The main factor behind the easy stance of policy was the fragile state of the recovery, as growth continued to be well below average in the largest euro area economies. One factor restraining the ECB from lowering its policy rate even further was that inflation remained near the 2% ceiling of the ECB's price stability range. Tax increases and relatively elevated unit labour cost growth, reflecting inertia in compensation growth and weak productivity gains, were two key elements that kept inflation from falling by as much as might have been expected given the degree of labour market slack. Moreover, there was little evidence that the sharp appreciation of the euro was putting much downward pressure on inflation.

The trade-offs that policymakers in the euro area faced during the period can be viewed in the context of the euro's appreciation, especially vis-à-vis the dollar. On the one hand, with the recovery stalling and unemployment high, the ECB came under pressure to lower interest rates as a result of the prospective loss of competitiveness due to a stronger currency. It did not help matters that policy in the United States was regarded by many as being more proactive in supporting growth. Policy rates were twice as high in the euro area as in the United States, and this was seen as one cause of the euro's strength against the dollar. On the other hand, the ECB had to contend with the fact that both main indicators in its two-pillar strategy presented obstacles to lowering the policy rate. As already mentioned, both headline and core inflation remained near the upper bound of the ECB's price stability range, and M3 growth continued to be much higher than the reference value of 4.5%. As





for the euro, the ECB generally viewed its strengthening as part of a process of adjustment to bring the value of the currency back to its normal historical range; the euro's appreciation was not seen as a risk that would warrant a further easing of monetary conditions.

The ECB also faced the ongoing challenge of large regional discrepancies. One concern had to do with inflation differentials across euro area economies, particularly since Germany was close to experiencing deflation. Another issue had to do with the sustainability of increases in household debt and the acceleration of residential property prices in only a subset of the euro area economies (Graph IV.4). In response to these challenges, the ECB maintained its position that changes in the policy rate for the euro area as a whole would not be an effective means for dealing with regional imbalances: raising interest rates in an effort to restrain inflation or excessive house price increases in one region would risk choking off the recovery in another.

Regional discrepancies persisted

This conclusion does not imply that the potential development of financial imbalances is not taken into account in the ECB's monetary policy. Indeed, as discussed in Chapter IV of the *73rd Annual Report*, one possible reason for the apparent difference in the degree of activism evident in ECB policy compared to the policy of the Federal Reserve has been the ECB's reliance on its two-pillar strategy. Excessive growth in money and credit aggregates has been seen as providing signals of potential inflationary pressures or of an underlying build-up of financial and other imbalances even when headline inflation measures have remained relatively subdued. The fact that M3 growth has been well above the reference value since late 2001 is indicative of such a risk, which might have restrained policy from being even more proactive.

Quantitative policy measures still a concern

### *Japan*

The Bank of Japan continued its use of unconventional monetary tactics in pursuing its policy goals of overcoming deflation and fostering economic recovery. With the overnight interest rate anchored virtually at zero, both short- and long-term market interest rates remained near historical lows. Given

The Bank of Japan continued its unconventional policies ...

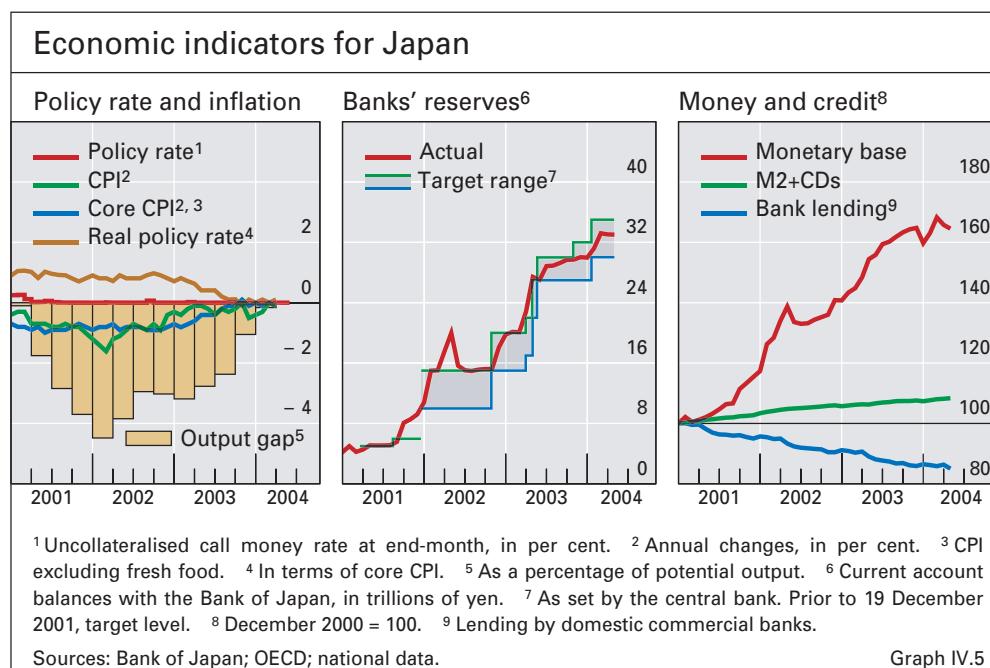
... and provided a very accommodative policy stance

Monetary transmission mechanism was still impaired ...

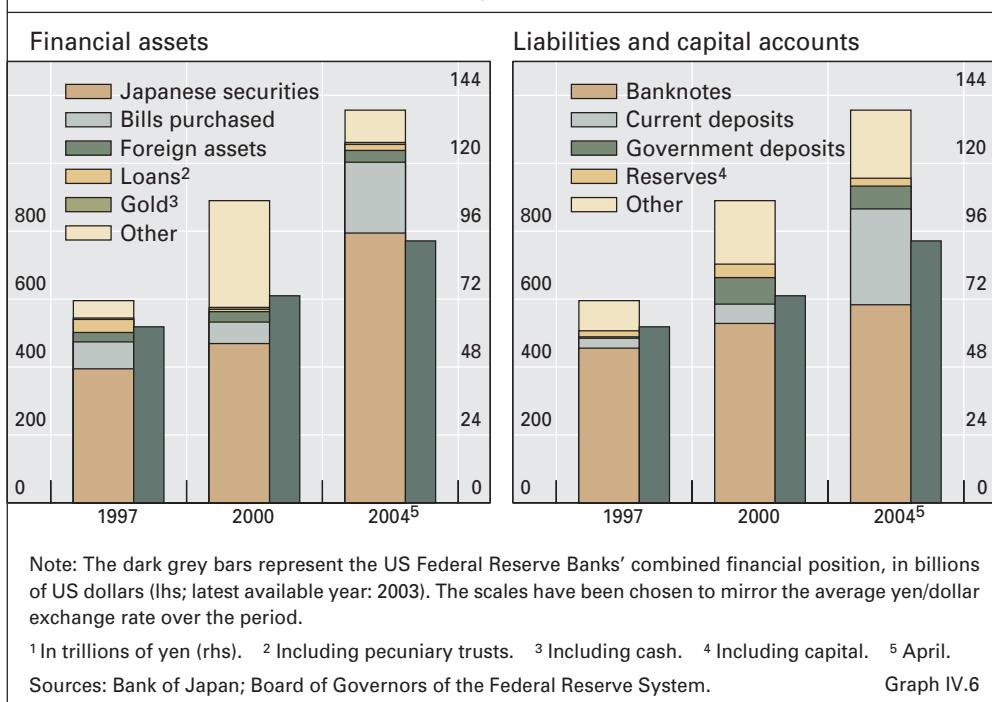
short-term nominal interest rates at the zero lower bound, the Bank of Japan was unable to directly reduce ex post real rates, which were determined by the actual rate of deflation. However, as deflation pressures eased somewhat, real interest rates declined modestly towards zero during the period under review (Graph IV.5).

The Bank of Japan complemented this low interest rate environment with a policy of quantitative easing, and twice adjusted upwards its target range for current account balances held at the central bank. The Bank raised the upper limit of the target range to ¥32 trillion in October 2003, widening the range to provide extra operational room for manoeuvre; in January 2004, the target range was raised again from around ¥27–32 trillion to a new range of around ¥30–35 trillion. The Bank of Japan also took the opportunity in October to clarify its strategy for exiting from quantitative easing: it stated that quantitative easing would continue until core CPI rose stably (on a year on year basis) for a few months and was also forecast to continue to rise. This clarification was intended to quash speculation of a premature end to quantitative easing, which was perceived to have contributed to volatility in long-term interest rates.

As had been true in previous years, the strong growth in the monetary base did not translate into appreciably faster growth for the broader aggregates. M2 expanded only moderately and the level of credit extended fell again. The continued impairment of the monetary transmission mechanism reflected the lingering effects of damage to the financial system in the past. Indeed, the Bank of Japan made further efforts to strengthen the transmission mechanism of monetary easing by purchasing stocks held by commercial banks and fostering alternative markets for financial intermediation. To this end, the Bank increased its holdings of pecuniary trusts (ie stocks purchased from financial institutions) and asset-backed securities (ABSs). In May 2004, its outstanding balances of pecuniary trusts stood at ¥2 trillion and those of ABSs at ¥150 billion.



## Balance sheet of the Bank of Japan<sup>1</sup>



As tentative signs began to emerge that deflation was easing, hopes were raised of a return to more normal monetary conditions. Actual increases in the price level, were they to materialise, would raise such hopes further. A full return to normality will, however, require that the health of the Japanese financial system continues to improve. At present, various structural impediments still represent significant challenges to the proper functioning of the financial system (see Chapter VII).

One complicating factor on the road to a more normal monetary policy environment is the Bank of Japan's expanded balance sheet. The size of the balance sheet roughly doubled from about ¥72 trillion in 1997 (equivalent to 18% of GDP) to around ¥140 trillion in April 2004 (25% of GDP). This was due in large part to the quantitative easing policy, which included aggressive purchases of domestic assets (Graph IV.6). As part of the re-establishment of more normal monetary conditions, and depending on circumstances, the central bank might need to sell long-term fixed income securities from its portfolio. This could in turn adversely affect its capital position, possibly even requiring a recapitalisation.

### Inflation targeting countries

Central banks in countries with explicit numerical targets for inflation followed diverse policies during the period under review. Some central banks tightened policy, while others loosened. The asynchronous nature of the policy cycle across these and the larger industrial countries marked a divergence from recent years. At the onset of the global downturn in 2001, most central banks lowered policy rates. However, over the past year, the Bank of Canada and Sveriges Riksbank eased policy further, while the Swiss National Bank

... but some positive signs emerged

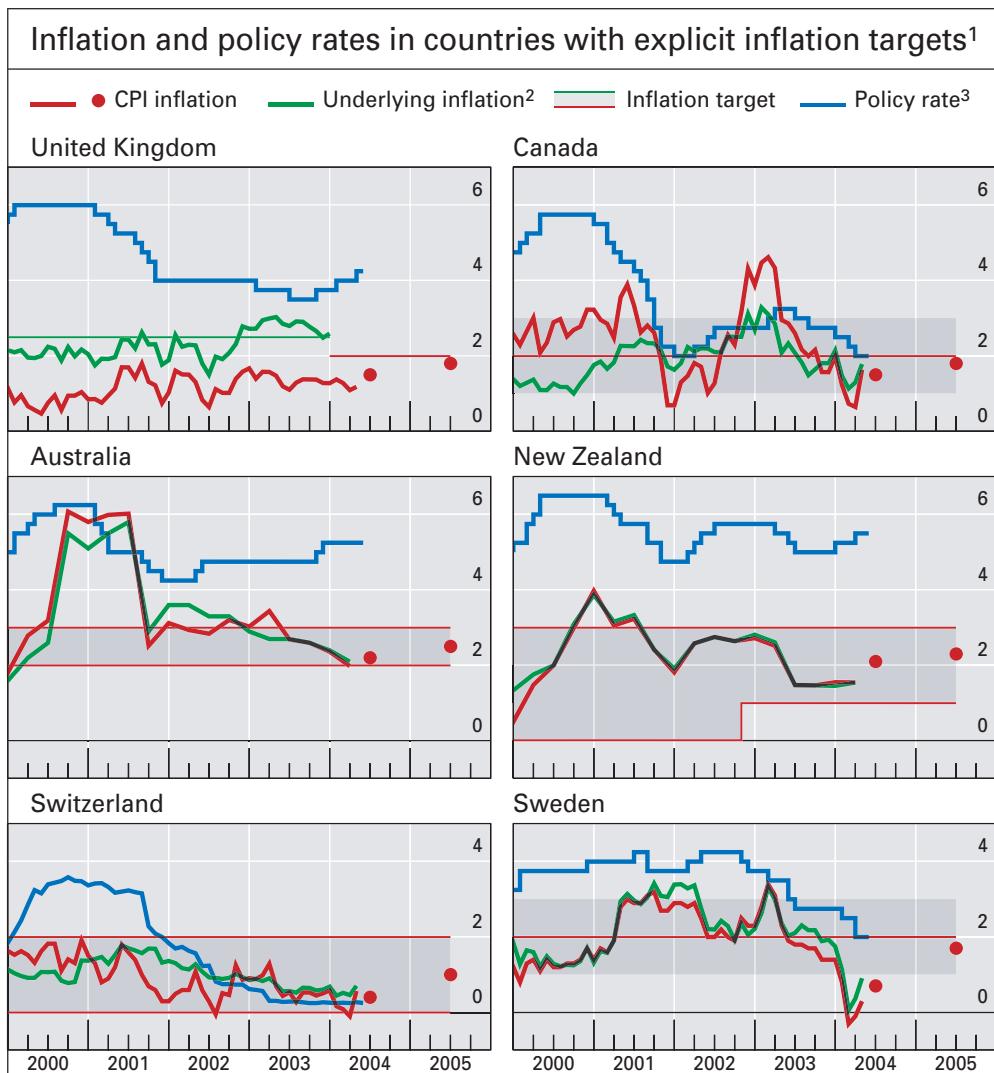
Bank of Japan balance sheet concerns persist

Diverse policies in countries with inflation targets

Canada, Sweden  
and Switzerland  
pursued stimulative  
monetary  
policies ...

maintained rates at already low levels. In contrast, the Bank of England, Reserve Bank of Australia and Reserve Bank of New Zealand all raised their policy interest rates (Graph IV.7).

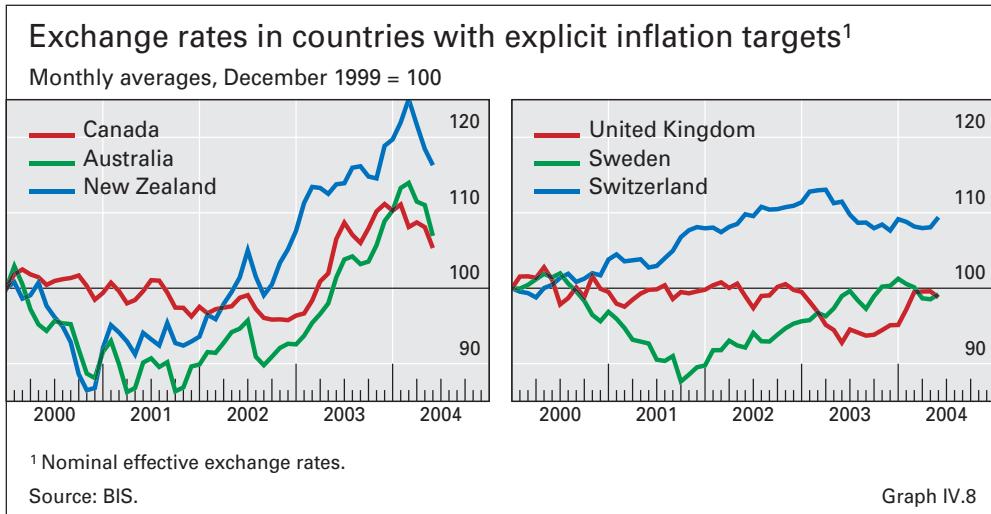
In Canada, Sweden and Switzerland, inflation was at or below target, growth in domestic demand was still below potential, and output gaps were negative. Against this background, the central banks of all three countries continued to foster stimulative monetary conditions. The drop in inflation was especially large and unexpected in Sweden, and actually resulted in declines in the price level in early 2004. As a consequence, the Riksbank lowered rates



<sup>1</sup> Inflation rates measured as annual changes, in per cent. CPI inflation is targeted by Australia, Canada, New Zealand, Sweden and, since 10 December 2003, the United Kingdom (previously, underlying inflation); Switzerland does not target inflation but instead uses a broad-based inflation forecasting strategy. The dots represent market forecasts from surveys conducted in May 2004. <sup>2</sup> For Australia, CPI excluding volatile items (fruit, vegetables and automotive fuel); for Canada, CPI excluding eight volatile components and the effect of changes in indirect taxes on the remaining components; for New Zealand, CPI excluding credit services; for Sweden, CPI excluding household mortgage interest expenditure and the effects of changes in indirect taxes and subsidies; for Switzerland, core CPI (trimmed mean method); for the United Kingdom, retail price index excluding mortgage interest payments. <sup>3</sup> For Australia and New Zealand, cash rate; for Canada, midpoint of the operating band for overnight financing; for Sweden and the United Kingdom, repo rate; for Switzerland, three-month Libor.

Sources: © Consensus Economics; national data.

Graph IV.7



five times from March 2003, by a total of 175 basis points. This brought short-term real rates to roughly 2% by March 2004. In Canada and Switzerland, a key factor affecting policy was the exchange rate. The appreciation of the Canadian dollar (Graph IV.8), particularly vis-à-vis the US dollar, posed a threat to the recovery given trade links with the United States, and raised the risk of undershooting the inflation target. This threat was not thought to be fully offset by the contemporaneous increase in commodity prices, and the Bank of Canada thus reduced its policy interest rate five times during the period under review. The Swiss National Bank, also facing a currency appreciation, cut its policy rate in the first half of 2003 and intervened directly in foreign exchange markets. In the absence of evidence that the recovery had gained a firm footing and with inflation near zero, an easy policy stance was maintained throughout the remainder of the period.

In contrast, in response to worries that rapid domestic demand (and output) growth would exacerbate inflationary pressures, the central banks of Australia and New Zealand increased policy rates, despite the simultaneous appreciation of their exchange rates. By the end of 2003, the output gap had become positive again in Australia, and it remained large and positive in New Zealand for the third consecutive year. Similarly, the Bank of England tightened policy in the face of above average growth in domestic demand, along with concerns over the potential build-up of financial imbalances, particularly the continued acceleration of residential property prices and household debt. To be sure, it is far from clear what impact the associated changes in household balance sheets will have on spending and overall consumer price inflation, in both the short and long run. However, given the variable rate nature of mortgage financing arrangements in the United Kingdom, potential problems associated with the accumulation of household debt would be expected to worsen if interest rates were to increase sharply or house prices were to fall.

The experiences of these countries during the period under review – the combination of strengthening currencies, buoyant domestic demand, growing output gaps and increases in other asset prices, particularly in residential property – highlight the potentially difficult trade-offs sometimes faced by

... whereas  
Australia, New  
Zealand and the  
United Kingdom  
raised rates

Asset prices and  
exchange rates  
were key policy  
risks

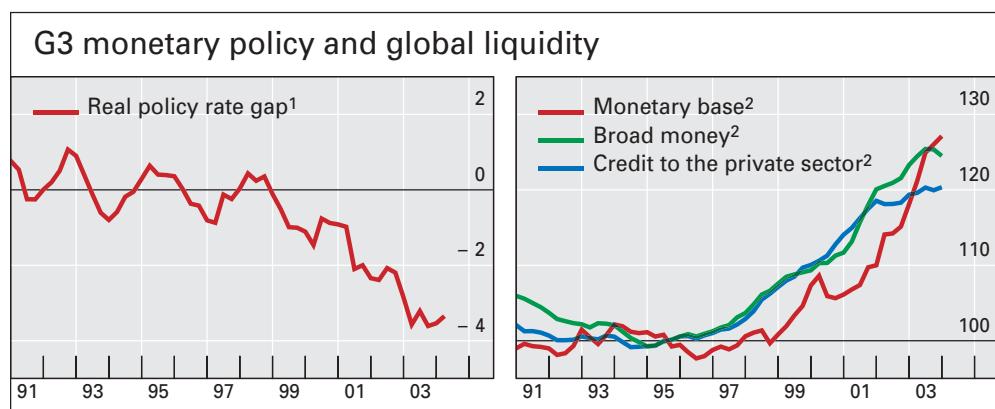
policymakers in smaller open economies. If domestic demand is growing at an unsustainable pace and property prices are displaying a sharp upward trend, policymakers would normally wish to raise rates to combat potential inflationary pressures. However, if the appreciation of the exchange rate helps to hold inflationary pressures at bay, then the need to raise interest rates may be much reduced. The problem is that, by keeping interest rates lower in the short run, policy could add to upward pressures on asset prices and feed financial imbalances in the longer run.

### Global liquidity: the role of monetary policy in the G3

G3 policies could be feeding global liquidity

The accommodative monetary policy stance of the largest industrial economies – the United States, the euro area and Japan – raises the possibility that it has created excess liquidity in global financial markets. This is a difficult issue to assess, not least because it is hard to give a precise macroeconomic definition of liquidity, much less “excess” liquidity. What is known is that short-term nominal interest rates in the G3 have been reduced to such low levels that the (weighted average) real policy rate gap in the G3 – defined as the difference between the real policy rate and the natural real interest rate consistent with price stability in the long run – has widened significantly in recent years. This is certainly the case when compared to the 1990s (Graph IV.9). At the same time, quantitative measures of the stance of monetary policy, such as narrow and broad money and private sector credit, have also risen sharply. The question this raises is how far central banks should be concerned about such developments.

The reason for such concern arises from two types of risks. First, even if inflation is quiescent in the short run, very low policy rates could still increase the risks of higher inflation in the future. They might also feed growing financial imbalances, which could then unwind in a debilitating fashion. The rapid



Note: Data for the G3 (the United States, euro area and Japan) are weighted averages, based on 2000 GDP and PPP exchange rates. Prior to 1999, euro area data are calculated from member countries' statistics.

<sup>1</sup>Defined as the real policy rate less the natural rate. The real rate is the nominal rate adjusted for four-quarter consumer price inflation. The natural rate is defined as the average real rate (1985–2003; for Japan, 1985–95) plus the four-quarter growth in potential output less its long-term average. Quarterly averages, in percentage points. <sup>2</sup>Relative to nominal GDP; 1995 = 100.

Sources: IMF; OECD; national data.

Graph IV.9

growth of monetary and credit aggregates, rising asset prices and the unusual compression of yield spreads recently can be viewed as potential indicators of such risks in the G3 economies themselves. Second, these developments might have undesirable implications elsewhere because of the special role played by the G3 currencies as international currencies. Excessive liquidity creation in the G3 could potentially spill over to non-G3 economies, likewise raising the risks of higher inflation and unsustainable asset price developments there. One possible manifestation of this process is the increased flow of private capital to those countries whose exchange rates are seen to be good value, as investors try to exploit interest rate differentials by buying higher-yielding currencies (see Chapter V). These types of capital flows have been especially large in the current interest rate environment because low nominal rates in the G3 have, in part, driven investors to search for yield by purchasing assets in other countries. During the period under review, this behaviour was evident in the surge in private capital flows to emerging market economies (see Table III.2 on page 38).

Low interest rate  
fosters search for  
yield

In addressing the issue of spillovers from G3 monetary policies to the rest of the world, the exchange rate regime plays a pivotal role. In a purely flexible exchange rate regime, monetary policy is, in principle, solely a domestic affair. Any excess monetary stimulus would tend to be reflected in nominal exchange rate adjustments. Existing international arrangements, however, are quite at odds with the textbook treatment of flexible exchange rate regimes. Indeed, in some respects, current international arrangements resemble a fixed exchange rate system. Many emerging market economies have chosen to intervene in markets to keep their exchange rates, vis-à-vis the G3 currencies, in a relatively narrow range. The reasons authorities intervene in foreign exchange markets may be a direct concern about exchange rate volatility, a desire to maintain external competitiveness or a wish to mitigate the effect of currency movements on such other domestic policy objectives as low and stable inflation, balanced growth and financial stability. In addition, the fact that non-G3 economies have accumulated large holdings of international reserves provides a feedback mechanism through which the policies of emerging market economies can affect the G3. In most instances, they have used the proceeds to purchase dollar-denominated assets, such as US Treasuries. This may also have led to lower long-term interest rates in the United States than would otherwise be the case, although hard evidence on this issue is difficult to come by (see Chapter VI). Of course, it is not only non-G3 countries that have pursued such policies; Japan has also done so.

Transmission via  
exchange rate  
channels

The similarity between current international currency arrangements and earlier, more formal, global exchange rate regimes, such as the gold standard or the Bretton Woods system, suggests that these experiences might provide lessons for today. The gold standard, for example, worked well when the core economies followed credible monetary and fiscal policies that were largely consistent with the given constellation of exchange rates. If imbalances arose, either gold flowed to equilibrate the system or the dominant central banks would increase their foreign lending to dampen business cycles. However, both systems became vulnerable to realignments, and ultimately broke down,

Lessons from past  
experience

when exchange rates became at odds with macroeconomic fundamentals. In effect, the associated adjustments in domestic labour and goods prices necessary to hold the existing systems together were deemed too costly.

#### Policy implications

What are the main implications for monetary policy today? If the G3 central banks continue to follow expansionary monetary policies and other countries are disinclined to accept upward adjustments in nominal exchange rates, then central banks in non-G3 economies would be induced to pursue more expansionary monetary policies than would otherwise be the case. This would be likely to manifest itself in one of two possible ways. First, central banks could lower policy rates. Second, central banks could engage in sterilised interventions, as a number already have been doing. Even though such actions might help curb a currency appreciation, if effective, they might not be able to prevent a rise in inflation or excessive movements in asset prices in the medium term. The dilemma for policymakers is whether such longer-term risks are worth bearing in order to reap the benefits of stronger growth in the short run.

#### Financial vulnerabilities

Moreover, if a rapid increase in global liquidity were to lead to a build-up of financial imbalances in various parts of the world, many financial positions might become more vulnerable in the event of a rise in short-term interest rates. Indeed, there is some evidence that recent lending to emerging market economies has sometimes been undertaken without sufficient discrimination. Fortunately, compared with past episodes, emerging market countries have generally taken steps to strengthen their financial infrastructures and liquidity positions. At the same time, the corresponding adjustment need not be entirely smooth.

#### Monetary policy adjustments may be necessary

Various adjustments could mitigate the build-up of excessive global liquidity, were the implications of this judged to be significant. If the non-G3 economies were to bear the brunt of the adjustment, they would have to accept an appreciation of their currencies or the imposition of capital controls. In contrast, if the G3 economies were to bear the burden of the adjustment, then somewhat tighter domestic policies would be called for. A more comprehensive approach might be for both the G3 and non-G3 economies simply to commit to a credible international framework of more flexibly determined exchange rates, as recently recommended at a meeting of the G7 Finance Ministers and central bank Governors. In practice, however, this would probably involve some form of agreement about macroeconomic policies as well. Asian countries, for example, might be reluctant to accept appreciation of their currencies if they believed that the US fiscal deficit and low domestic saving rate were the crux of the many worrisome imbalances.

## Communication in monetary policy

#### Clear communication is key to monetary policy

The importance of clear communication in monetary policymaking was underscored in the period under review. It is widely recognised that a good communication policy can strengthen the institutional independence of central banks as well as increase the effectiveness of monetary policy. This helps to explain why, over the past decade, there has been a trend for central banks to try to communicate more clearly. At the same time, it is also clear

that one size does not fit all when it comes to designing good communication strategies; different central banks face different constraints as they try to fine-tune their messages. These constraints are likely to continue to present challenges to central banks as they contemplate future changes in their communication policies.

#### *The importance of good communication*

Clear communication plays a critical role in a central bank's institutional policy framework because it provides a means for central banks to be transparent, accountable and credible. These three dimensions are interrelated and mutually reinforcing in the best of circumstances.

Greater transparency in monetary policy can enhance central bank accountability and credibility, and can reduce uncertainty about the central bank's objectives, strategies and decisions. For its part, clear communication is critical to increasing transparency. It is important to note, however, that more information is not necessarily synonymous with greater transparency; sometimes extra information can convey a false sense of precision or simply overwhelm its recipients. Thus, policymakers are faced with the task of determining what information can best characterise their views and how best to communicate them to the public.

Transparency and accountability go hand in hand. To be accountable, a central bank has to be clear about what it does and why. The importance of accountability, however, transcends the narrow confines of inflation and output stabilisation. Given the potential impact – both positive and negative – of monetary policy on economic welfare, central banks have a duty to be accountable to both the government and the general public. Being accountable promotes trust and confidence and is a natural counterpart to the operational independence of a central bank. Moreover, past studies confirm a positive relationship between central bank operational independence and welfare-improving inflation and output outcomes.

Similarly, greater transparency can help build credibility. Ultimately, central banks gain credibility by fostering conditions that contribute to the best economic outcomes. However, credibility can be established faster if sufficient information is provided to allow the public to assess the consistency of policy plans and their execution, and the link between the policies and objectives of the central bank.

Clear communication can also make monetary policy more effective. A major policy lesson, learned from experience over the past three decades, is that private sector expectations have a significant impact on the transmission of monetary policy. Well anchored private sector expectations, for example, contribute to making the economy more resilient to transitory supply and demand shocks and reducing the need for countercyclical adjustments which could, in less transparent environments, increase volatility. This means that central banks can best achieve their goals by setting short-term policy rates appropriately and by trying to shape public expectations in a way that reinforces their policy stance. Conversely, if policy actions are misunderstood by the private sector, then monetary policy is unlikely to fully achieve its intended outcomes.

Good communication aids ...

... transparency ...

... accountability ...

... and credibility

Clear communication makes policy more effective ...

... thereby complementing policy actions ...

... and reducing  
macroeconomic  
volatility

One way a central bank can help stabilise the economy is by reducing the private sector's uncertainty about its policy framework. It was not uncommon in the past, however, for central banks to see a strategic advantage in withholding information about decisions and intentions. Central bank secrecy was largely predicated on the view that monetary policy actions could be more effective if they were not anticipated by the public. Over time, this view was superseded by the belief that policies that are clearly explained to the public eliminate an extra source of uncertainty in private sector decision-making. Structurally, the rapid development and growing importance of financial markets in transmitting monetary policy have contributed to this shift, given that asset prices and yields are highly sensitive to expectations about policy actions.

While it is generally held that actions speak louder than words, when it comes to central bank communication, words can speak louder than actions if the central bank has a reputation for delivering what it promises. The past year has provided good examples of the potential gains from clearer communication. Concerns about financial imbalances in the United Kingdom and Australia, for example, led markets to bid up longer-term interest rates in advance of policy moves because the central banks were telegraphing their intentions. In a sense, clarifying their future policy intentions amounted to a verbal tightening: private sector expectations translated into forward-looking behaviour that helped to achieve a tighter stance of policy than would otherwise have been the case.

#### *Trends towards greater openness*

Central banks have  
become more  
open ...

Central banks are now generally quite open about most aspects of monetary policy. A brief summary of current communication practices is given in Table IV.1. At the cost of some oversimplification, practices can be broadly divided into means to improve the effectiveness of monetary policy and means to enhance central bank accountability. The former category can be further broken down between communication on policy decisions and on the central bank's assessment of economic conditions.

As is evident from the table, there is considerable uniformity across central banks on certain elements of strategies aimed at making monetary policy decisions more transparent; for example, the adoption of explicit short-term targets for instruments and the public announcement of policy decisions (eg press releases). In addition, most central banks now regularly publish detailed descriptions of their views on the current and prospective state of the economy. However, there is less agreement on the detail and timing of explanations of policy decisions. For instance, not all central banks publish the minutes of policy meetings, and the lags in publication vary for those that do.

#### *Assessing the record*

... and policy has  
become more  
predictable

To the extent that changes in communication policies over the past decade have increased the clarity of central bank intentions, then, all else equal, policy rates should now be more predictable. An analysis of the record is broadly consistent with this view.

## Provision of information by central banks

|  | G3             |     |     | Inflation targeters |     |     |     |                  |                  |
|--|----------------|-----|-----|---------------------|-----|-----|-----|------------------|------------------|
|  | US             | ECB | JP  | GB                  | CA  | NZ  | AU  | SE               | CH               |
| Accountability                                 |                |     |     |                     |     |     |     |                  |                  |
| Quantitative inflation objectives <sup>1</sup> | No             | Yes | No  | Yes                 | Yes | Yes | Yes | Yes              | Yes              |
| Reports to legislature <sup>2</sup>            | Yes            | Yes | Yes | Yes                 | Yes | Yes | Yes | Yes              | Yes              |
| Policy decisions                               |                |     |     |                     |     |     |     |                  |                  |
| Decisions announced immediately                | Yes            | Yes | Yes | Yes                 | Yes | Yes | Yes | Yes <sup>3</sup> | Yes              |
| Press conferences                              | No             | Yes | Yes | No                  | No  | Yes | No  | Yes              | Yes <sup>4</sup> |
| Press releases                                 | Yes            | Yes | Yes | Yes                 | Yes | Yes | Yes | Yes              | Yes              |
| Minutes published <sup>5</sup>                 | Yes            | No  | Yes | Yes                 | .   | .   | No  | Yes              | No               |
| Precise voting result published                | Yes            | No  | Yes | Yes                 | .   | .   | No  | Yes              | No               |
| Economic assessments                           |                |     |     |                     |     |     |     |                  |                  |
| Reports on monetary policy                     | H <sup>6</sup> | M   | M   | Q                   | Q   | Q   | Q   | Q                | Q                |
| Forecasts released                             | H              | H   | H   | Q                   | Q   | Q   | Q   | Q                | H                |
| Quantitative risk assessments                  | No             | No  | No  | Yes                 | No  | No  | No  | Yes              | No               |

AU = Australia; CA = Canada; CH = Switzerland; GB = United Kingdom; JP = Japan; NZ = New Zealand; SE = Sweden; US = United States. M = monthly; Q = quarterly; H = half-yearly.

<sup>1</sup> ECB and Switzerland: definition of price stability; United Kingdom: inflation point target; Canada and Sweden: inflation point target with tolerance interval; New Zealand: inflation target band; Australia: target range for medium-term average inflation. <sup>2</sup> United States: reports/testimony to Congress; ECB: reports/testimony to EU bodies; Japan and Canada: reports/testimony to Parliament; United Kingdom: reports to Treasury Committee; New Zealand: reports to/hearings in legislature; Australia: reports to Parliament/testimony to House of Representatives Committee; Sweden: reports to/hearings in Parliament (Finance Committee); Switzerland: no statutory requirements, but periodic reporting to parliamentary committees. <sup>3</sup> A press release is published the day after the decision of the Executive Board. <sup>4</sup> After the June and December reviews of monetary policy. <sup>5</sup> Publication lag: United States (five to eight weeks); Japan (one month); United Kingdom (13 days); Sweden (two weeks). <sup>6</sup> The *Monetary Policy Report* is provided semiannually; the *Beige Book* is published eight times a year.

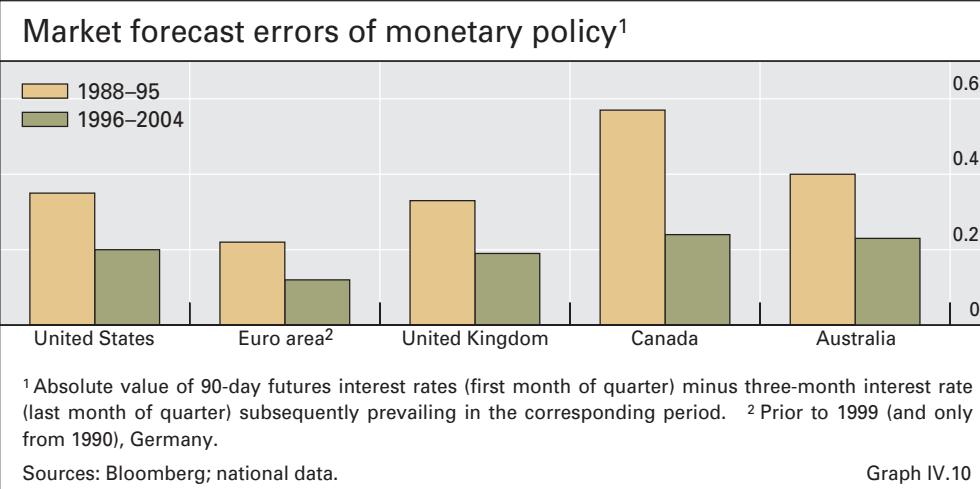
Source: Central banks.

Table IV.1

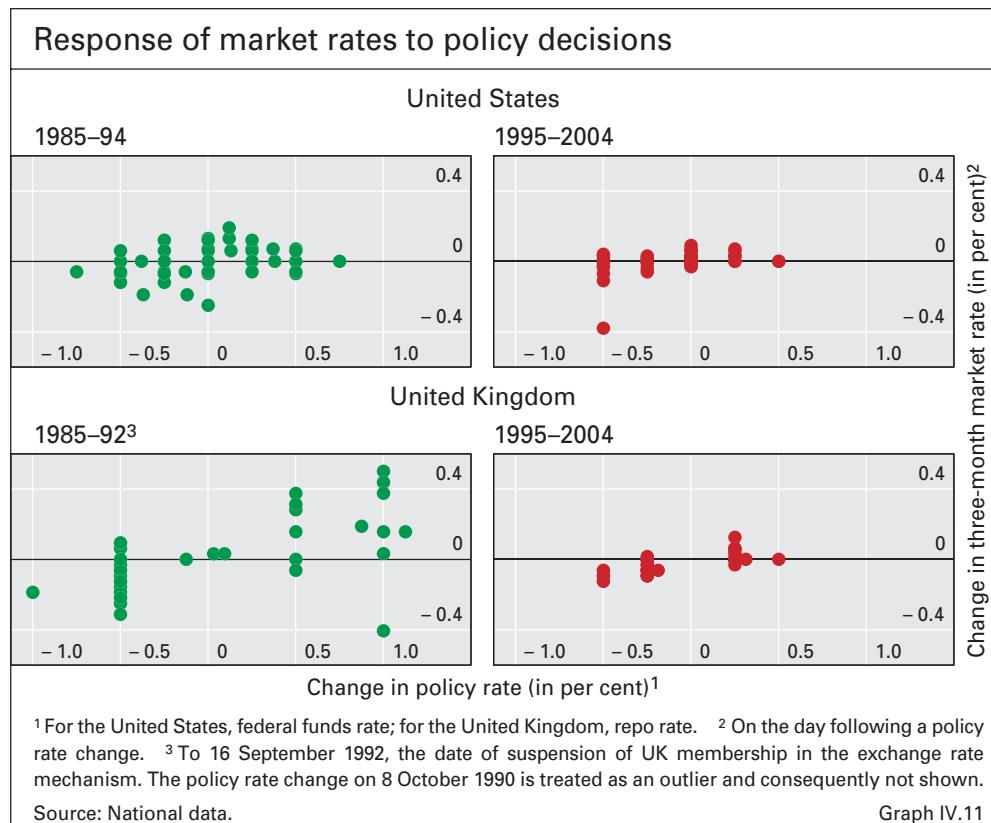
In particular, two pieces of evidence are supportive of greater predictability. First, average forecast errors of short-term rates have become smaller since the mid-1990s, as gauged on the basis of the rate implicit in futures markets (Graph IV.10). Second, a similar message emerges from the reaction of market interest rates at the time of decisions on policy rates. Graph IV.11 shows that three-month money market rates have reacted less to policy announcements since 1995, consistent with policy decisions being better anticipated by markets.

Although better communication may have made central bank actions more predictable, it is important to recognise that central bank communication strategies allow for a two-way flow of information. Central banks provide information about policy actions and future intentions; the private sector then reacts and provides feedback on how the information about policy is being received. To some extent, the hallmark of a good communication policy is that the central bank and the private sector end up having consistent views; such a situation is likely to promote an environment where the best economic outcomes can be achieved. However, there will be times when financial

Communication is bidirectional



markets indicate to policymakers that their view of what monetary policy is likely to do is different from the view held by the policymakers themselves. In those critical times, when markets go off track, the central bank might wish to shepherd them back. Moreover, a gentle nudge from a transparent central bank is generally thought to be preferable to radical swings by an opaque central bank. Of course, in such circumstances, the policymakers will also have to reflect seriously on whether the markets' view of appropriate policy looking forward may not be better than their own. That is what two-way communication is really about.



### *Understanding differences in communication strategies*

While there has been a common trend across central banks towards greater transparency about most aspects of monetary policy, the fact that significant differences remain should not be surprising. The history, audience and economic challenges specific to each central bank help shape the best communication strategy. One size does not fit all.

One size does not fit all because of ...

First, for those central banks with a long track record, from which the public can reasonably infer their policy framework and likely reaction to economic events, explicit communication may not be as important as it is for central banks operating under less well established regimes. Arguably, the long history of the Federal Reserve, and particularly the actions of the FOMC over the past decade or so, provide considerable information about how US monetary policy will be conducted going forward. In contrast, the ECB, as a new institution, and smaller industrial countries with new inflation targeting regimes, would face a demand for more comprehensive information about their policy frameworks.

... history ...

Second, different central banks face demands for different types of information. In part, this is because the main target audience may differ across countries. For instance, in countries where financial markets play a relatively large role in the transmission of monetary policy (eg the United States), policymakers may have to focus on ensuring that financial markets have easy access to information that could have a large influence on asset prices. In contrast, in countries that have more bank-dominated financial intermediation systems, this information might be less essential. Rather, the central bank might focus more on the general public, who need to be reassured of its commitment to price stability as they make longer-term decisions to work, save and invest.

... audience ...

Third, country-specific conjunctural circumstances may also call for differences in communication practices across central banks. For example, the Bank of Japan has responded to its deflationary environment by providing detailed information about its unconventional monetary policies as well as forward-looking information about when such policies may end. To a lesser extent, the Federal Reserve in the past year felt it was necessary to emphasise the policy strategies it could implement if an unwanted deflation were to occur. Facing still different circumstances, the Bank of England, for example, has devoted more effort to explaining its policy options in the face of potentially unsustainable increases in residential property prices.

... and special circumstances

### *Communication challenges*

History shows that central banks strive for continuous improvement in their communication strategies. They also learn from the efforts of their peers, as has been evident in the trend towards the use of inflation targeting frameworks by many central banks around the world. Discovering new communication modalities, as well as refining existing strategies, remains integral to future progress. While this may sound straightforward, there are different types of practical constraints on central bank communication strategies.

Further progress is important but ...

Even if central banks might want in principle to release more information, there might be good practical reasons for not doing so. Apart from the obvious

... it will be costly ...

... and too much openness may stifle debate

Inherent limitations stem from ...

... the use of language ...

... the difficulty of describing all contingencies ...

... and potential conflicts with credibility

inappropriate release of proprietary information, which could have a chilling effect on the future flow of such information to policymakers, improving communication is not costless. Clear communication requires time, money and central bank resources. Subjected to a sober cost-benefit analysis, releasing certain types of information might simply prove to be wasteful. In addition, deliberations in policy meetings benefit greatly from full and frank discussions, which could be adversely affected by too much openness, such as broadcasting meetings or releasing complete transcripts as soon as would be possible. Similarly, enhanced transparency regarding policy deliberations, voting records and so on might induce the media to dramatise differences in opinion amongst policymakers, which in turn could politicise internal monetary policy discussions. All these concerns suggest that central banks must carefully consider what information they provide.

Another important issue is how the central bank can best get its intended message across clearly to the public. There are several reasons why this is so challenging. First, language may be imprecise and subject to various interpretations, especially when policymakers feel the need to be concise. Consider, for example, the recent changes in the FOMC's post-meeting press release. Starting in mid-1999, the Committee indicated a "bias", along with its policy rate target, which provided a signal of what deviations from target might be likely during the inter-meeting period. Its full meaning, however, was not well understood in financial markets. Consequently, in February 2000, the statement on bias was replaced by the "balance of risks" statement. This was meant to indicate the FOMC's view of likely outcomes for inflation and output over a horizon beyond the subsequent policy meeting. Moreover, wishing to keep its statement brief, the Committee has had to choose its words carefully in order to best characterise its views. Experience during the period under review suggests that even slight modifications in the balance of risks statement can cause a large, and sometimes unwanted, reaction in the markets. A longer statement, with greater emphasis on the conditions under which certain policy actions would be taken, might seem the obvious alternative but would necessarily delay its release to the public at the conclusion of an FOMC meeting. Moreover, it might unduly raise the sensitivity of markets to unfolding economic developments.

Second, while striving to be clear and predictable during normal circumstances, central banks might not find it feasible, or desirable, to describe all possible contingencies and what they might do in response. This is partly because of the impossibility of knowing the precise nature of events until they occur and partly due to concerns that the discussion of extreme contingencies might unduly influence the public and roil financial markets. In addition, the difficulties may reflect the reality that the public may be unwilling or unable to fully digest complex analyses and a substantial amount of policy information.

Finally, because a focal point of communication strategies is credibility, an ironic question arises: can central banks appear to be too credible? A central bank may face a "winner's curse" problem: if it is too credible, the public may place more weight on its pronouncements than the central bank intended.

This problem might be particularly relevant when policymakers make comments on low-probability outcomes, which the public then blows out of proportion. In such an environment, providing too much information may end up adversely affecting the central bank's credibility. Similarly, if the markets simply accept the central bank's assessment of how policy should evolve in the future, the two-way communication referred to above could become seriously compromised.

The payoffs to better communication are potentially significant but, if history is a reliable guide, attaining such gains will most likely involve careful and prudent efforts rather than quick fixes.