Part VI. United Kingdom

The United Kingdom followed Canada in adopting inflation targeting, but under quite different circumstances. In discussing its experience, we focus on the following themes:

- Like the other countries examined, the United Kingdom adopted inflation targets after a successful disinflation. Unlike these countries, however, the United Kingdom took this step in the aftermath of a foreign exchange rate crisis in order to restore a nominal anchor and to lock in past disinflationary gains.

- In the United Kingdom, there is less attempt to treat inflation targeting as a strict rule than in New Zealand, making the targeting regime more akin to the German and Canadian approach.

- As in the other inflation-targeting countries, monetary policy in the United Kingdom also responds flexibly to other factors, such as real output growth.

- Like Canada, but unlike New Zealand, the United Kingdom separates the entity that measures the inflation target variable (Office for National Statistics) from the entity that assesses whether the target has been met (the Bank of England).

- In the United Kingdom, the headline consumer price index (CPI) is not used in constructing the inflation target variable; the target variable excludes mortgage interest payments, but does not exclude energy and food prices or other adjustments.

- Initially, the Bank of England targeted an inflation range, but then shifted to a point target.

- Because the British central bank lacked independence until the May 1997 election, it was accountable for meeting the inflation targets but did not fully control decisions about the stance of monetary policy.[1] Indeed, up until May 1997, the Bank was limited to providing the principal forecast of inflation and assessing past inflation performance. As a result, the Bank functioned as the Chancellor of the Exchequer's counterinflationary conscience.

- In part because of its weaker position before May 1997, the Bank of England focused its inflation-targeting efforts on communicating its monetary policy strategy and its commitment to price stability, relying heavily on such vehicles as the *Inflation Report*, an innovation that has since been emulated by other inflation-targeting countries.

Although the relationship between the Bank of England and the Chancellor of the Exchequer has now changed, the United Kingdom's targeting framework prior to the granting of independence in May 1997 is an important example to consider in the design of inflation-targeting frameworks in general. (We briefly discuss the post–May 1997 regime at the end of this case study.) In particular, our analysis indicates that the split between the monetary policy decision maker and the primary public inflation forecaster had significant implications for the performance of U.K. monetary policy between October 1992 and May 1997; future actions of the newly independent Bank of England will support or disprove our belief about the importance of this relationship to target performance.

Adoption of the Inflation Target

The Chancellor of the Exchequer, Norman Lamont, announced an inflation target for the United Kingdom at a Conservative Party conference on October 8, 1992.[2] Three weeks later, at his annual Mansion House Speech to the City (Lamont 1992), he "invited" the Governor of the Bank of England to publish a quarterly *Inflation Report* detailing the progress

being made in achieving the target, an invitation that the Governor accepted.

The adoption of a target was an explicit reaction to sterling's exit from the European Exchange Rate Mechanism (ERM) three weeks before. The Chancellor wished to reestablish the credibility of the government's commitment to price stability, which had seemed to gain from the pound's two years in the ERM (as primarily measured by interest rate differentials with Germany and spreads in the U.K. yield curve). Given the United Kingdom's history of trying and abandoning a series of monetary regimes in the post–Bretton Woods period, there was considerable potential for damage to credibility, both at home and abroad, from the aftermath of the Black Wednesday foreign exchange crisis in September 1992 and a currency devaluation of more than 10 percent.

There had been no prior public discussion on the part of either the Treasury or the Bank about setting inflation targets. While the pound was maintaining parity in the ERM, of course, such talk would have been irrelevant because the United Kingdom was committed to attempting to match the Bundesbank's inflation performance. As the exchange rate crisis approached, revealing the existence of a fallback plan could have been dangerous. Accordingly, the announcement of an inflation target of 1 to 4 percent per year in October 1992, unaccompanied by an explanation of the methods for monitoring and achieving this performance, had a certain amount of shock value. Perhaps this approach was seen as underlining the commitment by plunging ahead in a decisive manner. It is important to emphasize that the Chancellor announced the policy adoption at a partisan, though public, forum, and he committed the nation to the targets only "through the end of the present parliament," that is, May 1997. In other words, this was a policy of the ruling Conservative majority, and could not be given a life independent from their own commitment—except to the extent that the framework's success could earn support from the public and opposition parties.

When, in September 1992, the government was faced with the choice between attempting to defend the exchange rate at length (with at least a major downward realignment inevitable) and leaving the ERM, it opted for the latter despite the damage to credibility. The unwillingness of the U.K. monetary policymakers to raise interest rates to defend the currency beyond Black Wednesday—in contrast to, say, Italy or Sweden—suggests that their commitment to the ERM was not very strong.

It thus seems fair to say that the United Kingdom's adoption of an inflation target presented two elements of continuity and one of change with respect to the monetary regime of ERM membership. First and foremost, there was no change in the objective of monetary policy—price stability. The explicitness of this goal and its primacy, however, had increased over the 1990s. By the time the pound exited the ERM, the government had made clear that it did not wish to be let free from discipline, merely from the conflict between German and British business cycles. Second, the strategy followed to achieve this objective had to have credibility with the public through a transparent means of communicating the stance and success of policy.

The main change for the United Kingdom, having abandoned both monetary and exchange rate targets, was the strategic decision not to employ any intermediate target variable in the setting of policy. In fact, in Chancellor Lamont's speech announcing the inflation-targeting policy, he took pains to make clear that money growth and exchange rate measures would be monitored but would not determine policy.[3] A speech delivered by the Bank of England Governor, Robin Leigh-Pemberton, on November 11, 1992, made the point abundantly clear:

> Experience leads us to believe that monetary policy cannot be conducted with reference to a single target variable. The overriding objective of monetary policy is price stability. Therefore policy must be conducted with reference to our expectations of future inflation. . . . Consequently, policymakers should make use of every possible variable, with the importance attached to any given variable at any point in time dependent on its value as a guide to prospective inflation. (Leigh-Pemberton 1992, p. 447)

Thus, targeting the inflation goal directly was seen as the only practical way to achieve the goal. This conclusion, however, still left open the question of how to

make this new policy credible, especially after the exit from the visible restraint of the ERM. In his speech, the Governor continued: "But in such an eclectic framework it is possible for the underlying rationale of policy to be lost in a welter of statistical confusion. That is why we have opted for a policy of openness."

This last point, reflecting a belief that efforts at effective ongoing communication with the public—not the announcement of a simple goal alone—are required for credibility, is the operational core of the United Kingdom's inflation-targeting framework. Nevertheless, while the framework emphasizes accountability, the idea that rules have replaced discretion (as in the Reserve Bank of New Zealand's "contract," for example) is not prominent. This may have been more a matter of the reality of ultimate monetary policymaking resting with the elected government rather than of a consciously held conviction. As noted in the discussion of New Zealand, the extent to which inflation targeting is treated as a rule is best seen as a design choice. [4]

THE OPERATIONAL FRAMEWORK

The intermediate target variable for policy set by the Chancellor and the Bank of England is the annual change in the retail price index excluding mortgage interest payments (RPIX). RPIX was to remain in a range of 1 to 4 percent until at least the next election, with the intent that it would settle itself in the lower half of that range by then (2.5 percent or less).[5] The long-term intended average for RPIX is 2.5 percent or less. RPIX is meant to capture underlying inflation and is usually reported along with RPIY, which is RPIX altered to exclude the first-round effect of indirect taxes. The British have chosen to include the effects of commodity price shocks, including oil shocks, in their target. In all inflation targets other than headline inflation, there is some trade-off between transparency (because headline CPI is what people are accustomed to following) and flexibility (because then onetime or supply shocks are defined out of the target requirement).

RPIX has proved to be an effective measure for the Bank, however, with the financial press and the public adapting to it over time. There was some consideration of a change to RPIY in 1995, but that was seen as switching too often and opening the possibility of being perceived as constantly expanding the list of shocks for which monetary policy would not be responsible. Indeed, to discourage this perception, the Office for National Statistics, an agency separate from the Bank (the forecaster), was asked to calculate the various inflation series (and thus the actual results to be compared with the forecasts).

The target band width, set by the Chancellor, was intended to limit the scope for both slippage and countercyclical monetary policy. Later interpretations by the Bank and the U.K. Treasury, however, indicate that it was never intended as a range strictly speaking, but as an admission of imperfect control.[6] Once set, however, the band width takes on a life of its own, so that widening the band would likely be seen as a loosening of policy or a failure to keep the commitment.

The official position agreed to by the Treasury and the Bank in recent years is that there is no longer an actual range for the target, but a point target of 2.5 percent to be met on an ongoing basis. This change was made explicit in Chancellor Kenneth Clarke's (1995) Mansion House Speech to the City on June 14, 1995.[7] In reality, the endpoint of such a time horizon is likely to correspond to the lifetime of any parliamentary majority, as it did in New Zealand when the country changed its target range after the October 1996 election. Unlike New Zealand, however, the United Kingdom makes no explicit commitment to remain within a range. Therefore, the U.K.'s inflation point target allows flexibility by permitting short-run unavoidable deviations while shifting the focus away from the values of the bands themselves.

Another issue inherent in the United Kingdom's targeting framework was the tying of the endpoint of the target period to a specific event—the end of the then-sitting Parliament. Unless the commitment to inflation targeting is open-ended, there is uncertainty about whether the targeting regime will continue past the close of the designated period. As a result, there may be increasing doubts about the country's will to undertake necessary actions to meet the targets as the end of the period approaches and

pressures increase to let bygones be bygones. As noted in the discussion of German monetary targets in the run-up to European Monetary Union (EMU), these doubts and pressures will arise for any targeting framework that is not renewed far ahead of its announced (or politically determined) endpoint. Just as the Liberal majority in Canada, shortly after taking office in 1993, extended the 1995 targets to 1998, the British Labour Party made clear that it would extend the inflation target of 2.5 percent or less for the duration of its tenure in office should it win in May 1997, thereby removing a potential source of uncertainty and lowering credibility.[8] In contrast, in the New Zealand elections of October 1996, there was no way to shield the time horizon of the targets from the political process. This difference may, in part, have been related to the formal agreements tightly tying the Reserve Bank of New Zealand's goals to the majority in government.

In reality, the actual target of Bank of England policy is the *expectation* of RPIX inflation in the domestic economy. The success in meeting the target is judged by whether the Bank's own inflation forecast over the next two years falls within the intended range. This approach to assessing success is consistent both with a forward-looking orientation and a belief that it takes about two years for monetary policy to affect inflation. At the time of the Chancellor's initial announcement of the adoption of targets, he was criticized by market observers for focusing on a lagging indicator by targeting RPIX inflation per se.

From the first *Inflation Report* onward, the Bank has increasingly considered private sector inflation forecasts and their spread in addition to the distribution of the Bank's own inflation forecasts. In recent issues of the *Inflation Report*, this focus has shown itself in discussions emphasizing the skew of forecast distributions as opposed to a point estimate or even confidence intervals.[9] Most important, the Bank does appear to have successfully communicated to the press and the public that a forward-looking monetary policy must be designed to achieve a balance of risks rather than tight control (even with lags considered). Since many central banks have this intellectual framework behind their policymaking, there is much to be appreciated in the Bank's efforts in this direction.

The Bank of England does appear to be working from a standard policy feedback framework in line with the Chancellor's and Governor's initial speeches—that is, one in which all pieces of information are gathered and weighed. M0 and M4 (narrow and broad money) figures must be reported, with "monitoring ranges" announced for them, but with an explicit escape clause indicating that when their information conflicts with RPIX forecasts, the RPIX forecasts are to be believed. Exchange rates and housing prices have been repeatedly cited as other indicator variables in the policy decisions by the chancellors and governors over the period, but with the pointed absence of any explicit ranking of the usefulness of different indicator variables. The Bank acknowledges that its failed experiences with money and exchange rate targeting have made it hesitant to rely on the stability of any one indicator or relationship.

The stated ultimate goal of the United Kingdom's inflation targets is price stability, "namely that the rate of inflation anticipated by economic agents is unimportant to savings, investment, and other economic decisions" (Leigh-Pemberton 1992). As in most other countries, a target of zero inflation was dismissed as unduly restrictive given the failure to capture all quality adjustments in price indexes (although the Bank of England points out that RPIX is rebased far more frequently than in many other countries, so there would be less substitution bias for the United Kingdom's price index). Consequently, price stability is operationally defined as growth in RPIX of 2.5 percent or less. The choice of this figure was primarily a pragmatic decision, with the likelihood that if the 2.5 percent goal were achieved and maintained, a lower goal, say of 2 percent, would then be set. No consideration of any other goals, such as exchange rate stability or business cycle smoothing, is explicitly acknowledged within the target framework.

Like every other central bank, however, the Bank of England remains de facto committed to trading off disinflation when necessary against its real-side costs and its effects on the financial system. This is best illustrated by excerpts from Governor Leigh-Pemberton's November 1992 speech about the policy shift, "The Case for Price Sta-

bility." The speech, reprinted in the Bank of England's *Quarterly Bulletin*, states, "The overriding objective of monetary policy is price stability." In the preceding paragraph of the speech, however, the Governor explains why other factors *overrode* that objective and prompted the pound's exit from the ERM:

> It [the ERM] certainly offered a very visible sign of our commitment to price stability . . . [but] there was a real risk of these disinflationary forces doing quite unnecessary damage to the real economy. Although we would have achieved price stability very quickly—indeed there is reason to believe we might have reached that position during 1993—there was a real danger that the deflation which was already apparent in certain sectors of the economy (notably asset markets) would have become much more widespread. It was not necessary to compress the transition phase to price stability into such a short time span and could well have been counter-productive in the longer term.[10] (p. 446)

This trade-off is recognized even in contexts where the choice between achieving an inflation goal quickly at a high cost in real output or more slowly at lower cost is less stark than that presented by the divergence of German and British domestic needs within the European Monetary System (EMS) in 1992. Why else would the achievement of price stability be pursued gradually, as outlined by the Bank and the Chancellor for the path from the September 1992 RPIX rate of 3.6 percent? Clearly, a gap exists between the claims and reality of inflation as a sole goal even under inflation targeting.[11] Various speeches by Governor Eddie George in recent years have been at pains to stress that the Bank aims to stabilize the business cycle (and thereby at least partially engender exchange rate stability) within the target constraint.

Only three weeks after the decision to adopt inflation targeting, Chancellor Lamont coordinated with the Bank of England an institutional implementation of the policy. The Bank would produce its own inflation outlook on a quarterly basis, beginning with February 1993; the Bank's medium-term forecast for inflation would be the main yardstick of success or failure. As mentioned above, the role of this forecast in accountability for policy becomes quite complicated. One complication arises when interest rate decisions are inconsistent with the implications of the published forecasts, but a full explanation for the rationale behind the decision is not made public. Nevertheless, the rapidity with which the commitment to publish forecasts was undertaken underlines just how central communication efforts are to the operation of the United Kingdom's inflation targets—and how the announcement of the targets was never thought to be enough on its own.

As part of its role in tracking progress toward the inflation target, the Bank of England's *Inflation Report* details past performance of the U.K. economy, compares actual inflation outcomes (both RPIX and its components) with prior forecasts of the Bank, identifies factors presenting the most danger to price stability, and forecasts the likelihood that inflation will in two years' time be in the target range. In the words of Governor Leigh-Pemberton (1992), "Our aim will be to produce a wholly objective and comprehensive analysis of inflationary trends and pressures, which will put the Bank's professional competence on the line." From the third issue (August 1993) onward, the *Inflation Report* has consistently followed a six-part format covering developments in inflation, money and interest rates, demand and supply, the labor market, pricing behavior, and prospects for inflation. In addition, the *Inflation Report* does not supplant the ongoing publication of policy speeches and relevant research in the *Quarterly Bulletin*, in which the authors of the research articles are always identified.

The transparency of the Bank's views and the Chancellor's reaction to them is meant to be the check on the government's monetary stance between elections. Following the third *Inflation Report* in August 1993, it was decided that the Bank would only send the report to the Treasury after it had been finalized. Thus, the Treasury would have no chance to edit or even suggest changes. This agreement on timing indicates the government's conscious acceptance of the Bank's distinct voice.

The *Inflation Report* is best seen in the context of the Bank's traditional role as adviser to the Chancellor on monetary policy. Even after the adoption of inflation targeting, the Bank's contribution remains that of advice and information, just as it had presumably been consulted on Chancellor Lamont's initial decision to implement inflation

targeting and the choice of target range and midpoint. What is innovative is the fact that the Bank would be called upon to report to the public independently of its regular consultations with the Treasury staff and with the Chancellor directly. Often overlooked, however, is the fact that the Treasury, which reports directly to the Chancellor, was commissioned to produce its own monthly monetary report from December 1992 onward. This publication, which predates the *Inflation Report* and is issued more frequently, had a mandate to track the growth of broad (M4) and narrow (M0) money in the monitoring ranges set by the Chancellor and to keep readers apprised of moves in the foreign exchange and asset markets, particularly U.K. housing. In other words, the Chancellor committed U.K. monetary policy to the monitoring of a particular set of indicators compiled by his own staff, even if the Bank of England chose to emphasize other variables or compute numbers differently. The Bank, despite the *Inflation Report*, has not been given a monopoly on monetary policy advice.

The emphasis on public explanations of policy, and especially on delineating differences between the Chancellor's and the Bank's points of view, was buttressed by three additional institutional changes. First, in February 1993, the monthly meeting between the Chancellor and the Governor to set monetary policy was formalized. Second, starting in November 1993, the timing of any interest rate changes decided upon by the Chancellor at the monthly meeting would be left to the Bank's discretion as long as the changes were implemented before the next meeting. Combined with the Bank's commitment to issue a press release explaining the reason for any interest rate change once made, this discretion gave the markets a great deal of information about the Bank's view of the Chancellor's decision. Third, and most significant, since April 1994, the minutes of the monthly Chancellor-Governor meetings have been publicly released two weeks after the next meeting (replacing the prior lag of thirty years with one of six weeks).

In essence, the Bank has operated as the government's institutional counterinflationary conscience. There was an underlying tension in this role because the Bank remained under the control of the Chancellor while the instruments of monetary policy remained out of its control. The Bank's use of public and formalized forums to communicate its forecasts, its analyses, and even its explicit monetary policy recommendations does increase the cost for the government of going against the Bank's assessment and thus, presumably, of not serving price stability. Unfortunately, since the Chancellor did not have a requirement to report his reasoning beyond what he chose to reveal at these monthly meetings, disputes over preference or competence can become shrouded as competitions over forecast accuracy (see next section).

The standing given the Bank by the monthly minutes did not, however, provide monetary policy with democratic accountability beyond that given already by elections; it was the Bank, not the market or the people, that was passing judgment, but any punishment or reward for that judgment (beyond market reactions) had to wait until the next election. Even under the new Monetary Policy Committee of the Bank, which sets U.K. monetary policy, ultimate responsibility for the goals and outcome of policy rests with the parliamentary majority at the next elections.[12] Nor did these forums provide clarity about the intent of ultimate policy, since, for all the Bank's statements, the Chancellor could override them with only limited public explanation.

British Monetary Policy under Inflation Targeting

This section summarizes briefly the macroeconomic outcomes and the interaction between the Treasury and the Bank at critical junctures in the policy-setting process since target adoption. The section draws on various issues of the Bank's quarterly *Inflation Report* and on the Minutes of the Monthly Monetary Meetings between the Chancellor and the Governor. To support this review of monetary policy, Charts 1-4 (pp. 84-5) track the path of inflation, interest rates, the nominal effective exchange rate (henceforth the exchange rate), GDP growth, and unemployment in the United Kingdom both before and after inflation targeting was introduced.

The period from October 1992 until the end of 1993 was marked by the beginning recovery of the U.K. economy. Sterling's exit from the ERM coincided with the

end of recession. GDP growth turned positive in the first quarter of 1993, and the unemployment rate peaked at 10.6 percent in December 1992 (Chart 4, p. 85). Throughout 1993, output growth was accelerating, and the unemployment rate declined. With some brief interruptions, RPIX inflation continued its downward trend, reaching the midpoint of the designated target range of 2.5 percent for the first time in November 1993 (Chart 1, p. 84). The exchange rate bottomed out in February 1993, then strengthened through the remainder of the year (Chart 3, p. 85).

Two major themes in the medium-term inflation forecasts of the first two issues of the *Inflation Report* (February and May 1993) are the inflationary impulses from sterling depreciation and the growing government budget deficit. The official interest rate (the *base rate*) had been reduced from 10 percent in August 1992 to 6 percent in January 1993 (Chart 2, p. 84), reflecting the desire to escape from German monetary tightness. Unsurprisingly, between the United Kingdom's exit from the ERM and early February 1993, sterling had depreciated by 14.5 percent.[13] In explaining why inflation expectations might still be above the target range, the Bank mentioned fears of *eventual* monetization of the unsustainable debt. The Bank did not make any call for immediate fiscal action or actively criticize the government's stance. The Bank's inflation projections in the first two reports continued to fall at all horizons discussed.

In the May 1993 *Inflation Report*, the Bank stated that it believed that the government would manage to hold inflation below 4 percent for the following eighteen months. This statement did not represent an endorsement of the government's monetary stance: not only had the Chancellor committed to being within the inflation range (that is, below 4 percent) in two years, but he had also stated that he would have inflation in the lower half of that range (below 2.5 percent) by 1997. It is interesting that the Bank felt comfortable tracing the source of inflation risk to the government's decisions (suggesting that it was a matter of the government's choice), rather than to economic risks. The Bank expressed concern about the exchange rate's potential effects, noting that the 5 percent appreciation of sterling (trade-weighted) since February permitted only a small measure of optimism, but surveys and financial market interest rates continued to indicate a lack of medium-to-long-run credibility. The Bank also emphasized that the principal uncertainty about the inflation forecast, most of it on the upside, had to do with domestic wages and profits. The meaning of these concerns became clear three weeks later when Governor George gave a speech explicitly warning against a rate cut. The Bank apparently feared that with the imminent change in chancellors (from Norman Lamont to Kenneth Clarke) and submission of the budget, a decision to ease would be made in compensation for various fiscal measures. At the time, rates were not cut.

Six months later, in the November *Inflation Report*, the Bank touched on the same themes but even more sharply. There was a slight probability now, according to the Bank, that inflation would exceed the target in the near term. Moreover, the Bank said it foresaw real potential for a wage push if headline inflation were to be allowed to rise up to the 4 percent target band. Again, the Bank was responding to a political situation in which many Conservative Party backbenchers and commentators were expecting an interest rate cut. The government had agreed to certain spending cuts and an extension of the value-added tax (VAT) to domestic fuel and power starting in April 1994, while economic real-side news was generally not good. This time Chancellor Clarke did lower rates 3/4 percent without further fiscal tightening to compensate.

What made this conflict between Bank and Chancellor particularly interesting was that the Bank had already offered an out for the Chancellor in the May and November issues of the *Inflation Report*. The Bank attributed 0.4 percent of the projected rise in inflation in 1994 to the VAT change, which it was sympathetic to in general terms as a deficit reduction, and reminded people that if RPIY (which excludes the first-round effect of taxes) rather than RPIX were considered, the inflation would be on target (albeit near the top of the range and with upside risks). For whatever reason, the Chancellor did not take advantage of the proffered defense.

Though unexercised, this sort of definitional tactic raises a real dilemma for accountability. If indirect taxes are

legitimately to be excluded, why did the Chancellor and the Bank choose to target RPIX and not RPIY in the first place? If the government had in fact switched to RPIY after the Bank had "allowed" (that is, explained without criticizing) the move, how could the markets and electorate have been sure this was not just a onetime escape clause? And if the wage spiral the Bank worried about sparking tends to run on headline inflation, would this switch have been beside the point, or would it have allowed a shift of blame to the unions' lack of sophistication? On the basis of this case, it would appear that the people who set the definitions of the inflation measures should be kept separate from the people who assess success in achieving them. The United Kingdom's framework might be compared with New Zealand's on this score: New Zealand's central bank—partly because of the country's small size—retains some amount of discretion over the short-run definition of the target inflation series and, on a few occasions, has exercised it.

Around the beginning of 1994, against the background of the better than expected inflation performance, the Chancellor eased monetary policy further. Inflationary pressures remained subdued as the lagged effect on prices of the earlier depreciation was offset by a reduction in unit labor costs related to continued weak employment. It was apparent at the time that pass-through of the onetime drop in the exchange rate upon ERM exit had been effectively averted—a major success for the new monetary regime.[14] This triumph was even more impressive than the Bank of Canada's successful avoidance of passing through a onetime rise in taxes in 1991, given that it followed a presumptive blow to U.K. credibility upon the country's exit from the ERM. The base rate, which had been reduced from 6 percent to 5.5 percent in November 1993, was cut to 5.25 percent in February 1994. These rate reductions occurred despite projections in every *Inflation Report* from August 1993 on that inflation would rise until the end of 1995. Indeed, actual inflation did not start to rise until the end of 1994.

When assessing its past predictions, the Bank repeatedly mentioned slow earnings growth and a squeeze in retail margins as reasons for the unexpectedly low inflation outcome. Although cast as a difference over the implications of incoming economic data, the divergence between the Bank's opinion and the Chancellor's policies could, in our view, reflect differing assessments of the importance of achieving the inflation target in the short run. Indeed, as long as the elected official can appeal to differences between his or her own private forecast and the central bank's published forecast, the official can hide what is actually a weaker commitment to the stated inflation goal. We find this pattern again in the next situation we consider.

Throughout 1994, GDP grew vigorously, with fourth-quarter GDP exceeding the previous year's by 4 percent. For the first ten months, RPIX inflation was trending downward, reaching a twenty-seven-year low of 2 percent in September and October before it started to rise to 2.5 percent in December. The unemployment rate fell further during the year, to around 9 percent. Sterling (according to the Bank's index) had peaked at the end of 1993 and trended slightly downward during the year.

During the summer of 1994, it became clear to the Bank that the economy was rebounding more strongly than expected, and the *Inflation Report* began to cite evidence of inflationary pressures (for example, growth in wholesale prices). Despite the still-improving inflation performance—both RPIY and RPIX inflation at the time were below 2.5 percent and falling—the Chancellor, on the advice of the Governor, raised the base rate on September 12, and again on December 7, by 0.5 percent each time. Unlike the previous tightening in 1988, these base rate increases were preemptive—a fact that was widely noted in the press.[15] The ability to tie current policies to a future priority, and to justify those policies as acting with a lag, appears to be one advantage of having a specified medium-term goal consistent across targeting regimes.

The discussions between Chancellor Clarke and Governor George during the time leading up to the September 1994 tightening offer some insight into the role that the Bank's medium-term inflation forecasts play in the policy-setting process. During their meeting on July 28, the Governor pointed out that, on the basis of the Bank's latest forecast,

> he did see a risk to the inflation objective in 1996,

> implying a need to tighten policy in some degree before very long. . . . He was not, on the current best guess, forecasting a strong upturn in inflation, and there was, as always, a significant margin of error around that best guess. But the best guess for mid-1996 was already slightly above the mid-point of the target range, and there was an uncomfortable sense that the upside risks to the medium-term forecast might, this time, be somewhat greater than the downside risks.[16]

The Chancellor, however, remarked that "there was a danger of trying to set a game plan too far in advance and not looking at the actual evidence as it unfolded. . . . The forecasts suggested inflation might be even lower in the next few months."[17] Although agreement was reached not to raise interest rates at that time, this decision made ambiguous the extent to which monetary policy decisions were indeed based on the Bank's medium-term forecast. While the existence of target commitments, and the Bank's open statements of opinion, moved the U.K. government toward a more forward-looking monetary policy, the government could not be forced into the policy that the Bank considered optimal. Again, the government's private forecast—even if driven as a politically motivated markdown from the Bank's formal analysis—became the actual target. Moreover, because both the estimate itself and the reasoning behind it were not shared with the public, the government forecast could not fully serve as a transparent target.[18]

During 1995, GDP growth decelerated, from 4 percent between the fourth quarter of 1993 and the fourth quarter of 1994, to 2 percent by the last quarter of 1995. The unemployment rate continued its gradual downward trend, reaching 8 percent at year's end. RPIX inflation rose to 2.8 percent in January, and for the rest of the year fluctuated between 2.6 percent and 3.1 percent without exhibiting any trend. Early in 1995 it became apparent that output growth, although slightly slower than in early 1994, was still running high relative to potential, and that observation contributed to the Bank and the Chancellor's belief in a worsening inflation outlook. Consequently, on February 2, the base rate was raised 0.5 percent, to 6.75 percent. Despite this preemptive interest rate increase, the exchange rate fell steeply over the three months following the February increase. By May 4, the Bank of England's sterling index was down 4.7 percent from February 2. The depreciation was seen to aggravate the discrepancy between the recovery in the tradables sector and that in the nontradables sector, a discrepancy that became increasingly evident at this time. This "dual economy" was highlighted by the contrast between 10 percent growth in export volumes during 1994 and flat retail sales and falling earnings growth in services during early 1995.

As a consequence of the depreciation and the resulting increase in import prices, the Bank's RPIX inflation projection in May 1995 was revised upward nearly 1 percent throughout 1996 from the February forecast, with RPIX inflation reaching almost 4 percent in the first half of 1996 before falling to around 2.5 percent in early 1997.[19] The potential consequences of the exchange rate development for the inflation outlook completely dominated the discussion during the monthly meetings on April 5 and May 5. At least indirectly, this discussion informed the public that the pass-through to inflation from exchange rate movements was faster than that from either output or interest rates.

It was against the background of this upward revision of the Bank's inflation forecast and the dual economy mentioned above that in their meeting on May 5, 1995, the Chancellor overruled the Governor's advice to raise interest rates. This refusal of Chancellor Clarke to raise rates provides an even starker example of the conflict (and the difficulties in assigning accountability) arising from the Bank of England's dependent status than the November 1993 episode discussed earlier. At the end of that day's monthly meeting with Governor George, Chancellor Clarke immediately summoned the press and announced that he was leaving rates unchanged; since, contrary to custom, the Governor was not present to echo the Chancellor's post-meeting statement, and Clarke gave some details of the discussion (including some of George's reasons for concluding that inflation was a real threat) rather than waiting for release of the minutes six weeks later, it was clear that Clarke was overruling the Bank.[20]

Clarke cited his personal skepticism about the incoming and forecasted U.K. growth numbers but seemed to be as intent on making the conflict apparent as on explaining it (Chote, Coggan, and Peston 1995).

Perhaps this candor from Chancellor Clarke was a response to the new strength granted the Bank through the inflation-target-reporting framework: facing this reality, Clarke may have felt that the best defense was a good offense. The conflict would have been confirmed with the release of the Bank's May *Inflation Report* a week later. The Bank's central estimate was for 3 percent inflation in two years' time, indicating that, contrary to the government's pledge, inflation would be in the upper half of the target range at the end of the sitting Parliament. Furthermore, the Bank added that the risks to its forecast were almost uniformly on the upside and that these risks were "large." The Bank explicitly noted that sterling was depreciating as it had in the fall of 1992, but that, unlike then, wage and capacity pressures were high.

Upon taking office, Chancellor Clarke had made a commitment to Governor George that he would not censor the *Inflation Report* at any time, but in return he reserved the right to say he disagreed. What seems to have emerged as accountability for policy decisions in this framework is a system in which the Chancellor has to make explicit his or her independence from the Bank of England's position when a disagreement exists, and to make some modest effort to justify the rejection of the Bank's inflation forecast. As suggested above, however, while this system may have a salutary effect on the overall counterinflationary stance of policy, it may undermine public trust in the competency and objectivity of forecasting and of policymaking, and may even obscure what the actual forecast is.

Over the following months, it became apparent that the Chancellor had guessed right as a forecaster. GDP first-quarter growth was revised downward, new numbers on housing and manufacturing came in below expectations, and the global bond market rally (surrounding the expected drop in U.S. interest rates) supported the pound. In a September 1995 account of the Chancellor-Governor discussions since May, Governor George reiterated that "we still think that the chances are against achieving the inflation target over the next 18 months or so without some further [base rate] rise," but he conceded that "we are not in fact pressing for one—and have not been doing so since before the summer break" (George 1995a).

So should the Bank be taken to task for being less accurate in forecasting than the Chancellor ex post in this one instance? Since the Chancellor's private forecast of May 1995 remained private in number and reasoning, at least in comparison with the *Inflation Report*, it again proved impossible to determine whether Clarke disagreed with the Bank because he was skeptical of the growth forecasts, or simply because he was willing to take a risk of greater inflation to achieve higher growth. Would a point-by-point rebuttal of the *Inflation Report*, however, have been worth the additional information given the damage it might have done to perceptions of the Bank's forecasting role? A record of forecast performance clearly matters for accountability; equally clearly, however, reducing the monetary policy debate to a Chancellor-Bank forecasting competition is undesirable. This tension appears to be inevitable as long as the transparent (and intended-to-be-persuasive) forecast and the interest rate decisions come from different sources.

The minutes of the meetings do not provide any clear answers to these questions but accentuate the issues. Specifically, the minutes give the impression that the subject of discussion between the Governor and the Chancellor is never the stated reasoning behind the Bank's medium-term forecast itself, but rather whether the most recent data that feed into the forecast represent an underlying trend or are distorted by some contemporaneous event. The minutes of the discussion during the June 7, 1995, meeting state that "while one strength of the policy process was that all the new evidence was examined each month for its implications for inflation, it was important not to read too much into one month's data which could prove to be erratic." [21] This sort of discussion might be construed as undermining the importance of the Bank's medium-term forecast.

On June 14, 1995, in his Mansion House Speech to the City, Chancellor Clarke (1995) extended the announced inflation target beyond the latest possible date

of the next general election. The Chancellor did admit, however, that inflation could well temporarily rise above 4 percent, the top of the target range, in the following two years; he also left some confusion about whether meeting the target entailed being below the 4 percent ceiling or below the 2.5 percent target set by him and his predecessor for the end of this Parliament. Governor George (1995b), in his speech to the same audience, referred only to the 2.5 percent target, calling it achievable. Inflation expectations at a ten-year horizon, as derived from government bond yields, then rose upon these remarks, from 4.36 percent in early May to 4.94 percent in late July, a move that only in late 1996 began to be reversed.

The Bank's inflation outlook during the second half of 1995 was shaped by weighing the upside risks to inflation resulting from the lagged effects of the earlier sterling depreciation against the downside risks from increasing signs of slowing output growth and a buildup in inventories, particularly during the second quarter of 1995. Domestically generated inflation pressures remained weak, with tradables inflation continuing to outpace that of nontradables. In addition, the Bank noted in its November *Inflation Report* that during the current cycle, real wages had been much more subdued than expected. Still, RPIX inflation, at 3.1 percent in the year to September, was forecast to peak at about 3.5 percent during the first half of 1996. Substantial downward revisions of GDP figures for the first three quarters of 1995 and an unexpectedly low RPIX inflation rate of 2.9 percent in the year to November set the stage on December 13 for the first of four successive quarter-point cuts in the base rate.

The hoped-for "soft landing" of the U.K. economy materialized in 1996. GDP growth picked up toward the end of 1996; in the third quarter, GDP was up 2.4 percent over its level for the third quarter of 1995. The unemployment rate continued its gradual decline, dropping to 6.7 percent by December 1996. From October 1995 to September 1996, RPIX inflation fluctuated only between 2.8 percent and 3 percent, then rose to 3.3 percent in October and November. From January to the end of September, sterling strengthened gradually from 83.4 to 86.1 according to the Bank's exchange rate index, then finished the year in a rally at 96.1, an appreciation of 11.6 percent over three months.

Receding cost pressures and weak manufacturing output data, as well as a GDP figure of 0.5 percent, for the last quarter of 1995 prompted the next two quarter-point base rate cuts on January 18 and March 8. At their March 8 meeting, the Chancellor and the Governor agreed that demand and output were likely to pick up later in the year and through 1997, and that there was a possibility that the latest rate cut would have to be reversed at some point. Again, given the credibility of the Bank of England's role as the Chancellor's counterinflationary conscience, the Bank granted the Chancellor a de facto escape clause—or at least justification of future reversals as necessary and not reflective of a shift in preferences—when the Bank supported the Chancellor's interpretation of the economy. In May 1995, a similar defense had been offered, but not used; this time the option was exercised by mutual agreement.

The Bank's assessment did not change during the spring, and its medium-term projection published in the May *Inflation Report* was essentially unchanged from the previous one. The central projection of RPIX inflation in two years remained at 2.5 percent, with the risks biased downward over the short term but upward over the medium term because of uncertainties concerning the strength of the expected pickup in activity. Following the June 5 meeting, the Chancellor announced another quarter-point cut in the base rate despite the opposition of the Governor, arguing that the cut "was sufficiently small not to cause any significant inflationary risk, while reducing the downside risks to the recovery. If consumer demand started growing too strongly, and put the inflation target at risk, the rates could be raised when this became evident."[22] In this instance as in those discussed earlier, there appears to be some tension between the Bank's forward-looking approach based on its projections and the Chancellor's tendency to emphasize the current economic situation and the latest data. With the election approaching (and the time dwindling for monetary policy to take effect before the election), the elected Chancellor may have been willing to take greater inflation risks on behalf of economic growth than before.

The August *Inflation Report* was unusually frank about the consequences of the June base rate cut the Bank had opposed. Citing as evidence "lower interest rates since May, the new Treasury forecasts for taxes and public spending, and the slightly better-than-expected gross export performance in the first half of the year" (p. 45), the Bank projected that inflation would rise above 2.5 percent. Consistent with this assessment, from their August meeting on, the Governor was pressing for a rate increase, but it was only on October 30, 1996, that the Chancellor agreed to raise the base rate by a quarter point, to 6 percent. Some in the financial press speculated that the decision to raise the base rate then might be intended to avert further rate increases as the general elections, which had to be held by May 1997 at the latest, approached.[23]

This ongoing split between the agency that makes the inflation forecast and the agency that makes the policy decisions, and the bias it imparts to inflation expectations, could be characterized as the basic limitation of the largely successful inflation-targeting regime in the United Kingdom. The problem may have contributed to the decision on May 6, 1997, by the new Labour Government to grant operational independence to the Bank of England. The new Chancellor of the Exchequer, Gordon Brown, called a news conference moving up his scheduled monthly meeting with the Governor of the Bank of England; it was expected that he would announce an interest rate hike—long sought by the Bank—to deal with mounting inflation pressures (RPIX inflation was forecast to be 2.9 percent by the end of 1997). Chancellor Brown did announce a quarter-point hike in the base rate, the main monetary policy instrument, but then also made the surprise announcement that control of the base rate in pursuit of the inflation targets (as well as short-term exchange rate intervention) would now be given to the Bank of England.

One important factor in the decision to grant the Bank of England operational independence was its successful performance over time as measured against an announced clear baseline. Another factor cited by Chancellor Brown in granting independence was the increased accountability achieved through the emphasis on transparency in the inflation-targeting framework—a change that made monetary policy from an independent central bank more responsive to political oversight. When monetary policy goals and performance in meeting them are publicly stated, as they are in the U.K.'s inflation-targeting regime, the policies pursued cannot diverge from the interests of society at large for extended periods of time, yet can be insulated from short-run political considerations.

Decision-making power was vested in a newly created Monetary Policy Committee, and beginning in June, meetings of that Committee replaced the Chancellor-Governor meetings. The Committee consisted of nine members: the Governor and two Deputy Governors (one for monetary policy, one for financial matters), two other Bank Executive Directors, and four members appointed by the government (all well-known academic or financial economists). Members serve (eventually staggered) three-year renewable terms.

The elected government retained a "national interest" control over monetary policy, in essence an escape clause allowing it to overrule the Bank's interest rate decisions or pursuit of the inflation target when it deemed such action necessary. The government did not specify ahead of time any formal process for implementing the escape clause or any set of conditions under which the clause would hold.

On June 12, just prior to the first meeting of the Monetary Policy Committee, Chancellor Brown told the Committee to pursue a target of 2.5 percent for underlying inflation. The range was officially replaced with a 1 percent "threshold" on either side of the target. "Their function is to define the points at which I shall expect an explanatory letter from you [the Committee]," stated Brown. The open letter would require the Bank's explanation of why inflation has moved so far from the target, what policy actions will be taken to deal with it, when inflation is expected to be back on target, and how this meets its monetary policy objectives. The Chancellor retains the ability to tell the Bank how quickly he wishes the miss to be rectified (see Chote [1997]).

It is important to point out that the mandated response to a target miss in this framework is to provide more public explanation. The government is not precommitted to punishing the Bank for misses, say by dismiss-

ing the Governor, nor to a specified course of action. Thus, the government's control over the Bank of England is more like that exerted by the Canadian Parliament over the Bank of Canada than that imposed by the New Zealand government on its central bank through a very explicit and rule-like escape clause. As in all the cases we consider except the Bundesbank, however, the level and time horizon of the inflation target remained under the Cabinet's control—the Bank was not granted goal independence.[24]

As we noted at the start of this section, we would expect this change in framework to increase transparency of monetary policy by tying decisions to the published *Inflation Report* forecasts (and reasoning), thereby increasing accountability and decreasing interest rate uncertainty. In addition, such a move may be expected to increase the credibility of the United Kingdom's commitment to its inflation targets, because deviations from target now require the government to overrule the Bank publicly or to reset the target. Under the old regime, the government could potentially attribute deviations from the announced target to disagreements over short-run forecasts.

KEY LESSONS FROM THE UNITED KINGDOM'S EXPERIENCE

The United Kingdom's experience has particularly interesting lessons for inflation targeting. Until May 1997, inflation targeting was conducted under severe political constraints—that is, under a system in which the government, not the central bank, set the monetary policy instruments. As a result, it was not at all clear what motivated decisions to move (or keep steady) interest rates: was it differences in forecasts between the Chancellor and the Governor or differences in commitment to the announced inflation goals? Also unclear was the party accountable for achieving the inflation targets: was it the agency that made public forecasts (the Bank of England) or the agency that set the monetary policy instruments (the Chancellor of the Exchequer)? In addition, as we noted above, this lack of clarity led to much confusion about the degree of commitment to inflation targets and gave a strong impression that short-run political considerations were influencing monetary policy.

Despite this handicap, however, British inflation targeting has helped produce lower and more stable inflation rates. The success of inflation targeting in the United Kingdom can be attributed to the Bank of England's focus on transparency and the effective explanation of monetary policy strategy. Perhaps because for many years its position was weaker than that of the other central banks discussed here, the Bank of England led the way in producing innovative ways of communicating with the public, especially through its *Inflation Report*. Indeed, the Bank of England's achievements in communication have been emulated by many other central banks pursuing inflation targeting.

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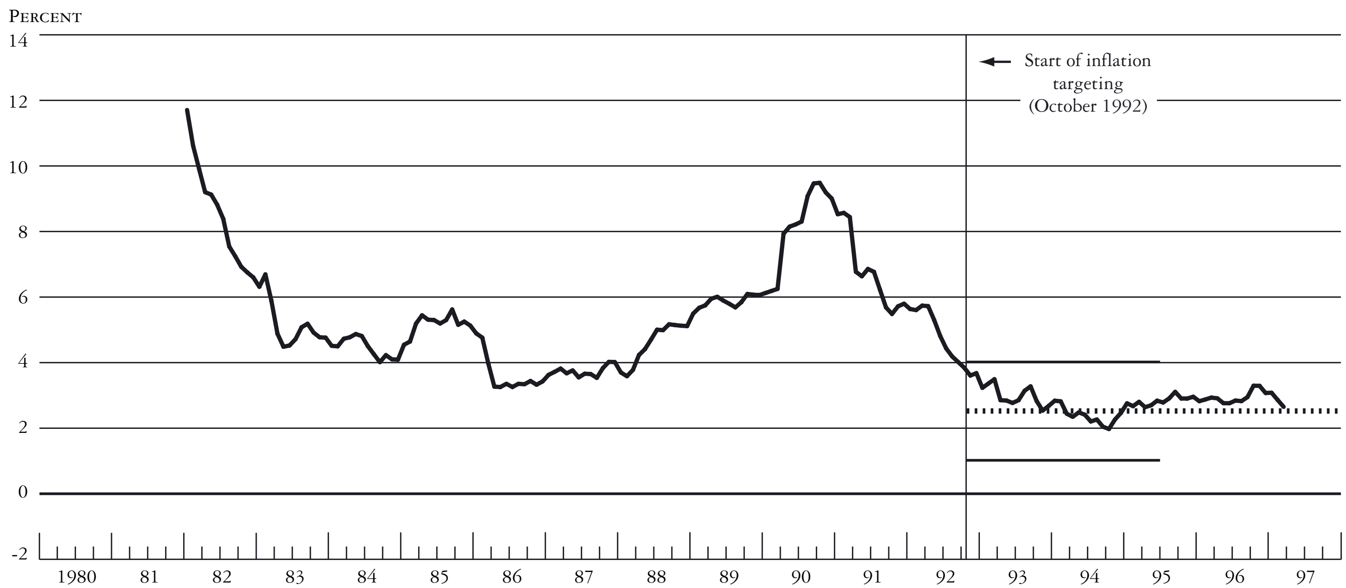
Economic Time Line: United Kingdom

Chart 1

RPIX Inflation and Targets

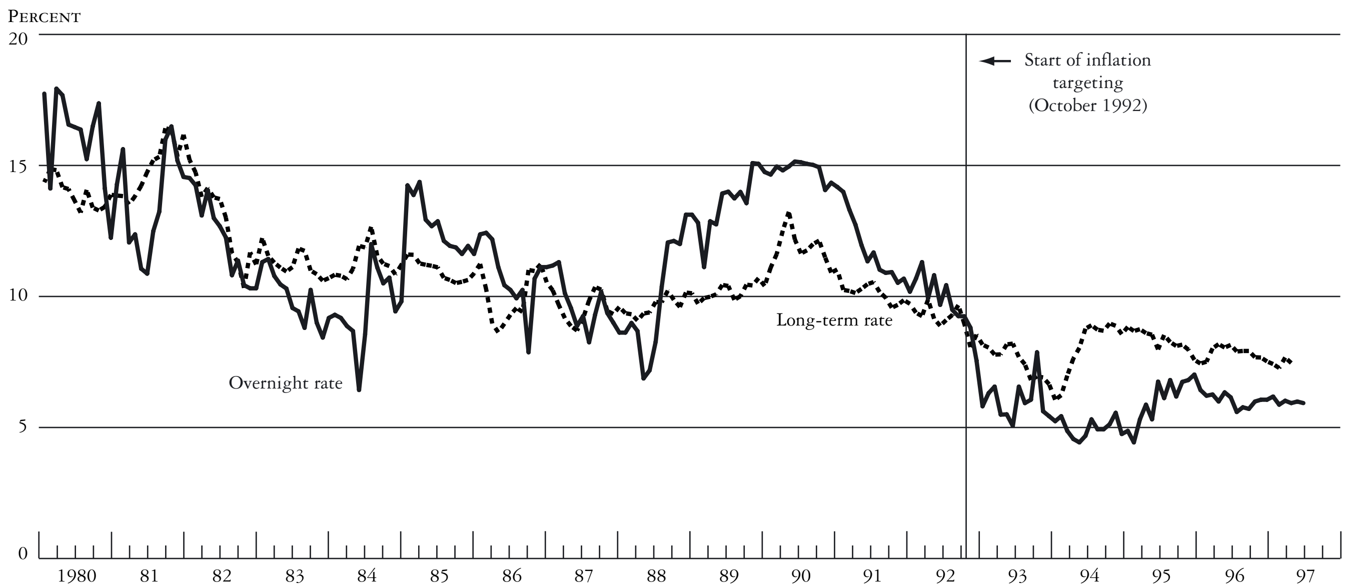


Sources: Bank of England; Bank for International Settlements.

Note: The chart shows the shift from an inflation target range of 1 to 4 percent, in effect from October 1992 to June 1995, to a point target of 2.5 percent (the midpoint of the range, marked by a dashed line).

Chart 2

Overnight and Long-Term Interest Rates

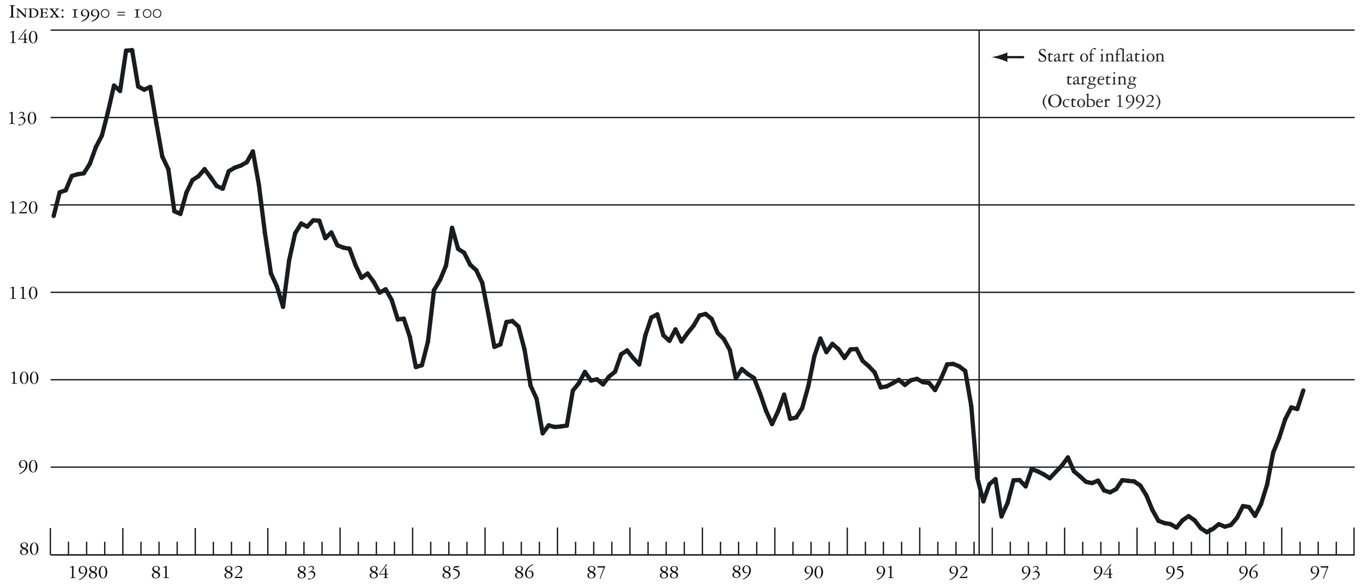


Source: Bank for International Settlements.

Economic Time Line: United Kingdom *(Continued)*

Chart 3

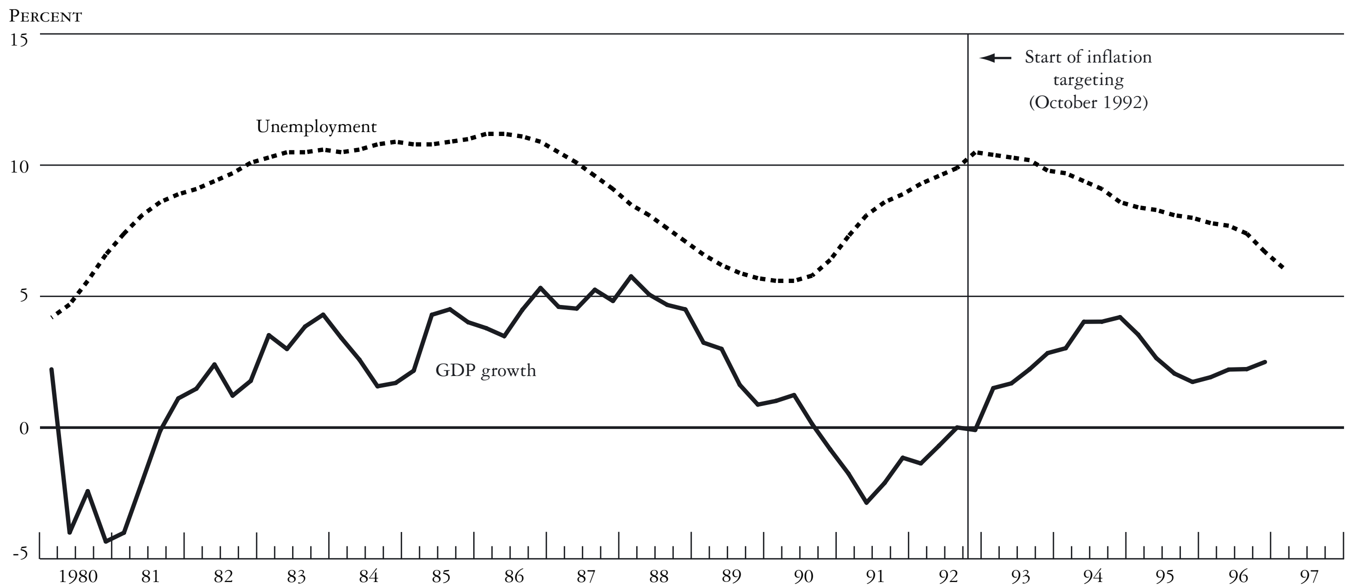
Nominal Effective Exchange Rate



Source: Bank for International Settlements.

Chart 4

GDP Growth and Unemployment



Source: Organization for Economic Cooperation and Development, *Main Economic Indicators*.