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What can the Bank of England do?

The monetary dilemmas of a medium-sized nation

Long saga of external vs. domestic in UK monetary policy

The latest jump in the pound is another instalment in the famous soap opera of the British economy, "External Irresistible Force vs. Domestic Immovable Object". Previous highlights in this soap opera, which started in the early 1920s, were the return to the gold standard in 1925 and the expulsion of the pound from the European exchange rate mechanism in 1992. The central question is, "should interest rates be based on the exchange rate or on domestic monetary objectives, including monetary growth?". Often external and domestic considerations give the same message for interest rates. But sometimes - as now - they do not. High money growth, a tight labour market and above-target inflation argue for a rise in interest rates; the over-valued and rising pound suggest that interest rates ought to be reduced or, at worst, kept unchanged.

Capital inflows - outside British control - partly to blame for strong pound

The Bank of England deserves some sympathy. It is not to blame for the current American mania to buy corporate equity in any country where it is more modestly valued than in the USA, which means everywhere; it is also not responsible for the insatiable Japanese craving for foreign bonds, motivated by the sub-2% yields available on yen-denominated paper. Capital inflows from the USA and Japan go some way to explain the discrepancy between a soaring pound, which will hit company profits, and an ebullient stock market, which is supposed to represent the capital value of those profits. In a deeper sense, the policy dilemma reflects the UK's geopolitical position. The UK is no longer a large global power, able to base monetary policy on its own circumstances. But neither is it a small nation, like the Netherlands or Portugal, which can sensibly fix the exchange rate and import monetary stability. Instead the UK is a medium-sized nation, for whom both a fixed exchange rate and money supply targets (or inflation targets) have their drawbacks.

Over-funding should be adopted,

But the Bank of England's monetary tactics are not perfect. It ought by now to have recommended that Mr. Brown activate debt management (so-called "funding policy"). Debt management can be used to cut money supply growth, without raising short-term interest rates. (In present circumstances, the right policy would be to concentrate new gilt issues at the long end. As banks do not normally buy long-dated issues, the purchasers would be non-banks, principally financial institutions. This would mop up some of their excess money holdings.) At any rate, the Monetary Policy Committee recognises that it has a medium-term problem in keeping inflation under control. Its disquiet contrasts markedly the complacency about rapid money supply growth and asset price inflation in the USA. Dollar interest rate increases will come, but they will be too small and too late to prevent the boom - which can fairly be labelled "the Greenspan boom" - ending in a bust.

but at least UK monetary policy is better than American

Summary of paper on

"The monetary background to the Greenspan boom"

Purpose of the paper

The consensus view of the international economic outlook at the start of 1998 - that the Asian crisis would lead to a global slowdown - now looks implausible. Another jump in American share prices has been accompanied by signs of continued strong demand in the USA and rising stock markets elsewhere. The paper tries to identify the causes of the boom.

Main points

- * **The central cause of the buoyancy of US asset prices in the last three years has been the upturn in money supply growth which began in early 1995. Faster money supply growth partly reflects the healthy capital position of American banks. (See pp. 7 - 8.)**
- * **The American public wants to convert its stock market winnings into larger and better houses. Applications for new mortgages soared in late 1997 and early 1998, implying rises in housing turnover and more housebuilding activity. (See p. 11.)**
- * **The strong housing market and the leap in share prices make a slowdown in domestic demand most unlikely in 1998. Indeed, because of the effect of positive "wealth effects" on spending, a slowdown to beneath-trend growth is almost inconceivable while share prices are at present levels. (See p. 4.)**
- * **As foreign buying of US Treasuries has exceeded the increase in American public debt since 1994, Americans have been net sellers of US Treasuries! (See p. 10.) But recent trends in the American balance of payments are unsustainable. (See p. 9.)**
- * **With unemployment beneath the "natural rate", wage increases are rising. (See p. 12.) The Greenspan boom has many unusual features, but - as always in these cycles - the acceleration in money supply growth will lead to a significant increase in inflation.**

This paper was written by Professor Tim Congdon, with assistance from Mr. Alexander Skinner, and is based on material presented at recent Lombard Street Research seminars.

The monetary background to the Greenspan boom

Rapid US money supply growth will lead to inflation of over 4% in 1999 and 2000

Full-scale boom in the USA,

The American economy is in a full-scale boom. Apart from a few quarters in late 1994 and early 1995, the growth of domestic demand has been at an above-trend rate since 1992 and shows no signs of slowing down. It is true that the growth of output will be hit in 1998 by the so-called "Asian effect", the impact of last year's financial crisis in some East Asian countries on net exports from the industrial world, including the USA. But US manufacturing - which ought to be affected far more than services by Asia's traumas - remains buoyant. Weakness from Asia has been smothered by strong demand from elsewhere. (Some commentators have claimed that the Asian effect has been deferred. But this is contradicted by data on trade flows for the countries affected, such as South Korea and Thailand. See p. 9.)

with unemployment now beneath its natural rate

Indeed, as the monthly employment increase has recently been over 250,000, the message is that the growth of output - like the growth of domestic demand - is proceeding at an above-trend rate. (The trend monthly increase, dictated by demography, is widely estimated at a little above 100,000.) The unemployment rate of 4.6% is lower than at any time since the late 1960s, but seems likely soon to drop to less than 4 1/2%. As the "natural rate of unemployment" (i.e., the rate at which wage growth is stable) is thought to be nearer 6%, the rate of wage increases is rising. Whereas the typical increase in average hourly earnings (expressed by annualizing the six-month figure) was between 2% and 2 1/2% in 1992 and early 1993, it was roughly 4 1/2% in late 1997. (See p. 12.)

Boom caused by upturn in money growth,

The question arises, "what has been the main cause of the boom?". A research paper in the June 1997 issue of this *Monthly Economic Review* argued that "the explanation for the share price gains of the last few years, and of the present strength of demand and output in the American economy, is monetary". In particular, it was emphasized that - largely because of the robust capital position of the banks - "since late 1994 the rate of monetary growth has accelerated...from an annual rate of 0% - 3% in the preceding three years to 5% - 8% subsequently". This research paper reviews and up-dates the evidence.

evidenced in asset price bubble

The main points are straightforward. Money supply growth remains high and may even be increasing further. In particular, wholesale money balances (of the type which appear in the portfolios of financial institutions and wealthy individuals) have continued to soar at an annual rate in the high teens. (See p. 8.) If financial institutions maintain stable ratios of cash to assets, the high rate of wholesale money growth is by itself sufficient to account for the surge in share prices and the spread of asset price inflation throughout the US economy. (Conspiracy theories of orchestrated official buying of the stock market - as proposed by Mr. Tony Dye of PDFM - are incredible.) As cash-to-asset ratios have in fact been reduced over the last few quarters because of rampant bull

sentiment, the American economy now has an extreme asset price bubble. Here is the monetary background to the Greenspan boom.

Positive "wealth effects" of asset price gains on spending, notably home-buying

As always in these cycles, asset prices have affected spending behaviour. A classic pattern is for some people (mostly wealthy people) to try to convert their stock market winnings into housing equity, so that the faster rate of monetary expansion is associated with a boom in mortgage applications, higher turnover in the existing housing stock and more housing construction. Logically, early 1998 has seen an all-time peak in total home sales (i.e., existing and new combined). (See p. 11.) With the inventory of unsold homes at an all-time low, high levels of housing construction are to be expected at least until the autumn. Since both the housing market and share prices are leading indicators of economic activity, the message has to be that above-trend growth in demand will continue to the end of this year and - on unchanged interest rates - well into 1999. (February's leading indicator index was in fact up by 0.4%.)

helped by low bond yields due to Japanese influence

Low bond yields have reinforced the housing boom. In this context an extraordinary feature of American financial flows in the last three years needs to be highlighted. The boom has led to a surge in tax revenue and the virtual elimination of the budget deficit. Meanwhile foreign buying for US Treasuries has been unprecedented. (Much of it has been by Japanese investors, motivated by pathetically low yields on Japanese bonds and the depreciating yen.) As a result, foreign buying has exceeded the increase in the US national debt and Americans themselves have been net sellers of US Treasuries! (See p. 9.) The flat yield curve - which gives no protection against a rise in interest rates or inflation - reflects this remarkable supply-demand situation.

If the bubble continues, so does the boom

What happens now? Market sources suggest that the start of the new financial year will see another flood of Japanese purchases of US Treasuries, more or less regardless of the US macroeconomic data. If so, the bubble goes on. The situation is obviously unsustainable. The punchline here is simple: the yield curve, the bond market and, implicitly, the equity market are pricing in a slowdown in demand, but a slowdown in demand cannot happen while the bond and equity markets are at their current levels. (The reason is the positive "wealth effects" on housing and consumption from the over-valued stock market, as already described.)

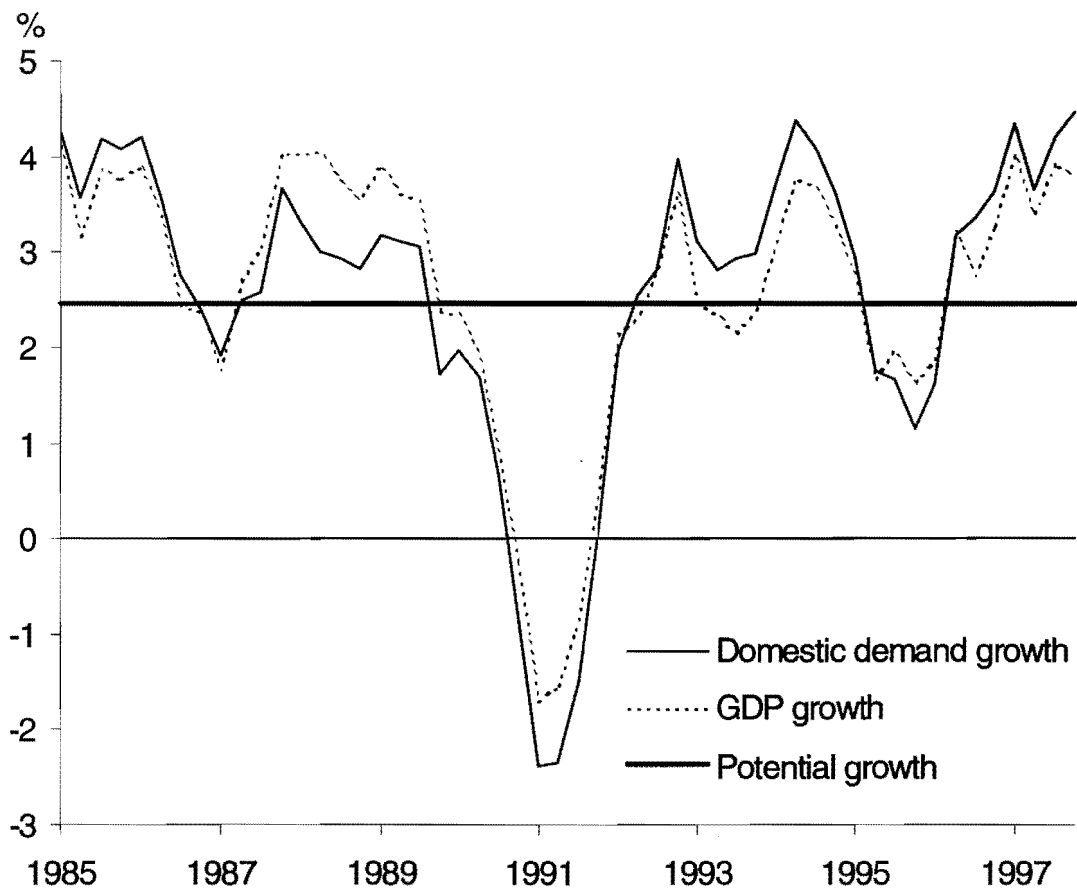
Significant rise in inflation is inevitable

If the bubble goes on, so will the Greenspan boom. The eventual outcome must be a significant rise in inflation. The unsurprising sequel to the acceleration in US money growth since 1995 will be a rise in inflation to 4% or more in 1999 and 2000, with the precise number depending on the exchange rate, oil prices and so on.

The arithmetic of the Greenspan boom

Above-trend growth in demand cannot go on for ever

Chart shows annual growth rates of real GDP, domestic demand and potential GDP.



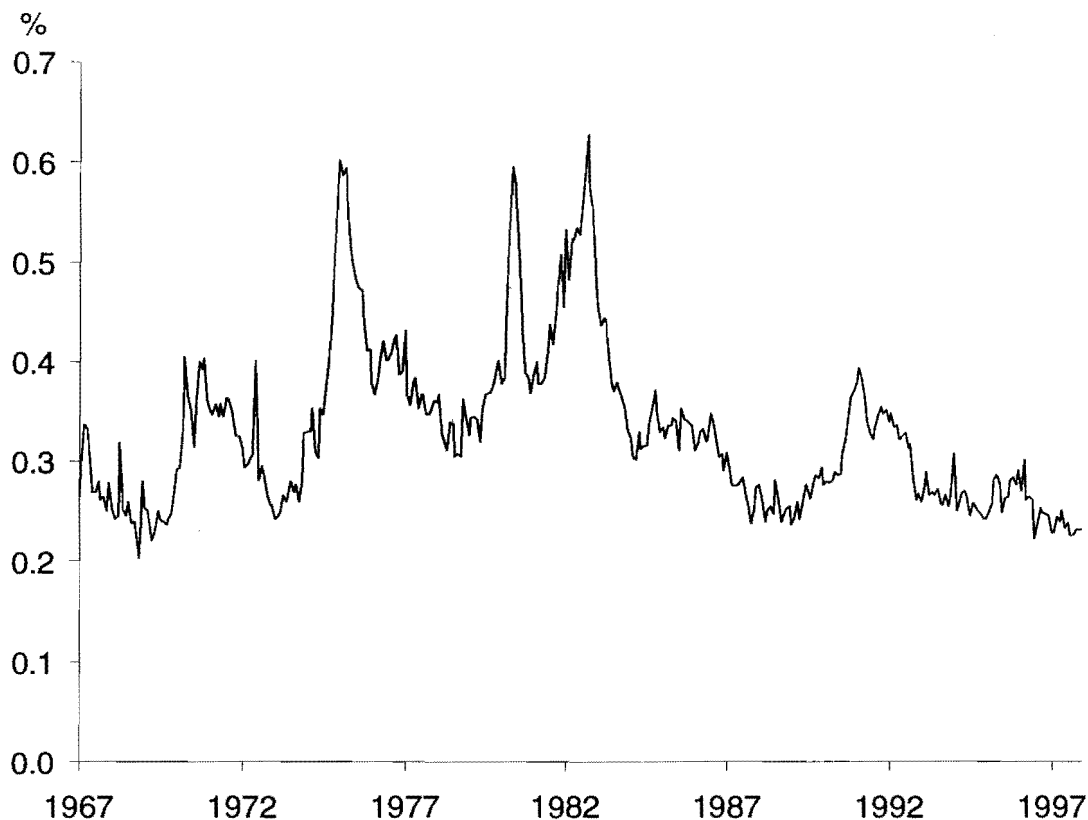
Sources: Federal Reserve Bulletin, Lombard Street Research.

Apart from a short phase in late 1994 and early 1995, which followed the increase in Fed funds rate from 3% in Jan 1994 to over 6% in early 1995, US domestic demand has been increasing faster than the trend rate of output growth since 1992. Output has responded to the extra demand, but its growth has been somewhat lower. So excess demand growth has gone abroad, with a widening current account deficit acting as a safety valve for inflationary pressure. The Federal Reserve has been reluctant to tighten monetary policy in early 1998, apparently because of worries that higher interest rates might reinforce the "Asian effect" and lead to an unduly sharp slowdown in the economy. But this argument overlooks that the Asian crisis is not relevant to US domestic demand. If domestic demand continues to boom (as seems likely) while the Asian crisis takes its toll on exports, the external payments deficit will widen to unprecedented levels.

Labour market at its tightest since the late 1960s

Unemployment not a great worry for American workers

Chart shows weekly initial unemployment claims divided by payroll employment, i.e., it measures the likelihood of a worker becoming unemployed in a one-week period.



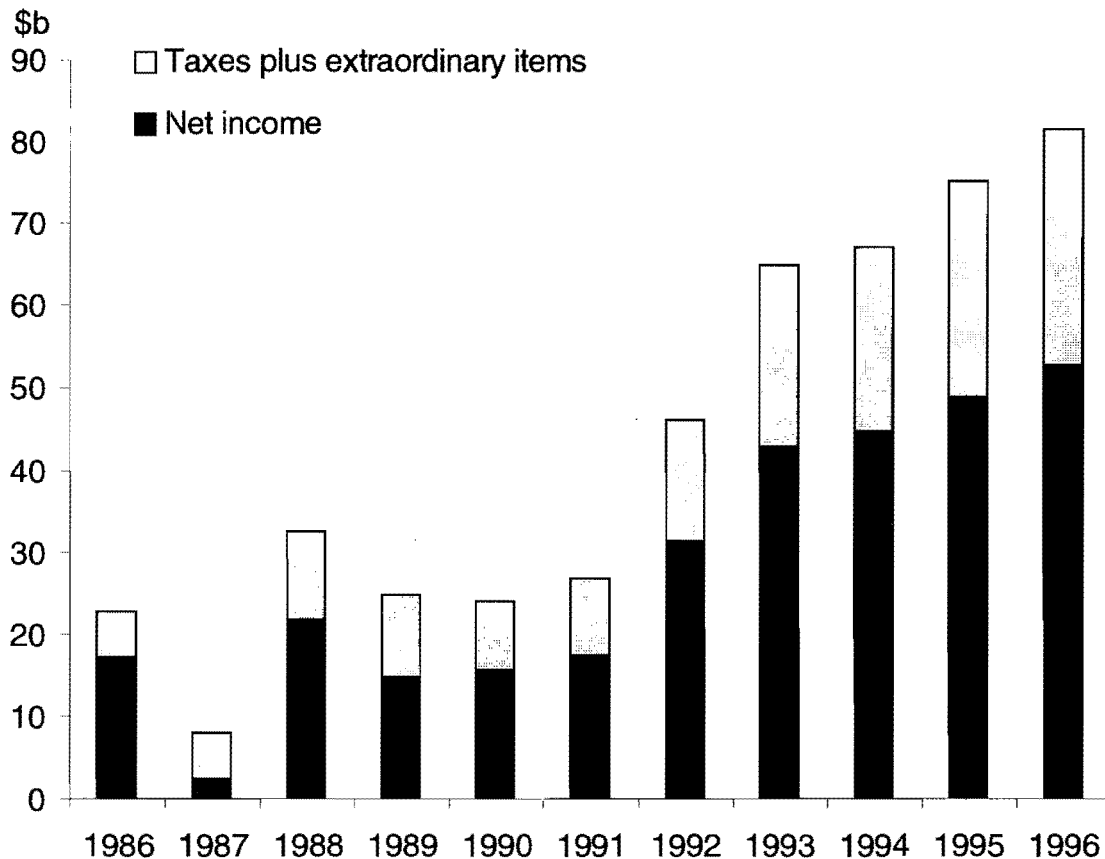
Source: Economic Indicators.

The American labour market has been tightening since the mild recession of 1991. (The slowdown in late 1994 and early 1995 did not interrupt the decline in unemployment.) The unemployment rate is down to almost 4 1/2%, the lowest figure since 1969. The chart shows another way at looking the labour market. By dividing initial unemployment claims by payroll employment, it shows the likelihood of becoming unemployment in a one-week period. This is at present about one-in-400, compared with one-in-250 at the worst point of the 1991 recession and one-in-150 at the worst points of the recessions of the 1970s and early 1980s. For the time being the threat of redundancy is not a significant constraint on wage demands. Most estimates of the "natural rate of unemployment" (i.e., the rate at which wage inflation would be stable) suggest that unemployment has to rise by about 1 1/2% to keep inflation under control. (See p. 8 on the current acceleration in wage growth.)

Profitable banks want to expand

Profits have soared in the 1990s, creating an over-supply of bank capital

Chart shows annual earnings, in the form of net income and taxes plus ordinary expenses, of US commercial banks and non-deposit trust companies.



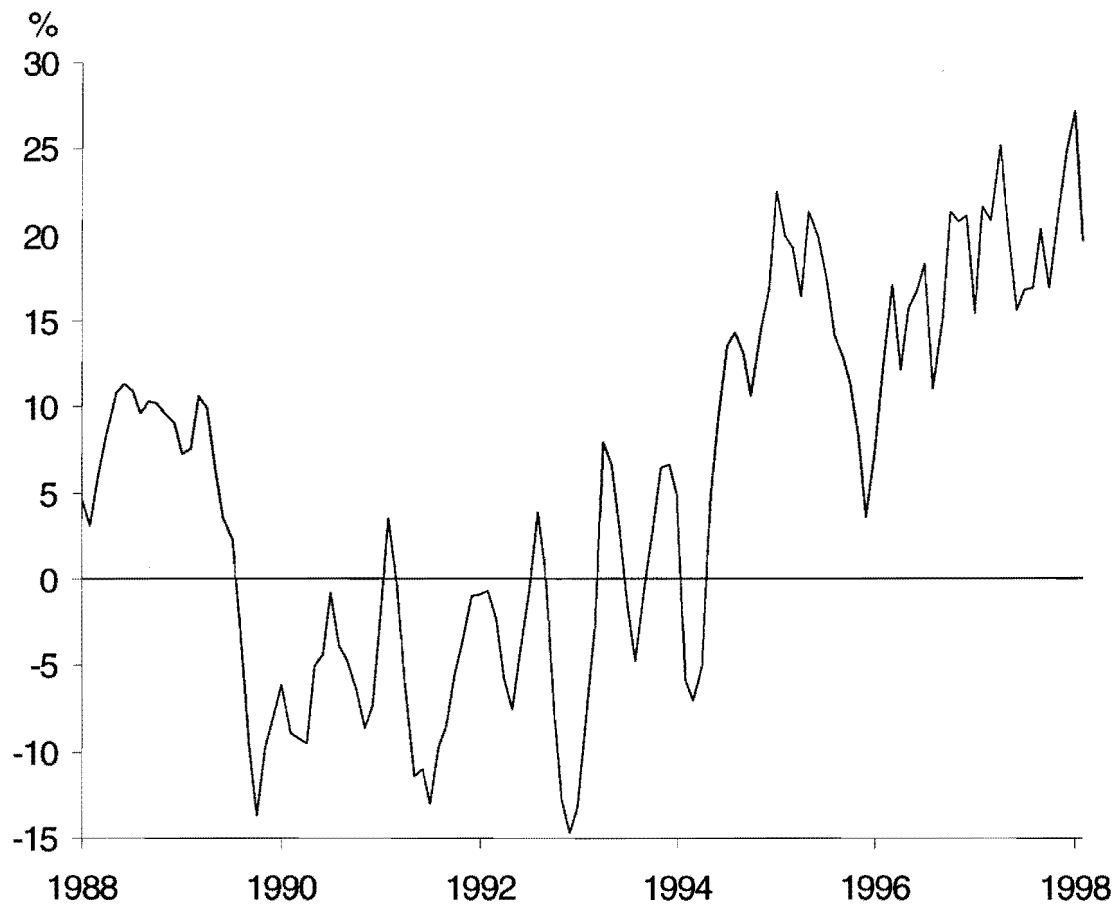
Source: Federal Reserve Bulletin.

Net income of US commercial banks rose for the seventh successive year in 1996, boosted by higher non-interest income and a drop in loan write-offs. These profits have resulted not only in bigger dividends, which have boosted the value of bank stocks, but also higher retentions. Equity capital grew by 9.4% a year between 1993 and 1996 and the latest data suggests similar growth in 1997. With capital adequacy restored after the recession of the early 1990s, banks are keen to lend. Loans and leases grew by 8.5% a year between 1993 and 1996, and by 8.2% in 1997. The expansion in credit has been a key influence on the growth of broad money. But, with output estimated to be 1 1/2% to 2% above its trend level, broad money growth of 9% is no longer consistent with low inflation in the medium term. Econometric work by Lombard Street Research suggests inflation could rise to 4% by the end of 1999.

Monetary excess

Soaring liquidity the key influence on buoyant asset prices

Chart shows annualised quarterly growth rate of nominal M3-M2 i.e. a measure of wholesale money.



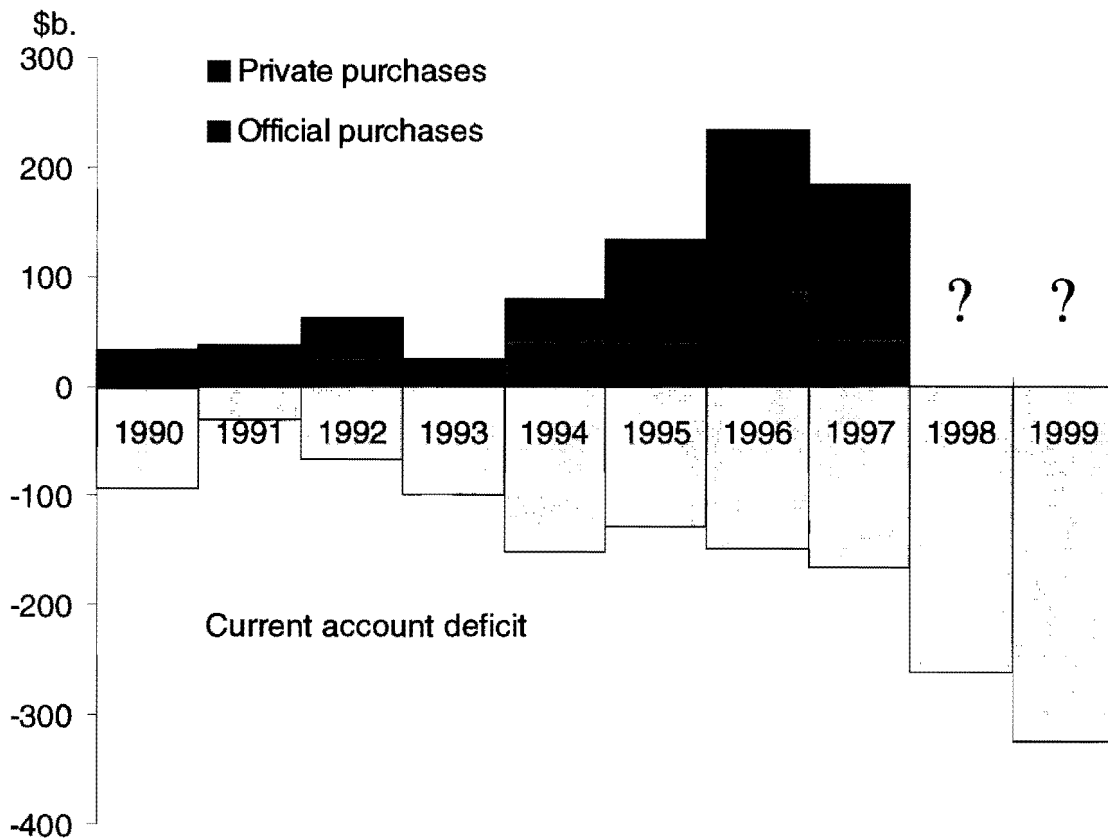
Source: Federal Reserve Bulletin.

In the long run the demand to hold real money balances depends predominantly on real variables. When individuals find themselves with "excess real money balances" they restore monetary equilibrium by buying assets, transferring their excess balances to companies and financial institutions. Consequently, both large time deposits, which are mainly held by companies, and money-market mutual funds, which are mainly held by institutions, have been growing by approximately 20% since the middle of 1995. In order to reduce these balances, companies and financial institutions have been buying assets from each other. But, at the aggregate level, a purchase is also a sale. Equilibrium can only be restored through an increase in prices. High broad money growth is, therefore, the key explanation for the continuing bull run in the already-overvalued US stock market.

Balance-of-payments trends

Current account deficit financed by foreign buying of US Treasuries

Chart shows the scale of net foreign purchases of marketable Treasury bonds and notes in relation to the current account deficit. Current account deficit in 1998 and 1999 is forecast.



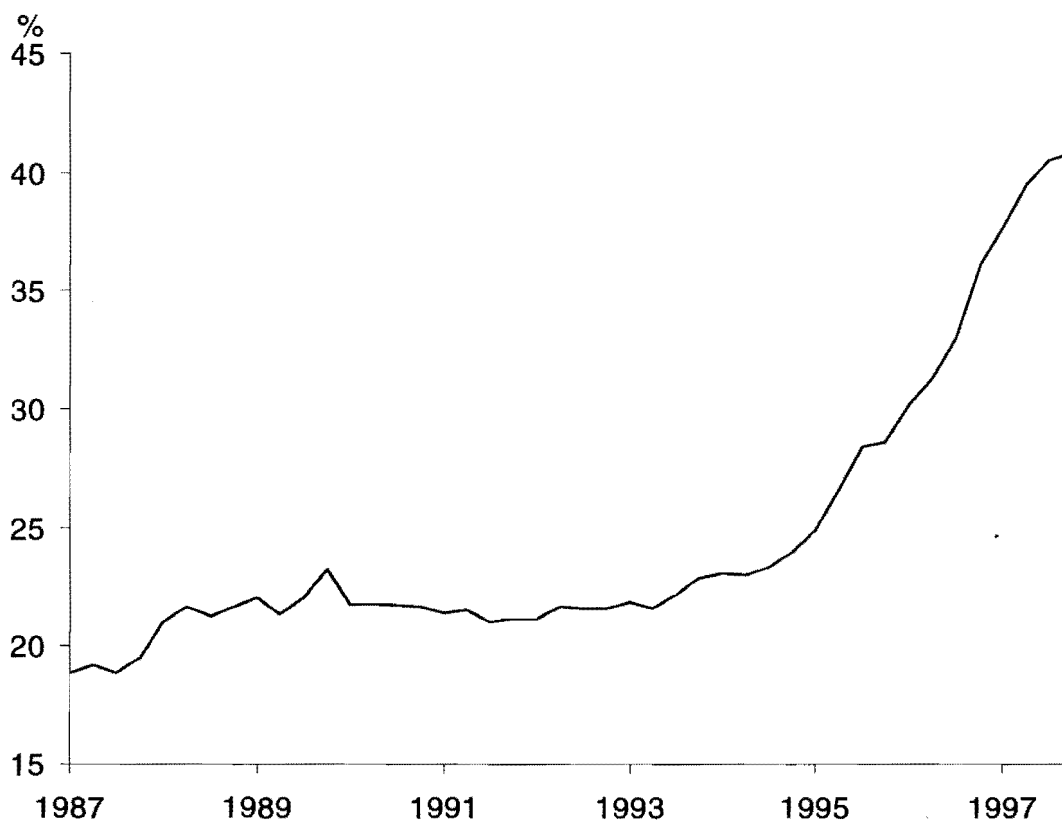
Sources: Federal Reserve Bulletin, Lombard Street Research.

Some commentators believe that the "Asian effect" on the world economy has been deferred. For example, Mr. Ore of the National Association of Purchasing Managers claimed - in his statement on the NAPM's very buoyant March survey - that the "full magnitude of the Asia impact has not yet hit the US economy". In fact, the Asian crisis is already evident in a mass of data. The NAPM survey was published on the same day as the South Korean trade figures, which showed a March surplus of \$3.74b. This was Korea's highest monthly surplus ever and a swing of \$5b. from a year earlier! American officialdom shows little concern about the implied lurch into deficit of the USA's own external payments. The chart shows that the financing of the growing deficit has been dominated by foreign buying of US Treasury debt. This foreign buying must become even larger in 1998 and 1999, as the annual deficit widens towards \$300b.

Unsustainable

Nearly half of American public debt now foreign-owned

Chart shows the percentage of the public debt held by private investors (i.e. not held by US government accounts and Federal Reserve banks for accounting and monetary policy purposes) that is owned by foreign investors.



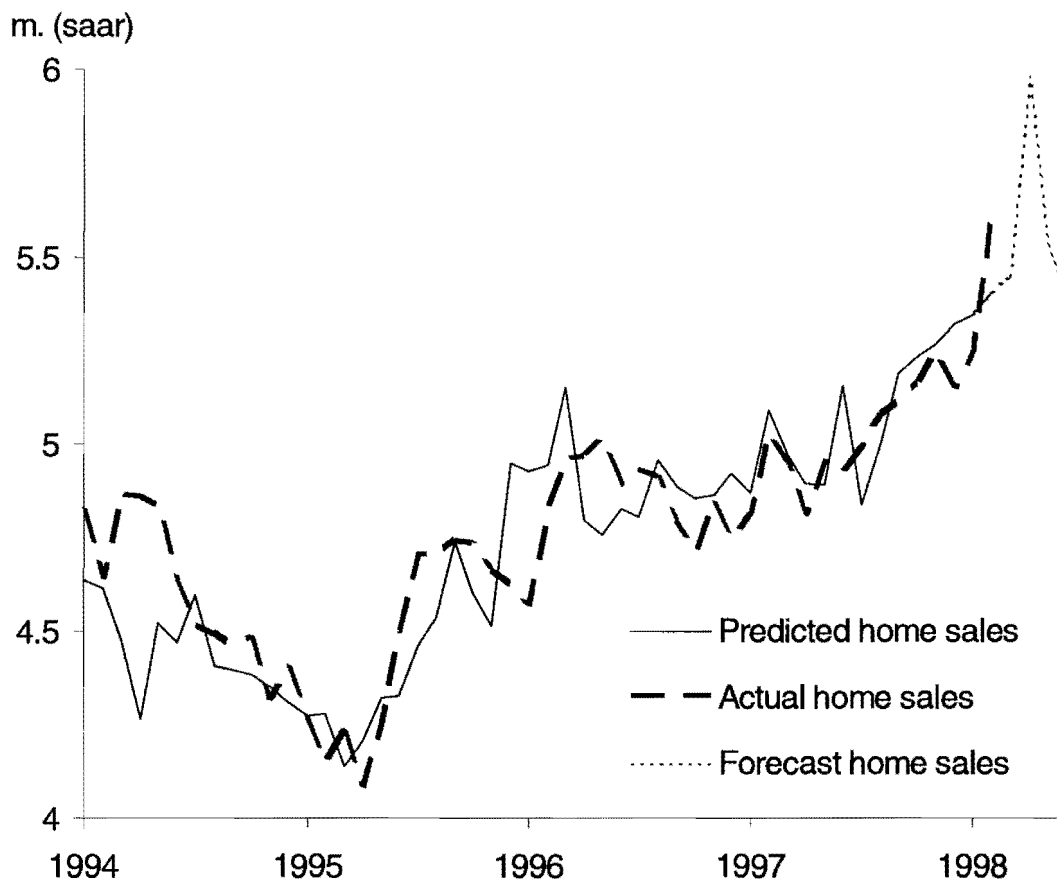
Source: U.S. Department of the Treasury.

This chart demonstrates another extraordinary feature of the financial flows behind the Greenspan boom. The American economy is by far the largest in the world. Given its scale relative to other countries, a natural expectation would be that foreign ownership of its national debt would be minimal. This was true in the 1950s and 1960s, but had begun to change by the 1980s and early 1990s. Then - in the three years to the end of 1997 - the foreign-owned share jumped from 21.7% to 37.7%. The foreign buying was so intense that it exceeded the increase in the national debt. In consequence, the American private sector has been a net seller (!) of US Treasuries since 1994. As the American private sector has an ever-rising portfolio demand for bonds, this surprising development has been possible only at high bond prices. The resulting fall in bond yields has improved the valuation basis of all assets, including of course the equity market.

Housing activity leads the economy

Home-buying stimulated by stock market gains and low bond yields

Chart shows actual and forecast total home sales in the US. The figures for predicted and forecast home sales are based on an equation with mortgage applications as the independent variable.



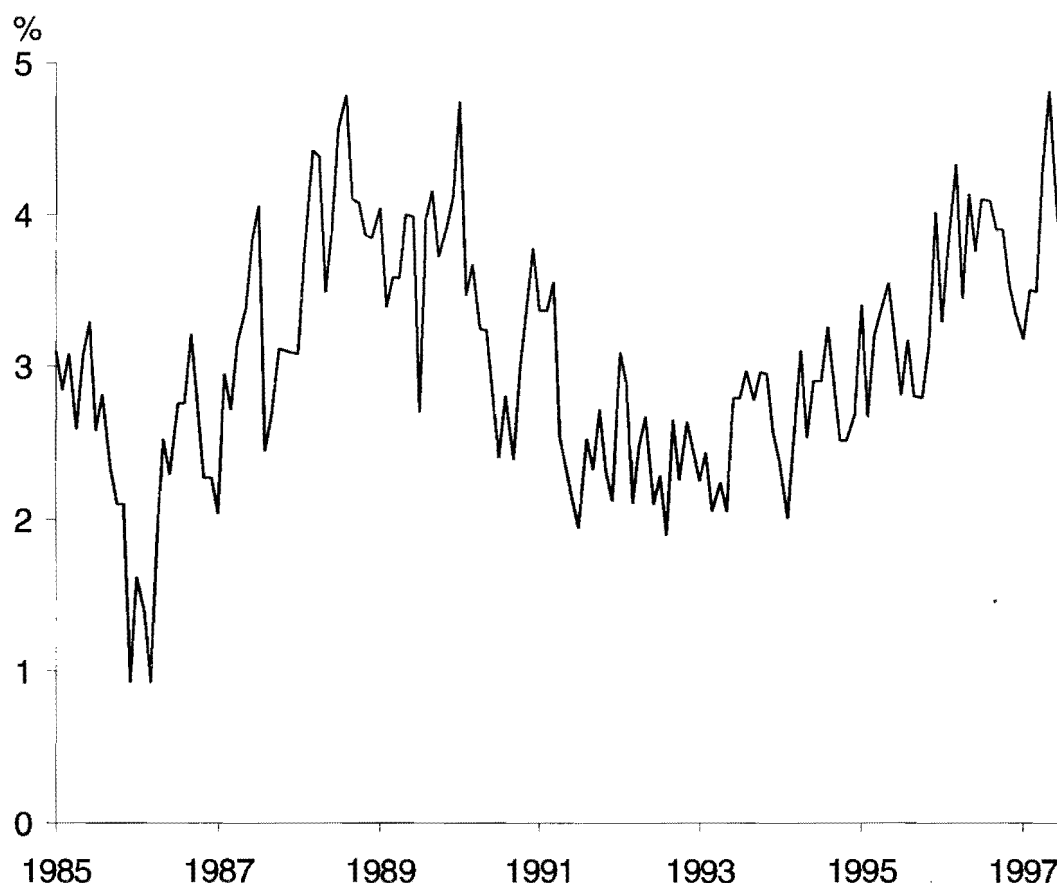
Source: Department of Commerce, National Association of Realtors, Lombard Street Research.

New and existing family home sales have been strengthening since mid-1995. Econometric work by Lombard Street Research suggests that there is a statistically-significant correlation between mortgage applications and total home sales three months later. Mortgage applications in the first quarter of 1998 were 7% higher than in the previous quarter. Home sales are therefore likely to rise from 5.4m. per month (at a seasonally adjusted annualised rate) in the first quarter of this year to 5.8m. in the second quarter, their highest rate in the 1990s. Further, with the National Association of Realtors Housing Affordability Index rising to 136.5 in February (100 equals the point where a family earning the median income can just afford a median-priced existing home), mortgage applications should remain strong in the coming months. With the housing market already tight, further growth will not only contribute to above-trend domestic demand, but also higher building costs and rising asset price inflation.

Significant rise in inflation now inevitable

Increase in average hourly earnings rising since 1995

Chart shows six-month annualised growth rate of average hourly earnings.



Source: Economic Indicators.

Most estimates are that the USA's natural rate of unemployment (see p. 8 for definition) is 5 1/2% - 6%. As the unemployment rate went beneath this figure in early 1996, it would be logical to expect wage growth to accelerate thereafter. The chart shows that this is exactly what happened. Expressed in terms of an annualised six-month change, the increase in average hourly earnings climbed from a low of 2% - 2 1/2% in 1992 and 1993 to almost 5% in late 1997. Over the last two years price inflation has been restrained by lower import costs due to the dollar's strength and favourable commodity price movements (such as the collapse in oil prices). But the deterioration in wage inflation is clear evidence of over-heating. If Friedman's natural rate theory is correct, wage increases will continue to rise while unemployment remains beneath 5 1/2%-6%. If the dollar were also to weaken in 1999 and 2000, inflation would move towards the 4% - 5% level, perhaps even higher.