Glenn Stevens: Finance and economic development in Australia

Address by Mr Glenn Stevens, Governor of the Reserve Bank of Australia, to the Committee for Economic Development of Australia (CEDA) Annual Dinner, Melbourne, 12 December 2006.

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It is a great pleasure to be invited to address the Annual General Meeting of CEDA, continuing a long tradition of such addresses by Governors of the Reserve Bank of Australia.

CEDA – the Committee for Economic Development of Australia – began in 1960, an initiative of D.B. Copland. Copland, one of Australia's most remarkable economists of the Depression era, was a member of 'Giblin's Platoon', whose history is recorded so nicely in the recent book of that name.[1] CEDA has over the years made a substantial contribution to debate in a number of fields, from trade policy to taxation policy, from indigenous affairs to infrastructure.

Interestingly enough, the list of publications on CEDA's website does not include any which are overtly financial in their focus. I do not say this as a criticism – perhaps the reason you have invited central bank governors to speak so regularly is to cover that very set of issues!

But it seems appropriate, given CEDA's core focus on economic development, to address the questions: what is the role of finance in economic development and growth? How does the financial system contribute? How can financial events sometimes be detrimental to economic growth? What can be done to ameliorate those risks? What risks do we face at present?

History

The growth we take for granted in the modern world is actually a fairly recent phenomenon in human history. Prior to the industrial revolution in western Europe, living standards rose, if at all, very slowly. According to Angus Maddison's data, the real per capita GDP of the United Kingdom rose between 1500 and 1820 at an average rate of only 0.27 per cent per annum.[2] At that pace, living standards doubled about every 250 years. In other words, a person would not live all that much better than their grandparents – assuming they could discern any difference.

From 1820 to 1913, the rate of increase rose to 1.15 per cent. That's a very big change. At that pace, living standards doubled in about 60 years. In the 20th century – despite wars, the Great Depression, the Great Inflation and various other problems – growth per head rose further. Australia's per capita growth was 1.70 per cent in the 20th century, according to the same data set, for a doubling in living standards about every 40 years. The difference between my living standards and those of my grandparents in the mid 1940s when they were as old as I am now – a trebling – is remarkable.

There is a vast literature on what accounts for this growth, and there has been a long debate in economics about whether the development of financial institutions and markets followed or led the developments in the real economy. Some, such as Joseph Schumpeter, Sir John Hicks and Walter Bagehot argued that financial development actively fostered innovation and entrepreneurship. Others, including Joan Robinson, argued that finance passively followed in the wake of real-side development.[3]

Surely *both* components were necessary, and neither alone would have been sufficient. Technological advance provided the potential for a marked acceleration in productivity. In the early age of industrialisation, the steam engine and electricity were two obvious examples. Without those opportunities, such financial capital as was available for deployment would probably have struggled to find a useful outlet.

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[1] Coleman, W., S. Cornish and A. Hagger (2006), *Giblin's Platoon: The Trials and Triumph of the Economist in Australian Public Life*, ANU E Press, Canberra.

[2] Maddison, A. (2003), *The World Economy: Historical Statistics*, OECD, Paris.

[3] For a treatment of these issues, see Levine, R. (1996), 'Financial Development and Economic Growth: Views and Agenda', The World Bank Policy Research Working Paper 1678.

But equally, the potential technological advance would have remained just that – potential, rather than actual – had there not been a capacity to mobilise the financial resources needed to invest in the equipment embodying the new technology. The capital required for an economy based on agriculture and artisan-based manufacturing had been in the form of land, seed, basic tooling and the like. Traders needed working capital in order to purchase goods in one place and move them to another for sale, and various financial devices arose to assist this. The need to sink very big sums into large-scale machinery, however, called for capital on a different scale, and financial development was key to providing it.

The economic historians suggest that a number of innovations were important. The development of the limited liability corporate structure allowed proprietors to take risk without facing complete personal ruin if the venture failed. Banking corporations efficiently pooled the resources of a large number of savers, the more so as they developed into joint-stock ownership structures, as opposed to purely private ones. These organisations also provided, before central banks developed fully, circulating monetary assets for the community, which facilitated exchange. Markets for the trading of claims against future income flows – what today we know as stock and bond markets – allowed the providers of capital to retain their wealth in a more liquid form, thus encouraging them to commit more capital to long-term ventures. In other words, the development of financial markets and institutions was an integral part of the industrial revolution. It remains a key facilitator of the growth we enjoy today.

Yet such progress was not without its occasional problems, in the form of periodic panics. Commodities markets had a certain tendency towards occasional instability. Optimism and greed could push prices to extreme levels, following which a loss of confidence typically precipitated a crash. The Dutch tulip bubble of the 1630s occurred without the aid of the highly developed set of financial intermediaries that came later, though it did achieve considerable added fizz via a futures market for tulip bulbs – derivatives allow leverage, which is almost always a key element of the latter stages of speculative manias.[4]

But the growth of a modern banking system in England by the late 18th century, whose liabilities were effectively financial claims against assets that could not be quickly realised if suddenly called, brought heightened risks. Banking is, after all, a business that involves leverage and liquidity and credit risks. There was always the possibility of a financial panic that could, if unchecked, threaten not only the financial institutions but also the course of the real economy. The question facing public policy, then, was how to find a set of arrangements that would allow the necessary credit extension to support capital investment in pursuit of new technological opportunities, yet provide a stable monetary standard and a financial system in which the public could have confidence.

We should record that in the same era, questions of a qualitatively similar nature arose in the fledgling colonies of the Antipodes, even if they were, to begin with, at a lower level of sophistication. The Colonies needed both a system of mobilising capital and a means of making payments other than circulating paper claims over goods – be it rum or something else. We are all aware of Governor Macquarie's ingenious attempt in 1813 at keeping metallic money in the colony of New South Wales, by making two coins out of each Spanish dollar, thus rendering them at once more useful in New South Wales and much less useful elsewhere.

But Macquarie's initiatives in granting a charter to the Bank of New South Wales in 1817, and those of Governor Darling in rescuing it from disaster in 1826, were perhaps more important milestones in the early financial development in this country. According to Trevor Sykes' account,[5] both of these actions were contrary to the policy of the British Government. These appear to have been occasions when the lags in implementation of official policy – measured by the time taken for a request for instructions to reach London by sailing ship, be considered and then answered by return ship, too late to influence the decision – helped to produce a superior outcome!

Around the world, governments groped towards a sustainable solution for combining the benefits of financial intermediation with stability. Progress was not necessarily always steadily in the right direction,[6] but one of the key developments was the gradual evolution of the institution we would today

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[4] See Sykes, T. (2003), 'Tulips from Amsterdam', in T. Richards and T. Robinson (eds), *Asset Prices and Monetary Policy*, Proceedings of a Conference, Reserve Bank of Australia, Sydney, pp. 194–202.

[5] See Chapter 1 of Sykes, T. (1988), *Two Centuries of Panic*, Allen & Unwin, Sydney.

[6] Rondo Cameron, for example, in claiming that the British financial system contributed to the industrial revolution between the mid-18th and mid-19th centuries, argues that this contribution was in spite of, rather than as a result of, policy actions of

recognise as the central bank. In a number of countries, these institutions had begun life as a means to finance military expeditions by governments of not altogether unquestioned creditworthiness,[7] but they gradually became central players in the efforts to foster stability in normal times, and to restore it after something went wrong. Bagehot's classic, *Lombard Street,*[8] remains one of the best accounts of this in the case of the Bank of England. The notion of the lender of last resort, and the idea that the central bank should look to the interests of the system rather than any commercial interest of its own, were slowly developing.

It was, of course, to be some time before the central bank had fully evolved into the current form, even in the most advanced economies. In our own case, the central bank did not really have a fully developed public policy mandate until after the 1930s, and arguably was not a purely policy institution until the separation of the Reserve Bank from the Commonwealth Bank in 1960.

Through the 20th century, of course, views about the appropriate role of a central bank changed a good deal, as did views about the appropriate extent of official intervention in financial markets and institutions generally. The Great Depression of the 1930s occasioned new ideas about macroeconomic policy, which envisaged more official intervention in economic matters. This was followed by a very large increase in the government sector's command over economic and financial resources, of necessity, to conduct the Second World War. Hence by the end of the 1940s, the landscape had changed a great deal in comparison with 1930. The financial systems of many countries found themselves subject to much more regulation, and central banks with more regulatory powers and more explicit mandates for macroeconomic stabilisation, than had previously been the case.

Initially, this arrangement held great promise. The instability of the 1930s had apparently been banished. But as time went by, other problems emerged. As explained eloquently by Ian Macfarlane's recent Boyer Lectures, macroeconomic policies became overly ambitious, and neither the policy frameworks nor the governance arrangements under which they were implemented were up to the challenges posed by the shocks of the 1970s.

Nor, we might add, was the structure of financial regulation, with its emphasis on governments or central banks setting most financial prices and even seeking to decide who should and should not receive credit. Many of us here will recall the debates at the time of the Campbell Inquiry in the late 1970s. By then, the problems of the extensive regulatory regime had become all too clear. It was ineffective (or even counterproductive) at a macroeconomic level, it distorted resource allocation at a microeconomic level and it fostered the rapid development of a more dynamic financial sector operating beyond the regulatory net.

This wasn't sustainable, and something had to give. There was large-scale liberalisation of the financial sector through the 1980s, winding back many of the post-Depression, World War II era restrictions. Efforts at prudential supervision were beefed up, but these progressively became focused on ensuring adequate risk management in individual financial institutions rather than the more direct controls of the earlier era.

In more recent times, financial system stability – as distinct from the solvency of individual institutions – has become more prominent as an explicit focus of central banks, many of which publish regular detailed assessments of system stability.[9] This is a natural response to the circumstances, but it is really a refocusing on one of the key original purposes of the central bank.

All of that history is a backdrop to the financial trends of the past decade, to which I now turn.

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the British governments of the day. He writes: 'At almost every point at which banking and monetary policy might have been used constructively to promote economic growth, the authorities either made the wrong decision or took no action at all.' See Cameron, R. (1967), (ed.) *Banking in the Early Stages of Industrialization: A Study in Comparative Economic History*, Oxford University Press, New York, p. 58.

[7] For example, the Bank of England was granted its charter – establishing it as Britain's first limited liability banking entity – in 1694 after raising £1.2 million for the Government to fund expenditure in the war with France.

[8] Bagehot, W. (1873), *Lombard Street: A Description of the Money Market*, Henry S. King and Co., London.

[9] It is not mere coincidence, by the way, that this came at the same time as the *macroeconomic* instability concerns of the 1960s, 1970s and 1980s receded. Better macroeconomic stability has coincided with, and in all probability encouraged, a dramatic increase in the size and complexity of financial activity.

Financial and economic trends in Australia in the past decade

The most prominent financial development of the past decade has, of course, been the change in the structure of the balance sheets of households. Much has been said about this and so any description here can be brief.

The essence of the story is that in the early 1990s, two decades of chronically high inflation in Australia ended. Interest rates declined as a result. In fact, they returned to levels last seen in the low-inflation period in the 1960s. But in the intervening period, of course, the Australian financial system had changed out of all recognition, a result of liberalisation, competition and innovation. No longer was the potential borrower for housing on bended knee to a stern-faced bank manager, the way they had been in earlier periods of low rates. Now, lenders were under more competitive pressure to grow their balance sheets. Having pursued the corporate borrowers in the 1980s, with rather mixed success, they were now looking to households as a source of growth. We can all recall the advertisement for one major bank in which the formerly stern manager practises saying 'yes' in the mirror each morning.

So by the mid 1990s, we had a household sector more able and more inclined to demand housing finance, and financial institutions more willing to supply it. It is hardly surprising that this should ultimately result in households carrying much more debt, as well as higher levels of assets, than they had before. It might have happened earlier had the course of inflation and interest rates been different.

Nor is it surprising that such an expansion in finance over a relatively short period of years should be associated with higher prices for dwellings. I find persuasive the arguments that changes to planning and development regulations have raised the cost of new building – that is, the cost of adding to the dwelling stock. It is plausible that this, in turn, adds to the price of those existing dwellings that could reasonably be substitutes for new dwellings. But if we are seeking an explanation for why the prices of the 8 million existing dwellings across the country have increased so much, we surely have to give a very prominent role to the halving of the cost of debt and its easier availability.

These trends also added to aggregate demand in the economy, via additional construction and renovation spending, and the generally expansionary impact of rising asset values on broader household spending. Whereas dwelling investment averaged around 5 per cent of GDP through the 1970s and 80s, it reached a peak of nearly 7 per cent of GDP in 2003/04. Households also expanded their consumption faster than their income. For a time, these trends were helpful in periods when adverse shocks from abroad were having their impact. Over the past two or three years, these effects gently faded. We have seen some decline in spending on housing, and a slowing in the growth of household borrowing and consumption spending, but these changes have been fairly modest compared with earlier episodes, partly because there are regions of the country where the resources boom has continued to boost house prices and household demand.

The run-up in household borrowing has also raised, on occasion, and quite naturally, questions about how sustainable all this was, and whether there was a build-up of exposures in the household sector and the financial system that could impair financial or macroeconomic stability at some future time. Considerable attention has been given over recent years to this set of questions, both in the Reserve Bank and elsewhere.

We did not believe that the rise in debt was, in itself, likely to trigger an economic downturn. That said, higher leverage would, in the event of an economic downturn that occurred for some other reason, probably make at least some households' spending behaviour more responsive to declines in income than it would have been in the past.

Precisely this set of issues has recently been addressed as part of the IMF's Financial Sector Assessment Program (FSAP). That program was a very wide-ranging exercise, as all FSAPs are, but from our point of view a key component of it was a macroeconomic stress test. The Reserve Bank, through our Financial Stability Department headed by Keith Hall, co-ordinated this exercise, which involved the IMF team, APRA, the Australian Treasury and the risk-management areas of the five largest banks – for whose co-operation we express our thanks.

The results were included in our September *Financial Stability Review*, and also released by the IMF as part of the FSAP report in October. In brief, the test involved a scenario featuring: a very large fall in house prices, a recession, a big rise in unemployment, a sharp depreciation of the exchange rate and a rise in the funding costs of financial institutions. This was designed specifically to test the resilience of the financial system when several of the key elements underpinning business strategies over the past decade were removed.

In such a scenario, only some of the adverse effects would come directly through mortgage portfolios; a good deal of it would come through business portfolios. Faced with a loss of income, indebted households would be likely to cut back consumption sharply in order to keep up their mortgage payments. Hence, businesses supplying into discretionary consumer markets would feel the effect quite quickly.

In the tests conducted, the result was an estimated decline of around 40 per cent in the banks' aggregate profits after around 18 months, and by the end of the three-year scenario, profitability remained 25 per cent lower than its starting point. That said, the institutions remained not only well and truly solvent but with capital positions above regulatory minima. In part, this reflected the strength of business balance sheets. As the banks worked through the scenario, this strength meant that the significant cutback in household spending did not cause widespread loan defaults in the business sector.

Overall, the results are, within the limitations of this type of exercise, reassuring. Before we take too much comfort from them, however, we need to enter a few caveats. For a start, while the scenario seems a demanding one at first blush, it is predicated on a recession in Australia but not in the rest of the world. That would be, if not unprecedented, at least very unusual, and a more realistic scenario in which Australia suffered a downturn simultaneously with, and largely as a result of, an international downturn could well be a more challenging environment than the one assumed for the tests.

A second factor is that everyone taking part in the simulation knew that the scenario involved an economic recovery, by assumption. They could factor that into their modelling. But in a real recession, there always comes a point at which many people are *not* confident of recovery, and that affects their behaviour. It is not unknown for lenders to be sufficiently lacking in confidence that they are reluctant to take on the risk of new borrowers. That would feed back to the economy, deepening the decline and slowing the recovery.

Thirdly, there were quite large differences in results across banks. While these differences may be partly explained by variations in the structure of individual bank balance sheets, they also appear to reflect different approaches used by the banks to model their outcomes. There is nothing wrong with that – it is not that one approach is definitely right and another wrong. But the fact that varying techniques can produce significantly different results means that there must be a fair bit of uncertainty around any individual estimate.

Hence, while the results provide some comfort, we can have only limited confidence that they would be replicated in a real-world downturn. We are, however, confident that the exercise was worthwhile, and would be worth doing again at some point. The Council of Financial Regulators, a body that brings together APRA, ASIC, the Treasury and the Reserve Bank under the chairmanship of the RBA Governor, is of the view that system-wide stress testing should be conducted on a regular basis, though of course the scenario would need to change through time. This was also the view of the IMF in its FSAP report. We have indicated to the CEOs of the participating banks that we would look to do this type of stress test roughly once every two years, and I look forward to their support for this.

Looking ahead, the increasing prominence of private equity and leveraged buyout activity will be a point of interest. To date, this trend has probably caused a bit more excitement than the straight numbers would suggest is warranted, since LBOs accounted for a relatively small proportion of corporate mergers and acquisitions of Australian companies in 2006.

But perhaps the reason for the attention is the feeling that the trend could continue for some time. In essence, many of these transactions are based on two fundamental premises: the return on equity is high, and has in recent years been unusually stable as well; and the cost of debt is low. Those offering high prices for businesses are essentially betting that, over the next several years, they can enhance returns by increasing leverage. To some extent, they may also feel that in a private-ownership structure they can do some things to improve long-run performance of the company that current shareholders would not tolerate because of short-term damage to earnings and share prices. But mainly, the strategy is one of leverage. If this analysis is correct, then corporate leverage, and the associated exposures around the financial system, could be rather more prominent as an issue over the next five years or so than it has been for a couple of decades. Going back to the FSAP stress tests for a moment, it is likely that the results would have been more worrying had the leverage of the corporate sector been considerably higher.

But we shall have to leave a more detailed discussion of such issues to another occasion. For now, it is time to conclude.

Conclusion

Finance and growth go together. It was no accident that the acceleration in growth in the industrial revolution was associated with the development of modern banking and capital markets.

By the same token, disruption to the financial sector is costly to the real economy, as is only too clear in history. The role of public policy is to respond to these disruptions forcefully if and when they occur to preserve the stability of the system, but in the good times to work hard at fostering a climate of careful risk assessment in the relevant institutions and markets.

For the past 15 years or so, the financial system in Australia has worked remarkably smoothly to assist the economy. A very large change in the household sector's balance sheets has made households more sensitive to changes in their circumstances, but financial institutions have continued to perform strongly.

The challenge remains for these institutions, and all of us, to understand how risk is changing in this new environment, and to remain aware that we may at some stage face less forgiving circumstances than we have enjoyed over the past decade. We need also to be alert to the shift in the wind in the area of corporate leverage that seems to be occurring. I suspect we will be talking about that for some time to come.

In the interim, I wish all of you a merry Christmas and a happy, prosperous – and stable – new year.