

# Introduction

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The structure and performance of the Australian economy have been shaped profoundly by international linkages. Despite their enduring importance, however, the strength of the links between Australia and the rest of the world have varied considerably through time. The depression of the 1930s, and then World War II, saw the trade links weakened substantially. In the three and a half decades that followed, little effort was made to rebuild these linkages, as Australia pursued a development strategy that left the greater part of the economy relatively isolated from the world. This gave Australia some of the characteristics of a 'dual economy': one part (resources and agriculture) closely integrated with the outside world, and another (larger) part that was inward looking and sheltered from the efficiency and pricing pressures that come with international integration.

In the past decade, all this has changed. Australia has embraced the idea of an outward-looking, export-oriented economy, with both its goods and financial markets increasingly integrated with world markets. Arguably, today our links with the rest of the world are stronger and more pervasive than at any time, at least over the past century. This change has seen a weakening of the division between the outward-oriented sectors and the domestic sectors, and has led to many non-traded industries also feeling the impact of international integration.

This increase in international integration can be seen in a number of indicators. The average effective rate of assistance to industry has fallen from 24 per cent in 1984 to about 10 per cent in 1993. Over the same period, the ratio of exports plus imports to GDP has increased from about 30 per cent to nearly 40 per cent. On the foreign investment front, the removal of foreign exchange controls in 1983 allowed Australian firms to exploit their comparative advantages on a global scale. Since the removal of these controls, outward foreign direct investment has averaged about one per cent of GDP per year; a ratio three times higher than in previous decades. Financial liberalisation has also allowed domestic investment to be financed from foreign savings to a greater extent than had been the case for many years. Reflecting this change, the current account deficit averaged nearly 4.5 per cent of GDP over the past decade, almost 2 percentage points higher than in the previous decade.

Despite this deeper integration into the world economy, Australia's trade share remains relatively low compared with that of other industrialised countries of a similar size. Australia barely participated in the rapid increase in world trade that took place in the decades following World War II. In addition to being a legacy of high protection, the low trade share reflects the nature of Australia's resource endowments and the long distances to the centres where much of world production takes place. In both of these areas, things are changing. The centre of world production is moving inexorably towards Asia, and the rising skill level of the Australian workforce is likely to lead to further increases in exports of manufactured goods and intra-industry trade. Further, an emerging comparative advantage in a number of highly income-elastic service industries, in conjunction with a solid commitment to the international economy, should see the trade share continue to rise in the years ahead.

The papers in this Volume were commissioned by the Reserve Bank of Australia to help improve our understanding of the depth and implications of this process of internationalisation. In particular, the papers attempt to throw light on three related questions. These are:

- What are the effects of increased integration on medium-term economic growth?
- What are the implications of increased integration for employment and wages?
- What impact does increased integration have on the management of inflation and the business cycle?

Tariff protection for domestic manufacturing had been a central policy tool since Federation and the development of this sector was further fostered by World War II. In the post-war period, high rates of immigration and the continued expansion of a protected manufacturing sector were inter-connected central elements of the development strategy. This strategy was pursued in an environment in which Australian workers were paid relatively high wages by international standards, and the wage distribution was relatively compressed. The high wages reflected, in part, the small labour force and the resource rents from primary production (and later minerals). Given the dislike of inequality in the Australian ethos, the centralised wage-fixation system acted to protect these high wages, and, in particular, protect the wages paid to unskilled workers. The high tariffs on manufactured goods, combined with Australia's distance from major world markets, were also important in allowing increasing employment in manufacturing, without any significant downward pressure on relative manufacturing wages.

From the late 1960s onwards this strategy was increasingly questioned. This reflected two concerns. First, the relative size of the primary sector of the economy had declined, and hence its ability to generate high average living standards had diminished. Second, many manufacturers, sheltered behind tariff walls, had become focussed on producing solely for the domestic market. They could not exploit scale economies and, when met with increased competition from international rivals, often sought increased protection, rather than improvements in efficiency. With many manufacturing firms moribund in their protective cocoon, there was relatively little research, development and innovation. The concern became that this environment was not conducive to sustained increases in output and wages. While it had been helpful in developing the manufacturing industry and keeping wages high for a period of time, the tariff wall and the inward orientation risked condemning Australian workers to stagnating wages. Elsewhere in the world, and particularly in the Asian region, outward-oriented economies were experiencing fast rates of growth and rapidly rising living standards.

In response to these developments, a major program of economic liberalisation was begun. The promise was that liberalisation could deliver a faster rate of economic growth than that which the previous system could deliver. This growth dividend has its roots in increased competition and efficiency, the more effective exploitation of Australia's comparative advantages and an increase in the returns to innovation, training and research. There are tentative signs that these effects are at work, and that the economy is entering a period of faster labour-productivity growth than that experienced over the past decade. This faster productivity growth should eventually deliver increasing real wages for all Australian workers.

However, to the extent that tariffs played a role in compressing the wage distribution, trade liberalisation could also lead to pressure to increase wage dispersion. This increased dispersion is generally seen as undesirable. The optimistic view is that the greater dispersion is temporary. By increasing the relative return to skilled labour, trade increases the incentive to acquire skills. As a result, both individuals and government devote greater resources to training. The increasing number of skilled workers then acts to again compress the wage distribution. The pessimistic view is that the wage distribution should be permanently wider, and that if the wage system stands in the way, the price will be sustained unemployment for workers with relatively few skills. The unenviable choice would be between widening wage disparities (the US model?) or persistent high unemployment supported by income redistribution (the European model?). A third, more attractive, outcome is also possible. That is, *wage* dispersion increases, but the stronger economic growth generates both higher wages for all, and the wherewithal for income redistribution to prevent *income* dispersion from also increasing.

## Internationalisation and Economic Growth

Conceptually, the benefits of increased trade can be decomposed into increases in the *level* of output and the *growth rate* of output. In practice, given that the level effects may take a long time to be realised, the distinction is often blurred. Traditional models of trade have emphasised the level effects. By leading to a concentration of resources in the goods that a country produces relatively efficiently, international trade increases the level of output. Once this shift in resources has occurred, the growth rate is unchanged.

More recent models, which fall under the general heading of ‘endogenous growth theory’, or ‘new growth theory’, emphasise the growth-rate effects. These models crystallise insights that have been around for many years. They start by noting that resource endowments and technology are not in fixed supply, but rather can be accumulated. If international trade affects the speed and type of accumulation, then it may be able to change an economy’s growth rate.

If increased trade does increase the level and growth rate of national income, what are the principal mechanisms through which this occurs?

First, the more outward oriented the economy, the greater is the incentive for finding better ways of doing things. This applies not only to the production of goods that are internationally traded, but also to a range of non-traded goods. For traded goods, international competition increases the penalty for poorly performing firms, and increases the return to efficient firms. For some non-traded goods, inward foreign direct investment provides the same type of discipline, by allowing foreign firms with superior technologies to compete with domestic firms. Outward foreign direct investment also allows efficient Australian firms to exploit their comparative advantage on a world scale.

Further, once the logic that competition improves efficiency is accepted, it seems incongruous not to apply that same logic throughout the economy. In particular, as the trade share rises, concerns about competitiveness increase. This puts pressure on any sector, or factor, that supplies inputs to the production of exports or import-competing goods. In addition, the general concern with efficiency makes it easier to reform sectors that have nothing to do with the international economy. These ‘cascading’ competitive

effects are a major conduit through which international trade improves welfare. It is no coincidence that the drive for increased micro-reform has coincided with trade liberalisation.

The second linkage between outward orientation and growth rests on factor accumulation. Here the new growth theory suggests that trade may either increase or decrease an economy's growth rate. If trade redirects resources into activities that do not stimulate learning and technological advances, then it risks trapping the economy in a low-growth path. Alternatively, if trade stimulates training, innovation and research and development it can propel the economy onto a higher growth trajectory.

In Australia's case, the concern is sometimes expressed that free trade will force a reallocation of resources away from manufacturing and towards the primary sector, and that this sector does not offer significant potential for the type of skill accumulation that underpins continuing economic growth. Certainly, as trade reform has taken place, the size of the manufacturing sector has declined. However, this decline began while tariffs were still rising and it has occurred in all industrialised economies. Further, it has been the services sector, and not the primary resources sector, that has been expanding. Despite these trend changes, the last few years have seen the re-emergence of the manufacturing sector, which is now experiencing employment growth and rapid productivity growth.

The challenge for Australia is to underpin the trade reform with the type of domestic policies that encourage competition, innovation, training and the accumulation of skills. The basic message is that trade policy should not be thought of as being independent of what could be loosely called 'background industrial policy'. To achieve the maximum benefit from free trade, Australia needs a highly-skilled and innovative workforce that can easily adapt to, and develop, new technologies.

## **Internationalisation, Employment and Wages**

If trade reform does indeed lead to a more efficient and dynamic economy, real wages and employment opportunities will increase. The concern is that the dispersion of wages will also increase. As tariffs continue to fall, and imports from low-wage countries rise, there may be downward pressure on the employment and the relative wages of workers with few skills. To date, however, the loss of low-skilled jobs in Australia as the result of trade reform appears to be relatively modest. It is only in the clothing and footwear industry that cheaper import prices, associated with lower tariffs, have caused significant job losses.

An alternative but related view is that changes in technology, rather than the direct effects of trade, are driving developments in the labour market. The suggestion is that there is some world-wide technological change that is reducing the demand for unskilled labour. This technological change is mainly driven by general scientific advance. In the United States it is leading to lower wages for unskilled workers. In Australia, and in other countries with relatively inflexible relative wages, it is raising the possibility of chronic unemployment of unskilled workers.

Both increasing wage dispersion and high unemployment are leading to pressure in many countries to limit or reverse trade liberalisation. These pressures seem generally

inappropriate, and particularly so, if the real force is technological change. A more appropriate response is to ask what type of policies might be used to limit, and to deal with, increasing inequality and unemployment.

One response is to give up on the notion that the wages system is an appropriate tool to achieve income distribution goals. Perhaps an economy adjusts more easily to various types of shocks if relative wages are free to move. In the end, a more flexible labour market may deliver lower unemployment and a more dynamic economy. If this is the case, the tax and transfer system is probably the appropriate policy tool to achieve distributional goals. The difficult issue is how to do this. If the market-clearing wage for unskilled workers falls too close to the level of unemployment benefits, is the incentive to work affected? If highly-skilled labour that is internationally mobile is taxed heavily, the incentive to acquire skills may be reduced and the high taxes might lead to a 'brain-drain'. Understanding these interactions between the tax and transfer system and people's incentives is critical to developing successful policies concerning income distribution.

A second response is to upgrade the skills of relatively unskilled workers through increased training. By reducing the relative supply of unskilled workers, it may be possible to increase their relative wage. This idea is attractive. If the training is of the right type, the new growth theory suggests that it might also increase the economy's rate of growth. The fact that training holds the promise of increased growth and less dispersion of income has seen many governments embrace the idea in recent years. The real problem is what type of training is required. Should it be vocational or general? Should training be conducted by government or in the private sector? How should training be paid for? These are questions with no simple answers. However, the twin processes of technological change and internationalisation significantly increase the returns to finding the right answers.

## **Internationalisation and Macro-Management**

In addition to affecting the behaviour of goods and factor markets, internationalisation has affected the financial markets and the interaction of financial markets and the real economy. In this regard, three policy reforms have been particularly important; the floating of the exchange rate and the removal of exchange controls, domestic financial liberalisation and reductions in tariffs. These changes have affected the inflation process, the current account deficit and the relationship between the world and Australian business cycles.

The floating of the exchange rate fundamentally changed the way in which external shocks impact on the domestic economy. Under the fixed rate system, an increase in the terms of trade led to an increase in the foreign exchange reserves at the Reserve Bank and to a substantial increase in domestic demand. Typically, these additional reserves could not be sterilised as interest rates were relatively inflexible. The resulting expansion of money and credit, in conjunction with the higher demand, meant that an increase in the terms of trade led to an increase in the inflation rate; a terms of trade fall deflating the economy.

Under the floating system, increases in the terms of trade appreciate the nominal exchange rate, rather than increase the central bank's reserves. The appreciation has two

effects. First, it redistributes part of the real income gains away from exporters, towards consumers of imports. Second, and perhaps more importantly, the appreciation reduces the Australian dollar price of imports. It may even be that these lower import prices offset the higher prices of non-traded goods brought about by the income-induced rise in demand, with the end result, a decline, rather than an increase, in the measured rate of inflation.

The process of internationalisation also has a number of other implications for both inflation dynamics and the average inflation rate. As the trade share rises, the prices of more and more goods come to be influenced by the exchange rate. This increases the importance of exchange rate movements for understanding the short-run dynamics of inflation. Here, the issue of exchange rate pass-through also becomes more important.

Long-run inflation pressures may also be changed by the process of internationalisation. When financial prices were administered and transactions were regulated, it was relatively difficult for markets to show their concern or displeasure about policy. This is no longer the case: the reaction can be immediate and severe. This may change the incentives for policy makers to undertake radical policies, or policies that the financial markets dislike. If the financial markets dislike inflation more than other groups in society, financial liberalisation and internationalisation might significantly reduce the incentive to inflate.

Further, if a more outward-oriented economy can deliver faster growth, the pressure on policy makers to generate growth through exploiting the short-run trade-off between inflation and growth is reduced. There is also direct downward pressure on prices through the faster productivity growth. In addition, concern over international competitiveness may see workers become more subdued in their wage demands and enterprises more concerned about improving margins through lower costs, rather than higher prices. All these factors suggest that a more open economy may deliver lower average rates of inflation.

A second area in which liberalisation has had a significant impact is the size of the current account deficit. Financial deregulation removed the artificial borrowing constraints on many individuals and firms. With no exchange controls, the increased imbalance between domestic savings and investment was easily financed by capital inflow. The other side of these capital flows was larger and more persistent current account deficits.

The size of these deficits and the resulting rise in foreign debt has generated much debate. There have been two related issues. The first is, should we worry about the size of the resulting liabilities? The second is, if we should worry, what should be done? If the foreign borrowing is the result of undistorted decisions by the private sector, the central concern is whether or not the increase in debt raises the possibility of dramatic domestic adjustment following some general trouble in world capital markets. History suggests that such troubles occur periodically and can cause severe domestic adjustments. Concern also arises if the savings-investment imbalance is driven by a lack of government savings, or if private investors over-estimate the return on investment, or under-estimate future world real interest rates.

A central policy problem is to ensure that individual decisions concerning investment and savings are not distorted unduly by the tax and transfer system. Just as the costs to

having inappropriate training policies are amplified by internationalisation, so too are the costs associated with distortions affecting savings and investment. Other than keeping inflation low, monetary policy has no influence in this area, and is thus an inappropriate instrument with which to influence the size of the current account.

The process of internationalisation also appears to have increased the correlation between the Australian business cycle and the OECD business cycle. There are at least three possible explanations for this change. The first relies on the strengthened trade links. Since the share of Australian output sold abroad has increased, foreign business cycles should have an increased impact on the demand for Australian output. This link between foreign demand and Australian output is not restricted to just the traded sector of the economy. If producers in the non-traded sector see a world recession spilling over to Australia, they are also likely to cut back investment and production.

The second explanation rests on financial markets. Closer movements between Australian and foreign asset markets, coupled with widespread financial deregulation have probably led to a greater synchronisation of the Australian and world business cycles. Many of the countries that liberalised their financial markets in the 1980s experienced an equity and property boom in the second half of the 1980s. The boom was followed by a period of slow output growth in many countries, as companies and banks came to terms with the excessive leading done on the back of the inflated asset prices.

The third explanation for the stronger link between the Australian and world business cycles is the more rapid spread of ideas. Advances in communications technology make it easier to transmit both scientific breakthroughs and policy ideas across national borders. The effects of these advances have been amplified by an increased commitment to the world economy by Australian business people and policy makers.

## **The Papers**

This Volume consists of seven principal papers. In the opening paper, Steve Dowrick provides a survey of both traditional and recent thinking on the links between international trade and economic growth. The paper also presents an empirical study that examines the interactions between openness, investment and growth using data from a range of countries. It tentatively suggests that if Australia's trade ratio was in some sense 'normal', this might add up to half of one percentage point per annum to the long-run growth rate.

While trade liberalisation should increase labour productivity, the macroeconomic data do not provide strong evidence that it is doing so, at least not yet. In part, this reflects the more general problem of explaining trends in aggregate labour productivity. In response to these difficulties, Henry Ergas and Mark Wright use firm-level data from a survey undertaken by the Australian Manufacturing Council to examine how exposure to the international market place changes the behaviour of firms.

In the third paper, John Howe details trends in foreign direct investment over the past decade and examines the relationship between trade and foreign direct investment. In a supplementary paper, Kuzuhiko Ishida examines Japanese foreign direct investment in East Asia and its influence on Japan's trade structure and trade elasticities.

The fourth and fifth papers discuss the interactions between the labour market, trade and technology. Jerome Fahrer and Andrew Pease examine these interactions for the Australian case. Robert Lawrence examines the US case, using both US domestic data and data on US multinationals' foreign operations. Both papers conclude that technological change, rather than trade, is the dominant factor explaining movements in relative wages and employment growth for skilled and unskilled workers.

The final two papers discuss issues related to management of the macro-economy. Susan Collins examines the policy responses of Australia and a number of Asian countries to current account deficits, while David Gruen and Geoffrey Shuetrim examine the implications of greater integration of financial and goods markets for Australian inflation and the business cycle.