

## IV. Monetary policy in the advanced industrial economies

### Highlights

The stance of monetary policy in the G3 economies remained highly accommodative in the period under review. However, with the US economic expansion continuing and risks shifting away from unwelcome disinflation and economic weakness towards possible inflationary pressures, the Federal Reserve began reducing the degree of accommodation in a series of measured increases in the federal funds rate target. The ECB kept its policy rate unchanged as sub-par economic growth and the appreciation of the euro continued to hold back inflationary pressures. The Bank of Japan held its policy rate at zero as economic and financial headwinds proved sufficiently strong to rule out an end to deflation. Improving financial market conditions nonetheless seemed to bring closer an eventual exit from the Bank of Japan's unconventional policy of quantitative easing. As their respective recoveries continued in the context of low policy interest rates, G3 policymakers were mindful of the need for clear communication in their exit strategies.

Policy concerns across smaller industrial economies were more diverse. Some central banks chose very accommodative policy stances while others adopted more neutral settings. Many central banks raised policy rates modestly as expectations about growth at home and abroad firmed; in some cases, more binding resource constraints gave rise to concerns about price stability. Debt levels, frothy housing markets and exchange rate considerations continued to weigh on monetary policy decisions.

External developments, especially movements in the prices of oil and other commodities, dominated the period under review for all the economies. Comparisons of these as well as other recent developments with similar movements in the late 1960s and early 1970s seem to produce some striking parallels. In the latter part of this chapter, the historical record is reviewed and contrasted with current circumstances in order to assess the likelihood of history repeating itself. In a broader context, the comparison also helps to clarify the kinds of risks that monetary policymakers might be facing.

### Review of developments

#### *United States*

The Federal Reserve reduced the degree of monetary policy accommodation throughout the period under review. Despite eight measured increases of 25 basis points each, the federal funds rate target finished the period at 3%. This was still below conventional estimates of the neutral, or natural, rate of

The Federal Reserve raised rates in a measured ...

interest for the United States. As of late spring, financial markets were still anticipating further rate increases.

One important aspect of the Federal Reserve's tightening of policy was its transparency. The rate increases were well telegraphed, in part to minimise any potential stress on the financial system. The Federal Reserve signalled its intentions by various means, including Federal Open Market Committee (FOMC) press releases, meeting minutes and statements by Committee members. Financial markets generally took the FOMC's actions in their stride and there were few surprises about the direction or size of the moves.

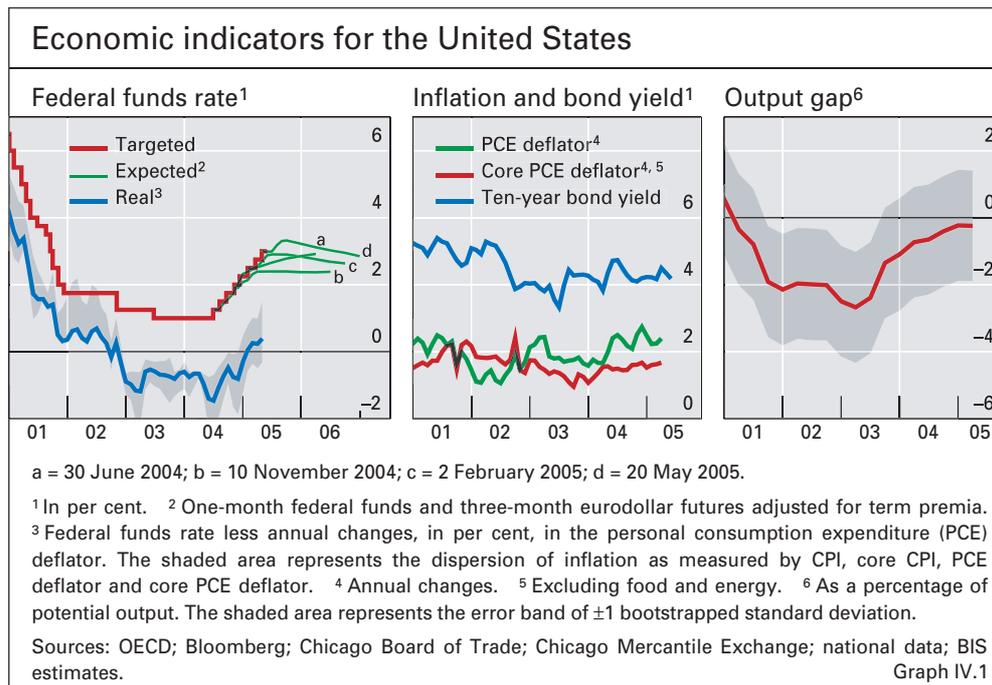
This measured approach was intended to balance the risks to sustainable growth against the desire to maintain price stability, as the four-year economic expansion continued to reduce margins of underutilised resources (Graph IV.1). Nevertheless, questions arose about whether the increases in the federal funds rate were sufficient to achieve the Committee's desired reduction in policy accommodation. One concern was that rising headline inflation was resulting in very low ex post real policy rates throughout the period – below zero during 2004 and just edging above zero in early 2005.

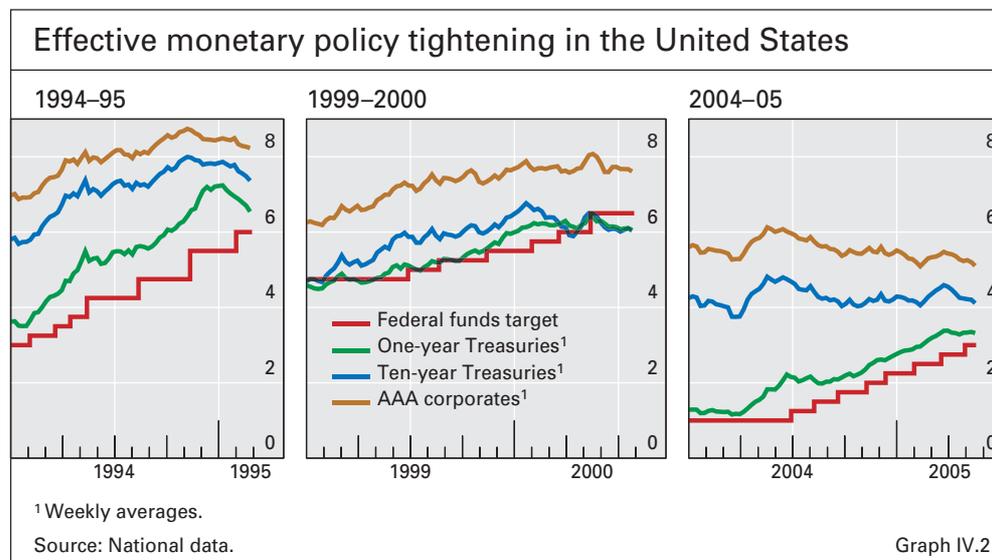
Moreover, the unusual reaction of longer-term market interest rates to the measured tightening was posing a number of further questions. In the past, major tightening phases had typically gone hand in hand with significant increases in market interest rates, short-term as well as long-term (Graph IV.2). This time, while short-term rates moved in a typical lockstep manner, longer-term yields on fixed income securities showed no sign of a sustained upward trend; if anything, yields drifted downwards (see Chapter VI). For some, this pattern raised concerns about whether policy actions were having the desired restrictive impact on aggregate demand. However, the Federal Reserve noted that one reason for the muted response in long-term rates was the fact that

... and transparent fashion

However, real policy rates remained near zero ...

... and long rates behaved atypically for a tightening phase ...





longer-term inflation expectations appeared to be lower and more firmly anchored than in the past. This implied that less demand restraint was needed.

... raising concerns about excessive liquidity

The uncharacteristic behaviour of longer-term interest rates also underscored potential concerns about other considerations, with further conflicting implications for monetary policy. The relatively flat yield curve might indicate that the markets were expecting a reduction in long-term growth prospects, perhaps implying the need for an easier stance of monetary policy. However, the low long-term interest rates, along with yield compressions and rising asset prices, could also be seen as a sign that investors were continuing to take on excessive risk during the prolonged period of policy accommodation. Accelerating house prices also suggested that such forces were at work. Such an interpretation pointed to a possible need for a steeper rise in policy rates than was priced into financial markets, in order to absorb excessive liquidity.

Concerns also arose about surging energy prices ...

US monetary policy decisions during the period under review were further complicated by the need to deal with other unforeseen and potentially inflationary developments. The sharp increase in energy prices, especially oil prices, raised concerns about price stability and downside risks to the expansion. Nevertheless, with core inflation comfortably below 2%, policymakers assessed the inflation threat as reasonably contained, albeit deserving heightened monitoring. The sharp depreciation of the dollar also presented potential policy challenges. Even so, continued low import prices and the apparent decline in exchange rate pass-through in recent years seemed to mitigate the need for more aggressive policy actions. Anecdotal evidence at the end of the period, however, pointed to greater pricing power of firms. If it signals a new trend, this might call for a somewhat faster removal of policy accommodation.

... dollar depreciation ...

... and the productivity trend

The FOMC also faced the possibility of a slowdown in structural productivity growth, as output per hour decelerated and unit labour costs accelerated over the past year. While a trend break could not be established with any confidence, the implications had to be factored into policy. In the short run, profit margins were ample enough to moderate the inflationary

consequences and the need for a more aggressive schedule of policy rate increases in advance of more definitive evidence. Over the medium term, a decline in trend productivity could imply a lower natural rate of interest and hence a lower level for the federal funds rate at the end of the tightening phase.

An important question for the Federal Reserve earlier this year was whether an explicit inflation target could foster even better US economic performance. The FOMC's discussion of the advantages and disadvantages of formulating an explicit price stability objective should be seen as part of a much broader ongoing review of its institutional framework to enhance transparency, recently exemplified by its decisions to expedite the release of FOMC meeting minutes and to extend its published forecast horizon. The FOMC pointed out that, on the one hand, an explicit inflation target could strengthen the economy's inflation anchor, enhance the transparency of internal deliberations and improve communication with the public. On the other hand, an explicit target might compromise the Federal Reserve's traditional mandate concerning both economic activity and inflation, and might constrain its flexibility in responding to changing economic and financial circumstances.

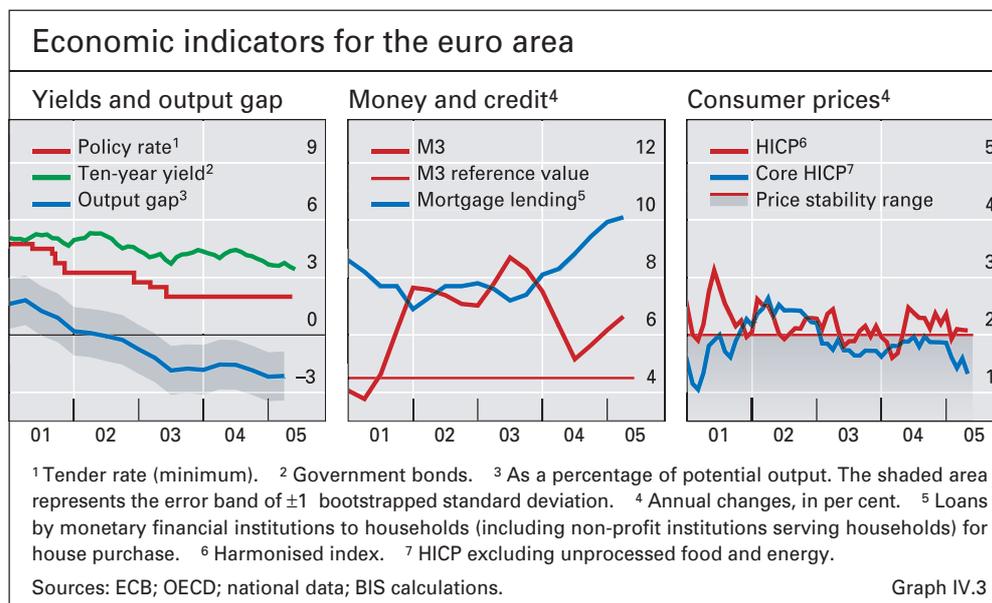
An explicit inflation objective was considered

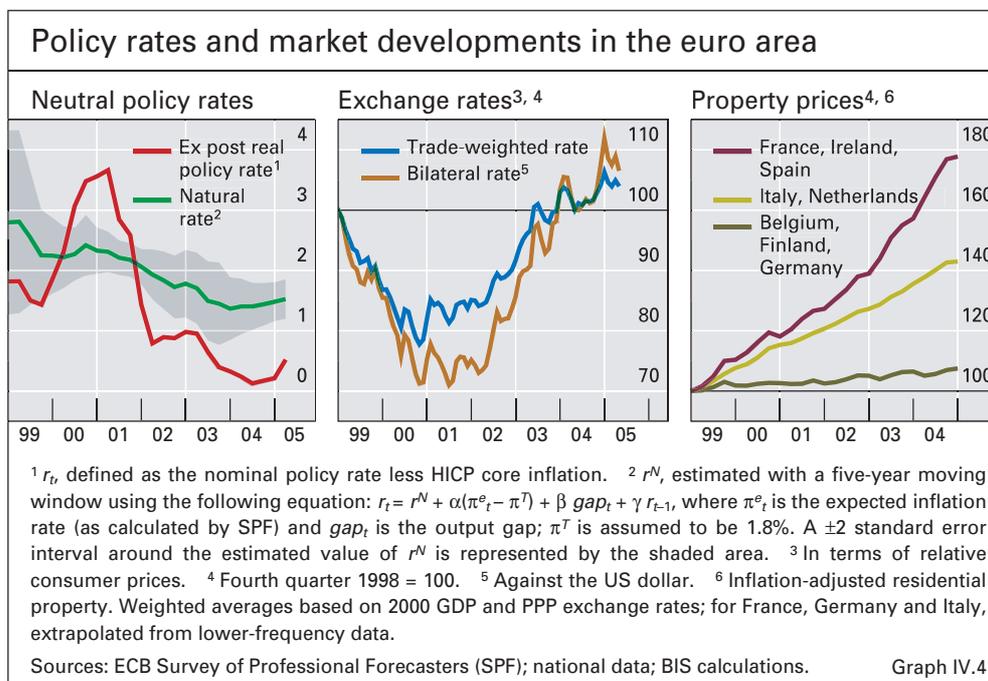
### Euro area

With inflation generally subdued and economic activity flagging in the euro area, the ECB continued to pursue a stimulative monetary policy. As of late spring, the policy rate had been kept at 2% for two years, balancing the discomfort from an inflation rate that was above the upper limit of the Bank's definition of price stability against the concern arising from sub-par economic performance. Surging oil prices raised concerns about a possible deterioration in the short-run inflation outlook and even a return of stagflation. However, little evidence emerged that energy and other commodity price rises were passing through to core inflation, to wage setting behaviour or to medium-term inflation expectations. Thus, the ECB concluded that the risks of more generalised

The ECB kept rates on hold ...

... given subdued economic activity and inflation above the price stability range





inflation were not sufficiently great to justify an increase in rates. In part, this was because there seemed to be continued economic slack owing to slow growth (Graph IV.3). With inflation running near the upper end of the ECB's desired range of below, but close to, 2%, the real policy interest rate stayed close to zero. As in the United States, this is well below estimates of the natural rate of interest. This indicated that, as the economy recovered, the ECB would need to tighten policy to keep inflationary pressures in check (Graph IV.4).

Again as in the United States, a key question arose about the consequences of a prolonged period of accommodative policy. On the one hand, the real-side measures of inflationary pressures referred to above indicated few imminent inflation threats. On the other hand, M3 growth rates continued to exceed the ECB's reference value of 4½%. Traditionally, rapid growth in the broad monetary aggregate has indicated an easy stance of monetary policy that could lead to higher inflation. While in previous years rapid M3 growth had been attributed to an increased precautionary demand for holding funds, the reasons for still further increases in such demand were harder to identify last year. Accordingly, the ECB emphasised the traditional medium-term inflation risks associated with such monetary expansion.

The ECB's two-pillar approach to its medium-term assessment also offered a less conventional way of considering the monetary policy risks. The pickup in M3 growth after mid-2004 coincided with a rise in euro area credit expansion, especially mortgage lending. Viewed from this perspective, a continuation of the low interest rate policy, with its natural implications for long-term yields, had the potential to fuel not only goods and services price inflation but also house price inflation, and to encourage the accumulation of debt to unprecedented levels. In a more conventional story, higher policy rates would be needed to prevent the economic recovery from gaining excessive momentum and inflation from rising. In a less conventional story, rate increases would be

Rapid M3 growth added to concerns about the medium-term assessment ...

... as did rapid credit growth and house price increases

needed to rein in financial imbalances before strong asset price appreciations and subsequent reversals threatened price stability on the downside.

House price trends also underscored potential monetary policy complications arising from regional diversity across the euro area. The anaemic housing markets in Austria and Germany, for example, paled in comparison with the double digit price gains in France and Spain (see Chapter II). The ECB expressed its concern about increases in several member countries, but noted that its direct mandate only obliged it to react to the extent that they affected euro area macroeconomic conditions. The ECB also noted that national financial stability issues naturally fell under the purview of national financial supervisory authorities and euro area central banks.

The sharp appreciation of the euro against the US dollar in 2004 presented a challenge for the ECB. While it helped to curb short-run inflationary pressures, it did so by concentrating the burden of adjustment largely on the export-oriented sector. Moreover, with the US current account deficit still growing to unprecedented levels, further dollar depreciation could not be ruled out (see Chapter V).

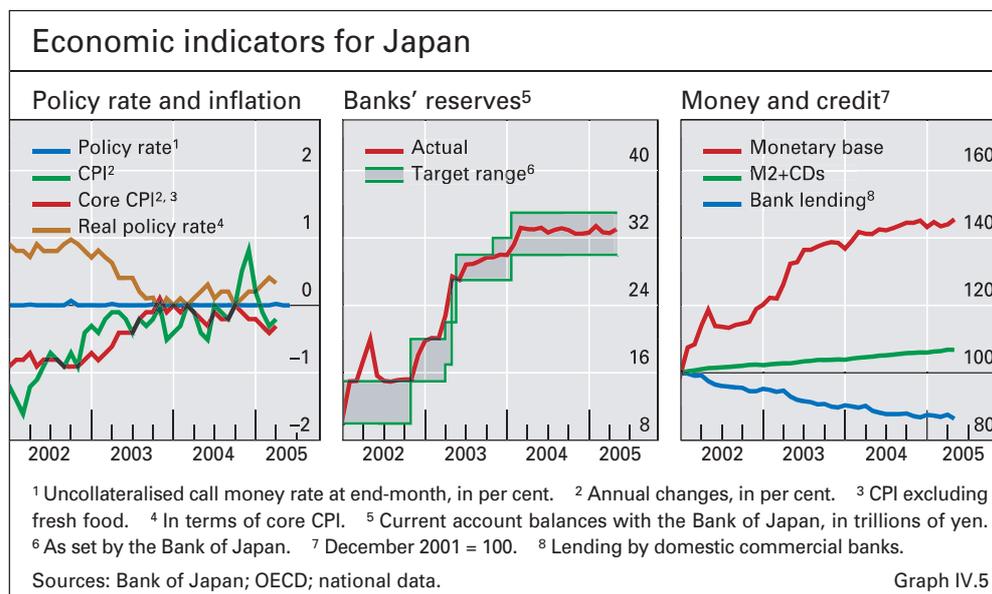
Divergent regional house price trends complicate the policy environment

Sharp euro appreciation presented a challenge

### Japan

The Bank of Japan maintained its very accommodative policy of quantitative easing, with short-term policy rates remaining essentially at zero (Graph IV.5). Part of the reason for continuing the unconventional policy was that deflationary forces proved to be too difficult to shake off as the economy stagnated, leaving a high, albeit declining, level of underutilised resources. Significant improvements in the financial sector, which was still labouring under the effects of the asset price collapse in the 1990s, helped reduce concerns that the Japanese economy might stumble into a deflationary spiral (see Chapter VII). Even so, the easy stance of monetary policy generated just a modest increase in the broader monetary aggregates, as bank lending showed only incipient signs of a turnaround.

The Bank of Japan held its policy rate at zero as deflation persisted



Target bands for quantitative easing were left unchanged ...

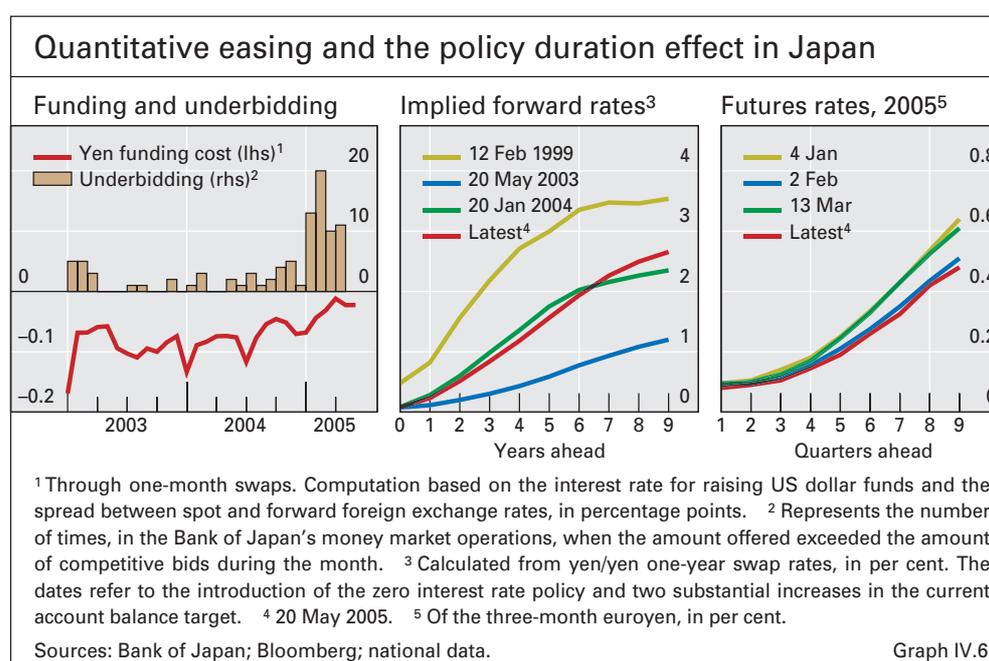
... but fundamental issues were raised about the policy ...

... and technical difficulties arose

The Bank of Japan kept the target band of ¥30–35 trillion for outstanding current account balances with the central bank. However, some members of its Policy Board became increasingly sceptical about the consistency of this target with the Bank’s policy goals of low and stable inflation. Indeed, the Bank considered lowering the target range for the first time since the adoption of its policy of quantitative easing in 2001. This development occurred as some Policy Board members also indicated a growing concern about the potential negative side effects of the quantitative easing policy. These effects included moral hazard among borrowers, the poor functioning of money markets, a decrease in monetary policy flexibility and a weakening of fiscal discipline.

Technical difficulties in conducting the Bank’s market operations to inject liquidity complemented uncertainties about the appropriate target bands for current account balances. The frequency of underbidding (ie the number of times that the amount offered exceeded the amount bid) in its bill buying operations increased appreciably in March of this year (Graph IV.6). This was widely interpreted as an indication that market demand for liquidity was falling as a result of the improving health of the banking sector. In particular, because banks strengthened their balance sheets, they did not have to pay as high a cost to raise US dollar funds via yen swaps. For years, banks with US dollar deposits, especially foreign ones, had engaged in currency swaps for yen at negative yen funding costs in the currency swap market. These had made it profitable for the banks to hold yen balances in various low-yielding liquid assets, even zero interest bearing current accounts at the Bank of Japan. As the swap spread disappeared earlier this year, so did this type of demand for current account balances generated by the foreign banks.

While technical in nature and unrelated to the stance of monetary policy, the Bank’s inability to attract sufficient demand for its operations, which



remained largely confined to short maturities, initially led to market speculation about a turning point in the Bank's monetary policy. The forward interest rate curve steepened and became more volatile. These market reactions led the Bank of Japan to reiterate its view that the underbidding problem was a purely technical issue and did not signal a shift in policy stance. The Bank also reaffirmed its commitment to the zero interest rate policy. These developments indicated that the commitment to maintain the zero interest rate policy, rather than current account targets per se, was critical to a monetary transmission process geared towards keeping market interest rates low. Whatever the circumstances, the Bank of Japan's communication strategy will play an important role in shaping the policy environment once the Bank exits from its unconventional monetary policy.

Market reactions highlighted the importance of the central bank's communication strategy ...

One policy option discussed this year to help reorient expectations towards low, stable inflation was for the central bank to formulate and announce an explicit inflation objective. This issue, though raised frequently in the past, appeared to receive additional attention in the period under review, as inflation became more likely and such a commitment became more credible. As seen elsewhere in the world, inflation targeting regimes can help to shift inflation expectations down and maintain them at a low level. The Bank of Japan's challenge, however, would be somewhat different. It would be to achieve and maintain expectations of low inflation in a growing economy after a decade of deflation and sub-par economic performance. Perhaps the more important contribution made by setting an explicit inflation objective, once the economy and financial system were on a sounder footing, would be to reduce the likelihood of inflation expectations overshooting on the upside given the large reserve overhang. Such an overshoot could lead to an increase in borrowing costs and aggravate some lingering fragilities in the economy, not least problems associated with weak companies still battling for survival.

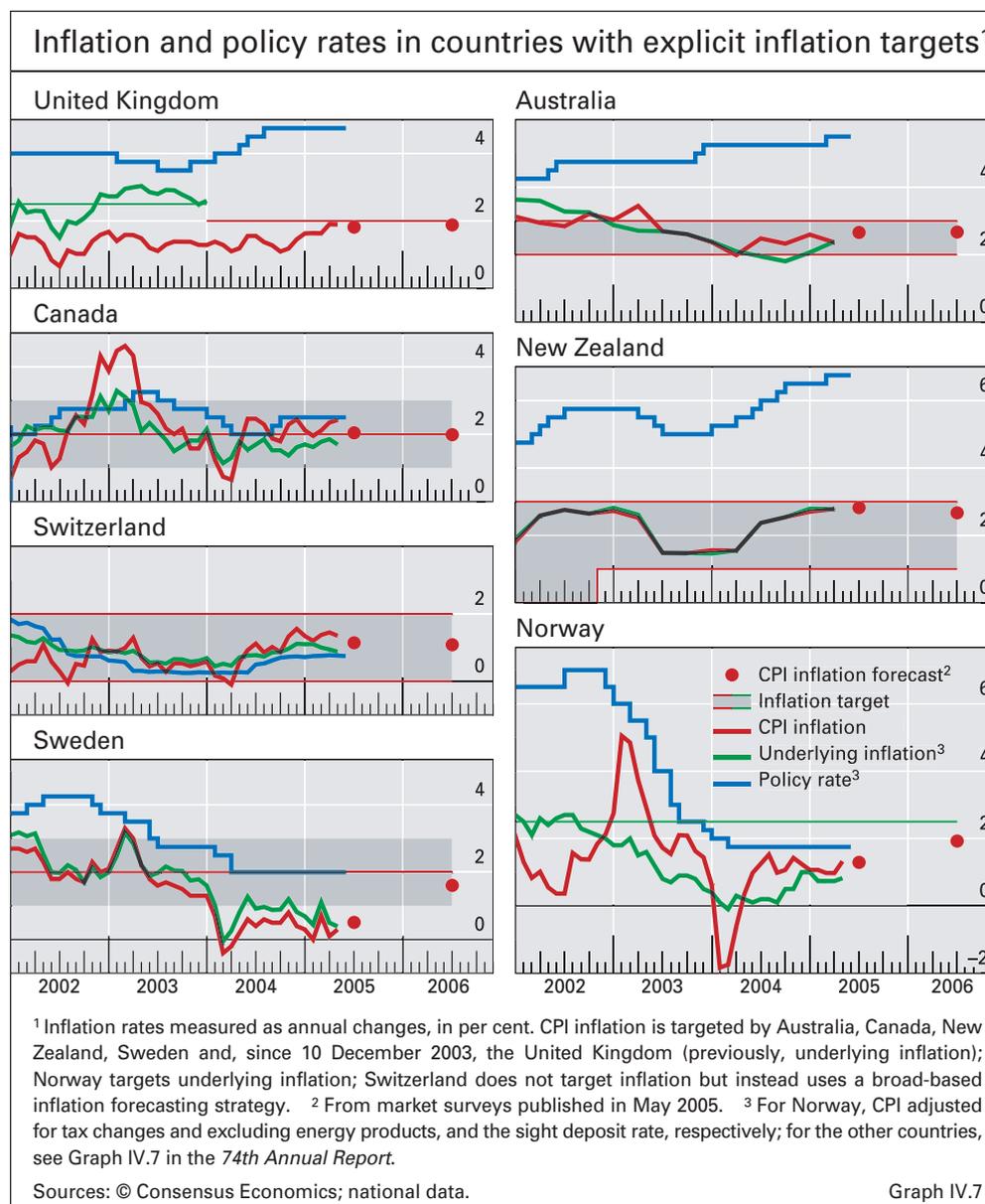
... and underscored the potential benefits of an explicit inflation objective

### *Inflation targeting countries*

Many central banks in countries with explicit numerical targets for inflation increased policy rates modestly during the period under review. In general, the stronger global economy helped to bolster domestic economic conditions. Moreover, the accompanying increases in commodity prices, especially oil, directly raised concerns about inflationary pressures. And some central banks expressed the view that higher rates might also help deter further accumulation of debt and higher asset prices, which, under certain circumstances, could raise the potential costs of a subsequent adjustment.

Many central banks in countries with inflation targets tightened policy

For the Reserve Bank of Australia and the Reserve Bank of New Zealand, the rate increases last year followed a series of earlier tightening moves (Graph IV.7). In the case of the Bank of Canada and the Swiss National Bank, the rate rises were the first after troughs in their respective policy cycles. For the Swiss National Bank, this trough had seen rates pushed almost to zero. In contrast, Sveriges Riksbank and the Central Bank of Norway held their respective policy rates unchanged from the trough of their policy cycles in early 2004. In spite of initially very low inflation, the Bank of England kept its policy rate unchanged from August 2004 onwards.



Australia, New Zealand and the United Kingdom chose policy settings close to neutral ...

Policy rates in Australia, New Zealand and the United Kingdom are now close to levels seen as consistent with long-run non-inflationary sustainable growth. The Reserve Bank of Australia had expressed concerns that, after 13 years of expansion, spare resource utilisation was being stretched thin and inflationary pressures were building. In the absence of an upward adjustment in the policy rate, inflation was expected to approach the upper end of its target band. New Zealand, already near the upper end of its inflation range and with the economy showing signs of overheating, had the highest policy rate amongst the industrial economies, at 6.75%. Moreover, the Reserve Bank explicitly left open the possibility of further increases. The Bank of England raised rates throughout the first half of 2004, reaching 4.75% in August. At that time, the Monetary Policy Committee made it clear that it was closely watching the rapid growth in household debt and elevated house prices in the light of the potential vulnerability implied for the household sector. Indeed, the Bank of

England said that rate rises were justified, in part, by the desire to curb these possible excesses. This was also the case for the Reserve Bank of Australia and the Reserve Bank of New Zealand.

The Bank of Canada and the Swiss National Bank ended the period under review with a policy stance still seen as accommodative. In Canada, there was a significant withdrawal of policy accommodation around the middle of 2004, intended to moderate growth before the economy overheated. However, in late autumn, with oil prices subsiding and the Canadian bilateral exchange rate against the US dollar appreciating, the Bank of Canada delayed further rate increases owing to somewhat more subdued short-term inflation prospects. After lifting its policy rate from the historical low of 0.25% to 0.75%, the Swiss National Bank also kept further rates rises on hold, as unexpectedly weaker European growth prospects weighed on the Swiss recovery. Sveriges Riksbank and the Central Bank of Norway, too, kept their respective policy rates very low. The Nordic countries benefited from unexpectedly favourable supply side developments, which fuelled economic growth while holding inflationary pressures and labour utilisation rates in check. Indeed, lower import prices and higher domestic productivity posed some risk of falling prices in Sweden. In spite of existing slack conditions in Norway, there was still some upside risk to inflation, in part because of more favourable investment prospects in the energy sector.

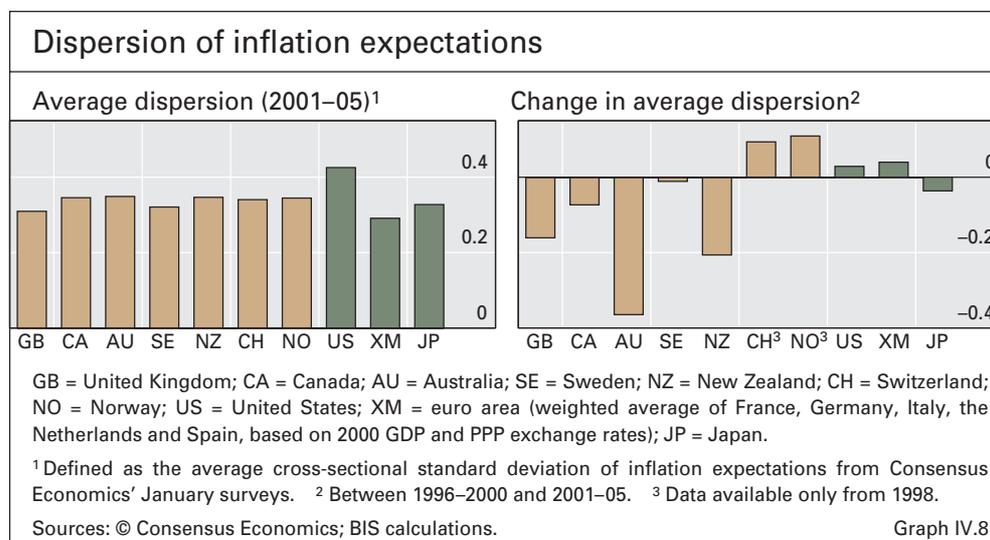
Vulnerabilities arising from the coexistence of elevated asset prices with high debt levels continued to represent a significant risk for various central banks in the period under review. Australia, New Zealand and the United Kingdom, for example, experienced a marked cooling of their respective housing markets, reflecting in part the tighter stance of policy implemented over the past few years. The welcome deceleration in house prices seen so far has had benign effects relative to more disruptive potential scenarios. However, the possibility of sharper house price decreases in the future cannot be ruled out (see Chapters II and VII for further discussion of house price developments and their implications). The Riksbank faced a different set of circumstances. Even though Swedish inflation was forecast to undershoot the target for most of the two-year-ahead period, rapid growth in household debt and increases in house prices argued against looser monetary policy. The Riksbank pointed out that lower rates, if they subsequently had to be rapidly reversed, could threaten consumption growth given elevated indebtedness. It noted that, in its view, supply-driven deflation is qualitatively different from deflations associated with insufficient demand or the collapse of asset prices (see Chapter IV of the *73rd Annual Report*).

Despite the various unforeseen developments that these central banks faced, they have recorded an impressive inflation performance over the past few years (Graph IV.8). Private sector expectations of inflation have remained largely consistent with the inflation targets of the central banks. Moreover, the average dispersions of inflation expectations in the inflation targeting countries are low and now broadly in line with those in the larger economies, in spite of their relatively poor inflation performance in previous decades. This has been seen as a testament to the transparency and credibility of such regimes. Nevertheless, further refinements of inflation targeting frameworks are possible. The Bank of

... while others were distinctly accommodative

High asset prices and indebtedness represented a significant risk

Inflation uncertainty is now on a par with that in the G3

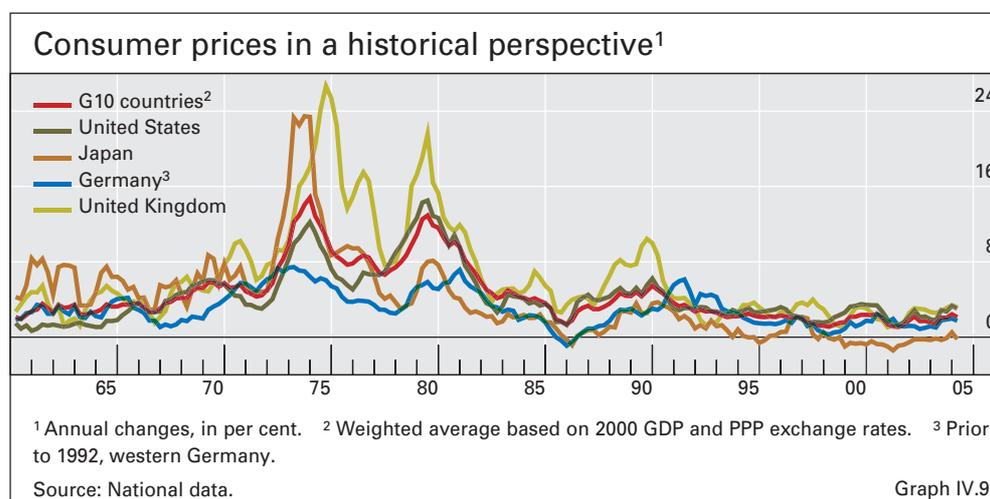


Canada, for example, is currently reviewing the 18- to 24-month timeline over which it attempts to bring inflation to its target. Even though such a horizon provides considerable transparency, responding to some types of economic shocks may best be done with a more flexible and possibly longer horizon.

### Déjà vu?

Parallels between the current situation and that of three decades ago

Some of the salient developments during the period under review elicited comparisons between today's monetary policy environment and that of the late 1960s and early 1970s. The prima facie similarities include the continuation of a prolonged period of accommodative G3 monetary policy, uncertainty about the degree of economic slack, concerns about the US external position and the implications for exchange rates, a sharp rise in oil and commodity prices, and a relaxation of fiscal discipline. Such parallels have naturally raised concerns that, as in the earlier period, there might soon be an inflation flare-up, and that monetary authorities might again react too slowly.



The backdrop for these concerns is the unwelcome inflation experience of the late 1960s and 1970s (Graph IV.9). The process of escalating inflation began in the late 1960s, gained momentum during the early 1970s and accelerated rapidly at the time of the first oil crisis. Of particular note, inflation rates remained high even after oil price increases subsided and economies slowed down. Against this background, it is worth examining the experience of the period in greater depth, explaining both similarities and differences, so as to draw implications for monetary policy in current circumstances.

*The case for history repeating itself*

Looking back at the monetary policy environment of the late 1960s and early 1970s, one can identify six factors that contributed to the build-up of inflationary pressures during that period. There are parallels today.

Similarities with the earlier period:

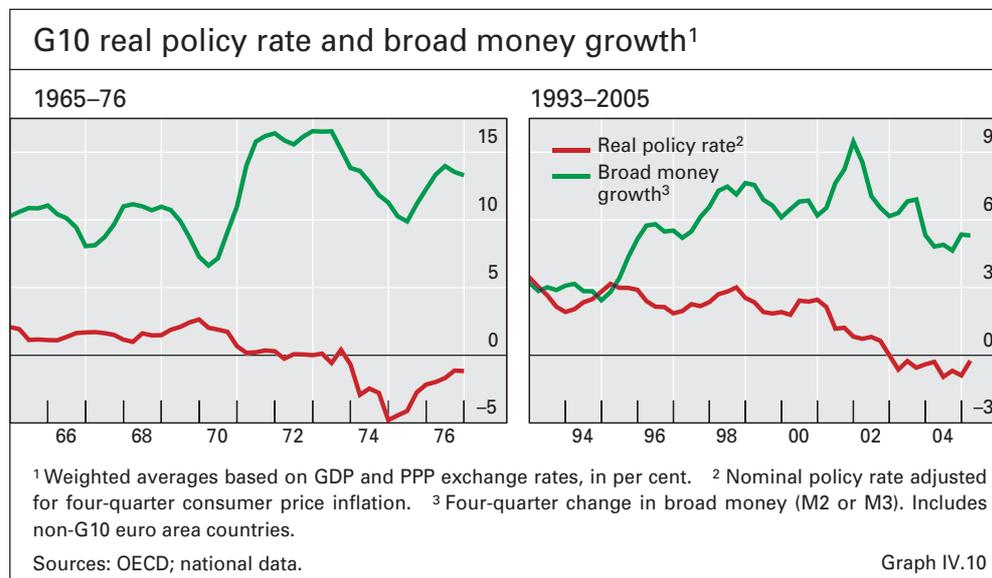
First, real policy rates were low and growth in the monetary aggregates was rapid (Graph IV.10). This accommodative monetary policy was not confined to a few countries but was generalised among the major industrialised economies. Low long-term real interest rates also contributed to the situation, especially as nominal rates remained relatively low and were generally slow to react to the rising inflation. At first, this accommodative policy helped to counter the weakness in the 1970–71 recession, but thereafter it led to an overstimulation of demand during the 1972–73 economic boom.

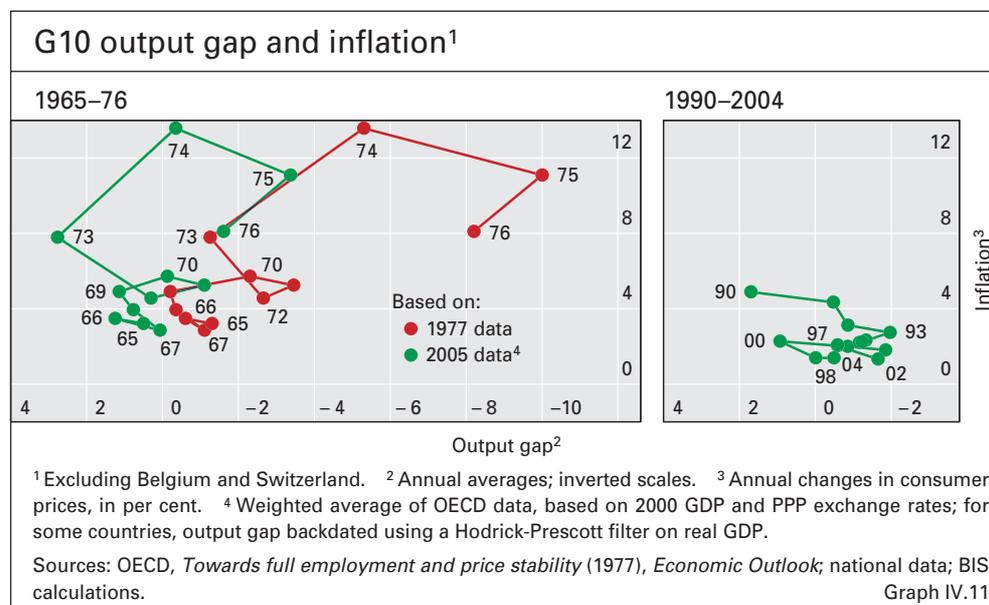
prolonged periods of accommodative monetary policy ...

In recent years, as discussed earlier, monetary policy in the G3 has also been quite accommodative. Nominal and real policy rates have been low and the monetary and credit aggregates have grown rapidly. Indeed, real policy rates have been persistently near or below zero in only two periods in the past 40 years: the recent one and the 1970s. In both cases, the expansion of global liquidity was substantial. Moreover, long-term real rates have remained quite low too.

Second, the international monetary system had “rules of the game” that led to the transmission of accommodative monetary policies from large

... exchange rate regimes with an inflation bias ...





economies, specifically the United States, to the rest of the world. At first, the inflation transmission process worked through the fixed exchange rate regime of the Bretton Woods system. As the United States pursued expansionary monetary and fiscal policies at home to address domestic economic concerns, it exported inflation to the rest of the world, owing to its size and the importance of the dollar as an international currency. After the breakdown of the Bretton Woods system, other countries no longer had to accept US inflation; they could choose to let their currencies appreciate. But in practice, they often chose to resist exchange rate appreciation, particularly when it seemed to be due to speculative capital inflows. This resulted in more stimulative global monetary conditions than would otherwise have been the case.

The current international monetary system bears some similarities to previous arrangements. It is neither a fixed nor a purely flexible exchange rate system, but rather a hybrid. A key feature of the system has again been the reluctance, of various countries and to varying degrees, to accept appreciation against the dollar. Unprecedented foreign exchange intervention has led to a very large accumulation of US dollar reserves and, in some cases, lower policy rates than would otherwise have been the case. The resistance to dollar depreciation has arguably contributed to the rapid expansion of global liquidity. (See the *74th Annual Report* for a more detailed discussion.)

Third, the apparent flattening of the Phillips curve in the 1960s lulled authorities into a false sense of security that stimulating the economy would not lead to rising inflation (Graph IV.11). At the time, the Phillips curve played a dominant role in the way policymakers, and economists more generally, viewed the link between monetary policy and the real side of the economy.

Today, the short-term trade-off between economic activity and inflation has also become remarkably flat – indeed, somewhat flatter and lower than in the 1960s. Graph IV.11 shows that economic activity appears recently to have had little effect on well anchored inflation expectations. Moreover, after falling into disrepute during the 1980s, the Phillips curve framework has received

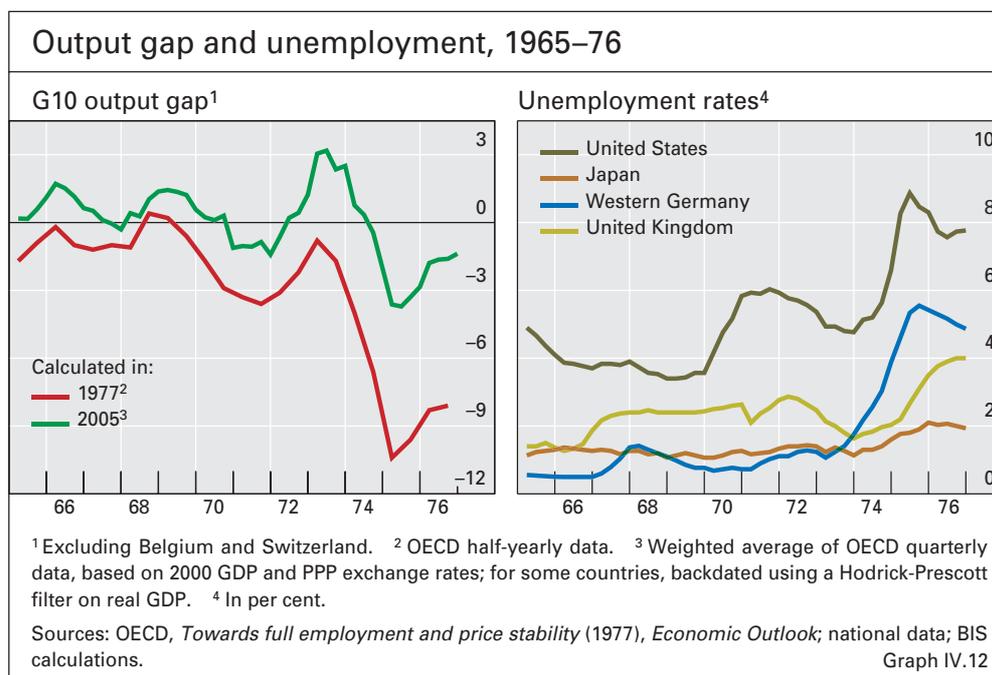
... seemingly flat short-run Phillips curves ...

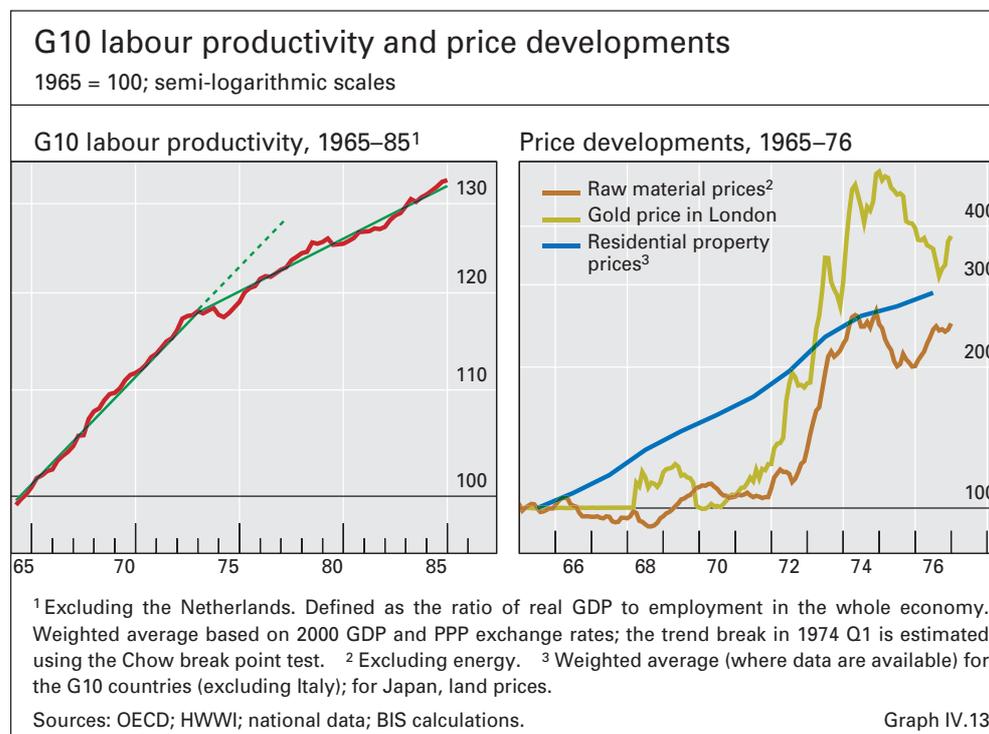
considerable interest of late. The New Keynesian Phillips curve offers a new perspective on the short-run policy trade-off between output and inflation; no such trade-off is assumed to exist in the long run, however.

Fourth, conventional measures of underlying inflationary pressures in the late 1960s and early 1970s were sending mixed, indeed biased, signals. One main source of error came from the fact that output gaps were perceived, at the time, to be wide and negative. In addition, unemployment rates were rising. At the time, the apparent disconnect between these estimates of growing slack along with increasing inflation led to some speculation about a fundamental change in the inflation process. Some analysts saw no urgency to tighten monetary policy in such circumstances because they assumed the rising inflation would naturally reverse itself given the extent of slack in the economy. Others turned away from a conventional Phillips curve approach to one where the economy was subject to “speed limits”. In this approach, the rising inflation of the early 1970s was seen as responding to the change in resource utilisation, rather than to its level. Only later, with the benefit of hindsight, did it become clear that the situation was, at least partly, due to simple mismeasurement (Graph IV.12): the period had actually been characterised by excess demand. One underlying problem was that productivity growth had begun to decelerate and this was not appreciated at the time (Graph IV.13). Moreover, higher unemployment rates were thought to represent cyclical developments when in fact they were largely due to demographic trends and the increased generosity of social insurance programmes. At the same time, policymakers had to factor in the significant supply side developments, especially oil prices in the mid-1970s, that were adding to the opaqueness of the situation.

... potentially erroneous signals of economic slack ...

Nowadays, too, uncertainties about real-time estimates of output gaps, time-varying non-accelerating inflation rates of unemployment (NAIRUs) and





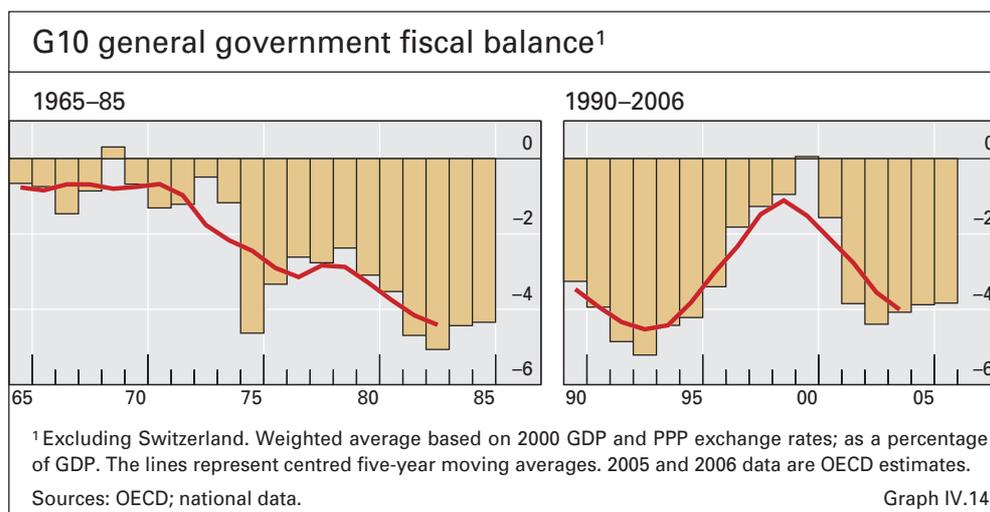
other measures of slack could be sufficiently large to prevent policymakers from accurately assessing inflationary pressures. Underlying questions about domestic productivity and labour market trends still cloud the policy environment, as do questions about the supply side implications of recent commodity price movements. Some have attributed the recent incipient rise in inflation, despite what they see as global aggregate slack, to the operation of new speed limits in some sectors, especially commodity-intensive ones.

... high oil and non-oil commodity prices ...

Fifth, oil and other commodity prices in the early 1970s jumped dramatically to levels that were well outside their established historical trading ranges. Oil prices in real terms also reached unprecedented heights, only to be surpassed during the second oil crisis at the end of the decade (see Chapter III). Moreover, many inflation hedges, such as non-oil commodity prices and real estate prices, also recorded new highs at the time (Graph IV.13). These indicators, however, did not show particularly uniform timing in their turning points. Naturally, the recent behaviour of oil and non-oil commodity prices has given rise to widely cited parallels with the earlier period. Perhaps less well remembered is the rise in real estate prices during the late 1960s and early 1970s. This provides yet another interesting parallel with current house price developments (see Chapter II).

... and expansionary fiscal policies

Finally, fiscal policies in the early 1970s became rather expansionary, as fiscal deficits widened substantially (Graph IV.14). As with monetary policy, fiscal policy was generally seen through the lens of the Keynesian stabilisation goals of the time. It was meant to smooth the business cycle, despite the tendency for the policy lags sometimes to amplify rather than dampen such swings. In the mid-1970s, structural deficits began to emerge in earnest and remained large even though economic recessions became less frequent and



less volatile than in the past. Today, after considerable progress in the late 1990s in bringing fiscal balances under control, larger structural deficits are again emerging (see Chapter II).

These parallels, while notable, do not necessarily augur an imminent return to the inflationary environment of the 1970s. To better understand the policy issues, it is instructive to turn to the lessons learnt and to note some important differences between the earlier period and today.

#### *Lessons learnt*

The didactic story of the late 1960s and 1970s is not one-dimensional. Indeed, no single adverse development can plausibly be held accountable for one of the worst periods of economic performance in the past 50 years. The culprit was the confluence of unfortunate and unforeseen economic developments and policy errors on top of a changing economic and financial landscape that policymakers did not fully appreciate. From a practical monetary policy viewpoint, three key lessons deserve highlighting.

Important monetary policy lessons have been learnt

The first lesson concerns the importance of price stability and the need to provide the institutional means to achieve it. The substantial costs of high inflation became all too clear during the 1970s. They included wasted time and effort to avoid the effect of inflation on nominal assets, and distortions of investment activity owing to tax codes not being fully indexed. High inflation carried additional costs because of its association with high inflation variability, not the least of which were greater output variability due to the jamming of economic signals from relative price changes and elevated inflation risk premia on financial assets. The 1970s also demonstrated that there were no long-run benefits from accepting high inflation. The view at the time, of a positive long-run trade-off between inflation and output growth, was simply wrong; if anything, the trade-off was negative because of the deleterious effects of high inflation on growth. In the light of this experience, it is not surprising that an intellectual, political and social consensus to fight inflation was forged over time. The lesson learnt also helped to underpin the global trend towards giving central banks greater independence to pursue mandates more focused on price stability.

The importance of price stability ...

... of staying ahead of the inflation curve ...

The second lesson was the importance of reacting quickly and vigorously to inflationary pressures. Policymakers in the 1970s generally pursued accommodative monetary policies as a means to stimulate economic activity, even as inflation rose. In part, this reflected misperceptions about the costs of inflation as well as the slope of and likelihood of shifts in the Phillips curve. It also became evident that the longer the delay in resisting the updrift in expectations, the higher the ultimate cost of restoring price stability. Unsurprisingly, policymakers in the past decade have been much more careful to tighten monetary policy as clear inflationary signs have emerged. This behaviour has been key to the success of central banks in achieving and maintaining price stability.

A specific illustration of this general lesson has been the recognition of the need to respond aggressively to the second-round effects of an oil price increase. The initial impact of an oil price increase, the first-round effect, generates a rise in inflation in proportion to the energy component of the price index. A one-time jump in the price level would not necessarily have a lasting inflation impact and hence would not call for a significant change in the stance of monetary policy. However, if the jump led to an increase in inflation expectations, the second-round effect, this could trigger a wage and price inflation spiral. The 1970s taught monetary policymakers that a strong policy reaction could prevent such second-round effects. In fact, when this lesson was applied during the second oil crisis, central banks such as the Deutsche Bundesbank, the Bank of Japan and the Swiss National Bank achieved much better inflation outcomes.

... and of being prudent when assessing economic slack

The third lesson from the 1970s is the importance of being cautious when assessing the degree of economic slack. Slack is a theoretical concept that is difficult to measure precisely, owing to the need to rely on unobserved variables such as potential output or the NAIRU. These policy benchmarks can change in unforeseen ways and such shifts could remain largely undetected well after the change. The slowdown in structural productivity in the 1970s, for reasons that are still not entirely clear, is a good example of how economic developments can lead to misperceptions of slack that in turn result in a more accommodative monetary policy setting than would otherwise have been the case. Such a possibility highlights the importance of having good real-time data and of cross-checking with other available data. Above all, it implies factoring into policy deliberations the inherent uncertainties about the extent to which policymakers truly know the policy environment.

#### *Decades later: the case for a different scenario*

Three key changes in the economic environment:

These lessons suggest that central banks are unlikely to make the same mistakes, so that history will not repeat itself. To be sure, this does not rule out the possibility of an unexpected flare-up of inflationary pressures, or even of inflation. But it does suggest that, if they were to materialise, the pressures would be more firmly resisted and the situation more promptly resolved than in the past.

The conclusion that history will not repeat itself is further supported by what seem to be clear differences between economic conditions now and those in the late 1960s and early 1970s. These differences pertain to the behaviour of wages, the impact of continuing globalisation and the reduced role of oil.

Wage behaviour in the late 1960s and 1970s was generally more strongly correlated with inflation than today (Table IV.1). Two key factors fostered such conditions. First, the earlier period was characterised by strong labour union power and aggressive wage bargaining. Labour unrest, especially on the European continent, also exhibited its vehemence in strike activity. From a policy point of view, a little more inflation for fewer strikes might have appeared an attractive option, especially in a time of less independent monetary authorities. Second, incomes policies were much more the norm, causing stronger linkages between wage growth and inflation. This was particularly important in the 1970s, as oil and commodity prices rose. Automatic wage escalator clauses generated nominal income gains that were not compatible with higher transfers of real income to oil- and commodity-producing countries. As a consequence, whether de jure or de facto, such escalators were also particularly effective in raising the persistence of goods and services inflation.

more muted wage behaviour ...

Today, labour markets are much more competitive and market-oriented. Union power has ebbed and wage bargaining has become considerably less aggressive. Part of the explanation is that labour supply elasticities have increased, directly via migration and indirectly through trade and market contestability. Whatever the reasons for more quiescent labour markets, the result has been a weakening of the link between wage growth and inflation, as well as a reduction in the labour share of income relative to the 1970s. These labour market developments have contributed to reducing the pass-through of various types of inflationary shocks. In turn, this has helped to keep inflation expectations well anchored (see Chapter II).

Another difference, though related to the first one, has been changes in global supply conditions that have contributed to keeping inflationary pressures at bay. They reflect a combination of several more favourable trends. In addition to strong labour-saving productivity gains that have boosted output growth while holding down cost pressures, the most dramatic change has been the extent of globalisation. To be sure, Japanese and Korean export penetration in the 1960s and 1970s was significant. But export penetration from Asia, especially China, is an even more important factor today keeping both import prices and wages low in most of the industrialised countries (see Chapter II). The pace of deregulation has also helped to reinforce disinflationary pressures, especially in emerging market countries, via stiffer price competition.

... greater globalisation ...

Correlation between inflation and wage growth, then and now						
	United States	Japan	Germany	France	Italy	United Kingdom
1965–79	0.76	0.95	0.47	0.75	0.54	0.71
1991–2004	0.28	0.53	0.19	0.11	0.18	0.56

Note: The entries are the correlations between annual changes, in per cent, in consumer prices and unit labour costs.  
Sources: OECD; national data; BIS calculations.

Table IV.1

... and more benign linkages between oil prices and the macroeconomy

The third difference between the current policy environment and that of the 1970s concerns the macroeconomics of oil. There are several good reasons to believe that the implications of higher oil prices for inflation would be less significant in today's economic environment (see Chapter II). In particular, major industrialised economies have become less reliant on oil, as measured in terms of barrels of oil per dollar of GDP. This reflects the wider use of more energy-efficient technologies and a secular shift towards services and away from manufacturing. Current estimates of the elasticities of both inflation and output with respect to the price of oil are smaller than those for the industrial economies in the 1970s.

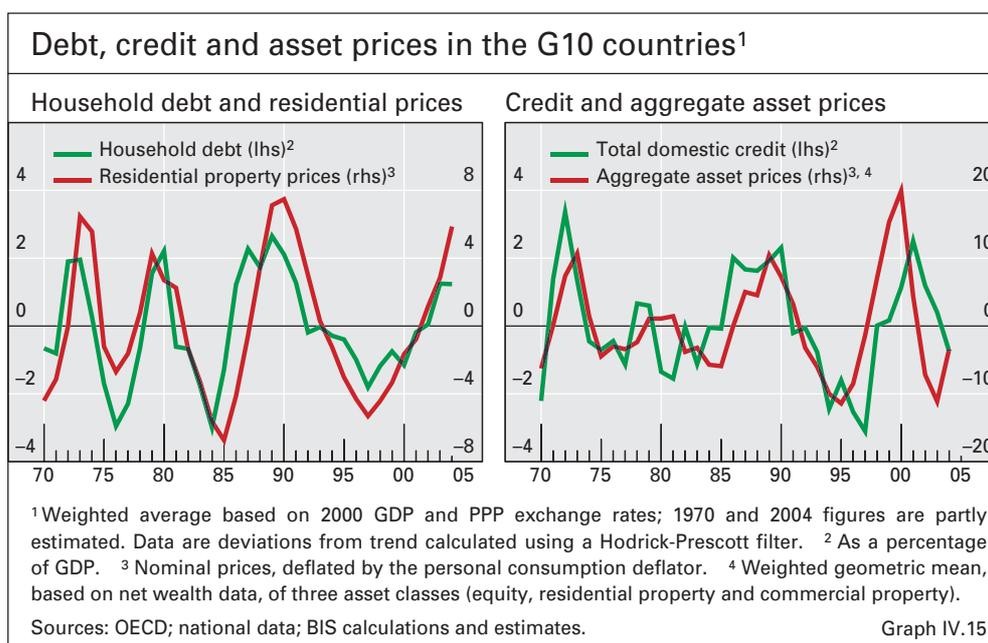
### Changing risks?

An exact repeat of history is unlikely, but significant risks exist owing to ...

While learning from past mistakes provides considerable comfort, it does not rule out the possibility of making different ones. The main risks for policy rarely come from the recurrence of circumstances; they normally reflect unforeseen developments in the economic and broader environment. And, as exemplified by the experience of the early 1970s, it is typically the interaction between policies and that environment which can result in new and unexpected challenges.

... the changing inflation process, very low policy rates, and asset price and credit growth

From this perspective, the unforeseen developments that regularly emerge serve as healthy reminders of the limitations of our understanding of the dynamics of a modern economy. Examples abound. One such is the fact that inflation has tended to be systematically overpredicted for much of the disinflation period and again more recently; in addition, inflation now appears to be less responsive to country-specific indicators of excess demand pressures (see Chapter II). This is a mirror image of the systematic underprediction of inflation in the late 1960s and early 1970s. A second unforeseen development is the confluence of policy and market rates that seem to be well below levels consistent with long-run non-inflationary growth, with actual inflation remaining



rather subdued. A third is the series of booms and busts in credit and asset prices, each having disruptive consequences for the economy (Graph IV.15). This has occurred despite the achievement of price stability, confounding expectations that such cycles would disappear along with inflation.

It is, in fact, possible to think of paradigms that could account for such puzzling developments. Somewhat paradoxically, it might be argued that the new challenges faced by central banks today result in part from the confluence of three unquestionably welcome developments: the globalisation of the real economy; liberalised financial markets; and the newly established anti-inflation credentials. In this view, globalisation provides the underlying disinflationary force, financial liberalisation the weaker financial constraints on self-reinforcing credit-asset price processes, and the anti-inflation credibility the anchoring of expectations that can help to delay the translation of excess demand pressures into higher inflation (see the Conclusion of this Report).

Even so, understanding the full implications of each major structural change is difficult. And fully understanding the implications of the interactions is even more challenging. There is, clearly, considerable uncertainty surrounding the processes at work. This undoubtedly complicates the setting of monetary policy. Not only do the changes potentially alter the transmission mechanism of both exogenous shocks and monetary policy but they can also shift the risks looking ahead.

Some of the practical challenges that central banks have recently faced are symptomatic of this situation. In some countries, such as Sweden, the decline in inflation to well below target, in the context of a robust economy, has raised the question of whether the central bank should ease policy further. However, doing so could well exacerbate incipient signs of financial imbalances in the housing market, possibly risking an unwelcome unwinding in the future. The limited sensitivity of inflation to domestic demand pressures can add to the dilemma, implying the need for stronger easing to bring inflation back up. More generally, across many countries the comparatively high levels of household indebtedness and house prices complicate the exit strategy from the current accommodative stance. They arguably make it more difficult to calibrate the pace and timing of the tightening, by increasing the uncertainty surrounding the response of asset prices and, in turn, expenditure decisions. In Australia, a modest 25 basis point increase has been associated with a significant cooling of its housing market. Even tougher policy choices would be required if there were a sudden flare-up of inflation, because of either the lagged effects of demand pressures or higher energy prices. In such circumstances, it is not inconceivable that increases in rates generally thought to be appropriate might inadvertently trigger an unwelcome disinflation over time.

These examples indicate that today, as in the past, central banks need to be aware of the limitations of their knowledge and to be wary about mistaking consensus for true understanding. And they must also be alert to the possible emergence of risks from unexpected quarters. There is no substitute for the careful assessment of evolving economic conditions and processes. Learning the lessons from the past is important. However, as emphasised in the Conclusion of this Report, learning is a never-ending process.

Central banks may be facing new policy challenges