

Decline And Fall

Global

Bubbles, Busts And Deflation

- ▶ **Post-bubble hangovers can last a long time...**
- ▶ **...suggesting that the US and global recovery will disappoint...**
- ▶ **...with remarkably low inflation (and a whiff of deflation)**

What will life be like beyond the recession? After all, the experience of many countries suggests that cyclical downswings can be associated with on-going changes in economic behaviour.

Our 'Recession Roadmap' highlights where the risks lie. It provides a mixed message for the US – and maybe for other countries – today. The good news is that the US is not in the same boat as it was in the 1930s or Japan was in the 1990s. The bad news is that America's boat is still in danger of capsizing. The excesses of the 1990s imply that any American recovery will ultimately be disappointing, associated with ongoing deflationary worries.

Cyclical downswings sometimes lead to a better medium economic outlook. 'Planned recessions' are good examples. They are designed to put an economy back on a sustainable path and, as such, tend to lead to benefits in the form of lower inflation, a better allocation of resources and, with luck, a higher trend growth rate.

The current recession, however, falls into the 'unplanned' category. 'Unplanned recessions', coming after a period of financial market excess, do not give way to improving medium-term fundamentals. Associated with collapsing private sector expectations, they are more difficult to deal with.

'Unplanned recessions' are sometimes associated with the bursting of a financial and economic bubble. Post-bubble environments, however, tend to vary considerably. For emerging market economies and small open industrial economies, initial sizeable losses can be quickly reversed. For large closed economies – the US in the 1930s and 1970s, Japan in the 1990s – the prospect of sustained strong recovery is low. Moreover, the adjustment period often involves a shock to the price level.

The role of asset prices within modern economies is much bigger than in earlier decades. A combination of free capital markets, an ageing population and financial market liberalisation has increased private sector susceptibility to asset and liability mismatches. Resource allocation mistakes over time – leading to periods of excessive capital and consumer spending followed by periods of prolonged downward adjustment – are on the increase.

Under these circumstances, recovery mechanisms tend to work either slowly or not at all. We highlight a number of factors that may prevent monetary and fiscal policies from working well at the moment and suggest that deflation is now a greater risk than at any other point in the last fifty years. Moreover, once deflation begins, policy makers begin to run out of recovery 'options'. Given the speed of the policy response so far, this 'nightmare' scenario should be avoided but the battle against deflationary risk may continue for some time.

Economics

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The Abridged Version

Economists often assume that cyclical downswings in economic activity can easily be shrugged off. Even during the most painful of recessions, there is always light at the end of the tunnel and there is always a good chance of a quick return to the previous 'underlying trend' rate of growth.

Our analysis suggests that this assumption is partly untrue. While economic downswings do not always damage longer term growth prospects, sometimes they can mark the beginning of a sustained period of economic under-performance, leading to low growth (or, indeed, outright contraction), shocks to the price level and poor returns on financial assets (page 12-17).

Our 'Recession Roadmap' highlights the risks that face specific economies when they head into recession. Some economies benefit from recessions. 'Planned recessions', designed to remove structural impediments to growth, can leave an economy in a healthier underlying position. The UK's recession at the beginning of the 1980s, for example, gave way to a higher trend growth rate relative to the 1970s and a lower rate of inflation. Arguably, the recession – painful though it was – removed some of the earlier impediments to growth (pages 18-24).

'Unplanned recessions' are less forgiving. They are typically linked to a misallocation of resources over time and, for the most part, are associated with private sector excess. Unplanned recessions are associated with collapsing private sector expectations for economic growth and profits and, from a policy perspective, are very difficult to turn around. They can be regarded as hangovers from earlier excess.

Good examples of unplanned recessions include the US in the 1930s and Japan in the 1990s. But there are other, less spectacular, examples. Mexico's experience in the mid-1990s could also be regarded as an unplanned recession. Often, unplanned recessions are associated with previous economic and financial bubbles, whereby both assets and liabilities are overly inflated relative to the underlying growth rate of the economy (pages 18-24).

No clear pattern emerges from post-bubble environments. Sometimes the adjustment is short but violent. Think, for example, of the Mexican downswing and subsequent rebound in 1995 and 1996. Others seem to take forever. Japan's experience over the past ten years is a good example. We suggest that these differences can be partially explained through both size and stage of development.

Emerging market economies tend to suffer violent reactions because foreign capital can depart so quickly. Equally, however, they can enjoy relatively early recoveries because they benefit from official bailouts. Small, open developed economies can sort their bubble problems out through devaluation: good examples include Sweden and the UK in the first half of the 1990s. For large, closed economies, however, there are far fewer options. Indeed, large closed economy bubble shocks can lead to major disturbances to the price level: either deflation, as in 1930s America and 1990s Japan, or inflation, as in 1970s America (pages 25-30).

There has always been a relationship between asset price movements and changes in economic performance. Recent developments, however, suggest that asset prices may now

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be having a larger and larger influence. First, ageing populations imply that there is now a greater dependence on financial capital rather than human capital as a source of income over a lifetime. Big asset price moves today may, therefore, have a very substantial impact on savings behaviour. Second, the free movement of capital across borders has made it easier for countries to run current account deficits in the short term, even if those deficits are not sustainable forever. Third, the process of financial disintermediation over the past ten years has directly increased the exposure of both borrowers and lenders to capital market movements (pages 31-37).

Unplanned recessions may be associated with policy failure, or only weak policy success. Unless aided by fiscal support, recoveries often depend on a reduction in savings out of current income either for consumers or for producers. For consumers – upon whom American recoveries have depended over the last twenty years – lower savings are prompted either through lower than expected inflation – giving unanticipated real wealth gains – or a rapid rise in asset prices. It may be difficult to generate a further boost today: consumers have already inflated their balance sheets heavily against a background of earlier asset price gains – now partially reversed – and inflation cannot realistically fall much further (pages 38-44).

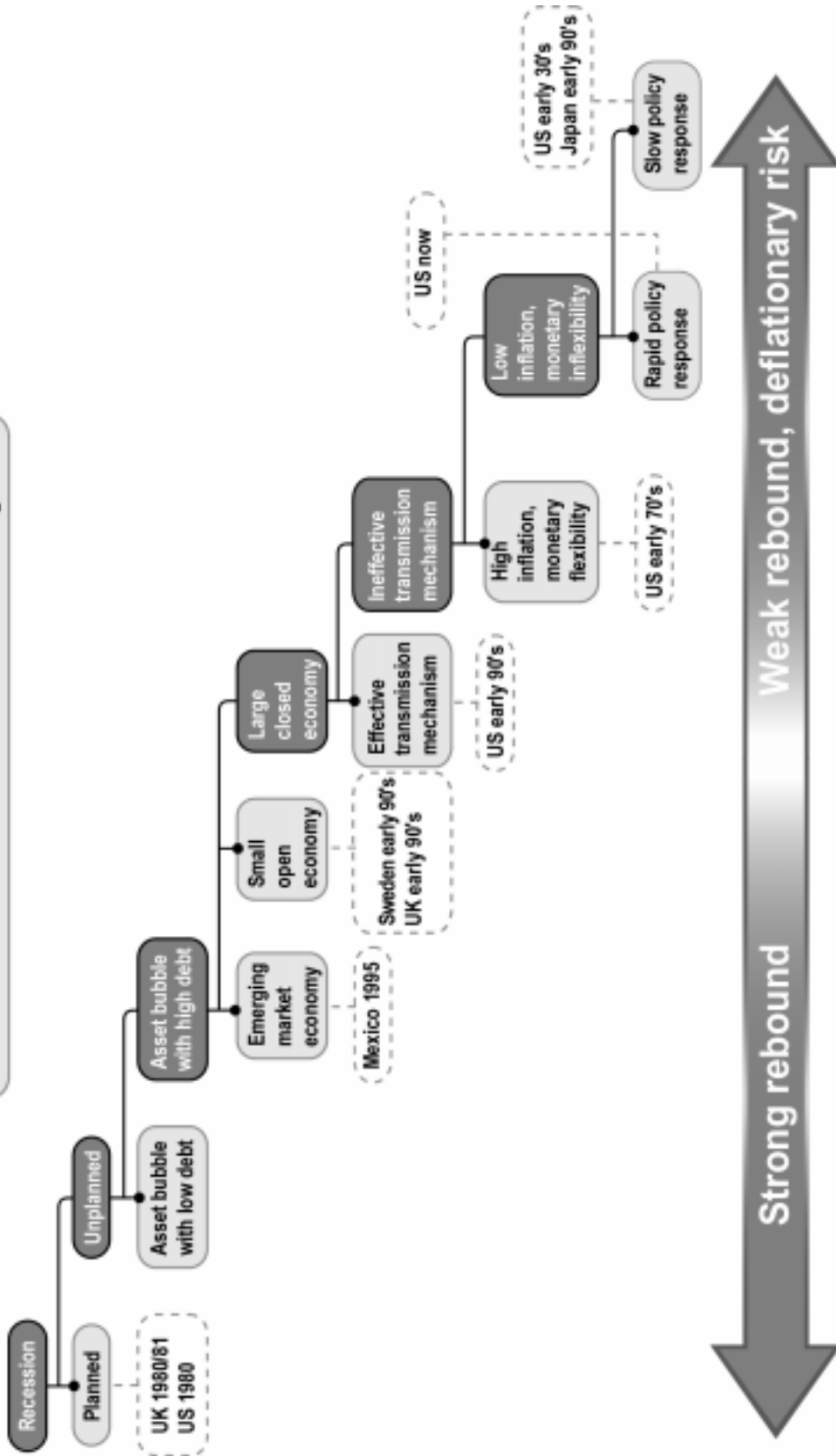
Indeed, although low inflation may reduce the frequency of hard landings, it may, at the same time, reduce the ability of policy makers to foster recovery from recession. Recoveries tend to be easier when real interest rates are low – preferably negative – and when the yield curve is steeply positive. If inflationary expectations are low, both conditions are more difficult to achieve. Moreover, persistent failure could increase the risk of deflation. Falling prices are, perhaps, the biggest risk now facing the global economy: by raising the return on cash relative to other assets, deflation removes risk appetite and chokes off growth on – potentially – a long term basis (pages 45-48).

Our 'Recession Roadmap' suggests that the US is now at risk of a prolonged period of economic adjustment and under-performance relative to its own experience of the late 1990s – and, indeed, of the 1980s – and, possibly, relative to countries elsewhere. The US is a large closed economy. It has experienced both a bubble and a subsequent recession. The American private sector balance sheet inflated rapidly in the second half of the 1990s. Policy may have some short-term impact on economic growth but any strong upswing is unlikely to be sustained. The first decade of the 21st century is likely to be a lot more difficult than the last decade of the 20th century. The good news is that the Federal Reserve and the fiscal authorities seem to recognise the potential scale of the problem and are adjusting policy accordingly. The bad news is that policy is unlikely to bring sustained benefits following years of excess (pages 45-48).

If these conclusions are right, we may be on the verge of another policy revolution, equivalent in scale to the rejection of the 'full employment' objectives of the 1960s. Increasingly, policy makers may be forced to recognise that price stability, on its own, is no guarantee of overall macroeconomic stability and, as such, will be forced to recognise more explicitly the role played by asset prices and debt in promoting or threatening macroeconomic stability (pages 52 to end).

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A recession roadmap



Source: HSBC

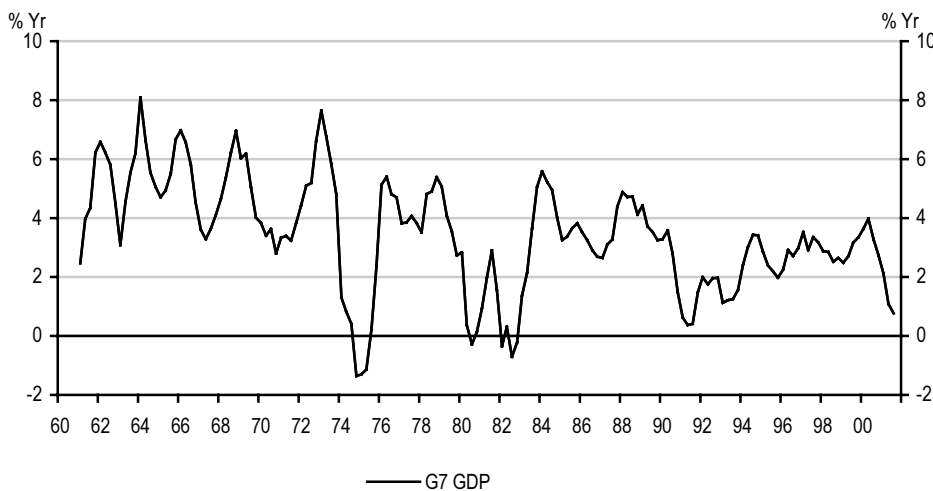
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The secrets of success

What are the limits to economic recovery? Why are some countries so slow to pull themselves out of recession? Is it really the case that the return of price stability has contributed to a more stable and predictable outlook for economic growth? What is the role of asset prices in determining growth patterns over different periods of time? Do conventional productivity models fully explain the secrets of economic growth? Or do they miss out vital determinants of changing economic prosperity?

These are very ambitious questions to which there will never be clear answers. However, they are questions that need to be addressed. After a period of tremendous economic confidence built on the hopes offered by new technologies, the world economy suddenly looks vulnerable and unstable. With recession already entrenched in Japan and other parts of Asia, coming through in the US and Germany and threatened elsewhere in the world, the near-term outlook is very poor. Yet is this just a cyclical slowdown? Or will this downswing expose structural problems that keep growth weak over an extended period of time?

1. Growth in the industrialised world heading down



Source: Thomson Financial Datastream, HSBC calculations

At the root of many of these questions is the performance of the US economy. A lot of very ambitious claims have been made about US economic performance over the last five years. Some of these claims appear to be genuinely impressive. For example, in terms of GDP growth, the US has outperformed its peer group of advanced industrial economies by a considerable margin (table 2). The US has also outperformed in terms of productivity growth – defined here as output per head – although the degree of out-performance against its peer group is less impressive. This suggests that part of America's success in recent years has more to do with labour force growth, and reductions in unemployment than productivity growth *per se*.

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2. The US record against its peer group: the late 1990s

Country	Annualised growth in GDP in five years to 2000 (%)	Annualised growth in GDP per person employed in five years to 2000 (%)
US	4.1	1.7
Japan	1.3	1.3
Germany	1.8	1.1
France	2.6	0.7
UK	2.8	1.5
Italy	1.9	0.8
Canada	3.9	1.7

Source: Thomson Financial Datastream

Relative to its own history, America's performance is still impressive. However, some of the more ambitious claims associated with the new paradigm theories of the late 1990s do not – yet – stand up to close scrutiny. Table 3, for example, shows rolling five-year annualised growth rates for the US economy. Certainly, recent performance stands out relative to, for example, the early 1990s. Compared with other periods, however, America's performance is not unique. In terms of both growth and productivity, the recent acceleration is only a little better than the relatively short burst seen during the mid-1980s, and nothing like as impressive as the 'golden era' of economic growth in the late 1950s and the early 1960s when, for many years, the US achieved outstanding economic results relative to subsequent developments. (The productivity numbers in table 3 use the Federal Reserve's preferred definition, which gives an upward bias relative to the internationally comparable definition used in table 2. While both measures have their merits, it should be noted that some of the more extravagant claims regarding US productivity growth have pitched the Fed's preferred measure against the output per head measures for other countries, effectively an 'apples and pears' mistake.)

Table 3 also suggests that, other than the 1960s, the US has been unable to sustain rapid productivity growth over an extended period of time. Delivering an acceleration in productivity growth seems to be easy through the course of an economic upswing: sustaining the new, higher, rate across economic cycles has been much more of a challenge. Indeed, over the last thirty years, the inability to sustain faster productivity growth has been a key part of America's relatively low growth rate compared with the experience of the 1950s and 1960s. The recent acceleration in productivity growth needs to be seen in this context. Can the US sustain the impressive productivity gains of recent years, taking the economy back to the 1960s 'golden era'? Or will the economy fail once again, hit by the damaging effects of recession and disjointed recovery? Put another way, to what extent was the pick-up in growth in the second half of the 1990s a cyclical rather than structural affair? And, to what extent will the recent downturn expose structural, rather than purely cyclical, weaknesses?

This is an incredibly important issue. If growth rebounds after the latest downswing and the US economy delivers a continuation of the growth rates of the late 1990s, then we will truly be in a new 'golden era'. At least some of the rapid gains in equity prices seen in the late-1990s will have been justified. The dollar's value may be relatively secure. And the coming

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recession will be seen as no more than a blip against a background of strong underlying economic performance.

3. The growth story: the US economy since the late 1950s

Year	GDP growth, 5 year annualised percentage change	Non-financial corporate output per employee hour, 5 year annualised percentage change	Year	GDP growth, 5 year annualised percentage change	Non-financial corporate output per employee hour, 5 year annualised percentage change
1955	4.5	n.a	1978	2.9	1.5
1956	3.4	n.a	1979	3.7	1.8
1957	3.0	n.a	1980	3.7	1.0
1958	1.8	n.a	1981	3.1	0.7
1959	3.4	n.a	1982	1.7	0.4
1960	2.5	n.a	1983	1.5	0.9
1961	2.6	n.a	1984	2.3	1.6
1962	3.4	n.a	1985	3.1	2.1
1963	4.5	3.6	1986	3.3	2.1
1964	4.2	3.3	1987	4.4	2.6
1965	5.0	3.5	1988	4.4	2.2
1966	5.8	3.1	1989	3.7	1.4
1967	5.1	2.6	1990	3.3	1.2
1968	5.2	2.5	1991	2.5	1.3
1969	4.6	1.8	1992	2.4	1.1
1970	3.4	1.4	1993	2.1	1.0
1971	2.8	1.9	1994	2.2	1.7
1972	3.3	2.1	1995	2.4	1.8
1973	3.5	1.7	1996	3.2	2.0
1974	2.8	1.2	1997	3.5	1.6
1975	2.7	1.9	1998	3.8	2.1
1976	3.1	1.7	1999	3.8	2.2
1977	3.0	1.6	2000	4.1	2.9

Source: Thomson Financial Datastream

The Federal Reserve is, understandably, keen for all of us to believe that a new 'golden era' has truly arrived. Although policy statements through the course of 2001 were used primarily to justify aggressive interest rate cuts, they nonetheless continued to emphasise that "the long-term prospects for productivity growth and the economy remain favourable and should become evident once the unusual forces restraining demand abate" (FOMC press release, 2 October 2001). Nevertheless, even within the Fed, there appear to be renewed signs of doubt. At his testimony to Congress on 17 October 2001, Chairman Greenspan appeared to be suggesting that, although productivity growth was likely to remain stronger than the averages seen during the 1970s and 1980s, it might not be able to match the exceptional performance seen in the second half of the 1990s.

Thinking the worst

What happens if the productivity miracle has been seriously overstated? What happens if the expected returns on earlier investments fail to materialise, leaving the US recession

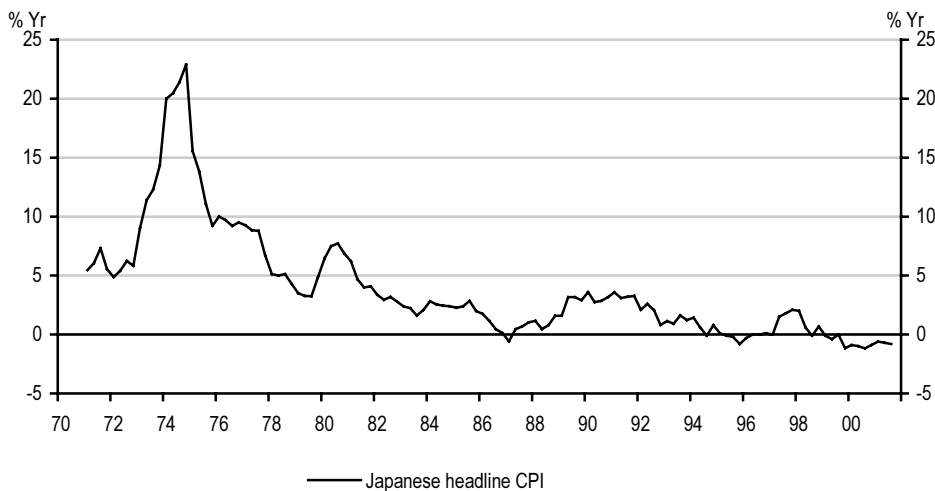
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longer or deeper than expected? Or if the rebound is disappointingly weak? Or if the trend growth rate that emerges from the current downswing is manifestly weaker than the assumptions derived from the excellent performance seen during the second half of the 1990s? What happens if, as a result of globalisation, shocks in the US have a bigger impact on economies elsewhere?

Think of some of the consequences:

- ▶ The 'new paradigm' expectations built on the benefits stemming from new technologies would be found wanting. No one should deny that new technologies are transforming the ways in which we live. What, perhaps, should be questioned is the impact of new technologies on growth, profits and overall macroeconomic stability. After all, the 1920s were wonderful years for technological innovation yet they were followed by the 1930s Depression. Could it be that technological change can be a key source of macroeconomic *instability*? If so, what are the implications for both cyclical and trend growth over the next few years?

4. Japan's inflation record in the 1980s was excellent – but then what happened?



Source: Thomson Financial Datastream

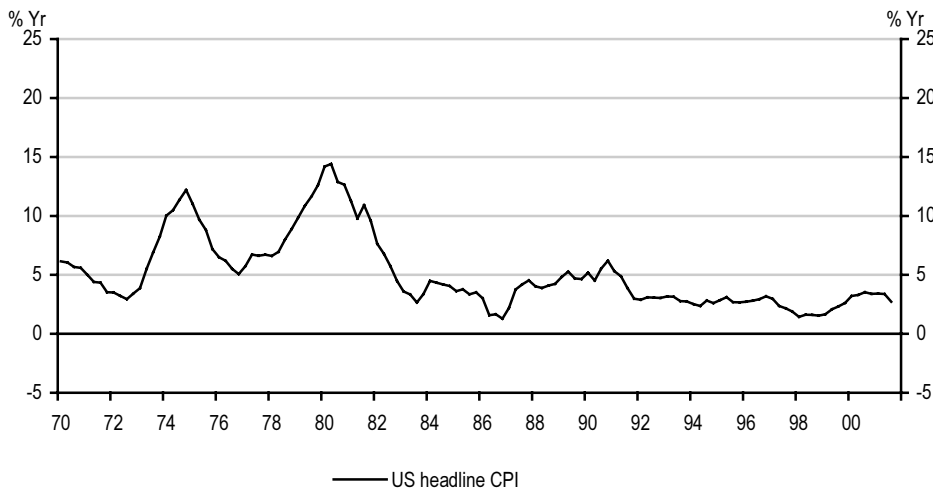
- ▶ The performance of asset prices in the late-1990s will, in hindsight, be increasingly regarded as a 'bubble'. As the bubble deflates, there could be sizeable effects on savings and investment decisions. For example, faced with a lower post-bubble stock of assets and a lower prospective rate of return, there may have to be a permanently higher level of savings. How would this shift impact on longer-term economic and financial performance?
- ▶ The achievement of overall price stability will no longer be regarded as a sufficient condition for macroeconomic stability (charts 4 and 5). Central banks and governments around the world may be forced to review their policy priorities. In a low inflation world, there may be other challenges. We know, for example, from pre-1970s economic history

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that stable prices in no way guarantee macroeconomic stability. Could it be that the 'price stability' objective of the 1990s will be followed by the kind of radical rethink forced upon policy makers after the breakdown of the 'full employment' objective in the late-1960s and the early-1970s, with more emphasis on asset prices and financial liabilities?

- ▶ Lessons will have to be learnt in terms of our ability to distinguish between cyclical and structural effects on economic growth. Perhaps the distinction is too arbitrary. Indeed, it may be the case that supposedly cyclical effects can have structural implications and supposedly structural effects can have significant cyclical consequences (see box on page 10)

5. America's price stability in the 1990s provides no guarantee of ongoing success



Source: Thomson Financial Datastream

To examine these issues, we have divided this paper into seven key parts.

First, we look at some lessons from history

There are good examples of perceived shifts in trend growth rates that seem to be associated with booms and the arrival of recession. Some of these shifts are both accurate and positive - for example, the modest pick-up in trend growth in the UK in the 1980s relative to the 1970s. Most shifts, however, have been negative - including the US disappointment of the 1970s and 1980s, the Japanese losses of, first, the 1970s and, second, the 1990s and the recent disappointing trends seen in both Germany and France. We look at the reasons behind the apparent relationship between the arrival of recession and changes in trend growth expectations.

Second, we distinguish between 'planned' and 'unplanned' recessions

'Planned' recessions are a means to an end. They may be painful and undesirable in themselves, but they may lead the economy to a healthier future path, perhaps associated with greater price stability. They are, mostly, a response to an earlier deterioration in the

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structural performance of an economy. 'Unplanned' recessions are typically associated with collapsing private sector expectations and tend to respond less effectively to supportive changes in macro-economic policy.

Growth puzzles

It is often assumed that, given the right ingredients, an economy will perform well. Thus, in the case of the US, rapid technology advance, flexible labour markets, a rapid growth rate of the population via immigration, a financial market framework that ensures respect for shareholder value and support for open markets and trade are seen to be key factors behind the success of economic growth in recent years. Knowing, however, what the appropriate ingredients are does not guarantee a successful outcome. After all, making a cake is not just a case of having the right ingredients – otherwise we would all be great chefs and bakers. Consider the following two examples, both based on an economy which can sustain a growth rate over the medium term of 3% per annum:

Example 1: The economy has grown at 3% per annum in the past and will carry on doing so in the future. Expectations of 3% growth are persistently met and, as a result, there are few risks to macroeconomic stability. The 3% growth rate is driven by an effective combination of the ingredients outlined above.

Example 2: The economy has grown at 4% in the past, based on – subsequently unjustified – hopes of some form of technology miracle. Expectations have delivered a rapid rise in the capital stock and, at the same time, have fuelled a boom in asset prices. The 4% growth assumption turns out to be wrong and, as a result, the economy is left with significant financial problems, which reduce its ability and willingness to invest and innovate. The pace of innovation declines rapidly and, as a result, the growth rate shifts down from 4% to, say, 1%. The problem comes not from the ingredients themselves but how they were treated. In this example, the cake was burnt leaving a pile of indigestible crumbs.

The key point is that economic growth is a combination of 'enabling factors' – the right kinds of ingredients – and 'combining factors' – the appropriate mixture and treatment of those ingredients. Both are necessary to ensure an appropriate outcome for the economy. Growth accounting frameworks – commonly used to explain America's success in recent years – tend to focus on 'enabling factors' alone. They do not look seriously at how information is transmitted across sectors at any specific point in time and nor do they deal with the impact of informational failures over time. Yet these are precisely the problems that have derailed economies in the past.

Third, we look at more specific examples associated with the bursting of financial bubbles

Specifically, we are interested in the varied responses of countries to environments in which economic and financial bubbles burst. In the case of Mexico, for example, the bursting of the bubble at the end of 1994 led to a quick and violent collapse in economic activity but an equally quick and violent subsequent recovery. Japan's experience has been quite the opposite, with only modest output losses stretched out over an incredibly long period of time. We suggest that size, level of development and structure may be important influences on the response of differing economies to bubble-bursting experiences.

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Fourth, we look at the role of asset prices

We suggest that rapid shifts in asset prices can create the illusion of structural economic changes which, in turn, lead to the mistiming of resource allocations over time. To the extent that financial disintermediation has risen during the course of the 1990s, we suggest that these mistiming problems may be on the increase. Combined with the impact of an ageing population, more companies and more consumers are now exposed to capital markets than ever before, particularly in the US. These mistiming issues have a significant relevance for the years ahead: if there was excess investment and durables expenditure in the late-1990s, then a 'black-hole' may have been created in terms of demand within the first years of the 21st century.

Fifth, we look at the extent to which the policy success in terms of low inflation may have led to significant – and perhaps inappropriate – shifts in risk appetite

We suggest that confidence in the 'value' or 'stability' of financial wealth has grown significantly over the last ten years. Low inflation may have created the impression – perhaps falsely – that the economic cycle was more stable, less subject to change, and that, as a result, there should be greater confidence in both the stability of interest rates and of profits growth. We cast doubt on both of these assumptions.

Sixth, we look at the various 'recovery mechanisms' which have supported economic growth over the last twenty years

For a variety of reasons, consumers are in weaker position to take up the recovery running today. Moreover, we suggest that low inflation may have reduced the power of monetary policy, increasing the risks of an outright move into deflation. We also look at the constraints imposed on economic recovery stemming from imbalances of assets and liabilities both domestically and internationally.

Seventh, we suggest that, as a result of these 'macroeconomic imbalance and instability' arguments, the key influence on economic growth over the years ahead is likely to be the extent to which macro-economic excess now needs to be squeezed out of the system

This excess, in turn, may have been associated with earlier excessive hopes with regard to the technology revolution. One implication may be a relatively slow and unsustained response to changes in terms of economic policy. This is particularly worrying in an environment where virtually all major countries have embraced a similar policy approach. If it turns out that the 'inflation targeting' approach has significant weaknesses, we may be on the verge of another macroeconomic policy revolution of the kind last seen in the 1970s, when the belief in Keynesian demand management began to unravel.

Shifts In Trend Growth

Simple economics is too simple

As a rule of thumb, economists tend to assume that 'trend' or 'sustainable' growth for the majority of industrialised countries is around 2¼ or 2½% per annum. Thinking about the experience of economies within the G7 area, this is clearly a very poor rule of thumb. Table 6 shows the average annual GDP growth rates recorded by each of the G7 countries through the course of the 1990s. In each case, we have taken the early 1990s peak in activity as a starting point based on the chronology of economic cycles provided by the Economic Cycle Research Institute (www.businesscycle.com). This provides a simple way of removing some of the potential distortions that might arise as a result of cyclical influences on economic performance.

6. The growth experience during the 1990s

Country	Date of cycle peak	GDP growth, % annual rate, since peak	GDP per employee growth, % annual rate since peak
US	Q3 1990	3.1	1.3
Japan	Q2 1992	1.0	1.1
Germany	Q1 1991	1.4	1.4
France	Q1 1992	1.8	0.7
UK	Q2 1990	2.2	1.4
Italy	Q1 1992	1.6	1.5
Canada	Q1 1990	2.5	1.4

Source: HSBC, Thomson Financial Datastream, Economic Cycle Research Institute

Maybe the results for overall growth are not that surprising. They demonstrate, however, that experience across the G7 nations has varied enormously (even if some of the differences may reflect different measurement approaches). Moreover, the variety of experience cannot be explained through differing stages of development. At the beginning of the period, the US was the richest country in terms of GDP per capita and was even more so by the end of the period. The UK put in a better growth performance than any of the other European economies, a result which could reflect 'catch-up' effects. This, however, is difficult to reconcile with the superior performance of the US economy.

Obviously, a lot of factors have influenced these numbers. Oddly enough, in terms of output per employee, the US is no better than many other countries on the list, suggesting that much of America's out-performance reflects changes in labour market behaviour through the cycle as a whole rather than changes in productivity. After all, although the second half of the 1990s was an excellent period for US productivity performance, the same cannot be said about the first half of the 1990s.

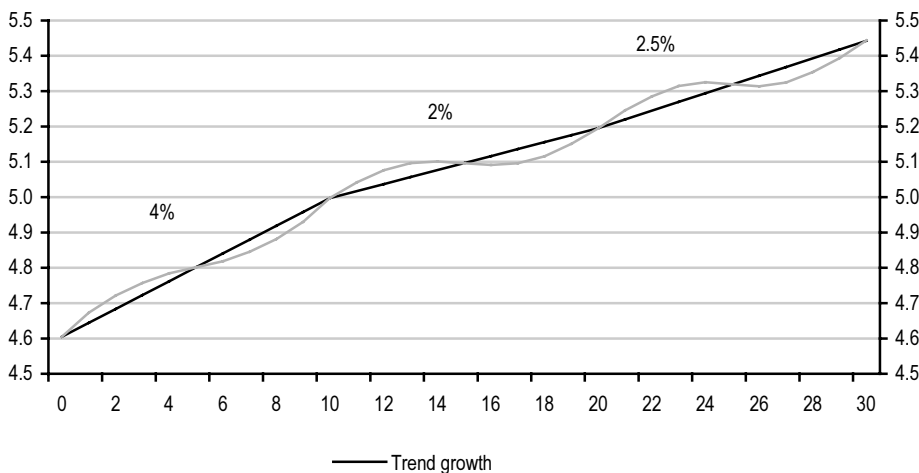
Regardless of the reasons, the trend rate of growth can vary enormously across countries, creating significant differences in living standards over an extended period of time. Let's assume, for example, that the US and Japan start off with the same level of GDP at a specific point in time. Based on the growth numbers above, after 10 years, US GDP would be 23% higher than Japan's. After 25 years, US GDP would be 67% higher than Japan's. In other words, small(ish) differences in trend growth rates can make an enormous difference in terms of relative economic size over an extended period of time.

Shifts In Trend Growth

History changes

This argument equally works, however, for individual countries over different periods of time. Chart 7 provides a stylised example of the general problem. For a 'theoretical' country, it tracks the path for GDP on a log basis over a 30-year period. The grey line provides the actual performance. The solid lines show the 'trend' performance across different cycles, taking an average of 'peak-to-peak' and 'trough-to-trough' comparisons. The key point about the chart is the variance in the 'slope' of the solid lines indicated by the growth rates labelled above the lines. In other words, the chart suggests that changes in 'structural' growth rates can be associated with cyclical turning points in economic activity.

7. How growth changes from cycle to cycle – a theoretical picture



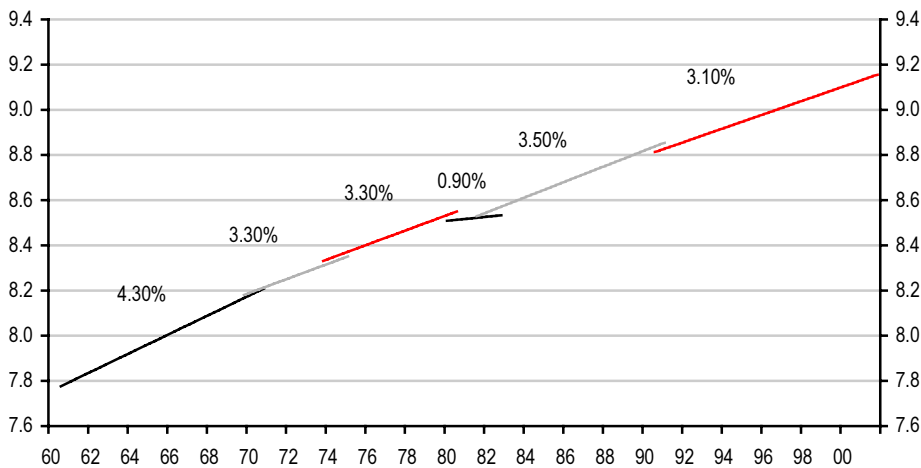
Source: HSBC. All GDP levels expressed in log terms

Is this a reasonable reflection of reality? Charts 8 through to 12 suggest that it is. Based, again, on the business cycle peaks and troughs as measured by the Economic Cycle Research Institute, it is clear that some periods of economic performance deliver very different results in terms of economic growth relative to other periods. To summarise:

- ▶ US growth during the 'golden era' of the 1960s averaged over 4% per year, an achievement that has never been repeated over a whole cycle since. In the 1970s, US growth faded to a little over 3% per year and has been stuck in that kind of range ever since. There is no evidence to suggest that overall growth this time around has been any stronger than in either the 1970s or the 1980s. Admittedly, labour force growth was weaker in the 1990s (1.3% pa relative to 1.6% pa in the 1980s), suggesting an enhanced role for productivity gains. However, employment growth was exactly the same in the 1980s and 1990s, suggesting that a key story for the US has been not so much the improvement in productivity but, rather, the ability to get more people into work. Put another way, strong growth in the 1990s was partly a reflection of a sustained fall in the unemployment rate

Shifts In Trend Growth

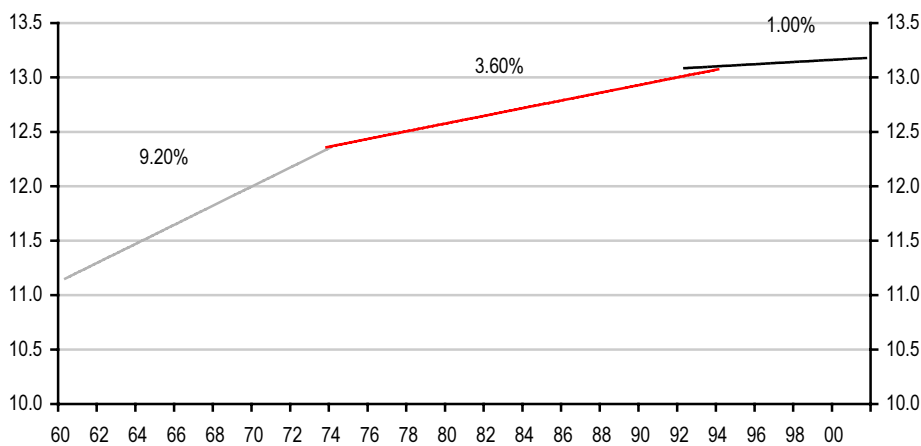
8. The changing patterns of US trend growth



Source: Thomson Financial Datastream. All GDP levels expressed in log terms

▶ Japan has seen the biggest shifts in ‘trend’ economic growth. From the late-1950s through to the beginning of the 1970s, Japan experienced a spectacular growth rate, averaging over 9% per year. By the mid-1970s, this growth rate had fallen back to a little under 4% per year. That rate was maintained through to the end of the 1980s. Thereafter, of course, things went badly wrong, with average growth through the course of the 1990s of only 1% pa

9. Japan’s decline and fall

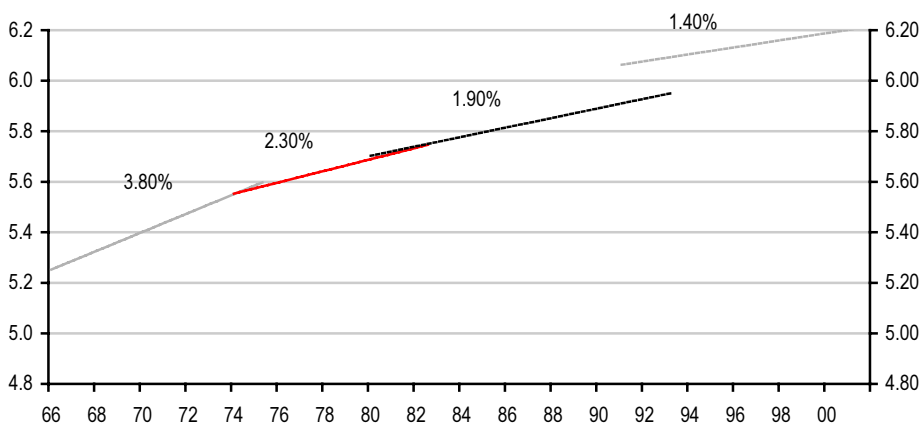


Source: Thomson Financial Datastream and OECD. All GDP levels expressed in log terms

Shifts In Trend Growth

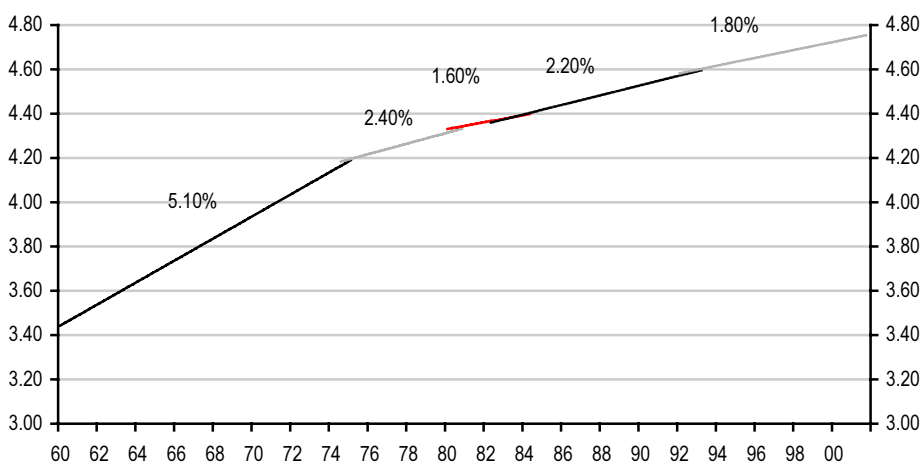
- Germany has also seen significant shifts over the last forty years. During the 1960s, Germany enjoyed growth rates of around 4% per year. By the 1970s, however, growth had fallen back to 2¼% per year, a rather unimpressive result. Growth has faded even further since then, partly a reflection of the hangover following German reunification, particularly within the construction sector. By the 1990s, growth was limited to less than 1½% per year

10. Germany heads to slower growth



Source: Thomson Financial Datastream. All GDP levels expressed in log terms. The leap in 1990 reflects reunification

11. French growth disappointment

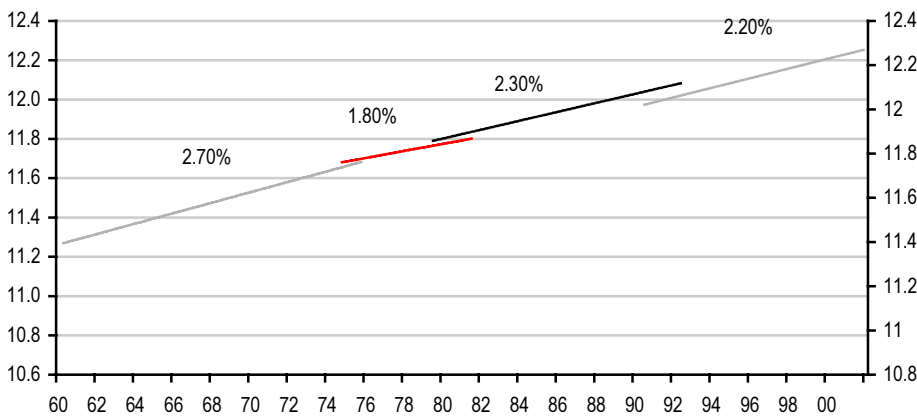


Source: Thomson Financial Datastream. All GDP levels expressed in log terms

Shifts In Trend Growth

- ▶ France performed very well during the course of the 1960s, averaging 5.1% per year. Thereafter, however, the French economy slowed significantly, with growth dropping back to a miserable 1½% at the beginning of the 1980s before rebounding to above 2% in the late 1980s. During the 1990s, however, disappointment set in again. Despite better numbers recently, the 1990s as a whole saw growth of just 1.8% per year
- ▶ The UK's overall growth performance has been by far the most disappointing of any of the G5 economies over the last 50 years. Growth of less than 3% through the 1950s and 1960s was followed by growth of less than 2% during the 1970s. The position has improved since then – both absolutely and against the UK's European peer group – but still remains relatively weak

12. The UK has been the worst of the bunch



Source: Thomson Financial Datastream. All GDP levels expressed in log terms

These shifts in trend growth are hugely important for living standards, for returns on financial assets and, hence, for savings and investment behaviour. They are also important from the perspective of economic power. If, for example, Japan had managed to carry on growing at 9% per year in the 1970s and beyond, it would now be a significantly bigger economy than the US.

In all our examples, there have been variances both in cyclical and structural growth rates over an extended period of time. Moreover, different economic cycles appear to be associated with different structural growth rates. Could it be that the two are linked? And could it be that different cyclical shocks have different effects on structural growth? The *prima facie* evidence suggests that there may well be a relationship, at least in the short to medium term. If true, the idea that cyclical shocks do not matter for growth over the medium term may have to be questioned. Cyclical shocks may well have longer-term growth implications. Moreover, the evidence presented here suggests that growth expectations based on historical growth patterns may prove to be highly inaccurate.

Shifts In Trend Growth

Of course, these charts do not guarantee that there is any direct relationship between economic cycles and changes in trend rates of growth. A relationship may, however, exist through the formation of expectations. A strong period of economic growth – whether structural or otherwise – tends to be used as a basis for optimism on the pace of economic expansion into the future. Yet the charts in this section suggest that growth rates are not constant over time. To the extent that asset prices adjust to perceived changes – rather than actual changes – in trend growth rates, balance sheet mistakes may lead to future economic disruption. Under these circumstances, perceptions may not relate strongly to subsequent reality.

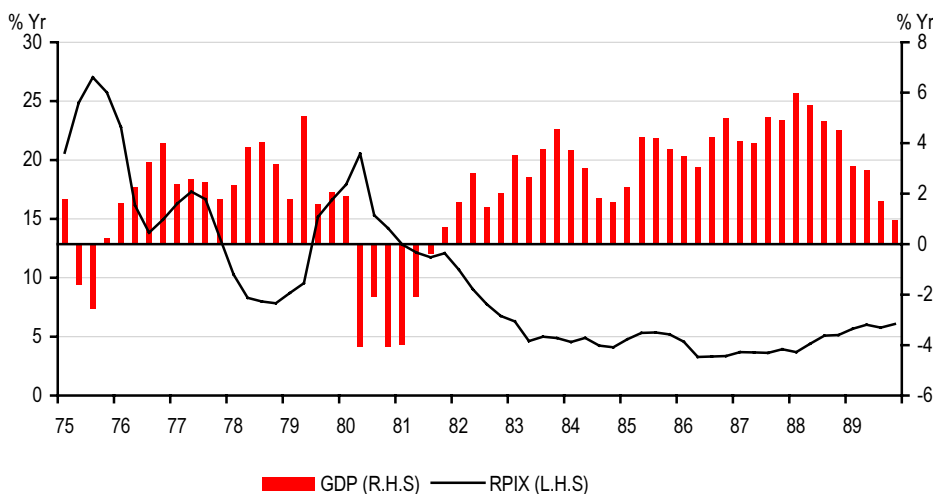
Who Wants A Recession?

Why some recessions are good (eventually)...

Some recessions are planned. They may not be desirable in themselves but they have an intentional 'cleansing effect' which ensures a better future growth performance. Often they are associated with earlier periods of poor macro and microeconomic performance, associated with high inflation, poor productivity, bad management and relatively high wage growth. These recessions are, therefore, a means to an end. The hope is that near term pain will be followed by a structural shift upwards in the underlying growth rate.

Examples of planned recessions include the UK recession of the early-1980s and the US recession in 1980. In both cases, the key aim was the removal of inflation. Expectations of high inflation had become embedded in product and labour markets. Policy-makers regarded the removal of inflation and inflationary expectations as an essential pre-requisite of future economic prosperity. This belief was partly based on the observation that relatively high inflation rates were also relatively volatile inflation rates. High volatility implied a failure of the price mechanism to achieve an efficient allocation of resources which, in turn, implied that the level of activity and, perhaps, its growth rate would be lower than desirable.

13. The reduction in inflation led to a prolonged UK upswing in the 1980s



Source: Thomson Financial Datastream

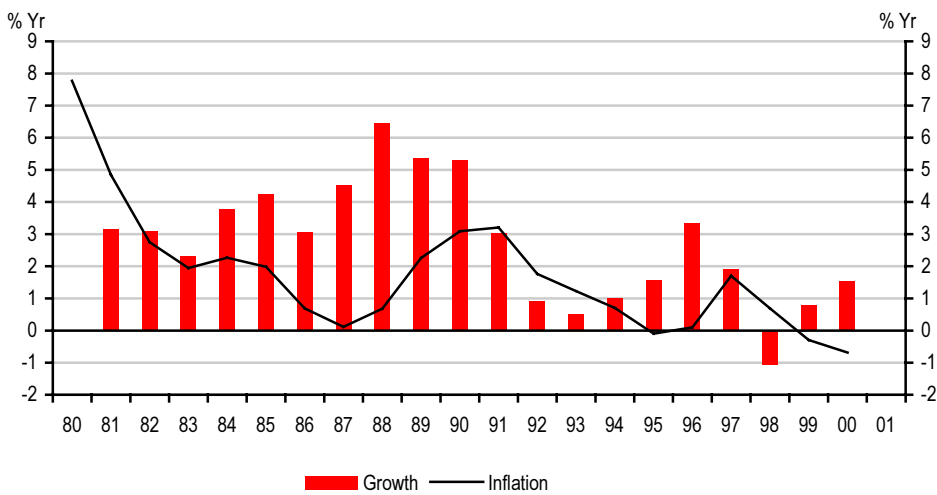
...and others are not

Unplanned recessions are a different matter altogether. They can arrive even without dramatic policy tightening. Moreover, they can arrive after a period of relatively good economic performance. Japan's macroeconomic performance in the late 1980s appeared to be highly successful: growth was strong, inflation was very well behaved, the current account of the balance of payments was in modest surplus and the government was repaying debt. Seemingly, Japan was in a stable equilibrium of growth out-performance

Who Wants A Recession?

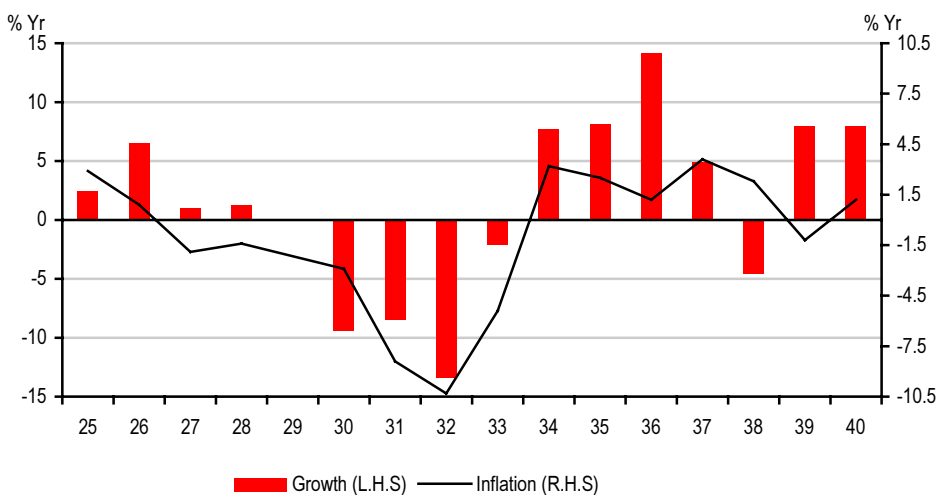
without any serious inflationary risk. Even when the economy first began to slow significantly – driven down by monetary policy action – the generally held view was that this slowdown would be just sufficient to remove the limited inflationary pressures, paving the way for a quick return to decent economic growth. Obviously, this view proved to be highly inaccurate. Japan’s recession has yet to provide the “cleansing process” associated with the reforms of Margaret Thatcher or the aggression of Paul Volcker.

14. Japan’s unplanned recession goes on and on



Source: Thomson Financial Datastream

15. It all went horribly wrong for the US in the 1930s



Source: Thomson Financial Datastream

Who Wants A Recession?

Another good example of an unplanned recession was the US experience in the 1930s. Like Japan in the 1980s, the US in the mid-1920s appeared to be enjoying rude health. Strong growth was accompanied by a complete absence of inflationary pressures. Growth weakened in 1928 and 1929 but there were few signs of the impending disaster – which, of course, was on a much greater scale than Japan's experience in the 1990s. Moreover, when the disaster did begin to unfold – starting with the Crash in October 1929 – there was a marked reluctance to recognise the scale of the problem. Indeed, throughout the period of falling share prices and, eventually, declining activity, many commentators refused to accept that anything was seriously wrong. Capitulation only came when the facts turned out to be far worse than the majority of commentators had expected.

16. Mexico's short sharp shock



Source: Thomson Financial Datastream

There are other, more recent, examples. The greater mobility of capital over the last thirty years has increased the vulnerability of countries to capital exodus. This is a particular problem for emerging market economies. An apparently sustainable economic picture can go wrong as a result of factors beyond a country's direct control. Mexico may have been suffering from its own excesses in 1993 and 1994 but its position was clearly not helped when the Federal Reserve began to tighten monetary policy in the US aggressively after the very 'loose' policy environment of the early 1990s. Under the new circumstances, it became a lot more difficult for Mexico to continue to fund its current account position.

The benefits of planning

Planned recessions sometimes work. Growth in the UK during the 1980s was a definite improvement on growth in the 1970s. For the US, the 1980 recession, created by Paul Volcker's Fed, was less successful. Subsequent structural growth was no better than in the 1970s (although, arguably, it might have been a lot worse had the Volcker Fed not stamped

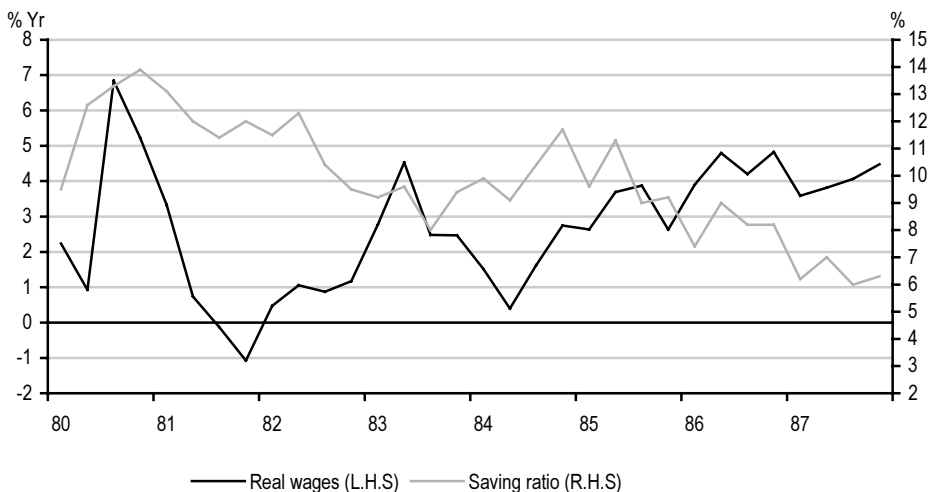
Who Wants A Recession?

on inflation at the beginning of the 1980s). Nevertheless, the actions by the Volcker Fed did ensure the gradual removal of inflationary expectations which, other things being equal, was undoubtedly a good thing. From this perspective, some recessions can have desirable outcomes.

Planned recessions are all about bringing future benefits. Their success lies in the ‘credibility’ of the policy being adopted. If the policy is seen to be credible, either initially or at a later stage, the recession could be seen as an unpleasant means towards a worthwhile end. Again, the UK recession in the early-1980s should be seen in this respect. The ‘there is no alternative’ mantra (known as ‘TINA’) reinforced a view that the Government would not be shifted off course, no matter how undesirable some of the short-term consequences of the adopted policies were (although it is worth noting that opponents of the policy pushed the ‘there is a realistic alternative’ message, known as ‘TIARA’). In contrast, the policies adopted ten years later ultimately did not carry credibility – although, to be fair, they were not initially intended to bring about recession. The UK’s membership of the ERM might have been successful had German reunification not led to high interest rates across the whole of Europe. However, the extent to which German policies had to adapt to specific domestic difficulties implied that weaknesses elsewhere in the ERM system were revealed. Suddenly, a UK policy which had been broadly welcomed by the financial community as a way of stabilising inflationary expectations lost credibility. The depth of the ensuing recession was partly a consequence of a planned – but fatally flawed – attempt to shore up the credibility of a defunct policy.

‘Credible’ planned recessions eventually get their own reward. For example, a recession which is designed to remove inflation will, if successful, deliver a number of key benefits:

17. In the UK, real wages picked up and the savings ratio fell



Source: Thomson Financial Datastream

Who Wants A Recession?

- ▶ Lower than anticipated inflation should ensure a combination of higher real wages and higher asset values in real terms. As a result, consumer spending is boosted through both income effects and, via the rise in real wealth, a fall in the saving ratio (see chart 17)
- ▶ Lower inflation should reduce the volatility of inflation and, therefore, improve the allocation of resources across the economy more broadly. In other words, there should be an improvement in the supply-side performance of the economy
- ▶ Falling interest rates, accompanied by lower inflation, should be regarded as a clear indication of policy success. The confidence effects associated with this could trigger a particularly powerful recovery, as both consumers and producers recognise that the earlier sacrifices were worth going through

The costs of surprise

'Unplanned' recessions may lead to less favourable outcomes. The main problem with unplanned recessions is their association with a loss of earlier policy credibility and, as a result, a loss of policy 'power'. Unplanned recessions tend to be associated with a collapse in private sector expectations as people capitulate from their earlier beliefs. Unplanned recessions are more difficult to understand precisely because they were not supposed to happen, neither in the eyes of the general public nor in terms of the policy-makers themselves.

Because they are associated with a collapse in private sector expectations, unplanned recessions are much more difficult to offset through changes in terms of macro-economic policy. One way to show this comes from the relationship between asset prices and the broader economy. In an economic upswing, asset prices may rise dramatically and, in a situation of relatively high financial market liberalisation, there may be a corresponding increase in liabilities. In other words, there may be a general inflation of the private sector balance sheet that supports an expansion of real expenditure on business equipment and consumer durables. So long as this expansion is not accompanied by significantly higher inflation – an increasingly common occurrence given the experience of both the US in the second half of the 1990s and Japan in the second half of the 1980s – this will turn into a virtuous circle. As demand expands, so estimates of the trend growth rate will rise, thereby justifying further increases in asset prices.

Assuming that the gains in asset prices are ultimately not justified – in other words, that profits growth will never be sufficient to meet current expectations – the main effect of this kind of asset price 'bubble' is to disrupt expenditures over time. The initial gains in asset prices enable expenditures to be brought forward from the future. The subsequent declines in asset prices suggest that the expenditures went too far, implying excessive stocks of both business equipment and consumer durables. In other words, a demand 'black hole' is created. Under these circumstances, policy changes are likely to be less effective:

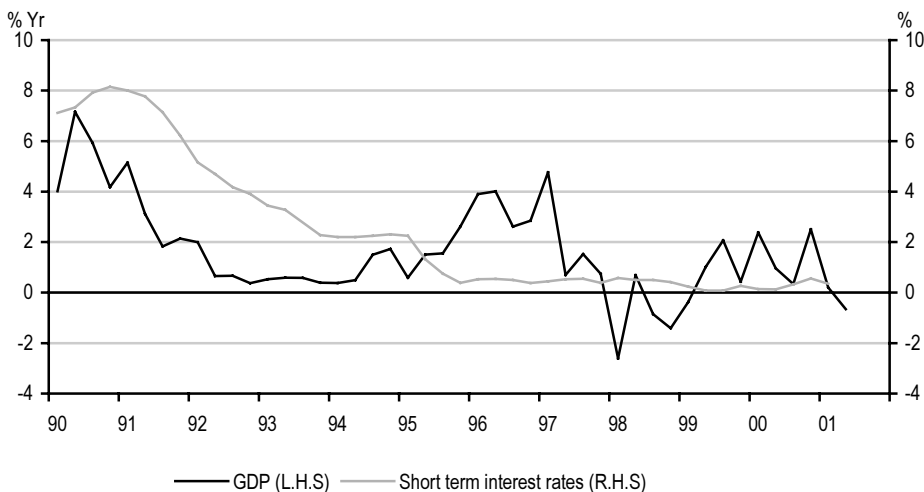
- ▶ The fall in asset prices suggests that earlier assumptions about the 'trend' rate of growth were just plain wrong. It is difficult to see why policy should have a huge influence on this change of tack. If capital spending took place on the assumption that demand would

Who Wants A Recession?

expend by 4% per year when, in reality, the speed limit of the economy was less than 3%, the capital stock would simply be too large

- ▶ Interest rate cuts under these circumstances are unlikely to be effective, at least not immediately. Under normal circumstances, lower rates reduce the cost of capital and, consequently, should lead to higher capital spending. But, faced with earlier over investment, it is difficult to see why capital spending should suddenly recover (chart 18). This is not to say that policy will never work: rather, that the effect may be both small and delayed relative to expectations

18. Japanese rates fell but it didn't do much good



Source: Thomson Financial Datastream

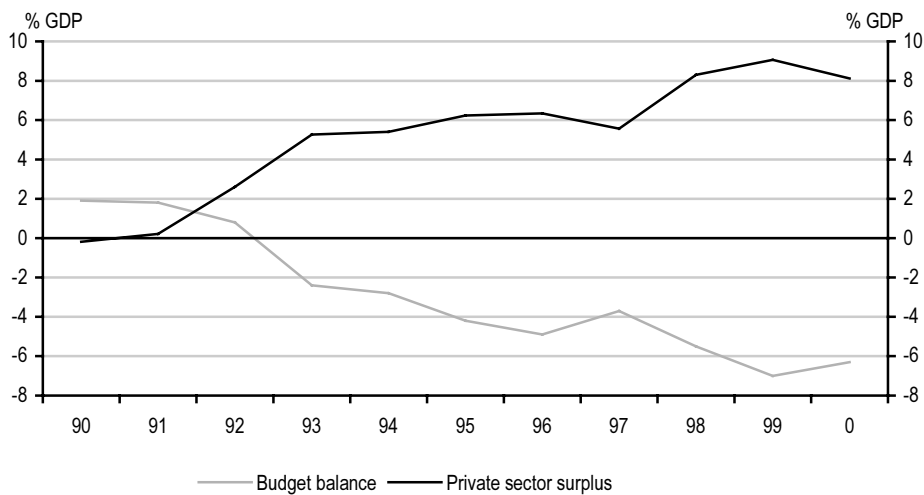
- ▶ Looser fiscal policy may also not be particularly successful. Obviously, in a situation of falling asset prices in general, the government may have better access to capital markets than the private sector and, thus, is better placed to raise funds for capital spending projects. However, unless people can readily recognise that there will be a positive impact on the longer term growth rate associated with these spending plans, there may be little impact on private sector activity. As Japan has shown in recent years, wasted public spending can simply lead to higher private savings, as people choose to save more to offset future tax liabilities (chart 19). The net impact on the economy, therefore, is minimal

In summary, policy loosening after a 'planned' recession is a sign of success. It suggests that the earlier 'hair shirt' policy had a desirable impact on expectations. As a result, as interest rates fall, as fiscal policy is loosened, the private sector may react relatively positively. The policy loosening simply highlights that the days of austerity are drawing to a close. Policy loosening during or after an unplanned recession is less likely to be successful because the recession itself was a product of earlier excesses. Successful policy to deal

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with these forms of recession may be better aimed at avoidance of earlier excess rather than at limiting the scale and duration of the recession itself.

19. Japan's government borrowed but its private sector saved



Source: HSBC

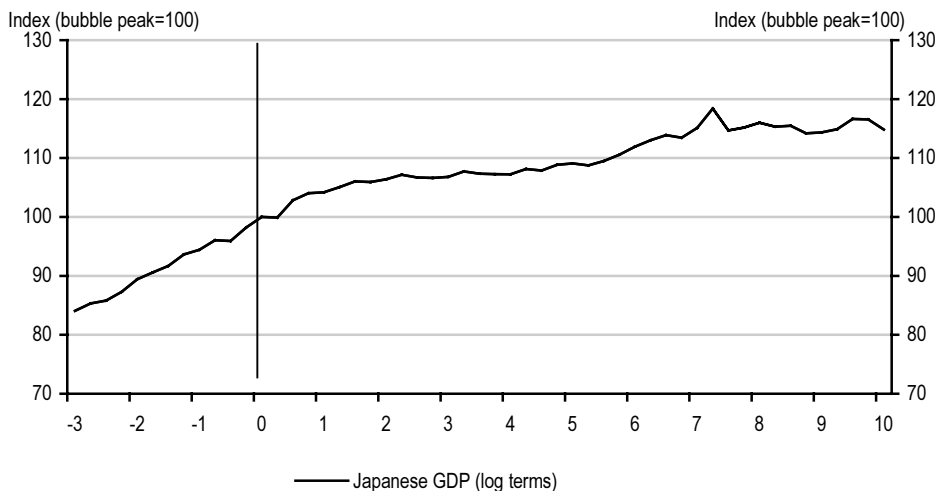
Post-bubble Worlds

Different bubbles, different outcomes

Unplanned recessions often follow earlier financial market and economic bubbles. We examined a range of these bubbles in “Bubble Trouble” (July 1999). We suggested that many bubbles had similar characteristics – strong growth, low inflation, a deteriorating current account position, falling commodity prices, a rising exchange rate, declining private sector savings – and that, as a result, it might be possible to pinpoint potential areas of future macroeconomic instability. At that stage, the intention was to highlight areas of risk. In particular, we suggested that the US was a ‘bubble economy’ that was likely to burst, paving the way for a collapse in asset prices and a subsequent move into recession.

While bubble economies appear to share similar characteristics, there is less evidence that post-bubble economies share a common experience. Charts 20 through to 22 show the experience of a range of ‘bubble’ economies in terms of GDP levels (in log terms) over extended periods of time. In each chart, history ‘begins’ three years before the peak in the bubble and continues for ten years after (where possible). Each chart is drawn on the same scale, thereby making it easier to compare the experiences across countries. The following conclusions apply:

20. Japan’s bubble burst but output losses were slow in coming

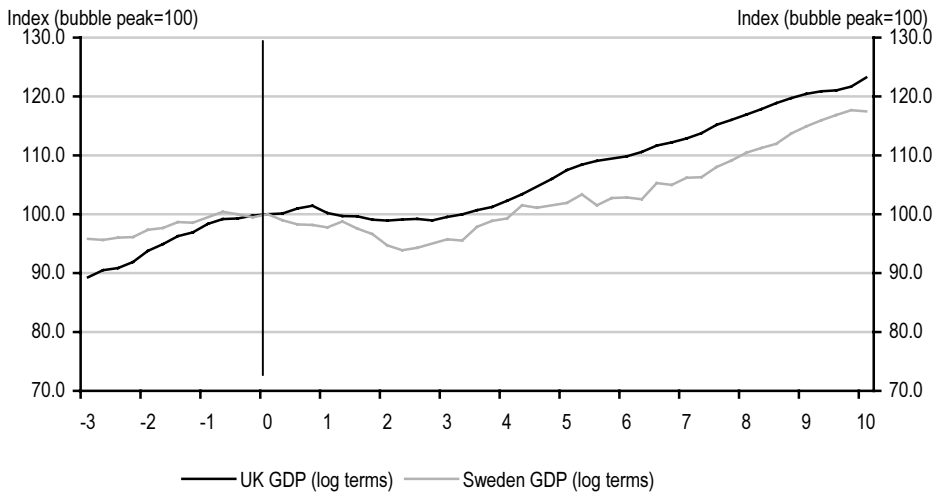


Source: Thomson Financial Datastream, HSBC. Vertical line indicates peak of bubble

- ▶ Japan experienced no serious output losses in the immediate aftermath of its bubble. On that basis, Japan had the best initial response to the collapse in asset prices. However, Japan’s economy was not able to recover. Seven years after its bubble burst, growth remained pitifully weak. Thereafter, the growth recession turned into a full-scale recession with a series of output contractions

Post-bubble Worlds

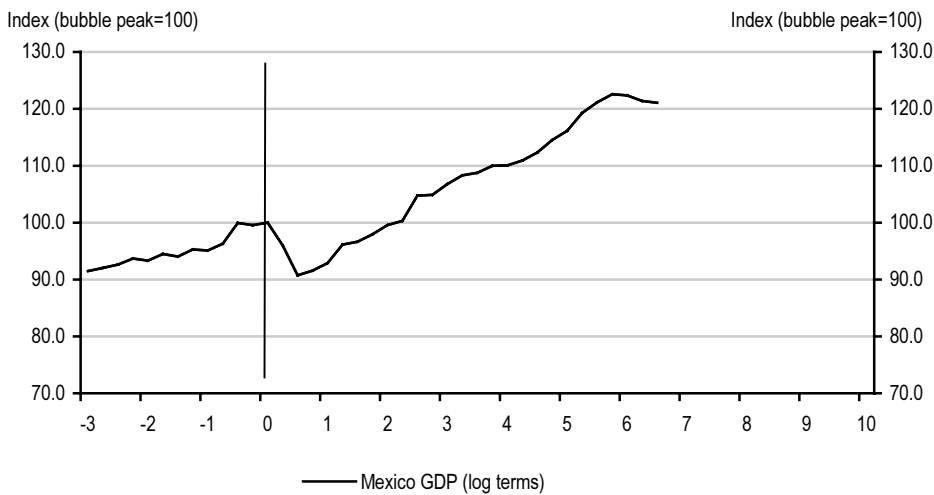
21. The UK and Sweden suffered big initial losses



Source: Thomson Financial Datastream, HSBC. Vertical line indicates peak of bubble

- ▶ The UK and Sweden had bigger output losses than Japan in the short term. Subsequently, however, they were better able to generate a strong recovery. Ten years after their bubbles burst, they were enjoying considerably faster growth rates than Japan although, interestingly, the overall increase in GDP in Sweden ten years after the bubble burst was not much more than experienced in Japan

22. Mexico collapsed but then rebounded very strongly



Source: Thomson Financial Datastream. Vertical line indicates peak of bubble

Post-bubble Worlds

- ▶ Mexico suffered severe initial losses although it subsequently bounced back very quickly – indeed, far more quickly than in any of our other examples. Just a year lapsed between the initial collapse and the first signs of a strong economic rebound

In other words, the outcomes associated with bursting bubbles appear to be rather random. Knowing that a bubble is bursting is one thing: predicting how an economy is likely to react is an entirely different affair. Moreover, in some cases, there appear to be significant effects on ‘trend’ growth whereas, in others, trend growth appears to be hardly affected. On a ‘trend’ basis, Japan has been a terrible performer whereas Mexico has performed relatively well.

There are plenty of structural reasons that can be utilised to explain these different responses. A common approach in recent years, for example, has been to criticise Japan for its failure to free up its labour and product markets. The oddity with this approach, however, is that exactly the same structural factors were cited as reasons to explain the earlier period of success. Lifetime employment may now be seen as a major constraint on Japanese economic performance but, in the 1970s and 1980s, it was part of a model that was envied in other parts of the world. Back then, lifetime employment was regarded as a way of ensuring the full development of human capital in a way that removed the perceived strain between employee, manager and shareholder.

Size matters

Another approach is to think about the problem in terms of ‘size’ and ‘sources of capital’. Here, it may be useful to draw a distinction between emerging market economies, small open economies and large closed economies. Faced with a similar bubble shock, are these economies likely to have different ‘post-bubble’ experiences? Do they differ in terms of their ability to manage their way out of a bubble-induced period of economic decline? Are there options open to some which are not available to others?

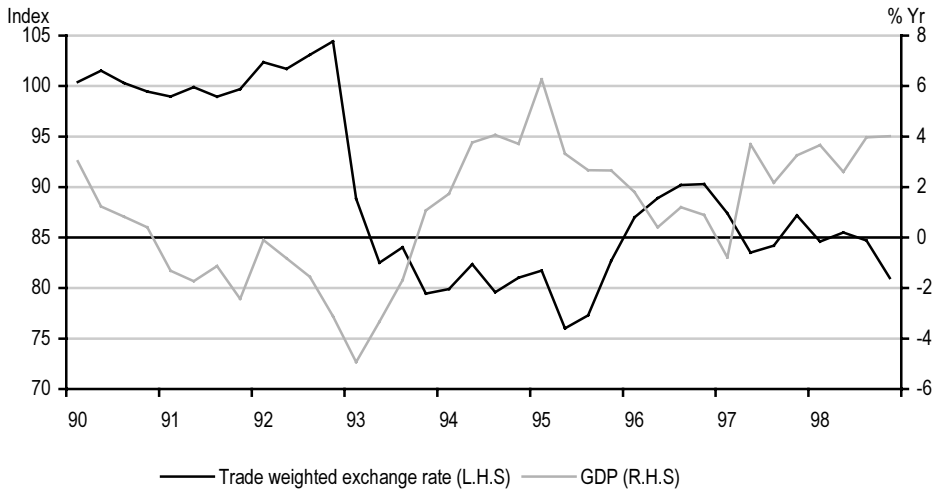
One way to approach this issue is to think about the ways in which countries adopted macro-economic policies which forced reform and change. Three points are worth making:

For emerging markets, policy independence is typically not great

Booming emerging market economies will usually have large current account deficits and, hence, will be heavily dependent on foreign capital inflows. If those capital flows dry up – driven by rising interest rates elsewhere or a collapse in risk appetite – there are few options. Either the economy has to be severely deflated or the currency has to fall or domestic borrowers have to default. This immediate adjustment process forces the economy into a deep recession. Thereafter, chances of recovery are relatively high. First, there is the possibility of ‘official’ bailout through the intervention of another economy – for, example, the US – or through the support of, for example, the IMF. Second, the signs of official bailout may encourage foreign investors to return. Third, changing returns elsewhere in the world may force investors hungry for yield to return, regardless of the risk. Fourth, the collapse in final demand associated with the crisis should be associated with a lower current account deficit (or, indeed, a current account surplus) and, as a result, the dependency on foreign capital should be reduced, at least in the initial stages of recovery.

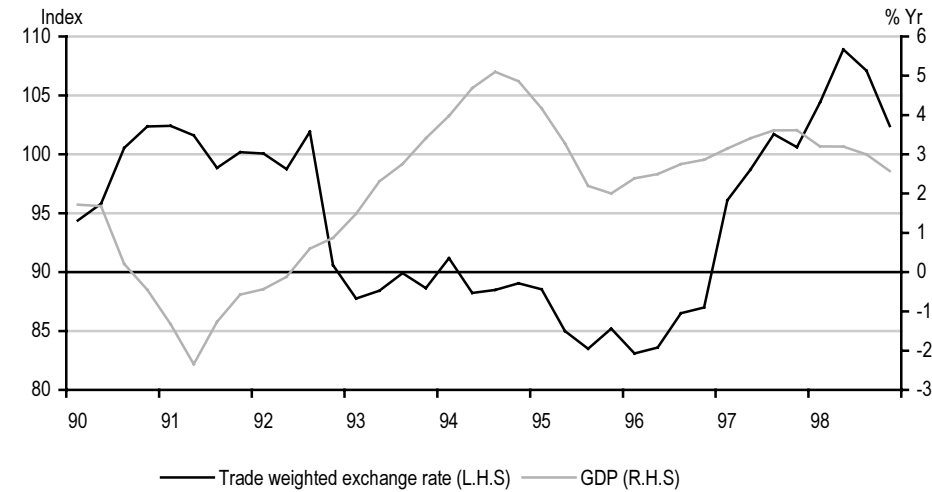
Post-bubble Worlds

23. Sweden's recovery was driven by exchange rate depreciation



Source: Thomson Financial Datastream

24. The UK was bailed out by a falling exchange rate



Source: Thomson Financial Datastream

Small open developed economies have different problems

Their financial markets are likely to be better developed than those in emerging markets. This, in itself, should be sufficient to reduce the 'boom and bust' risks associated with excessive financial market speculation. However, as we have seen in both the UK and Sweden, these countries are still prone to significant reversals. Small open developed economies are likely to be vulnerable to the extent that financial market liberalisation allows

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an expansion of the private sector balance sheet. Under these circumstances, a collapse in terms of asset prices leaves the domestic private sector in a very weak position: think, for example, of the problems created within the UK housing market and in the Swedish banking system in the early 1990s. These countries, however, have a secret weapon in the form of the exchange rate. If a private sector recovery cannot be engineered via domestic demand, it may be better to allow exporters to do the work. The advantage for a small open economy is that exchange rate depreciation can bring big benefits without significant costs for its competing countries.

Large closed economies may be more vulnerable

Their bubbles may not burst very often but, when they do, policy options are relatively limited. There is no bailout – they are simply too big to receive help from, for example, the IMF. They cannot easily depreciate their currencies. A major fall in the dollar against the euro and yen, for example, could have very unpleasant effects on the overall global economy (for a more detailed discussion, see “Denting the dollar”, 17 August 2001). Domestic policy may prove to be ineffective as a result of an ‘unplanned recession’. Moreover, confidence in their ability to ride out recession might lead to the adoption of policies which, although designed to limit losses in the short term, could create difficulties in terms of the resolution of earlier excesses and imbalances. These difficulties could be associated either with moral hazard problems or, alternatively, with an absence of restructuring.

Large closed economy problems

Fortunately, there are very few occasions in which large economic and financial bubbles have been created within large closed economies. The big examples over the last 100 years include the US experience of the 1920s, followed by the 1930s depression, and the Japanese experience of the late 1980s which was followed by the prolonged recession of the 1990s. The US experience of the late 1960s and early 1970s might also be added: although not a bubble period in terms of asset prices – equity prices peaked in the mid-1960s – the belief in a policy-driven new paradigm, based on Keynesian demand management, put the economy on an unsustainable path which ultimately ended in tears in the 1970s.

In each of these cases, ‘conventional’ macroeconomic policies of the day were unable to help. In the 1920s, the belief in free markets was at its zenith and there was a general suspicion of government intervention. Financial markets were regarded as efficient mechanisms for allocating capital. There was also a general suspicion of bailouts because of the associated moral hazard fears. We know, in hindsight, that most of these assumptions were, at best, only partially right. In the 1960s, authorities and markets became increasingly confident in the power of macroeconomic management. The secrets of full employment had been revealed and, as a result, temporary fall-off in demand could easily be remedied through expansionary monetary or fiscal policy. As inflation began to emerge, this approach began to break down; suddenly, unreconstructed Keynesian economics was out of favour. In the 1980s, Japan was at the forefront of economic organisation and planning, seemingly offering a successful combination of state guidance with private sector innovation. Yet, by

Post-bubble Worlds

the 1990s, this had broken down. Like the US in the 1930s, there was a marked reluctance to loosen policy aggressively in the early stages of the downswing. However, subsequently, major fiscal expansion had no obvious impact on the broader economy. A supposedly Keynesian problem did not appear to have a Keynesian solution.

Of course, the economic consequences of these three episodes varied enormously. There are no other periods that equate to the 1930s in terms of economic disruption. The 1970s experience was the only one associated with inflation. Japan's deflation in the 1990s has not led to output losses on the scale seen in the 1930s. Yet there are two features common to all three:

- ▶ First, there was an inability to find an immediate economic solution given the 'conventional' policy tools available at the time and given the size of the economies in question. Unlike emerging markets, there could be no bailout. Unlike small open economies, there could be no immediate move towards aggressive devaluation (although both the 1930s and 1970s were ultimately associated with huge exchange rate upheavals)
- ▶ Second, in all three cases, there was a shock to the price level. In 1930s America and 1990s Japan, deflation was the key problem. In 1970s America (and, indeed, across the industrialised world as a whole), inflation was the key problem

This second point warrants a further examination. When bubbles burst, the private sector is generally left with excessive liabilities relative to a new, lower, level of assets. The desire to reduce liabilities is a key factor behind subsequent economic weakness but, at the same time, is caused by the *expectation* of subsequent economic weakness. Under normal circumstances, the loss of demand associated with this effect is likely to be deflationary. Even if the central bank decides to pump in large amounts of liquidity, deflation may still persist: as Japan has found out in recent years, a private sector which is simply unwilling to spend is likely to end up holding excessive money balances. The 1970s, however, proved to be an exception, partly because of the impact of earlier demand management policies. In the late 1960s, both fiscal and monetary policy were not tightened dramatically despite clear signs of upward pressure on real wages in the US. This limited the extent of the downswings in both 1967 and in 1969-70. However, to the extent that the supply curve no longer seemed to be moving out as quickly as had been the case in the early 1960s, the net result of active demand management was the emergence of inflation and accelerating inflationary expectations. This, in turn, raised the desire to save out of current income as households found their existing assets eroding away more quickly than they expected.

The key point is that, in all cases, the emergence of excesses left an excessive amount of debt or, alternatively, an insufficient level of assets. Without the 'emerging markets bailout' and without the 'devaluation option', the US in both the 1930s and 1970s and Japan in the 1990s were forced to look at domestic solutions to their balance sheet problems. The decision to pay off debt led to a serious loss of demand that placed significant downward pressure on prices. In the 1970s, debt reduction took a different course, namely though higher than expected inflation. Higher inflation eroded debt levels which, in turn, may have been a force for stability in the US economy. However, higher inflation also eroded returns for savers, ultimately reducing the desire to take economic risk.

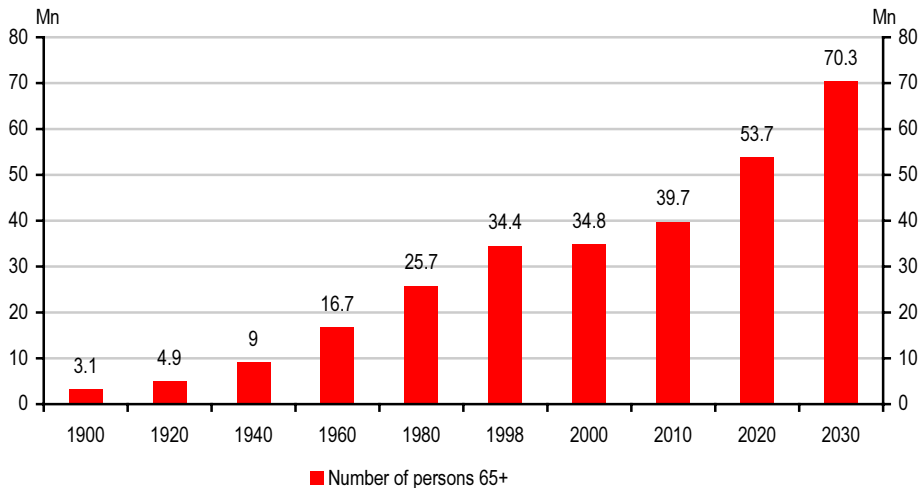
Asset Prices And Wealth

Borrowing from the future

To what extent do changes in asset values have an impact on economic performance? And for how long can the effects last? These are hardly trivial questions. Periods in which asset values are weak or falling are typically periods of poor economic performance. Inevitably, this is a bit of a chicken and egg issue. However, there is certainly evidence to suggest that economic performance can be heavily influenced by periods of asset price strength and weakness.

Indeed, there is good reason to think that changes in asset prices now may be having an even bigger effect on economic performance than in the past. The critical issue is the relationship between life expectancy from the point at which a person becomes available for work and the retirement age. In the US, for example, there has been no significant shift in the retirement age since the 1930s. Yet over the intervening period, life expectancy for those reaching working age has risen dramatically. For those people who entered the workforce in around 1895, 54% of males were still alive and 61% of females were still alive at retirement age in 1940. For those people who entered the workforce in 1945, around 72% of males and 84% of females were still alive at retirement age in 1990. An overview of the challenge is shown in chart 25, which shows the number of people in individual years that are aged 65 and above. It emphasises, first, that the numbers aged 65 and above have already risen very quickly but also stresses that there is going to be a much more substantial increase over the next thirty years.

25. Could the ageing US population be a source of heightened financial instability?



Source: US Bureau of the Census

As is well known, these numbers basically imply that people are working for an increasingly smaller proportion of their lives. Link this with the 'baby boom' bulge in the population, most of whom are looking to retire over the next twenty years, and the result is a particularly high vulnerability to sudden and sustained losses in asset values. In the 1930s, losses in financial

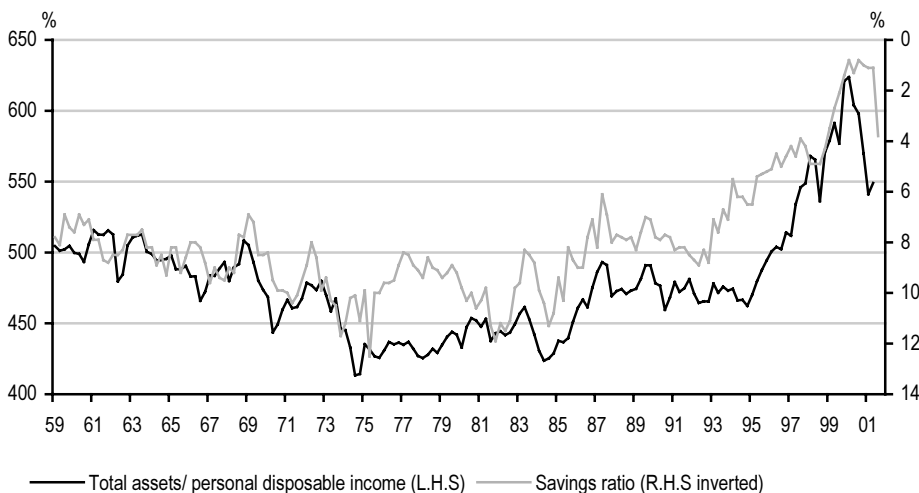
Asset Prices And Wealth

wealth had a dramatic impact but, at the end of the day, most people's wealth was tied up primarily in the form of human capital rather than financial capital. With lower life expectancy, retirement planning was not such a pressing issue and, as a result, the dominant influence on wealth was the ability to hold down a job. Human capital may still be the biggest source of wealth but, proportionately, it is not as important as it used to be.

What impact do these changes have on asset accumulation? The permanent income hypothesis suggests that people's savings behaviour is based on a concept of 'permanent income', in other words the income per year that could be earned on average through a lifetime. On this basis, people in their twenties and thirties are likely to go into debt – they may, for example, buy a house and a variety of consumer durables – but, in their forties and fifties, they are more likely to pay off their debts and to accumulate assets for their retirement. At the aggregate level, this suggests that, associated with a baby boomer generation, there should be an overall increase in savings out of current income.

Yet this is precisely the opposite of what has happened. Over the last twenty years, when the labour force has grown at a pace unprecedented in recent history, net savings out of current income have declined, not risen. There are some potential justifications for this – for example, assets may be passed on from earlier generations in the form of inheritance, thereby reducing the need for the current generation to save for the future (although see "Can Inheritances Alleviate the Demographic Burden?" an IMF Working Paper by Erik Lueth published in August 2001, in which it is argued that "the increase in future generations' inheritances is insufficient to make up for the demographic burden".). Overall, however, household behaviour seems decidedly odd in the light of the need to save for retirement.

26. The saving ratio reacts to changes in household net worth in the US



Source: Thomson Financial Datastream. The recent rise in the saving ratio may be more a reflection of the Bush tax rebates than of any specific wealth effect

On further investigation, there is a relatively straightforward explanation for this 'odd' behaviour. It comes from chart 26, which shows changes in household net worth relative to

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income. Net worth is defined simply as total assets – both real and financial – less total liabilities. The chart shows that, during the 1990s, there was an extraordinary increase in net worth relative to income. During the previous 40 years, the ratio had fluctuated only modestly. Admittedly, there was a sustained downward move in the 1970s associated with the terms of trade shock following the quadrupling of oil prices. However, previous post-war history provides no precedent for the massive gains in wealth which have accumulated over the last ten years. Indeed, the last occasion in which equities rose to such inflated levels relative to GDP was in the late 1920s.

These wealth gains have given consumers the perfect justification for reducing net savings out of current income. If it is the case that assets have risen much faster in value than expected, why bother to save out of current income? Indeed, why not borrow against the faster than expected rise in asset values in order to improve current living standards? In effect, this is exactly what has happened over the last ten years. Unanticipated gains in asset price have made consumers feel richer even if they are not working any harder. Those unanticipated gains have allowed extra spending.

But where has this spending power come from? After all, if net worth has risen dramatically relative to income on a permanent basis, it can only mean one of three things:

- ▶ The actual performance of the economy has been significantly better than was expected during the 1980s, forcing asset values up on a 'surprise' basis. In other words, asset values are a lagging indicator of economic performance
- ▶ The expected performance of the economy in years to come will be significantly better than has been the case during the 1990s. Asset prices have simply risen to anticipate this 'new paradigm' world
- ▶ There has been an ongoing redistribution of national income towards profits and, thus, towards shareholders

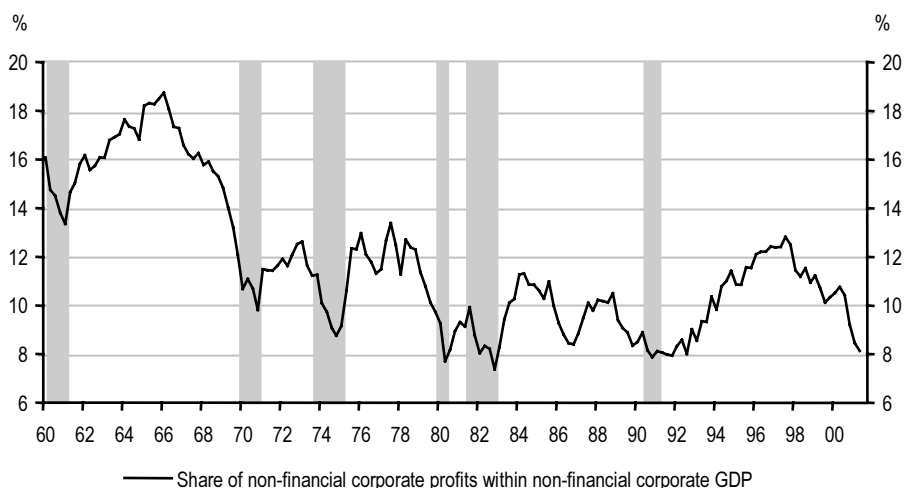
The first of these potential explanations looks fairly weak. First, asset markets are ultimately designed to be forward looking. In other words, even if the US economy did improve during the 1990s, asset markets still need to make a bet on what will happen in the future. Reaching the heady levels seen two years ago is one thing: sustaining and building upon those levels is a completely different challenge. Second, as we have argued throughout this piece, US economic growth in the 1990s was, overall, no better than was the case in the 1980s. Third, this kind of view leaves asset prices highly vulnerable should there be economic disappointment in the future.

The second explanation looks more likely. After all, the new paradigm was very much a story about the future. Even here, however, there are significant weaknesses. First, there is no guarantee that the economy will perform in ways currently – or previously – discounted by financial markets. Second, even if the economy does perform in the appropriate way, the benefits may not accrue to shareholders. Productivity improvements can lead to higher wages rather than higher profits. Indeed, this is one of the major problems with the 'redistribution of income' rationale. Chart 27, for example, shows that, although the profit share in GDP did rise through the mid-1990s, it subsequently fell back again to earlier lows,

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suggesting that at least part of the improvement in profits was cyclical – perhaps associated with the process of disinflation – rather than structural.

27. Whatever happened to the US profits miracle?



Source: Thomson Financial Datastream: Grey bars represent periods of recession

These arguments basically suggest that the fall in the saving ratio seen through the course of the 1990s has been based on increases in debt which, in turn, have been driven by a belief that gains in asset values have been permanent. Yet history suggests that this is an unwise conclusion. Even if people believe in efficient markets, there is plenty of evidence to suggest that discounted expectations are highly volatile. For example, the standard deviation of rolling returns on US equities is significantly greater than the equivalent standard deviation on real GDP growth. This difference can be justified on the back of relatively small changes in discounted future expectations for economic growth or corporate profits. However, the key issue here is not one of rationality or justification but, rather, of the extent to which asset values are somehow 'safe'. If they are not, then borrowing against them may lead to severe medium term balance sheet strains. After all, changing asset values are unlikely to be matched by offsetting changes in liability values. Indeed, financial liberalisation may have increased the risks of severe, unintended, balance sheet strain.

How safe are assets?

Why might asset values not be safe? There are three key reasons:

First, there may be a money illusion problem

One of the peculiarities of the 1990s was the association of a fall in inflation with both declining interest rates and rising nominal profits growth. There may be good reasons for this. Falling inflation should be associated with falling interest rates. But if the disinflationary process requires greater cost control, a reduction in union power, a move towards using

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cheaper labour from other countries and a focus on productivity gains, then it is perfectly reasonable to think that the profit share within GDP will rise. This, however, cannot be a continuous process. When inflation reaches a new more desirable level, the process of disinflation comes to an end. As a result, it may be more difficult to continue rebuilding the profit share. At that point, 20% annualised returns on stocks begin to be recognised for the peculiarity they always were: increasingly, the market is forced to price in earnings growth which is not that much greater than GDP growth.

Second, there may be an economic stabilisation problem

A common assumption in recent years is that the world economy has moved towards a more stable economic cycle, partly as a result of a reduction in inflationary pressures. On that basis, growth rates should be more 'sustainable' than in the past and, as a result, there should be less risk of boom and bust. So long as prices remain relatively stable, the assumption must be that any acceleration in the growth rate is sustainable and that, as a result, there are fewer downside risks for asset values. If, subsequently, it turns out that booms and busts have not been eradicated – in other words, that economic cycles can occur even in the absence of inflation – asset values may be vulnerable.

Third, there may be a moral hazard problem

If the arrival of low inflation implies that a central bank's room for manoeuvre is greater (ie that it can cut rates earlier in an economic downswing), then it may be easier for a central bank to act pre-emptively to ward off the threat of a recession. However, if everyone knows this, there could be a danger of excessive gains in asset values. The bailout apparently makes investing in riskier assets safer and, therefore, seems to justify a fall in the risk premium on equities, for example, relative to bonds. However, this argument only works well if interest rates have the desired effect. Unfortunately, rapidly rising asset prices that, ultimately, cannot be justified through either faster economic growth or faster profits growth, may simply disrupt the timing of expenditures on capital equipment or durable goods. With well-functioning capital markets, a rise in asset values can be met through a rise in either corporate or household liabilities. These increases ensure higher expenditure today based on a belief in a higher future income stream. In effect, companies and households are 'borrowing from the future'. Let's say, however, that current predictions implicit within asset prices with regard to future growth are too optimistic. On that basis, companies and households may borrow too much and have significant problems with debt repayment later on. Under these circumstances, the power of interest rate cuts begins to fall dramatically. In effect, the earlier belief in a monetary 'bailout' leads to an inflation of the balance sheet that proves impervious to subsequent changes in interest rates.

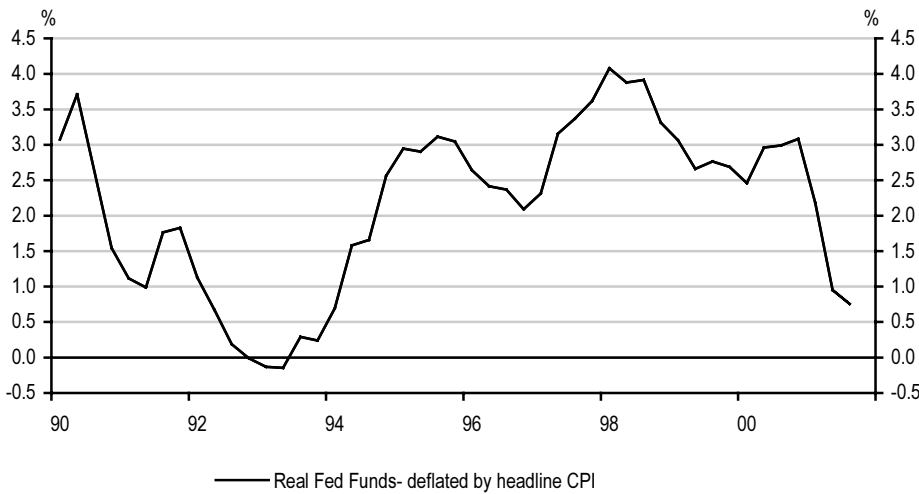
Underlying these problems is the complex relationship between interest rates, asset prices and the monetary policy stance. The monetary policy stance can be measured in all sorts of ways – the growth rate of monetary aggregates, the level of the exchange rate, the slope of the yield curve – but a common approach is simply to look at the current level of short term interest rates and compare that level to earlier periods, either in nominal or real (inflation-adjusted) terms.

Chart 28 shows real Fed funds measured in the normal way, in other words deflating by the inflation rate. The chart suggests that monetary policy in the second half of the 1990s was

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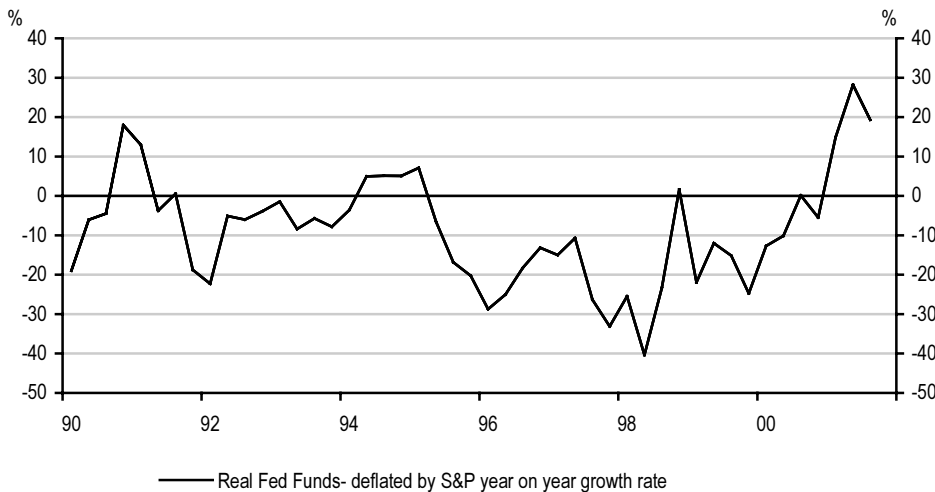
relatively tight and that, as a result, there was little chance of either economic overheating or subsequent recession. Moreover, the chart suggests that monetary policy got a lot looser through 2001, a result of rapid reductions in nominal interest rates and relative stability in terms of the inflation rate.

28. Real Fed funds deflated by consumer price inflation



Source: Thomson Financial Datastream

29. Real Fed funds deflated by equity price movements



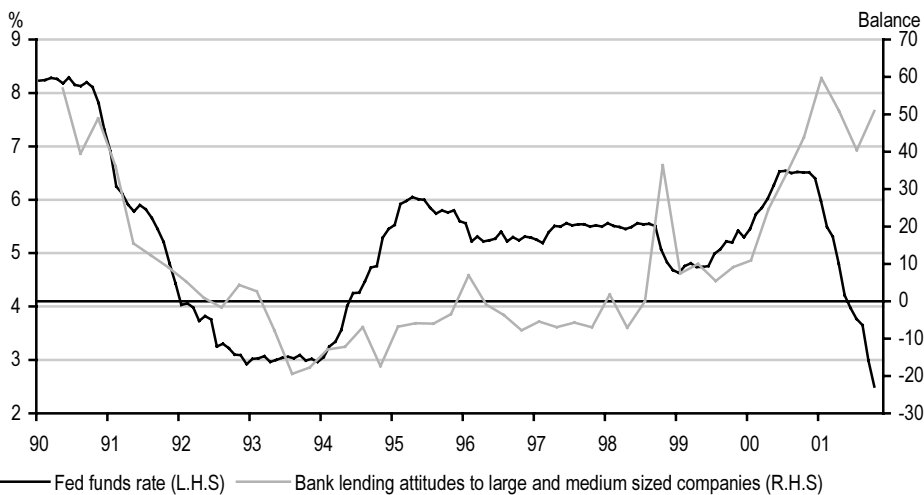
Source: Thomson Financial Datastream

Chart 29 shows real Fed funds measured in a different way, this time deflating interest rates by movements in stock prices. Relative to the information contained in chart 28, this

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approach has one major advantage: it relates current borrowing costs to expected future returns. On this basis, the conclusions are quite different. Monetary policy in the late 1990s was relatively loose because expectations for future growth were incredibly high. With expectations having collapsed – implying a much higher perceived debt burden than before – monetary policy is now relatively tight, irrespective of the declines in Fed funds which took place through the course of 2001. Of course, there is no guarantee that this second chart is any more accurate a measure than the first, but it raises the possibility that interest rate policy may not always work particularly well. This conclusion is supported by chart 30, which shows the relationship between the Fed funds rate and lending attitudes of banks to large and medium sized corporations, as revealed within the Federal Reserve’s Senior Loan Officers’ Survey. The chart suggests that, unlike the early-1990s, significant reductions in interest rates have yet to lead to any significant improvement in banks’ lending attitudes. In other words, the benefits of lower interest rates are not feeding through particularly quickly to the broader economy.

30. Rates come down but banks don’t pass on the benefits



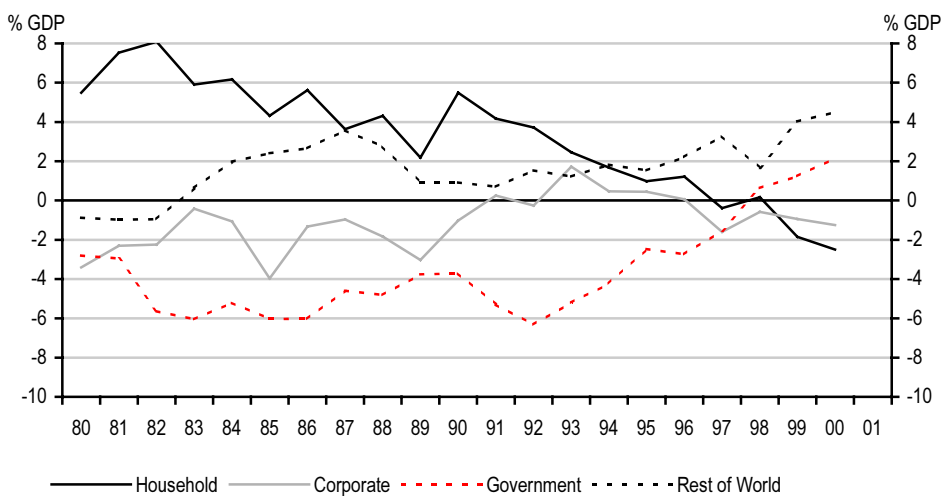
Source: Thomson Financial Datastream

Recovery Mechanisms (1)

Sectoral balances provide some clues

Asset prices play a role in recoveries as much as they play a role in recessions. One way to show this comes from the 'sectoral balance' approach to macroeconomic analysis. Chart 31, for example, shows the net savings position of the four key sectors of the US economy on a flow basis over the last 20 years.

31. Movements in savings between US sectors



Source: Thomson Financial Datastream

The four sectors are as follows:

The household sector

The household sectoral balance shows the amount of net saving – or net borrowing – that takes place out of current income. As with the other sectors, it is therefore a flow concept. It shows the extent to which, in any one year, households either add to their net worth (ie by saving out of current income) or take away from their net worth (ie by borrowing out of current income). Of course, these numbers say nothing about the overall change in net worth: this will be affected by changes in the value of the stock of both assets and liabilities. Generally speaking, the household balance is likely to be in surplus.

The corporate sector

The corporate sectoral balance shows the amount of net saving – or, more likely in the corporate sector, net borrowing – that takes place out of current income.

The government sector

The government sectoral balance is simply one measure of the budget surplus or deficit.

Recovery Mechanisms (1)

The rest of the world sector

The rest of the world sectoral balance shows the extent to which the rest of the world is saving in the US or borrowing from the US in any particular period, again on a flow basis. In effect, the rest of the world balance is simply the US current account balance with the sign reversed.

These balances are defined purely in an accounting sense. In principle, they should add up to zero: collectively, the economy, including the rest of the world sector, cannot be in deficit with itself. In practice, however, measurement difficulties sometimes ensure that there is a residual. It is also worth noting that the corporate sector and financial sector are sometimes defined separately; however, given that the financial sector is purely an intermediary, it typically is in neither larger surplus nor large deficit (although, interestingly, it has been in deficit recently, partly explaining why the sectoral balances in chart 31 do not add to zero).

It is not so much the overall sectoral balance position at any one point in time which is of interest: rather, it is the changes in sectoral balances over time that matter. Although it is sometimes difficult to account for the changes, it is generally reasonable to conclude that big movements in one or other of the balances will reveal something about the driving forces behind the changing patterns within an economy.

Chart 31 is interesting to the extent that it reveals some of the key driving forces behind the recoveries subsequent to the early 1980s recession and the early 1990s recession in the US. During the 1980s, the biggest sectoral balance shifts came from households (down), the government sector (down) and the overseas sector (up initially). This suggests that the primary sources of economic growth over that period – in Keynesian terms, the main demand injections – came from households and fiscal policy with some offsetting leakage abroad (in other words, the current account went into bigger deficit).

During the 1990s, a slightly different pattern emerged. As the economy came out of recession, the main changes came from the household sector (down), the government sector (up) and the rest of the world sector (up). The corporate sector was changeable, with initial increases offset by subsequent declines. Overall, though, the story of the 1990s was a story primarily about households. The dramatic decline in the household sectoral balance was a key factor behind the strength and sustainability of economic growth throughout the decade.

The importance of households

Put another way, the recoveries in both the 1980s and the 1990s were crucially dependent on household behaviour. Without a reduction in net savings out of household income, the recoveries in the 1980s and 1990s would either have been weaker or, alternatively, would have had to depend on a more dynamic performance from some other sector of the economy. So why was it that households could play such a decisive role? There are two explanations and one objection:

- ▶ The early to mid-1980s were characterised by a combination of significant declines in inflation (from 13.6% in 1980 to just 1.9% in 1986) and substantial declines in interest

Recovery Mechanisms (1)

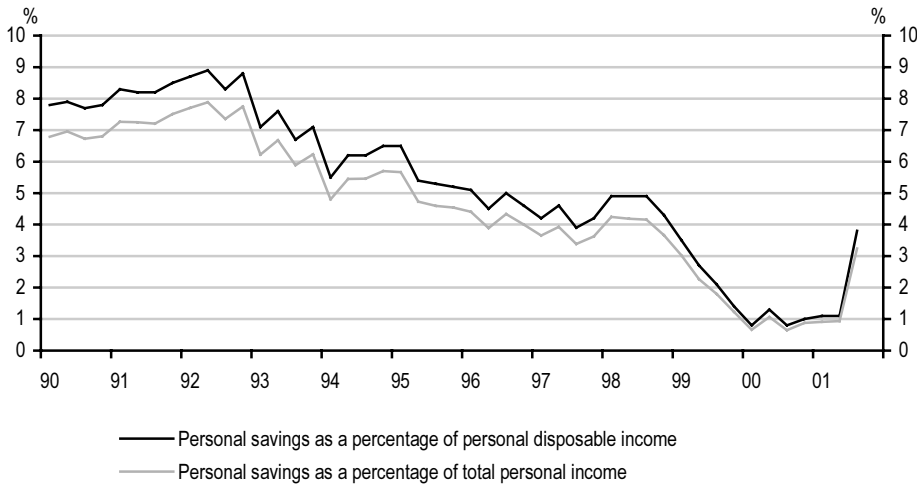
rates (from 13.4% in 1980 to a low of 6.7% in 1987). The downward surprise on inflation had a key impact on wealth: for a given stock of assets, the end period value would have been higher than expected in real terms. This unanticipated gain reduced the need to save out of current income and, therefore, stimulated consumer spending

- ▶ The mid-1990s were characterised by relatively modest changes in inflation, a higher level of interest rates relative to the earlier-1990s period of credit crunch but dramatic increases in nominal asset values. As we have already seen (chart 26), these gains were extraordinary relative to earlier periods. As with lower than anticipated inflation in the 1980s, they implied an ex-post upward surprise in terms of wealth and, as a result, led to dramatic further reductions in household savings out of income
- ▶ The decline in household savings, measured either through sectoral balances or through the saving ratio, is simply a mirage, as a result of improper treatment of either income or expenditure. There are two variants of this story. First, capital gains are not included as part of income but capital gains tax is taken away from income. Thus, in strong bull markets, the saving ratio will appear to fall even if there is no change in saving behaviour. Some people have suggested that, to deal with this, capital gains should be included as part of income. This, however, is ridiculous because it completely masks the dependency of savings behaviour on asset gains rather than income gains. A better bet is simply to compare the saving ratio including taxes with the saving ratio excluding taxes (chart 32). On either basis, the saving ratio has come down a long way. Second, some supposedly household savings are, in fact, savings made by corporations into pension funds. Faced with rapid asset price gains in the late 1990s, companies were able to take 'pension fund holidays' reflecting rises in asset values above and beyond actuarial plans. On this basis, it is not households which have been responsible for lower savings. However, this argument is simply a case of 'buck-passing'. Higher household savings simply imply lower corporate savings, leaving the overall private sector position unchanged

Overall, it appears that movements in household and corporate savings behaviour have responded to changes in terms of asset values, either in nominal or real terms. This suggests that the US economy now faces a significant problem. The last two recoveries have, in part, been driven by a household response to rising real asset values, either in the form of lower than expected inflation or higher than expected nominal returns. Neither of these options looks particularly plausible now. First, inflation is already low. Were the inflation rate to fall to the same extent that was seen during the 1980s, the US would have to move to outright deflation, with price falling by 8 or 9% y-o-y, a very unlikely scenario at this stage. Second, asset prices have collapsed in a way that very few were predicting two or three years ago. Comparing the actual path of equities, for example, with the kinds of gains which could have been – and were being – extrapolated from the experience of the late 1990s, equities are now 50% lower than might, earlier, have been expected ("Dow 36,000" doesn't look quite so clever now; the authors of that book suggested that the Dow Jones would hit 36,000 between 2002 and 2005. Of course, it could still happen but the claims seem to have lost some of their earlier apparent plausibility). As a result, the two key mechanisms behind the recoveries of the last twenty years – falling inflation, rising asset prices – appear to be largely irrelevant today.

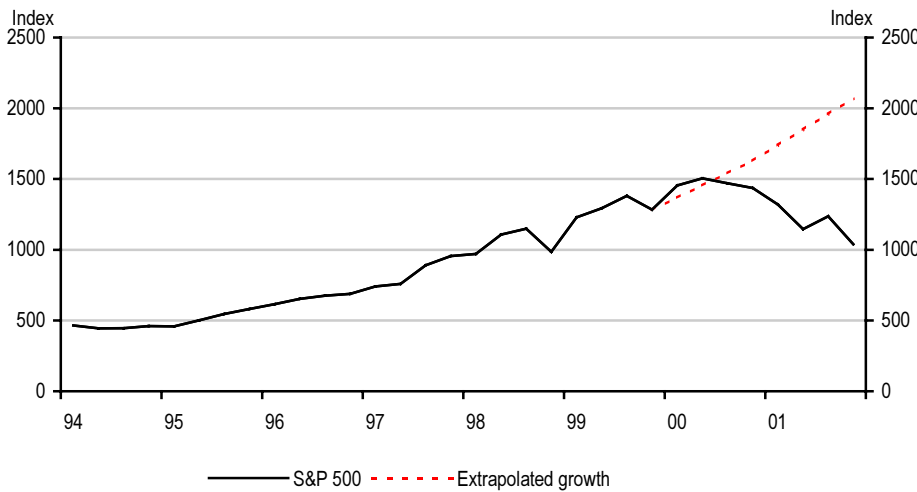
Recovery Mechanisms (1)

32. Including taxes, the saving ratio has fallen less, but it has still come down



Source: Thomson Financial Datastream

33. The S&P 500: what could have happened and what did happen



Source: Thomson Financial Datastream and HSBC

In other words, noting that interest rates have fallen, or that fiscal policy has been loosened, is not sufficient to be sure that a sustained economic recovery will come through. Recoveries do not depend purely on changes in terms of economic policy: they depend, in addition, on the ability of sectors of the economy to respond to those changes. That response, in turn, will depend on the relationship between income flows and asset and liability levels. On this argument, there is a potentially serious problem now facing the US economy: it is more likely in the short to medium term that, *ex ante*, household savings will

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rise rather than fall. In other words, the medium term outlook for households is the complete opposite of the experience of the last twenty years.

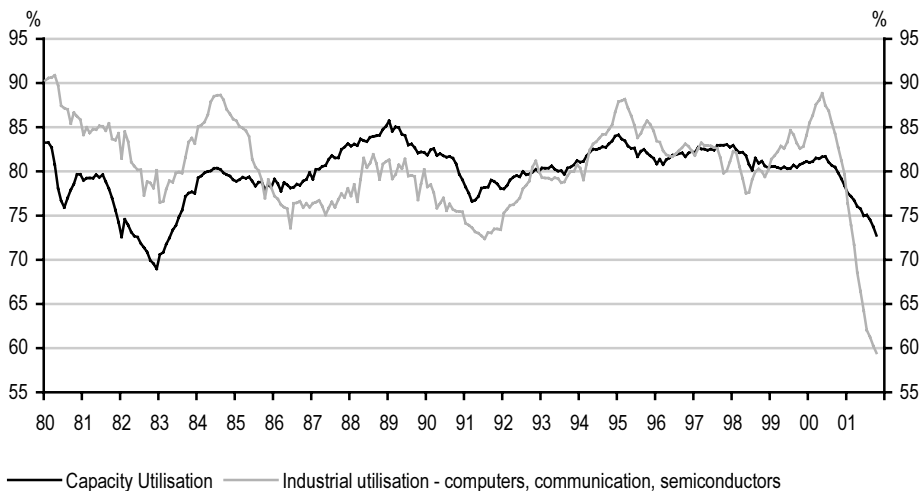
Who can drive the recovery?

On this basis, recovery may have to depend on another sector of economic activity. But which one? There are a number of options:

First, rising household saving is matched by increased corporate dis-saving

A positive interpretation of this move would be to suggest that higher savings imply higher expected future returns which, as a result, imply higher capital spending. However, given the massive decline in capacity utilisation – particularly in technology – through 2001, this seems like a somewhat unlikely conclusion (chart 34). More likely is the idea that households recognise that future returns will be lower than previously expected and, as a result, they are simply forced to save more out of current income to meet their longer-term wealth objectives. On that basis, a higher corporate deficit, rather than reflecting higher capital spending, would simply reflect a collapse in profits and, hence, a bigger financial deficit. That, in turn, would prompt a further series of job losses.

34. Capacity utilisation has collapsed in technology areas



Source: Thomson Financial Datastream

Second, rising household saving is matched by lower 'rest of world' saving

In other words, the current account deficit is reduced dramatically. There are a number of ways in which this could happen. There could be a significant rise in demand for US goods elsewhere in the world; a reflection of the competitive benefits accrued by US firms in the light of earlier heavy investment in IT. However, America's experience through the course of 2001 suggests that this is not a realistic scenario. Despite the higher capital spending, US

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exports have fallen significantly. Admittedly, part of this decline is a reflection of lower intra-company trade with affiliates of US companies elsewhere in the world. However, there is little evidence to suggest that there has, so far, been a lasting trend reversal in the current account position. A more likely scenario is that the US grows more slowly than the rest of the world. Given the relatively poor performance of Europe and Asia in recent years, this cannot be a positive outcome.

Third, rising household saving is offset by higher government borrowing

In other words, the government recognises the black hole created within the private sector and chooses to step in to plug the gap. In the short term, this may be a workable solution, if only to the extent that the economy does not spiral downwards. However, it should be noted that, in Japan's case, fiscal policy and private savings have not been independent of one another. Higher government borrowing, by increasing the future tax burden for households, appears to have been entirely offset by higher private sector saving. As a result, although fiscal policy may have prevented a collapse in Japanese GDP, it is far less obvious that it has been associated with a significant positive multiplier effect.

Flows and stocks

The underlying problem is the extent to which flows of income and expenditure are a function of stocks of assets and liabilities. If consumption growth rises above and beyond that which can reasonably be sustained over the medium term, it will eventually have to reverse. This process is the more likely under the following conditions:

- ▶ Households have high stocks of financial assets
- ▶ Those financial assets are valued on the basis of future growth expectations discounted back to the present day
- ▶ Households are able to take on liabilities on the back of the perceived value of their financial assets
- ▶ Future growth expectations are unstable and are prone to substantial revision, thereby having an immediate impact on the current value of financial assets
- ▶ Household liabilities built up on the back of changes in financial assets are fixed in nominal terms: only debt service costs are likely to change

On the back of these assumptions, it is relatively easy to demonstrate that upward revisions to future growth expectations which, ultimately, prove to be unjustified can lead to excessive borrowing in the short term followed by a debt 'overhang' subsequently. Under these circumstances, subsequent interest rate cuts may reduce debt service costs but they will do little to get rid of the underlying excess of liabilities. The only two ways around this are, first, a rapid rebound in asset prices – implausible if growth expectations were excessive in the first place – or, alternatively, a dose of inflation which reduces the real value of the nominal debt stock – undesirable if the subsequent costs of disinflation are deemed to be relatively high.

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These arguments suggest that we do not live in a world of 'push button' economics whereby a 1% change in short term interest rates or a 1% of GDP fiscal easing give entirely predictable results. Instead, we live in a world whereby behaviour in any one period is governed both by the asset and liability baggage carried over from earlier periods and by the ephemeral qualities of financial market expectations. On that basis, the volatility of asset values relative to the fixed nature of financial liabilities presents a real challenge to policy makers.

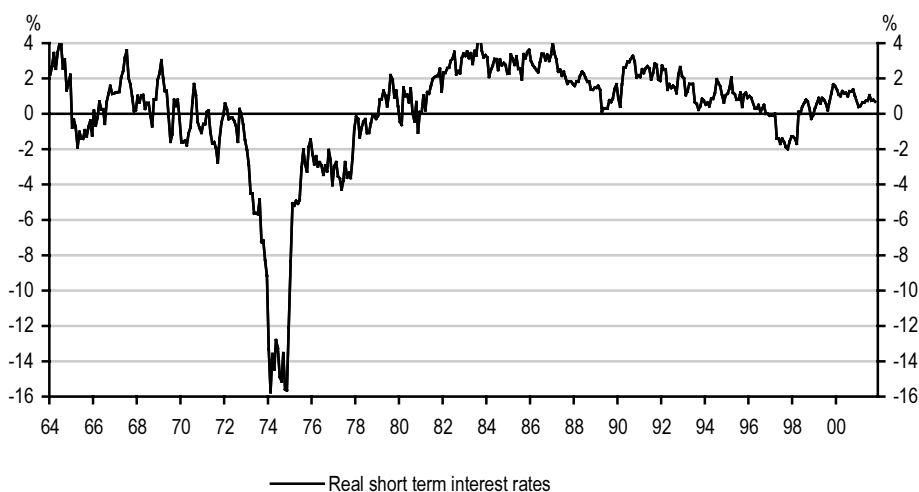
Recovery Mechanisms (2)

Price stability and deflation

The impact of asset prices on sectoral economic performance is one key influence on the shape and scale of economic recovery. A second key influence is the impact of price stability on the likely success of monetary and fiscal policy. The general point is this: lower inflation may reduce the frequency of economic disaster but, when disaster does come, it may be more difficult to rectify the situation. There are three key reasons:

- ▶ First, in a situation of relative price stability, it is more difficult to sustain low – or negative – interest rates in real, inflation-adjusted, terms. Using a standard measure of real interest rates, chart 35 shows that, although rates have been low in Japan over the last ten years, there has been no ability to generate sustainably negative interest rates of the kind seen in the late 1960s and throughout much of the 1970s. Moreover, for all countries, the 1950s and 1960s were years which lacked sustained balance sheet inflation. Bretton Woods may have had its disadvantages but at least it prevented countries from pursuing unsustainable economic paths driven by rises in assets and subsequent increases in liabilities. The need for negative real interest rates in the light of rapid asset price declines was, therefore, reduced

35. Deflation may have prevented Japanese rates falling far enough



Source: HSBC

- ▶ Second, banking sector problems are easier to deal with if the central bank can generate a very positively sloped yield curve. Given that banks typically borrow short and lend long, a steeper yield curve signifies an improvement in the potential supply of credit: in effect, banks receive greater compensation for the inherent risk associated with lending, a risk that will be perceived as particularly high during recessions. If inflationary expectations are low, it is more difficult to achieve a steeply sloped yield curve for the simple reason that bond yields would be lower than might otherwise be the case. At the

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extreme, the result is a Japanese-style situation, whereby lower short rates are matched by lower long rates and, as a result, a yield curve which is never particularly steep

- ▶ Third, if real interest rates cannot be reduced dramatically, and the yield curve cannot be forced into a very positive shape, there is a risk that low inflation will slip into outright deflation. Once prices begin to fall, the transmission mechanism of monetary policy begins to seize up, reducing the ability of the monetary authorities to boost economic activity. Some have suggested that this need not be the case: in the 1930s, for example, the 'Pigou effect' pointed to the positive impact on 'real money balances' of falling prices and suggested that this would lead to a positive impact on overall spending. This, however, may be an overly optimistic interpretation of deflationary trends. Ultimately, deflation reduces the ability of the economy to link willing lenders with willing borrowers and, as a result, leads to informational failures

Deflation reduces the ability to deal with risk

Deflation basically reduces the ability of the economy to recover because it provides a major disincentive to risk taking. Money rises in value not just against goods and services but also against the majority of 'risky' assets. During a deflationary period, it may be the case that companies are able to earn positive real returns but, in nominal terms, those returns may still be negative. Under these circumstances, there is little reason to hold equities or corporate bonds. Instead, the choice is likely to be between cash and 'near-cash' alternatives, such as government bonds. As a result, the mechanisms to transfer funds from savers through to 'risky' borrowers are curtailed and the economy begins to move to a much weaker path for economic growth.

Is deflation a serious risk? During the 1970s and 1980s, there were few reasons for concern. With inflation relatively high in the first place, monetary policy was relatively effective. Meanwhile, when there were big declines in asset prices – in 1972 and 1973, for example – the excessive levels of debt that were left over were eroded quickly through higher inflation. Moreover, given that inflation was always relatively high over that period, it was difficult to even think of the possibility of price declines. Deflation was an historical quirk, interesting for economic historians but not for anybody else.

Four deflationary influences

Deflationary risk is greater under four conditions:

- ▶ First, there is evidence of a financial or economic bubble. In other words, there are indications that liabilities have risen on the back of rapid gains in asset values. If nominal return expectations subsequently collapse, asset prices fall but the stock of liabilities remains unchanged. The process of debt repayment slows the pace of recovery and, in turn, may lead to an increased chance of price declines

Recovery Mechanisms (2)

- ▶ Second, the inflation rate is already very low. In other words, a shock to the level of activity which forces inflation lower has a greater chance of creating deflationary conditions if inflation is already close to zero
- ▶ Third, policy responds only slowly to changes in the economic environment. If the authorities continue to fight last year's inflationary battle rather than this year's deflationary war, they may find themselves in a position whereby the collapse in private sector expectations for future growth comes through faster than the offsetting monetary and fiscal adjustment. On this basis, liquidity trap problems are more likely
- ▶ Fourth, an absence of significant exchange rate adjustment prevents a switch in demand from non-functioning domestic sources to external sources. As a result, the adjustment to a deflationary shock takes longer carries greater downside risks for longer-term price stability

Of these four factors, the US currently scores on three. There was evidence of a bubble, the inflation rate is very low and there has been no exchange rate adjustment of any significance so far. The good news is that, so far, policy has responded much more quickly to the threat than was the case either in Japan at the beginning of the 1990s or the US at the beginning of the 1930s. Nevertheless, there is at least some risk that deflation could take hold. After all, Japan experienced a significant decline in the yen's value at the end of the 1980s (see chart 36) yet this did not manage to save the Japanese economy.

36. The yen fell in 1989 and 1990 – but unfortunately rose thereafter



Source: HSBC

It is also worth noting that we have said nothing about restructuring. There is a good reason for that. Japan's lack of restructuring in the first half of the 1990s has been seen as one factor behind the subsequent period of deflation. However, America's deflation in the 1930s came at a time of aggressive cost restructuring. In Japan's case, deflation was associated with a rising household saving ratio – perhaps a precautionary response to the threat of

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rising unemployment – but America's deflation was associated with a falling saving ratio as households attempted to maintain their spending habits in the wake of severe job losses. There seems to be no direct relationship between restructuring and the chances of avoiding recession.

The risk of deflation is ultimately a risk that stems from earlier excess. A combination of balance sheet inflation and price stability significantly increases the risk of a subsequent move into deflation. From that perspective, central bankers should be aiming to prevent financial and economic bubbles from developing not from the perspective of a short term threat of higher inflation but, rather, from the perspective of a medium term risk of falling prices.

Growth And Imbalances

The limits to the pace of recovery

An absence of consumer recovery mechanisms does not rule out recovery altogether. However, there may be limits to the extent of any recovery. These limits, in part, will be based on the earlier period of excessive growth. The magnitude of these limits is, of course, not easy to calculate. Nevertheless, some useful clues come from the outlook for one specific part of an economy, namely the balance of payments position.

In the 1950s and 1960s, the balance of payments provided a key constraint on the ability of countries to grow at 'excessive' rates. With limited global capital flows, a lurch into balance of payments deficit would be difficult to fund and, as a result, a policy reversal was required relatively early on to avoid a devaluation of the currency. This process contributed, in part, to the 'stop-go' economic policies of that period.

37. The US has borrowed like there's no tomorrow



Source: HSBC

Since the 1970s, however, the balance of payments constraint has gradually been lifted. A number of factors have contributed to this process. First, higher and more volatile inflation made fixed currencies more difficult to sustain. In response, the Bretton Woods system collapsed to be replaced by a variety of floating regimes, pegged regimes and regional currency systems. Second, the gradual abolition of capital controls enabled current account deficits to be funded relatively easily. Third, the evolution of financial markets and the increase in informational flows – partly associated with the advent of new technologies – made it easier for countries to get access to capital from elsewhere in the world.

Put another way, these changes in the balance of payments position have made it easier for the domestic sectors of an economy – the household sector, the corporate sector and the government sector – to go into deficit over a sustained period of time. The provision of resources from abroad has been a key factor in suppressing inflationary pressures and, as a

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result, countries have been able to go down 'unsustainable' paths for longer than might have been the case in the past.

Expectations play a key part in this process. In exactly the same way that domestic asset prices will discount expected future growth, so capital inflows will be driven by relative return expectations. As long as these remain buoyant for a particular country, there should be no difficulty in attracting capital flows. Yet we know from emerging market examples over the last decade that there may be an inconsistency between short and long run views of an economy's likely success or, alternatively, there may be a break down in informational flows between the ultimate providers of capital and the domestic users of capital – sometimes as a result of a poorly functioning banking system which suffers from a lack of prudential supervision.

We also know from other areas of borrowing that there can be a sustainability problem over the medium term associated with an excessive build-up of debt. The Italian and Swedish fiscal crises of the 1990s are good examples of this problem. There may not be any great difficulty in borrowing in any one year but, cumulatively, the impact on debt and debt service costs can become unsustainable. Either the government is forced to raise taxes or, alternatively, it chooses to inflate its way out of the problem, thus reducing the real value of its outstanding debts. As a result, it imposes an inflation tax on bond holders.

America's growing debt with the rest of the world

38. The new paradigm outlook for US external debt

	Foreign owned US assets (ie US external liabilities) % US GDP	US owned foreign assets (% US GDP)	Current account deficit (% US GDP)	Net external liabilities (% US GDP)
2000	95	73	3.3	22
2001	110	75	4.5	35
2002	125	77	4.0	48
2003	141	79	4.0	62
2004	159	82	4.0	77
2005	178	84	4.0	94
2006	198	86	4.0	111
2007	219	89	4.0	130
2008	242	91	4.0	150
2009	266	94	4.0	172
2010	292	96	4.0	195
2011	319	99	4.0	220

Source: HSBC This scenario assumes that US assets continue to outperform those elsewhere in the world by 6% per year, in line with the average outperformance of US bonds and equities in the second half of the 1990s. It also assumes that the dollar rises by 3.5% in trade-weighted terms, a continuation of the average appreciation seen in the second half of the 1990s. Nominal GDP growth is assumed to be 5.5% per year, in line with 'new paradigm' expectations

These arguments apply to the US today. Although the US can hardly be described as an emerging market, it is nevertheless true that the US cannot continue indefinitely on the path embarked upon during the late 1990s. The persistence of current account deficits over the last 20 years has already shifted the US to being a net external debtor rather than a net external creditor. Persistent current account deficits will make the situation even worse.

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Table 38, for example, shows the outlook for net external liabilities based on a continuation of new paradigm assumptions, all of which are detailed at the bottom of the table. The table suggests that the US simply cannot persist with a current account deficit at around 4% of GDP. It will lead to an explosive rise in the ratio of net external liabilities relative to GDP which, ultimately, will not be sustainable.

This scenario suggests that countries can face a 'ticking time bomb' problem. The bomb will go off at some point but policy makers cannot be sure when that moment will be. In the short term, there may be a number of positive outcomes that can be achieved for an economy. These, however, may ultimately not be consistent with a long-term equilibrium in terms of assets and liabilities whether from a purely domestic perspective or from a global angle. Table 38 basically shows that even a stabilisation of the current account deficit – an event which has occurred in the last twelve months – is not sufficient to undo this longer-term problem.

39. What needs to happen to bring the current account into balance by 2004				
	2001	2002	2003	2004
<i>Option 1: Growth contraction</i>				
US GDP (% year)	-0.8	-5.7	-5.6	-5.0
US Current account (% GDP)	-389	-218	-90	0
World GDP growth (% year)	1.2	-1.0	0.4	0.7
<i>Option 2: Dollar decline</i>				
US GDP (% year)	1.1	2.5	7.2	-0.1
US current account (% GDP)	403	335	162	0.0
World GDP growth (% year)	1.3	2.0	1.7	0.0
Yen/\$		60	50	45
\$/euro		1.4	1.4	1.4
\$/£		2.2	2.2	2.2

Source: HSBC, based on simulations carried out on the OEF model

To illustrate the magnitude of the problem, we have carried out some simulations on the Oxford Economic Forecasting model – see table 39 – to assess what would have to happen to the US economy over the next three years in order to bring the current account deficit into balance. We have adopted two approaches. The first assesses the extent to which US domestic demand would have to weaken to generate the improvement purely through a downward shift in US growth relative to growth elsewhere in the world. The second achieves the same result but, this time, assesses how far the dollar would have to fall – for a given growth rate – to achieve a switch expenditure away from domestic demand towards exports. The results, shown in table 39, are disconcerting. They suggest either a sustained period of extraordinarily deep US recession or, alternatively, a dollar decline to \$1.40 against the euro and to ¥45. Either way, they imply big problems not just for the US economy but also for the rest of the world: shocks on this scale would imply a serious disruption of the global economy over the next few years.

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Sustainability is the issue

All of the arguments used within this piece boil down to an issue about sustainability. They suggest, first, that booms and busts have not been eradicated even with the advent of price stability and, second, that booms and busts can lead to longer-term problems for economic growth. As a result, it may be desirable to direct policy in ways that could be consistent with a sustainable economic outlook: in other words, booms and busts should, where possible, be avoided.

This might seem like a sensible proposition but it is worth noting that policy makers at the highest level have suggested otherwise. In his semi-annual testimony to Congress on 22 July 1999, Fed Chairman Alan Greenspan said the following:

“By itself, the interpretation that we are currently enjoying productivity acceleration does not ensure that equity prices are not overextended. There can be little doubt that if the nation's productivity growth has stepped up, the level of profits and their future potential would be elevated. That prospect has supported higher stock prices. The danger is that in these circumstances, an unwarranted, perhaps euphoric, extension of recent developments can drive equity prices to levels that are unsupportable even if risks in the future become relatively small. Such straying above fundamentals could create problems for our economy when the inevitable adjustment occurs. It is the job of economic policymakers to mitigate the fallout when it occurs and, hopefully, ease the transition to the next expansion.”

The suggestion appears to be that central bankers should not intervene significantly during a period of economic boom even if there is evidence that asset prices are being driven up to unsustainable levels. Instead, central bankers should simply minimise the cost associated with any subsequent decline in asset prices. This asymmetry could, arguably, lead to the development of moral hazard problems, which might ultimately backfire if monetary policy fails to ‘kick-start’ the economy during the subsequent downswing.

Clearly, the Fed tried very hard throughout 2001 to ‘mitigate the fallout’. Moreover, it probably will be the case that, eventually, a recovery will come through. The arguments in this piece, however, suggest that the fallout may be highly disruptive and, as a result, could lead to years of growth under-performance. Moreover, the extent to which policymakers are able to ‘mitigate the fallout’ may be significantly lower than they expect if the earlier period of excess was extensive.

In other words, it might be better to prevent excesses from arising in the first place. Inflation targeting was supposed to do this. Although the Federal Reserve does not have a published inflation target, it is quite clear that price stability is its overriding objective. In its own account of its monetary objectives, the Federal Reserve says the following:

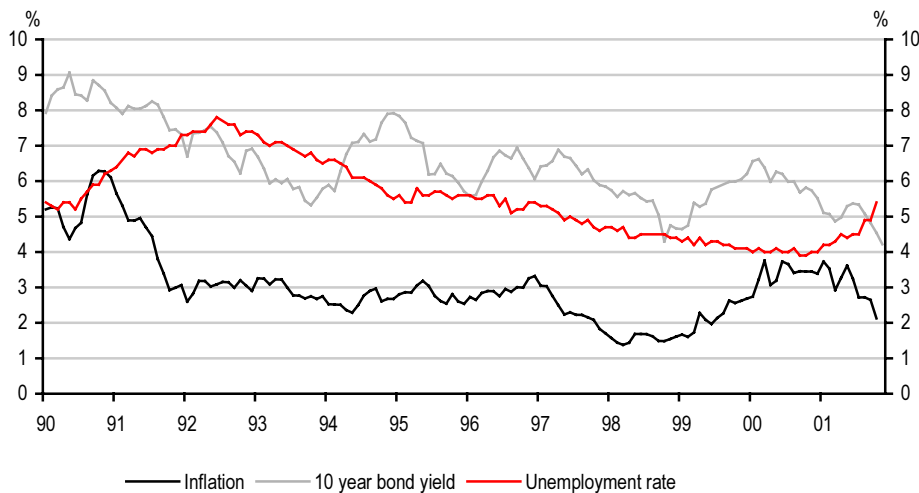
“Most analysts believe that the central bank should focus primarily on achieving price stability. A stable level of prices appears to be the condition most conducive to maximum sustained output and employment and to moderate long-term interest rates.”

On that basis, the Federal Reserve did a fabulous job through the course of the 1990s. Chart 40 shows the performance of the US economy in terms of growth, inflation and interest rates. Relative to its own stated objectives, the Fed's record is very impressive. In the second half of the 1990s, growth was higher, inflation lower and interest rates lower than

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in earlier periods. On that basis alone, it seems reasonable to suggest that the Fed was, at all times, pursuing the right policies.

40. America's 1990s success



Source: Thomson Financial Datastream

The wrong yardstick?

41. Japan and the US compared – the US in the 90s was similar to Japan in the 80s

Five years to:	US GDP, % annualised growth	Japanese GDP, % annualised growth	US inflation, % annualised rate	Japanese inflation, % annualised rate	US long rates, average percentage rate	Japanese long rates, average percentage rate
1965	5.0	9.2	1.3	n.a	4.1	n.a
1970	3.4	11.1	4.3	n.a	6.0	n.a
1975	2.7	4.5	6.8	11.3	7.0	8.2
1980	3.7	5.7	8.9	6.7	8.9	7.9
1985	3.1	3.3	5.5	3.0	12.2	7.2
1990	3.3	5.0	4.0	1.6	8.4	5.5
1995	2.4	1.4	3.1	1.4	6.9	4.2
2000	4.1	1.3	2.5	0.1	6.0	1.9

Source: Thomson Financial Datastream

Yet, this is a conclusion that only holds true if the chosen yardstick is appropriate. Table 41 is revealing. It shows the performance of growth, inflation and long-term interest rates in discrete five-year periods over the last forty years, comparing the US with Japan. The highlighted periods show the five years of the Japanese bubble and, for the US, the second half of the 1990s. If the yardstick of success could be applied to the US over the last five years, it seems reasonable to think that a similar yardstick of success could be applied to Japan in the second half of the 1980s.

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This is a very worrying conclusion. It suggests that there was nothing wrong with Japan's bubble and, moreover, that the Bank of Japan should have taken no pre-emptive action to prevent the bubble from building. In this view, Japan's problems in the 1990s were associated only with a failure to change policy sufficiently to deal with the aftermath of the bubble. If only interest rates had fallen quickly, there might have been a better chance of seeing a subsequent recovery.

This view stems from one particular analysis of the events of the 1920s and 1930s that, in turn, owes a lot to the work of Milton Friedman. This analysis is based, primarily, on the observation that the Federal Reserve did not cut interest rates aggressively in the immediate aftermath of the 1929 crash and, subsequently, chose to raise interest rates at an inopportune time. Add to these decisions an ongoing commitment to the Gold Standard and the result was a complete collapse in activity in the first half of the 1930s. Why did the Federal Reserve make these 'mistakes'? Many reasons are given but the most important, perhaps, is moral hazard: the Fed did not want to put itself in the position of 'bailing out' private sector greed. This would only encourage excessive risk taking in the future.

A similar philosophy was adopted by the Bank of Japan in the first half of the 1990s. It regarded the second half of the 1980s as, ultimately, a period of excess that needed to be stamped out. The Bank of Japan's policy at the beginning of the 1990s focused on the need to prevent the bubble from reforming: there was little focus on the risks associated with a bursting of the bubble, at least not until the mid-1990s. Indeed, the Federal Reserve has sometimes argued that America's success in the 1990s, and Japan's failure, are both related to policy: the US faced a similar threat to Japan but dealt with it more successfully through a combination of fiscal bailouts for the banking sector and rapid interest rate cuts to ensure a positively sloped yield curve, again offering support for the banking sector.

This, however, is not the only interpretation. The alternative – one which has a European rather than American pedigree – is that 1930s America and 1990s Japan were, in one sense, the inevitable result of 1920s America and 1980s Japan. In other words, bubbles burst and, when they do, there are limits to what monetary policy can achieve to limit the fallout. From this perspective, the problem lies with a collapse in expectations of future growth and future returns. Falling interest rates may help to reduce debt service costs but will not have any great impact on economic growth. Earlier excesses will simply have to be worked off.

A useful way to think about this comes from the relationship between official interest rates and expectations of future returns. Assume that there is no direct relationship between the two. Interest rates are set by the central bank. Real returns are based on perceived changes in technology. Moreover, the central bank sets interest rates on the basis of historic norms. How might this process be destabilising? Consider three examples:

- ▶ Nominal interest rates are set at 6% and inflation is stable at 2%. Real rates are above the historic average. Expected returns on investment are sky-high, running at 20% per year in nominal terms. As a result, there is every incentive to borrow and re-invest in the stock market and in the real economy. Under these circumstances, there is a huge investment boom and there is an excessive rise in liabilities

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- ▶ Nominal interest rates are set at 1% and inflation is stable at 2%. Real rates are well below the historic average. Expected returns on investment, however, have collapsed into negative territory. As a result, there are no willing borrowers and there is no investment. Monetary policy appears to be loose but, in fact, is very tight
- ▶ Nominal interest rates are set at 1% but, with expected returns in negative territory, the economy shrinks, putting downward pressure on prices. As a result, returns on holding money relative to other assets – real or financial – start to rise and the velocity of circulation of money supply collapses. Under these circumstances, a liquidity trap starts to take hold and deflation results

The key thing about these examples is that they are all possible stages in the same process. The first example comes from the period of economic boom. The second comes from an 'interim' stage whereby there is a conscious attempt to reinvigorate the economy. The third comes from the failure of that reinvigoration process. In other words, the danger is that economic booms create stresses and strains which, in specific circumstances, lead to a subsequent failure of monetary policy to support recovery. If this is a risk, it might be better to prevent booms from occurring in the first place.

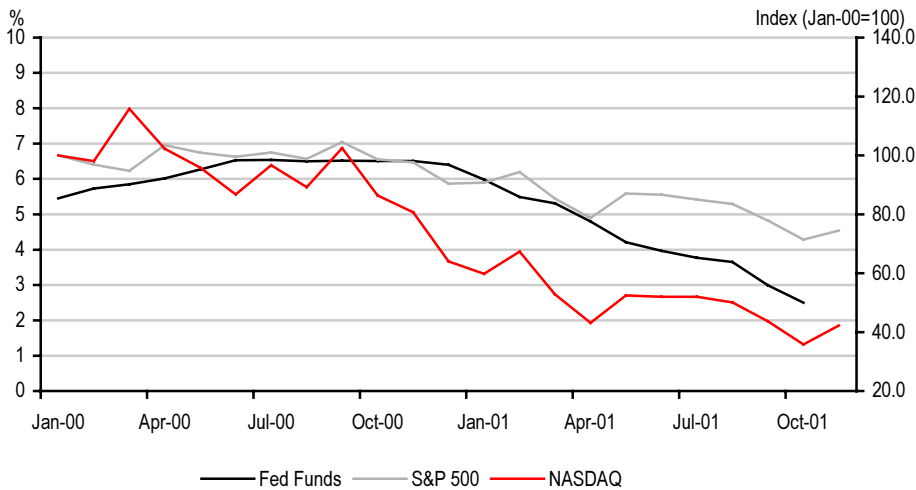
Different deflationary boats

This is not to say that the US today is in the same boat as either Japan ten years ago or the US in the 1930s. For starters, Japan's experiences of recession and of subsequent deflation in the 1990s have been insignificant relative to the US experience of the 1930s. In other words, there is no well-defined standard deflationary pattern and, as a result, there is little to be gained by attempting to throw the US today in a 'catch-all' deflation category. Second, the US loosened policy aggressively during 2001. The rate cuts from the Fed have been bigger than anything that was achieved at the beginning of the 1930s. They have also been earlier – relative to the bursting of the equity bubble – than achieved by Japan ten years ago. Third, the loosening of fiscal policy from the US through 2002 suggests a degree of 'problem recognition' that was absent in either 1930s America or 1990s Japan. For all these reasons, it is inappropriate to suggest that the US is facing similar problems to either of these examples of deflation.

Yet there are limits to this argument. The timing of interest rate reductions is an area of confusion. The latest rate cuts from the Federal Reserve have occurred concurrently with the equity market decline (chart 42). In Japan ten years ago, the cuts came 18 months late relative to the equity market decline (chart 43). From this perspective, it looks as though the Fed has acted much more quickly. However, the impact of falling equities on US GDP has come through more rapidly than in Japan eleven years ago. This may reflect the fact that America's late-1990s boom was built against a background of financial disintermediation and capital market growth whereas Japan's was more dependent on bank lending. Either way, although America's rate moves have come through a lot more quickly than Japan's with respect to equities, the evidence for a more pre-emptive approach with respect to economic growth is less clear cut.

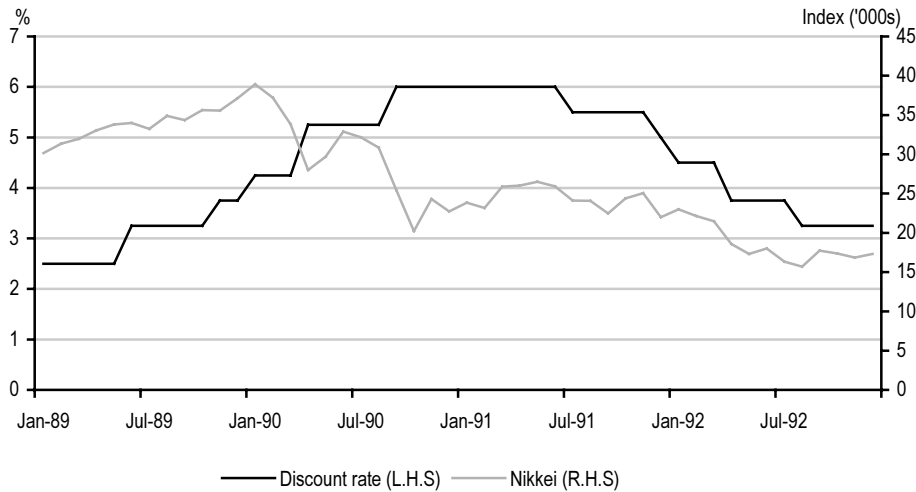
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42. The Fed cut rates as soon as the S&P fell (although not when the NASDAQ fell)



Source: Thomson Financial Datastream

43. The Japanese cut rates long after the Nikkei began to fall

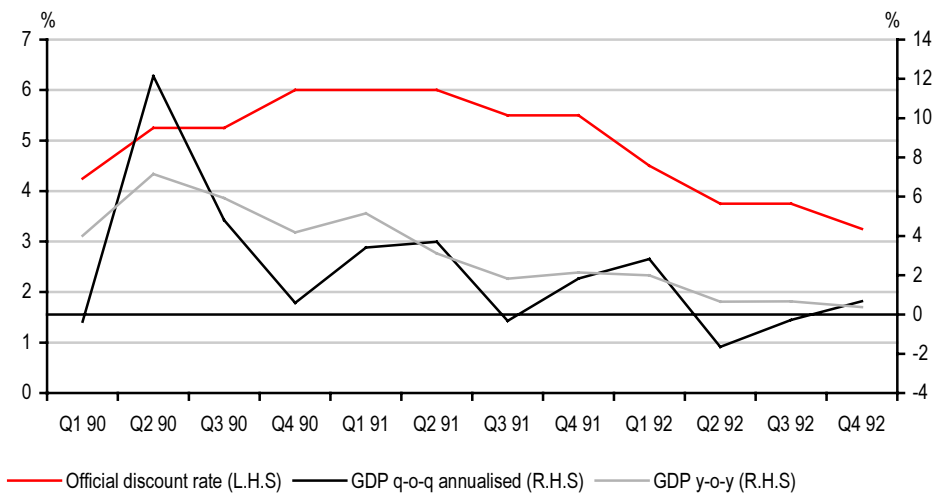


Source: Thomson Financial Datastream

The Bank of Japan began to cut interest rates in the third quarter of 'below trend' Japanese growth whereas the Fed cut rates at the very beginning of the third quarter of below trend growth. In the first year of rate cuts, the Japanese Official Discount Rate fell by more than 2%. The Federal Reserve has done more although at least some of the rate cuts at the tail end of 2001 were more a response to the tragic events of 11 September than a direct result of ongoing economic weakness. Either way, the conventional wisdom on Japan's slow response to its economic difficulties is probably misleading.

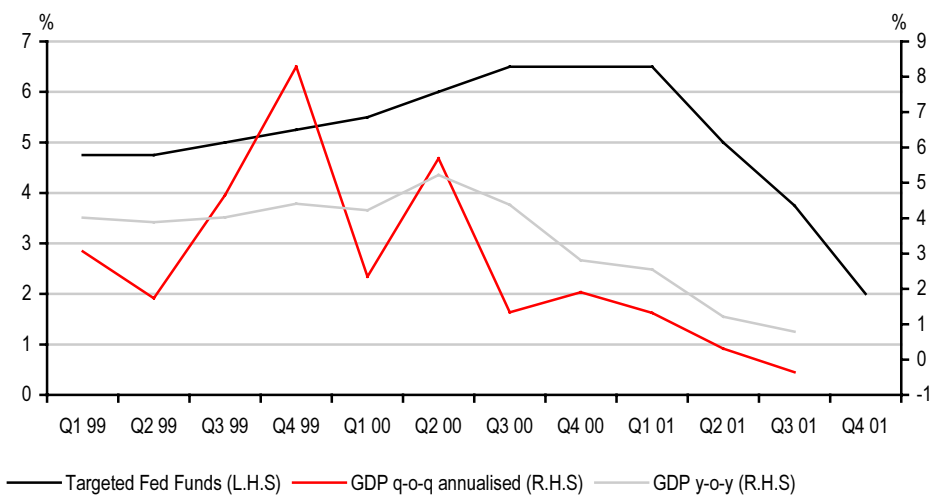
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44. The Japanese cut rates in third quarter of below trend growth



Source: Thomson Financial Datastream

45. The US also cut rates in third quarter of below trend growth



Source: Thomson Financial Datastream

Moreover, the thrust of the arguments contained within this paper are that minimisation of deflationary adjustment requires a combination of preventative policies on the upside as well as quick policy action on the downside. The US may have delivered the second but it certainly did not deliver the first. If our arguments are right, this suggests that the process of adjustment over the coming few years is going to be painful. There will be some growth from time to time – particularly when fiscal injections come through – but the excesses of the last five years may imply a prolonged period of under-performance relative to the late 1990s

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and, indeed, relative to most other periods of economic recovery from recession. At best, the US may be able to emulate its performance of ten years ago, when there was a sustained period of weak and disappointing growth that spawned an industry on 'American failure'. At worst, the risk of a move into deflationary territory – which policy makers have few answers to – is now higher than at any point over the last fifty years.

Three hangovers

Where does this leave the outlook for the US economy – and, indeed, the global economy – in the months and years ahead? In sum, our arguments suggest that there is no smooth path back to a 'trend' growth rate. Moreover, they suggest that uncertainty over the 'true' underlying growth rate of the US economy is likely to persist for an extended period of time. During that period, optimism over the underlying performance of the US economy is likely to fade further.

Nevertheless, economics never has been a 'straight-line' discipline. We may be entering a period of growth disappointment but there are still huge uncertainties over the precise nature of this under-performance. In our view, three scenarios are worth considering:

Scenario 1

Growth remains weak but the policy response has been swift enough to prevent deflation. On this basis, we end up with an early-1990s scenario. The last five years will increasingly be regarded as a period of excessive boom and the new paradigm will be increasingly questioned. Although the economy comes out of recession during the course of 2002, the pace of subsequent recovery is severely curtailed. There may be occasional boosts, associated with the timing of fiscal support efforts, but the annualised growth rate of the US economy may prove to be no more than about 2% over the next few years. On that basis, the performance of risky financial assets could be seriously undermined.

Scenario 2

Growth rebounds very quickly as a result of an overly exuberant reaction to the policy easing of the last twelve months. However, the underlying structural performance of the economy remains very weak with relatively poor returns on investment. As a result, the recovery can only be sustained through higher government spending or higher real wage growth. Both lead to a squeeze on corporate profits and, eventually, give rise to a quick policy reversal. The initial, unsustainable, rebound is choked off either through more corporate restructuring or higher interest rates or a combination of both.

Scenario 3

The policy adjustments through 2001 ultimately fail. The excesses within the economy, combined with relatively low inflation at the beginning of the downswing, lead to the emergence of widespread deflationary pressures. With prices beginning to fall, the appetite for risk-taking begins to diminish and, as a result, conventional macro-economic policies begin to fail. The cyclical downswing leads to a permanently low growth rate for the economy, reflecting an inability to innovate technological advances.

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At this stage, our forecasts suggest that scenario 1 is the most likely scenario. Although we expect a reasonable rebound in US growth in H2 2002, it does not persist into 2003. The underlying restraints on economic growth imposed by the earlier period of excess suggest that policy-makers will have their work cut out trying to prevent the emergence of deflation. As a result, we are about to enter a period of low growth on a sustainable basis with a bias towards low interest rates and low returns on other financial assets. In one sense, this should be regarded as a successful outcome given the scale of the excesses built up earlier and the constraints now imposed by those excesses. However, our arguments imply that the 'new paradigm' economy is a story fading fast. Hopefully, the US will be able to hang on to some of the exceptional productivity gains seen in the late 1990s. However, a return to late 1990s growth rates on a sustainable basis seems most unlikely any time soon.

Given this, we could be on the verge of a new policy revolution. In the 1960s, policy makers thought they had discovered the secret of economic prosperity. Monetary and fiscal policy could be directed at the maintenance of full employment against a background of current account balance. That model, however, broke down and, after years of macro-economic disorder and distress, was replaced by a general commitment to either monetary targets of explicit inflation targets. In the 1990s, the commitment to price stability seemed to be paying off: – we'd never had it so good. That model is now showing signs of age. Faced with our new world of rapid capital flows, liberalised financial markets and increased dependency on financial wealth, it is no longer clear that a rigid inflation targeting approach is a true guarantee of sustainable economic growth. Perhaps policy makers will increasingly have to focus on the direct implications of movements in asset prices and their impact on private sector balance sheets. Economic stability ultimately depends on an efficient allocation of resources. Hopefully, we have shown in this paper that asset prices can play havoc with resource allocation in the same way that general inflation has over the last thirty years. Ultimately, the history of economic cycles and of economic growth has not ended with the defeat of inflation.

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