Money and asset prices

The MPC increased the official interest rate by 0.25 percentage points to 4.0% on 5 February. The Reuters poll of economists in late January suggested that official interest rates were expected to increase to 4.5% by the end of the year. And the profile of UK short-term market interest rates on 4 February was consistent with that. Bond yields in the United Kingdom on 4 February suggested that market participants expected CPI inflation to be close to the target of 2% over the medium term. Between early November and early February the US dollar fell against the euro, the yen and sterling, probably linked to concerns about the sustainability of the US current account deficit. Sterling was stable against the euro, but the sterling ERI rose by just over 2%. Equity prices continued to increase in the United Kingdom and in most other countries. UK monetary data pointed to steady growth in nominal aggregate demand. House price inflation in the fourth quarter was broadly the same as in the third quarter, and remained well above earnings growth. Household borrowing remained strong, associated with the high level of house prices.

Chart 1.1 Bank of England repo rate and GC repo/gilt(a) two-week forward curves(b)



⁽b) date.

1.1 Asset prices

Short-term interest rates

On 5 February, the Monetary Policy Committee increased the official reportate by 0.25 percentage points to 4.0%. Interest rates were also increased by 0.25 percentage points in November 2003, but left unchanged in December and January. A Reuters poll of economists taken between 27 and 29 January suggested that interest rates were expected to increase to 4.5% by the end of 2004, and to 4.7% by the end of 2005. The forward curve for the GC repo rate on 4 February suggested a similar profile (see Chart 1.1). The curve had shifted down by around 0.4 percentage points at the one and two-year horizons since the previous Report. The forward curve reflects market participants' expectations of future interest rates. But it may also reflect term premia, which compensate lenders for interest rate uncertainty. The downward shift in the curve since November may have been associated with a fall in term premia, as well as lower interest rate expectations. In contrast, the Reuters survey suggested little change in economists' expectations over the period.

Central banks in the United States, the euro area and Japan left official interest rates unchanged in the three months since the November Report. Futures contracts on 4 February suggested that official rates in the United States and the euro area were expected to start increasing in the second half of 2004, and that official rates in Japan might increase

Chart 1.2 Official interest rates and forward interest rates in major economies^(a)







Sources: Bank of England and Bloomberg.

moderately next year (see Chart 1.2). The forward curves in all three countries had moved down by around 0.5 percentage points at the two-year horizon since the November *Report*, similar to the fall in the forward curve in the United Kingdom. The shifts in all four economies occurred at around the same times, apparently in response to developments in the United States, such as announcements by the Federal Open Market Committee, and weaker-than-expected US employment data.

Government bond yields

In the United Kingdom, the nominal yield on ten-year government bonds fell by 0.2 percentage points between early November and early February, reversing some of the increase in yields in October last year (see Chart 1.3). Bond yields also fell in other major economies, by a broadly similar amount as UK yields.

Around a quarter of the value of outstanding UK government bonds are indexed to inflation, measured by changes in the RPI. In the absence of risk premia, the expected return on index-linked bonds should be the same as on conventional bonds. So the difference between the real yield on index-linked bonds and the nominal yield on conventional government bonds contains information about RPI inflation expectations.⁽¹⁾ Because of the way that indexation is calculated, yields on bonds maturing before 2006 are less informative about expectations. Yield changes during the past three months suggest that expectations for RPI inflation were revised down for maturities between 2006 and 2010, but at longer horizons expectations rose a little. Bond yields did not change significantly on the day that the new CPI inflation target was announced, probably because the announcement was in line with market expectations.

Yields on 4 February suggested that RPI inflation was expected to be around $2^{3}/_{4}$ % between 2007 and 2010. Taking the past as a guide to the expected difference between RPI and CPI inflation (see the box on page 36 of this *Report*), this might suggest that market participants expected CPI inflation to be close to the 2% target in those years.

Exchange rates

The sterling effective exchange rate index (ERI) measures the UK exchange rate against a basket of other currencies, weighted according to their importance in determining UK trade. In the 15 working days to 4 February, the ERI averaged 102.8, up just over 2% on the equivalent average used in the November *Report*. Between these periods, sterling appreciated

⁽a) For the United Kingdom, the United States and the euro area, these are estimates of the yields on a synthetic, zero-coupon bond, derived from yields on a conventional bond. But for Japan, these are yields to maturity on conventional bonds.

See Scholtes, C (2002), 'On market-based measures of inflation expectations', Bank of England Quarterly Bulletin, Spring, pages 67–77.

Chart 1.4 Cumulative changes in sterling exchange rates







(a) Adjusted using relative movements in consumer prices.

(a) Aquistic using relative involutions in provident of the second second

Chart 1.6 United States international transactions



7.9% against the US dollar, and 0.4% against the euro (see Chart 1.4).

In the two years to January 2004, the US dollar fell by around 30% against the euro, and by around 20% against the yen. But the US dollar broad ERI fell just 13% in real terms, reflecting smaller changes against many Asian currencies, and an appreciation against the Mexican peso. The level of the broad ERI in real terms in January was not particularly low by recent historical standards (see Chart 1.5).

It is not clear what caused these movements in the US dollar. They cannot be solely explained by revisions to expectations of interest rates. One plausible explanation for the appreciation and subsequent depreciation of the US dollar is the effect of technological advances that raised productivity growth there. In the short run, if overseas investors increase their demand for US assets in expectation of higher returns, that might cause the US dollar to appreciate. But in the long run, there might need to be a real depreciation in order to ensure sufficient world demand for the extra goods and services being produced in the United States as a result of the higher productivity. Consistent with that explanation, between 1996 and 2000 there was a strong flow of private sector foreign capital into the United States. And this flow of private funds fell back in 2001 (see Chart 1.6), around a year before the dollar started to decline.

But another possible explanation is that the flow of private sector capital dried up because it was based on overly optimistic expectations for US productivity growth, or because the higher productivity growth that did occur had a smaller effect on US corporate profits than had been expected. There may be other equally plausible explanations. Whatever the underlying cause, market intelligence suggests that the decline in the dollar reflected increasing concern about the sustainability of the US current account deficit, given the change in the composition of capital flows.

In 2003, the weakness of private sector capital inflows into the United States was partially offset by an increase in official purchases of US assets (see Chart 1.6), largely by the Japanese, Chinese and other Asian central banks. This in part reflected the exchange rate policy in those countries, but it may also have reflected a desire to build up liquid foreign reserves. It is not clear how long this pattern of financing the US current account deficit will continue. There is, therefore, a risk of further falls in the US dollar. Even if that were to have little effect on the sterling ERI, there might be a significant impact on the UK economy. For example, a further loss of euro-area competitiveness could reduce growth in the euro area, which is a key destination for UK exports.





Table 1.A The housing market(a)

	2003	2003			
	Q1	<u>Q2</u>	<u>Q</u> 3	Q4	Jan.
Indicators of transactions					
HBF net reservations (b)	-32	-22	15	13	n.a.
Mortgage approvals (c)	96	101	114	123	n.a.
Particulars delivered (d)	124	107	109	110	n.a.
Monthly percentage changes i	in house pi	rices			
Halifax	1.6	0.9	1.4	1.5	2.2
Nationwide	1.4	0.9	1.1	1.5	0.7
Sources: Bank of England Halifay	House Build	ore Fodor	ation Inl	and Poyon	uo and

Nationwide

(a) Quarterly data are averages of monthly observations. All data are seasonally

Quarterly data are averages of moniting observations in each of a djusted. Percentage balance of respondents reporting more net reservations than during the same month of the previous year. The number of loans approved for house purchase (thousands). The number of loans approved for house purchase (thousands). (b)

(c) (d) Registry (thousands)

Chart 1.8 Ratio of average house price to annualised disposable income per household(a)



(a) Disposable income in the United Kingdom, divided by the number

of households in Great Britain

Equity prices

The FTSE All-Share index averaged 2213 in the 15 working days to 4 February—the starting assumption used in the MPC's projection. That was an increase of 3.8% since the equivalent average used in the November Report. Between the same periods, in domestic currency terms, the S&P 500 index increased by 9.0%, and the Euro Stoxx index increased by 10.6%, while the Japanese Topix was unchanged (see Chart 1.7). The increases in equity prices might have reflected lower expected real interest rates. But they are also consistent with an upward revision to expectations of profits.

The property market

On a seasonally adjusted basis, indicators of the number of UK housing transactions suggest that activity in the fourth quarter was similar to that in the third quarter (see Table 1.A). At the time of the November Report, it appeared that demand in the housing market was picking up strongly in the third quarter. But following revisions to the loan approvals series, and some weakening in net reservations of new houses in the fourth quarter, the increase in activity now appears a little less marked.

Although average house price inflation was lower in 2003 than in 2002, there has been little sign of deceleration in house prices through 2003. House prices increased somewhat more than 1% per month throughout 2003, except in the second quarter which may have been affected by lagged effects from the faltering in household confidence ahead of the war with Iraq. The current rate of house price inflation remains well in excess of earnings growth, and is not sustainable in the medium term.

The average level of house prices is high, relative to incomes (see Chart 1.8). Various factors might explain the increase in house prices, including higher population growth, lower unemployment rates and the transition to low inflation.⁽¹⁾ But their effect on house prices is difficult to evaluate, so there remains considerable uncertainty over what level of house prices is sustainable.

Commercial property values can give an indication of expected corporate demand, relative to supply. Recent developments in commercial property values might suggest some strengthening in demand. The annual growth of industrial property values was around 3% in recent months, a little stronger than in 2001 and 2002. Office property values continued to fall, but at a slower rate than at the start of 2003.

(1) For a more detailed discussion see page 6 of the November 2003 Report and the box on pages 8 and 9 of the August 2002 Report.

Chart 1.9 Household consumption and notes and coin in real terms(a)



Chart 1.10 Broad money^(a) growth less output growth and price inflation(b)



Sources: Bank of England; Capie, F and Webber, A (1985), A monetary history of the United Kingdom, 1870–1982, Volume 1: Data, sources, methods, Allen and Unwin, London; Feinstein, C H (1972), National income, expenditure and output of the United Kingdom, 1855–1965, Cambridge University Press, Cambridge; and ONS.

Estimate of M4 deposits. RPI before 1976.

Ten-year moving averages.

Table 1.B Monetary aggregates(a)

Percentage changes on a year earlier

	2003	2004			
	Q1	Q2	Q3	_Q4	Jan.
Notes and coin	6.7	6.3	7.9	7.3	7.5
M0 (b)	6.6	6.2	7.8	7.2	7.7
M4 (c)	7.4	8.2	6.5	6.8	n.a.
M4 lending (d)	10.8	11.4	10.6	11.5	n.a.

(a) (b)

- (c)
- Seasonally adjusted using a new method. See the December 2003 issue of *Monetary and Financial Statistics* for more details. M0 is a narrow measure of money, consisting of notes and coin and bankers' operational balances held at the Bank of England. M4 is a broader monetary aggregate. Its principal components are the UK private sector's holdings of sterling notes and coin, and its holdings of sterling deposits (including repos) with UK monetary financial institutions (MFIs). Sterling lending by MFIs to the private sector (including financial corporations that are not MFIs). The effects of securitisations have been excluded. (d)

1.2 Money, credit and balance sheets

Monetary aggregates

The stock of notes and coin in circulation grew by 7.3% in the fourth quarter of 2003 compared with a year earlier, similar to growth in the third quarter. Cash is largely used to undertake household consumption-around three quarters of notes and coins in circulation are held by households. And the growth rates of cash and consumption have tended to move together (see Chart 1.9). So continued strong growth in notes and coin might indicate that household consumption in the fourth quarter was reasonably strong.

But the strong growth in notes and coin also probably reflects a continuing response to lower interest rates. When interest rates are low, the benefit of holding wealth in interest-bearing accounts is reduced. So people respond by holding more of their wealth in liquid assets, such as cash, for greater convenience. The effect of interest rates on the demand for cash can be powerful and prolonged. For example, during the 1970s and 1980s, on average and in real terms consumption grew 4 percentage points per year faster than the stock of notes and coin, as households responded to high rates of interest by economising on their cash holdings (see Chart 1.9). Since around 1980, another reason for the relative weakness in growth of notes and coin has been a rising trend in the number of transactions carried out using cards and other non-cash methods of payment. That trend has probably continued in recent years, suggesting that the impact of low interest rates since 2000 on the demand for notes and coin has been more marked than the difference between growth rates of cash and consumption would suggest.

In the absence of velocity changes, broad money growth, in excess of output growth, must be associated with price inflation. As can be seen from Chart 1.10, this relationship has broadly held over the past 120 years. M4-a measure of broad money including bank and building society deposits held by the UK private sector—grew by 6.8% in the year to the fourth quarter of 2003 (see Table 1.B). This was little changed from growth in the third quarter, but weaker than in the first half of last year. Lending by UK banks and building societies to the private sector (excluding the effects of securitisations) grew by 11.5% in the year to 2003 Q4.

Since 1999, the flow of money from the private sector into bank and building society deposits (M4 deposits) has been significantly lower than the flow of money from UK banks and building societies to the private sector (M4 lending). The difference between the two flows-the funding gap-has

Chart 1.11



Table 1.CLending to individuals(a)

Percentage changes on a year earlier

1995– 2002		2003			Outstanding debt per	
	Average	Q1	Q2	<u>Q3</u>	Q4	person (b) (£)
Unsecured lending Secured lending	; 14.7 7.1	14.5 13.7	14.4 13.8	13.5 14.2	$\begin{array}{c} 12.4\\ 14.2 \end{array}$	3,601 16,254

Flow as a percentage of household disposable income

Mortgage equity					
withdrawal	1.2	6.3	6.0	7.0	n.a.

(a) Seasonally adjusted using a new method. See the December 2003 issue of *Monetary and Financial Statistics* for more details.
(b) In December 2003.

averaged about 4% of GDP (see Chart 1.11). UK banks and building societies have bridged this gap by raising finance in various ways:⁽¹⁾ issuing equities and bonds, taking net deposits from non-residents, and securitising assets (typically mortgages which are packaged and used to back the issue of bonds by a special-purpose vehicle).

But how did the gap arise in the first place? Broadly speaking, transactions within the UK private sector cannot generate a funding gap, as they should affect borrowing and deposits in the same way. For example, if one household borrows to buy a house, the ultimate recipient of the cash will increase their deposits by the same amount as the original increase in borrowing or pay off some of their debt. A persistent funding gap implies that private sector borrowing is leaking out to some other sector. Since 1970, funding gaps have often been associated with current account deficits (see Chart 1.11), suggesting that eventually the borrowed money flows overseas, with the purchase of imports. But borrowed money would also leak from the private sector if it were used to buy financial assets from the government, banks or overseas sectors, or if the government ran a fiscal surplus.⁽²⁾ In recent years, the current account has been in persistent deficit, but the deficit has been smaller than might be implied by the funding gap. This suggests that some of the increase in private sector borrowing has been matched by the purchase of financial assets, rather than imported goods and services. Although that is true of the private sector in aggregate, it is unlikely that the same individuals or businesses who have increased their borrowing, have also purchased more financial assets.

Household borrowing

Unsecured borrowing, which includes borrowing using credit cards, bank overdrafts, personal loans and hire purchase agreements, grew by 12.4% in the year to 2003 Q4. This represents a slowdown since the start of last year (see Table 1.C). The monthly data for December were particularly weak, showing growth of just 0.5% on the month—the weakest since March 1997. But lending data can be erratic, and especially difficult to interpret around Christmas time. It is too early to say whether the underlying trend in unsecured borrowing has turned down significantly.

According to a survey commissioned by the Bank of England,⁽³⁾ it is largely households with relatively high

⁽¹⁾ See Speight, G and Parkinson, S (2003), 'Large UK-owned banks' funding patterns', Bank of England Financial Stability Review, December, pages 135–42.

⁽²⁾ See Power, J and Andrews, P (2001), 'Explaining the difference between the growth of M4 deposits and M4 lending', Bank of England Quarterly Bulletin, Summer, pages 183–88.

⁽³⁾ Tudela, M and Young, G (2003), 'The distribution of unsecured debt in the United Kingdom: survey evidence', Bank of England Quarterly Bulletin, Winter, pages 417–27.

Chart 1.12 Interest rates^(a) on unsecured debt



⁽a) A weighted sum of interest rates quoted by different lenders. The last data are for January 2004, so do not reflect the latest increase in the Bank of England repo rate.

Chart 1.13 Characteristics of new mortgages for first-time buyers



Sources: Bank of England and CML

incomes that have increased their unsecured borrowing. They may be less likely to have problems servicing their debts. But around 10% of households with unsecured debt say it is a 'heavy burden'. This proportion has been broadly constant since 1995. But those households have increased their borrowing more than other groups. And over the same period, there has been an increase in the number of personal insolvencies and credit card debt write-offs. This suggests that a small proportion of households have been borrowing more than they can afford to repay. And that is against a backdrop of low official interest rates, and falling interest rate spreads on unsecured debt (see Chart 1.12). If interest rates or retail spreads on unsecured debt were to rise, problems in servicing debts could increase. That could imply weaker aggregate consumption growth in the future.

The stock of individuals' debt secured on housing grew by 14.2% in the year to 2003 Q4. Growth picked up slightly through last year (see Table 1.C). And, in contrast to unsecured debt, there has been a considerable acceleration since the second half of the 1990s, associated with developments in the housing market.

Mortgage equity withdrawal—new borrowing secured on housing that is not spent improving or enlarging the housing stock—was 7.0% of household disposable income in 2003 Q3 (see Table 1.C). That was the highest level since 1988 Q3. Equity withdrawal is likely to have remained high in the fourth quarter, given the strong growth in secured borrowing. To some extent, the rise in house prices will automatically cause mortgage equity withdrawal to increase, for example by increasing the value of receipts from the sale of inherited properties.⁽¹⁾ And not all of these receipts feed into consumption in the short term. Nevertheless, the rise in equity withdrawal has probably supported household consumption to some extent.

Looking forward, what does the growth in secured borrowing imply for the risks to household consumption? Between 1985 and 1991, around 30% of loans taken out by first-time buyers exceeded the value of the property being bought. That was one factor leading to the large incidence of negative equity in the early 1990s. And part of the weakness of household spending in that period was due to households attempting to rebuild their housing equity. But in recent years buyers and lenders have been more cautious, with about 10% of new loans exceeding the property value, and a relatively low proportion with loan to value ratios between 90% and 100% (see Chart 1.13). Other things being equal, lower loan to value

⁽a) These data overstate the increase in loan to income ratios since June 2003 due to a change in the treatment of extreme values.

⁽¹⁾ See the box on pages 8 and 9 of the November 2003 *Inflation Report* for a more detailed discussion.

The sensitivity of the economy to changes in interest rates

Chart A

Changes to official interest rates can affect the economy through a number of channels,⁽¹⁾ and it is likely that the size of the effects will change over time. This box considers two developments that have probably changed the impact of interest rates: the move to an explicit inflation target, and the growth in household debt. As a result of these developments there is more than usual uncertainty about the effect that changing interest rates will have.

Inflation expectations play a key role in determining current inflation. When firms set prices, they have to take account of general price inflation expected in the future, otherwise they may inadvertently change their prices relative to their competitors. Similarly, wage bargainers must take account of the expected change in the cost of living when bargaining over pay.

Monetary policy can have a powerful effect on inflation expectations. Without a credible inflation target, expectations of inflation may change in response to demand and supply shocks that affect current inflation. But the more credible the target, the less this will occur. So if inflation expectations are now better anchored, a given demand or supply shock will have a smaller effect on inflation. For that reason, a given change in interest rates would also have less effect on inflation, assuming that the impact on demand were unaffected.

However, changes in credibility may also alter the impact that a change in interest rates has on demand. When inflation expectations are fixed to the target, a change in nominal interest rates will be associated with an identical change in the expected real interest rate. When expectations are less entrenched, the real interest rate can change by more. For example, if a decrease in nominal interest rates raised expected inflation, that would reduce the expected real interest rate by more than the change in nominal rates. Furthermore, a credible inflation target may also help to anchor the exchange rate. For example, if a cut in interest rates caused inflation expectations to rise, that would probably generate a sharper fall in the exchange rate than if inflation expectations did not respond. So the impact on demand of a given change in official rates through both the exchange rate and real interest rate channels could be smaller when inflation expectations are well anchored.

The current monetary framework in the United Kingdom appears to have anchored inflation expectations to the target. Since May 1997, when the Monetary Policy Committee was given responsibility for achieving the inflation target, inflation

expectations implied by bond yields and, for example, by the Barclays surveys of trade union officials have come down. For the past six years or so they have been close to the inflation target. According to the Barclays survey of the general public, inflation expectations remain above target, but have tended to be lower than in the period before inflation targeting was adopted (see Chart A). An alternative survey of public inflation expectations, conducted by NOP on behalf of the Bank of England, suggests that at least since 1999, median expectations for price inflation have been close to 2.5%.⁽²⁾ There is then reasonably strong evidence that inflation expectations have been close to the target since 1997, despite the shocks that have occurred. By itself, that might imply that small unanticipated changes in interest rates will have less of an effect on inflation and output than before credibility was established.



(a) The difference between five-year forward, five-year yields on conventional and index-linked government bonds.(b) RPIX inflation between 1% and 4%, and in the lower half of that range by the

end of that parliament.
(c) With an RPIX inflation target of 2.5%.
(d) The Barclays Basix quarterly survey.

But developments in households' finances in recent years may also have affected the sensitivity of the economy to changes in interest rates. Theory suggests that households base their spending decisions upon an assessment of their future expected income. So long as they have access to credit, they will not change their spending in response to changes in their current income that are perceived to be temporary. In contrast, for households without access to credit, changes in current income might have a one-for-one impact on their spending.

The strong growth in household debt may mean that a greater proportion of households have reached their

See 'The transmission mechanism of monetary policy' (1999), Bank of England Quarterly Bulletin, May, pages 161-70. (2) See 'Public attitudes to inflation' (2003), Bank of England Quarterly Bulletin, Summer, pages 228-34.

borrowing limits—where they are no longer willing, or even able, to borrow any more. That would imply that household consumption will be more closely linked to income than it has been in the past. Furthermore, the resources available for consumption—income net of tax and interest flows—have become more sensitive to a given change in interest rates as a direct result of the growth in debt. And that will be particularly true for households with large debts relative to their incomes, who may be the most likely to have limited access to further credit. So the growth in debt may have made consumption more sensitive to a given change in interest rates.

But other developments may have reduced the sensitivity of household spending to interest rates. The stock of household deposits has grown reasonably strongly in recent years. So a change in interest rates will now have a more powerful effect on households' interest receipts, which will partly offset the effect on interest payments. And the fall in interest rate spreads on unsecured household debt suggests that some of the growth in borrowing reflects an increase in the supply of credit. So at least some households that previously faced credit constraints now have more access to credit, which may have reduced the sensitivity of their spending to changes in income flows.

It is not clear whether the net effect of higher household debt and deposits, and better anchored inflation expectations has made the economy more, or less, sensitive to changes in interest rates. And this makes the MPC less certain about the likely size of the effect of an interest rate change on inflation and output.

Chart 1.14 Income gearing for new mortgages issued in different periods



Chart 1.15 UK corporate bond spreads^(a)



⁽a) The difference between yields on corporate bonds and UK government bonds.

ratios reduce the probability that the mortgage holder will face negative equity in the future. However, if house prices were to fall, even if there were a relatively small incidence of negative equity, consumption growth would be likely to weaken, as households' collateral, and therefore their ability to borrow at low interest rates, would be reduced.

The high level of secured borrowing might also pose a risk to consumption if a significant proportion of households had difficulty servicing their mortgages. Since the 1980s there has been a trend increase in the size of new mortgages, relative to incomes for first-time buyers (see Chart 1.13). But despite this, mortgage interest payments on new mortgages have fallen, relative to incomes, given the current low level of interest rates (see Chart 1.14). And the number of mortgages in arrears is low by historical standards. So it would seem that, at current rates of interest, the large majority of mortgage holders are able to service their debts. But this might change if interest rates were to rise significantly. Indeed it is possible that consumption will be more sensitive to changes in interest rates, following the growth in household debt (see the box on pages 10–11 for more details).

Private non-financial corporations' (PNFCs') financing

In general, PNFCs' financial position appears to have improved through 2003. Equity prices have risen since their trough in March. Dividend payments have increased as profits have recovered. And there have been continued falls in corporate bond spreads (see Chart 1.15), suggesting that financial market participants judge that the risk of default has lessened. That has occurred despite the near failure in December of Parmalat, a large Italian firm, presumably because markets judged that there was little general news in that development.



⁽b)

The annual growth rate of PNFCs' M4 deposits has picked up since 2002, and was 8.3% in 2003 Q4.

PNFCs raised £3.7 billion in sterling loans in the fourth quarter, after a small net repayment in the third quarter. There was also a sharp increase in money raised through bond issuance. PNFCs' total external finance was higher than in the third quarter, even though the total figure was depressed by repayments of foreign-currency debt (see Chart 1.16). The level of external finance raised in Q4 remained below the average between 1999 and 2002. But the increase in bond issuance, coupled with the improvement in PNFCs' financial position, could be consistent with a modest strengthening in business investment in the coming months.