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Australia's medium-term challenges

Address to the ABE Forecasting Conference
By Dr Martin Parkinson, Executive Director, Macroeconomic Group, Australian Treasury

14 December 2004

By any measure the Australian economy has performed very well over the last decade, largely due to a series of economic reforms since the early 1980s that have delivered improved macroeconomic stability and allowed us to raise productivity closer toward the world's best. But there remain significant medium-term challenges involved in maintaining this performance and closing the productivity gap further.

These challenges include random events, such as a further rise in oil prices; economic imbalances, such as high house prices and household debt, which has been the main driver of the current account deficit; and structural changes, such as the ageing population, the rapid integration of China into the world trading system and the slowing in Australian exports. How Australia responds to these imbalances and structural developments will be critical to our future growth path. Further reforms to enhance flexibility in labour and product markets will position the economy to meet these known challenges while helping shock-proof Australia against random events.

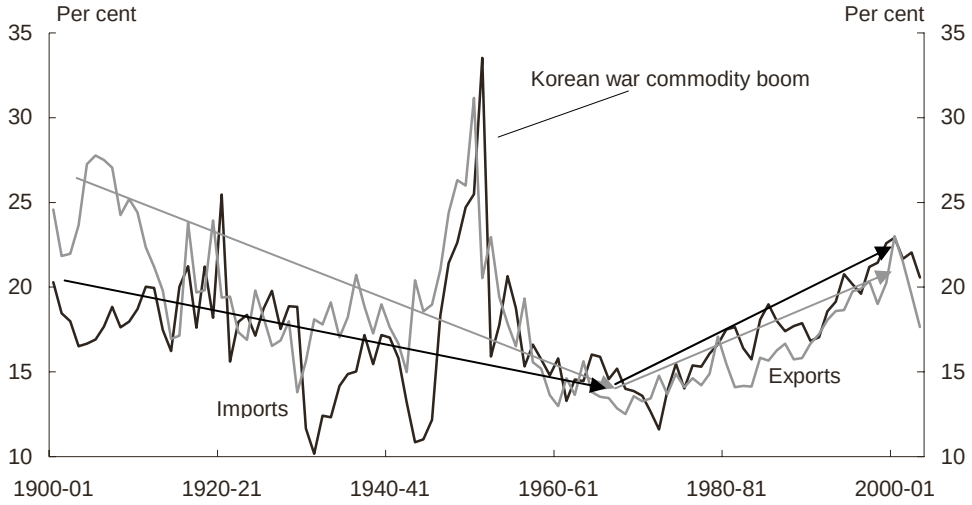
Thank you for inviting me to speak today. I have been asked to discuss the medium-term challenges facing the Australian economy. In doing so, and without attempting to be comprehensive, I will outline some of the risks to the global and Australian economies — how these risks play out will shape the global backdrop and, in turn, shape the nature of the medium-term challenges we will confront.

Previous challenges and responses

Before discussing today's medium-term challenges, though, it might be useful to reflect on how we would have characterised the challenges facing the Australian economy if this was 1984, rather than 2004.

By the early 1980s, many years of poor macroeconomic policy choices, high protection and inflexible institutional arrangements had resulted in a progressive deterioration in our international competitiveness. Rather than embracing the explosion of post-war trade, we had to some extent turned our back on the world.

Chart 1: Australia's exports and imports as a share of GDP



Source: Reserve Bank of Australia Preliminary Annual Database, Australian Bureau of Statistics.

And when hit by external impulses — whether negative, like the 1973 oil shock, or positive, like the resources boom — our wage-fixing system quickly propagated these into generalised inflationary pressures. As a result, wage growth was running in excess of 12 per cent in 1982 and 1983, and unemployment reached a post-depression high of 10.4 per cent in September 1983. Inflation was rampant, peaking at 12.5 per cent in September 1982, the Commonwealth fiscal deficit was 3.4 per cent of GDP in 1983-84, and nominal interest rates were well above 10 per cent for most of the 1980s.

In response to these economic challenges, Australia embarked on a series of reforms which, broadly, had bipartisan political support, even if there were debates about the speed and extent of reform. These reforms included financial deregulation, floating the exchange rate, lowering tariff barriers, major changes to the tax system, beginning the process of freeing up labour and product markets — a process which is still ongoing — and implementing credible medium-term monetary and fiscal policy frameworks.

In a large part as a result of these reforms, the Australian economy is a dramatically different creature today than it was 20 years ago. The fact that Australia weathered the Asian crisis, the global slowdown of 2001, the uncertainty from 9/11 and SARS, and now higher oil prices, is a function of the flexibility and adaptability of the economy. Virtually all of these shocks would have triggered a dramatic slowdown and/or higher inflation in years past.

In other words, the floating exchange rate has done what it was intended to do — buffer us from external shocks. The medium-term focus of macro policy has achieved its aims — over the business cycle, low and relatively stable inflation and a Commonwealth public sector that makes no call on national saving. Structural reforms have succeeded — wages are more sensitive to firm-specific conditions, productivity and competitiveness are much improved, and resources flow more easily to their most productive uses.

But just as the economy has changed, and hence the way it responds to shocks has evolved, the nature of the shocks themselves has changed. This is important to recognise, because it can be tempting to extrapolate from the past even when the macroeconomic drivers, the nature of shocks, and the structural underpinnings of the economy are very different.

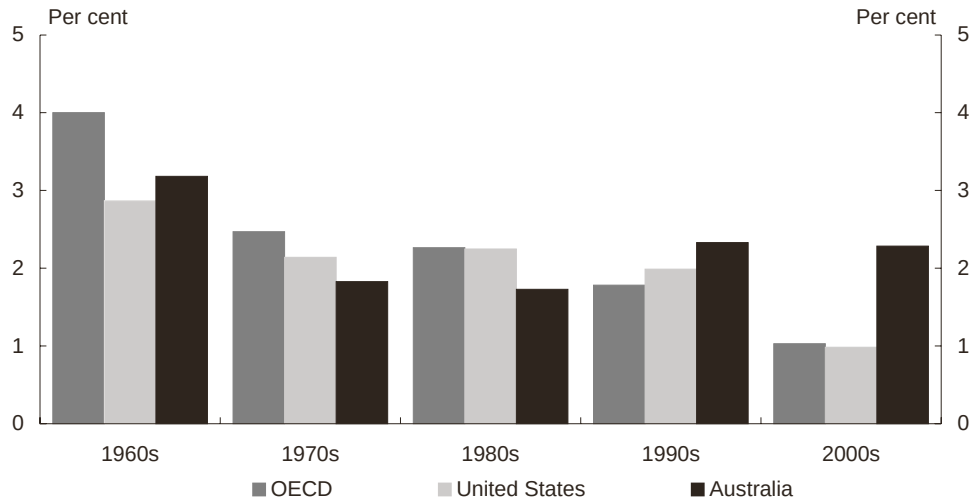
Equally, while we should acknowledge the broad success of many of the past reforms, we also need to recognise they will not guarantee future economic success. And in many ways, the Australian economy faces just as many, albeit different, challenges today as it did in the early 1980s; we simply have the benefit of confronting these from a far better base.

Australia's relative growth performance

In assessing our performance since the 1980s, it is also instructive to consider our growth relative to that of comparable countries. On this measure, Australia has performed very well, and particularly so over the past decade.

For instance, since 1990 our GDP per capita — a highly aggregate indication of living standards — has increased by more than ½ a percentage point per annum faster than that of the United States or the OECD area.

Chart 2: Per capita GDP growth comparisons

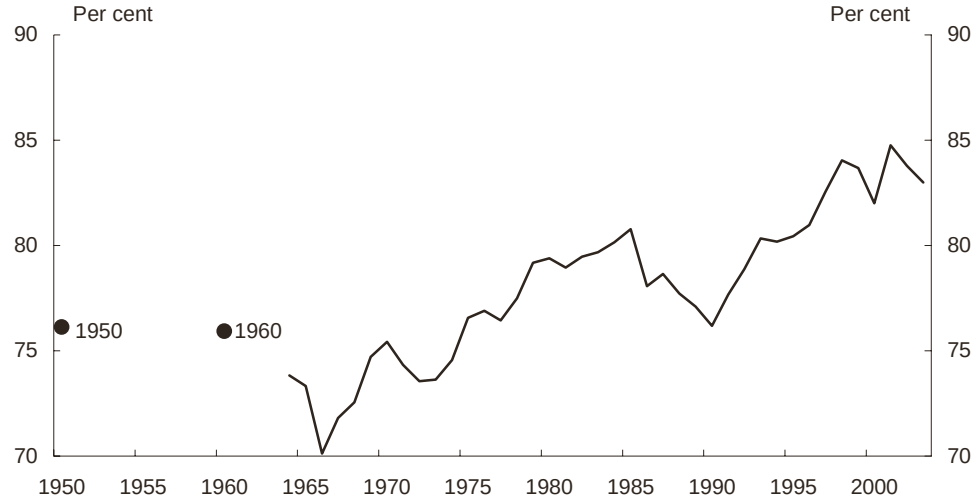


Source: Groningen Growth and Development Centre and The Conference Board.

Having said that, the level of Australia's GDP per capita is still below that of the best performers in the OECD.

Over the last 20 years, Australia's GDP per capita has risen relative to that of the US, from around 75 per cent in 1983 to around 79 per cent in 2003. While this catch-up might seem small in percentage terms, it represents an increase in real terms of around $2000 per person.

Chart 3: Australian labour productivity level relative to the US
(Per hour worked)



Source: Groningen Growth and Development Centre.

This catch-up has occurred mainly due to improvements in Australia's relative productivity level. In 1990, our productivity was around 76 per cent of that in the US. By 2003, this had increased to around 83 per cent. While the historical data are difficult to interpret and should be treated with caution, there are some indications that this relative productivity level is higher than it has been since at least 1950.

Furthermore, an analysis of this catch-up on an industry basis reveals some interesting trends. Preliminary analysis suggests that some Australian industries have made significant productivity gains relative to their US counterparts since the mid-1980s. In addition, the number of industries with productivity levels above that of their US counterparts has increased over this period.

As a result, the proportion of employment engaged in industries with productivity levels greater than their US counterparts has increased from around 22 per cent in 1985 to around 40 per cent in 2001.

This is indicative of the effectiveness of Australia's labour and product market reforms, allowing resources to move toward those industries for which we have a comparative advantage. But it also highlights the key medium-term challenge confronting us — how to improve our economic performance closer to that of other leading economies on a sustainable basis.

Risks to the economy

Identifying risks to our economic performance, and developing contingent policy responses, is one of the greatest challenges confronting us in the medium-term.

Indeed, it is often a source of frustration to us in Treasury that, when the Treasurer releases forecasts, commentators focus on the point estimates. To us, just as important, if not more so, is the discussion of the risks around the forecasts.

In recent budgets, for example, we have discussed the risks around higher house prices and the increase in household sector debt, movements in world oil prices, changes in weather conditions and the increase in the US fiscal and current account deficits, to name but a few.

Identifying the risks and thinking about how they might unfold is integral to our economic analysis. This allows us to provide better policy advice to our ministers; advice that takes account of alternative, but plausible, economic scenarios.

For the sake of exposition, let me classify risks into three groups:

- random or unpredictable events;

- economic imbalances where, once the imbalance is recognised, the risk is often around how and when it might correct; and

- risks around the appropriateness and timeliness of policy responses to foreseeable structural changes in the economy.

Of course, classification of risks into these three categories is somewhat arbitrary, with substantial overlap in how risks might arise and play out.

Random shocks and oil prices

In the first category — that of random events — we could, for example, include drought, the outbreak of a virus such as SARS and terrorist attacks. While the impact of these events can be large, they are — by their nature — very difficult or impossible to predict. The effects of these shocks will in a large part depend on an economy's underlying flexibility and the strength of its institutions and markets.

Large and unforeseen increases in oil prices are often considered an example of a random shock. And, to some extent, the increases in oil prices in the past did reflect unpredictable changes in supplier behaviour. It is more difficult to categorise the recent increase in oil prices in this way. Factors that have been driving high oil prices include strong world demand and low inventories, coupled with insufficient investment in appropriate refining capacity and supply capacity in general.

While the recent increases in oil prices reflect a set of less random events than past increases, it is clearly still very difficult to forecast oil prices themselves and the effects they may have on the world and domestic economies.

Even if one could correctly forecast oil prices, the effects of higher oil prices are difficult to determine. In Australia, higher oil prices lead to higher petrol prices, which lower real household disposable incomes and increase business input costs. On the other side, higher oil prices benefit Australian oil producers through increased profits. As Australia is a net oil importer, the negative effects would dominate.

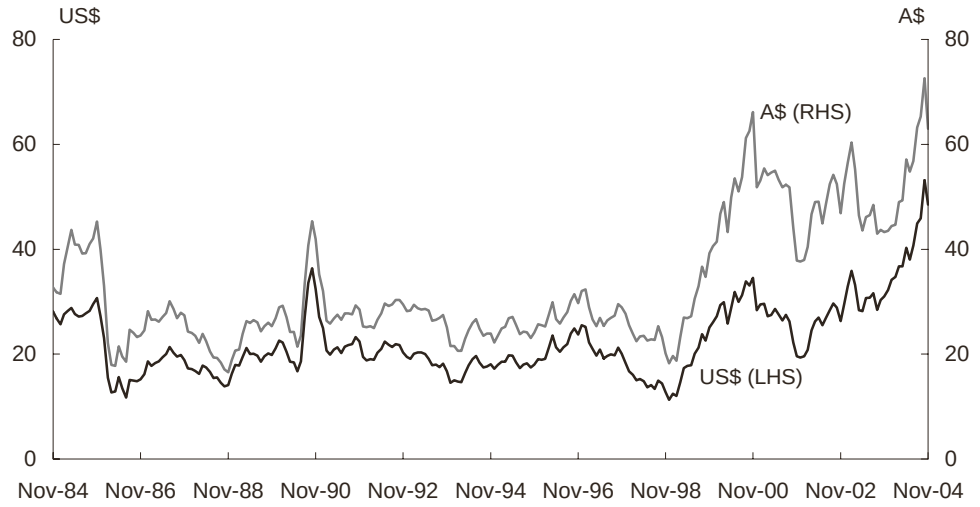
And given that Australia's major trading partners are predominantly net oil importers, higher oil prices will lead to lower trading partner growth and reduced demand for Australian exports.

However, the strong world demand that has contributed to the recent increase in the price of oil has also increased the prices of other forms of energy — including apparently doubling the $US contract price for coking coal from April 2005. As Australia is a net exporter of energy products taken together — that is including oil, liquefied natural gas and coal — the overall effect of an increase in oil prices is likely to

be an improvement in Australia's terms of trade. Therefore, the net effect of an oil price increase in the medium-term is not at all clear cut.

Furthermore, changes in the US dollar price of oil do not directly flow through into the Australian economy. Fluctuations in the Australian dollar also have a major impact on the price that Australian consumers and business pay at the pump. And looking at the Australian dollar price of oil, we can see that the Australian economy has already endured — and overcome — an oil price shock in recent times.

Chart 4: A$ price of oil



Source: Australian Government Treasury.

The Australian dollar price of oil increased by 250 per cent between February 1999 and November 2000, due to the combination of an increase in the US dollar price of oil and around a twenty per cent depreciation of the Australian dollar. What's more, this has been a long lived increase, with the average Australian dollar price of oil over the new decade almost double the average of the previous decade.

Yet the Australian economy has managed to absorb this increase, without the (inevitable) direct inflationary effects being passed through into second and third round wage and price increases. This is undoubtedly a result of the credibility of macroeconomic policies over the last decade. And this illustrates the importance of credible medium-term policy in dealing with shocks to the economy.

Economic imbalances

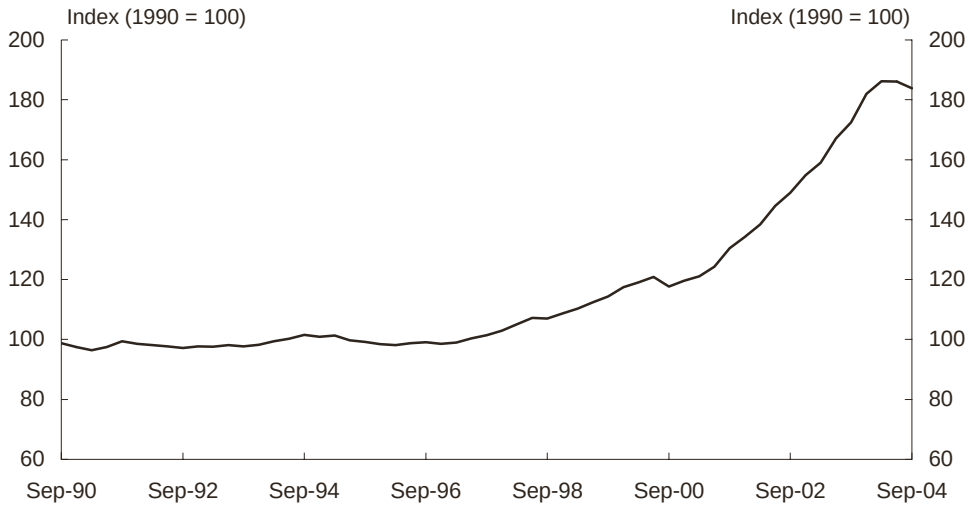
The second category of risks is those that arise because of imbalances in the economy. It is not always easy to identify an imbalance at the time it is building up.

An example of an imbalance in the global economy at the moment is the high level of the US current account and fiscal deficits. In Australia, an example may be high house prices and the increases in household debt over recent years.

Let me speak to the latter example first.

Over the last decade, Australia has experienced a housing boom of unprecedented proportions. Both construction activity and house prices have increased dramatically, driven by low interest rates, greater consumer access to housing finance, an increase in net immigration, and continued increases in household income. House prices have also been affected by supply side constraints, particularly on land release.

Chart 5: Real house prices



Source: Australian Bureau of Statistics.

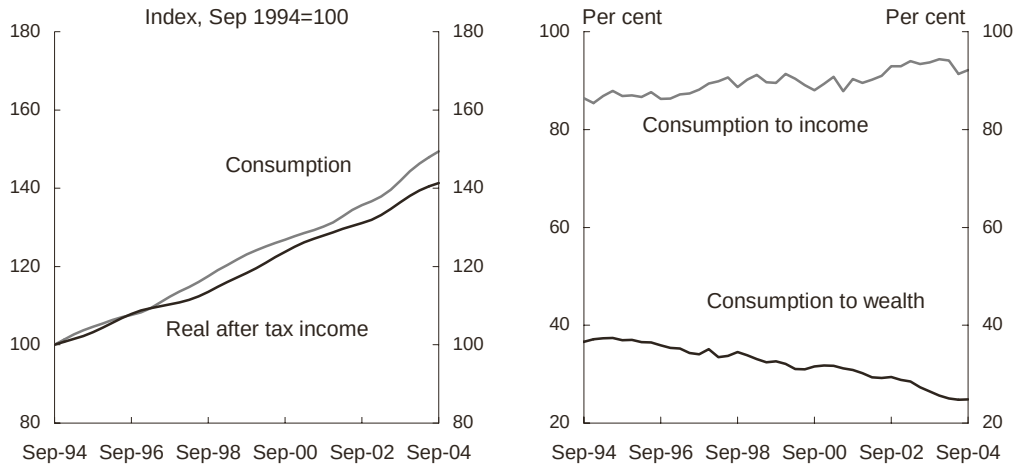
Strong investment in housing has boosted national investment.

Rapid growth in house prices — the real price of established homes has increased by around 80 percent since the beginning of 1998 — has boosted household wealth. This in turn has supported rapid growth in private consumption, and has underpinned a fall in the household saving ratio.

While the fall in the household saving ratio gets attention, recall that the national accounts measure of saving does not include capital gains (including on houses) that most households would likely consider as a form of saving. Moreover, while

household consumption has risen faster than income, households have not fully exploited all the consumption possibilities of the increase in household wealth.

Chart 6: Consumption, income and wealth

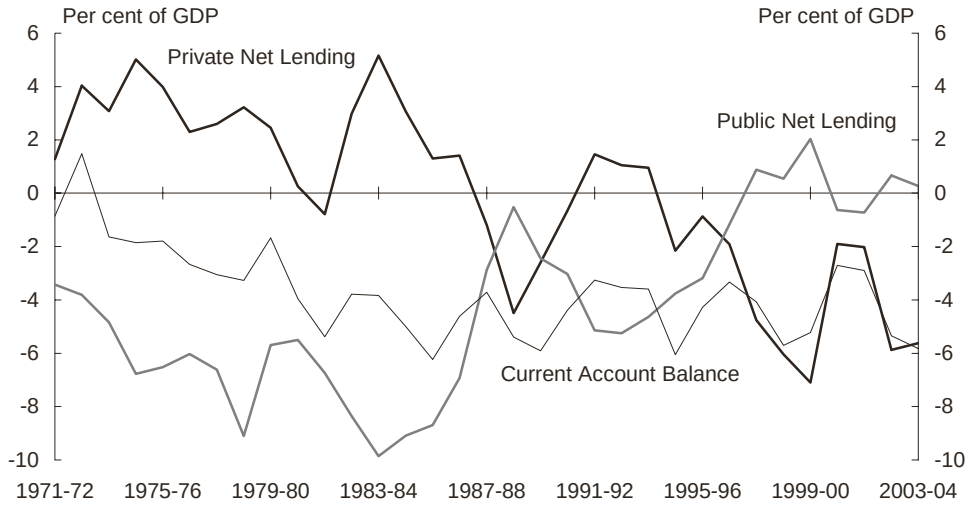


Source: Australian Bureau of Statistics.

Even if households have not increased consumption by as much as they otherwise may have done, their housing investment and consumption behaviour has significantly increased domestic financing requirements, which have been met by increased borrowing from overseas, contributing to a rise in the current account deficit (CAD).

This can be illustrated using a net lending framework — that is, a framework that splits an economy's investment financing requirement into domestic and foreign sources. An economy that saves more than it invests will be a net lender of capital to the rest of the world, while an economy that saves less than it invests will need to be a net borrower of capital.

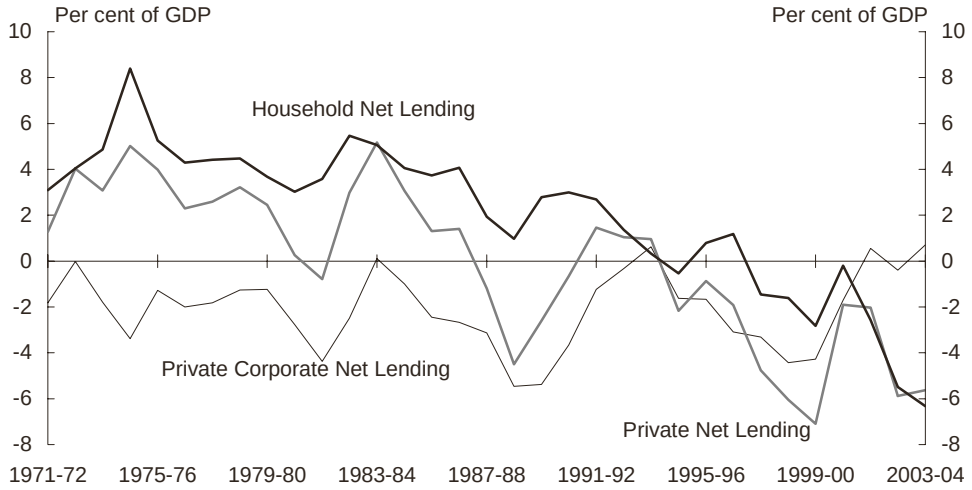
Chart 7: Australian net lending



Source: Australian Government Treasury and Australian Bureau of Statistics.

Australia's current account deficit is entirely a reflection of an excess of private investment over savings. Importantly, and in contrast to the United States, the Australian public sector is a net *lender*, and therefore is partly offsetting the private saving-investment imbalance.

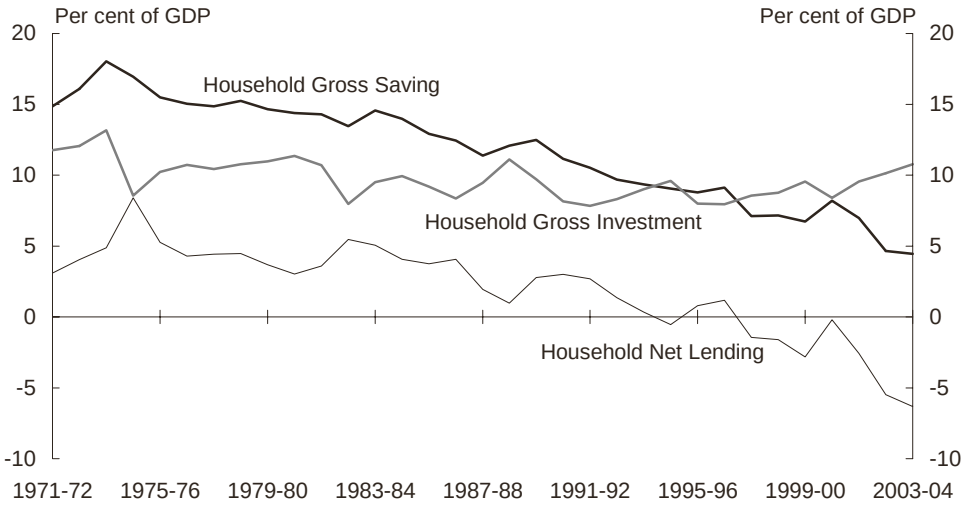
Chart 8: Private net lending



Source: Australian Government Treasury and Australian Bureau of Statistics.

Further decomposing the private side of Australia's net lending position into households and corporations reveals that private corporate net lending, like public net lending, is around balance. Hence, the current account deficit, as it stands, is largely a reflection of the net borrowing of households.

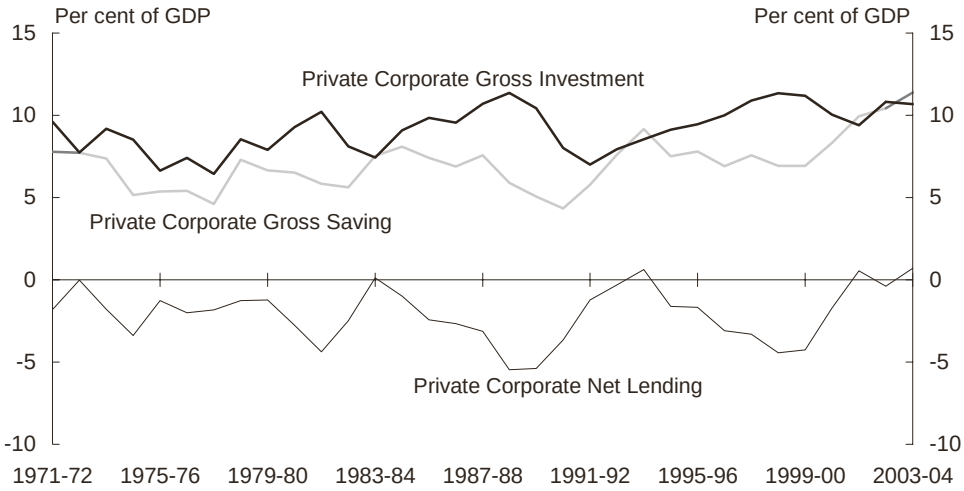
Chart 9: Household net lending



Source: Australian Government Treasury and Australian Bureau of Statistics.

Taking this framework one step further, we can see the impact of the housing boom. Household (dwelling) investment has risen substantially as a share of GDP, although it should be noted that it has been higher in the past. And household saving has continued to fall, to record low levels.

Chart 10: Corporate net lending



Source: Australian Government Treasury and Australian Bureau of Statistics.

On the private corporate side, there are also some interesting features. While this is not the first time that the corporate sector has been in balance, previous instances have generally occurred when the economy was in a period of slowdown that coincided with a decline in investment expenditure.

In this instance, corporate investment has been quite strong and it has been a sharp increase in corporate saving — largely undistributed profits — that has brought the corporate net lending position into balance. This is one example of the beneficial effects of the increase in the terms of trade.

Returning to the housing market, there remains considerable uncertainty about the future path of adjustment. We continue to forecast a benign adjustment. There is a risk, however, that falling house prices could prompt a sharper correction in investment and consumption and, hence, in overall economic activity.

Just as for unpredictable shocks, the ability of an economy to adapt to the unwinding of an imbalance — especially if it is combined with, or triggered by, some other shock — depends upon the flexibility and resilience of its markets and institutions. A small shock to an inflexible economy could have more negative and longer-lasting effects than a larger shock to a more flexible economy.

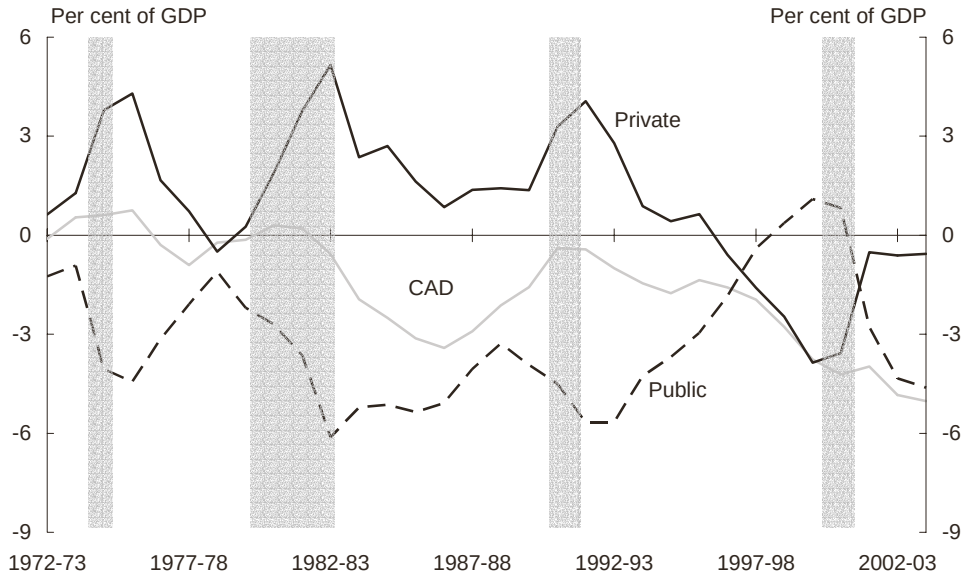
United States current account

Let's now consider developments around the US CAD. In particular, I want to share with you a line of thinking recently set out by US President Nixon's Secretary of Commerce, Peter Peterson. [1]

As you know, in contrast to the situation of the 1990s, the widening of the US current account deficit since 2000 has reflected a turnaround in the public net lending position, as federal, state and local government budgets have moved into deficit. In fact, as it currently stands, the US CAD is mostly a reflection of an imbalance in public saving and investment.

1 'Riding for a Fall', *Foreign Affairs*, September/October 2004.

Chart 11: US net lending position



Source: Bureau of Economic Analysis.

Much of the discussion among the economics profession has revolved around the need to engage in fiscal consolidation to address the US twin deficits. Yet there are a broader set of issues at play here that get little attention from economists but which could potentially influence significantly the medium-term economic and geo-political backdrop for the Australian economy.

In Peterson's view, the US is rightly regarded as the sole superpower, pre-eminent in military and economic strength for the foreseeable future. Yet it faces what we might term an impossible trinity — fighting a global war on terrorism while the US's financial dependence on foreigners grows dramatically, all in the face of an ageing developed world.

As Peterson (and Federal Reserve Board Chairman Greenspan) has put it, the US CAD may well be sustainable at current levels for a while — but it will increase and it is not sustainable in the long run.

Peterson also believes that the US's scope to move dramatically on fiscal policy is constrained. For the first time since World War II, the US faces a situation in which every major category of federal spending is projected to grow as fast, or faster than, the economy for many years to come. This not only includes increased pension and health care spending for retiring baby boomers, but also increased defence spending for the war against terrorism.

The problem, as Peterson sees it, is that the US is reliant on the ageing developed world for help in financing — at least part of — the fiscal and current account deficits. He believes that the ability of the developed world to assist the US will diminish as they struggle with the fiscal costs of their own ageing populations. This will increasingly place the burden of adjustment on the US, and increase the risk that other world events could trigger a disruptive correction. And while Peterson doesn't go this far, if the developing world continues to fund the US deficits, this can only come at the cost of reduction in their own growth prospects.

As I noted earlier, imbalances are extremely hard to identify, given that they often occur at the same time as the economy is undergoing structural change. When imbalances arise in an economy, adjustment is inevitable. Thus, how adjustments take place and the ability of the economy to cope with adjustments become the key concerns of policy makers. And as the Peterson' material emphasises, imbalances can have consequences that go well beyond the narrow economic.

Structural changes

The third category of risks is those that can arise from policy inaction, or the inability of the economy to adjust to major structural shifts. The ageing of the population is an example of this type of risk. Much has been said by the Treasurer and Treasury on this issue and I do not intend to reprise that material here.

Instead, I will take a few minutes to discuss two other major structural changes which will pose challenges for us.

First, the rapid integration of the Chinese economy into the world trading system will continue and see China increasingly become a key contributor to global growth. The productive potential of China's 1.3 billion people is attracting investment and technology from around the world. And since China's accession to the WTO, its share of world exports has increased at an unprecedented rate — from 3.9 per cent of global exports in 2000 to over 6 per cent this year.

China's growth, and the nature of its industrialisation, is raising global demand for resources, and hence their prices. At the same time, the movement of manufacturing to China and other low cost economies is gradually reducing the world price of manufactures.

Since Australia is a resource exporter and a net importer of manufactures, these global developments are raising Australia's terms of trade and living standards. Developments in China, India and elsewhere also appear to be generating a significant, and potentially long lived, shift in Australia's comparative advantage, in favour of resource exports and away from manufactured exports.

For China's part, it needs to continue to manage its economic opening while pursuing reforms that will drive and support its growth and development. This is particularly important given the increased interdependency of growth prospects in the region, including Australia's. Key challenges for China are to achieve more balanced growth, reform the financial system, and address medium-term fiscal and demographic pressures.

There is no precedent for the economic transformation currently underway in China. The magnitude of the task means that it is unrealistic to expect the transition to take place without disruptions to growth which, in turn, would affect Australia and the region.

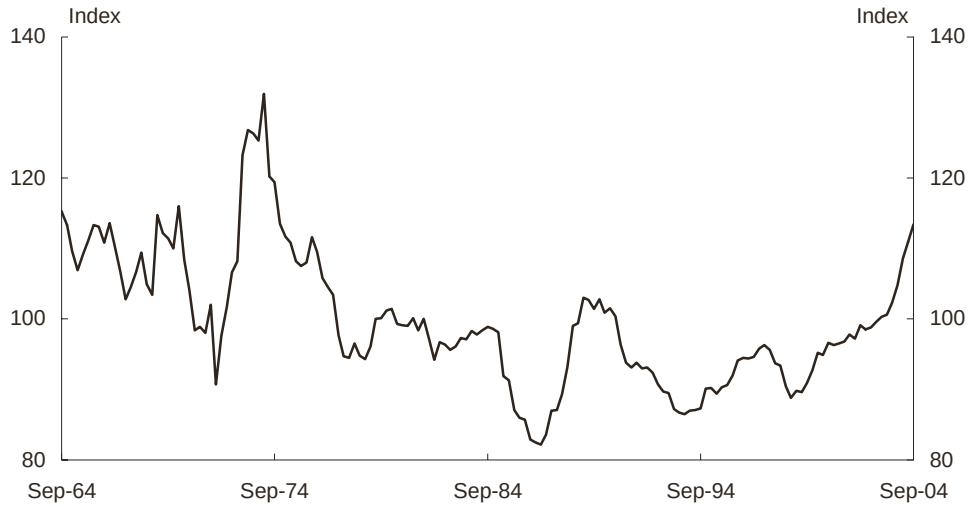
For the rest of the world, we need to support China's integration into the global economy in a way that minimises disruption globally and for China. In particular, as we saw in the recent US election, protectionist sentiment in the developed economies can emerge quickly and needs to be deftly handled.

China has been under pressure to allow greater flexibility in its exchange rate. While a more flexible exchange rate will help the adjustment of global imbalances, it is also in China's own interest to allow greater flexibility. This would allow the pursuit of an independent monetary policy and a smoother process of adjustment to shocks. But the timing of such flexibility will need to recognise the concomitant need to strengthen the financial system.

The second issue I want to address concerns the slow growth in Australia's exports over the past few years, particularly in light of the emphasis in our forecasts on a gradual shift from domestic to external sources of growth.

To some extent this export performance is not surprising given recent events including slow world growth in 2001-02, drought, the outbreak of SARS, and the 37 per cent appreciation of the exchange rate since its low in 2002. While export volumes have been slow to respond, Australia has benefited significantly from dramatic increases in export prices and in the terms of trade more generally.

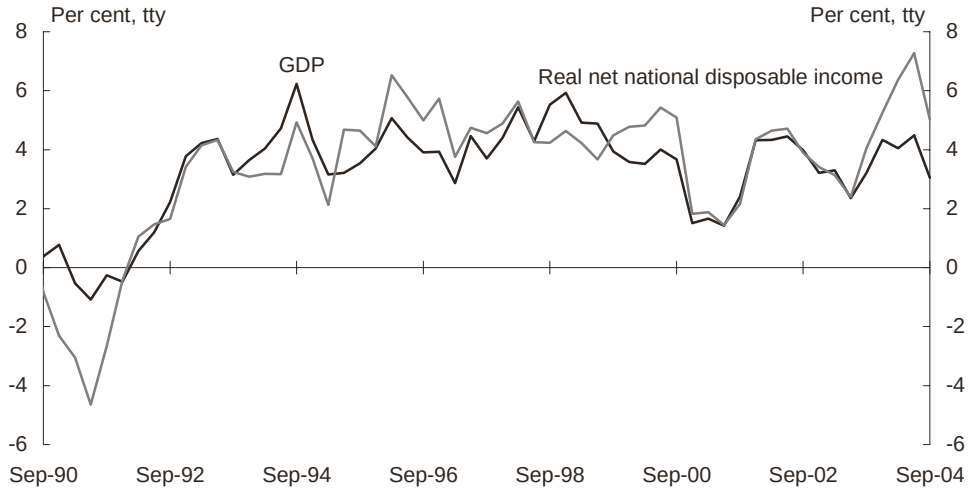
Chart 12: Terms of trade



Source: Australian Bureau of Statistics.

This improvement in the terms of trade is reflected in the difference between GDP and real net national disposable income, a broad measure that includes increases in purchasing power driven by the terms of trade effect. Growth in this measure through the year to the September quarter was around 2 percentage points higher than GDP.

Chart 13: Impact of the terms of trade



Source: Australian Bureau of Statistics.

None of this is to suggest we should be sanguine about the sluggish export response. After all, the world has been growing strongly for some time now. But the nature of that growth appears to have caused a change in the nature of Australia's export growth. Examining those changes will give us some feel for what the future may hold.

Given the impact of China's growth on Australia's comparative advantage that I referred to earlier — towards resources and away from manufactures — it seems likely that resource exports are set to grow strongly for a number of years, while growth in manufacturing exports seems likely to remain more subdued than the strong rates achieved in the 1990s.

Resource exports are set to increase substantially as a result of significant investment under-way to raise capacity.[2] Of course, these projects have substantial lead times before they start exporting — which is one reason why export volumes have not yet significantly increased.

Prospects for our manufactured exports are likely to be somewhat different, though we continue to expect growth.

Over the past two decades, the gradual removal of trade protection has exposed the Australian manufacturing sector to heightened global competition. This has generated rising efficiency in the sector and led to a substantial re-orientation of production from supplying the domestic market to exporting.

Since the mid-1980s, manufacturing output has grown at an average annual rate of about 2 per cent. Manufactured exports, by contrast, grew at an average annual rate of over 12 per cent from the mid-1980s to the turn of the century, but at a much more subdued rate of less than 4 per cent since then.

It seems unlikely that the kind of structural change that drove export growth over the 1980s and 1990s can continue. Disaggregated data suggest that manufactured export growth has been gradually slowing for quite some time. Of 35 sub-components of manufactures exports, 27 experienced double digit annual real growth from 1985-86 to 1993-94, while only 11 did from 1993-94 to 2000-01, and only 6 from 2000-01 to 2003-04.

Manufacturing export performance

	Performance of manufacturing categories (number)		
	1985-86 to 1993-94	1993-94 to 2000-01	2000-01 to 2003-04
Rapid growth (>10% p.a.)	**27**	11	6
Mature (0-10% p.a.)	7	**22**	12
Decline (< 0% p.a.)	1	2	**17**
Total	35	35	35

Source: Australian Government Treasury.

2 For example, recently completed projects include the North West Shelf fourth train, the Bayu/Undan oil and gas fields, and BHP's MAC iron ore mine; projects currently underway include the Mutineer/Exeter oil fields, and Yandicoogina iron ore mines; while projects currently being planned include the North West Shelf fifth train and Gorgon LNG fields, the Enfield oil project, and further expansion of iron ore mines in the Pilbara.

Beyond the maturation of the export orientated manufacturing sectors, there may be other reasons for the slowdown in manufacturing export growth since the turn of the century.

One possibility is that manufacturers have been diverting sales away from export markets toward the booming domestic market. If this were the case, export to output ratios in manufacturing sectors would be expected to stabilise or fall. Preliminary analysis suggests that this is the case, with the export to output ratios of most industries remaining flat over the first part of the current decade (see Attachment 1).

In summary, it seems possible that manufacturing export growth will remain relatively subdued over the next several years, for three main reasons:

- Double-digit annual export growth rates are possible off a low base, but much harder to achieve when exports already account for a sizeable fraction of output — essentially a maturation argument.

- The gradual global shift of manufacturing production to low cost countries, including China, is continuing to place competitive pressures on parts of Australian manufacturing.

- The rise in world resource prices has underpinned a sizeable appreciation of the Australian dollar, with the real trade weighted exchange rate now around 10 per cent above its average since 1990 and nearly 15 per cent above its average over the past five years. This appreciation has reduced the competitiveness of Australian manufacturing exporters. While some part of the current strength in resource prices may not be sustained, the changing global demand/supply balance suggests that resource prices may remain strong for some time.

Again, the key challenge to policy makers in dealing with this kind of structural shift in Australia's comparative advantage is to maintain and enhance the flexibility of labour and product markets. This will enable the economy to adapt to these global changes with less short-term dislocation.

Concluding comments

A primary medium-term challenge for Australia is to sustain the conditions for growth. Maintaining and further enhancing flexibility in labour and product markets allows the economy to adapt to structural changes, such as aging of the population and the rise of China — which provides great opportunities as well as challenges — and shocks such as higher oil prices.

The economic reforms of successive governments over the past two decades have played a major role in Australia's recent economic performance. Although it is difficult to quantify the extent to which government policy has been responsible for this impressive performance, it is certainly the case that Australia's economic growth would have been diminished in the absence of these reforms.

Australia now has more coherent and disciplined monetary and fiscal policy frameworks than in the past. Increased flexibility and competition in labour and product markets have allowed for the more efficient allocation of resources within the Australian economy. These reforms have seen wage and price pressures remain relatively subdued, even in an environment of continued strong GDP and employment growth.

The micro reforms that were undertaken over the last two decades are clearly paying off, and will continue to do so. But further reforms will be required if we are to maintain productivity and economic growth. Only a flexible and resilient economy will be able to deal with the challenges that confront us, be they unforseen shocks, emerging imbalances or long term structural changes.

Attachment 1

Manufacturing export to output ratios

	Exports to output ratio				Proportion of output
	1995-96	2000-01	2001-02	2002-03	2002-03
Food, beverage & tobacco	30.4	32.7	33.4	22.4	23.9
Textiles, clothing, footwear & leather	28.0	32.0	35.5	40.9	3.3
Wood & paper product MFG	7.3	11.1	12.2	12.6	5.6
Printing, publishing & recorded media	3.6	3.5	3.6	3.2	7.6
Petroleum, coal & chemical product MFG	17.0	18.0	18.0	17.2	18.6
Non-metallic mineral products	6.2	5.1	4.4	4.4	3.9
Metal product MFG	30.4	39.4	38.3	37.8	15.8
Machinery & equipment MFG	26.3	36.9	36.3	36.3	18
Miscellaneous manufacturing	16.8	22.7	19.9	15.6	3.5
Total	22.8	27.1	27.0	24.0	100

Measuring recent trends in Australia's economic remoteness

Robert Ewing and Bryn Battersby[1]

Australia is (with New Zealand) one of the two most remote advanced economies in the world in terms of average distance from world economic activity. The rapid economic growth of countries in the Asian region in recent decades has resulted in only a modest reduction in Australia's level of remoteness. This remoteness has direct effects on Australia's trade performance. Overcoming the natural barrier to trade created by Australia's location may require greater efforts than those of most other countries to promote trade and the economic benefits that come from international engagement.

1 Domestic Economy Division and Macroeconomic Policy Division, Australian Government Treasury. We are grateful for comments and suggestions received from Graeme Davis, John Hawkins, Paul O'Mara and Martin Parkinson. The views in this article are those of the authors and not necessarily those of the Australian Government Treasury.

Is there still a 'tyranny of distance'?

The growth of communications technology, and Australia's increased openness to trade, have led to claims that the years of Australia as an economy suffering from the 'tyranny of distance' are now over. In addition, the rapid growth of some countries in Asia means a greater share of global economic activity now occurs within Australia's region. But while these factors may help, Australia's geographic position is likely to remain an important determinant of economic performance.

One argument commonly made is that increasingly exports of services will allow Australia to overcome the effects of geographic remoteness. Thanks to advances in information and communication technologies, many services can be provided to overseas companies or consumers as easily from Australia as from the United States. But while these technologies and services may become significant in the future, at present exports of services that are independent of distance still account for only a small proportion of Australia's international trade.

Exports and imports of physical items still account for the vast majority of Australia's international trade in goods and services. In 2003-04 physical goods accounted for nearly 80 per cent of both exports and imports.[2]

Even within services exports, distance remains an important factor. Included within the services measure in the balance of trade are such items as spending on shipping of goods, airline fares, tourism and so on — items that probably experience a greater distance effect than many physical goods. Spending on these transport, shipping and travel items made up around 70 per cent of services imports and exports in 2003-04. This means services unaffected by distance comprise only around 6½ per cent of total imports and exports.[3] While this percentage has grown over time for exports (from around 4 per cent in the early 1980s), it still represents only a small fraction of Australia's international trade. And this group includes many items that experience distance effects as well, albeit of a different form, for example consultancies where the company sends representatives to overseas sites to advise.

Another argument made for the reduction of the tyranny of distance is that international trade of goods and services has become cheaper thanks to the introduction of more advanced shipping technology, such as containerisation. More efficient transport should lead to lower transport costs and increased trade. Evidence for this is somewhat mixed. Coe, et al (2002) discuss this evidence, finding that while

2 Australian Bureau of Statistics, International Trade in Goods and Services, cat. no. 5368.0, November 2004.

3 That is, services unaffected by distance make up only 30 per cent of services trade, which are themselves only 20 per cent of imports and exports.

there has been a reduction in the measured effect of distance on international trade in goods and services, this reduction has been small. Even if there is a benefit from reduced costs of transportation, this may not improve Australia's relative position as all countries benefit from these reduced costs.

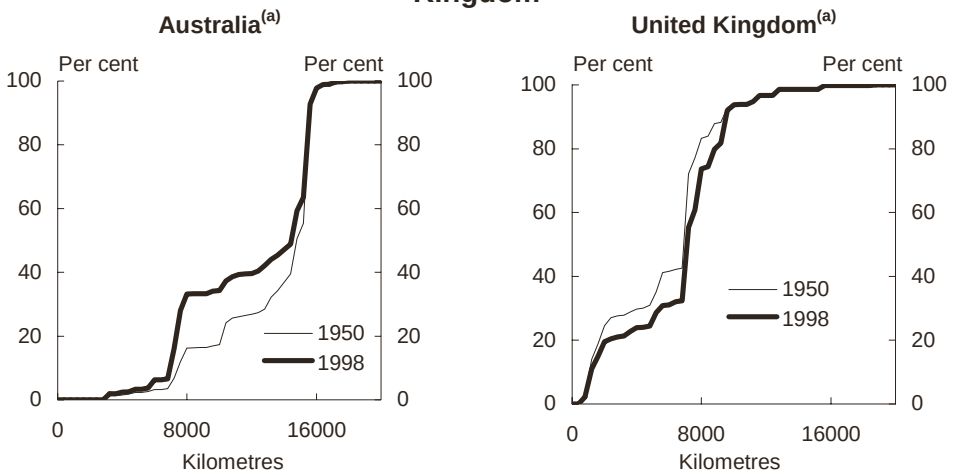
All these factors suggest that the overall effect of distance remains significant for Australia, and will continue to be so for the foreseeable future.

Measuring remoteness

Understanding the nature, effect and changes in Australia's economic remoteness requires some way of measuring remoteness. The principal difficulty in constructing such a measure is that remoteness depends not just on how far Australia is from other countries, but also on the level of economic activity taking place in each other country.

A simple approach to measuring remoteness is to look at what percentage of world GDP is within so many thousand kilometres of Australia or any other country of interest.[4] Chart 1 below shows this picture for Australia and the United Kingdom for 1950 and 1998.

Chart 1: Distance to the World's GDP from Australia and the United Kingdom



(a) These charts show the percentage of world GDP (measured in purchasing power parity terms) falling within circles of different radii (from 0 to 20,000 kilometres) from either Sydney or London.
Source: Australian Government Treasury calculations based on data from Maddison (2001).

4 GDP throughout is measured in purchasing power parity terms, which adjusts for the different price levels that can prevail in different countries.

Australia is clearly much more remote than is the United Kingdom. In 1998, 94 per cent of world economic activity was within 10,000 kilometres of the United Kingdom, but only 34 per cent of the world economy was within 10,000 kilometres of Australia.

Chart 1 also shows that the growth of Asia has reduced Australia's remoteness by a modest degree in recent decades. While the picture for the United Kingdom is largely unchanged between 1950 and 1998, the percentage of world GDP within 10,000 kilometres of Australia has doubled since 1950.

Chart 1 is not a complete picture of how things have changed in the period since World War II. The world's economy has grown markedly in real terms, from around $9,000 billion in 1950 to $56,750 billion in 1998.[5] So in real terms the amount of economic activity within 10,000 kilometres of Australia has grown from slightly over $1,500 billion in 1950 to $19,500 billion in 1998 — more than twice the total world GDP in 1950.

But the important story about Australia's remoteness is about the relative level. While the economies within 10,000 kilometres of the United Kingdom grew by a factor of around 6 over those 48 years, those within 10,000 kilometres of Australia grew by a factor of over 12. This represents a substantial shift of the world economy towards Australia in relative terms, but also underlines Australia's continued remoteness.

While the diagram in Chart 1 is a simple and useful way to compare two countries or two time periods, in reality there are many countries to consider. Further, while an approach that looks at the amount of GDP within 10,000 kilometres of the country does allow for comparisons between many countries at once, it is a very limited measure as it doesn't differentiate between situations where two countries are 100 kilometres or 9,000 kilometres apart.

A more comprehensive measure of remoteness needs to summarise both the distance and economic weight for every other country. There are several ways to construct such a measure, but perhaps the most useful measure is to take a weighted average of the distance from each country.[6] This average could be thought of as how far away the rest of the world would be if the entire world's GDP were in a single country. This approach provides a measure which allows comparison between a country's remoteness and the remoteness of other countries, or the remoteness of that country in a previous time period.

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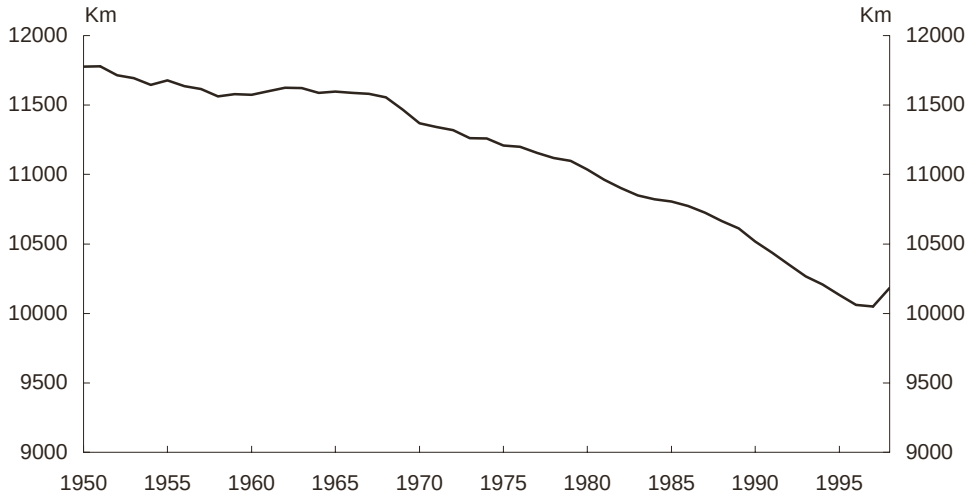
5 Measured in 2002-03 Australian dollars.

6 Details on the methodology for calculating these numbers can be found in Battersby and Ewing (2005).

Chart 2 shows how this measure of distance to the rest of the world GDP has changed for Australia since 1950. The chart shows a substantial fall in remoteness over the period, with the fall accelerating sharply after 1970. The small tick upwards in 1998 is related to the impact of the Asian financial crisis, which affected the GDP of several of the countries that are relatively near to Australia.

Chart 2: Distance to the rest of world GDP, Australia, 1950-1998



Source: Australian Government Treasury calculations based on data from Maddison (2001).

Despite this improvement, Australia is still relatively remote. Table 1 shows the distance to the rest of world GDP for the members of the OECD, as well as those members of the G20 which are not members of the OECD themselves. In 1998, out of these 38 countries, which together made up 85 per cent of world GDP, Australia is more remote than every country but one, New Zealand.

The advantage held by Europe is clear in Table 1. The twenty least remote countries are all in Europe, and the only non-European country less remote than a European country is South Korea (which benefits in this calculation from being a close neighbour of both Japan and China). One country that is notably remote is the United States, which is more remote than countries such as China, India and Indonesia.

Table 1: Distance (kms) to the rest of world GDP, selected countries, 1950 and 1998

	1998	1950	% change		1998	1950	% change
Luxembourg	1767	1427	23.8	Greece	3726	3252	14.6
Belgium	2016	1606	25.6	South Korea	4016	5661	-29.1
Netherlands	2017	1587	27.1	Finland	4210	3524	19.5
Switzerland	2197	1834	19.8	Turkey	4454	3979	11.9
Austria	2365	1946	21.6	Iceland	4596	3861	19.0
Czech Republic	2442	1853	31.8	Russian Federation	5389	6039	-10.8
Germany	2671	2089	27.8	Saudi Arabia	5402	5362	0.7
Denmark	2711	2168	25.1	Canada	5410	4734	14.3
Slovakia	2751	2025	35.8	Mexico	5494	5093	7.9
Hungary	2880	2297	25.4	China	5700	6466	-11.9
France	2984	2446	22.0	Japan	5977	7456	-19.8
Ireland	2992	2252	32.9	India	5983	6755	-11.4
Poland	3057	2449	24.8	Indonesia	7663	9407	-18.5
United Kingdom	3216	2727	17.9	United States	7886	7334	7.5
Italy	3260	2699	20.8	Brazil	8813	7983	10.4
Norway	3517	2799	25.7	Argentina	9907	9482	4.5
Portugal	3599	3226	11.5	South Africa	10080	9920	1.6
Sweden	3665	3040	20.6	Australia	10183	11777	-13.5
Spain	3720	3161	17.7	New Zealand	12312	13331	-7.6

Source: Australian Government Treasury calculations based on data from Maddison (2001).

Table 1 also shows the remoteness of the same group of countries for 1950, and the percentage change over those 48 years. All of the European countries have become more remote, by around 20 per cent, while those Asian countries in the group have generally become less remote. South Korea is particularly notable, with a 29 per cent fall in remoteness.

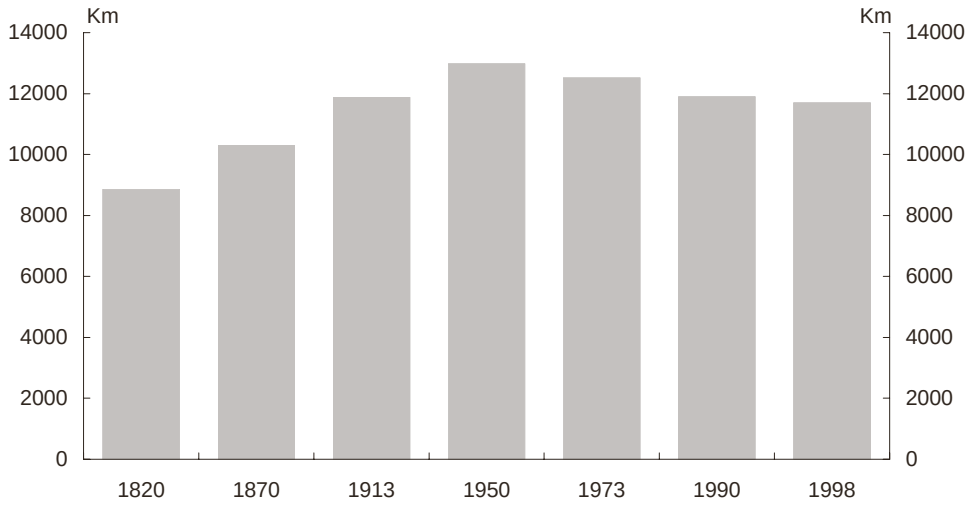
While Australia and New Zealand both experienced falls in remoteness, these falls were not unusually large compared to some countries in Europe. New Zealand remained the most remote country out of the group, and Australia remained the second-most remote (although the gap between Australia and the third-most remote country, South Africa, closed considerably).

But while Australia is still very remote, the advantage that other countries have has fallen substantially. The United Kingdom used to have an advantage of 9,000 kilometres relative to Australia, which fell to less than 7,000 kilometres in 1998.

Looking at the picture of Australia's remoteness prior to 1950 is difficult, as the data needed are not available for many countries. Chart 3 shows how Australia's

remoteness looks when measured using only the countries where data are available from 1820.[7]

Chart 3: Distance to the rest of world GDP, Australia



Source: Australian Government Treasury calculations based on data from Maddison (2001).

Chart 3 shows that the middle of the twentieth century was an important turning point in terms of Australia's remoteness. From the early days of white settlement in Australia until just after World War II, Australia's remoteness appears to have increased. This reflects the rapid growth experienced in Europe and the United States over that period, which tended to shift the balance of world GDP away from Australia. Since World War II, growth rates in those areas have slowed relative to the rest of the world, particularly Asia, and the balance of world GDP has begun to shift back towards Australia.

The important trend not captured by the calculations of remoteness above is the influence of technology, in particular technologies that reduce transportation costs such as air transport, containerisation or, looking back to the earliest days of Australia's settlement, the introduction of steam ships over sail ships. So while the balance of world GDP was apparently more favourable to Australia in 1820 than in 1998, it is almost certain that the 'cost' of remoteness on all countries has fallen overall.

7 A disproportionate number of countries close to Australia are excluded. Hence the remoteness calculated will tend to be overstated. It excludes several countries that have grown relatively rapidly since World War II, such as Malaysia, the Philippines, Thailand and so on. This bias is the reason why Australia's remoteness in 1998 is higher in Chart 3 than that shown in Table 1.

Australia became less remote over the past 50 years, as economic growth in the world has favoured the regions closer to us, in particular Japan and China. This fall in remoteness is likely to have positive effects for the economy, as discussed in the following section. Despite this improvement, Australia is still one of the most remote countries in the world, which poses important challenges for economic policy.

The effect of remoteness on Australia's economy

Remoteness increases the natural protection afforded to industries within an economy because high transport costs limit trade in some or all markets. This means that remoteness may reduce the expected level of trade for Australia, as well as the expected level of productivity (by keeping market size smaller than otherwise). However, the obvious question is 'to what extent is this the case?'.

A 'gravity trade model' provides a way to examine the role that remoteness has in explaining the level of trade for Australia. A gravity trade model relates the value of imports and exports between trading partners to the size of their economies and the distance between them, and allows the expected levels of Australian trade to be calculated. [8]

The predictions of one gravity model for Australia's total trade are presented in Chart 4. These predictions suggest that Australia moved from a point of underperformance with respect to trade in the early 1980s to a continued period of better than expected performance through the late 1980s and 1990s. Indeed, the model suggests that Australia's level of trade has been above expectations that take account of Australia's remoteness since about 1984.

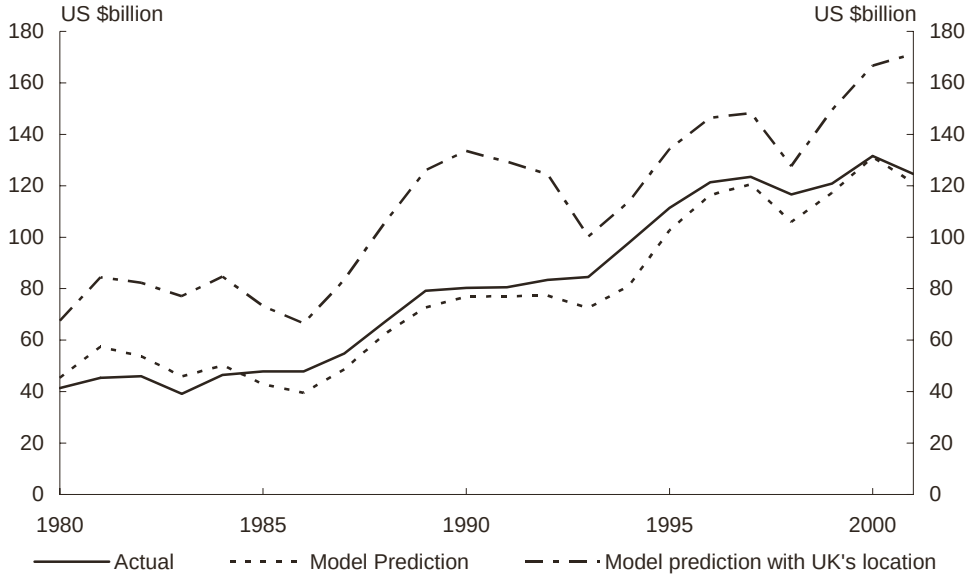
The predictions of the gravity model also suggest that Australian trade levels were fairly resilient through the turbulent period of the later half of the 1990s. It was around this time that many of Australia's nearby trading partners were struggling through the economic woes of the Asian financial crisis. This model suggests that Australia's trade levels could have turned downwards much more sharply than they did. However, Australia's actual aggregate trade levels were relatively stable through this period.

More interestingly, though, the gravity model allows exploration of a number of 'what if?' scenarios. For instance, what would be Australia's expected level of trade if Australia were located where the United Kingdom is? Because this would place Australia closer to global economic output, the model suggested that, between 1980

8 Details on the gravity trade model used, its estimation, and the results are provided in Battersby and Ewing (2005). Further details on gravity trade models in general can be found in several sources, such as Rose (2004).

and 2001, Australia's expected level of trade with the rest of the world would have been, on average, around 50 per cent greater each year. This gives an indication of the role that Australia's remoteness plays in determining the extent to which Australia trades with the rest of the world.

Chart 4: Actual and predicted aggregate trade for Australia



Notes: Predictions were calculated using a gravity trade model specified in Battersby and Ewing (2005). The model prediction with the UK's location substitutes the Australian distance to bilateral trading partners and remoteness variable with the UK's equivalent variables. Source: Battersby and Ewing (2005).

This natural disadvantage also has implications for the rest of the Australian economy. This was noted in the Commonwealth Treasury's *Budget Strategy and Outlook 2003-04:*

> 'Efficient resource allocation will lead to activities of the highest value being carried out. On the one hand, resources will be allocated to activities where distance is not a barrier or where Australia's advantages are clear. For example, in some areas of mining and agriculture, and potentially some areas of the international trade in services. On the other hand, it also means that, to a greater extent than for many other countries, resources will be allocated to activities where distance confers natural protection by decreasing the competitiveness of imported goods or services.' (pp. 4-22)

This effectively reinforces the importance of accounting for effects of economic remoteness when comparing Australia's performance internationally and when defining appropriate policy options for Australia. It is unlikely that the costs of distance can ever be completely overcome and, because of this, it is probably necessary

that those characteristics that make Australia unique continue to be evaluated at a policy level.

Conclusion

Australia is a very remote country. Among OECD countries, only New Zealand is more remote from the rest of the world's economic activity than Australia. The rapid growth of countries in Asia in recent decades has helped to reduce this remoteness somewhat, but as even these countries are relatively far from Australia this improvement is limited.

Altering Australia's remoteness and distance variables in a gravity trade model to reflect those of the United Kingdom highlights the tyranny of distance that is so often aptly remarked of Australia. Importantly, this suggests that while Australia does face challenges in its geographical location, Australia's actual trade performance has improved relative to the model predictions since the early 1980s, reflecting the benefits of the wide range of macroeconomic and microeconomic reforms in Australia over recent decades, which have helped to counter the adverse effects of distance and transport costs.

This remoteness matters not only in the case of international trade, where the evidence suggest it is a very important factor, but also in the other benefits that flow from international trade. Openness to international competition and markets promotes productivity growth by encouraging firms to become more efficient, and expanding the range of technologies available to them. Remoteness creates a natural barrier to trade, and can block these benefits. As one of the most remote countries in the world, Australia may need to make more effort than most to overcome these barriers and make the most of international engagement.

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Why have Australia's imports of goods increased so much?

Deborah Dark and John Hawkins[1]

The proportion of Australian domestic expenditure spent on imported goods has been steadily increasing over the past two decades. This partly reflects higher incomes as imports tend to be luxury goods.

A more important influence over the longer term has been the decrease in the relative price of imported goods, reflecting technology and cuts in protection and transport costs. (At times, exchange rate appreciation has further decreased the relative price.) As imported goods have become relatively cheaper, demand has increased.

But imports have increased even beyond what can be explained by movements in incomes and relative prices. For consumption items, this may reflect a preference for variety in goods. Companies are increasingly operating globally, leading them both to import and to export more components and finished goods. This has been facilitated by reductions in barriers to global trade.

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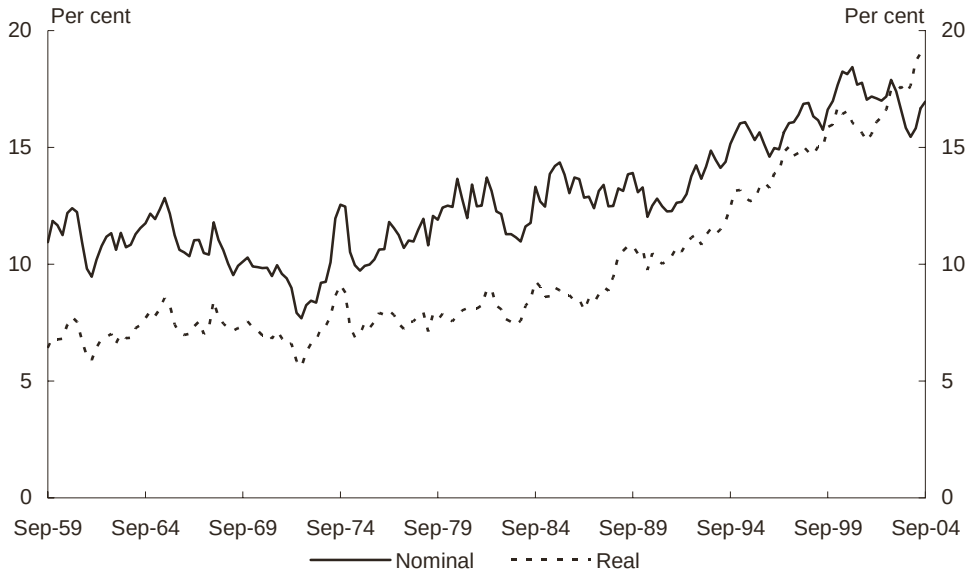
1 The authors are from Domestic Economy Division, Australian Government Treasury. This article has benefited from comments and suggestions provided by David Gruen, Steven Kennedy, Stephen Miners, Leanne Neo, Martin Parkinson and Meghan Quinn. Jane Love prepared the charts. The views in this article are those of the authors and not necessarily those of the Australian Government Treasury.

Introduction

In the 1960s imported goods were on average around 11 per cent of nominal domestic demand; after increasing steadily they now account for around 17 per cent (Chart 1). As prices of imported goods have risen more slowly than domestic prices, the increase in the 'volume' of imports has been even greater — an average annual growth rate of 9 per cent over the past decade. This paper looks at why this switch of expenditure has occurred, focusing on the causes of strong growth in the past 10 to 15 years.

Chart 1: Import penetration ratio
(imports of goods as percentage of gross national expenditure)



Source: Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.
Australian Bureau of Statistics 2004, National Income Expenditure and Product, cat. no. 5206.0, Canberra.

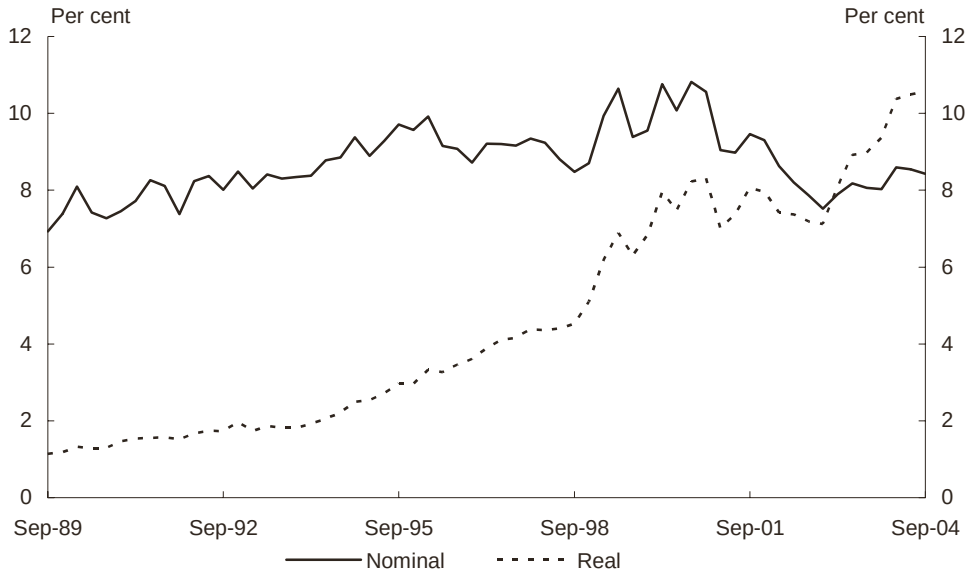
Australia imported $133 billion of goods in 2003-04. This is equivalent to an average of $6,700 per person, although many of the goods were imported by companies rather than households. The analysis in this paper concentrates on developments in the imports of goods. Australia also 'imported' $34 billion of services. About half of this represents spending by Australian tourists abroad, but it also includes freight charges and payments for other services.

Some of the major types of imported goods are cars ($12 billion in 2003-04), machinery ($11 billion), fuel ($10 billion), food and beverages ($5 billion), clothing and footwear ($5 billion), computers ($5 billion), household electrical goods ($4 billion), telecommunications equipment ($4 billion) and aeroplanes ($3 billion). About a third of imported goods are classified as 'consumption goods', used by households. About a

quarter are classified as 'capital goods', such as machines used by firms to produce other goods. Most of the remainder are classified as 'intermediate goods', raw materials and components used by firms to make goods for domestic sale or export.[2]

A notable change in the composition of Australia's imports has been Australian consumers and firms buying more information and communication equipment, especially computers. However, despite the significant increase in the number of these goods purchased[3], and the increase in their capabilities and quality, the decline in their prices has meant the total amount spent on them as a proportion of spending on imports has not changed significantly (Chart 2).

Chart 2: Imports of information and communications technology goods
(as percentage of total imports of goods)



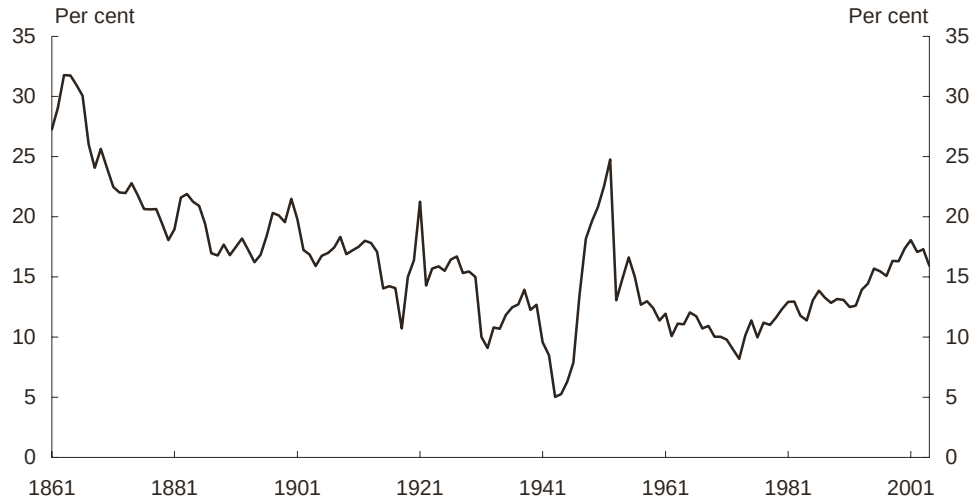
Source: Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.

2 Information on the composition of imports is given by the Australian Bureau of Statistics in its monthly publication, *International Trade in Goods and Services* cat. no. 5368.0.

3 Some of the surge in computer imports in the late 1990s reflects bringing forward purchases to have Y2K-compliant systems.

The increase in the proportion of spending on imports over the past decade is placed within a longer term context in Chart 3. Abstracting from temporary influences[4], the imports share tended to decline until the late 1960s as Australia used immigrant labour and tariff barriers to build up domestic manufacturing to replace imports. Notwithstanding high protection, this policy was seen as a failure, and did not prevent the import share starting to rise again by the 1970s. Policy then changed to a more competitive export-oriented focus. Tariffs were cut across the board by 25 per cent in 1973 and phased down further subsequently. The import share therefore rose further in the 1980s and 1990s.

Chart 3: Import penetration ratio
(imports of goods as percentage of nominal GNE)



Sources: Vamplew (1987), Australian Bureau of Statistics.

As Australia represents only 1 per cent of global GDP, there should not be any difficulty in the world supplying the volumes of goods that Australia demands as imports. The main drivers of Australian imports are therefore likely to be Australian incomes, prices of imported goods relative to domestically produced goods, and gradual changes to the structure of the Australian economy and changes in tastes.

4 Imports were unusually low during the depressions of the 1890s and early 1930s and during the two World Wars. They were unusually high following the gold discoveries of the 1850s and when domestic incomes were boosted by high commodity prices associated with the Korean War of the early 1950s.

However, it is difficult to assign the increase in imports to these different factors with accuracy.[5] The following sections in this paper explore these factors in turn.

Income effects

Part of the rapid growth in demand for imports over the past decade reflects strong growth in incomes. Since the early 1990s there have been no recessions and real GDP has grown at an average annual rate of almost 4 per cent. Spending (real GNE) has grown by around 4½ per cent. This was faster than income growth, and reflected increased wealth and a greater willingness and ability for households to take on debt.

Many imported consumer goods are luxury items such as prestige motor vehicles. As incomes increase, consumers spend a higher proportion of their income on such luxury goods, and hence on these types of imported goods. A substantial proportion of capital equipment is also imported, for example specialised machinery and computers. Investment moves cyclically with GDP and GNE, but more than proportionately (an accepted stylised fact, supported by 'accelerator' theories). As the past decade has been one of virtually uninterrupted strong growth in real GNE, it is not surprising that imports of capital equipment have grown faster than GNE over this period. The boom in exports of manufactures in the 1990s would also have added to Australian demand for imports as their import content is about a third.[6]

Accordingly, most estimates of the 'income elasticity of imports'[7] are greater than 1. The short-run elasticity could be higher than the long-run elasticity if a surge in demand is temporarily met by imports, due to either physical capacity constraints or high costs of sharply increasing production. Alternatively, if there are long lags in ordering and receiving imports, the short-run elasticity could be below the long-run elasticity.

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5 Over the past decade, there has been a fairly steady increase in incomes and a strong tendency for declines in relative prices. (The correlation between the level of real GNE and a time trend over the past decade is 0.99 and the correlation between GNE and the relative price measure shown in Chart 4 is -0.85.) It is therefore difficult to distinguish the income and price effects from the longer term structural changes. The econometric estimates will suffer from multicollinearity.

6 Over the medium term, changes in the composition of domestic demand have not been that large and there is no evidence that import-intensive components of demand have increased in importance. Compositional effects are therefore unlikely to explain much of the increase in imports.

7 The elasticity refers to the percentage increase in imports arising from a 1 per cent increase in incomes or total spending. It differs from the 'marginal propensity to import' (MPM); the dollar increase in imports for a dollar increase in income. As imports of goods are currently around one-sixth of income in Australia, an elasticity of 1.2 translates into an MPM of 0.20.

Single equation estimates within Treasury, including that for Treasury's economy-wide model, TRYM, and elsewhere suggest the income elasticity is around 1 to 1½. This may have increased over time; in Macfarlane's (1979) survey of studies that use data from the mid-1960s to early-1970s, the income elasticity estimates range from 0.7 to 1.2.

Comparable elasticities have been estimated for similar economies overseas. For example, Krugman (1989) reports income elasticities of 1.3 for the United States, 0.8 for Japan and 1.7 for Canada. More recently, Senhadji (1997) reports a long-run income elasticity of 1.5 for Canada and Hooper, Johnson and Marquez (1998) an elasticity of 1.4 for Canada.

Globally, over the past five decades volumes of exports of manufactures have increased at an annual average rate of 7 per cent while GDP grew by 4 per cent, suggesting a long-run elasticity of almost 2. However, this was a period of widespread cuts to trade barriers so this apparent high elasticity may not be sustained.

Some cross-country studies suggest a lower income elasticity. For example, Guttmann and Richards (2004) report that total trade (imports and exports) as a proportion of GDP is not robustly related to income, once other explanatory variables are included in the analysis.[8] This would imply the income elasticity is around 1.

An alternative way of analysing the effect of increases in income on consumption imports is to examine cross-section data from the household expenditure survey. Dark and Hawkins (2005) look at 26 categories of household spending and make plausible assumptions (drawing on input-output tables) about the import content of each. Imports make up a higher proportion of the expenditure of higher income households. The calculations imply that the elasticity of imports with respect to consumer spending is around 1.2.[9]

Price effects

The 'relative price of imports' (price of imported goods relative to the price of domestic goods) showed almost no net change from the mid-1960s to the mid-1980s, whereas the past decade has seen a steady decline (Charts 4 and 5).

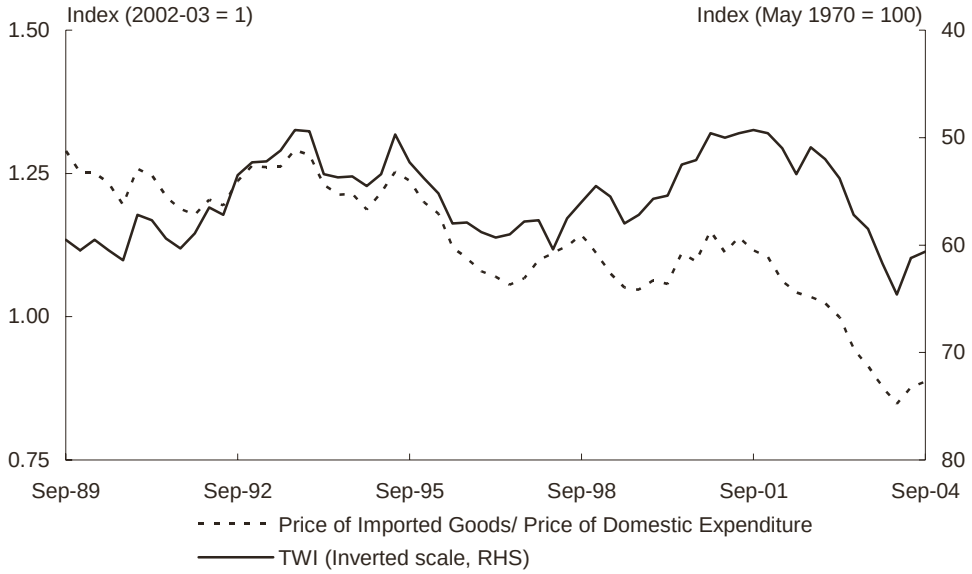
Looking at medium-term trends, while the trade-weighted exchange rate index is now close to where it was in the early 1990s, the relative price of imports has dropped by a

8 They also cite some other cross-country studies reaching a similar conclusion.
9 This may be an underestimate as it assumes, for example, that the same proportion of food consumed by wealthy households is imported as the proportion for poorer households.

third over this period. Part of this reflects continual price declines of computers and telecommunication devices; as Chart 2 shows, these account for about a tenth of imported goods and their prices — particularly once adjusted for quality improvements — have fallen markedly.

Shorter term fluctuations in the relative price in recent years have mostly been driven by movements in the nominal trade-weighted exchange rate (Chart 4), given that inflation has been low in both Australia and most of our major trading partners.

Chart 4: Relative price of imports and trade-weighted index

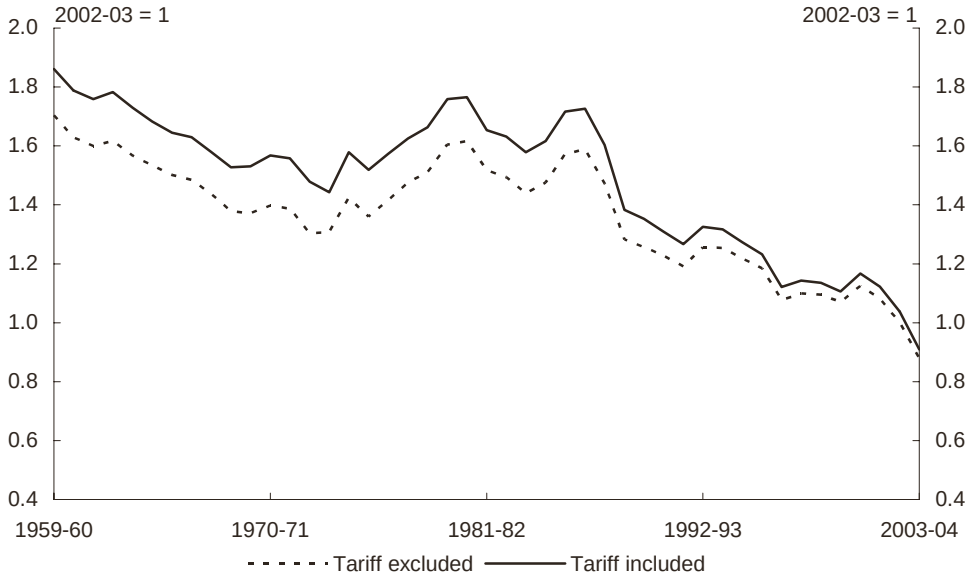


Source: Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.
Australian Bureau of Statistics 2004, National Income Expenditure and Product, cat. no. 5206.0, Canberra.

Another cause of imports becoming relatively cheaper for Australian consumers is the reduction in tariffs over time. This has reduced the amount by which the prices paid by Australian consumers for imported goods exceeded the world price for them. As a result, the prices faced by Australian consumers have fallen by more than the world price over time. The magnitude of this effect is illustrated by Chart 5.

Single equations estimated within Treasury, including in the economy-wide model, TRYM, and elsewhere suggest the price elasticity is between -½ and -1. Macfarlane's (1979) survey of studies that use data from mid 1960s to early 1970s reported relative price elasticities spread over a range from -0.5 to -1.6, raising the possibility that it may have declined in absolute magnitude over time.

Chart 5: Relative price of imported goods

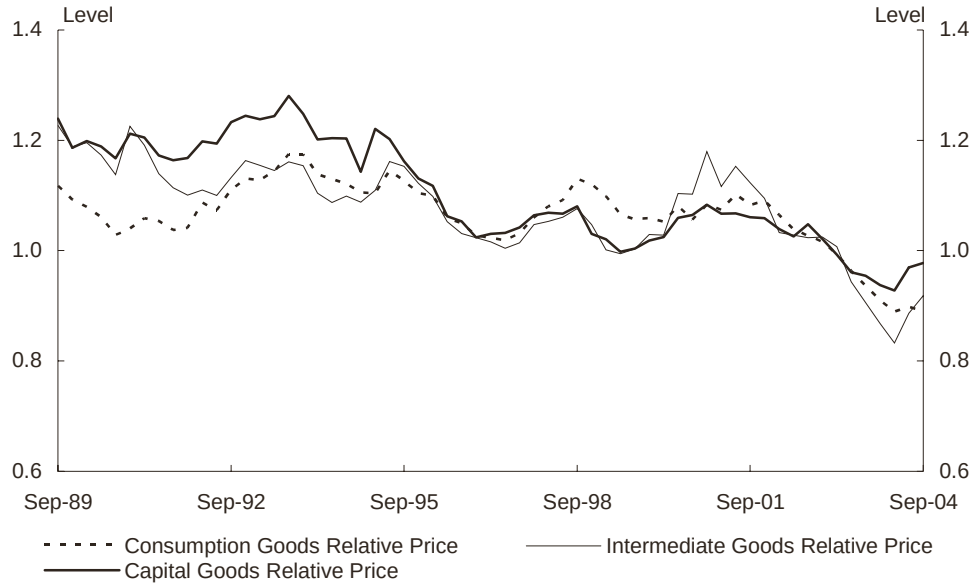


Source: Productivity Commission.
Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.
Australian Bureau of Statistics 2004, National Income Expenditure and Product, cat. no. 5206.0, Canberra.

There may be substantial variation in the price elasticities across types of imports. Menon (1993) found elasticities ranged from -0.2 to -1.8. Dwyer and Kent (1993) conclude that consumption goods are more responsive to relative prices than are aggregate imports, while intermediate goods are unresponsive, consistent with the lack of readily available domestic substitutes. During the past 15 years, which have been a time of strong growth in imports, the relative prices of capital and intermediate goods have fallen more substantially than that of consumption goods (Chart 6).

Comparable elasticities have been estimated for similar economies overseas. For example, Senhadji (1997) reports a long-run price elasticity of -1.3 and Hooper, Johnson and Marquez (1998) report an elasticity of -0.9 for Canada. They both found lower elasticities in the United States, -0.5 and -0.3 respectively.

Chart 6: Relative prices of imported goods



Source: Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.
Australian Bureau of Statistics 2004, National Income Expenditure and Product, cat. no. 5206.0, Canberra.
Definitions: The relative prices are derived by dividing the import price by the domestic price for each category.

Other drivers

Imports have become a larger proportion of expenditure in most advanced economies over recent decades, notwithstanding their differing experiences of exchange rate movements and growth in incomes. This suggests there are factors other than income and prices at work. These other effects can be categorised as either changes in tastes, changes in the composition of domestic expenditure, specialisation and international integration of firms or reduced impediments to trade.

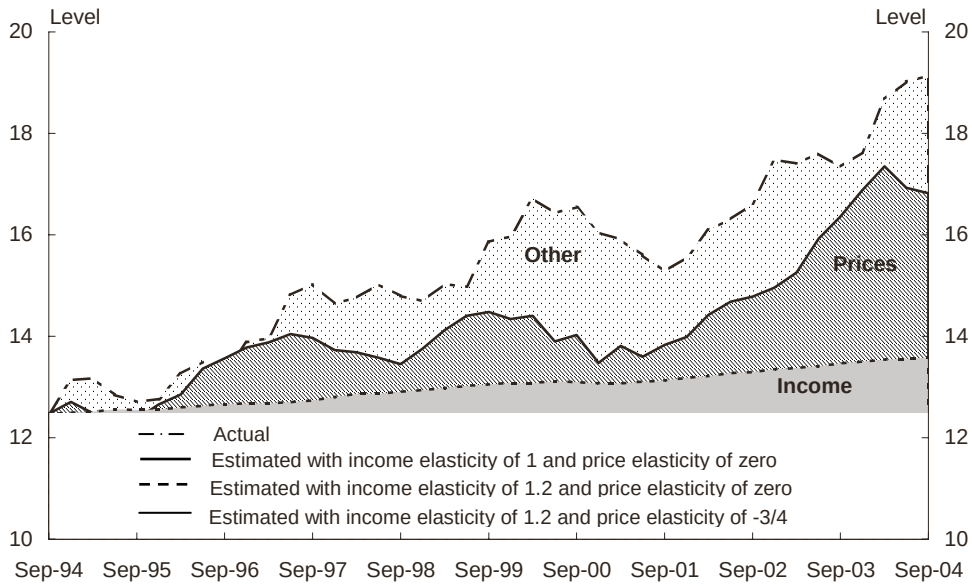
For the Australian case, using plausible estimates from the above discussion of an income elasticity of 1.2 and a price elasticity of -¾ explains only part of the rise in the proportion of expenditure that goes on imported goods.[10]

Chart 7 shows the increase in real imports relative to that of GNE. Were imports to have grown at the same rate as GNE, the share would have been constant. The lower wedge shows the effect of the income elasticity being greater than one. The middle wedge shows the effect of relative prices, which contributed most to the growth in

10 To explain fully the rise in imports (and continuing to assume a price elasticity of -¾) would require an income elasticity of 1.6. This looks implausibly high given the discussion above.

imports around 2003 when the exchange rate appreciated markedly. The top wedge, the remainder, includes the effects of other influences such as tastes and specialisation.

Chart 7: Imports of goods: actual vs estimated
(constant prices; percentage of GNE)



Source: Australian Bureau of Statistics 2004, Balance of Payments and International Investment Position, cat. no. 5302.0, Canberra.
Australian Bureau of Statistics 2004, National Income Expenditure and Product, cat. no. 5206.0, Canberra.

Consumers may now prefer more imported goods, either because of an increased interest in diversity, more cosmopolitan tastes (immigration from non-Anglo-Saxon cultures may be adding to this) or demands for new goods (for example, plasma TV screens and mobile phones) that are not (yet) made domestically. Krugman (1989) has stressed the importance of new goods ('product proliferation') in the growth of GDP and the faster growth of imports.

An example of increased imports due to changing tastes is the increase in imports of pharmaceutical goods (which have increased from around 2 per cent to 5 per cent of the total value of imported goods over the past 10 to 15 years) which presumably at least partly reflects longer life expectancies and the ageing of the 'baby boom' cohort.

Increased specialisation has increased both imports and exports of final goods. International integration by firms has increased both imports and exports of raw materials and components. Globalisation means firms are now moving components around the world more, as more goods have been 'commoditised'. This has been facilitated by the reduction of some barriers to trade. Tariffs are generally lower, reflecting both global reductions and bilateral free trade agreements, and non-tariff

barriers have also been reduced. Some transport bottlenecks have been widened and the cost of transport reduced. Trade has also been assisted by wider availability of credit, better communications, fairer and more certain legal processes and reduced corruption in many parts of the world.

Conclusion

Over the past decade the volume of imported goods grew by an average rate of 9 per cent a year, while real GNE grew by 4½ per cent. While a large part of the fast growth in imports can be explained by rising incomes and falling relative prices, other factors such as changes in tastes and specialisation have also played an important role.

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The changing pattern of East Asia's growth

Heather Smith, Garth Day, Brian Thomas and Luke Yeaman[1]

China's economic rise is increasingly affecting East Asian growth and trade. This article discusses the changing patterns of the region's trade and considers whether business cycles in East Asian economies have become more synchronised. We find that China's main impact to date has been through its role in driving intra-regional trade but we are unable to identify the relative influence of China from the many other factors powering East Asian growth.

Nonetheless, over time, China will play an increasingly larger role in the global and regional economy, resulting in some economies becoming dependent on China's economic cycle. This presents both challenges and opportunities, providing an incentive for countries to persevere with economic and institutional reforms to take advantage of China's emergence and to minimise the associated adjustment costs.

1 The authors are from Macroeconomic Group, the Australian Government Treasury. We are grateful to Brenton Goldsworthy and Sarah Gurr for their contributions on China. This article has benefited from comments and suggestions provided by Martin Parkinson, Gordon de Brouwer, Phil Garton and John Hawkins. The views in this article are those of the authors and not necessarily those of the Australian Government Treasury.

Introduction

A striking feature of East Asian growth in recent years has been the increasing role of China's economy in regional economic activity and the significant shift in the pattern of East Asia's trade.[2] This article discusses these trends and assesses the extent of change in the economic linkages between the economies of East Asia, particularly China, and the rest of the world. While we focus on trade, this is just one of the drivers behind East Asian growth.

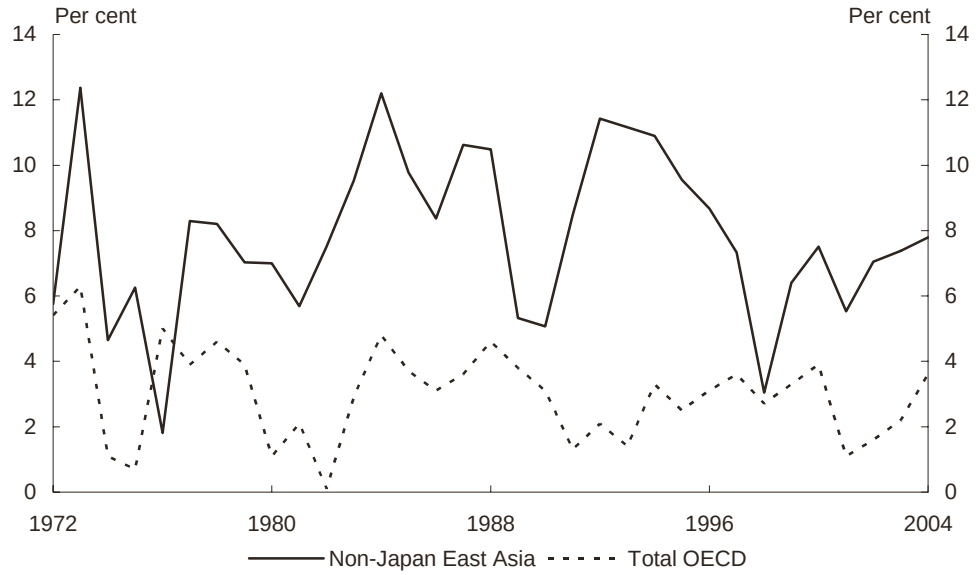
With trade flows being increasingly the channel through which developments in China could spill over to other economies, we discuss the implications for the region of a slowing in China's economy. The article concludes by raising some policy implications that flow from a region characterised by increasing economic interdependence.

Shifting sources of growth

East Asia's post-war growth experience can be characterised as one of market-oriented reform and openness to the global trading system. For several decades, demand from industrialised economies, especially the United States, acted as a key source of growth for East Asia, especially for the Newly Industrialised Economies (NIEs — Korea, Taiwan, Singapore and Hong Kong) (Chart 1). Japan emerged as a source of regional demand and global growth from the 1960s onward through to the early 1990s, when Japan's strong rates of growth (averaging 10 per cent per annum) saw its trade and investment linkages to East Asia intensify.

2 East Asia is defined to include China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand.

Chart 1: East Asian and OECD GDP



Source: IMF World Economic Outlook Database and OECD.

Until the Asian crisis, macroeconomic stability in the face of external shocks was a key feature of East Asia's growth. From the early 1970s, the external economic environment of developing countries was disrupted by the collapse of the Bretton Woods system, two massive oil shocks, world inflation, strong cyclical movements in real economic activity, high interest rates and the accumulation of large international debts. On the whole though, East Asian economies adjusted more flexibly and achieved better macroeconomic performance than other developing countries (Treadgold 1990).

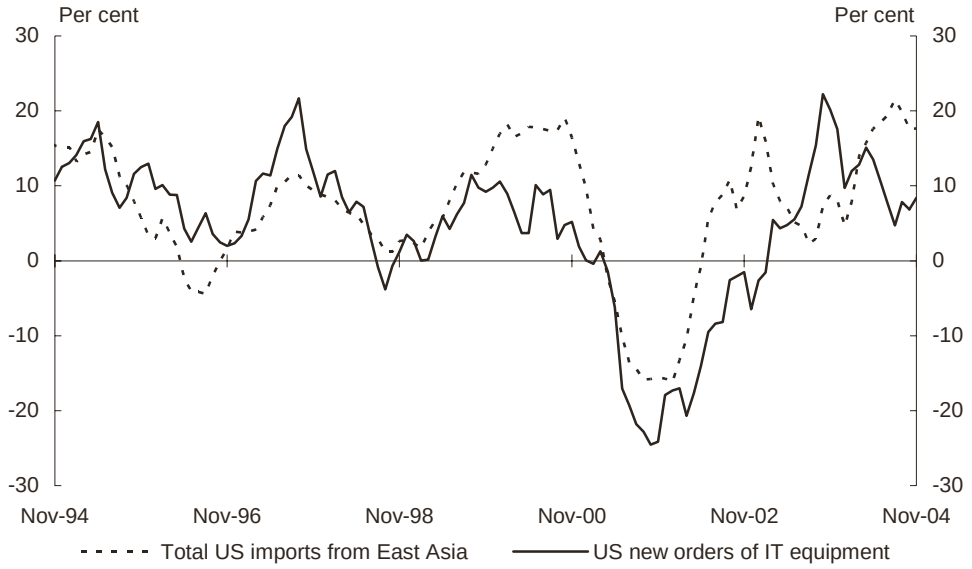
Rising trade tensions with the United States, combined with domestic structural pressures, saw the NIEs undertake substantial structural reform in the 1980s and begin to focus more on domestic demand as a source of growth. A distinguishing feature of the region's development from the late 1980s was the increased economic interdependence between Hong Kong, Taiwan and parts of mainland China. Trade and investment flowed between these economies which, at different stages of development, sought to take advantage of complementarities in factor endowment and technological capacity (Smith 2000). At the same time, rising costs of production saw Japanese firms relocate labour-intensive production to the ASEAN4 (Indonesia, Thailand, Philippines and Malaysia).

The Asian crisis saw Japan's economic and financial linkages with the rest of the region weaken dramatically as foreign direct investment and bank lending fell,

although for several economies Japan still remained the second- or third-most important trading partner.[3]

At the same time, the IT boom in the United States gave rise to intra-industry specialisation and for major IT exporters — Singapore, Korea, Taiwan, Malaysia and increasingly China — United States IT investment became an important driver. The result has been a heavy concentration of IT goods in East Asian trade and an increased synchronisation between indicators of United States demand for IT goods and East Asian exports (Chart 2).[4] This period also coincided with two key developments — China's increasingly central role in regional supply chains and production networks, and the associated rise in intra-regional trade.

Chart 2: East Asia's exports and United States IT cycle
(percentage change, through the year)



Source: Datastream.

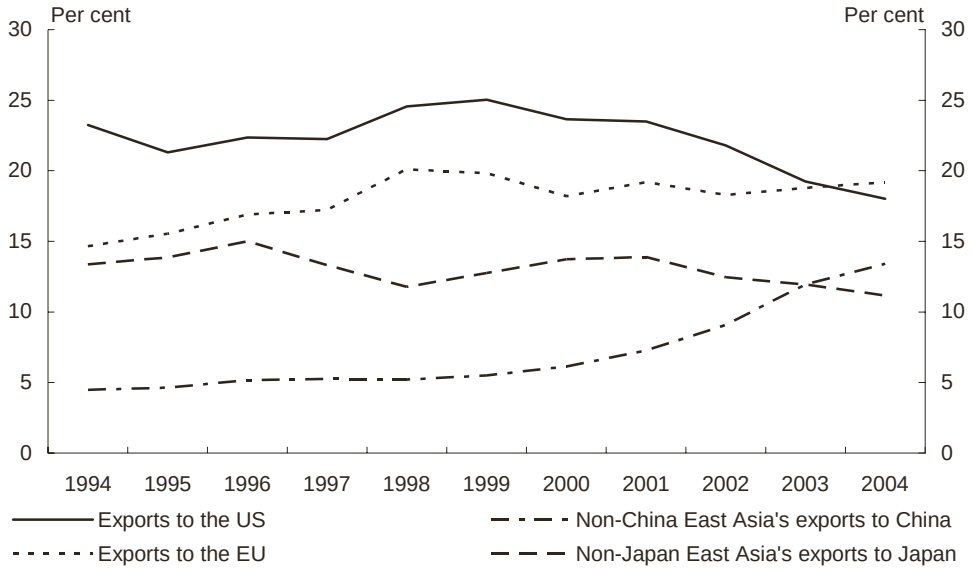
3 Bank credit from Japan to East Asia is still around 30 per cent below what it was in 1996 and is well below the levels of the late 1980s. Europe and the United States are the major recipients of Japanese foreign direct investment (FDI) accounting for 65 per cent of the total Japanese outflow in 2003-04. East Asia received 18 per cent of Japanese FDI outflows over this period, with half, that is, 9 per cent of the total, flowing to China.

4 Around 40 per cent of East Asian exports are IT goods, with China's share of total East Asian IT exports more than doubling from around 12 per cent in 2000 to over 30 per cent in 2004. Whether the current slowdown in IT demand reflects broader weaknesses or IT-specific factors is unclear. Still, demand for IT goods will continue to be an important driver of East Asian exports.

Changing patterns of trade

Before the Asian crisis, East Asia's trade was dominated by demand from outside the region, particularly from the United States. Since the late 1990s, the pattern of East Asia's exports has undergone significant change — East Asia's exports to the United States as a share of total exports have fallen to be less than 20 per cent, the European Union has become the region's largest export market and, in 2003, China overtook Japan as East Asia's main regional export partner. On current trends, China will likely become the region's main export market within the next few years (Chart 3).

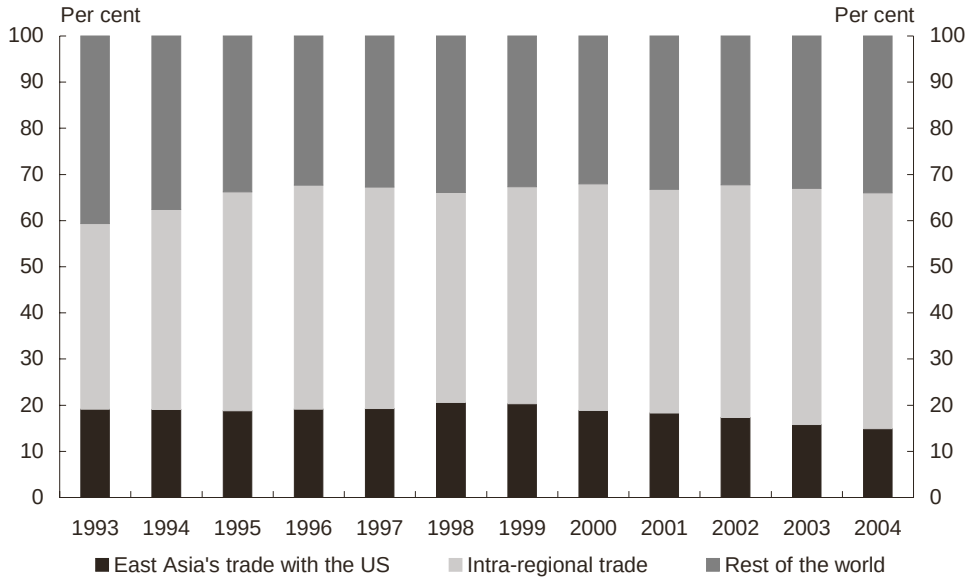
Chart 3: Share of East Asia's exports by destination



Source: CEIC and Datastream.
Note: Data for Korea and the Philippines are only available to November 2004, and to September 2004 for Indonesia.

These trends by and large reflect a shifting of the region's trade profile associated with a rise in intra-regional trade (Chart 4). Intra-regional trade has been on a rising trend since the mid-1980s and recently has been increasing at a faster rate than East Asia's trade with the rest of the world.

Chart 4: Share of East Asian total trade (exports and imports)

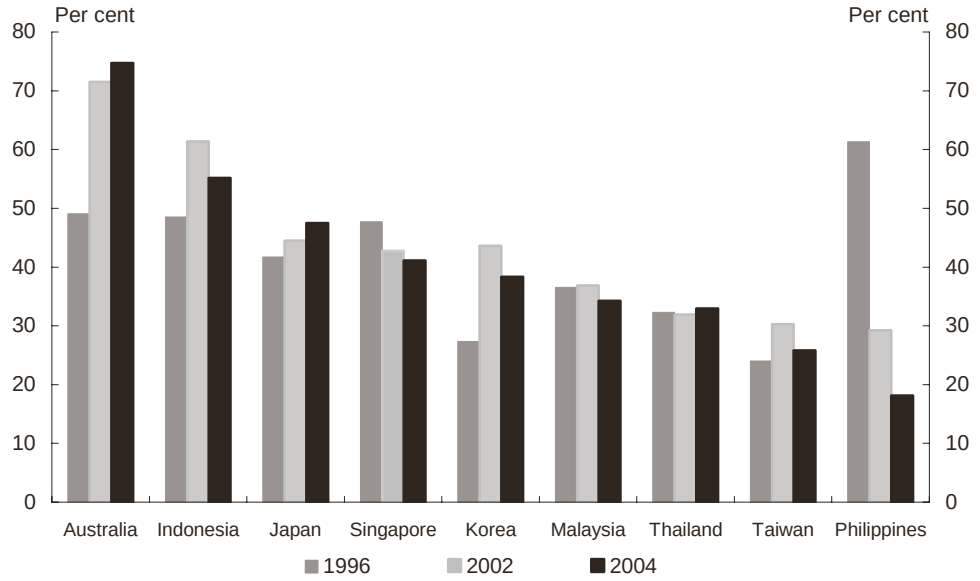


Source: CEIC and Datastream.

Intra-regional trade has been market-led, driven by a combination of unilateral reforms, implementation of WTO commitments, and the rise in cross-border processing and assembly related to global demand.

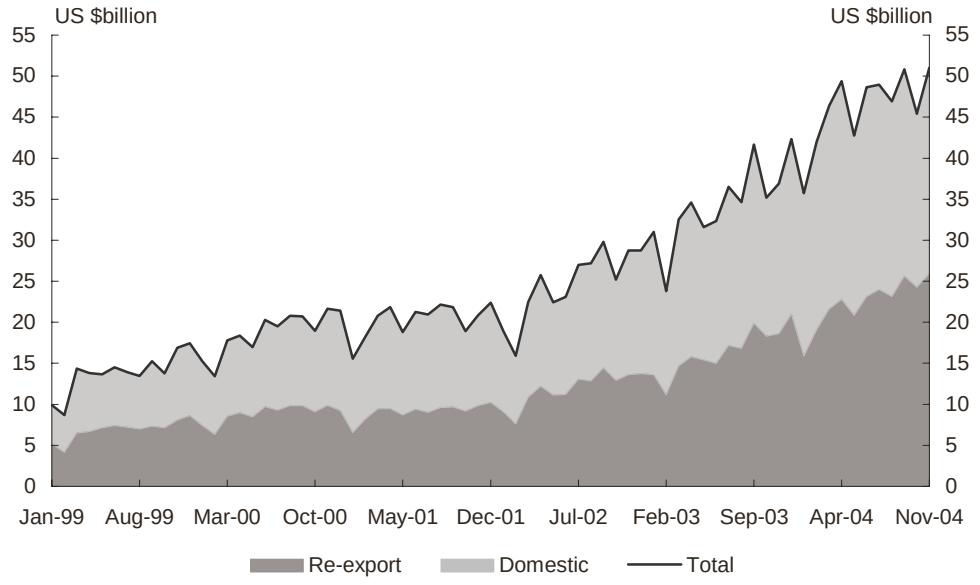
However, an increasing portion of intra-regional trade comes from the growing importance of regional domestic demand, including from China. Chinese customs data suggests around half of imports to that country are now for domestic use, with a relatively larger proportion of such imports being sourced from Australia and East Asia (Charts 5 and 6).

Chart 5: China's imports for domestic use as a proportion of total imports



Source: Chinese General Administration of Customs.

Chart 6: China's imports by use



Source: CEIC.

Is East Asia decoupling?

Concordance of GDP cycles

As discussed above, the pattern of East Asia's trade points to growing regional trade interdependence, in large part fuelled by China's economic development. With strong trade relationships potentially affecting cross-country synchronisation of business, we assess the degree of concordance between business cycles in East Asia, the United States and Europe in an attempt to identify more formally changing patterns over time.[5]

Annual real GDP data were collected starting in 1980 for six major regions: the United States, the European Union, Japan, China, the NIEs and ASEAN4. GDP was decomposed into a trend and a cyclical component, with the latter representing the business cycle.[6] Correlations were then calculated between pairs of business cycles over three time periods (1980 to 1987, 1988 to 1995 and 1996 to 2003). Correlations close to 1 suggest a high level of concordance between business cycles, while correlations closer to 0 suggest lower levels of concordance. Negative correlations suggest that business cycles move in opposite directions.

5 In particular, intense bilateral trade will tend to accompany highly correlated business cycles in a wide range of theoretical models, ranging from multisector international models with intermediate goods trade to one-sector versions with either technology or monetary shocks (Imbs, 2003). See Backus et al (1992), Kose and Yi (2002), and Kose, Eswar et al (2003) for a discussion about the theoretical impact of increasing trade and financial integration on business cycle concordance.

6 A Hodrick-Prescott filter was used to decompose GDP into a trend and cyclical component. The default setting of 100 for annual data was chosen for the smoothing parameter.

Table 1: Correlations in East Asian business cycles

	1980-1987	1988-1995	1996-2003
Within East Asia			
China and ASEAN4	-0.88	0.16	0.68
China and NIEs	0.07	0.62	0.52
ASEAN4 and NIEs	0.22	0.24	0.78
With Japan			
Japan and China	-0.49	-0.92	0.71
Japan and ASEAN4	0.65	-0.46	0.86
Japan and NIEs	0.35	-0.48	0.76
With US			
US and China	0.84	0.14	-0.02
US and ASEAN4	-0.66	-0.60	-0.53
US and NIEs	0.33	0.09	-0.04
With EU			
EU and China	0.10	-0.52	-0.51
EU and ASEAN4	0.23	-0.55	-0.70
EU and NIEs	0.70	-0.02	-0.23

Sources: CEIC Database, IMF WEO Database and Australian Government Treasury calculations.

Table 1 shows that GDP cycles in East Asia are more highly correlated with one another than with the United States or European Union. In particular, the business cycles of the NIEs and the ASEAN4 exhibit high levels of correlation with each other and with that of China in the most recent period, after showing low levels of correlation in the early 1980s.

Japanese growth has also shown high levels of correlation with the business cycles of non-Japan East Asia in the most recent period, following a period of instability in the early 1990s, possibly reflecting the end of the bubble economy in 1990.

Historically the business cycle of the ASEAN4 has been more highly correlated with Japan's output growth, than with that of the United States and European Union. However, business cycle correlations between the NIEs and the United States and European Union, which have traditionally been strong, appear to have become less synchronised over the last two decades. The negative correlation between East Asia and the United States in the final period is somewhat surprising, perhaps reflecting in part the impact of the United States recession in 2001.

As is apparent from the above discussion, these results are subject to a number of caveats. Caution is required in interpreting changing correlations as indicating changing structural dependence. The presence of increased correlation between regional business cycles does not necessarily mean that heightened trade flows are the cause. A number of significant shocks have affected East Asia over the last time period — including the Asian financial crisis, the bursting of the IT bubble and the

decade-long weakness of Japanese growth — which may also be responsible for changing correlations.

Commonality of business cycles

While correlations of output are useful in understanding the degree of synchronisation, they are a simple single-dimension indicator of business cycle concordance. In this section we extend the analysis to focus on whether there exists commonality among the GDP growth rates of a group of economies, with a particular focus on East Asia. Latent factor analysis is used here to determine the extent to which fluctuations in output are associated with worldwide, regional, or country-specific factors both before and after the Asian crisis.[7] The specification of the model is as follows:

$$y_{i,t} = b_i^{world} f_t^{world} + b_i^{region} f_t^{region} + b_i^{country} f_{i,t}^{country}$$

where $y_{i,t}$ is the growth rate of GDP in country i. The factor, f_t^{world}, represents the common element of $y_{i,t}$ across all economies and is referred to as the world factor. The world factor affects all economies with the response to that factor, b_i^{world}, differing between economies. The factor f_t^{region} represents the regional factor for the subset of economies covering Japan and the NIEs; with b_i^{region} the response of each economy in this regional grouping to the regional factor. The factor $f_{i,t}^{country}$ represents the unique, or idiosyncratic, element of $y_{i,t}$ to each economy and is referred to as the country-specific factor. The parameters for these factors, b_i^{world}, b_i^{region} and $b_i^{country}$, are estimated from second moment conditions using Generalised Method of Moments (GMM) assuming that all factors are independent and with factor variances normalised.

Understanding the sources of international economic fluctuations is important for both developing business cycle models and making policy. As such, the theoretical framework of these undertakings should capture the degree to which the variation in activity among a group of economies with different policy settings, institutions and economic structures is explained by a world or regional business cycle. The importance of including a world factor is that subsets may lead to observed co-movement that may in fact be common to a larger group of countries.[8]

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7 The econometric model used is based on a simple two factor model by de Brouwer and Dungey (2004) and extended to include a regional factor to analyse the linkages between economies while taking account of a common world factor. Estimation is carried out using a panel of quarterly GDP growth data.

8 Kose, Otrok and Whiteman (2003) find a distinct world business cycle which accounts for a significant fraction of output growth in many countries.

The results of this analysis, presented in Appendix A, suggest that while there are patterns of commonality within the region there is also evidence of important linkages outside the region. Another recurrent theme is the trend toward domestic factors dominating the variation in GDP growth for Japan and China in the post-crisis period. In particular, before the Asian crisis, Japan shared a high degree of commonality with the NIEs. Following the Asian financial crisis domestic factors dominated. And while China shared a higher degree of variation in GDP growth due to the common factors before the crisis, we find that domestic factors become more prevalent in the post-crisis period.

China as a future driver of regional growth

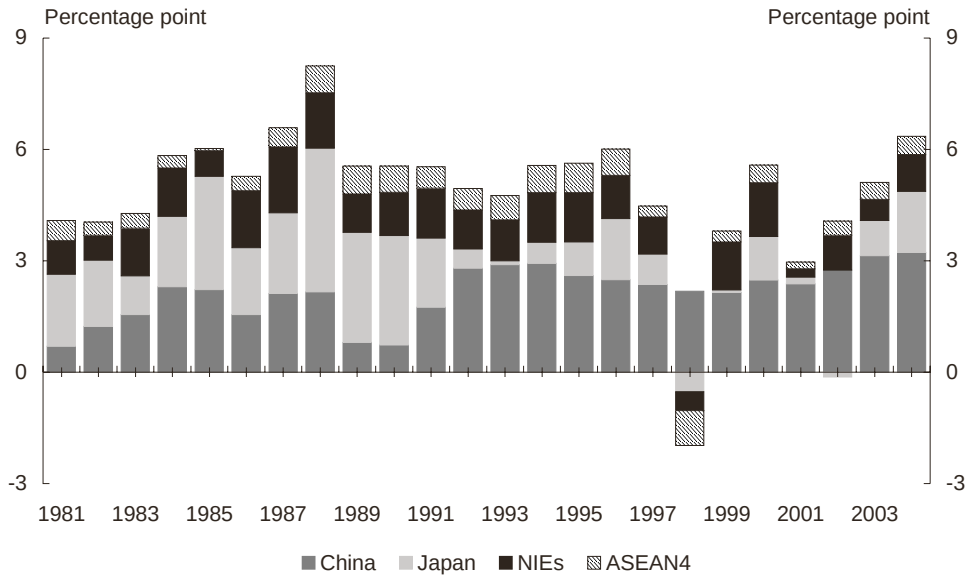
China's economy has been growing at an average annual growth rate of over 9 per cent since it began to open up and reform its economy in 1978. In 1995, China overtook Japan to become the world's second largest economy after the United States in purchasing power parity terms.[9] If both countries maintain their average growth rates, China will overtake the United States as the world's largest economy in about a decade.

Since 1978, China's international trade has expanded more rapidly than any other country, even through periods of exceptional growth in the rest of East Asia, North America and Australasia (Garnaut 2003). Since 1993, China's share of world exports has risen from 2.5 per cent to be currently more than 6 per cent, while a range of reforms, including tariff reductions and entry in the WTO, have seen its share of imports over the same period grow from 2.8 per cent to be close to 6 per cent.

China's economic reform and increasing openness has been a positive shock to the region — in recent years, China has accounted for well over half of East Asia's total GDP growth (Chart 7). In the same fashion, a hard landing in China would adversely affect the region's economic performance. A significant reduction in Chinese GDP growth would reduce world and regional GDP in a direct sense, and it would lead to reduced exports and investment in exporting industries in a number of countries.

9 China is the seventh-largest economy in the world when GDP is compared across countries using market exchange rates.

Chart 7: Contributions to East Asia's GDP growth



Source: IMF World Economic Database and CEIC.

Impact of a Chinese slowdown

Trade flows are increasingly becoming the key channel through which developments in China are transmitted to other economies. When analysing which countries are most exposed to a slowdown in China, it is important to determine whether China's imports from a particular country are for re-export or domestic use. This is because imports for re-export are mostly dependent on demand in the United States and other industrial markets, while imports for domestic use are more influenced by growth in China's domestic demand. As shown earlier in Chart 5, over 70 per cent of China's imports from Australia and around 40 per cent of China's imports from Indonesia, Japan Singapore and Korea are for domestic use, suggesting that these countries could be most exposed to a slowdown in China's growth.

The IMF (2004) recently attempted to quantify the impact that a slowing in China's growth may have on other countries, using a basic trade-flow framework. In their analysis, it was assumed that growth of Chinese imports for domestic use would decline by 10 percentage points (imports for processing and re-export were unaffected). This fall in imports, and the eventual fall in China's GDP growth of around 4 percentage points, was estimated to cause a 0.4 percentage point decline in the rest of East Asia's GDP growth. In the concurrent 12-month period, the estimated impact on GDP growth was highest in the NIEs, down 0.6 percentage points, and

lowest in the ASEAN4, down 0.3 percentage points. Japan's GDP growth was estimated to fall by 0.5 percentage points.[10]

General equilibrium models can provide additional insights regarding the impact of a Chinese slowdown on the rest of East Asia. The key benefits of these models over partial-equilibrium analysis is that they: accommodate non-trade transmission channels, such as capital flows; capture secondary impacts of slower growth in each economy on the other economies in the region; and, allow for offsetting policy adjustments by affected economies.

In recognition of these benefits, the IMF used its new Global Economy Model (GEM) to conduct a simulation of the same order of magnitude as in the partial analysis above.[11] Of the four regions in the model — the United States, Japan, non-Japan Asia, and the rest of the world — Japan was found to be most affected. The United States and the rest of the world were only marginally affected. However, even the estimated impact on Japan was less than what the IMF's partial-equilibrium analysis suggested because of offsetting real exchange rate changes. Details of the exact magnitude for each region were not provided.

McKibbin and Stoeckel (2004), using the Asia-Pacific G-Cubed Model, have also analysed this issue. In their analysis, a sharp slowdown in the Chinese economy was modelled through a policy-induced reduction in investment. Results suggest that such a slowdown may actually benefit other countries in the region. This occurs because the negative trade effects are mitigated by real exchange rate changes and are outweighed by beneficial financial effects — foreign direct investment previously destined for China now goes to other countries in the region.[12]

However the actual impact may be greater than estimated. Both the GEM and the Asia-Pacific G-Cubed Model most likely underestimate the negative impact that a significant Chinese slowdown would have on the region. One reason for this underestimation is that the model's parameters may not adequately reflect China's current importance to the region. That is, econometric analysis, on which some of these parameters are based, will not yield precise estimates of key elasticities, partly because of ongoing structural change. For example, China's income elasticity for imports is

10 However, exports to China account for only 0.3 per cent of Japan's nominal GDP. Exports to China are a higher share of GDP for Singapore (11.1 per cent), Taiwan (7.5 per cent), Malaysia (6.2 per cent), Korea (5.8 per cent) and Australia (1.2 per cent).

11 See IMF (2004).

12 This surprising result is partly an outcome of the way the shock was implemented. However, implementing the shock in other justifiable ways produces only a small negative effect that is substantially milder than what the IMF's general and partial-equilibrium analysis suggests. This is due to strong offsetting exchange rate movements and policy responses, in addition to financial effects.

likely to have increased over time in line with its greater openness and recent entry to the WTO, making it difficult to estimate the current elasticity from historical data.

A second reason why these models may underestimate the impact is that they may not capture all the channels through which a Chinese slowdown may spill over to other countries. Although they are superior to partial-equilibrium analysis in this regard, the models do not pick up confidence effects, and they may not fully capture the impact that China's rising demand has on particular markets and prices. [13]

Policy implications

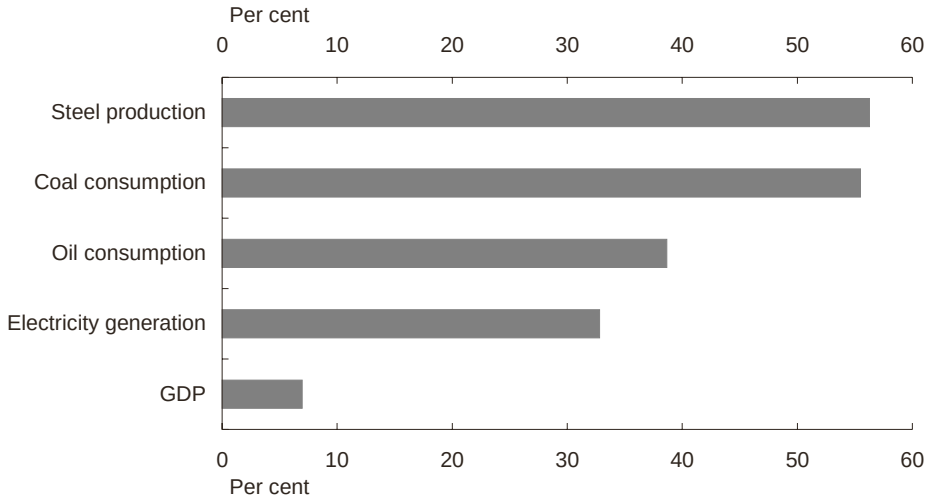
So far China's economic performance and its global impact are in line with what was observed in previous waves of rapid integration involving first Japan and subsequently the NIEs. However, China's vast pool of labour, low per capita income and ongoing commitment to reform and opening mean it could sustain high rates of GDP growth for many years yet. This would see China eventually playing a much larger role in the global economy than any previous integration episodes (IMF, 2004).

China's economy could eventually present a larger shock to world factor endowments and to the global economy than previous integration episodes, implying a major impact on certain sectors and regions (IMF, 2004). For instance, China's demand for agricultural and mineral-intensive goods will continue to rise and its impact on commodity markets and prices will only increase as the economy continues its process of industrialisation and urbanisation.

China is already the world's biggest consumer of many commodities, such as steel, copper, coal and cement, and is the world's second-biggest consumer of oil. As an illustration of China's impact on commodities, over the period 1998 to 2003 China was responsible for 55 per cent of the world's increase in coal consumption and 56 per cent of the increase in steel production (Chart 8).

13 The recent focus by financial markets on whether China's economy was overheating is indicative of the increasing impact China's economy will have on global and regional sentiment. For example, when Chinese Premier Wen Jiabao spoke of the need to slow the Chinese economy on 28 April 2004, the following day stock prices fell around the world.

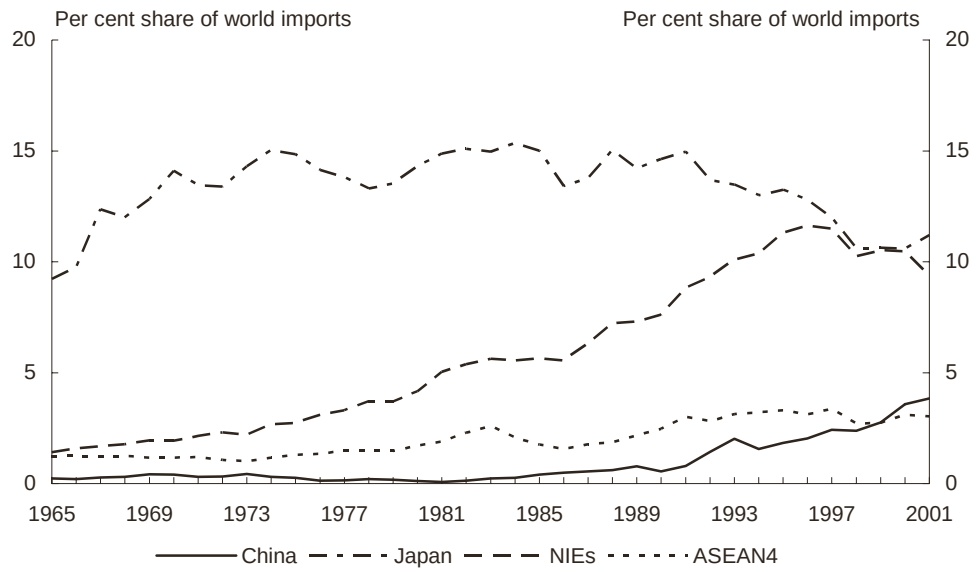
Chart 8: China's share of world increments, 1998-2003



Sources: BP and IMF WEO September 2004.
Note: All commodities are internationally recognised volume measures. GDP is nominal and is calculated by weights based on market exchange rates.

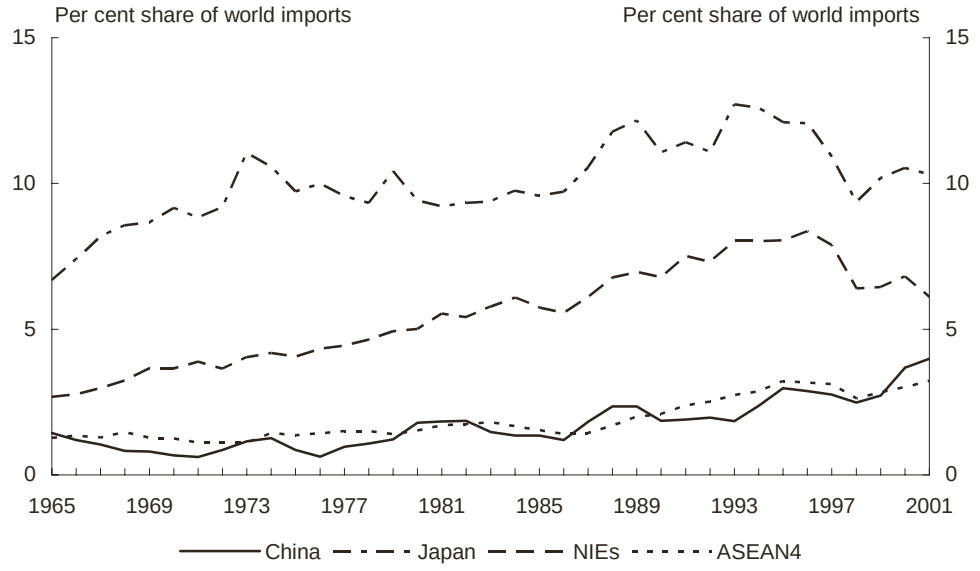
Australia is well-placed to benefit from China's growth, given China's energy needs and still low share of global energy and agricultural imports compared to Japan during its rapid growth phase (Charts 9 and 10). China's share of global labour-intensive exports has recently surpassed Japan's peak of the mid-1960s but is still below that of the NIEs in the mid-1980s. At the same time, China has considerable scope to move up the value-adding chain, presenting competitive challenges for those economies whose factor endowments are similar to China's (Charts 11 and 12).

Chart 9: Share of world mineral-intensive imports



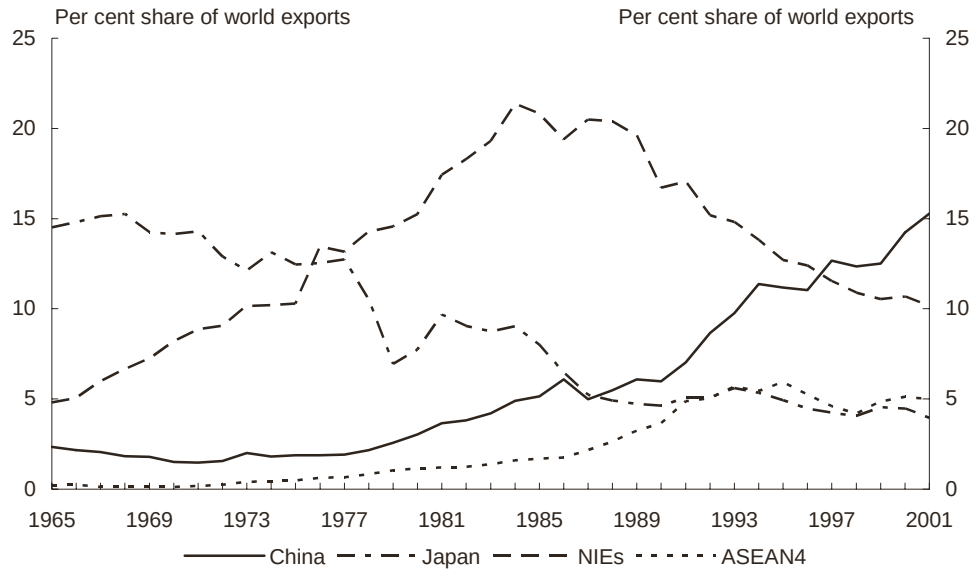
Source: ANU, International Economic Database.
Note: Mineral-intensive goods are based on an SITC classification defined by Phillips (1984).

Chart 10: Share of world agricultural-intensive imports



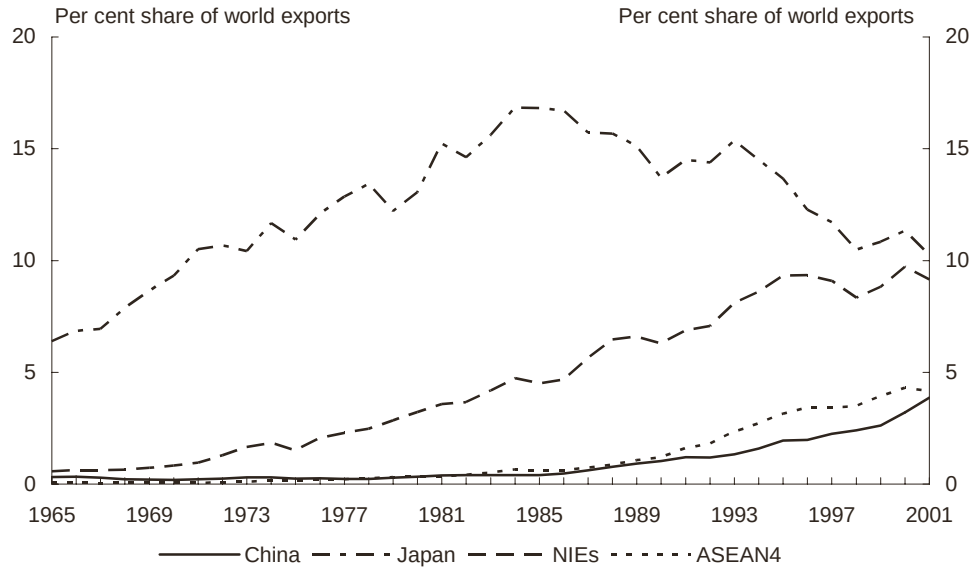
Source: ANU, International Economic Database.
Note: Agriculture-intensive goods are based on an SITC classification defined by Phillips (1984).

Chart 11: Share of world labour-intensive exports



Source: ANU, International Economic Database.
Note: Unskilled-labour-intensive goods are based on an SITC classification defined by Phillips (1984).

Chart 12: Share of world human capital and technology-intensive exports



Source: ANU, International Economic Database.
Note: Human capital and technology-intensive goods are based on an SITC classification defined by Phillips (1984).

China's growth and integration into the regional and global economy implies that its business cycle might begin to have a larger impact on East Asia's and Australia's business cycles. On the one hand, the growing economic interdependence within East Asia could see the region sustain its growth even as the rest of the world slows. Yet greater regional interdependence also makes East Asia more vulnerable to a slowdown in China than in the past (Goldman Sachs, 2004). And the magnitude of the reform task facing China means that it is unrealistic to expect the transition to take place without disruptions to growth which, in turn, will affect other economies.

Given the increased interdependency of growth in the region, policy approaches that enhance regional economic policy dialogue and surveillance will become increasingly important. This will be particularly so as China continues to open its financial markets and its global and regional financial linkages deepen.[14] And the high degree of GDP cycle concordance implies East Asian economies will increasingly face similar macroeconomic conditions.

China's role as a driver of intra-regional trade suggests its impact as a regional engine of growth could soon become larger than Japan's (IMF, 2004). It is important to remember though that the United States is still the most important trading partner for several East Asian countries and will remain a significant source of foreign investment finance and technology transfer. This reliance suggests initiatives to deepen regional economic cooperation need to be designed not to disrupt the economic and financial links with countries outside East Asia (Frischtak and Haddad, 2003).

Policies that ensure more balanced sources of growth between external and domestic sources of growth will also be important. In particular, China's growth provides additional incentive for countries to persevere with economic and institutional reforms. Those that compete most directly with China will need to display considerable flexibility in their product and labour markets in order to minimise the transition costs and maximise the opportunities from China's growth. The opportunities flow from the growth of a major export market for the rest of the region, lower priced imports, and increasingly, China's own domestic demand and investment.

14 This article has not considered the impact of financial linkages due to the difficulty of obtaining data. However, contagion effects that are transmitted through financial linkages clearly could result in cross-country spillovers of macroeconomic fluctuations and a high degree of synchronisation by generating large demand side effects. Financial linkages generally are more important, in terms of business cycle transmission and correlations with global output, for economies that are more open to capital flows.

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Appendix A

Table A1 presents the proportion of the variation in GDP growth for each country that is attributable to a common 'world' factor, a regional factor and its own idiosyncratic behaviour.[15] For instance, in the period before the Asian crisis, Japan shared virtually no common variation in GDP growth with the other economies in the model and neither did the European Union nor the NIEs. The regional grouping of Japan and the NIEs produces some interesting results, with around 75 per cent of the variation in Japan's GDP growth sharing a common element with the NIEs. In contrast, the NIEs do not appear to share much of a common element with Japan but rather are dominated by domestic factors which account for around 93 per cent of the variation in their GDP growth.

Table A1: Variance decomposition of model I, world and regional factor[16]

	Pre-crisis (1985:2 to 1997:4)			Post-crisis (1998:3 to 2003:4)		
	Common factor	Regional factor	Idiosyncratic factor	Common factor	Regional factor	Idiosyncratic factor
United States	31.5	-	68.5	49.3	-	50.7
European Union	3.2	-	96.8	42.2	-	57.8
Japan	0.1	75.5	24.4	3.9	3.1	93.0
NIEs	6.7	0.2	93.1	44.7	42.2	13.1
Australia	96.7	-	3.3	15.1	-	84.9

Note: Imposing a break in the series has limited the period of analysis and requires the use of quarterly data which is inherently more volatile than annual data. As such, the results are not representative of commonality of business cycles at longer intervals nor are they an indication of commonality in growth cycles.

In the post-crisis period, domestic factors dominated the variation in Japan's GDP growth, accounting for around 93 per cent. Australia also had a divergent pattern of growth from the common world factor, although for very different reasons, with domestic factors accounting for around 85 per cent of the variation in GDP growth. In contrast, the NIEs show more commonality with both the common world factor and the regional factor, which combined account for around 85 per cent of the variation in

15 Note that the inclusion of the United States and the European Union provides this model with a representative world factor. In aggregate, the economies selected in this model account for around 50 per cent of world GDP on a purchasing power parity basis and around 75 per cent based on market exchange rates. The data are from the CEIC database except for Australian data (which are from the ABS database) and the US data (which are from the OECD quarterly national accounts database).

16 The Asian crisis is commonly referred to as beginning in the June quarter 1997 and lasting through the first half of 1998. However, with the exception of Thailand, aggregate GDP growth rates of the affected countries were not significantly affected, measured at the 95 per cent confidence level, until the March quarter 1998. The data used here reflect this.

their GDP growth. A large proportion of the NIEs' world factor might be a common element with the United States.

A comparison of these results is made with the simple two factor model presented in Table A2, which combines the world and regional factor into a single common factor. This approach allows us to check the robustness of the results of model I and provides a benchmark to interpret the simple two factor models presented below.[17] Japan's and Australia's cycle are dominated by domestic factors after the Asian crisis.

Table A2: Variance decomposition of model II, a simple two factor model

	Pre-crisis (1985:2 to 1997:4)		Post-crisis (1998:3 to 2003:4)	
	Common factor	Idiosyncratic factor	Common factor	Idiosyncratic factor
United States	53.1	46.9	51.1	48.9
European Union	2.9	97.1	42.7	57.3
Japan	0.5	99.5	0.6	99.4
NIEs	10.3	89.7	42.2	57.8
Australia	51.8	48.2	17.1	82.8

Table A3 reports the results including China. The proportion of the variation in China's GDP growth which shares a common element with the other economies in model III is about 42 per cent in the first period, and around 23 per cent in the second period. In the first period, the proportion of the variation in GDP growth due to a common element is higher for Japan but lower for the United States and Australia, compared to the results of model II. In the post-crisis period, the United States and European Union experience a stronger common element while Japan and Australia remain dominated by stronger domestic factors. When China is included, the common factor for the United States and European Union rises while that for the NIEs falls.

17 The results for the European Union between these models are consistent and the proportion of variation in United States GDP growth is consistent across both time periods, supporting a reasonable baseline of comparison between not only these models but also the time periods examined.

Table A3: Variance decomposition of model III, including China[18]

	Pre-crisis (1994:2 to 1997:4)		Post-crisis (1998:3 to 2003:4)	
	Common factor	Idiosyncratic factor	Common factor	Idiosyncratic factor
United States	26.5	73.5	63.3	36.6
European Union	7.5	92.5	54.2	45.8
China	42.4	57.6	22.9	77.1
Japan	19.2	80.8	2.2	97.8
NIEs	9.1	90.9	34.2	65.8
Australia	20.4	79.6	13.7	86.2

The final model, presented in Table A4, focuses on the regional grouping of China, Japan, the NIEs and Australia. The variation in output growth among these economies is broadly consistent with the results of model III, with China's common factor following the Asian crisis remaining relatively weak. The common factor for the NIEs is also lower than the results presented in previous models. This may reinforce the findings from model I, that the variation in output growth among the NIEs has become more aligned with fluctuations in output growth not only among the larger economies in the region, but also the United States and European Union.

Table A4: Variance decomposition of model IV, a regional perspective

	Pre-crisis (1994:2 to 1997:4)		Post-crisis (1998:3 to 2003:4)	
	Common factor	Idiosyncratic factor	Common factor	Idiosyncratic factor
China	43.1	56.9	26.5	73.5
Japan	17.6	82.4	0.3	99.7
NIEs	9.4	90.6	28.1	71.9
Australia	21.9	78.1	25.2	74.8

18 The GDP data used for China is a quarterly series interpolated from a through-the-year series published by the National Bureau of Statistics of China, sourced from the CEIC database.

Foreign investment issues in the Australia-United States Free Trade Agreement

Thomas Westcott [1]

This article looks at the investment chapter of the Australia-United States Free Trade Agreement (AUSFTA) and discusses the bilateral investment relationship, the AUSFTA negotiating process and the investment policy outcomes. The article concludes that the investment chapter in AUSFTA will be an important influence on future bilateral, plurilateral and multilateral treaty negotiations on investment.

1 The author was until recently from the Foreign Investment Policy Division, the Australian Government Treasury. The views in the article are those of the author and not necessarily those of the Australian Government Treasury.

Introduction

The recent entry into force of the Australia-United States Free Trade Agreement (AUSFTA) presents an opportunity to assess the investment chapter of the Free Trade Agreement (FTA), looking at what this means for foreign investors in or seeking entry to Australia and Australian investors offshore.

The negotiation of AUSFTA's investment chapter with Australia's single largest supplier of Foreign Direct Investment (FDI) and second-largest trading partner presented an important policy opportunity. The outcome was twofold: significant policy liberalisation (the first relaxation of policy brought about by investment negotiations); and a treaty text that is an important marker in Australia's investment treaty policy. With regard to the latter, some investment obligations were agreed to for the first time by Australia in an FTA, viz, 'most favoured nation' treatment and performance requirements.[2]

The historical context of investment negotiations with the United States is important. Prior to these negotiations, only the recently concluded FTA with Singapore had included investment provisions. Australia had previously concluded numerous bilateral investment promotion and protection agreements (IPPAs), and an FTA with New Zealand that did not contain investment provisions, and was party to the multilateral WTO General Agreement on Trade in Services (GATS) and (unsuccessful) OECD negotiations (see Attachment A, Australia's investment commitments in international treaties).

This article puts the debate about broader benefits of the complete FTA package to one side, while noting that the market access outcome on investment issues must be viewed (in negotiating terms) in light of concessions and gains elsewhere in the agreement.

Section I comments on the Australia-US bilateral investment relationship, including a brief outline of bilateral foreign direct investment flows, and summarises current foreign investment legislation in Australia and the US. Section II sets out the negotiating objectives both parties had for investment. As with all areas of the agreement, the Department of Foreign Affairs and Trade had primary carriage of negotiations and was assisted in negotiations by Treasury officers with technical expertise. Section III addresses AUSFTA investment outcomes under two headings: first, market access outcomes; and second, the legal text comprising provisions relating to scope and definition, non-discriminatory treatment, and other rights and protections afforded to the parties' investors.

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2 'Most favoured nation' treatment appears in Australia's Investment Promotion and Protection Agreements, but these only cover the post-establishment stage.

I. Australia's investment relationship with the United States

Bilateral investment relationship

The United States accounts for almost 30 per cent of total Foreign Direct Investment (FDI) in Australia, making it the largest source of FDI.[3] As at 31 December 2003, the total stock of US FDI in Australia was $70.9 billion.[4] The next largest direct investors were the UK with $52.7 billion and Japan with $18.2 billion.[5] Significantly, Australia has a larger stock of FDI in the US than they do here, with $78 billion invested as at 31 December 2003.[6] This is more than twice the level of Australian-sourced FDI in any other country.[7]

Current FDI levels reflect a shift in the historical trend of capital flows; Australia has always relied on significant amounts of foreign capital, but has not traditionally had high direct investment outflows. In 2001 Australia's stock of direct investment in the US was higher for the first time than the stock of US direct investment in Australia: $88.8 billion compared to $60.1 billion. In 2002, the stock of Australian FDI in the US was $70.2 billion compared to a US stock of $63.6 billion in Australia.

Services trade figures give further evidence of the maturing of the bilateral trade and investment relationship. In 2003-04, Australian services exports to the US totalled nearly $4.5 billion while the US exported nearly $6.2 billion worth of services to Australia. These figures highlight the strength of the bilateral services and investment relationship and the value of an investment agreement that provides even greater certainty and improved dynamic linkages.

Foreign investment legislation

Australia

Australia's foreign investment regime comprises the *Foreign Acquisitions and Takeovers Act 1975* (Cwlth) (FATA), associated regulations and policy, and sector- or company-specific legislation.[8] The Foreign Investment Review Board was set up in

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3 Foreign Direct Investment is one means of long-term capital transfer; others include debt and portfolio investment. While there are many definitions of FDI, most incorporate the concept of the investor retaining control of transferred resources. Portfolio investment involves 'the accumulation of securities in the host country'. See Bennett (1981).

4 All statistics, Australian Bureau of Statistics (2004).

5 The stock of total investment is considerably larger. US total investment at the same time was $297.3 billion.

6 Australia's **total** investment in the US was $211.0 billion at the same time.

7 UK $34.3 billion, NZ $21.8 billion.

8 For example, the *Qantas Sale Act 1992*, the *Telstra Corporation Act 1991*, the *Broadcasting Services Act 1992*, etc.

1976 to administer the Act and to advise the Treasurer on foreign investment policy. Under the provisions of the Act as it applied prior to the AUSFTA and continues to apply to non-US investors, certain proposals to acquire interests of 15 per cent or more (by a single foreign entity or person) and 40 per cent or more (by two or more foreign entities or persons) in Australian businesses, or prescribed corporations whose assets are valued over $50 million, must be notified to the Treasurer and can be rejected if considered to be contrary to the 'national interest', or subjected to conditions to address national interest concerns.

In addition to share acquisitions, the Act applies to asset acquisitions, investment in urban land and arrangements relating to the operation or control of Australian businesses. Proposals to establish new ('greenfield') businesses where the value of the business's assets is $10 million or more are not covered by the Act but must be notified to the Treasurer under the broader requirements of policy.

Under the Government's foreign investment policy, particular restrictions, including limits on equity participation, are maintained in a few areas where foreign investment generates community concern. For example, all direct foreign investment and all portfolio foreign investment of 5 per cent or more in the media sector require prior approval. There are also foreign equity restrictions on Telstra, Qantas and airports offered for sale by the Commonwealth.

United States

Foreign investment regulation in the United States has a greater emphasis on sector-based equity restrictions. While no single statute governs foreign investment, the Exon-Florio provision of the Omnibus Trade and Competitiveness Act 1988 and the Defense Production Act 1950 give the US President the authority, and in some cases mandate the President, to review on national security grounds mergers, acquisitions and takeovers of US businesses by foreign persons. Investors can voluntarily notify (pre- or post-establishment) the Committee on Foreign Investment in the United States under this provision to receive approval.

Transactions not notified to the US Government, in theory, remain open indefinitely to investigation and an order of divestiture. To avoid this, most companies file an Exon-Florio notice regardless of whether there is reason to suspect that national security interests might be involved. The International Emergency Economic Powers Act 1977 allows the President to block foreign acquisitions of US companies where an 'unusual and extraordinary threat' to the national security is apparent. Like Australia, the US has equity restrictions in sectors such as telecommunications, broadcasting, and air and maritime transport.

Central to the US approach is the notion of national security. This is somewhat narrower than Australia's emphasis on national interest. The latter reflects the different focus, historically, of the Australian policy debate regarding FDI, which has encompassed the implications for the development of Australia's economic resources and broader community concerns about the impact of foreign ownership and participation in the Australian economy. [9]

II. Negotiating objectives

The United States Congress and Australian Parliament passed implementing legislation for the AUSFTA, and the agreement entered into force on 1 January 2005.[10] Australian and US officials met for the first time in the last week of March 2003 in Canberra at the Department of Foreign Affairs and Trade. Six full negotiating rounds were held between March 2003 and February 2004 with an additional set of meetings devoted to services and investment issues held in September 2003. This compacted timetable was virtually unprecedented in such negotiations.[11]

Trade Minister Vaile publicly announced Australia's broad objectives ahead of the first round. Negotiating positions on specific aspects of the agreement were fine-tuned regularly by the Government, in the light of progress through each round. State government and business and community group consultations helped to shape positions and objectives along the way.[12]

Australia sought an enhanced treaty framework to govern investment flows, whilst looking for opportunities to reduce the impediments that licensing requirements, standards or other regulations in the United States impose on Australian investors and service providers. For example, improved access was sought in specific sectors, including ferries. In addition, Australia opposed inclusion of provisions that allow investors to initiate claims against the host state for breaches of investment provisions (investor-state dispute settlement provisions). Australia also looked to ensure that full account was taken of Australia's foreign investment policy and the need for

9 See Foreign Investment Review Board (2005), p. 8 for an explanation of the national interest test as applied to foreign investment.

10 The US House of Representatives passed the FTA on 14 July 2004 and the US Senate passed it on 15 July. The FTA implementing Bill was passed by the Australian House of Representatives on the 24 June 2004 and by the Senate on 13 August.

11 Negotiations received reinvigorated endorsement from President Bush and Prime Minister Howard during their Crawford, Texas meeting of May 2003. A transcript of the joint press conference is found at http://www.pm.gov.au/news/interviews/Interview296.html.

12 See the AUSFTA Briefing series produced by DFAT. http://www.dfat.gov.au/trade/negotiations/us_fta/newsletter/index.html.

appropriate policies to encourage foreign investment, while addressing community concerns about foreign ownership of Australian assets.[13]

American objectives were set out in the Trade Promotion Authority provisions contained in the Trade Act 2002 which gave the US administration guidance on issues to be covered in FTAs. From this, the Department of the United States Trade Representative (USTR) developed an agreed 'template' text which forms the basis of each US bilateral negotiation. More detailed investment objectives were set out in a letter from the USTR to Congress in late 2002 indicating the US sought, inter alia, modification of the national interest provisions of Australia's foreign investment legislation.[14]

III. Investment obligations and market access

Investment access — negotiated outcomes

Consistent with the requirements of the US Congressional mandate embodied in the Trade Promotion Authority, negotiations on improved investment access did not begin until the fourth negotiating round in October 2003, following the report of the US Trade Commission assessment of the potential impact of the agreement, and the substantive discussion of options did not effectively commence until the fifth round in December 2003.

In the context of the overall dynamics of the negotiations, the achievement of market access gains for foreign investors was a high priority for US negotiators. In particular, the US argued that the absence of pre-establishment screening in the US produced a market access imbalance that disadvantaged US investors. The US starting point preferred outcome was to exempt US investors fully from the application of Australia's foreign investment screening arrangements and/or from the application of the national interest test — or at least to narrow the interpretation of the latter effectively to issues of national security only.

The negotiations therefore presented an opportunity for the Government to consider the scope for liberalisation of Australia's foreign investment policy regime. However, the Government remained committed to retaining key elements of the existing framework, which it considered served Australia's interests well. In particular, it was not prepared to concede any erosion of the principle of a broad national interest test or of pre-establishment screening of all significant foreign acquisitions of existing Australian companies or assets. Australia's preferred approach, therefore, was to

13 DFAT website, http://www.dfat.gov.au/trade/negotiations/us_australias_objectives.html.
14 Zoellick (2002).

explore the scope for an agreement based on increased screening thresholds, while preserving the existing national interest test.

The terms of the deal on investment market access were finalised in early February 2004. Pre-establishment screening based on a national interest test was retained, while the dollar threshold above which US investments in non-sensitive sectors would require notification was significantly increased. This reflected the judgment that, in all but an identifiable set of sensitive sectors, national interest concerns were closely correlated with the value of the assets concerned and had historically only been raised by cases where the assets were valued significantly above the existing $50 million threshold. This outcome should reduce the number of investors requiring Foreign Investment Review Board approval while preserving the Government's right to continue to screen US investments of major significance against the national interest test.

The following amendments in relation to United States-sourced investment came into effect on 1 January 2005 [15]:

- exemption from the *Foreign Acquisitions and Takeovers Act 1975 (Cwlth)* of acquisitions of interests in financial sector companies as defined by the *Financial Sector (Shareholdings) Act 1998*;

- introduction of a screening threshold of $800 million, indexed annually to the GDP implicit price deflator, for acquisitions of interests in Australian businesses in non-sensitive sectors (see below);

- introduction of a screening threshold of $50 million, indexed annually to the GDP implicit price deflator, for acquisitions of interests in Australian businesses in defined sensitive sectors. The sensitive sectors are:

  – media;

  – telecommunications;

  – transport, including airports, port facilities, rail infrastructure, international and domestic aviation and shipping services provided either within, or to and from, Australia;

15 Amendments are reflected in the Annex 1 reservation (Australia's Foreign Investment Policy), Australia — United States Free Trade Agreement, 2004.

  - the supply of training or human resources or the development, manufacture or supply of military goods, equipment or technology to the Australian or other defence forces;

  - the development, manufacture or supply of goods, equipment or technologies able to be used for a military purpose;

  - the development, manufacture or supply of, or provision of services relating to, encryption and security technologies and communications systems; and

  - the extraction of (or holding of rights to extract) uranium or plutonium, or the operation of nuclear facilities;

- introduction of a minimum screening threshold of $50 million, indexed annually to the GDP implicit price deflator, for acquisitions by entities in which a United States federal or state government has a prescribed interest;

- introduction of a screening threshold of $800m, indexed annually to the GDP implicit price deflator, for acquisitions of interests in non-residential developed commercial property (other than accommodation facilities); and

- removal of existing policy-based screening requirements for the establishment of new Australian businesses.

Of these changes, the introduction of a distinction between sensitive and non-sensitive sectors is arguably most significant. This is a change from the previously established practice whereby certain investments — media, newspapers, foreign government investments — are treated as 'more sensitive' through policy, but not subject to different treatment under the FATA.

The agreement no longer to screen US investments in financial sector companies (FSCs) covered by the *Financial Sector (Shareholdings) Act 1998* under the FATA, streamlines the previous dual process whereby foreign investment in the shares of FSCs was subject to a national interest test under both pieces of legislation. A side letter to the agreement makes it clear that the principle announced by the Treasurer in April 1997, viz. that any large-scale transfer of the Australian ownership of the financial system to foreign hands would be considered contrary to the national interest, will continue to apply. The FATA will still apply to non-share transactions in FSCs.

The removal of the current policy requiring notification for new business (greenfields) US investments over $10 million reflects the fact that such investments do not generally raise national interest concerns akin to the foreign acquisition of existing economic assets but rather add directly to the economy's capacity to provide goods

and services both for domestic consumption and export. Moreover, whereas foreign investment screening of new businesses has in the past been used to assist in the enforcement of acceptable environmental standards and heritage rules, Australia now has separate effective and comprehensive national legislation for this purpose.

The agreement includes a commitment to conduct a review, within 18 months of entry into force, of options to exempt passive portfolio investment from the Act and to minimise the screening of internal corporate reorganisations and foreign-to-foreign takeovers. Australia also made a commitment to provide prior warning to the US authorities, subject to the consent of the investor, should a US acquisition of an Australian business or assets raise issues likely to require action by the Australian Government to reject, unwind or impose conditions.

All Australia's existing sectoral foreign investment restrictions were preserved under the agreement.

The outcome outlined above represents the first liberalisation of investment policy to come about through trade negotiations,[16] and is arguably a far more significant package of reforms than is ever likely to have been agreed in more traditional multilateral negotiations. Moreover, while the package was negotiated in the context of an FTA, which necessarily focuses attention on the market access 'concessions' each party agrees to grant to the other, these reforms are expected to provide net benefits to the Australian economy. These expected benefits will come through the impact of reduced compliance costs and, to some extent, a lower equity risk premium for foreign investors in Australia, with a consequent positive impact on the level of inwards FDI and related dynamic benefits over time.

Quantifying such benefits has been the subject of considerable analysis and debate elsewhere and is beyond the scope of this article. Nevertheless, consistent with the lessons from previous rounds of trade liberalisation, it is reasonable to anticipate that the primary beneficiary of liberalisation will be the economy that liberalises — in this case, Australia.

The provisions of the investment chapter

The 17 articles of the investment chapter — Chapter 11 of the agreement — fall into the following categories: definitions and scope; non-discrimination obligations; investment protection; limitations on government measures; and dispute settlement procedures. The chapter's structure is broadly consistent with the NAFTA model and though

16 In the GATS, Australia bound existing policy as it was then. There are no investment obligations in the Australia-New Zealand Closer Economic Relations Trade Agreement. Australia did not offer greater investment access to Singapore or Thailand.

similar to the Singapore-Australia FTA (SAFTA) text in many respects, it differs in the treatment of investments in the services sector.[17]

The chapter's scope is set, in part, by an asset-based definition of 'investment' as:

> every asset that an investor owns or controls, directly or indirectly, that has the characteristics of an investment, including such characteristics as the commitment of capital or other resources, the expectation of gain or profit, or the assumption of risk.[18]

The asset-based formulation used is narrower than the Australia-Singapore approach which doesn't limit the forms of debt covered. Though in principle an asset-based definition is more expansive than an enterprise-based approach to investment that focuses on FDI, the definition used is narrowed in scope by requiring that an asset 'have the characteristics of an investment'. This is intended to limit the scope of 'investment' to prevent expropriation claims regarding, for example, permits to pollute and grazing rights on federal land.[19] Other existing OECD agreements adopt a narrower definition of 'capital movements' and FDI.[20] However, the narrower definition used in this agreement differs from that used in Australia's bilateral investment treaties where the maximum level of protection is sought for Australian investments in other countries. Other than the definition of investment, the scope of the investment chapter is determined by coverage of the pre-establishment and post-establishment stages of investment as qualified by 'negative list' style annexes.[21]

Chapter 11 guarantees the investors of each party non-discrimination and prompt and adequate compensation in the event of expropriation of an investment. Non-discrimination principles are captured in Article 11.3: National Treatment, 11.4: Most Favoured Nation (MFN) Treatment, and 11.5: Minimum Standard of Treatment, with limited exceptions to these contained in annexes. Of note is the fact that this is the first FTA investment chapter that Australia has concluded with post-establishment MFN and a minimum standard of treatment obligation.

Agreement to include an MFN provision is unsurprising but significant as it commits Australia to extending to the US any future favourable treatment granted to another treaty partner. Neither Singapore nor Australia had sought to include an MFN article

17 SAFTA adopts the WTO GATS treatment of 'mode 3 commercial presence' and treats investment in services as a method of services delivery covered by the Services Chapter.

18 Article 11.17: Definitions.

19 In *Methanex Corporation v United States of America* market share was claimed to constitute an investment.

20 Annex A, OECD Code of Liberalisation of Capital Movements (1961).

21 A negative list approach means that treaty obligations apply in all cases *except* for those measures set out in annexes to the agreement.

in SAFTA, in part reflecting the fact that both countries were separately negotiating or considering negotiating with the US and in part reflecting Singapore's membership of the preferential ASEAN group.

The chapter also sets out the minimum standard of treatment to be afforded to investors of each party. It defines the customary international minimum standard of treatment of aliens as the minimum standard of treatment to be applied. The provision provides greater clarity to what is meant by 'fair and equitable treatment' and 'full protection and security'. This language is responsive to perceived problems with outcomes in various NAFTA cases and reflects the subsequent NAFTA Free Trade Commission binding interpretation issued in July 2001.[22]

The expropriation provision provides a guarantee that parties will not directly expropriate or nationalise a covered investment, nor indirectly expropriate through equivalent measures except where such measures are non-discriminatory, enacted for a public purpose in accordance with due process of law, and where there is payment of prompt, adequate and effective compensation. Chapter 11 also provides guidance on the sorts of actions that may constitute indirect expropriation and contains a commitment that the expropriation article is not to affect normal governmental regulatory activity.

In addition to these non-discrimination and expropriation principles, chapter 11 also guarantees investors the right to transfer freely investments (including capital, profits etc) into and out of the country. The right of free transfers is subject to the application of domestic laws relating to bankruptcy, insolvency, issuing and dealing securities, criminal offences and so forth. Australia agreed to eschew a balance of payments exception to the free transfers principle previously used in its FTAs on the basis that Australia acknowledged that it could never envisage invoking this exception to block transfers from the US. However, the Australian Treasurer subsequently made it clear in a letter to his counterpart, US Treasury Secretary Snow, that Australia continues to see a role for capital and exchange controls in limited and extreme circumstances by some countries and that the International Monetary Fund, rather than bilateral trade negotiations, was the appropriate forum in which to resolve differences of view regarding the future role for such controls in the context of potential balance of payments difficulties.

The performance requirements provision (Article 11.9) regulates conditional incentives and other requirements imposed by governments as a condition of an investment

22 Arbitral Tribunals in *Metalclad*, *S.D. Myers* and *Pope and Talbot* all gave a broad interpretation to 'fair and equitable treatment'. For a summary of this issue see Menaker (2002), p. 107.

approval. This provision extends the WTO Trade-Related Investment Measures Agreement by covering measures in the services sector as well as the goods sector. The provision prohibits requirements relating to the transfer of technology and the exclusive supply to specific markets as well as domestic sales targets.

Australia agreed to limit the use of performance requirements, recognising that certain performance requirements can distort trade and investment flows. The provision gives Australia a binding guarantee restricting the use of such requirements by governments in the US which might adversely affect the interests of Australian companies, or Australian trade and investment interests. At the same time, the provision does not affect the right of governments to regulate the operation of enterprises in their jurisdiction for any public policy purpose, including environmental and health and safety concerns.

The investment chapter is arguably most notable, however, for the absence of investor-state dispute settlement provisions. The US's stated objective on investment dispute resolution procedures was that the agreement:

> provide procedures to resolve disputes between US and Australian investors that are in keeping with the goals of making such procedures expeditious, fair and transparent.[23]

However, Australia was strongly of the view that an agreement between two developed countries with advanced legal systems and an established rule of law does not require an additional avenue for investors to pursue their rights outside the domestic legal system. Notwithstanding the evolution of US treaty language to give greater guidance to arbitration panels, there remains continuing discomfort over NAFTA jurisprudence.

The eventual agreement not to incorporate investor-state dispute settlement provisions reflected an acknowledgement by both parties of the robustness of their respective domestic legal systems, along with provision, should circumstances change in future, for either party to initiate discussions to review this outcome, but without prejudicing the outcome of such possible future discussions. One important implication of the omission of investor-state dispute settlement provisions is that decisions by the Treasurer on foreign investment cases will not be subject to international arbitration when no similar rights are available under domestic law.

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23 Zoellick (2002).

Conclusion

The primary focus in most FTAs has been trade liberalisation. A 2003 Productivity Commission study found evidence that FDI responds significantly to the investment provisions of FTAs.[24] Moreover, the study did not find evidence of trade diversion that might be expected from companies relocating from a low-cost to a higher cost (FTA partner) host country. The study also concludes that FDI responds more significantly to preferential FTAs than to bilateral investment treaties, which have tended to be more narrowly focused on investment protection. This suggests a greater role for FTAs in encouraging reform of investment regulations and in opening capital markets, including for FDI.

Negotiating FTAs necessarily involves trade-offs in arriving at an agreed liberalisation of domestic policy settings, even though experience strongly indicates that such reforms inevitably benefit the economy which undertakes the reform. Australia's foreign investment policy has been periodically reviewed and liberalised since its inception in the mid-1970s. The latest reforms are expected to bring further benefits to Australia, while reaffirming the Government's responsibility to review significant and sensitive foreign investments to ensure they are in the national interest.

Chapter 11 of the agreement will be important in shaping Australia's future investment agreements, though negotiators must be prepared to depart from this text where appropriate in future negotiations. This offers no immediate solution to potential difficulties associated with divergent treaties containing different rules and processes. Australia continues to support efforts to develop FTA and investment treaty best practice through plurilateral forums such as APEC and the OECD, and multilaterally in the WTO.[25]

24 Adams et al. (2003).

25 The OECD outreach programme includes a programme of work between the APEC Investment Experts Group and the OECD Investment Committee. See APEC (2004).

Attachment A

Australia's investment commitments in international treaties

Bilateral investment treaties

Bilateral investment treaties have become increasingly used between developed and developing countries from the 1960s to enable investment. Australia has entered into 19 Investment Promotion and Protection Agreements, with several others signed but not yet in operation.

In recent years Australia has also signed three FTAs with investment chapters. This reflects a trend since the North American FTA (NAFTA, 1994) to include a range of 'new issues' in trade agreements. These FTAs are:

- 2003, Singapore-Australia FTA;
- 2004, Thailand-Australia FTA;
- 2004, Australia-United States FTA.

Multilateral investment arrangements

The Uruguay Round of WTO negotiations brought international investment issues into the WTO with the conclusion of the Trade Related Investment Measures Agreement and the inclusion of commercial presence as a mode of service delivery covered by the General Agreement on Trade in Services.

Australia is a signatory to numerous multilateral and regional initiatives on foreign investment:

- 1961, OECD Codes of Liberalisation of Capital Movements and Current Invisible Operations
- 1965, Convention on the Settlement of Investment Disputes between States and Nationals of Other States;
- 1976, OECD, Declaration on International Investment and Multinational Enterprises;
- 1983, UN draft Code of Conduct of Transnational Corporations;

- 1985, World Bank, Convention Establishing the Multilateral Investment Guarantee Agency;
- 1994, APEC Non-Binding Investment Principles;
- 1994, Energy Charter Treaty (signed, though not ratified);
- 1994, General Agreement on Trade in Services;
- 1994, Agreement on Trade-Related Investment Measures.

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Australian net private wealth

Treasury has published annual estimates of Australian net private sector wealth since the *Summer 1990 Economic Roundup*. This article updates previous estimates and provides preliminary estimates for net private sector wealth as at June 2004.

The market value of Australian net private sector wealth grew by 17.6 per cent in the year to 30 June 2004. In real terms (that is, after allowing for inflation), wealth grew by 16.2 per cent. Real wealth per Australian grew by 14.9 per cent.

Wealth definitions and uses

From an economic perspective, wealth can be defined as 'a store of spending power that can be carried into the future' (Jones and Perkins 1986, p. 150). Therefore, wealth includes a wide variety of assets, both financial assets, such as cash, shares and bonds, and non-financial assets, such as dwellings, factories and other business assets that can be used to generate future income.

Measurements of the *store* (or 'stock') of spending power, such as wealth, complement measurements of the *production* (or 'flow') of income, such as gross domestic product (GDP). Wealth thus provides a useful additional measure of living standards as well as a benchmark for examining trends in such aggregates as external liabilities and private sector debt. In addition, wealth appears to be a significant determinant of current and future aggregate private consumption.

Wealth can also include a variety of other less tangible assets that are sometimes referred to as 'human wealth'. Human wealth includes, for example, the skills, education and social structures that contribute to an individual's capacity to generate income in the future. In addition, a broader definition of wealth might include such assets as natural resources or aesthetic qualities.

The change in real net wealth of households from one period to the next is the pure economic definition of saving.[1] Therefore, the annual change in real private sector wealth can be interpreted as the annual economic saving of the private sector.

Measuring wealth

From a practical perspective, some components of wealth can be extremely difficult to quantify. In particular, it is difficult to value those assets that are not readily tradeable and hence for which there are no readily observable prices. This is often the case for the various components of human wealth and some natural resources. As a result, the estimates in this article relate only to financial assets and non-financial (or physical) assets in those cases where there are well-developed markets and observable prices.

The scope of the estimates presented in this article is the Australian private sector. This consolidation of the private household and business sectors greatly simplifies the calculation of private sector wealth.[2] However, this consolidation does result in a loss of detail on the liabilities of these two sectors. Consequently, the data on asset types

1 See the article, 'The Measurement of Saving in Australia', in the *Economic Roundup,* Spring 1999.

2 Consolidating the private household and business sectors implies that the bulk of financial instruments held by households (such as bank deposits, debt instruments and superannuation) are netted out in the analysis.

contained in the attached tables and charts should not be used to infer relative ownership by either the household or business sectors, or the level of personal wealth.[3]

A number of assumptions and approximations are required to construct these estimates, particularly for the latest year where many of the data remain provisional. Together with inevitable revisions to historical data, these limitations imply that the estimates should be interpreted as indicative of trends and broad orders of magnitude, rather than precise estimates.

The Australian Bureau of Statistics (ABS) also publishes estimates of wealth. The appendix has a discussion of the relationship between these estimates and the Treasury estimates.

Methodology — How is wealth measured?

The wealth estimates presented in this article are a measure of the net value of domestic and foreign assets owned by the Australian private sector. These estimates are constructed using the inventory approach[4], largely following the methodology of Callen (1991). This approach involves aggregating across different asset types and adjusting for the public and/or foreign ownership[5] of assets. The estimates are largely based on ABS estimates of the dwelling stock, business capital stock[6], stock of consumer durables and Australia's international investment position. Reserve Bank of Australia (RBA) data are used for holdings of public securities and RBA liabilities. Some private sector data and estimates from previous studies also enter the estimates.

Treasury estimates of net private sector wealth are calculated on both a market value and replacement cost basis. The market value of an asset represents the value that would be obtained if assets were to be sold in current market conditions. For example, dwelling wealth will move with house prices while business wealth will move with stock market prices. In contrast, the replacement cost of an asset is the cost of reproducing that asset. That is, it is the price which would have to be paid for an identical asset which is in the same condition and expected to yield the same flow of services as the original asset. It is the relevant concept for physical assets such as

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3 Details on assets by sector are available in the ABS publication Australian National Accounts: National Balance Sheet (cat. no. 5241.0), and Bacon (1998) discusses household wealth estimates in detail.

4 Other approaches for constructing estimates of wealth include the portfolio and estate methods. Piggott (1987) provides a useful summary of these approaches.

5 The wealth estimates presented in this article measure wealth owned by Australians, regardless of where that wealth is located. For example, an Australian-owned factory located overseas contributes to Australian net private wealth, while an overseas-owned factory located in Australia does not.

6 Business capital stock includes both rural and non-rural assets.

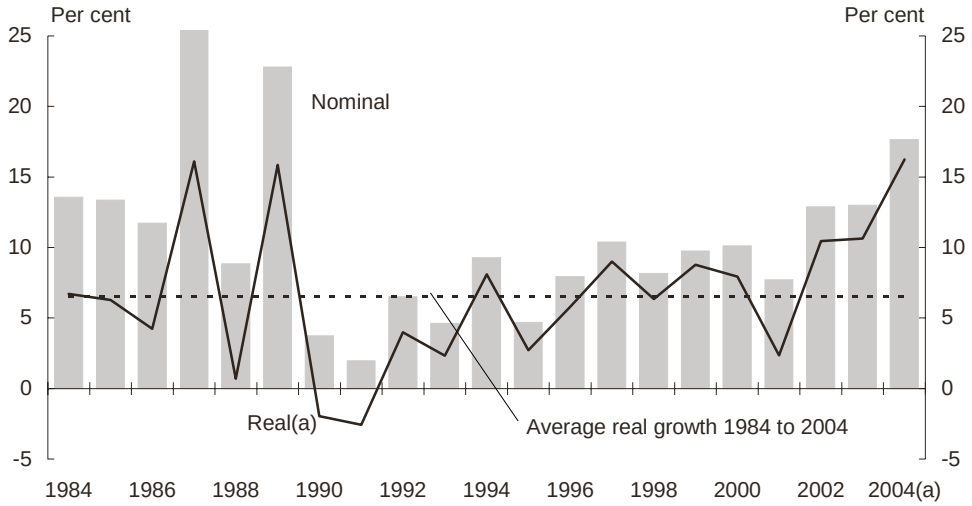
consumer durables, the stock of dwellings and the business capital stock. The equivalent concept for financial assets is the face value, which in the case of debt, for example, represents the price (excluding any accrued interest or dividends) which the borrower promises to repay the lender on expiry of the loan.

Detailed wealth estimates since 1960 are presented in the attached tables.

Movements in Australian private sector wealth in 2004

Through the year to 30 June 2004, Australian net private sector wealth at market value grew by 17.6 per cent in nominal terms, 16.2 per cent in real terms and 14.9 per cent in real per capita terms. The growth rate in nominal net private sector wealth during the year to June 2004 was the highest for more than a decade (Chart 1). The tables in the appendix provide further details.

Chart 1: Growth in Australian net private sector wealth at market value



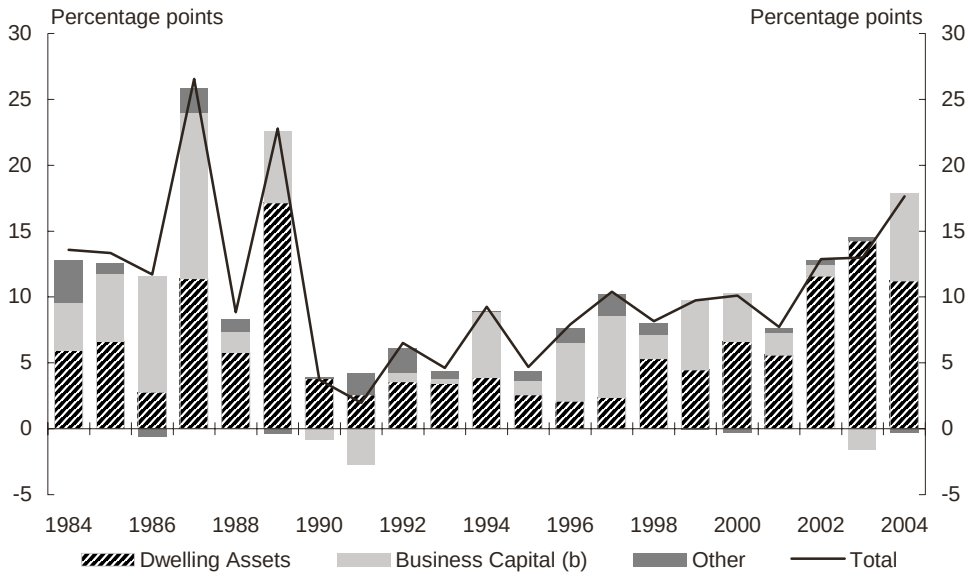
(a) Real wealth is determined using the consumption deflator. This includes the transitional impacts of *The New Tax System*.
Source: Australian Government Treasury

In current prices, Australian net private sector wealth was approximately $5,145 billion at market value as at 30 June 2004. This is the first time Australian net private wealth has climbed over $5 trillion, and represents around $250,000 per Australian and 6.6 times the value of the annual nominal gross domestic product of the economy. Real net wealth per Australian has increased for 13 consecutive years and has risen by over $51,300 in the past three years alone.

In the year to June 2004, growth in the market value of dwelling assets contributed 11.2 percentage points to the growth in private wealth (see Chart 2). The strong growth in dwelling wealth is a direct result of the sharp rise in house prices throughout the country leading up to 2004. The ABS House price index reported a broad-based rise in established house prices of 12.6 per cent in the year to June 2004.

The other main influence on wealth over the period was business assets (net of Australian investment abroad and foreign liabilities), which contributed 7.8 percentage points, more than double the long-term average contribution to growth of 3.1 percentage points. This follows a small subtraction in 2003. The rise in business assets coincided with large increases in the value of the stock market. The ASX 200 has continued to climb since its recent trough in February 2003, rising by 22.8 per cent over the year to December 2004. Movements in non-rural business assets, which make up over 80 per cent of total business assets, reflect changes in stock market prices and are, therefore, quite volatile.[7]

Chart 2: Contributions to growth in nominal Australian net private sector wealth at market value[(a)]



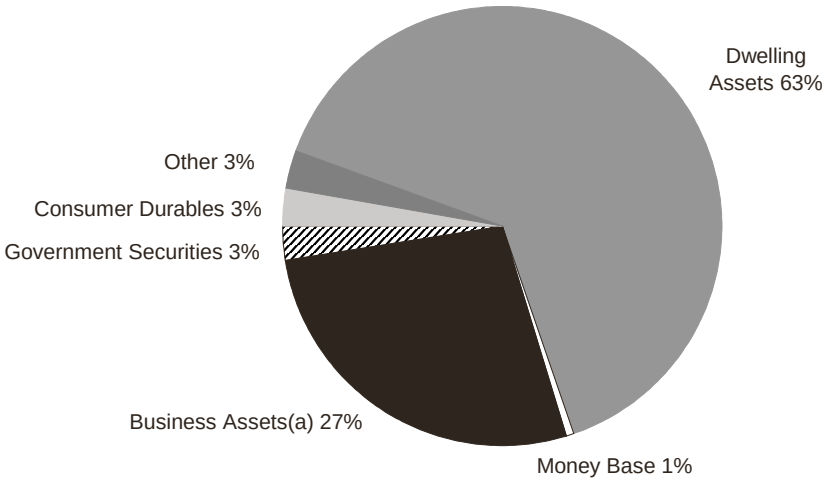
(a) Over the year to June 30.
(b) Includes Australian investment abroad and excludes foreign liabilities.
Source: Australian Government Treasury.

7 It is assumed that the market valuations of listed and non-listed companies move together.

Composition of Australian net private wealth by asset type

The composition of wealth at market value by asset type slightly shifted back to historical averages during the year to 30 June 2004 (Chart 3). Dwelling assets comprised a smaller proportion of Australian net private sector wealth (down 2 per cent compared with 2003) while the share of business assets rose (up 2 per cent). Further compositional changes are expected if the current moderation in house price growth continues.

Chart 3: Composition of Australian net private sector wealth by asset type



(a) Includes Australian investment abroad and excludes foreign liabilities.
Source: Australian Government Treasury.

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Appendix

Relationship with the ABS national balance sheets

The Treasury net wealth estimates presented in this article are broadly consistent with those published in the ABS publication, Australian National Accounts: National Balance Sheet (cat. no. 5241.0.40.001). The main differences are that the scope of the Treasury estimates is the aggregate private sector and that the Treasury estimates are prepared using a consistent basis for valuing the assets. In addition, the Treasury estimates are available for a much longer time period, thus allowing longer term analysis of past changes in wealth.

In terms of scope, the Treasury estimates cover the total private sector in Australia. In contrast, the ABS balance sheets are prepared for a range of institutional sectors and for Australia as a whole, but not for the private sector as such. In terms of the ABS institutional sector classifications, the private sector is the sum of the ABS household and unincorporated enterprise sector and the private sector components of each of the non-financial corporation and financial corporation sectors.

In terms of scope, the major difference is that the ABS estimates include the value of demonstrated sub-soil assets and timber in native forests. These assets are not included within the Treasury estimates for two reasons. First, the ABS estimates for these assets only go back to 1989; the Treasury wealth estimates are calculated for each year back to 1960. Second, the valuation of these assets is difficult. The ABS valuations involve 'calculating the expected future net income flow generated by the asset, and then discounting at some interest rate for the life of the asset'. These figures cannot easily be added to the tables below, since it is unclear to what extent these assets are already included in the valuations of businesses. In addition, comparisons with pre-1989 data will obviously not be possible.

Another important difference between the ABS and Treasury estimates is the valuation basis that is used. As noted earlier in this article, the Treasury estimates are compiled on both a market value and replacement cost basis. In contrast, the ABS uses a replacement cost basis for produced assets and a market value basis for financial assets and liabilities. As a result, the ABS estimates of 'net worth' (or wealth) are actually based on a mix of these two valuation methodologies.

Table A: ABS valuations of sub-soil and native timber assets

As at June	Subsoil assets	Native standing timber
	($billion)	
1989	61.8	1.1
1990	52.0	1.3
1991	56.9	1.7
1992	57.8	1.5
1993	66.1	1.7
1994	80.7	1.9
1995	97.0	2.1
1996	100.4	2.1
1997	110.2	2.2
1998	134.0	2.2
1999	156.2	2.2
2000	200.3	2.4
2001	252.0	2.6
2002	318.3	2.8
2003	339.6	3.0
2004(a)	376.8	3.2

(a) Preliminary figures.
Source: Australian Bureau of Statistics, 2003-2004, Australian System of National Accounts, cat. no. 5204.0, ABS, Canberra.

It is possible to reconcile the main components of the Treasury estimates of wealth at replacement cost with the estimates of produced assets in the ABS balance sheets, although allowance needs to be made for the differences in scope and coverage. While it is not generally possible to derive estimates of wealth at market value from the ABS balance sheets, it is possible to infer an estimate of the valuation ratio (the ratio of the market value of an asset to its replacement cost) for business assets. This is because the net financial assets held by the combined household and unincorporated, general government and foreign sectors (valued at market prices) should represent claims over the net physical assets held by the financial and non-financial corporation sectors (valued at replacement cost). The ratio so derived is reasonably similar to the valuation ratio for business assets which can be derived from the data presented in this article, thus confirming that, apart from the scope and coverage issues noted above, the Treasury wealth estimates are broadly consistent with the ABS estimates in the national balance sheets.

Table A1(a): Nominal private sector wealth at market value

As at June	Dwelling assets	Business assets	Consumer durables	Government securities	Money base	Australian investment abroad	Foreign liabilities	Total wealth	Wealth per person
				($ billion)					($ 000s)
1960	21.6	28.3	5.3	7.4	1.8	0.4	-3.5	63.3	6.0
1961	23.3	30.3	5.6	7.5	1.7	0.5	-3.1	67.9	6.3
1962	25.8	31.4	5.5	8.3	1.8	0.5	-3.3	72.3	6.6
1963	27.1	34.0	5.8	9.3	1.8	0.7	-4.1	76.9	6.9
1964	31.2	38.8	6.0	9.8	2.1	0.8	-5.4	86.0	7.6
1965	34.0	38.3	6.4	10.0	2.1	0.7	-4.8	89.8	7.8
1966	36.1	41.9	6.7	10.8	1.9	0.9	-5.1	96.4	8.2
1967	37.7	43.8	7.0	11.7	2.1	0.9	-6.0	100.8	8.4
1968	41.4	62.2	7.5	12.3	2.2	1.4	-9.3	121.7	9.9
1969	46.7	69.8	8.1	13.0	2.4	1.4	-10.5	135.2	10.8
1970	53.9	69.0	8.8	12.5	2.7	1.5	-10.1	143.3	11.2
1971	61.5	69.9	9.7	13.7	2.8	1.9	-11.2	153.9	11.8
1972	70.8	80.0	10.7	16.2	3.0	2.5	-14.5	175.0	13.2
1973	86.3	81.5	11.9	16.5	4.0	2.2	-14.8	194.6	14.4
1974	113.4	81.3	14.1	14.5	4.5	2.0	-13.0	224.8	16.4
1975	128.6	75.5	17.5	17.3	4.1	2.5	-13.2	241.7	17.4
1976	147.8	88.9	21.2	20.1	5.1	2.9	-18.9	278.0	19.8
1977	164.6	94.6	24.5	21.7	6.3	3.8	-20.1	308.3	21.7
1978	176.8	106.6	27.3	25.9	5.9	4.5	-22.1	339.6	23.7
1979	199.7	124.1	29.1	29.1	6.4	5.7	-25.4	385.5	26.6
1980	232.9	166.5	32.9	30.5	6.9	6.5	-34.3	461.4	31.4
1981	277.8	202.2	36.7	33.3	7.6	6.8	-42.1	545.1	36.5
1982	302.3	188.8	41.7	34.5	8.7	8.7	-48.8	562.8	37.1
1983	322.3	220.0	46.6	44.3	9.1	10.8	-61.3	623.3	40.5
1984	359.4	248.6	49.8	60.1	10.2	12.6	-69.3	707.9	45.4
1985	406.4	299.5	54.6	59.6	11.8	18.0	-89.4	802.4	50.8
1986	428.7	376.7	62.4	45.8	13.0	30.4	-108.5	896.4	56.0
1987	530.9	509.2	69.3	54.7	14.1	44.4	-142.2	1134.4	69.7
1988	596.8	529.6	74.2	59.0	15.8	58.1	-158.7	1234.8	74.7
1989	808.6	618.9	79.6	47.8	16.7	70.2	-192.9	1516.3	90.2
1990	866.4	622.8	86.1	42.7	17.7	76.5	-215.3	1572.8	92.2
1991	907.1	598.4	89.4	64.3	18.7	75.9	-233.6	1603.8	92.8
1992	964.6	614.5	92.1	90.5	19.1	90.4	-253.0	1708.1	97.6
1993	1023.7	620.0	95.7	94.6	20.5	111.6	-274.2	1786.9	101.1
1994	1093.0	722.4	99.5	90.9	22.0	135.2	-311.6	1952.5	109.4
1995	1143.2	752.5	105.2	98.0	23.5	152.9	-338.6	2044.1	113.1
1996	1186.0	861.9	109.5	115.6	24.5	162.3	-367.4	2206.2	120.5
1997	1238.7	1018.2	110.5	140.5	34.1	198.7	-423.6	2435.5	131.5
1998	1368.6	1089.0	114.7	160.5	31.4	258.2	-509.7	2634.4	140.8
1999	1486.3	1262.7	118.4	154.1	31.8	284.4	-571.5	2891.1	152.8
2000	1678.4	1391.1	122.5	145.4	28.1	381.3	-691.5	3183.3	166.2
2001	1856.4	1495.4	130.9	145.7	29.6	424.7	-785.3	3429.0	176.6
2002	2254.1	1547.3	136.8	146.3	34.9	427.2	-811.5	3870.4	197.1
2003	2806.3	1540.6	142.8	149.4	35.0	435.5	-875.0	4373.8	220.1
2004(a)	3297.2	1880.8	147.0	130.1	37.2	515.3	-1005.5	5145.2	255.8

(a) Preliminary figures.

Table A1(b): Contributions to annual percentage change in nominal private sector wealth at market value

As at June	Dwelling assets	Business assets	Consumer durables	Government securities	Money base	Australian investment abroad	Foreign liabilities	Total wealth
1961	2.7	3.2	0.5	0.2	-0.2	0.2	0.6	7.3
1962	3.7	1.6	-0.1	1.2	0.1	0.0	-0.3	6.5
1963	1.8	3.6	0.4	1.4	0.0	0.3	-1.1	6.4
1964	5.3	6.2	0.3	0.7	0.4	0.1	-1.7	11.8
1965	3.3	-0.6	0.5	0.2	0.0	-0.1	0.7	4.4
1966	2.3	4.0	0.3	0.9	-0.2	0.2	-0.3	7.3
1967	1.7	2.0	0.3	0.9	0.2	0.0	-0.9	4.6
1968	3.7	18.3	0.5	0.6	0.1	0.5	-3.3	20.7
1969	4.4	6.2	0.5	0.6	0.2	0.0	-1.0	11.1
1970	5.3	-0.6	0.5	-0.4	0.2	0.1	0.3	6.0
1971	5.3	0.6	0.6	0.8	0.1	0.3	-0.8	7.4
1972	6.0	6.6	0.6	1.6	0.1	0.4	-2.1	13.7
1973	8.9	0.9	0.7	0.2	0.6	-0.2	-0.2	11.2
1974	13.9	-0.1	1.1	-1.0	0.3	-0.1	0.9	15.5
1975	6.8	-2.6	1.5	1.2	-0.2	0.2	-0.1	7.5
1976	7.9	5.5	1.5	1.2	0.4	0.2	-2.4	15.0
1977	6.0	2.1	1.2	0.6	0.4	0.3	-0.4	10.9
1978	4.0	3.9	0.9	1.4	-0.1	0.2	-0.6	10.2
1979	6.7	5.2	0.5	0.9	0.1	0.4	-1.0	13.5
1980	8.6	11.0	1.0	0.4	0.1	0.2	-2.3	19.7
1981	9.7	7.7	0.8	0.6	0.2	0.1	-1.7	18.1
1982	4.5	-2.5	0.9	0.2	0.2	0.3	-1.2	3.2
1983	3.6	5.5	0.9	1.7	0.1	0.4	-2.2	10.7
1984	6.0	4.6	0.5	2.5	0.2	0.3	-1.3	13.6
1985	6.6	7.2	0.7	-0.1	0.2	0.8	-2.8	13.3
1986	2.8	9.6	1.0	-1.7	0.1	1.5	-2.4	11.7
1987	11.4	14.8	0.8	1.0	0.1	1.6	-3.8	26.6
1988	5.8	1.8	0.4	0.4	0.1	1.2	-1.5	8.9
1989	17.2	7.2	0.4	-0.9	0.1	1.0	-2.8	22.8
1990	3.8	0.3	0.4	-0.3	0.1	0.4	-1.5	3.7
1991	2.6	-1.6	0.2	1.4	0.1	0.0	-1.2	2.0
1992	3.6	1.0	0.2	1.6	0.0	0.9	-1.2	6.5
1993	3.5	0.3	0.2	0.2	0.1	1.2	-1.2	4.6
1994	3.9	5.7	0.2	-0.2	0.1	1.3	-2.1	9.3
1995	2.6	1.5	0.3	0.4	0.1	0.9	-1.4	4.7
1996	2.1	5.4	0.2	0.9	0.0	0.5	-1.4	7.9
1997	2.4	7.1	0.0	1.1	0.4	1.6	-2.5	10.4
1998	5.3	2.9	0.2	0.8	-0.1	2.4	-3.5	8.2
1999	4.5	6.6	0.1	-0.2	0.0	1.0	-2.3	9.7
2000	6.6	4.4	0.1	-0.3	-0.1	3.4	-4.2	10.1
2001	5.6	3.3	0.3	0.0	0.0	1.4	-2.9	7.7
2002	11.6	1.5	0.2	0.0	0.2	0.1	-0.8	12.9
2003	14.3	-0.2	0.2	0.1	0.0	0.2	-1.6	13.0
2004(a)	11.2	7.8	0.1	-0.4	0.1	1.8	-3.0	17.6

(a) Preliminary figures.

Table A1(c): Real private sector wealth at market value[(a)]

As at June	Dwelling assets	Business assets	Consumer durables	Government securities	Money base	Australian investment abroad	Foreign liabilities	Total wealth
				($2002-03 billion)				
1960	222.7	291.8	54.6	76.3	18.6	4.1	-36.1	652.6
1961	233.0	303.0	56.0	75.0	17.0	5.0	-31.0	679.0
1962	258.0	314.0	55.0	83.0	18.0	5.0	-33.0	723.0
1963	268.3	336.6	57.4	92.1	17.8	6.9	-40.6	761.4
1964	300.0	373.1	57.7	94.2	20.2	7.7	-51.9	826.9
1965	317.8	357.9	59.8	93.5	19.6	6.5	-44.9	839.3
1966	325.2	377.5	60.4	97.3	17.1	8.1	-45.9	868.5
1967	327.8	380.9	60.9	101.7	18.3	7.8	-52.2	876.5
1968	347.9	522.7	63.0	103.4	18.5	11.8	-78.2	1022.7
1969	379.7	567.5	65.9	105.7	19.5	11.4	-85.4	1099.2
1970	417.8	534.9	68.2	96.9	20.9	11.6	-78.3	1110.9
1971	445.7	506.5	70.3	99.3	20.3	13.8	-81.2	1115.2
1972	484.9	547.9	73.3	111.0	20.5	17.1	-99.3	1198.6
1973	549.7	519.1	75.8	105.1	25.5	14.0	-94.3	1239.5
1974	633.5	454.2	78.8	81.0	25.1	11.2	-72.6	1255.9
1975	609.5	357.8	82.9	82.0	19.4	11.8	-62.6	1145.5
1976	608.2	365.8	87.2	82.7	21.0	11.9	-77.8	1144.0
1977	611.9	351.7	91.1	80.7	23.4	14.1	-74.7	1146.1
1978	607.6	366.3	93.8	89.0	20.3	15.5	-75.9	1167.0
1979	626.0	389.0	91.2	91.2	20.1	17.9	-79.6	1208.5
1980	661.6	473.0	93.5	86.6	19.6	18.5	-97.4	1310.8
1981	723.4	526.6	95.6	86.7	19.8	17.7	-109.6	1419.5
1982	716.4	447.4	98.8	81.8	20.6	20.6	-115.6	1333.6
1983	691.6	472.1	100.0	95.1	19.5	23.2	-131.5	1337.6
1984	724.6	501.2	100.4	121.2	20.6	25.4	-139.7	1427.2
1985	768.2	566.2	103.2	112.7	22.3	34.0	-169.0	1516.8
1986	756.1	664.4	110.1	80.8	22.9	53.6	-191.4	1581.0
1987	859.1	823.9	112.1	88.5	22.8	71.8	-230.1	1835.6
1988	893.4	792.8	111.1	88.3	23.7	87.0	-237.6	1848.5
1989	1142.1	874.2	112.4	67.5	23.6	99.2	-272.5	2141.7
1990	1156.7	831.5	115.0	57.0	23.6	102.1	-287.4	2099.9
1991	1157.0	763.3	114.0	82.0	23.9	96.8	-298.0	2045.7
1992	1201.2	765.3	114.7	112.7	23.8	112.6	-315.1	2127.1
1993	1246.9	755.2	116.6	115.2	25.0	135.9	-334.0	2176.5
1994	1316.9	870.4	119.9	109.5	26.5	162.9	-375.4	2352.4
1995	1351.3	889.5	124.3	115.8	27.8	180.7	-400.2	2416.2
1996	1374.3	998.7	126.9	134.0	28.4	188.1	-425.7	2556.4
1997	1417.3	1165.0	126.4	160.8	39.0	227.3	-484.7	2786.6
1998	1539.5	1225.0	129.0	180.5	35.3	290.4	-573.3	2963.3
1999	1657.0	1407.7	132.0	171.8	35.5	317.1	-637.1	3223.1
2000	1834.3	1520.3	133.9	158.9	30.7	416.7	-755.7	3479.0
2001	1927.7	1552.9	135.9	151.3	30.7	441.0	-815.5	3560.7
2002	2290.8	1572.5	139.0	148.7	35.5	434.1	-824.7	3933.3
2003	2792.3	1532.9	142.1	148.7	34.8	433.3	-870.6	4352.0
2004(b)	3242.1	1849.4	144.5	127.9	36.6	506.7	-988.7	5059.2

(a) Real wealth is calculated by dividing nominal wealth by the private consumption deflator.
(b) Preliminary figures.

Table A1(d): Real private sector wealth per person at market value[(a)]

As at June	Dwelling assets	Business assets	Consumer durables	Government securities	Money base	Australian investment abroad	Foreign liabilities	Total wealth
				(2002-03 $ per person)				
1960	21 254	27 847	5 215	7 282	1 771	394	-3 444	62 287
1961	21 746	28 279	5 227	7 000	1 587	467	-2 893	63 372
1962	23 645	28 777	5 041	7 607	1 650	458	-3 024	66 261
1963	24 126	30 269	5 164	8 279	1 602	623	-3 650	68 461
1964	26 454	32 897	5 087	8 309	1 781	678	-4 579	72 917
1965	27 478	30 953	5 172	8 082	1 697	566	-3 879	72 575
1966	27 499	31 917	5 104	8 227	1 447	686	-3 885	73 431
1967	27 226	31 631	5 055	8 449	1 517	650	-4 333	72 795
1968	28 368	42 620	5 139	8 428	1 507	959	-6 372	83 390
1969	30 294	45 279	5 254	8 433	1 557	908	-6 811	87 703
1970	32 638	41 781	5 329	7 569	1 635	908	-6 116	86 772
1971	34 105	38 763	5 379	7 597	1 553	1 054	-6 211	85 346
1972	36 450	41 187	5 509	8 340	1 544	1 287	-7 465	90 095
1973	40 702	38 438	5 612	7 782	1 887	1 038	-6 980	91 780
1974	46 165	33 097	5 740	5 903	1 832	814	-5 292	91 515
1975	43 869	25 755	5 970	5 902	1 399	853	-4 503	82 451
1976	43 343	26 070	6 217	5 894	1 496	850	-5 542	81 524
1977	43 116	24 780	6 418	5 684	1 650	995	-5 265	80 757
1978	42 312	25 512	6 533	6 198	1 412	1 077	-5 289	81 274
1979	43 126	26 800	6 284	6 284	1 382	1 231	-5 485	83 250
1980	45 025	32 189	6 360	5 896	1 334	1 257	-6 631	89 200
1981	48 478	35 285	6 404	5 811	1 326	1 187	-7 347	95 124
1982	47 178	29 465	6 508	5 384	1 358	1 358	-7 616	87 833
1983	44 932	30 670	6 496	6 176	1 269	1 506	-8 546	86 894
1984	46 511	32 172	6 445	7 778	1 320	1 631	-8 968	91 612
1985	48 660	35 860	6 537	7 136	1 413	2 155	-10 704	96 074
1986	47 202	41 477	6 871	5 043	1 431	3 347	-11 946	98 698
1987	52 820	50 661	6 895	5 442	1 403	4 417	-14 148	112 863
1988	54 041	47 956	6 719	5 343	1 431	5 261	-14 371	111 814
1989	67 925	51 990	6 687	4 015	1 403	5 897	-16 204	127 374
1990	67 784	48 726	6 736	3 341	1 385	5 985	-16 844	123 051
1991	66 941	44 160	6 597	4 745	1 380	5 601	-17 239	118 356
1992	68 662	43 741	6 556	6 442	1 360	6 435	-18 009	121 586
1993	70 578	42 745	6 598	6 522	1 413	7 694	-18 904	123 195
1994	73 753	48 746	6 714	6 134	1 485	9 123	-21 026	131 751
1995	74 773	49 219	6 881	6 410	1 537	10 001	-22 147	133 698
1996	75 052	54 542	6 929	7 315	1 550	10 271	-23 250	139 612
1997	76 535	62 911	6 827	8 681	2 107	12 277	-26 173	150 481
1998	82 277	65 468	6 895	9 649	1 888	15 522	-30 642	158 374
1999	87 550	74 379	6 974	9 077	1 873	16 752	-33 664	170 299
2000	95 772	79 378	6 990	8 297	1 603	21 757	-39 458	181 643
2001	99 301	79 991	7 002	7 794	1 583	22 718	-42 007	183 421
2002	116 631	80 060	7 078	7 570	1 806	22 104	-41 988	200 261
2003	140 509	77 137	7 150	7 480	1 752	21 805	-43 811	218 993
2004(b)	161 210	91 958	7 187	6 361	1 819	25 194	-49 162	251 564

(a) Real wealth is calculated by dividing nominal wealth by the private consumption deflator.
(b) Preliminary figures.

Table A2: Nominal private sector wealth at replacement cost

As at June	Dwelling assets	Business assets	Consumer durables	Government securities	Money base	Australian investment abroad	Foreign liabilities	Total wealth	Wealth per person
				($ billion)					($ 000s)
1960	42.1	30.5	5.3	7.5	1.8	0.4	-4.9	82.7	7.9
1961	44.9	33.4	5.6	7.7	1.7	0.5	-4.2	89.7	8.4
1962	46.7	35.0	5.5	8.2	1.8	0.5	-4.1	93.6	8.6
1963	49.3	37.3	5.8	8.9	1.8	0.7	-5.2	98.6	8.9
1964	53.0	40.5	6.0	9.6	2.1	0.8	-7.4	104.5	9.2
1965	57.5	43.4	6.4	10.1	2.1	0.7	-5.6	114.6	9.9
1966	60.1	46.7	6.7	10.8	1.9	0.9	-6.2	121.0	10.2
1967	62.4	49.0	7.0	11.6	2.1	0.9	-7.5	125.5	10.4
1968	65.4	56.8	7.5	12.2	2.2	1.4	-12.7	132.7	10.8
1969	68.2	61.6	8.1	13.2	2.4	1.4	-14.2	140.6	11.2
1970	71.8	64.4	8.8	13.6	2.7	1.5	-13.8	149.0	11.6
1971	76.6	69.3	9.7	14.6	2.8	1.9	-14.6	160.2	12.3
1972	83.8	76.6	10.7	16.1	3.0	2.5	-17.9	174.8	13.1
1973	93.5	82.1	11.9	17.3	4.0	2.2	-18.9	192.2	14.2
1974	110.8	96.0	14.1	17.9	4.5	2.0	-16.2	229.0	16.7
1975	131.7	111.0	17.5	20.3	4.1	2.5	-11.3	275.8	19.9
1976	151.8	127.4	21.2	23.0	5.1	2.9	-20.6	310.7	22.1
1977	172.5	143.5	24.5	25.3	6.3	3.8	-19.3	356.7	25.1
1978	191.1	160.4	27.3	27.9	5.9	4.5	-20.9	396.3	27.6
1979	207.6	180.3	29.1	32.4	6.4	5.7	-27.1	434.4	29.9
1980	221.9	208.8	32.9	35.5	6.9	6.5	-42.9	469.6	32.0
1981	252.9	236.2	36.7	39.4	7.6	6.8	-52.0	527.6	35.4
1982	284.2	271.4	41.7	42.8	8.7	8.7	-75.1	582.3	38.3
1983	307.4	299.1	46.6	50.9	9.1	10.8	-93.1	630.8	41.0
1984	324.6	320.6	49.8	64.1	10.2	12.6	-100.7	681.3	43.7
1985	368.8	358.5	54.6	64.1	11.8	18.0	-116.3	759.6	48.1
1986	402.3	392.4	62.4	47.8	13.0	30.4	-121.5	826.8	51.6
1987	457.0	435.3	69.3	57.0	14.1	44.4	-137.7	939.5	57.8
1988	572.6	498.0	74.2	59.6	15.8	58.1	-167.5	1110.8	67.2
1989	671.7	584.0	79.6	50.9	16.7	70.2	-204.9	1268.2	75.4
1990	705.1	613.1	86.1	45.0	17.7	76.5	-229.9	1313.6	77.0
1991	742.5	600.4	89.4	63.4	18.7	75.9	-241.7	1348.5	78.0
1992	756.0	593.9	92.1	82.5	19.1	90.4	-248.4	1385.8	79.2
1993	803.1	614.6	95.7	84.3	20.5	111.6	-275.3	1454.5	82.3
1994	858.2	636.1	99.5	89.5	22.0	135.2	-282.4	1558.2	87.3
1995	904.9	666.9	105.2	96.0	23.5	152.9	-305.2	1644.2	91.0
1996	919.8	694.4	109.5	112.6	24.5	162.3	-307.9	1715.3	93.7
1997	989.6	719.3	110.5	126.8	34.1	198.7	-320.0	1859.0	100.4
1998	1055.6	758.4	114.7	139.9	31.4	258.2	-367.9	1990.4	106.4
1999	1147.6	798.9	118.4	140.5	31.8	284.4	-382.1	2139.4	113.0
2000	1252.9	841.3	122.5	134.6	28.1	381.3	-432.9	2327.8	121.5
2001	1404.4	867.7	130.9	135.9	29.6	424.7	-465.4	2527.9	130.2
2002	1580.5	894.3	136.8	138.3	34.9	427.2	-480.4	2731.6	139.1
2003	1626.2	933.9	142.8	136.5	35.0	435.5	-531.1	2778.8	139.8
2004(a)	1844.0	976.7	147.0	125.3	37.2	515.3	-534.5	3110.9	154.7

(a) Preliminary figures.

Key themes from the Treasury Business Liaison Program — November 2004

The following article provides a summary of findings from the Treasury Business Liaison Program conducted in November 2004.[1] In this round of business liaison, Treasury held meetings with a range of companies in Sydney and Melbourne as well as visiting the Mildura area.

Businesses continued to be positive about Australia's economic conditions and the prospects for sustained economic growth. Profitability remained strong, with cost pressures under control and most firms having experienced high volumes of turnover. Employment intentions remained robust while wage pressures were moderate.

Treasury greatly appreciates the commitment of time and effort made by the Australian businesses and industry associations that participate in this program.[2]

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1 A detailed explanation of the Treasury Business Liaison Program is provided in the Treasury *Economic Roundup*, Spring 2001.

2 This summary of business conditions reported in liaison meetings reflects the views and opinions of participants. It is provided for the information of readers. While Treasury's evaluation of the economic outlook is informed by findings from business liaison, a much wider range of information and data are utilised to ensure a rigorous assessment of the Australian economy.

Overview

The companies Treasury met in the November 2004 business liaison round were positive about the Australian economy and the prospects for sustained economic growth. This outlook was consistent with the buoyant expectations reported in most business surveys in the lead-up to this liaison round.

In particular, business surveys were suggesting that firms were becoming increasingly confident about their own business outlook. Treasury's discussions with companies confirmed this outlook, with most firms noting that they were experiencing strong sales volumes and good profitability. Consistent with this, firms with involvement across multiple sectors of the Australian economy, such as transport and media companies, also reported high levels of activity and revenue.

The retail and mining sectors continued to perform very strongly and to support growth in other sectors of the economy. Companies also noted that, as a whole, construction activity remained relatively robust, despite an easing in medium-density dwelling and office construction.

Businesses operating in service sectors of the economy provided mixed reports. Some firms, such as those operating in the finance, insurance and tourism-related industries, reported strong business activity. However, firms providing gaming and related services had seen a slowing of activity.

Most manufacturers reported sound business performance, although a number noted that they continue to face intense competition from 'low-cost' countries, especially in the production of generic or mass-market items (such as clothing).

Sales reported by farm machinery businesses suggest that overall farm activity is relatively sound. However, crop production is still patchy with some areas and some crops still struggling as a result of low water storage levels. Agricultural sector contacts reported that cattle herd rebuilding was taking place following the drought but that high meat prices were slowing the pace of restocking by holding up slaughter rates.

Firms generally reported stable to increasing employment intentions. Most companies were able to fill vacant positions with good-quality staff. However, as in past liaison rounds, some firms noted difficulties in filling certain positions. Wage pressures were largely under control, with recent wage outcomes not differing significantly from those agreed in previous wage negotiations.

Companies typically reported that their investment intentions were broadly similar to their current levels of investment. A number of firms indicated that the objective of their investment was to increase efficiency, with a particular emphasis on improving distribution networks, rather than to increase production per se.

Retail

In the lead up to the November business liaison round retail indicators suggested relatively weak growth in the value of sales. However, most retailers met during the liaison round indicated that their sales had remained strong. In some cases this reflected ongoing growth in sales. In other cases it reflected stable but high levels of sales.

Consistent with reported strong consumer demand, a significant number of retailers were planning a net increase in the number of stores they operate. In most cases companies planned to expand at roughly the same rate as in recent years. This trend towards expansion should produce continued investment and employment growth in the retail sector.

The recent record high levels of motor vehicle sales were reflected in positive comments from car manufacturers and importers. These firms saw the combination of new products and competitive pricing (in part reflecting the strength of the Australian dollar and the lowering of tariffs) as driving the strong demand for motor vehicles. Companies did not believe that higher petrol prices had dampened demand for motor vehicles, nor did they expect this to occur in the foreseeable future.

Some retailers noticed a change in the pattern of sales coinciding with the federal election, although businesses provided mixed reports. Some firms, such as those in the restaurant and consumer durables industries, noted that activity slowed in the two weeks prior to the election. Other firms thought sales slowed only in the week before the election but then didn't return for at least a week after the election. But, a number of retailers didn't notice any change in sales at all.

Construction

Over the course of 2004, economic indicators suggested that growth in the construction sector — and in particular housing construction — was easing. However, firms in both the residential and commercial construction segments of the market remained positive about their prospects for growth.

Most construction companies noted that although there was less work currently available on medium-density dwellings, there was still some work in the pipeline.

Some firms also suggested that the rate of decline in medium-density dwelling work was slower than earlier in the year and a number of companies referred to new projects currently in the concept stage. Companies also indicated that investment in new detached dwellings was still performing solidly, especially in Queensland.

Firms reported that the construction of retail and commercial buildings was still strong. In particular, companies considered construction work in the aviation and hotel sectors to be 'booming'. However, office building work had slowed, reflecting the high vacancy rates for existing offices. A number of companies also cited engineering construction as generating very good growth, driven largely by work in the mining sector.

State economic conditions

A consistent theme from companies operating across a number of states was that activity was particularly strong in Western Australia and Queensland. This strength included retail, building and farm activity. In part, firms saw this as driven by the strength of the resources sector, as well as by solid rates of population growth.

In contrast, companies reported that Victoria was their weakest performing state, although the forthcoming Commonwealth Games were considered to be supporting infrastructure investment in Melbourne. Business activity in NSW was generally reported as solid.

Employment and wages

More often than not, firms indicated that they were still able to recruit labour when required and that the quality of this labour was adequate. However, given strong employment growth recorded in the three months to November, some companies reported difficulties in attracting and retaining high-quality staff. In particular, shortages were reported in the areas of skilled tradespeople and finance and accounting professionals. Companies operating in regional areas also noted that they continue to face difficulties in filling positions.

Consistent with the *Mid-Year Economic and Fiscal Outlook 2004-05* (MYEFO) forecast for unemployment to remain low, most companies reported stable or growing demand for labour. In particular, the mining and retail sectors indicated strong employment intentions, reflecting their expectations of continued demand for their products. Both firms and employment agencies noted that companies were looking to increase the flexibility of their workforce to allow them to meet peak demands without locking in a given payroll size.

As has been the case in previous liaison rounds, there was little evidence of the strong labour market leading to a generalised increase in wages pressure. In most cases, firms were negotiating wage outcomes similar to previous increases. A number of companies also indicated that they thought employees were giving considerable attention to lifestyle and other opportunities — not just wages — when negotiating employment contracts.

Nonetheless, certain industries — and again most notably the construction sector — reported some wage competition as firms tried to attract employees with skills that were in relatively short supply.

Costs and prices

From the beginning of 2004 to the start of this business liaison round, Australian dollar oil prices increased by over 40 per cent. Most firms reported that the higher cost of oil was being passed through to users in the form of higher input costs — including transport, resin and packaging costs. Logically, those companies with a heavy reliance on oil-based inputs were facing the greatest cost pressure. However, the majority of firms reported that although high oil prices were starting to have an impact on profitability, it was not of significant concern at present.

Some individual firms raised specific cost pressures they were facing, but in general companies saw increases in overall costs as affordable. In addition, most firms reported the falling cost of imported inputs as a positive factor.

In contrast, firms noted that pricing pressures were squeezing profit margins. Companies saw this as the result of intense competition and indicated that they were continually seeking cost savings to compete on price. In particular, a number of firms were looking to source more products directly from low-cost countries (most notably China) to improve their competitiveness. Other firms noted that they were refining their products to meet the needs of their more profitable clients rather than trying continually to undercut their competitors' prices. Although this was reducing output for these firms, it was leading to a stronger profit position.

Accounting standards

Australian equivalents to International Financial Reporting Standards (IFRS) replaced existing Australian Accounting Standards for financial reporting periods beginning on or after 1 January 2005. The adoption of IFRS represents a significant change in accounting policy for many businesses, notably those in the financial services industry and those with significant intangible assets.

In general, most companies indicated they were making a smooth transition to the new standards as the necessary changes were relatively small. Accordingly, a number of companies had already implemented, or were well on the way to implementing, the IFRS.

Sources of economic data

The following table provides sources for key economic data. Australian Bureau of Statistics (ABS) data can be obtained over the internet at **http://www.abs.gov.au**. The Reserve Bank of Australia information is available at **http://www.rba.gov.au**. Similarly, OECD information is available at **http://www.oecd.org**. Information on individual economies is also available via the IMF at **http://www.imf.org**.

International economy	
Output, current account balance and interest rates	OECD Main Economic Indicators
Consumer price inflation	ABS cat. no. 6401.0
National accounts	
Components of GDP, contributions to change in GDP	ABS cat. no. 5206.0
Incomes, costs and prices	
Real household income	ABS cat. nos. 5204.0 and 5206.0
Wages, labour costs and company income	ABS cat. nos. 5204.0, 5206.0 and 6302.0
Prices	ABS cat. nos. 6401.0 and 5206.0
Labour market	ABS cat. no. 6202.0
External sector	
Australia's current account, external liabilities and income flows	ABS cat. nos. 5368.0, 5302.0 and 5206.0

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Copies of these articles are available from the Treasury. Written requests should be sent to Manager, Domestic Economy Division, The Treasury, Langton Crescent, Parkes, ACT, 2600. Telephone requests should be directed to Mr Chris McLennan on (02) 6263 2756.

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