## VIII. Conclusion: prevention rather than cure?

Economics is not a science, at least not in the sense that repeated experiments always produce the same results. Thus, economic forecasts are often widely off the mark, particularly at cyclical turning points, with inadequate data, deficient models and random shocks often conspiring to produce unsatisfactory outcomes. Even trickier is the task of assigning probabilities to the risks surrounding forecasts. Indeed, this is so difficult that it is scarcely an exaggeration to say that we face a fundamentally uncertain world – one in which probabilities cannot be calculated – rather than simply a risky one.

Economic history is a useful guide in this respect. The Great Inflation in the 1970s took most commentators and policymakers completely by surprise, as did the pace of disinflation and the subsequent economic recovery after the problem was effectively confronted. Similarly, virtually no one foresaw the Great Depression of the 1930s, or the crises which affected Japan and Southeast Asia in the early and late 1990s, respectively. In fact, each downturn was preceded by a period of non-inflationary growth exuberant enough to lead many commentators to suggest that a "new era" had arrived. Similar surprises can be noted at a more micro level. Around the time of the failure of LTCM in 1998, the firm faced price shocks in various markets that were almost 10 times larger than might reasonably have been expected based on previous history. As a result, its fundamental assumptions – that it was adequately diversified, had ample liquidity and was well capitalised – all proved disastrously wrong.

Of course, many will say that our understanding of economic processes has improved thanks to this experience. Yet this is not such an easy proposition to prove. Consider, for example, the typical way in which central bank economists forecast future inflation using econometric models of how wages and prices interact. To do this accurately, at least five questions have to be answered correctly. What is the best way to measure excess capacity in the domestic economy? What is the trend rate of growth of productivity? Are foreign influences limited to import prices alone? Are wages driven by forward-looking price expectations, or by past price developments? If expectations are important, are they influenced by the credibility of central banks or by something else, like actual or even perceived inflation? Each of these questions is currently highly contentious. And when we turn to other economic variables, the degree of disagreement about many equally fundamental issues is just as great.

Indeed, in the light of massive and ongoing structural changes, it is not hard to argue that our understanding of economic processes may even be less today than it was in the past. On the real side of the economy, a combination of technological progress and globalisation has revolutionised production. On the financial side, new players, new instruments and new attitudes have proven equally revolutionary. And on the monetary side, increasingly independent central banks have changed dramatically in terms of both how they act and how they communicate with the public. In the midst of all this change, could anyone seriously contend that it is business as usual?

There is, moreover, a special uncertainty in the area of monetary policy. While the commitment of central bankers to the pursuit of price stability has never been stronger, the role played by money and credit is being increasingly debated, against the backdrop of the uncertainty about the inflation process referred to above. For some central banks, and indeed many leading academics, neither money nor credit is thought to play any useful role in the conduct of monetary policy. For others, in contrast, the too rapid growth of such aggregates could be either a harbinger of inflation or the sign of a financially driven boom-bust cycle with its own unwelcome characteristics.

Against this background, neither central banks nor the markets are likely to be infallible in their judgments. This has important implications. The implication for markets is that they must continue to do their own independent thinking. Simply looking into the mirror of the central banks' convictions could well prove a dangerous strategy. The implication for policymakers is that they should continue to work on improving the resilience of the system to inevitable but unexpected shocks.

## Topics of current concern to policymakers

The consensus forecast for the global economy, which is obtained through a poll of economists, anticipates that recent high levels of growth will continue, that global inflation will stay quite subdued, and that global current account imbalances will gradually moderate. With respect to financial markets, the consensus forecast for 2007 is that long rates will stay around current levels. Evidently, and appropriately, this forecast implicitly assumes that there will be no major geopolitical disruptions and no disturbances in the financial sector significant enough to affect the real economy.

As a near-term proposition, a forecast that says the future will be a lot like the past has much to recommend it. Indeed, looking closely at forecast errors in recent years, one might conclude that there are grounds for even greater optimism. Real growth has, on the whole, been stronger than expected, while inflation has generally stayed in line with predictions, despite sharp increases in commodity prices in the last year or so. Long-term interest rates have also consistently come in below anticipated levels. Since it is well known that forecast errors often display a significant degree of persistence, one might with some confidence expect the good news to continue. Only with respect to global trade imbalances have the actual outturns been markedly worse than expected, but even here, as noted in the Introduction to this Annual Report, there are some signs of improvement.

Yet it is not difficult to identify uncertainties that could conceivably cause this near-term forecast to come unstuck, or that could result in less welcome outcomes over a longer horizon. Below, various areas of concern are identified and analysed separately, although they could well be interdependent. As will be described in the following section, those who are more focused on such interdependencies tend to see accommodative financial conditions as the causal thread linking these areas of concern together.

A first uncertainty has to do with the possible resurgence of global inflation and, potentially, inflation expectations. Estimates of capacity gaps in most of the major industrial countries indicate that they are approaching or have reached the limits of their potential. Disinflation pressures originating in emerging market economies also seem to be easing in the wake of sometimes extraordinary domestic growth rates. In China, in particular, it has become increasingly clear over the last few months that measures to slow the economy have not been effective so far. Partially as a result, continued strong increases in global energy and other commodity prices show no signs of abating, and questions are being raised about the ongoing capacity of companies to offset these higher costs through savings elsewhere. Finally, the fact that monetary and credit aggregates have also been growing very rapidly, not least in countries such as China that use foreign exchange intervention to resist currency appreciation, is a further worrisome sign for many.

Given the still pivotal role of the United States in the world economy, the possible inflationary impact of cyclically rising wages and declining productivity growth is a source of near-term uncertainty. In addition, two medium-term considerations need to be taken into account. The ratio of house prices to rents is at an all-time high. Unless house prices fall significantly, a renormalisation would imply a prospective rise in rents which would feed directly into the measured CPI. Moreover, if global trade imbalances need to be resolved, a further and perhaps substantial decline in the dollar might also be part of the adjustment process. To date, shrinking foreign margins, allied with productivity increases, have sufficed to keep exchange rate pass-through to a minimum in the United States. Whether this will continue remains to be seen.

Viewed in this light, the recent slowing in the US economy must be judged welcome. Yet, as 2006 wore on, concerns began to mount that this might turn into rather too much of a good thing. The attention of financial markets first focused on the US subprime mortgage market, but the underlying issue is much broader. The household saving rate in the United States fell for a time into negative territory, as sluggish wage growth failed to provide adequate support for a sharp increase in consumer spending and residential investment. Easy credit terms, especially in the mortgage market, encouraged both higher debt levels and higher house prices. The latter, in turn, provided both the collateral to justify more lending, and the perception of increased wealth to justify more spending.

The concern is that this might all reverse. Debt service levels are already elevated and mortgage rates might rise further. House prices only need to stop rising (indeed, this may already have happened) to slow both the recourse to credit and the sense of confidence arising from increases in wealth. Moreover, when cuts in construction jobs begin to match the much larger fall in housing starts to date, then wage income, job security and confidence could be further affected. Were corporate fixed investment, already inexplicably weak given high profits and low financing costs, to retreat as well, then the stage might be set for a more significant and perhaps unwelcome deceleration in US growth.

If this is the risk, it must also be recorded that the ratio of US household debt to income has been creeping up for decades without seriously compromising consumer confidence. Consumer spending could also get a second wind from faster wage increases. The wage share is secularly low and might rebound. Moreover, the United States is at that "late cycle" stage, when unemployment is low and compensation normally tends to rise. However, this possibility could have undesirable implications as well. As noted above, inflation pressures might increase, or, if wage demands instead cut into profit margins, stock market expectations could be disappointed, with possible implications for both asset prices and corporate investment.

Were the US economy to slow substantially, the crucial question would be how others might be affected. On the one hand, domestic demand has recently gained strength in the euro area and Japan, as well as in a number of emerging market economies. Furthermore, unlike the IT-related slowdown around the turn of the century, there has not been a synchronised industrial boom that might suddenly collapse at the global level. Support for continued global growth is also provided by the falling share of exports to the United States, in a context of surging world trade overall.

On the other hand, in both Germany and Japan the revival of domestic demand has been overwhelmingly in the form of corporate investment, itself driven by strong export demand. The same can be said for China, where the growth rate of the economy has been characterised by Premier Wen Jiabao as "unstable, unbalanced, uncoordinated and unsustainable". Moreover, even without a synchronised business cycle, boardroom confidence globally might be affected by a sharp US downturn. And while direct exports to the United States might have fallen relative to global totals, a major component of the latter has been imports for assembly in China. In this regard, the indirect exposure of many countries in Asia to slower US growth might still be significant. Finally, it is notable that the United States is by no means alone in its dependence on debt-fuelled consumption, with some countries even having substantially negative household saving rates. This provides a further channel for possible contagion.

To near-term uncertainties about inflation and growth must be added a number of medium-term concerns, not least persistent and substantial global trade imbalances. Does this constitute a problem, requiring a policy response to lower the possibility of large and perhaps abrupt movements in exchange rates? Or, rather, can we assume that the capital inflows needed to finance such deficits will be available on not significantly different terms for the foreseeable future?

Countries with large trade deficits are generally those where domestic demand has been growing relatively fast, and where interest rates are relatively high in consequence. In principle, such countries should also have depreciating currencies. This would allow external deficits to be reduced over time as domestic demand began to ease under the influence of higher rates. Unfortunately, in practice, relatively high interest rates often induce private capital inflows of such a magnitude as to cause the exchange rate to appreciate rather than depreciate, and to raise domestic asset prices, which leads to more spending rather than less. Both these developments will cause the trade deficit to worsen further. This process was very much part of the story in the United States prior to 2001, and the second element of it continues today. Moreover, in recent years there have been a number of variations on this "carry trade" theme, with still more dramatic effects on smaller economies like New Zealand and a number of countries in central and eastern Europe. In many of these countries, including some where fundamentals have significantly improved, fears have been rising that a sudden reversal of such capital flows might significantly complicate macroeconomic management.

The US trade deficit is of a very special nature, largely because of the dollar's role as a reserve currency. Thus, the significant reduction of private sector capital inflows after 2001 was counterbalanced by inflows from the public sector, leading to only a gradual decline in the value of the dollar. This has had the advantage of being quite manageable, but the disadvantage is that there has been no discernible reduction in the US trade deficit. When we add to this the gradual movement of the service account into deficit, and the growing size of the external debt position, the dollar clearly remains vulnerable to a sudden loss of private sector confidence, and presumably associated increases in risk premia in financial markets. While to some degree this would be welcome, as part of the external adjustment process, it could at the same time aggravate both near-term inflation pressures and the risks of a more serious downturn.

The reliability of public sector inflows has also become more uncertain, for at least two reasons. First, countries outside the United States might now be increasingly inclined to reduce intervention and let their currencies rise. Reasons for this might include a desire to limit the losses arising from an evergrowing currency exposure. But, likely to be of greater importance, there is mounting evidence of the domestic distortions associated with both currency intervention and easy monetary policies whose effect has been to hold down exchange rates. Authorities in China, Japan and some commodity-producing countries have already publicly expressed strong concern about excessive capital investments, and possible resource misallocations, in their respective countries. And, as noted above, in a number of countries inflationary pressures are rising and sterilisation seems to be becoming increasingly difficult.

The second potential threat is that holders of large portfolios of reserves might begin to reduce the proportion of new reserves held in US dollars. On the one hand, the principle of uncovered interest parity implies that, over sufficiently long time horizons, returns will not be increased by such a strategy. This would argue against the rebalancing of portfolios still primarily held in dollars. On the other hand, the variance of such returns, measured in domestic currency, could be reduced if the currency composition of the reserve portfolio were chosen with this end in mind. Whether concerns about the variability of returns would provide sufficient motivation for a significant reduction in the proportion of dollar holdings remains an open question. So too does the issue of whether such official actions would materially affect exchange rates, barring widespread imitation by the private sector. What is more certain is that, as reserve managers increasingly focus on maximising returns, they will be attracted to the currencies of countries that give them ready access to equity and other instruments that allow them to do so.

A final set of medium-term uncertainties has to do with potential vulnerabilities in financial markets and possible knock-on effects on financial institutions. As noted in the Introduction, the prices of virtually all assets have been trending upwards, almost without interruption, since the middle of 2003. For some commentators, it is not hard to find plausible reasons why individual asset price increases are justified and therefore more likely to be sustainable. For example, the very low risk spreads on sovereign issues are consistent with clear improvements in governance and macroeconomic policies in many countries. Comparably low spreads on high-risk corporates reflect high profits and very low default rates in recent years. Unusually low term premia could be the result of the absence of volatility in the major macro variables for some time. The prices of commodities and fine art reflect new sources of demand from newly emerging markets. And the increase in house prices, which has now become almost a global phenomenon, can be ascribed to lower long-term mortgage rates.

Yet it could also be suggested, consistent with the inherent difficulty of making longer-term valuations, that the market reaction to good news might have become irrationally exuberant. There seems to be a natural tendency in markets for past successes to lead to more risk-taking, more leverage, more funding, higher prices, more collateral and, in turn, more risk-taking. One manifestation of this, over the last few years, has been that the intermittent periods of financial volatility have become progressively shorter. Apparently, the observed resilience of markets to successive shocks has increasingly encouraged the view that lower prices constitute a buying opportunity. The danger with such endogenous market processes is that they can, indeed must, eventually go into reverse if the fundamentals have been overpriced. Moreover, should liquidity dry up and correlations among asset prices rise, the concern would be that prices might also overshoot on the downside. Such cycles have been seen many times in the past.

The obvious question is: who might be hurt by such a turn of events? The big investment and commercial banks seem very well capitalised, and many have been making record profits. Their attention to risk management issues has also been unprecedented. Yet some sources of concern must already have been identified by the markets, since the spreads on credit default swaps for some of the best known names have recently been elevated in comparison to the levels that would be normal given their credit ratings. One area of concern is market risk and leverage. Balance sheets have grown significantly. Moreover, value-at-risk measures have stayed constant even though measured volatility has fallen substantially. Another possible worry, linked to the "originate and distribute" strategy, is that originators might be stuck with a warehouse of depreciating assets in turbulent times. The fact that banks are now increasingly providing bridge equity, along with bridge loans, to support the still growing number of corporate mergers and acquisitions, is not a good sign. A closely

related concern is the possibility that banks have, either intentionally or inadvertently, retained a significant degree of credit risk on their books.

Assuming that the big banks have managed to distribute more widely the risks inherent in the loans they have made, who now holds these risks, and can they manage them adequately? The honest answer is that we do not know. Much of the risk is embodied in various forms of asset-backed securities of growing complexity and opacity. They have been purchased by a wide range of smaller banks, pension funds, insurance companies, hedge funds, other funds and even individuals, who have been encouraged to invest by the generally high ratings given to these instruments. Unfortunately, the ratings reflect only expected credit losses, and not the unusually high probability of tail events that could have large effects on market values. Hedge funds might be most exposed, since many have tended to specialise in purchases of the riskiest sorts of these instruments, and their inherent leverage can in consequence be very high.

It is not, by definition, possible to put all these uncertainties together and arrive at a prediction. Rather, if one believes that a range of possible developments could all interact in various ways, such interactions could form the basis of a thousand stories. Yet it must be noted that behind each set of concerns lurks the common factor of the highly accommodating financial conditions noted in the Introduction. While this observation need not call into question the consensus forecast as such, it should at least serve to remind us that tail events affecting the global economy might at some point have much higher costs than is commonly supposed.

## Challenges in formulating a policy response

There are a number of difficult and important questions facing central bankers, to which there are no agreed answers. A first issue has to do with the appropriate role of monetary and credit aggregates in the formulation of monetary policy. A second issue is closely related: assuming that occasional credit-driven boom-bust cycles are possible, should the public sector seek to prevent the build-up of imbalances, or rather just clean up afterwards?

Concerning the first issue, three schools of thought can be identified, each with at least some adherents in most central banks. A first school emphasises the short-run effects on inflation of gaps between aggregate demand and supply, with longer-run inflation trends being largely determined by expectations about such gaps. The role of money and credit is generally played down by this group. A second school attaches more importance to monetary developments in influencing longer-run trends in inflation. In practice, this would imply a continuing emphasis on the influence of demand-supply gaps on inflation, but with policy conclusions being systematically cross-checked against the monetary data. Finally, a third school of thought also attributes great importance to monetary, but above all credit, developments, albeit for a rather different reason. Adherents of this school become concerned when they see rapid growth of the aggregates along with rising asset prices, particularly if also associated with substantial and sustained deviations of spending patterns from traditional norms. They admit that the medium-term outcome could be rising inflation, but fear rather more that a boom-bust cycle might have significant economic costs, potentially including unwelcome deflation over a longer-term horizon.

Both historical experience and intellectual fashion have played a role in these divergences. Adherents of the first school would contend that forecasts of inflation using gap methodology have proven reasonably accurate in many countries over many years. Their refusal to countenance any more formal role for money rests in part on the unsuccessful "monetarist" experiment of the 1970s, but also on the failure of econometric work to reveal a stable and causal relationship with inflation in their countries. Supporters of the second school of thought would note that their belief in the money-inflation nexus is deeply rooted in theory. Moreover, the Deutsche Bundesbank and the Swiss National Bank have been translating such beliefs into effective anti-inflationary policies for decades. The third school of thought has been influenced not just by pre-World War II business cycle theory but also by the wrenching historical experience of the booms and busts referred to earlier.

While fashions come and go, it appears that the influence of the second and third schools has been growing. In recent years, a number of central banks, when raising policy rates, have cited concerns about very rapid growth in both credit and asset prices. A number of other central banks have announced their intention to lengthen their normal policy horizon, to allow them to better evaluate the full range of possible effects arising from their policies. Finally, almost everywhere, one hears reference being made to the "normalisation" of policy rates, a concept which logically implies that the appropriateness of policy cannot be judged on its short-run impact alone.

Behind this shift in thinking have been a number of influences. Forecasting inflation using traditional methodologies has become more difficult everywhere. Central banks are therefore looking for new guideposts, and these include the use of monetary and credit aggregates. Indeed, research in some central banks has recently identified what appears to be a reliable relationship between their monetary aggregates and inflation over long periods. Moreover, with the passage of time, new crises and the further analysis of old ones have provided empirical evidence to support the specific arguments for concern expressed by the third school. Finally, as evidence has accumulated that the global economy is characterised both by many imbalances and by a flatter short-run Phillips curve, the potential economic losses in a subsequent downturn have also been revised upwards. In sum, the possible implications of getting policy wrong have grown. All of these factors have helped to spur debate, and even sometimes to change minds.

A second question, eliciting diverse answers, is how best to deal with what seems to be the natural procyclicality of the financial system. Should policy sometimes lean against an upturn, even in the absence of inflationary pressures? And if so, how? Should it rather lean primarily against the subsequent downturn, and if so how? Or, reflecting our lack of understanding, and the shortcomings of each of the individual policy instruments we currently possess, should it do both, using a number of policy instruments simultaneously? Short of serious re-regulation of financial markets, which would create many harmful inefficiencies over time, this more pragmatic approach to procyclicality in the financial system might have much to recommend it.

The principal argument for tightening monetary policy in the upswing is to moderate the excesses in economic and financial behaviour and, in so doing, contain the costs of the downturn. There are of course some significant practical difficulties with this approach. How do policymakers evaluate when imbalances are building up to such a size as to warrant action? What degree of tightening would be required to moderate market euphoria, and might it do serious harm to unaffected parts of the economy? These points have been made repeatedly, and validly, in connection with the hurdles that central bankers would face in targeting asset prices. But the suggestion being made here is different. It is rather to react when a number of indicators – not just asset prices but also credit growth and spending patterns – are simultaneously behaving in a manner that indicates increasing exposures. In principle, such a configuration of developments would be both rarer and easier to identify. Moreover, the more widespread the euphoria, the less worry there will be that tighter policy might inflict collateral damage on unaffected sectors.

That said, small, and increasingly not so small, open economies will have a particular problem with this prescription if their relatively higher interest rates attract substantial capital inflows. These can contribute in turn to both a sharply higher exchange rate and more, rather than less, accommodative domestic credit conditions. Both can, for a time, exacerbate the underlying imbalances of concern to policymakers, as seen most recently in New Zealand and Thailand. One desirable response might be tighter fiscal policy, but if this simply increases confidence in the country, such a move might attract still more inflows. In any event, fiscal tightening is not always easy to implement politically, since unexpected tax receipts associated with such expansions often make the government's fiscal position look overly conservative to begin with. Longer-term, recurrent difficulties of this sort could eventually call into question the viability of some smaller currencies. In fact, this is consistent with what happened in Europe after restrictions on international capital flows were eased in the 1980s.

In the face of extreme difficulties of this sort, a number of smaller economies have turned to the use of administrative instruments to promote credit restraint. Various forms of capital controls, higher reserve requirements, changes in risk weights, lower loan-to-value ratios and other measures have all been tried, albeit with only limited success. In any event, all administrative measures of this sort routinely invite evasion over time.

Nonetheless, these practical difficulties acknowledged, the potential costs arising from the underlying problems emphasise the need for domestic monetary and regulatory authorities to cooperate more systematically in the future than they have tended to in the past. Preferably based on better information than we have today about household, corporate and bank exposures, agreement should be reached in advance about what the respective policymakers might do to mitigate the risks associated with rising credit exposure. Indeed, in some cases emerging difficulties might call for more cooperation internationally, rather than just domestically. Consider the example of central and eastern Europe. Most of the credit being granted there is coming from commercial banks headquartered in western Europe. For virtually all of these banks, there is no significant capital exposure involved. At the same time, the macroeconomic exposure of the countries receiving the loans is rising steadily.

In the light of all these difficulties associated with preventive action, it is not surprising that there is also a second school of thought. It essentially accepts that busts will happen, but argues that the associated costs can be significantly moderated by vigorous monetary easing after the event. Indeed, it might be noted that this approach has been used repeatedly over the last 20 years, not least in 2001, and seems to have worked reasonably well in many cases.

Yet this second approach also has its shortcomings. The first is that it might not always work. Consider the Japanese case as an example of "pushing on a string". Is it credible that a 15-year phase of weak economic performance had its roots in the failure of the Bank of Japan to ease aggressively enough in 1991? As a simple matter of fact, Japanese policy rates did come down very sharply at that time, as indeed they did in the United States in 1930, to similar limited effect. What is more credible as an explanation of stagnation in the Japanese case is that the zero lower bound for policy rates proved an important constraint, and that excessive investment and debt built up in the good times weighed heavily on the economy for many years.

While the use of lower interest rates to sustain demand might still be sensible, lower rates can also have unwelcome side effects if maintained for too long. On the supply side of the economy, below-equilibrium interest rates effectively transfer wealth from creditors to debtors, which will tend to lower saving rates and economic potential over time. If "zombie" companies are allowed to survive, continuing excess production capacity is likely to undercut the profits and viability of other companies. On the financial side, easy financing can also encourage mergers and acquisitions, as seen quite recently. Not only does the historical record indicate that such takeovers often fail to add value, but also the fear of takeovers could over time encourage a more general gearing-up of the corporate sector as a means of self-insurance. Within the financial sector, the search for yield might encourage imprudent behaviour. All of these factors make the economy more vulnerable to shocks over time. In effect, dealing with today's problem of deficient demand through sustained monetary accommodation can sow the seeds for more serious problems further ahead.

Such reflections lead to the conclusion that the management of problems through infusions of liquidity must, at the least, be complemented by more concrete and fundamental efforts to promote the reduction of excess debt and unprofitable investment built up in the earlier period. Companies whose survival chances are not evident should be closed promptly, with shareholders and managers paying the price. Other firms should then be allowed to find alternative uses for what resources remain. Moreover, if the banking system is seriously affected in turn, it should be restructured according to the sensible principles laid out so clearly in response to the Nordic banking crises of the early 1990s.

A complicating element, particularly in emerging market economies, is that such restructuring requires a skill set that many countries do not possess. Accountants, appraisers, lawyers and insolvency experts are all in short supply. Moreover, in a number of countries, legal procedures are not yet sufficiently developed to ensure speedy and final solutions, either using the courts or through out-of-court procedures. It is not hard to imagine that such shortcomings could in some countries strongly encourage forbearance in the event of future crises. Clearly, attention should be paid to this issue as soon as possible, since rectifying such deficiencies will certainly take time. It is of course true that large financial firms in the advanced industrial countries are currently trying to address such problems by assembling teams of workout and bankruptcy specialists. So-called "vulture funds" are also increasingly in evidence. However, whether this should be a source of solace or rather of concern remains to be seen.

## Where should policies go from here?

Now that a number of uncertainties have been laid out about prospective economic and financial events, complicating the issue of how policy might best respond, an unfortunate reality presents itself. Policy must still be made, and in a forward-looking context. Fortunately, the current confluence of circumstances is such that some recommendations can be hazarded. Broadly, they come down to using today's evident good times to prepare for a future that will, by definition, be less certain.

With respect to monetary policies, those who are concerned with nearterm inflation as well as those concerned about a further build-up of mediumterm imbalances might welcome further tightening. Inflation pressures globally seem to be increasing, while evidence of various imbalances continues to mount almost everywhere. For those concerned about inflation pressures, economies with external deficits, particularly the larger ones, should in principle bear a particular responsibility for contributing to the moderation of global demand growth. Those who are concerned about imbalances and resource misallocations would note that China seems to have a particularly large gap between actual interest rates and the "normal" rate determined by the economy's potential growth rate.

Japan has been facing persistent downward pressure on prices, but these pressures increasingly reflect the positive supply side shocks seen elsewhere in the world. This fact, together with secular improvements in the levels of corporate debt and non-performing loans, implies that the potential for a dangerous deflationary spiral has now been much reduced. The fact that the economy seems to be growing robustly, and that capital outflows from Japan might be having unwelcome effects elsewhere in the world, provides further arguments for supporting the suggestion that the Bank of Japan should continue to normalise interest rates gradually. Both short-term and medium-term considerations should also guide the path of fiscal policy in the same direction. Tighter fiscal policies could play a role in moderating global demand growth, although the dangers of fine-tuning in this regard are not negligible. But, to adopt a longer view, both government deficits and debts have been described as troublingly high in many countries. Moreover, countries with twin deficits, fiscal and external, might reap particular benefits from further steps towards fiscal consolidation. This could serve to reduce risk premia, the likelihood of disruptive capital flight in the event of future economic setbacks, and of course the attendant possibility of sharp movements in foreign exchange markets.

While, in general, large economies with floating exchange rates should continue to let them float freely, there is clearly something anomalous in the ongoing decline in the external value of the yen. Tighter monetary policies would help to redress this situation, but the underlying problem seems to be a too firm conviction on the part of investors that the yen will not be allowed to strengthen in any significant way. As a counterweight, investors might be better encouraged to consider the autumn of 1998, when the yen rose by more than 10% against the US dollar in the space of two days, inflicting sizeable losses on those involved in the carry trade business.

There should also be a greater willingness to let the renminbi rise, even though one recognises the formidable internal challenges this will pose to the Chinese authorities. Such a move would also allow other Asian currencies to move up further against the US dollar, again contributing to a reduction in global trade imbalances. While some in China seem to believe that the source of Japan's recent problems lay in allowing the yen to rise in the late 1980s, this is a misreading of history. The seeds of the Japanese bust were actually sown in the preceding, rampant monetary expansion designed to keep the yen down. Moreover, given the recent rates of credit expansion, asset price increases and massive investments in heavy industry, the Chinese economy also seems to be demonstrating very similar, disquieting symptoms.

Currently buoyant economic and financial conditions should also provide support for structural reforms that would enhance growth worldwide. Perhaps the greatest challenge with respect to the real economy is to facilitate the shift into non-tradable services in countries that currently have large trade surpluses, in particular China and Japan. By the same token, a shift into tradables is needed in the United States, to help reduce its current account deficit.

The problem at the moment is that the allocation of resources in all three countries has been moving resolutely in the wrong direction. In China and Japan, investment is still in large part focused on export markets. Moreover, should there be an economic shock affecting the Asian region, there is a reasonable chance that export markets would be relied upon even more heavily to maintain employment growth. The threat posed by rising protectionist pressures in western countries would clearly be exacerbated, and these pressures are already very substantial. In the United States, it is the recent massive investment in housing that has been unwelcome from an external adjustment perspective. Housing is the ultimate non-tradable, non-fungible and long-lived good. The

implication is that, to achieve the internal reallocation of capital and labour required in the countries concerned, the price signal provided by exchange rate movements might need to be significantly greater than otherwise.

Turning to financial sector developments, it would clearly be undesirable, even were it possible, to roll back the changes that have occurred over the last few decades in the advanced industrial countries. Nevertheless, more scepticism might be expressed about some of the purported benefits of having new players, new instruments and new business models, in particular the "originate and distribute" approach which has become so widespread. These developments have clear benefits, but they may also have side effects, with associated costs. In emerging market economies, the essential point is that liberalisation needs to be preceded by structural changes that will allow financial systems to remain resilient in the face of both domestic and external shocks. While much progress has been made, much more is still needed.

Finally, it is worth noting that domestic policymakers have always faced the challenge of responding to external shocks but, in our globalised and market-driven world, these have become ever more significant. Moreover, for the same reasons, the actions of domestic policymakers increasingly have external effects on others. These interactions apply in good times, but perhaps become more important in bad ones, when the efforts of many national authorities need to be harnessed to manage international problems at the least cost. While international cooperation has improved in some areas, the political and institutional structure has not kept up with these changing global realities. There is still far too strong a tendency for national authorities to go it alone, and for international dialogue to go no further than that. This is yet another global imbalance that urgently needs to be dealt with.