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AUSTRALIE

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES

MARS 1987



OECD ECONOMIC SURVEYS



# AUSTRALIA

MARCH 1987

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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# BASIC STATISTICS OF AUSTRALIA

## THE LAND

Area (1 000 sq. km)	7 682.3	Urban population, 30.6.1983, % of total (cities over 100 000)	70
Agricultural area, 1983-84, % of total	62.5	Population of major cities, 30.6.1983 (1 000):	
		Sydney	3 335
		Melbourne	2 865
		Brisbane	1 138
		Adelaide	969
		Perth	969

## THE PEOPLE

Population, 1985 (1 000)	15 752	Civilian employment, 1985-86 (1 000)	6 676
No. of inhabitants per sq. km	2.0	of which: Agriculture	412
Natural increase, 1984-85 (1 000)	130	Industry <sup>1</sup>	1 846
Net migration, 1983-84 (1 000)	35	Other activities	4 418

## PARLIAMENT AND GOVERNMENT

Composition of Parliament following latest elections:

Party	Senate	House of Representatives
Australian Democrats	7	—
Australian Labor Party	34	82
Independent	1	—
Liberal Party of Australia	28	45
National Party of Australia	5	21
Nuclear Disarmament Party	1	—
<b>Total</b>	<b>76</b>	<b>148</b>

Present Government: Australian Labour Party

Next general elections for House of Representatives: at the latest February 1988

## PRODUCTION<sup>2</sup>

Gross Domestic Product, 1985-86 (\$ A million)	232 381	Gross fixed capital formation, 1985-86: Percentage of GDP	24.2
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## THE PUBLIC SECTOR % OF GDP IN 1985<sup>2</sup>

Expenditure on goods and services <sup>3</sup>	27.46	Current revenue	12.79
Current transfers	10.07	of which: Direct taxes	13.32

## FOREIGN TRADE

Main exports in 1985-86, % of total:		Main imports in 1985-86, % of total:	
Rural	36.9	Food, beverages and tobacco	4.8
Metal ores and minerals	15.9	Fuels	6.7
Fuels	25.0	Basic materials	3.2
Metals and metal manufactures	8.6	Chemicals (incl. plastic)	8.3
Machinery and transport equipment	5.0	Metals, metal manufactures	4.7
Other	8.6	Machinery and transport equipment	44.5
		Other	27.8

## THE CURRENCY

Monetary unit: Australian dollar		Currency unit per US dollar, average of daily figures:	
		Year 1985	1.4317
		June 1986	1.4529

1. Including mining, electricity, gas and water and construction.

2. Fiscal year ended 30th June.

3. Current and capital expenditure.

Note: An international comparison of certain basic statistics is given in an annex table.

*This Survey is based on the Secretariat's study prepared for the annual review of Australia by the Economic and Development Review Committee on 20th January 1987.*

*After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 17th February 1987.*

## INTRODUCTION

The recovery from the 1982-83 recession was one of the strongest among post-war cyclical upturns. Output growth was faster than in most other OECD countries, unemployment fell and, at least until end 1984, inflation decelerated. This performance owed much to the expansionary policies followed by the authorities and the consensual incomes policies agreed between the Government and the union movement. However, with domestic demand moving progressively out of phase with that of its main trading partners and terms of trade declining sharply in the wake of a substantial softening in international commodity prices, the current external balance deteriorated further in 1985. This trend was accompanied by a large depreciation of the exchange rate and a reacceleration of inflation.

Worsening external and internal imbalances prompted a reorientation of policies as from early 1985. But in spite of progressively tighter fiscal and monetary policies and a cut in real wages, the imbalances continued to grow. The current account deficit reached 5¾ per cent of GDP in the first half of 1986; foreign debt rose rapidly while the exchange rate depreciated further; inflation reaccelerated to more than 9 per cent and real GDP fell slightly. With competitiveness having improved considerably and policies expected to remain tight, the outlook for the next eighteen months or so is for resumption of positive GDP growth of the order of 3 per cent per annum, some reduction in the external deficit and moderation of inflation.

Australia is now faced with a major adjustment task over the medium term. To halt the rapid rise in the foreign debt/GDP ratio will require a substantial and steady improvement in the current external balance. The development of a viable and competitive services and manufacturing sector will have a key role to play in ensuring the required services and shift of resources from the sheltered to the open sectors of the economy. An appropriate setting of policies will have to be maintained to control domestic absorption and promote sustained non-inflationary growth.

Against this background, Part I of the draft Survey reviews the reorientation of policies that has occurred since early 1985. Part II presents the salient features of economic developments in the two years to mid-1986 and the outlook for the next eighteen months or so. The balance of payments medium-term adjustment process is analysed in Part III; the size of the required adjustment is assessed and underlying conditions explored. Part IV focuses on the manufacturing sector with a view to detecting structural weaknesses which will have to be corrected if a successful adjustment is to take place; a critical assessment of industrial policies pursued so far is also contained in this Part. Finally, conclusions are presented in Part V.



## I. THE 1985/1986 REORIENTATION OF POLICIES<sup>1</sup>

### Overview

As noted, rapidly rising external and internal imbalances led to a marked reorientation of policies from early 1985. Monetary policy was tightened in successive steps; fiscal policy became distinctly less expansionary as reflected in Commonwealth expenditure cuts in May, decisions taken at the Premiers' Conference and Loan Council meeting later that month and the 1985/86 Commonwealth Budget in August. Proposals to restrain the prospective growth in labour costs were agreed between the Government and the Australian Council of Trade Unions (ACTU) in September. These measures, coupled with the significant improvement of external competitiveness in the wake of the large depreciation of the Australian dollar in the first half of 1985, were officially expected to put the Australian economy back on to a more balanced growth path. In the event, economic conditions grew worse in the year to mid-1986, largely due to a further marked deterioration in the terms of trade. This led, in turn, to a further weakening of the Australian dollar and rapidly deteriorating confidence heightening the need for additional policy adjustments. Monetary policy was substantially tightened towards the end of 1985. During the first half of 1986, the authorities indicated the need for further budgetary restraint and wage moderation. Curtailment of State authorities' global borrowing limits was agreed at the Loan Council meeting in June 1986 and a restrictive FY 1986-87 Commonwealth Budget was introduced in August. Finally, a change in the wage determination process is currently being considered, with a view to achieving greater wage flexibility, while maintaining restraint in aggregate wage levels.

### Fiscal policy

A main objective behind the significant tightening of fiscal policy since mid-1985 has been the correction of the widening external imbalance. Reductions in the Commonwealth's budget deficit – and in the public sector borrowing requirement (PSBR) generally – were also seen as instrumental in relieving pressure on financial markets and the cost of funds. Finally, the Government's approach to fiscal policy has been influenced by the need to check the expansion of public debt and interest payments and the associated erosion of budgetary flexibility. Public expenditure growth has slowed substantially since FY 1985-86 (July 1985 to June 1986), in both nominal and real terms. This trend has gone hand in hand with a substantial decline in the gross public sector borrowing requirement, two-thirds of which was accounted for by a reduction in the deficit of the Commonwealth budget. For the Commonwealth Government the growth in the ratio of public debt interest payments to total budget outlays is now expected to slow substantially while the ratio of Commonwealth debt to GDP is projected to decline slightly in 1986/87, following several years of increase.

In the FY 1985-86 Commonwealth Budget revenues grew faster than expenditures (12.6 per cent and 9.7 per cent respectively) (Table 1). Overall, revenues were close to the

**Table 1. Public sector transactions**  
Percentage change from previous fiscal year

	1983/84	1984/85	1985/86	1986/87 Est.
<b>1. Commonwealth<sup>1</sup></b>				
Receipts	9.4	17.5	12.6	11.0
Tax	9.0	18.0	11.4	11.1
Other	13.4	12.6	26.7	10.1
Outlays	15.7	12.9	9.7	6.9
Goods and services	16.3	12.4	12.8	10.9
Capital	-19.1	37.1	8.5	20.0
Transfer payments	15.8	12.9	9.1	6.0
Borrowing requirement (% of GDP)				
Gross	4.6	3.7	2.9	1.9
Net <sup>1</sup>	4.5	3.4	2.9	1.9
<b>2. State and local (total)<sup>1</sup></b>				
Receipts	12.8	11.5	9.5	5.8
From own sources	11.2	14.1	12.6	6.2
Net Commonwealth payments	14.2	9.0	6.6	5.4
Outlays	10.7	8.4	11.0	9.9
Current outlays	11.9	11.9	11.8	9.7
Capital outlays	8.0	0.5	9.0	10.4
Borrowing requirement (% of GDP)				
Gross	3.5	3.4	3.0	2.5
Net <sup>1</sup>	2.3	1.8	2.1	2.8
<b>3. Total public sector borrowing requirement (% of GDP)</b>				
Gross	8.1	7.1	6.0	4.4
Net <sup>2</sup>	7.0	5.2	5.0	4.7

1. Note that for 1986/87 estimates, receipts and outlays for the Commonwealth refer to the budget sector only; for State and local they refer to budget as well as off budget operations.

2. Gross borrowing less any change in financial assets (see footnote 2 in text).

Sources: *Budget Statement, No. 6* and submission of national authorities.

budget estimates but spending on debt interest, defence and transfer payments was higher than initially expected. This reflected different outcomes regarding inflation, the exchange rate, interest rates and unemployment than expected at the time the Budget was framed. There were also supplementary budget allocations for oil producers, medical costs and support for housing investment. The Commonwealth sector net borrowing requirement was a little higher than initially budgeted (by 0.6 per cent of GDP), but lower (0.5 per cent of GDP) than in the previous fiscal year. For the State governments and Authorities, global borrowing limits were reduced at the May 1985 Loan Council meeting and growth of revenues received from the Commonwealth and from their own sources decelerated. Outlays growth by State governments accelerated slightly from the previous fiscal year, while their net borrowing requirement also rose by 0.4 per cent of GDP to 2.2 per cent. Overall, the net borrowing requirement of the public sector<sup>2</sup> fell only marginally from 5.2 to 4.9 per cent of GDP.

Important changes to the tax system were decided upon in the course of 1985. As noted in the last Economic Survey, the tax system was imposing high marginal tax rates on those in middle-income groups while numerous exemptions permitted widespread tax avoidance and reduced the equity of the system. Initially, the Government's preferred option was for substantial reductions in rates of income tax financed by a broadening of the direct tax base and the introduction of a broadly based consumption tax in place of the existing wholesale tax.

As community-wide agreement for the most radical changes could not be reached<sup>3</sup>, a more modest but still substantial package of reforms was announced in September (for greater details see Annex I). The major changes include:

- Progressive reduction in the personal income tax rates, with changes effective from 1st December 1986 and 1st July 1987. The top marginal rate has been lowered from 60 per cent to 55 per cent and will fall to 49 per cent;
- Widening of the tax base to include real capital gains and fringe benefits<sup>4</sup>. In the same vein, entertainment expenses can no longer be deducted from taxable income and substantiation of employment-related expense claims will be required;
- Institution of a quarterly installment system for the provisional tax payment by individuals not liable to PAYE and widening of the coverage for prescribed payments tax<sup>5</sup>;
- Introduction of a foreign tax credit system. Foreign income of Australians will now be taxed but credits for tax paid at source will be allowed;
- Introduction of a full imputation system of company tax applying to dividends out of taxed income, accompanied by the abolition of dividend withholding tax on those dividends (partly paid for by an increase in the company tax rate from 46 per cent to 49 per cent) to eliminate the double taxation of company profits;
- Rationalisation of the wholesale sales tax, with a reduction in the number of rate categories, anomalies and inconsistencies in the application of the tax.

Overall, the revenue losses of tax reform measures may be substantial, of the order of \$3½ billion in a full year (excluding the effects of the capital gains tax)<sup>6</sup>.

Certain of these measures have raised considerable controversy, particularly the introduction of the fringe benefits tax and the higher rate of tax on corporate profits. The business community has argued that the fringe benefits tax will increase the tax burden of the business sector and that compliance costs would be high. In the light of these criticisms the Government has made modifications to reduce unintended effects. The widening of the income tax base should improve horizontal equity. In the case of fringe benefits, which were a major means of tax avoidance, particularly for higher income salary earners, there is now a trend to convert some of the non-cash benefits into cash income. Nonetheless, marginal tax rates remain higher for lower income levels than would have been the case under the Government's preferred option. Further, while there has been some rationalisation of the wholesale tax system and broadening of the base, the overall level of indirect taxation remains low relative to other OECD countries. More importantly, the multiple rate structure distorts relative prices considerably and imposes differential tax burdens between persons with different consumption patterns.

The Government's main macroeconomic objective in framing the FY 1986/87 Commonwealth Budget was to reduce pressure on the external accounts, through curbing domestic demand growth, improving expectations and promoting greater stability in money and foreign exchange markets. Further expenditure cuts were made and taxes were raised. Expenditure reductions were spread over a wide range of items, with the largest cuts in health and social security, education, defence and foreign aid. Against this, there were a number of additional expenditures largely for assistance to specific industries and to support housing. Overall, expenditure was estimated to be reduced by a net \$2 billion, with real spending expected to remain broadly unchanged. Approximately three-quarters of the cuts are carried forward into the next fiscal year. On the receipts side, the Government delayed the introduction of the first *tranche* of tax reductions by three months<sup>7</sup>, raised the Medicare levy, and increased a number of indirect taxes. As a result, Commonwealth tax revenues are expected to rise by 0.3 per cent

of GDP to 25.5 per cent. The higher tax burden has been supplemented by an additional large increase in the profits received from the Reserve Bank. Overall, the Commonwealth gross borrowing requirement is projected to be reduced by 1 percentage point to 1.9 per cent of GDP, a trend expected to contribute to reducing pressure on financial markets and interest rates.

Table 2. Public sector capital account<sup>1</sup>  
Per cent GDP

	1981-82	1982-83	1983-84	1984-85	1985-86
Finance of gross accumulation	4.2	2.2	1.0	1.6	2.2
of which:					
General government	2.7	1.4	-0.5	0.3	0.9
Public enterprises <sup>1</sup>	1.5	1.3	1.5	1.3	1.3
Gross fixed capital expenditure	6.9	7.6	7.1	7.2	7.3
of which:					
Commonwealth general government	0.3	0.4	0.3	0.4	0.4
State and local general government	2.9	3.0	3.0	3.1	3.3
Commonwealth public enterprises	0.9	0.9	0.9	0.9	1.1
State and local public enterprises	2.8	3.4	2.9	2.9	2.6
Total net lending <sup>2</sup>	-3.2	-5.5	-6.8	-5.6	-5.0
of which:					
Commonwealth general government	0.3	-1.9	-3.4	-2.7	-2.0
State and local general government	-0.8	-0.6	-0.4	-0.5	-0.7
Commonwealth public enterprises	-0.6	-0.3	-0.9	-0.4	-0.3
State and local public enterprises	-2.7	-2.7	-2.1	-2.0	-2.0
Net public sector borrowing requirements <sup>3</sup>	-3.6	-6.2	-6.8	-5.2	-4.9
Gross fixed capital expenditure (as a per cent of total)	100.0	100.0	100.0	100.0	100.0
Commonwealth budget	3.9	4.8	4.8	5.4	5.2
State and local budget	42.3	38.6	42.4	43.2	44.4
Commonwealth public enterprises	13.3	12.1	12.1	11.9	15.1
State and local public enterprises	40.5	44.5	40.7	39.5	35.3

1. Public sector and public enterprises excluding public financial enterprises.

2. Total net lending = finance of gross accumulation - gross fixed capital expenditure - increase in stocks - purchases of land and intangible assets.

3. Differs from total net lending because of statistical discrepancy and inclusion of public financial enterprises.

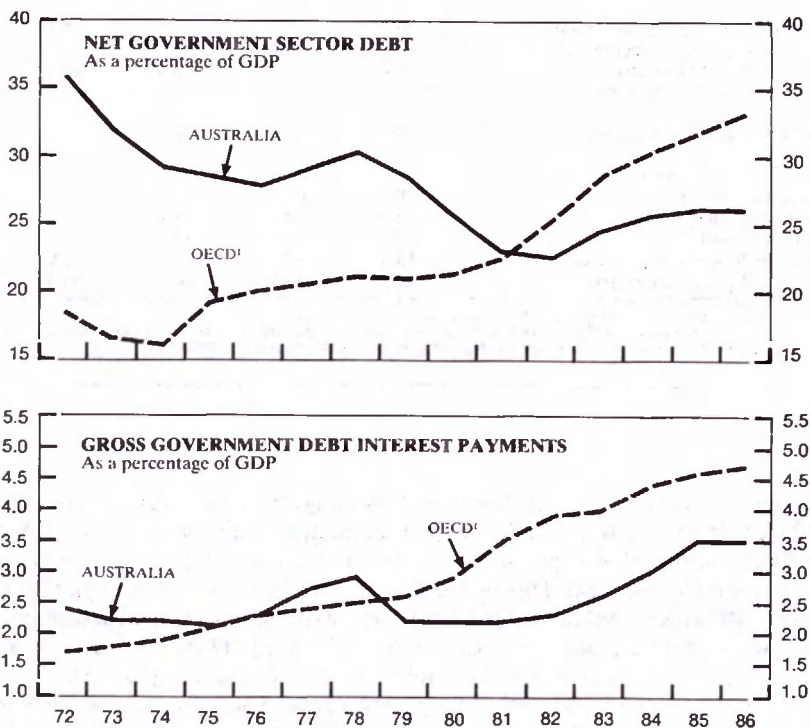
Source: ABS and Treasury.

The growth in outlays by the State and local government sector (including public enterprises) may decelerate by around 1 percentage points to some 10 per cent in FY 1986-87. Growth in final consumption expenditure should slow but capital outlays are expected to accelerate to around 9½ per cent. During the late 1970s and early 1980s, capital expenditure of the State authorities (public enterprises) rose with major infrastructure projects in electricity generation, transport and port facilities (Table 2). These projects are now being completed and no works programmes of similar size are foreseen. However, this has been partly offset by higher capital spending by governments. The projected slowing in capital works programmes by the State authorities was reflected in the June 1986 Loan Council agreements between the Commonwealth and State Governments to reduce the borrowing limits applying to State authorities by \$685 million, or about 10 per cent. Thus, their gross borrowing requirement should fall by 0.5 per cent of GDP to 2.5 per cent.

Overall, the gross borrowing requirement of the public sector is estimated to fall by 1.6 per cent of GDP in FY 1986/87, or somewhat more than in the two previous fiscal years. Nonetheless, the negative demand impact is expected to be considerably less, reflecting the scope for state authorities to draw down financial reserves<sup>8</sup>. Indeed, the net borrowing requirement of the state and local government sector is expected to rise in FY 1986-87 by 0.7 percentage points of GDP, such that the fall in the net borrowing requirement of the entire public sector will only be 0.3 percentage points. On the other hand, at the Commonwealth level, the contractionary stance as measured by changes in the cyclically adjusted budget deficit is probably greater than indicated by the reduction in the borrowing requirement. Owing to the marked slowdown in activity, the impact of "automatic stabilizers" will probably be important.

The rate of accumulation of debt in the public sector and the growth of debt interest payments is projected to decelerate (Diagram 1). In the Commonwealth sector, the ratio of debt to GDP may even decline slightly, whereas it is likely to rise further in the State and local government sector.

Diagram 1. Public sector debt and debt interest payments  
Percent of GDP



1. Excluding Portugal and Switzerland.

Source: OECD. For further information see J.C. Chouraqui, B. Jones, and R.B. Montador, "Public Debt in a Medium Term Context and its Implications for Fiscal Policy", OECD Dept of Economics and Statistics Working Papers, May 1986.

## Monetary policy

### *The new environment*

With the floating of the exchange rate, the dismantling of foreign exchange controls and the subsequent deregulation of the financial system, the environment in which monetary policy operates has changed dramatically in recent years<sup>9</sup>. The removal of restrictions on trading bank activities has ushered in a more competitive and innovative environment. Competition has been further enhanced by the authorisation of twenty-one new banks including the granting of sixteen licences to foreign banks<sup>10</sup>. In April 1986, the limits on maximum rates of interest charged on banks' new loans for housing of under \$100 000 was removed. Since deregulation, the trading banks have been able to win back market shares from non-bank financial intermediaries. More generally, intermediation within the financial sector would seem to have increased, at the expense of direct financing<sup>11</sup>. Lending is now almost exclusively determined by interest rates as there are no general restrictions on bank lending or on competition for deposits.

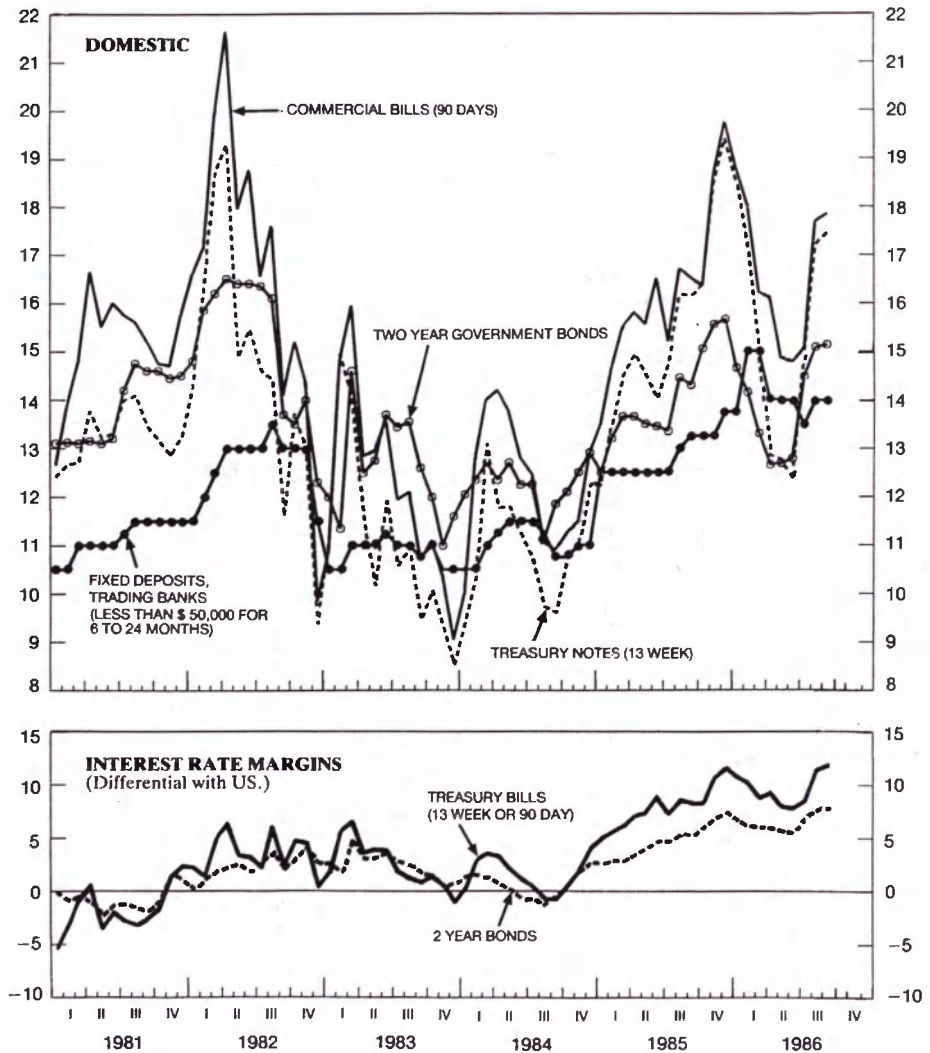
As a consequence of the above-mentioned changes, traditional relationships between monetary aggregates and the ultimate policy objectives (inflation and activity) have at least temporarily been distorted and the Government abandoned the conditional projections of M3 in early 1985. Policy setting is now made on the basis of the so-called "check list" in which the authorities review a range of financial and economic indicators<sup>12</sup>. No particular "indicator" is predominant and the weight placed on each one will change with economic circumstances. Where conflicting signals are given by the various indicators, the authorities are guided by the predominant trend. To help stabilize the policy environment the Reserve Bank has moved to reduce uncertainty and smooth fluctuations in monetary conditions by increasing the flow of information to the market<sup>13</sup>. Some additional changes to money market operations were also made to smooth seasonal fluctuations in liquidity and interest rates<sup>14</sup>.

With the deregulation of the banking system, the substantial growth in the number of banks and the rapid diversification of banks' activities both at home and abroad, the Reserve Bank has strengthened its prudential supervision. Each new authorisation to open a bank now carries conditions that the new bank will consult with the Reserve Bank on prudential matters and will operate within prudential standards determined by the Reserve Bank. These conditions formalise for new banks what have been informal arrangements with the existing banks. The Reserve Bank now requests reporting by banks' external auditors on: the observance of prudential standards; management systems to control exposures and limit risks; and the reliability of statistical data and compliance with statutory requirements. Increased attention is being placed on large exposures and "off-balance sheet" business. A prime assets ratio (PAR) requirement was introduced in May 1985, which requires banks to hold 12 per cent of total Australian dollar assets in high quality liquifiable assets<sup>15</sup>. Banks are also required to manage net open positions in foreign exchange within defined limits. Finally, the Reserve Bank has introduced higher minimum capital ratios for banks<sup>16</sup>.

### *The stance of monetary policy*

The monetary stance was gradually tightened from early 1985 to stem the rapid expansion in money and credit (Table 3). By June, short-term interest rates were on average 3 to 4 percentage points higher than a year earlier. (Diagram 2). As the exchange rate came under growing pressure, monetary policy was further tightened late in the year, the Reserve Bank reducing liquidity sharply through open market operations. Short-term interest rates

**Diagram 2. Interest rates and margins**  
Per cent



Sources: Reserve Bank of Australia Bulletin ; ABS; OECD.

rose again sharply and interest rate differentials with United States markets, which had been widening steadily since mid-1984, jumped to 11.5 percentage points. Long-term rates rose by less and there was a marked inverse yield curve. This was in line with the Government's view that the tightening was temporary and would be eased once the effects of a more restrictive fiscal policy and the depreciation fed through into slower demand growth and an improvement

Table 3. Interest rates and monetary aggregates

	1983/84	1984/85	1985/86	1986			
				Q1	Q2	Q3	Q4
<b>Interest rates<sup>1</sup></b>							
Commercial bills (90 days)	11.9	13.5	16.8	17.7	15.3	16.9	15.8
Treasury bonds: 15 years	14.2	13.7	13.7	13.5	12.7	14.3	13.8
<b>Monetary aggregates<sup>2</sup> :</b>							
% of GDP <sup>3</sup>							
M3	0.41	0.43	0.44	0.44	0.44	0.44	..
Broad money	0.69	0.70	0.71	0.71	0.71	0.71	..
In % change <sup>4</sup>							
M3	10.9	17.5	13.0	14.2	13.0	9.3	9.4
Broad money	11.5	16.0	13.4	14.8	13.4	9.4	9.7
<b>Lending to private sector:</b>							
Total financial intermediaries	12.1	20.8	19.8	21.4	19.8	18.6	..
By banks	12.5	23.9	22.0	24.5	22.0	20.9	..
By NBFIs	12.3	9.8	18.1	18.5	18.1	16.2	..

1. Averages of monthly data.

2. Breaks due to establishment of new banks.

3. End of period.

4. Percentage change on one year earlier for the last month of each period.

Source: ABS, Reserve Bank of Australia.

in the foreign balance. The underlying rate of increase in the major monetary aggregates began to slow towards the end of 1985.

During the early months of 1986 interest rates started to ease gradually, reflecting reductions in interest rates overseas, capital inflows and some evidence that growth of economic activity was slowing in response to tighter policies. By April, they had returned to levels before the November tightening but remained higher than in early 1985. The exchange rate during this period strengthened slightly compared to the last two months of 1985. Interest rates, after falling in the first half of May, did not change much from mid-May to end June. However, pressures reappeared on the foreign exchange market in May and the exchange rate depreciated further in June and July, reaching a low against the U.S. dollar of slightly more than 57 U.S. cents. A number of factors were at play. Disappointing current account figures and low commodity prices led to a reassessment of the longer-term prospects for the balance of payments. This was accompanied by concern about the impact of wage indexation and the ability of the Government to take what was seen to be the necessary fiscal action. With continuing pressure on the dollar – even after the announcement of a more restrictive budget than expected by the market – monetary policy was tightened further. From June to end-August short-term rates rose by about 3 percentage points to between 17 and 18 per cent. Although official policy was not to establish or defend any particular exchange rate level, the Reserve Bank was active on the foreign exchange market, as evidenced by the \$2.5 billion reduction in official reserve assets of valuation effects) (20 per cent of official assets) in July and August. In addition, the Government further reduced barriers to capital inflows<sup>17</sup>. Controls on foreign investment were eased in July, and in November, the Government relaxed restriction on investments at interest by foreign governments.

Sentiment appears to have been reversed in the fourth quarter. Interest rates have started to fall and the trade weighted exchange rate has strengthened. The Reserve Bank has been able to replenish its foreign exchange holdings. The stance of monetary policy has continued to



be firm. Real interest rates remain high by historical standards – of the order of 5 to 6 per cent – but near to rates in international markets. High nominal interest rates have added considerably to debt charges of firms, widening the gap between gross operating surplus and net profits in the corporate trading enterprise sector.

### **Incomes policies and industrial relations<sup>18</sup>**

The wage determination process has remained dominated by the bilateral Accord between the Australian Council of Trade Unions (ACTU) and the Labor Party<sup>19</sup>. In September 1985, the Commonwealth Government and the ACTU agreed on a continuation of the Accord for a further two-year period. The principle of indexation was maintained. However, in view of rising external inflationary pressure and the risk of a price and wage spiral, a 2 percentage points discount for the direct effect of the depreciation of the Australian dollar earlier in 1985 was accepted for wage increases expected in the first half of 1986. The ACTU also agreed to delay its demand for a real wage increase (or productivity-related award) until early 1986 and to take this in the form of improved occupational pensions (superannuation), to be introduced over a two-year period beginning mid-1986<sup>20</sup>. The loss in purchasing power was to be offset by a reduction in taxes in September 1986.

The national wage case decision by the Commission in November 1985 reflected the arrangements agreed under the Accord. Awards were increased by 3.8 per cent, or the full amount of price increases for the first and second quarters of the year. The next decision, scheduled for April 1986, was delayed until June and incorporated a number of elements. In the review of the wage determination system by the Commission, centralised wage setting was maintained, but principles were modified to give more weight to economic considerations. The Commission also agreed to the 2 per cent discount that had been proposed in the renegotiated Accord, and indicated that future indexation adjustments would occur in January and July. By not allowing for backdating, the effective wage discount from full indexation was raised<sup>21</sup>. The decision regarding the “productivity award” was more complex. While rejecting the imposition by arbitration of any occupational superannuation contributions on employers over the next two years, the Commission agreed to ratify agreements between unions and employers to improve superannuation schemes, but under certain limits and not before the beginning of 1987, except in special and isolated circumstances<sup>22</sup>.

In view of worsening economic conditions, in the wake of the terms-of-trade loss and the further sharp depreciation of the exchange rate, the Authorities have argued in favour of further real wage moderation. As early as June 1986, the Government indicated it would make the case for a further wage discount in the January 1987 adjustment. This was reiterated in the 1986/1987 budget where the possibility of further discounts at mid-1987 was raised, if economic conditions warranted it. At the same time, unions have continued to push for superannuation improvements. There is little evidence that the superannuation is coming through in a broadening in pension coverage to groups currently uncovered. Rather, increases have related to upgrading existing plans.

An active debate is currently taking place in Australia regarding the most desirable wage determination system. One of the problems in assessing the Accord is that it is impossible to know how wages, and industrial relations more generally, would have developed under any alternative system. To its credit, the current system has adapted to economic events to a greater extent than generally expected at the time of its inception. Achieving, over the last eighteen months or so, an overall fall of around 3 per cent in real compensation per employee and 3¾ per cent in real average earnings was not a small success in view of the rapid increase in

employment and hours worked. But the Accord and the centralised wage determination system has also had drawbacks. Although the flexibility of the Accord has been stressed, negotiations between Government and union regarding the required size of the wage adjustment have tended to be long and the outcome uncertain. This may have negatively influenced business and foreign investors' expectations, leading to hesitancy in investment decisions and exchange market pressures. To the extent that monetary policy had to be tightened to support the currency, interest rates were higher than would otherwise have been the case. Finally, movements in award wages at the national level allow little change in relative wages. If the wage structure is maintained over too long a period in the face of changes in supply and demand, imbalances can appear in individual skill markets. As noted, excess demand began to emerge in certain sectors in 1985 with shortages most evident for nurses and computer analysts<sup>23</sup>.

Against this background, the introduction of a two-tier wage determination process is currently being considered, including both centralised and decentralised negotiations. This seems likely to take the form of a flat rate increase for the first *tranche* as a national wage increase, with a second increase negotiated on a firm-by-firm or industry-by-industry basis<sup>24</sup>. Most recent information suggests that, after allowance for wage drift and improved superannuation entitlements, compensation per employee may grow on average by around 6½ per cent in 1987. With prices expected to grow by more than 7 per cent during the period, real wages would fall further. This approach has obvious attractions since the formal link to prices would be abolished. Wage developments could be more directly related to productivity trends and firms' performance. However, although measures are currently envisaged to minimise the risks associated with the move to more decentralised wage bargaining, the danger of an excessive increase in overall labour cost cannot be entirely excluded. A number of uncertainties still surround the details of principles that will apply to the second tier. There is also concern that labour disputes may increase where negotiations over the amount of the second-tier increase break down.

## II. RECENT TRENDS AND SHORT-TERM PROSPECTS

### Developments in the two years to mid-1986

The strong recovery of the Australian economy, following the 1982-83 recession, came to an end in the third quarter of 1985. Activity weakened further in the first half of 1986, with GDP falling by 1 per cent (s.a.a.r.) (Table 4 and Diagram 3). With import prices rising substantially more than export prices, real national income developments were even weaker; GDP adjusted for terms of trade<sup>25</sup> fell in the first half of 1986 by 3 per cent. However, employment growth remained strong, lagging behind the weakening of activity. A key feature of developments since early 1985 was the marked deterioration in the current external balance, the continued rapid increase in foreign debt and the reacceleration of inflation. The current account deficit widened to 5¾ per cent of GDP in the first half of 1986, a development accounted for by the marked worsening in the terms of trade, the valuation effects of the depreciation of the Australian dollar and the growing cost of servicing the country's foreign debt. In contrast, net trade volume improved in the year to mid-1986, exerting a significant positive contribution to growth. In a context of falling inflation abroad, price increases in Australia (as measured by the private consumption deflator) reaccelerated from early 1985 to more than 9 per cent in the first half of 1986. This was essentially due to rising import prices in the wake of the depreciation of the Australian dollar and, possibly also, to faster growth in unit labour costs as productivity fell.

### *Demand and output*

Private consumption, after growing less rapidly in the second half of 1985, fell in the first half of 1986 with a particularly marked decline in the first quarter (Diagram 4). Although employment growth remained remarkably strong, real compensation per employee decreased through 1985 and into 1986 as wages lagged prices. From mid-1985, real agricultural incomes also fell substantially. Net taxes and transfers only marginally affected the growth in real disposable income in the second half of 1985, but sharply reduced it in the first half of 1986. Spending on consumer durables was depressed by high interest rates and lower levels of dwelling completion. Automobile purchases remained very strong through most of 1985, but then fell sharply from November. In addition, a number of special factors tended to bring forward purchases into the second half of 1985<sup>26</sup>. Finally, higher rates of inflation may have affected household spending via wealth effects and higher uncertainty<sup>27</sup>. Thus, despite weakening income growth, the savings ratio rose again in 1986 after falling through 1985.

Government expenditure, although showing sharp fluctuations, contributed strongly to GDP growth in the year to June 1986. This reflected purchases of materials (partly for defence purposes) and higher public sector employment. Government investment remained broadly flat over the period.

Table 4. Demand and output  
Percentage changes, volume<sup>1</sup>

	From previous year <sup>2</sup>				From previous period, seasonally adjusted annual rate					
	1983	1984	1985	1985/86	1984		1985		1986	
	Calendar years			June year	I	II	I	II	I	Q3
Consumption										
Private	1.5	2.5	4.3	2.7	1.7	3.6	5.3	3.0	-0.7	1.5
Public	6.3	5.2	6.3	5.5	7.1	6.0	8.8	1.7	9.6	-20.9
Gross fixed investment	-7.7	4.7	6.1	1.6	7.2	2.2	8.7	4.9	-9.9	20.4
of which:										
Public	0.4	1.4	9.2	3.4	-1.3	12.5	9.6	7.8	-8.5	41.4
Private:										
Total	-11.1	6.1	4.7	0.8	11.3	-1.8	8.6	3.6	-10.7	10.7
Dwellings	-10.6	20.6	2.8	-0.9	26.9	7.8	0.2	3.4	-10.1	-14.8
Other construction	-22.8	-6.0	22.3	21.3	-6.7	26.3	18.5	26.1	17.6	129.5
Equipment	-7.6	0.3	1.7	-3.7	6.0	-14.1	12.9	-2.2	-19.5	0.5
Real estate transfer costs	15.2	23.8	-2.7	-8.8	30.4	-0.5	-6.3	2.6	-31.3	54.2
Final domestic demand	-0.1	3.4	5.0	2.9	3.8	3.7	6.7	3.2	-1.3	1.0
Change in stockbuilding <sup>3</sup>	-0.7	1.9	-0.4	-0.0	1.8	-1.3	-0.5	0.6	-1.7	-4.2
of which:										
Private non-farm <sup>3</sup>	-1.5	2.5	-0.1	-0.0	3.9	0.1	-0.7	1.1	-1.2	-4.4
Farm and miscellaneous <sup>3</sup>	0.9	-0.6	-0.4	-0.0	-2.1	-1.4	0.2	-0.5	-0.4	0.2
Total domestic demand	-0.7	5.2	4.5	2.9	5.6	2.2	6.1	3.8	-2.9	-3.2
Exports of goods and services	-3.1	15.7	10.9	7.1	17.4	16.2	10.0	7.9	2.8	10.1
Imports of goods and services	-10.1	20.5	5.2	0.9	27.6	19.5	-2.8	9.0	-10.0	2.8
Change in foreign balance <sup>3</sup>	1.5	-1.1	0.9	1.1	-1.9	-0.9	2.4	-0.3	2.7	1.3
GDP (expenditure-based estimate)	0.8	4.2	5.6	3.9	4.0	1.3	8.5	3.5	-0.3	-1.9
Statistical discrepancy <sup>3</sup>	-0.4	2.7	-1.1	-0.3	5.2	0.5	-3.2	1.6	-0.6	2.8
GDP (income-based)	0.4	7.0	4.4	3.6	9.2	1.8	5.3	5.1	-0.9	0.9
of which:										
Farm	2.7	16.1	3.1	-2.8	-3.8	-0.1	14.2	-13.5	6.4	2.5
Non-farm	0.2	6.4	4.5	4.0	10.1	2.0	4.8	6.5	-1.4	0.8
GDP (adjusted for terms of trade) <sup>4</sup>	0.9	7.0	3.1	1.6	9.0	1.2	4.4	3.1	-2.9	1.2

1. Volume data measured at 1979/80 prices.

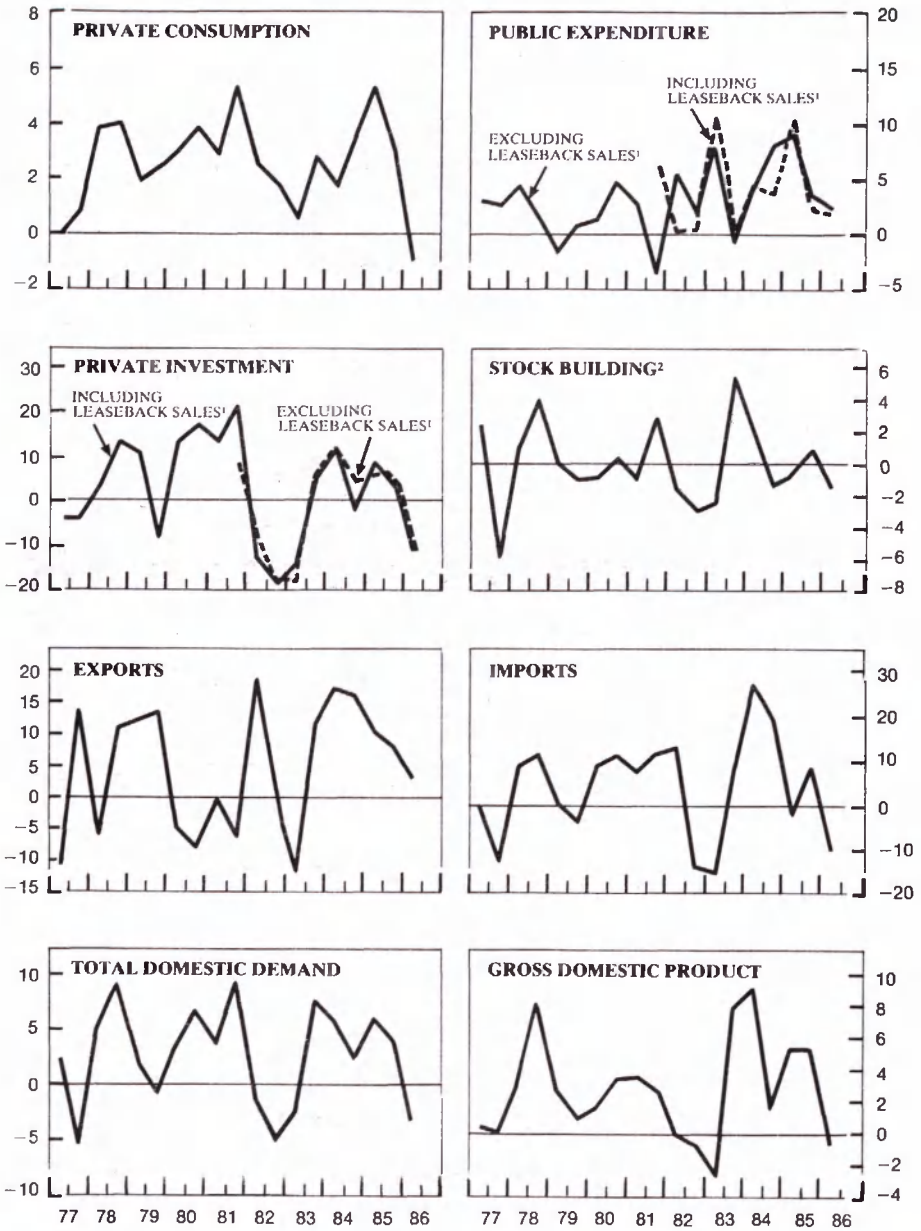
2. Published annual national accounts estimates are compiled for years ended 30th June. The calendar year estimates have been obtained by summing original quarterly data.

3. Contribution to GDP growth (percentage points on income measure).

4. Exports of goods and services revalued by the deflator of imports of goods and services. See also note 25 in text.

Sources: Quarterly Estimates of National Income and Expenditure, ABS.

**Diagram 3. Demand and output**  
Half-years per cent growth seasonally adjusted annual rates

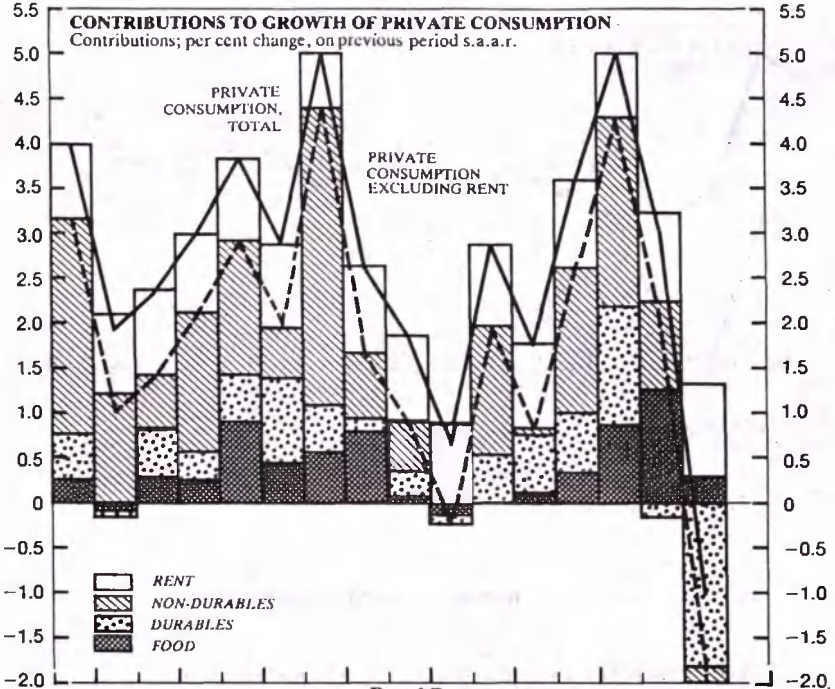


1. Adjusted by the Secretariat for the sale of major capital assets by the public sector to the private sector and subsequent leaseback.

2. Contribution to percentage change in GDP at annual rates.

Source: Australian Bureau of Statistics.

Diagram 4. Private consumption, income<sup>1</sup> and savings<sup>2</sup>  
Panel A



Panel B

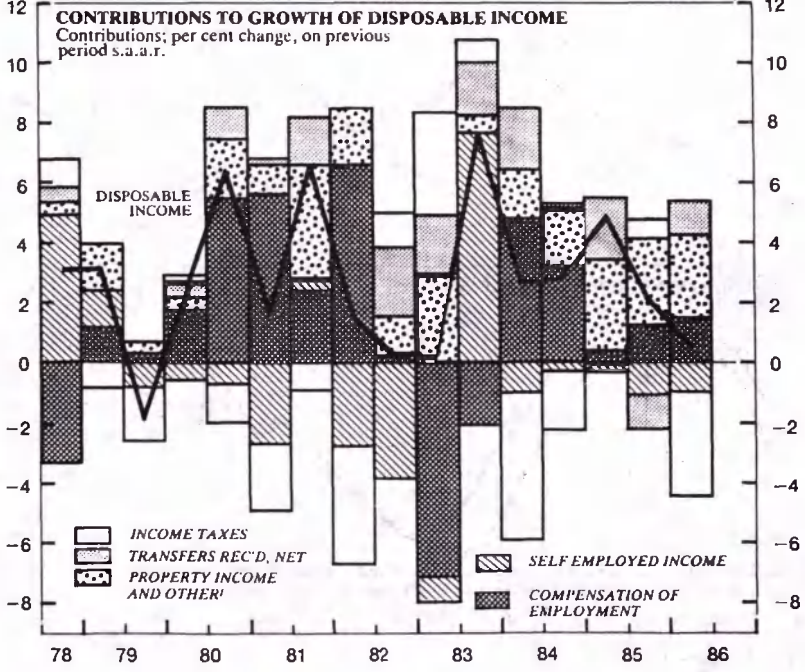
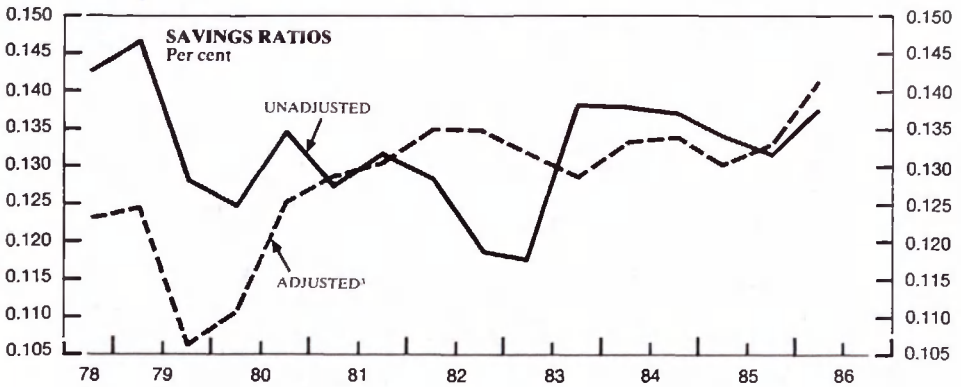


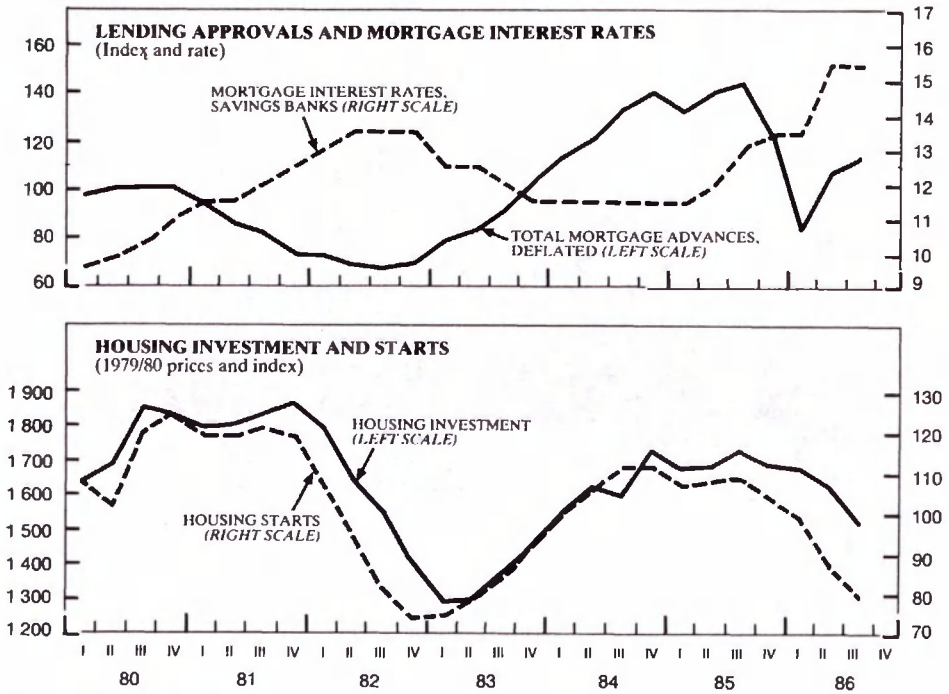
Diagram 4 (Continued). Private consumption, income<sup>1</sup> and savings<sup>2</sup>  
Panel C



1. Net of consumer debt interest.
2. Data for consumption does not take into account the effect of transferring part of medical spending from the private to the public sector.
3. In the adjusted series, savings and household income were calculated using a 4 year moving average of self employed agricultural income.

Source: Australian Bureau of Statistics.

Diagram 5. Indicators of residential investment

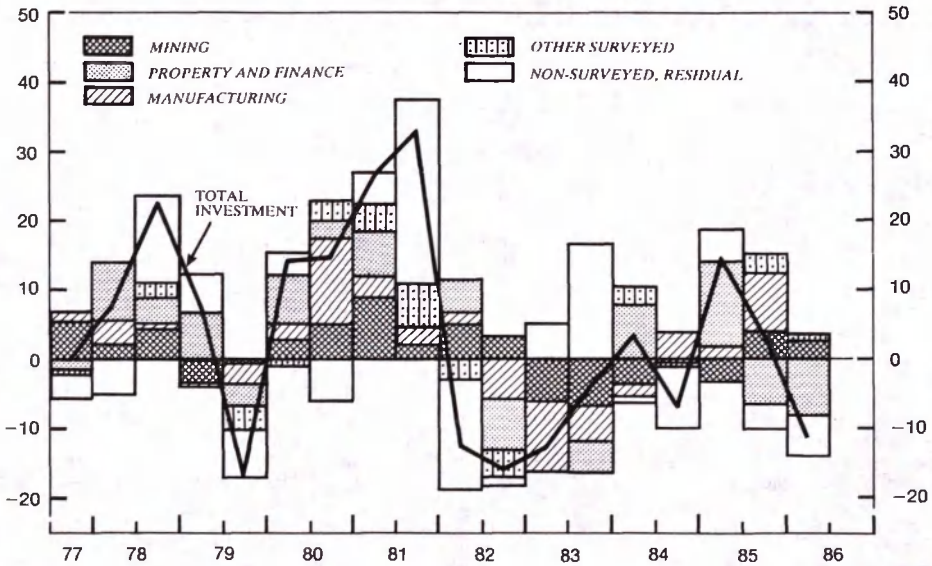


Source: ABS, NIF-10 Model Database.

Residential investment expanded strongly in the two years to mid-1985<sup>28</sup> (Diagram 5) but weakened substantially thereafter. Given the constraints on mortgage lending rates, higher market interest rates reduced the ability of savings banks to compete for deposits and led to reductions in available finance. These constraints eased in April 1986, when the interest rate ceiling for new saving bank mortgages was removed and subsidies granted to banks to allow them to maintain interest rates on existing mortgage lending. Although mortgage approvals recovered in the second quarter, residential construction has remained weak.

Despite rapid growth in aggregate demand since the cyclical trough in early 1983, private business investment has remained low in relation to GDP, although non-residential construction has displayed greater strength than machinery and equipment investment. Engineering construction has been weak since the end of the 1979-82 boom, except for a few large mining projects<sup>29</sup>. However, non-dwelling construction in other sectors has risen strongly. Hotel accommodation has expanded in expectation that tourism will be boosted by special events in 1986-88<sup>30</sup> and because greater international competitiveness of the industry is encouraging investment. More recently, there has also been substantial growth in office and shop building and some in manufacturing.

Diagram 6. Contributions to growth of private business investment  
Per cent change (s.a.a.r.), contributions



Note: Gross investment by business in non-dwelling construction and equipment (volume). Diagram combines survey and national accounts data. Data for individual sectors are from survey data which primarily covers large firms. The non-surveyed is the residual between total investment on a national accounts basis and the total surveyed. Does not take into account sales by the public sector to the private sector and their subsequent leaseback.

Source: Australian Bureau of Statistics.

The level of machinery and equipment investment, after adjustment for sale and lease-back transactions, was 2 per cent lower in the first half of 1986 than in the previous trough three years earlier. This development was largely associated with the trend decline in mining investment since the mining investment boom in 1981-82 and the recent sharp fall in



automobile sales for leasing purposes<sup>31</sup>. Investment in manufacturing was stronger, probably influenced by some advance purchases of equipment before the ending of the investment allowance, increased competitiveness in the wake of the devaluation in early 1985 and higher capacity utilisation<sup>32</sup>. On the other hand, a number of other factors have exerted a negative influence. While the gross operating surplus of corporate trading enterprises has risen since the trough, this has been partly offset by a rapid increase in debt interest payments. Levels of indebtedness had risen sharply during the preceding investment cycle and although some reduction took place as profits recovered, debt/equity ratios have remained troublingly high in many cases<sup>33</sup>. The rise in interest rates has increased the cost of debt servicing, negatively affecting company net income (see section on prices and profitability). High real interest rates have also reduced the incentive to invest in real as opposed to financial assets, as evidenced by the growing proportion of financial assets in total firms assets.

On the whole, the contribution of stockbuilding to GDP growth has been negative in the two years to mid-1986. Agricultural stocks were run down following the bumper harvest in 1983-84. The fall was particularly marked in the first half of 1986. The non-farm stocks-to-sales ratio continued to decline in 1985, although actual levels of inventory accumulation remained positive. This declining trend may be related to the higher proportion of consumption spending going to services and a smaller share of manufacturing in GDP. But

Table 5. Foreign trade

	1985	1983	1984	1985	1985		1986	
	Value \$A billion	Percentage change over previous period (seasonally adjusted annual rate)						
					I	II	I	Q3
<b>Exports</b>								
Volumes								
Rural	11.9	-19.4	23.7	10.4	9.1	10.4	9.4	7.4
Fuels	8.0	23.1	29.3	18.9	3.8	20.7	-27.9	82.4
Metals (ores and manufactures)	7.8	5.4	4.1	5.1	13.0	-0.5	5.8	-19.2
Other manufactured goods	4.4	10.8	14.5	9.1	3.6	5.5	10.4	25.8
Total non-rural goods	20.2	11.3	13.8	10.5	7.5	8.0	-6.1	17.2
Services	5.4	-4.8	4.7	13.7	22.6	1.3	21.7	-4.9
Goods and services	37.4	-3.1	15.7	10.9	10.0	7.9	2.8	10.0
Price deflator								
Rural	..	10.3	3.7	8.7	15.8	2.6	-5.6	27.5
Fuels	..	4.2	-1.4	17.1	27.8	5.0	-14.7	18.7
Metals (ores and manufactures)	..	6.4	2.9	12.6	18.9	0.5	-8.1	64.4
Other manufactured goods	..	9.5	2.0	5.3	1.1	12.2	2.0	24.8
Total non-rural	..	7.1	1.9	13.0	17.6	5.6	-9.8	38.6
Services	..	8.9	3.8	4.7	3.0	10.5	6.7	4.1
Goods and services	..	9.2	2.4	10.4	14.9	5.2	-6.1	28.2
<b>Imports</b>								
Volumes								
Food and raw materials	2.7	-0.2	14.4	1.5	3.1	-6.3	5.6	-33.1
Fuels	2.2	-31.7	6.3	-17.1	-29.4	4.4	-13.3	574.9
Manufactured goods	28.8	-10.0	24.0	9.1	-0.4	15.6	-12.1	-3.7
Services	9.6	-5.5	17.4	1.0	-4.6	-3.2	-7.6	-10.4
Goods and services	43.4	-10.1	20.5	5.2	-2.8	9.0	-10.0	2.8
Price deflator								
Food and raw materials	..	8.6	7.0	14.1	14.8	12.6	11.0	15.1
Fuels	..	-0.3	-2.5	13.2	21.7	-1.1	-45.5	-42.8
Manufactured goods	..	8.0	3.3	18.6	21.1	20.3	10.5	38.3
Services	..	7.4	0.7	18.3	25.4	17.5	3.2	37.3
Goods and services	..	6.3	2.3	17.7	21.2	18.1	5.6	26.4

Source: Australian Bureau of Statistics.

Table 6. Balance of payments  
\$ million

	1983	1984	1985	1986	1985		1986	
					I	II	I	II
<b>Seasonally adjusted</b>								
Trade balance	45	-931	-1 692	-	-151	-1 541	-1 807	-
Net services	-2 673	-3 548	-4 261	-	-2 052	-2 209	-1 708	-
Net investment income	-4 038	-5 313	-7 168	-	-3 548	-3 620	-3 685	-
Net transfers	86	121	771	-	315	455	403	-
Current account	-6 580	-9 671	-12 350	-	-5 435	-6 915	-6 797	-
<b>Not seasonally adjusted</b>								
Trade balance	26	-1 024	-1 824	-3 235	169	-1 993	-1 388	-1 847
Net services	-2 681	-3 556	-4 252	-3 584	-2 011	-2 241	-1 668	-1 916
Net investment income	-4 043	-5 325	-7 187	-8 082	-3 508	-3 679	-3 635	-4 447
Net transfers	84	137	759	1 003	248	511	319	684
Current account	-6 614	-9 768	-12 504	-13 898	-5 102	-7 402	-6 372	-7 526
<b>Capital account</b>								
<b>Direct investment:</b>								
Outflow	687	2 039	2 648	-	1 279	1 369	594	-
Inflow	3 159	497	2 164	-	1 602	562	362	-
<b>Portfolio and other investment:</b>								
Outflow	383	2 348	4 111	-	1 204	2 907	2 743	-
Inflow	5 885	9 872	10 807	-	5 403	5 404	7 234	-
General government (net)	427	1 331	1 959	2 977	944	1 015	2 013	964
Reserve Bank (net)	-3 379	1 435	3 260	-1 022	1 394	1 866	258	-1 279
Capital account balance	5 021	8 748	11 430	-	6 859	4 571	6 530	-
Errors and omissions	1 593	1 020	1 074	-	-1 757	2 831	-158	-

Sources: Australian Bureau of Statistics, Reserve Bank of Australia.

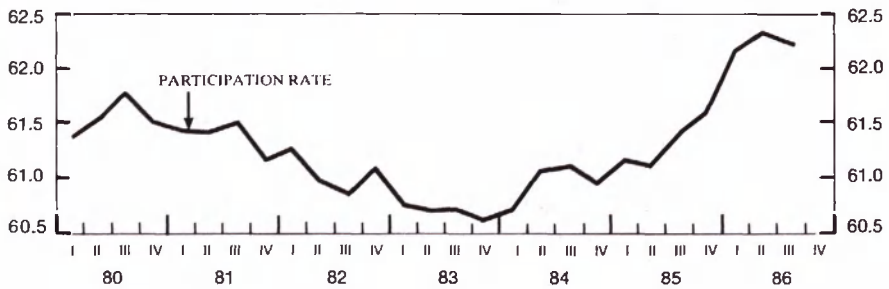
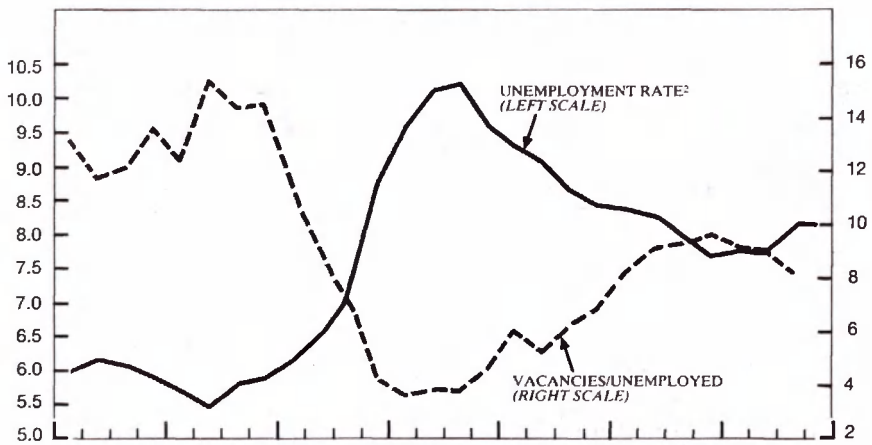
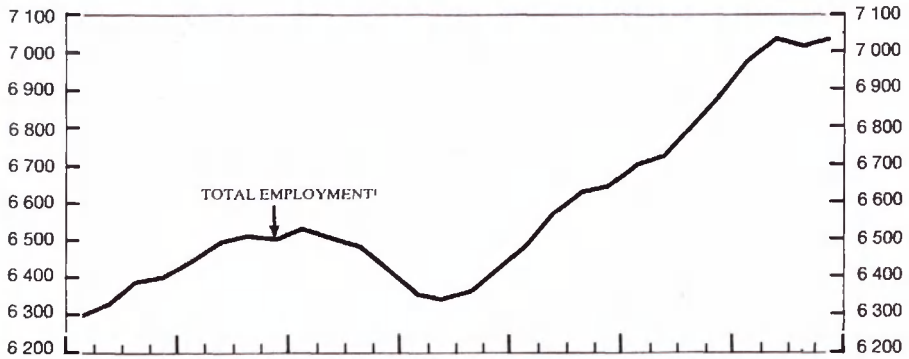
high interest rates and improved inventory control have probably also played a role. In the first half of 1986, the stocks-to-sales ratio increased somewhat, reflecting involuntary inventory accumulation.

The contribution of the real foreign balance to GDP growth was substantial over the three half years to mid-1986 (of the order of 1¾ percentage points on average). Export volume growth tended to decelerate steadily (Table 5). But import growth has slowed down much faster, a rebound in the second half of 1985 being followed by a marked fall in the first half of 1986. This reflected both income and relative price effects, namely, weaker domestic demand and improved competitiveness of import competing sectors following the depreciation of the Australian dollar in early 1985. Invisible payments rose as a result of higher interest payments on foreign denominated debt (Table 6), but this was largely offset by higher private transfer receipts. On a balance-of-payments basis, the current external deficit widened to A\$13¾ billion (s.a.a.r.) in the second half of 1985 and remained at about that level (A\$13½ billion) in the first half of 1986. From end January 1985 until end June 1986, the Australian dollar depreciated in nominal effective terms by around 30 per cent; the depreciation vis-à-vis the U.S. dollar amounted to around 10 per cent. For further details see Part III.

#### *Labour markets, employment and productivity*

The increase in employment has been greater relative to output than in any upswing since the beginning of the 1970s<sup>34</sup> (Diagram 7). Employment growth remained strong in the first

**Diagram 7. Employment, unemployment, vacancies and participation rates**  
Thousands and per cent



1. Values taken at mid-period.  
2. Values taken at mid-period. Per cent of civilian labour force.  
Source: Australian Bureau of Statistics.

Table 7. Employment and labour productivity by industry

	Employment share in 1985/86	Percentage change						Average 1980/81-1985/86
		1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
<b>A. Employed persons</b>								
Agriculture <sup>1</sup>	6.2	2.5	-1.2	1.9	-2.1	-1.2	4.6	0.4
Mining	1.5	8.5	11.2	-2.0	2.1	-4.0	11.6	3.6
Manufacturing	16.7	-0.3	0.6	-8.5	-4.2	1.1	-0.9	-2.4
Electricity, gas and water	2.0	2.5	-1.6	9.2	2.3	-3.0	2.9	1.9
Construction	7.8	4.2	-2.2	-7.9	-6.2	10.9	2.9	-0.3
Wholesale and retail trade	20.0	1.1	0.4	-1.9	-0.3	3.6	4.9	1.3
Transport, storage and communications	6.8	-2	2.0	2.0	-4	-0.7	3.0	1.2
Finance, property and business services	9.9	8.4	4.6	0.9	4.2	5.2	8.3	4.6
Public administration	5.4	4.4	1.5	0.9	6.2	0.3	1.8	2.1
Community services	16.9	4.7	1.6	1.4	4.4	4.9	3.0	3.3
Entertainment and personal services	6.7	1.5	2.2	0.7	2.2	5.0	3.5	2.7
Market sector <sup>2</sup>	77.3	2.0	1.2	-2.6	-1.1	2.9	3.7	.8
Total economy	100.0	2.6	1.3	-1.8	0.2	3.1	3.5	1.2
<b>B. Labour productivity</b>								
Agriculture <sup>1</sup>	6.2	-11.9	15.7	-17.9	34.6	5.1	-6.2	0.7
Mining	1.5	-6.8	-11.7	9.2	6.7	14.6	-7.3	1.8
Manufacturing	16.7	2.4	1.6	0.6	5.6	3.4	5.7	3.4
Electricity, gas and water	2.0	2.1	8.7	-7.4	1.7	7.9	-0.7	1.9
Construction	7.8	3.6	3.7	-1.3	0.9	-0.6	1.9	.9
Wholesale and retail trade	20.0	1.5	2.7	-0.8	2.6	0.8	-0.6	0.9
Transport, storage and communications	6.8	4.3	4.1	-3.8	6.6	7.4	.0	2.8
Finance, property and business services	9.9	0.1	-0.1	0.0	0.1	0.0	-3.3	-0.7
Public administration	5.4	0.1	0.1	0.0	-1	.2	1.1	.2
Community services	16.9	-2.0	1.9	1.9	.4	-8	1.7	1.0
Entertainment and personal services	6.7	0.7	-0.1	-1.3	-1.1	-3.5	-3.7	-1.9
Market sector <sup>2</sup>	77.3	0.6	3.1	-1.9	5.7	2.8	-3	1.9
Total economy	100.0	0.4	2.9	-0.8	4.5	2.2	0.1	1.8

1. Including forestry, fishing and hunting.

2. All sectors except public administration, community services and ownership of dwellings.

Source: Australian National Accounts, Gross Budget by Industry (ABS 5211.0), and Treasury estimates.

half of 1986, (4.8 per cent at annual rate), long after demand and output began to weaken. At the end of the second quarter, numbers employed were 10.8 per cent above the trough of the 1982-83 recession and 7.3 per cent above the peak of the preceeding upswing. The rise in employment has been accompanied by an increase in average hours and overtime worked, but has not led to any widespread skill shortages. The greater responsiveness of employment to output growth in the current cycle (in other words the weaker productivity growth) may in part reflect the shift in output towards construction and the service sector (Table 7). Three sectors – wholesale and retail trade, finance, property and business services and community services – accounted for about 70 per cent of total employment growth in the three years to mid-1986. Because employment in these industries is dominated by women with a large proportion of part-time workers, the growth in female employment was considerably more rapid than for men. Part-time employment also rose faster than its trend increase over the past ten years<sup>35</sup>. The growth in public administration and community services combined was roughly similar to that of total employment<sup>36</sup>. Employment in the construction industry increased substantially reflecting the housing boom. Most of these sectors have lower trend productivity growth<sup>37,38</sup>. In contrast, there was virtually no increase in manufacturing

Table 8. Labour force indicators

	1981	1982	1983	1984	1985	1986	1985				1986			
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Civilian labour force <sup>1</sup>	1.7	1.5	1.3	1.9	2.4	3.6	3.5	2.5	3.7	3.6	5.7	3.1	1.2	2.5
<i>of which:</i>														
Males	1.6	1.3	0.9	1.2	1.1	2.1	1.9	1.5	2.5	1.5	3.7	1.8	.8	1.8
Females	2.0	1.8	1.9	3.2	4.5	5.6	6.3	4.1	5.7	7.0	9.0	5.2	1.8	3.6
Employed persons <sup>1</sup>	2.1	0.0	-1.8	3.0	3.3	3.7	4.0	3.3	5.0	5.0	5.4	3.3	-1.2	2.4
<i>of which:</i>														
Males	1.9	-0.4	-2.7	2.3	2.0	2.4	2.3	1.6	4.3	3.9	3.2	1.5	-1.1	0.8
Females	2.5	0.6	-0.2	4.2	5.5	5.8	6.9	6.0	6.2	6.7	8.9	6.1	-1.3	4.8
Employed persons: Full time <sup>1,3</sup>	1.9	-0.5	-2.6	2.6	2.3	3.0	3.1	0.0	4.7	4.1	5.8	1.3	-0.9	1.9
Part time <sup>1,3</sup>	3.4	2.7	2.1	5.2	7.8	6.7	8.5	19.3	6.5	8.9	1.8	5.8	-2.4	..
Unemployment rates <sup>2</sup>	5.8	7.2	10.0	9.0	8.2	8.1	8.5	8.4	8.1	7.8	7.8	7.8	8.3	8.4
<i>of which:</i>														
Males	4.8	6.4	9.7	8.7	7.9	7.6	8.2	8.2	7.8	7.3	7.4	7.4	7.8	8.2
Females	7.4	8.5	10.4	9.5	8.6	8.7	9.0	8.6	8.5	8.5	8.5	8.4	9.1	8.8
Juniors looking for full-time work	16.4	19.7	26.5	24.7	21.9	21.8	23.3	22.0	21.6	20.6	21.2	22.3	22.8	22.1
Aged 20 and over looking for full-time work	4.4	5.7	8.7	7.6	7.0	6.8	7.2	7.2	6.9	6.6	6.5	6.2	7.1	7.2
Participation rate <sup>2</sup>	61.1	60.8	60.4	60.6	61.1	62.0	60.7	60.9	61.2	61.4	62.0	62.1	62.0	62.0
<i>of which:</i>														
Males	78.0	77.4	76.7	76.3	75.9	76.0	75.9	75.9	76.0	75.9	76.2	76.2	75.9	75.8
Females	44.7	44.7	44.7	45.3	46.6	48.4	46.0	46.3	46.8	47.3	48.1	48.5	48.5	48.6
Average hours worked <sup>3</sup>	34.7	34.4	34.2	34.6	34.4	34.0	34.8	34.4	34.6	34.1	35.0	33.2	34.7	34.2
Overtime hours per week, non-farm <sup>3</sup>	1.5	1.4	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3
Non-farm vacancies (thousands) <sup>3</sup>	..	..	..	39.1	54.0	53.5	55.0	56.6	52.4	51.8	59.0	54.4	48.6	59.9

1. Percentage change over previous period at seasonally-adjusted annual rates.

2. Seasonally adjusted.

3. Not seasonally adjusted.

Source: ABS.

employment, and with higher output in the first two years of the upswing, productivity rose dramatically in this sector. While changes in the structure of output have tended to increase the response of employment, the recent declines in real wages also appear to have played an important role<sup>39</sup>.

Despite a rise in participation rates, unemployment fell by 1.2 percentage points in the two years to mid-1986, to 7.8 per cent of the labour force. The unemployment rate for juniors (aged 15 to 19 years, looking for full-time work) declined substantially until the end of 1985, but edged upwards again in the first half of 1986 (Table 8). At 22.3 per cent in the second quarter, the unemployment rate for this category of the population remained high. Median duration of unemployment declined by around one-tenth, whereas the mean duration remained stable. The proportion of long-term unemployed among the total unemployed fell during the period but still remains substantial<sup>40</sup>. This may reflect the change in the output structure as a substantial proportion of those unemployed for over two years are displaced from the manufacturing sector tend to be older with little educational attainment and are located in declining areas. With demand in service sectors requiring different skills, these workers have been bypassed. An increasing number of workers are being drawn from outside the labour force as measured – showing up as an increase in participation rates rather than a lower unemployment rate<sup>41</sup>.

### *Prices, costs and profitability*

Inflation, as measured by the private consumption deflator, slowed in 1984 to an annual rate of about 5½ per cent in the second half of the year, roughly in line with the OECD average (Table 9 and Diagram 8). Price increases reaccelerated thereafter, primarily reflecting higher import prices in the wake of the depreciation of the Australian dollar and possibly to faster growth in unit labour costs. Initially, foreign exporters absorbed part of the devaluation effect but prices were adjusted subsequently; by the third quarter of 1986, import prices had risen by roughly 75 per cent of the cumulated exchange rate changes since early 1984. Nevertheless, import prices may have affected domestic prices with a longer lag than suggested by historical relationships. By the first half of 1986, the private consumption deflator was rising at an annual rate of over 9¼ per cent, an acceleration standing in marked contrast with developments elsewhere in the OECD area<sup>42</sup>. These diverging trends can only be partly ascribed to the differential treatment of lower oil prices. With government revenues from oil production falling, the authorities decided to increase the excise tax on petroleum products allowing only one-half of the fall in oil prices to feed through into lower domestic prices.

Growth in award wages reaccelerated to 5¼ per cent in the year to the first half of 1986<sup>43</sup>. However, ordinary time earnings (after adjusting for differences in the timing of surveys) tended to grow about 1 to 1½ per cent faster than awards. Since there is little evidence of wage increases outside national decisions, part of the difference may be explained by compositional changes in the workforce, particularly in the service sector. It may also reflect agreements within firms, such as job reclassification by employers which have the effect of raising average take-home pay. On a national accounts basis, average earnings in the non-farm sector, rose slightly faster than ordinary time earnings, partly reflecting higher employer charges for workers' compensation and redundancy pay<sup>44</sup>. Unit labour costs grew slowly in 1985 with a slight acceleration in the second half of the year, reflecting higher wage costs. But as productivity fell in the first half of 1986, unit costs rose sharply; while earnings increased by around 5½ per cent (s.a.a.r.), unit labour costs increased by 13 per cent.

Table 9. Recent trends in prices and costs  
Percentage change from previous period: annual rates

	1981		1982		1983		1984		1985		1986	
	I	II	I	II	I	II	I	II	I	II	I	Q3
National accounts deflators <sup>1</sup>												
Private consumption	8.8	9.5	10.3	12.8	9.2	7.6	7.0	5.6	7.4	9.0	9.3	11.4
Total domestic demand	9.4	9.6	12.4	12.1	7.5	6.1	7.6	6.1	7.0	10.1	9.1	14.4
GDP	9.2	10.1	11.4	11.6	7.9	7.2	7.8	5.4	5.8	7.3	7.5	12.4
Exports of goods and services	6.2	-1.1	2.4	7.4	11.1	7.3	-2.3	7.2	14.6	5.5	-6.3	28.4
Imports of goods and services	4.9	1.0	8.6	9.9	7.3	0.7	-1.0	10.9	21.2	18.1	5.5	26.4
Non-farm GDP	10.4	11.3	13.1	11.5	7.7	7.4	8.0	5.7	6.2	7.2	8.4	11.1
Consumer price index												
Food	8.5	10.5	5.0	10.3	10.9	8.1	4.2	5.6	5.5	8.1	9.0	11.4
Total	9.3	10.9	10.4	12.9	9.8	8.0	1.8	4.3	6.9	9.0	8.6	10.9
Total excluding hospital and medical services	9.5	9.9	9.0	12.2	9.3	8.1	6.1	5.5	6.8	9.2	8.3	10.8
Manufacturing												
Articles produced by manufacturers	8.2	6.8	9.3	10.3	8.1	6.0	5.0	5.7	6.5	7.6	3.7	10.6
Wage costs <sup>1</sup>												
Award wage rates <sup>4</sup>	11.4	10.1	17.5	12.5	2.5	5.0	9.3	4.4	2.7	5.2	5.1	9.7
Average non-farm earnings <sup>2</sup>	13.7	11.5	19.5	15.3	2.3	3.5	9.8	7.3	5.3	7.0	6.7	11.0
Average weekly earnings, all employees <sup>3</sup>	n.a.	n.a.	18.6	10.5	6.0	6.8	14.3	4.6	4.4	5.7	7.9	8.1
Non-farm unit labour costs	10.3	12.2	21.9	11.0	1.1	1.5	4.4	6.8	3.5	5.5	11.3	11.9
Gross operating surpluses <sup>1</sup>												
Corporate trading enterprises	6.5	17.5	4.2	1.2	29.8	31.2	43.2	-2.6	11.5	18.6	-8.8	22.0
<i>Memorandum item:</i>												
Productivity (per person employed in the non-farm sector)	3.1	-0.1	-1.0	7.3	2.2	0.3	3.9	-0.6	2.4	3.2	-5.0	-1.1

1. Derived from seasonally adjusted data.

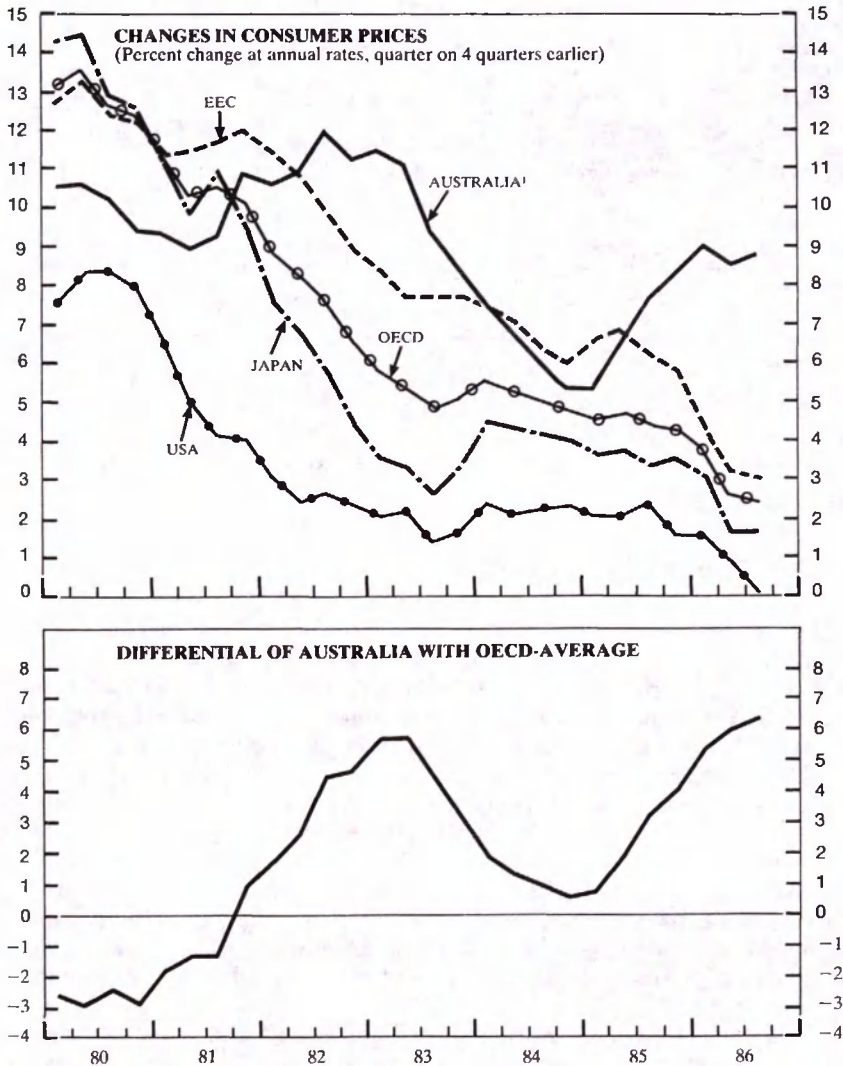
2. On a national accounts basis.

3. On a survey basis, not seasonally adjusted.

4. Persons, weekly wage earners series.

Source: ABS.

Diagram 8. Comparative inflation performance



1. Australia - Adjusted for medicare.  
Source: OECD.

The profit share seems to have fallen somewhat, the decline between the second half of 1985 and the first half of 1986 reflecting slower output growth and the terms-of-trade loss. The gross rate of return in corporate trading enterprises, after reaching a peak of 32 per cent in FY 1984-85, fell back to 30 per cent in FY 1985-86. Net rates of return appear to have declined somewhat less - from around 10% to 9½ per cent. High interest rates have



Table 10. Rates of return, corporate trading enterprises

	1981/82	1982/83	1983/84	1984/85	1985/86
Gross rate of return	28.4	25.1	30.5	32.1	30.1
Less: Depreciation <sup>1</sup>	7.1	6.7	7.4	7.6	7.3
Net rate of return	21.3	18.4	23.1	24.5	22.7
Less: Taxes <sup>1</sup>	6.9	5.1	5.7	6.0	5.3
Net interest payments <sup>1</sup>	6.7	7.3	7.3	8.3	8.1
Profit rate	7.7	6.0	10.0	10.2	9.4
Corporate gross operating surplus share <sup>2</sup>	13.3	12.5	14.4	14.0	13.7
	1984I	1984II	1985I	1985II	1986I
Corporate gross operating surplus share <sup>2</sup>	15.0	13.9	14.2	14.4	13.0

1. As a percentage of capital stock.

2. As a percentage of gross non-farm product at factor cost.

Source: Treasury, NIF model.

contributed to continued pressure on profit margins by keeping total debt charges relative to capital stock at high levels.

#### Most recent trends and short-term outlook<sup>45</sup>

While sharp quarter to quarter fluctuations mask underlying developments, the third quarter national accounts suggest that the trough of the cycle may now have been reached (Table 4). A strong contribution to GDP growth from the foreign balance has been accompanied by some recovery in private consumption, non-residential construction and public investment. This has been partly offset by weakness in other components of investment and by an acceleration in the rate of destocking. Labour market is also showing greater resilience. Employment rose in the fourth quarter at an annual rate of 2.4 per cent, while job vacancies and advertisements are also showing more encouraging signs. However, domestic demand appears likely to remain weak. Motor vehicle sales have declined since September and recent investment surveys are less optimistic than earlier in the year. The current account of the balance of payments is estimated to have improved in the fourth quarter when the deficit declined to 13½ billion (s.a.a.r.). The exchange rate has also risen somewhat, allowing the Central Bank to replenish its foreign exchange reserves, and interest rates have tended to fall.

Fiscal policy will be more restrictive in FY 1986/87 and monetary conditions are assumed to remain tight. There may be some further decline in short-term interest rates from their current high levels, but in view of the external constraint long-term rates are expected to remain relatively high, particularly in real terms. Against this policy background, the outlook to mid-1988 is for resumption of positive growth as from the second half of 1986, with GDP expanding at an annual rate of around 3½ per cent in the three half years to mid-1988. Net export volumes are projected to remain the main element of strength until mid-1987, with domestic demand progressively taking over thereafter. Labour market conditions are expected to deteriorate. Inflation, after peaking in the first half of 1986 may decelerate over the next year and into 1988, although remaining somewhat higher than the OECD average. Finally, the current external deficit is estimated to have been 5½ per cent of GDP in the second half of 1986 and is expected to decline to 4¼ per cent of GDP in the first half of 1988.

Table 11. Short-term forecasts

	Per cent share of GNP 1982	Constant 1979/80 prices, seasonally adjusted, percentage changes at annual rates										
		Calendar years			Fiscal years			1986		1987		1988
		1985	1986	1987	1985/86	1986/87	1987/88	I	II	I	II	I
Private consumption	62.0	4.3	¾	1¾	2.7	1	2	-0.7	1¾	1½	2	2½
Government consumption	15.8	6.3	5	2	5.5	3	1½	9.6	-¼	3½	1	1
Gross fixed investment	24.3	6.1	-4	-3	1.6	-4¼	0	-9.9	0	-7	2¼	3
<i>Of which:</i>												
Public investment	7.8	9.2	-½	-3	3.4	-1	-1½	-8.1	7½	9¾	1½	1
Private dwellings	3.7	2.8	-7½	-2½	-0.9	-8¾	2¾	-10.0	-12	0	3½	4
Private construction	2.9	22.3	19	-10	21.3	4¼	-5¼	17.6	15½	-25.0	2	4
Private plant and equipment	9.0	1.7	-11½	-¾	-3.7	-7	1¾	-19.5	-3	-1	2	4
Final domestic demand	102.1	5.0	½	¾	2.9	¼	1½	-1.3	1.0	0	1¾	2½
Stockbuilding <sup>2</sup>	0.0	-0.4	-1	¼	-0.0	-½	½	-1.7	-½	½	¼	¼
Total domestic demand	102.0	4.5	-½	1	2.9	-½	2	-2.9	½	½	2¼	2¾
Foreign balance <sup>2</sup>	-2.8	0.9	1½	2	1.1	1¾	1¾	2.7	¾	3	1½	¾
Exports of goods and services	17.4	10.9	3½	4	7.1	2½	4¼	2.8	¾	6	3¾	4
Imports of goods and services	20.2	5.2	-4	-6½	0.9	-6½	-4½	-10.0	-3¼	-9½	-4	¼
GDP at market prices <sup>3</sup>	100.0	4.4	1	3	3.6	1¼	3½	-0.9	1¼	3½	3½	3½
<i>Memorandum items:</i>												
Consumer prices <sup>4</sup>		7.4	9¼	7¼	8.7	8¾	6	9.3	9¼	7	6	5½
Unemployment rate		8.1	8	8½	7.8	8¼	8½	7.7	8¼	8½	8½	8½
Current balance (A\$ bill.)		-12.4	-14½	-13	-13.7	-14½	-12¼					
As per cent of GDP		-5.6	-6	-5	-5.9	-5¾	-4½					

1. Based on seasonally adjusted data.

2. Contribution to growth.

3. Includes statistical discrepancy not shown elsewhere.

4. Private consumption deflator.

Source: Secretariat forecasts.

The forecast for private consumption is predicated on relatively restrained wage growth. Recent developments on wage policy suggest that the next national wage increase is unlikely to occur before the second quarter of 1987. The Australian Conciliation and Arbitration Commission has indicated in an interim decision that while there is insufficient support for a continuation of the existing system, there is generally broad agreement for retention of a centralised approach, for a structured set of principles and for a two-tiered system. A conference of the-wage case parties was held in January 1987 to discuss the operation of a new system and wage increases can be expected to begin to appear from March/April for the first tier. In the Secretariat forecasts, a first-tier increase of around 2½ per cent is assumed to occur largely in the second quarter of 1987. This, combined with supplementary increases through negotiations at the plant and industry level (second tier), and continuing improvements to pension schemes, is projected to result in a 6-6½ per cent increase in compensation per employee in 1987. Real compensation per employee may continue to fall in the first half of the year, rising slightly thereafter. The main impetus to private consumption is expected to come from continued strength in other income – partly reflecting higher interest payments on assets and the tax reductions in December 1986 and July 1987. On this basis, private consumption may grow by 1¾ per cent in 1987 with an acceleration through the year and into 1988.

Government consumption and investment expenditure is expected to grow by around 1 per cent in the year to mid-1987. For FY 1987-88, it has been assumed that the Commonwealth Government will reduce the ratio of tax and expenditure to GDP in line with earlier commitments. At the level of the States and local authorities, expenditure growth is also assumed to decelerate. Cash reserves will have been run down in FY 1986-87 and the Commonwealth Government is expected to maintain a restraining influence through the Loan Council and direct payments to the States.

The future behaviour of private investment is particularly uncertain. High interest rates, depressed farm prices and lower net after-tax profits will tend to lower the rate of capital formation in agriculture, mining and extraction industries. But with improved growth prospects and regained external competitiveness, manufacturing investment is expected to strengthen. On the basis of most recent information, private business investment might begin to rise again in the second half of 1987 accelerating to 4½ per cent in the first half of 1988. Machinery and equipment investment in the manufacturing sector is likely to be the strongest element, and there are some early indications that construction may pick up in this sector as well. Following a further decline in the second half of 1986 and first half of 1987, residential construction may recover somewhat. The availability of finance is no longer a constraint, but interest rates appear to be holding back demand. After being initially depressed by the slow growth in import volumes, the rate of inventory accumulation in the non-farm sector is assumed to recover but the stock-to-sales ratio may continue to decline somewhat<sup>46</sup>.

Given the wage assumptions and the expected marked slowdown in import prices as the effects of the depreciation of the dollar wear off, domestic price increases could continue at over 9 per cent in the second half of 1986, decelerating to around 5½ per cent by the end of the forecast period. Employment is forecast to slow substantially in the second half of 1986 but to strengthen somewhat thereafter. Despite some discouraged worker effects, the labour force may grow at a marginally faster pace and unemployment could rise to around 8½ per cent by mid-1988.

Merchandise export volumes are projected to grow by 3 to 3½ per cent, or approximately in line with export markets. Shipments of primary commodities are expected to remain weak, particularly for food where intense international competition is reducing export possibilities. Lower export prices may also reduce supply in the farm sector. The difficulties facing the Japanese economy – and the iron and steel industry in particular – should put downward

pressure on shipments of coal and iron. However, this may be offset by stronger demand from Asian NICs as steel production in those countries expands, a temporary increase in uranium following the lifting of the embargo and higher exports of gold. Manufactured export volumes should continue to outstrip market growth, reflecting regained competitiveness. The sharpest improvement is likely to come from services, in particular tourism. There has been a major expansion in facilities, costs are now more competitive and a number of special events are likely to attract foreign visitors. Import volumes are expected to fall sharply throughout 1987, stabilizing only in the first half of 1988. Weaker domestic demand and sluggish investment performance will be important factors, although import substitution is also likely to occur in the wake of improved competitiveness. In spite of favourable trade volume developments, the terms-of-trade loss, the devaluation-related valuation effects and the growing cost of servicing the country's rising foreign debt are estimated to have lead to a slight widening of the current account deficit to A\$13¾ billion in the second half of 1986 (s.a.a.r). While there may be erratic movements over the forecast horizon, depending on the timing of import and export flows, this may be followed by a trend decline to around A\$12 billion in the first half of 1988. By then, net external debt outstanding may reach some A\$100 billion or around 35 per cent of GDP.

### III. BALANCE OF PAYMENTS ADJUSTMENT PROCESS

Australia is presently faced with a serious external imbalance characterised by a large current account deficit, high and rapidly rising foreign debt and growing servicing costs. Given the marked improvement in external competitiveness in the wake of the 35 per cent nominal effective depreciation of the Australian dollar since early 1985 and the tightening of policies, a gradual improvement is projected over the next eighteen months or so. However, by the first half of 1988, the deficit may still amount to 4¼ per cent of GDP, suggesting that the adjustment may be relatively slow and painful. A further substantial and steady improvement in the external position will be needed if the debt to GDP ratio is to stabilize over the medium term (say by 1990-91). Key balance-of-payments trends since the early 1960s will be briefly reviewed, with a view to setting the current balance-of-payments difficulties into historical perspective. In particular, main forces acting on the current account will be identified. The size of the required medium-term adjustment will then be assessed and necessary underlying conditions explored through a number of scenarios. In presenting medium-term scenarios for the balance of payments and external debt, it should be emphasized that they are neither forecasts nor projections. They only illustrate how broad aggregates might unfold on the basis of certain assumptions, variations in which can produce quite different outcomes.

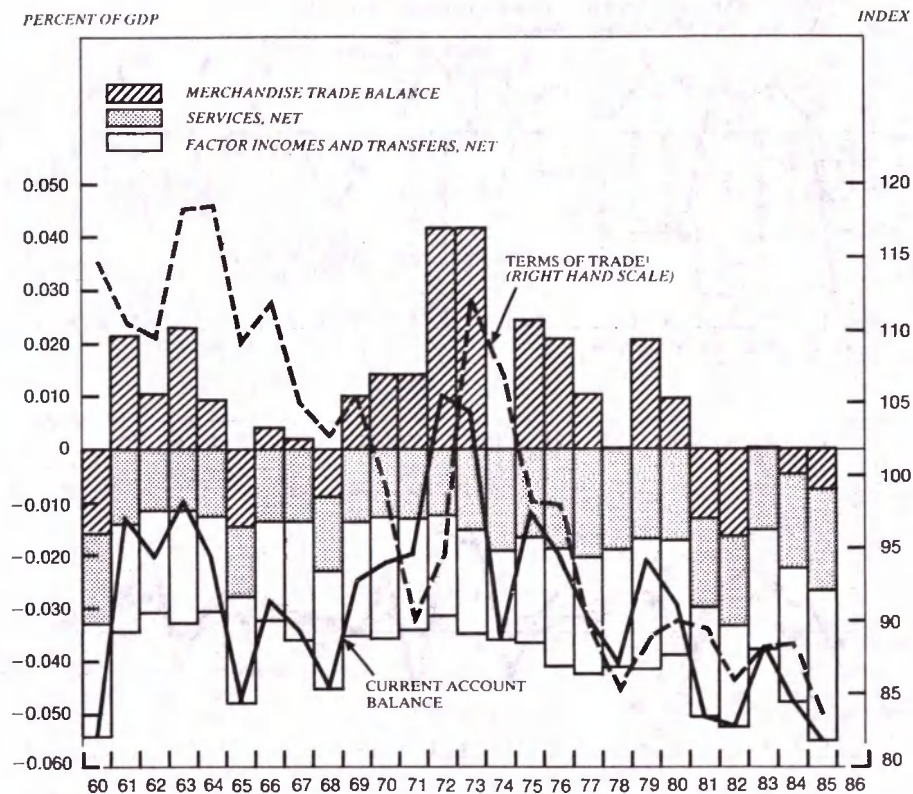
#### **Key balance-of-payments trends**

Over the two decades to 1980, the current account deficit averaged around 2½ per cent of GDP. There was considerable variation through the period reflecting changes in the country's terms of trade, relative cyclical position and external competitiveness. The deficit widened in the mid-1960s, in response to growing demand pressure (in part related to mining investment); it subsided in the latter part of the decade as imports of oil fell, in the wake of rising domestic production, and commodity prices strengthened towards the end of the Vietnam War period. These trends continued into the early 1970s. With the oil and commodity price boom in 1972-73 and rapid growth in international trade, the current account briefly moved into surplus. Since then, the current external position has deteriorated substantially, notably in the early 1980s. After a brief reversal in 1979 with the second oil shock, the deficit widened to nearly 6 per cent of GDP during the investment-led upswing in 1980-81. It still amounted to around 4 per cent of GDP during the sharp 1982-83 recession and widened again to 6 per cent of GDP in the year to mid-1986.

#### *Terms of trade*

Movements in the trade balance have been strongly correlated with changes in the terms of trade, particularly during the 1970s and the mid-1980s (Diagram 9). Higher commodity and energy prices during the commodity boom underlay the marked improvement of the trade

**Diagram 9. The current account balance and the terms of trade**  
(Percent of GDP and index)



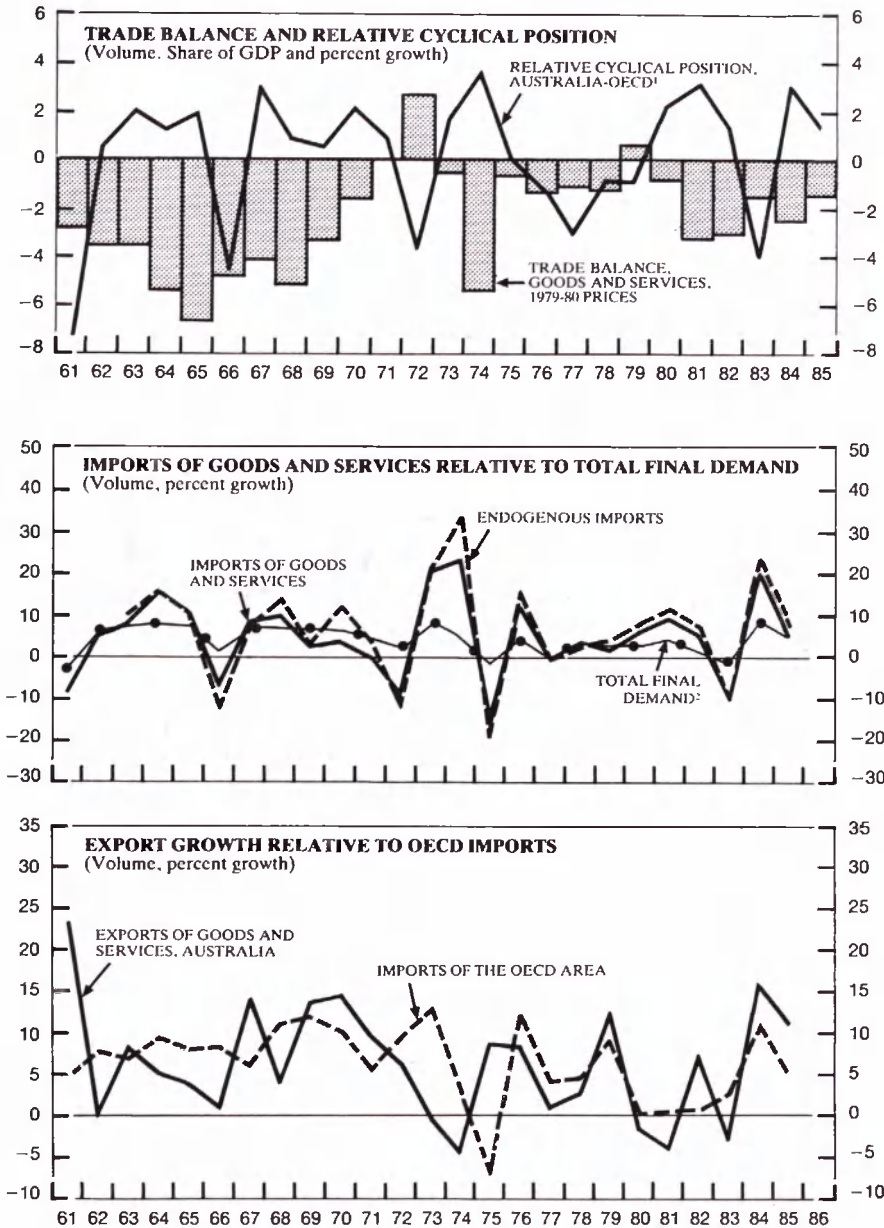
1. Ratio of indices of price of goods and services of exports to imports rebased on period average.  
Source: ABS.

balance in the early 1970s. In 1975, import prices of manufactures caught up with previous sharp increases in international commodity prices while the world recession depressed the prices of non-oil raw materials. In the three years to 1986, deteriorating terms of trade played a major role in the worsening external position as excess world supplies of raw materials and agricultural products depressed prices relative to manufactures imports. While the cumulative deterioration in the trade balance amounted to 2.5 per cent of GDP, the terms of trade contributed 3.9 per cent, favourable volume developments largely accounting for the difference.

#### *Cyclical position and competitiveness*

The real trade balance (defined in 1979-80 prices) has been influenced by Australia's cyclical position, both in relation to domestic capacity and the levels of activity in trading partners (Diagram 10). The removal of import licensing and rapid domestic demand growth

Diagram 10. Development of exports, imports and the real trade balance



1. Difference between average OECD growth rates total domestic demand and growth rate for Australia.

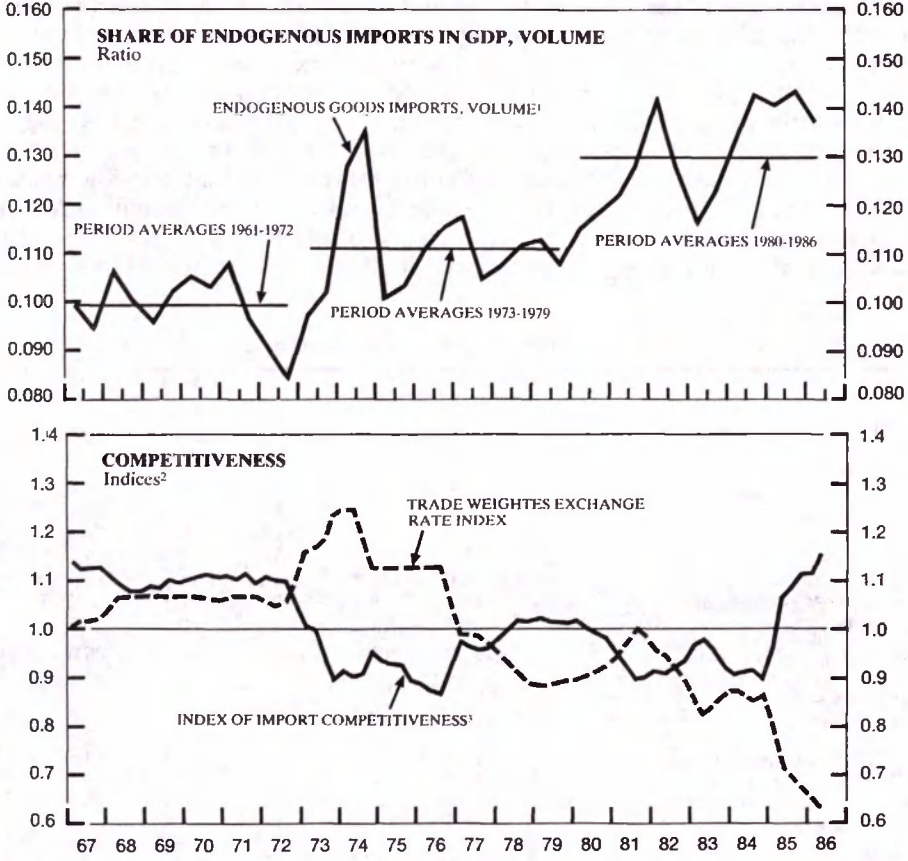
2. GDP plus imports.

Sources: ABS; OECD.

led to a strong expansion of imports in the early 1960s and a widening of the trade deficit. In the second half of the decade, the Vietnam war raised the level of exports, while increased domestic supplies of oil reduced import growth and by 1972 the real trade balance had moved into surplus. In 1973 and 1974, high levels of domestic demand in the face of capacity constraints raised import growth significantly, pushing the trade balance into deficit. With exports recovering and more modest growth in domestic demand, the real trade balance recovered and was close to balance over the rest of the decade. The widening deficit in the early 1980s reflected, initially, the investment wave associated with the natural resource boom and, subsequently, the cyclical upswing of the economy as from 1983.

Trade developments were also significantly influenced by changes in competitiveness. The marked increase in import penetration in the early 1970s and again in the early 1980s, was clearly associated with the sharp deterioration in external competitiveness during both periods (as measured by relative unit labour costs in a common currency)(Diagram 11).

Diagram 11. Competitiveness and import penetration



1. Endogenous – imports – exclude energy, government purchases and civil aircraft from total imports of goods and services.  
 2. Indices are relative to period averages.  
 3. Consumer prices in Australia relative to 5 major importing countries adjusted for exchange rates and some major tariff changes.  
 Sources: ABS, NIF-10 Model Database.



Import penetration of consumer goods was particularly marked in the first period, while in the 1980s imports of investment goods as a share of investment in machinery and equipment rose rapidly, from around 30 per cent in 1980-81 to an average of 45 per cent in 1984-85 and 1985-86. As regards exports, shifts in supply make it difficult to precisely assess the impact of changes in competitiveness. Nonetheless, large losses of market shares were also registered in 1973-75 and again in 1981. More generally, the steady losses of market shares registered by Australian exports, over the last fifteen years or so, reflect an unfavourable commodity composition of exports and poor competitiveness. However, this was partly offset by a favourable regional composition (for more details see Part IV).

### Trade structure

Despite shifts in the regional structure of trade during the postwar period, Australia has basically continued to sell primary commodities in return for manufactured products (Table 12 and 13). The distances from Europe, the changed trading environment as the United Kingdom entered the Common Market and rapid growth in the Pacific Basin led to a major shift in the regional pattern of trade. Higher demand for raw materials, first from Japan and then from the NICs, as well as mineral discoveries and increased supply in Australia were reflected in a rapid rise in the shipments of coal, iron ore and other minerals and the share of these commodities in total trade rose rapidly. Agricultural exports have developed sluggishly, reflecting low growth in volumes and small increases in world food prices. As a result, their share in total exports has declined steadily. After rising up to the end of the 1970s, the share of manufactures in total exports has tended to decline thereafter. Overall, the bulk of Australian exports is still dominated by rural products (38 per cent of total), fuels (23 per cent) and metal ores and minerals excluding gold (16 per cent). In 1985 manufactures only accounted for

Table 12. Import and export shares by country

	1963-65	1966-70	1971-75	1976-80	1981-85	1985
<b>Imports of goods</b>						
OECD-Europe	43.4	39.9	36.9	29.0	24.7	26.7
of which:						
The United Kingdom	27.1	22.5	17.4	10.8	7.1	7.0
OECD-North America	27.0	29.2	24.3	24.2	24.2	24.3
Japan	7.9	11.0	17.2	18.5	21.2	23.1
New Zealand	1.7	1.9	2.7	3.3	3.5	4.1
Far East	8.8	7.7	9.1	13.1	14.9	14.2
Other non-OECD countries	10.2	8.7	8.8	11.3	10.5	7.4
Non-specified	1.0	1.6	1.0	0.8	1.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Exports of goods</b>						
OECD-Europe	35.3	27.7	18.9	14.1	13.0	14.6
of which:						
The United Kingdom	18.5	13.4	7.5	3.1	3.5	3.4
OECD-North America	12.3	14.7	12.8	9.0	9.1	11.5
Japan	17.1	23.3	29.0	27.4	25.8	27.9
New Zealand	6.3	5.1	5.5	4.4	4.5	4.7
Far East	15.0	14.6	13.8	17.4	20.4	22.5
Other non-OECD countries	13.2	13.2	15.7	15.7	16.3	16.5
Non-specified	0.8	1.4	4.3	10.9	10.9	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: OECD.

Table 13. **Import and export shares by commodity**  
Per cent of total goods

	1961-65	1966-70	1971-75	1976-80	1981-85	1985
<b>Imports</b>						
Food, beverages and tobacco	5.1	5.0	5.0	5.1	4.6	4.8
Fuels	9.6	7.3	6.4	10.7	10.8	6.7
Basic materials	8.4	7.1	6.2	4.9	3.6	3.2
Chemicals (incl. plastic)	9.1	9.5	9.8	9.1	8.3	8.3
Metals, metal manufactures	6.8	5.7	6.2	5.2	5.2	4.7
Machinery and transport equipment	35.4	39.0	37.3	38.0	40.0	44.5
Other	25.6	26.4	29.1	27.0	27.5	27.8
Total goods	100.0	100.0	100.0	100.0	100.0	100.0
<b>Exports</b>						
Rural	75.4	62.3	51.9	46.1	39.9	36.9
<i>of which:</i>						
Meat	9.6	10.1	10.4	9.4	6.5	4.9
Cereals	15.4	13.1	12.7	12.0	11.7	11.9
Sugar	4.9	3.8	5.2	4.8	3.1	1.8
Wool	34.8	25.7	15.4	12.1	9.5	9.6
Other	10.7	9.6	8.2	7.8	9.1	8.7
Metal ores and minerals	3.4	9.9	13.5	13.4	17.4	15.9
Fuels	3.0	4.5	7.9	12.7	21.1	25.0
<i>of which:</i> Coal	1.7	3.5	6.0	10.7	14.4	16.0
Metals and metal manufactures	7.1	9.9	10.2	9.6	8.9	8.6
Machinery and transport equipment	3.9	4.7	6.6	4.7	4.3	5.0
Other	7.2	8.7	10.0	13.4	8.4	8.6
Total goods	100.0	100.0	100.0	100.0	100.0	100.0

Source: OECD.

around 20 per cent of total goods exports. The share of services in total exports of goods and services has risen steadily. As regards imports, shipments from the United Kingdom and, to a lesser extent, the United States have given way to goods originating in Japan, other European countries and non-OECD countries (Table 12). Over the 1970s Japan emerged as a major supplier of a broad range of high technology and capital-intensive goods. The broad commodity classification of Australian imports has remained fairly stable over the last decade, with manufacturing goods representing three-quarters of total goods imports. However, imports of services have risen faster than total imports and their share has increased.

### Capital flows

The structure of countervailing net capital inflows has changed from direct investment towards portfolio debt (Table 14). The fall of direct investment as a share of GDP in the early 1970s did not pose immediate problems as the current account strengthened temporarily. However, since 1977 foreign debt has financed the bulk of the growing current account deficit. Financing needs have also been augmented – at least temporarily – by the liberalisation of exchange controls in 1984<sup>47</sup>. The financing of growing current account deficits by bond issues or loans has led to a sharp rise in the ratio of net foreign debt to GDP, from less than 5 per cent at the beginning of the 1970s to an estimated 30 per cent in 1986. Interest payments on foreign debt absorbed 15 per cent of foreign revenue (goods and services exports and investment

Table 14. **Current and capital accounts of the balance of payments, 1960-1985**

Per cent of GDP

	1961-65	1966-70	1971-75	1976-80	1981-85	1983	1984	1985
Trade balance	1.0	0.4	2.5	1.2	-0.9	0.0	-0.5	-0.8
Net services	-1.3	-1.3	-1.5	-1.8	-1.7	-1.5	-1.8	-1.9
Net investment income	-1.9	-2.0	-1.7	-2.1	-2.4	-2.3	-2.7	-3.2
Net transfers	-0.1	-0.1	-0.2	-0.2	0.1	0.1	0.1	0.3
Current account	-2.3	-3.1	-1.0	-2.9	-4.9	-3.7	-4.9	-5.6
<i>Capital account</i>								
Direct investment:								
Outflow	0.1	0.2	0.3	0.3	0.7	0.4	1.0	1.2
Inflow	2.2	2.1	1.5	1.2	1.2	1.8	0.2	1.0
Portfolio and other investment								
Outflow	0.1	0.0	0.2	0.3	0.7	0.2	1.2	1.9
Inflow	0.5	1.2	0.9	1.0	4.6	3.4	4.9	4.9
General government (net)	0.1	-0.1	-0.1	0.7	0.5	0.2	0.7	0.9
Reserve Bank (net)	-0.8	-0.2	-1.1	0.4	-0.5	-1.9	0.7	1.5
Capital account balance	1.7	2.8	0.7	2.7	4.3	2.9	4.4	5.1
Errors and omissions	0.5	0.3	0.3	0.2	0.6	0.9	0.5	0.5

Source: ABS.

income) in FY 1985-86. The deficit on factor incomes has deteriorated, from an average of less than 2 per cent of GDP in the mid-1970s to 3¼ per cent in FY 1985-86. With more rapid inflation in Australia than abroad, higher interest rates have had to be maintained on Australian denominated debt to attract foreign investors or to induce Australian residents to borrow abroad.

### *Saving and investment balances*

Larger current account deficits and growing foreign debt have been accompanied by higher public sector borrowing requirements and lower levels of domestic fixed investment than in the 1960s and early 1970s. The role played by the larger absorption of savings by the public sector is difficult to assess precisely. Part of the increased borrowing was related to infrastructure investment. Some of it, however, has probably gone to finance higher current spending such as transfers which may have crowded out private sector capital formation. To the extent that increased foreign indebtedness has financed consumption and not investment, the productive base for repaying foreign debt has not been created.

### **Medium-term adjustment**

As noted, the current external deficit is projected to be reduced over the next eighteen months or so. Nevertheless, by mid-1988 it may still amount to 4¼ per cent of GDP. Debt will therefore continue to build up at rates which could lead to a renewed deterioration of the external position, unless further improvement in the balance on goods and services takes place. This section addresses the extent of the required adjustment to achieve a "sustainable"

balance-of-payments position and the conditions necessary to achieve it. The notion of sustainability is difficult to define precisely but it is, among other considerations, related to the ability of a country to service existing debt. Countries failing to meet this criterion face growing resistance from foreign investors and the consequent slowdown in capital inflow puts downward pressure on the exchange rate provoking external adjustment. While no single measure can proxy investor confidence, criteria used in evaluating countries' credit risk include the debt servicing ratios – in terms of exports or GDP – and the ratio of debt to GDP. The stabilization of the debt to GDP ratio is the criterion addressed here.

The achievement of sustainability – on the basis of this criterion – will be determined by four main groups of factors.

- i) *Trade volumes:* These in turn will respond to income effects, i.e. the rate of growth of foreign demand (influencing exports) and that of domestic demand (affecting imports) and relative price effects. Additional factors include the structure of trade, where demand and supply for raw materials, food or energy may develop differently from manufactures;
- ii) *Trade prices:* These will be dominated by relative movements in prices of imported manufactures as opposed to those for raw material, energy and agricultural exports;
- iii) *Debt servicing costs:* Where rates of interest on debt are higher than nominal GDP growth, then debt servicing will rise faster than GDP leading to a widening in the ratio of the current external deficit to GDP unless there is a larger trade surplus. Debt servicing costs will also be affected by the structure of capital inflows: to the extent that direct investment has lower servicing costs, higher levels of direct investment would reduce servicing costs over time;
- iv) *GDP growth:* Higher real GDP growth raises the available resources to service debt. While the same numerical result obtains from an increase in the GDP deflator, the longer-term effects are much different as higher prices in the absence of further depreciation reduce competitiveness and negatively affect the trade balance.

### *Size of the required adjustment*

Current account projections for the two years to mid-1988 (Table 11 and 15) point to a major shift in real resources to the external sector of the order of 3 per cent of GDP, largely because of a fall in import penetration. Since terms of trade are expected to deteriorate

Table 15. **Balance of payments adjustment: alternative projections**

	1984	1985	1986	1987	1988	1989	1990	1991
SCENARIO 1: TRADE AND VOLUME DEVELOPMENTS LEADING TO STABILIZATION OF DEBT/GDP RATIO								
Resource shift:								
Exports-imports (share of GDP) <sup>1</sup>	-2.3	-1.3	0.5	2.25	3.0	3.5	4.0	4.5
Difference in growth rates <sup>1</sup>	-4.8	5.7	8.75	10.5	4.5	2.25	2.0	3.5
Balance of payments (share of GDP):								
Trade balance goods and services	-2.2	-2.7	-3.0	-2.0	-1.25	-0.75	-0.5	0.0
Invisibles <sup>2</sup>	-2.6	-2.9	-2.75	-2.5	-2.5	-2.5	-2.5	-2.25
Current account balance	-4.8	-5.6	-5.75	-4.5	-3.75	-3.25	-3.0	-2.25
Debt to GDP ratio <sup>6</sup>	20.5	25.9	31.0	34.0	34.75	34.75	35.5	35.5
GDP, growth rate <sup>1</sup>	6.9	4.4	1.5	3.25	3.5	3.5	3.75	3.75
Private consumption deflator, growth rate	6.8	7.3	9.25	7.25	5.5	4.75	3.5	3.5

Table 15 (continued). Balance of payments adjustment: alternative projections

	1984	1985	1986	1987	1988	1989	1990	1991
<b>SCENARIO 2: PROJECTION WITH NO ALLOWANCE FOR THRESHOLD EFFECTS</b>								
Resource shift (share of GDP):								
Exports <sup>1</sup>	18.1	19.2	19.75	19.75	20.0	20.25	20.25	20.5
Imports <sup>1</sup>	20.4	20.5	19.25	17.5	17.0	17.25	17.5	17.75
Exports-imports <sup>1</sup>	-2.3	-1.3	0.5	2.25	3.0	3.0	2.75	2.75
Growth rates:								
Exports	15.6	11.0	3.75	4.0	4.0	4.25	4.25	4.25
Imports	20.4	5.3	-5.0	-6.25	0.25	5.25	5.25	4.25
Difference	-4.8	5.7	8.75	10.5	4.0	-1.0	-1.0	0.0
Balance of payments (share of GDP):								
Trade balance goods and services	-2.2	-2.7	-3.0	-2.0	-1.25	-1.5	-1.75	-1.75
Invisibles	-2.6	-2.9	-2.75	-2.5	-2.5	-2.5	-2.5	-2.5
Current account balance	-4.8	-5.6	-5.75	-4.5	-4.0	-4.0	-4.5	-4.5
Debt to GDP ratio <sup>6</sup>	20.5	25.9	31.0	34.0	35.0	36.0	37.75	39.5
GDP <sup>1,3</sup>	6.9	4.4	1.5	3.25	3.5	3.0	3.25	3.0
Private consumption deflator <sup>3</sup>	6.8	7.3	9.25	7.25	5.5	4.75	3.5	3.75
<b>SCENARIO 3: PROJECTIONS WITH ALLOWANCE MADE FOR SOME THRESHOLD EFFECTS<sup>4</sup> (IMPACT FROM DEVALUATION RAISED BY ONE HALF)</b>								
Resource shift (share of GDP):								
Exports <sup>1</sup>	18.1	19.2	19.75	19.75	20.0	20.25	20.5	20.75
Imports <sup>1</sup>	20.4	20.5	19.25	17.5	17.0	16.75	16.75	17.0
Exports-imports <sup>1</sup>	-2.3	-1.3	0.5	2.25	3.0	3.5	3.75	4.0
Growth rates:								
Exports	15.6	11.0	3.75	4.0	4.25	5.75	5.25	4.5
Imports	20.4	5.3	-5.0	-6.25	0.0	3.0	4.0	4.0
Difference	-4.8	5.7	8.75	10.5	4.25	2.75	1.0	0.5
Balance of payments (share of GDP):								
Trade balance goods and services	-2.2	-2.7	-3.0	-2.0	-1.25	-0.75	-0.5	-0.5
Invisibles	-2.6	-2.9	-2.75	-2.5	-2.5	-2.5	-2.5	-2.5
Current account balance	-4.8	-5.6	-5.75	-4.5	-3.75	-3.25	-3.0	-3.0
Debt to GDP ratio <sup>6</sup>	20.5	25.9	31.0	34.0	35.0	35.5	36.0	36.50
GDP <sup>1,3</sup>	6.9	4.4	1.5	3.25	3.5	3.75	3.75	3.25
Private consumption deflator <sup>3</sup>	6.8	7.3	9.25	7.25	5.5	4.75	3.5	3.50
<b>SCENARIO 4: PROJECTIONS WITH ALLOWANCE FOR LARGER THRESHOLD EFFECTS<sup>5</sup> (IMPACT FROM DEVALUATION INCREASED BY THREE QUARTERS)</b>								
Resource shift (share of GDP):								
Exports <sup>1</sup>	18.1	19.2	19.75	19.75	20.0	20.5	20.75	21.0
Imports <sup>1</sup>	20.4	20.5	19.25	17.5	17.0	16.5	16.5	16.75
Exports-imports <sup>1</sup>	-2.3	-1.3	0.50	2.25	3.0	4.0	4.25	4.25
Growth rates:								
Exports	15.6	11.0	3.75	4.0	4.5	6.25	5.5	4.5
Imports	20.4	5.3	-5.0	-6.25	-0.25	2.25	3.5	4.0
Difference	-4.8	5.7	8.75	10.5	4.75	4.0	2.0	0.5
Balance of payments (share of GDP):								
Trade balance goods and services	-2.2	-2.7	-3.0	-2.0	-1.0	-0.5	-0.25	-0.25
Invisibles	-2.6	-2.9	-2.75	-2.5	-2.5	-2.5	-2.25	-2.25
Current account balance	-4.8	-5.6	-5.75	-4.5	-3.75	-3.0	-2.5	-2.5
Debt to GDP ratio <sup>6</sup>	20.5	25.9	31.0	34.0	35.0	35.25	35.25	35.25
GDP <sup>1,3</sup>	6.9	4.4	1.5	3.25	3.5	3.75	3.75	3.25
Private consumption deflator <sup>3</sup>	6.8	7.3	9.25	7.25	5.5	4.75	3.5	3.5

1. Volume.

2. Investment income, other factor services, and current transfers.

3. Per cent growth

4. Price elasticities for imports and exports raised by one-half with the impact spread over the periods lagged 3 to 5 years.

5. As in Scenario 3 but with price elasticities for exports and imports raised by three quarters.

6. Debt to GDP ratios differs slightly from national sources and emphasis should be placed on changes of the ratio rather than its level.

Source: OECD.

further, the improvement in the balance on goods and services is more modest, of the order of 1½ per cent of GDP with a reduction of the same magnitude in the current account deficit. The path of adjustment over the remainder of the 1980s and into the 1990s is more difficult to foresee. First, as the time horizon lengthens, more complex inter-relations and adjustments come into play which are difficult to capture and assess. Second, the size of the recent depreciation of the currency is such (around 35 per cent in effective terms since early 1985) that the value of the standard elasticities and lags normally applied to assess the likely effects of marginal changes in competitiveness are open to doubt. However, conditions for achieving stability can be explored and the scope for adjustment assessed. One of the many possible scenarios (Table 15, panel 1) has the debt stabilizing at 35 to 36 per cent of GDP in 1991. The current external deficit would still amount to 2 to 2½ per cent of GDP. However, the real foreign balance would improve by an additional 1½ percentage points – or roughly half as much as expected in the period to the first half of 1988. This would require an average growth differential between import and export volumes of some 2½ to 3 percentage points per annum over the period.

### *Uncertainties surrounding the adjustment*

Admittedly, the outcome of such a scenario depends heavily upon the assumptions made. These are laid out in more detail in Annex II. The salient features are: GDP growth of around 3½ per cent a year, roughly in line with potential; no further loss in terms of trade for the period beyond mid-1988; a fall in the rate of debt servicing by 20 per cent, reflecting a decline in domestic interest rates in line with lower inflation and some reduction in domestic and international interest rates. The results are very sensitive to alternative assumptions. For example, higher domestic demand growth resulting in a 1 per cent faster GDP growth would increase the required shift in real resources to the external sector by ¼ per cent; a 1 per cent a year improvement or loss in the terms of trade would change the required shift by ½ percentage point of GDP; a 10 per cent reduction or increase in the rate of interest paid on debt could also change the required real resource shift by ⅓ percentage point. Consequently, real resource implications of achieving debt/GDP stability could improve or worsen considerably if these different factors cumulated in one direction.

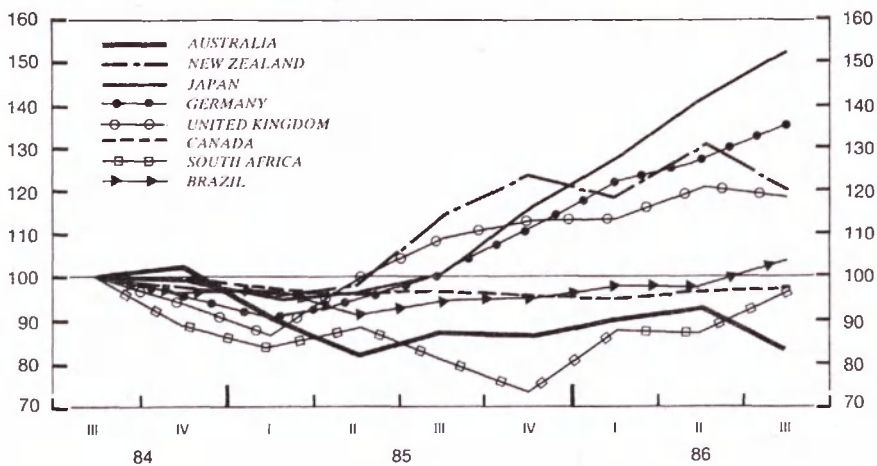
In this context, particular uncertainty surrounds future terms-of-trade developments. Abstracting from supply shocks, which may raise commodity prices in the short term, conditions during the second half of the 1980s do not look particularly favourable for the majority of commodity exports. Most markets are currently in oversupply. Agriculture, particularly the crop sector, has been affected by subsidised exports by the EEC and the United States and increased domestic supply in a number of countries which had been food importers. Although there may be some shift towards livestock production, increased supplies in this area may also place downward pressure on prices. Similar problems have appeared for many metals and minerals where some countries facing foreign exchange problems have been producing at less than cost. Some further fall in real raw material prices is therefore expected to mid-1988. It seems likely that excess supply will remain in many markets during much of the next five years. However, commodity prices are now near historically low levels; given the limited scope for further cost reductions, marginal producers may be squeezed out of markets placing a floor on further real falls in subsequent years.

The potential trade response over the medium term is also conditioned by the commodity structure of trade (Table 13) which remains dominated by agriculture and other primary commodities (metal ores and minerals). The outlook for exports of these products is for sluggish growth. These commodities are relatively income and price inelastic; demand for

these products is growing more slowly than world demand reflecting technological change and the shift towards services. As a rough rule of thumb, if activity in the OECD area were to grow in the range of 3 per cent per annum, the demand for raw materials might rise by 2 per cent. With a price advantage Australian exports could rise at a more rapid pace. However, declines in world commodity prices have broadly offset the price advantage to local producers from devaluation and the development of Australian commodity exports is assumed to be dominated by growth in world markets. The trend of energy and fuel exports is more difficult to assess following the large fall in oil prices during 1986. Exports of uranium and natural gas are projected to increase as shipments from Roxby Downs and the North-West Shelf begin, while lower energy prices may increase world demand in energy. On the other hand, there appear to be cutbacks in major markets such as Japan, which have oversupply in steel and electricity generation, although higher demand by the Asian NICs is likely to be an offsetting influence. On the basis of an assumed growth rate of around 3 per cent in the rest of the OECD area, energy exports might grow at slightly more than this rate while primary commodities and agriculture may expand in line with markets. This, in turn, implies that the required shift in net exports will have to take place through higher exports and increased import substitution in the manufacturing sector, and through an expansion in services.

Large uncertainties also surround the degree to which competitiveness of the various sectors has improved and the volume reaction to changes in relative prices. The forecasts up to mid-1988 point to a small erosion of the overall margin of competitiveness created by the sharp depreciation of the exchange rate. Beyond this period, the competitive position embodied in the scenarios is largely determined by movements in wage costs, as exchange rates are assumed fixed. Allowing for only a modest rise in real wages after mid-1988, inflation could continue to decelerate, although there may be some marginal further loss in competitiveness. However, synthetic measures of competitiveness may mask the potential in individual export and import competing markets. First, while the trade-weighted index has shown a 35 per cent improvement since early 1986, developments vis-à-vis major export competitors, have been less favourable (Diagram 12), particularly in relation to South Africa,

Diagram 12. Real exchange rate movements vis-à-vis the US dollar



Source: IFS.

Table 16. Effects of exchange rate movements on different commodity import values, selected months and countries

Index 1st quarter 1984 = 100<sup>1</sup>

Commodity	1984		1985				1986	
	February	June	February	May	September	December	March	August
Food, beverages and tobacco	100.3	100.3	96.2	119.9	120.3	128.9	124.8	145.6
Fats and crude materials	100.6	100.3	101.2	120.2	118.8	127.7	121.5	140.0
Chemicals and related products	100.2	100.3	101.6	128.1	125.2	137.2	136.1	164.0
Manufactures and metals	100.4	101.0	101.8	126.2	124.7	139.1	140.6	173.0
Manufactures of other materials	100.3	100.7	100.0	124.1	122.4	135.1	136.4	165.0
Industrial machinery and equipment	100.2	100.8	103.2	128.8	126.2	140.6	141.9	174.0
ADP and office machines	100.6	100.9	106.2	132.8	127.4	141.6	141.0	170.0
Telecom, sound and other electrical machinery	100.5	101.3	102.7	128.2	125.9	143.5	149.1	187.0
Road vehicles (passenger)	100.6	101.8	101.5	127.3	126.8	148.9	162.0	213.0
Road vehicles (other)	100.8	102.0	102.6	128.8	127.0	150.1	154.3	199.0
Miscellaneous manufactures	100.3	100.5	102.6	128.4	124.7	136.7	138.3	167.0
Textiles, clothing and footwear	100.4	100.3	100.6	124.1	118.1	124.5	122.9	145.0
Mineral fuels and other	100.4	100.9	105.9	135.3	125.4	137.1	132.6	156.0

1. An index of the import-weighted cost of foreign exchange (reciprocal of the exchange rate index) where import weights are industry-specific for the eighteen countries in having the largest shares in Australian non-oil imports in 1984-85. Coverage is in excess of 90 per cent except for the mineral fuels and other category. "Other transport equipment" is excluded from the analysis because of the volatility in its import values (the description of commodities in terms of AICC codes is given in Table 14).

Source: Treasury submission.

Canada, Brazil, which are major exporters of commodities, and to New Zealand and the NICs. The largest competitive gains have been registered vis-à-vis Japan and Europe where difficulties of market penetration, tariff barriers and distance are important constraints. Second, imports form a substantial portion of inputs into the manufacturing sector (ranging from one-third to one-half of costs depending on the industry) and higher import prices will partly erode the competitive position. Costs may also have risen for firms which have borrowed heavily in foreign currencies, thus raising their debt servicing charges. To the extent that capacity will need to expand, the higher import cost of investment goods will raise the capital cost component over the longer run. Third, each country contains range of cost structures across firms. Although there will be a general improvement in competitiveness, this may not benefit all firms. Finally, bilateral exchange rate movements have been reflected in differential movements in unit values for various import categories (Table 16). Low technology goods (e.g. food, fats and crude materials, mineral fuels, textiles, clothing and footwear) have received the smallest improvement in competitiveness while medium to high technology goods (automobiles, investment goods and electrical equipment) have improved the most. The lowest price incentives tend to occur in those sectors where domestic production is more important while relatively higher costs for investment goods – which have a substantial import content – will negatively affect competitiveness over the medium term.

### *Some alternative hypotheses*

Three different scenarios of adjustment are presented in Table 15 (panels 2 to 4). In the first, a short-term forecasting model provides the point of departure. The underlying assumptions are presented in Annex II; salient points are:

- Growth in GDP broadly in line with potential during the period 1988 to 1991;



- Favourable development in wage costs such that domestic prices increases continue to decelerate, implying only a further small erosion of the competitive position after 1988;
- Slower growth in government spending than in both GDP and revenues with the net lending of the government sector moving into surplus;
- Constant nominal effective exchange rate;
- Broadly unchanged factor shares and constant capital-output ratio.

In the first scenario, (panel 2 of Table 15) the lags are relatively short (two to two and a half years) implying that the impact of devaluation has largely worked itself out by the end of 1988, although exports of manufactures are allowed to grow faster than markets reflecting an assumed longer response lag. Thereafter, the increase in domestic demand is the principal determinant affecting the trade balance. Import penetration begins to increase again, the current deficit widens as a share of GDP and the debt to GDP ratio continues to rise. A profile of this sort probably underestimates the potential deterioration of the current balance because a reversal of the trend towards improvement could lead to pressures on the exchange rate, a rise in interest rates and higher debt-interest payments abroad. On the other hand, an outcome of this sort is not entirely probable as no allowance is made for a longer-term response to a shift in competitiveness of such a large size. There is no easy way of judging how important this longer-term response might be. Alternative outcomes are presented in the second and third scenarios in which the response of imports and exports relative to price changes are increased and the lags extended to four to five years so that the impact of the improved competitiveness continues to affect trade flows after mid-1988. If the price response is increased by about one-half, exports of manufactures would rise at a rate slightly less than twice that of market growth and import penetration would remain broadly unchanged. Even so, the response would remain insufficient; although the current deficit would continue to fall, the debt ratio would still rise. A response of around one and three-quarters times the "normal" one would, however, reduce the deficit sufficiently to stabilize the debt/GDP ratio in 1988-89.

### **Policy implications**

In drawing any inferences for policy, it must be stressed that scenarios of this sort depend upon the underlying assumptions. Exports of raw materials, or agricultural products could develop more favourably and there could be an improvement in commodity prices. However, on a fairly "neutral" set of assumptions, achievement of a "sustainable" balance-of-payments position remains a difficult task, requiring a large response from the manufacturing sector and services sectors. These considerations point to a number of policy implications. First, maintenance of Australia's competitive position is essential. This in turn requires very slow growth in real wages over the rest of the decade, at rates possibly less than that of productivity. Real wage moderation is needed on three counts:

- To maintain external competitiveness. With inflation in the rest of the OECD area likely to remain relatively low, real wage moderation in Australia will have to take place in a context of limited increases in nominal wages. External competitiveness should preferably be preserved through wage-cost moderation and productivity gains. Further adjustment of the exchange rate would initially lead to a worsening in the current balance deficit, compounding the adjustment task;
- To achieve an appropriate development of income shares. The adjustment is likely to require a rise in the share of productive investment in GDP (see below). Profit shares should therefore be increased or at least maintained;

- To contain domestic absorption. Given the magnitude of the shift of real resources to the external sector implied by the balance-of-payments adjustment process, the room for real consumption growth will be limited, even if part of the increase in domestic demand can be met through a better performance of import competing industries.

Second, the reduction in the current external deficit implies a corresponding increase in domestic savings. Although household savings are likely to rise to 1988, as a result of the expansion of occupational pensions, low growth of real wages and decelerating inflation could put downward pressure on saving ratios. Moreover, any reduction in business profitability and cash flow would reduce the incentive and ability to invest, particularly as debt/equity ratios remain high. Hence, higher savings must mainly come from the public sector and government expenditure must be constrained to grow by less than GDP and government revenues. The development in the State and local sector is likely to be particularly important in this context. Spending by State and local government (including public enterprises) represents one-half of total public sector expenditure; in FY 1986-87 they are expected to absorb over 50 per cent of gross public sector borrowing requirement. The Commonwealth Government has been attempting to constrain spending by the States through reductions in the real value of the revenue transfers to other levels of government (one-half of their revenues) and through global limits on borrowing through the Loan Council. But prior to 1986-87, the global limits have been somewhat above State sector deficit and they have been able to accumulate substantial financial reserves over the past few years. The global limits are more likely to constrain net borrowings by the States in 1986-87. Nevertheless, spending outside the Commonwealth budget is expected to rise by more than GDP in FY 1987-88 and further tightening would therefore be opportune.

Finally, investment in expanding sectors is needed. It is difficult to judge whether this requires an overall increase in the level of investment. The sectoral pattern of capital formation can be expected to shift. In some sectors, such as farming and mining, investment needs will probably fall although pressure on costs may make capital deepening attractive in some cases. In contrast, the manufacturing and service sectors can be expected to expand. Lack of information on the capital intensity, at the margin, in each sector increases the difficulty of assessment. Nonetheless, simple calculations based on current shares in production, exports and imports, suggest that if most of the shift to tradable goods were to occur through an expansion in manufacturing, this sector would need to raise output by at least one-third between 1986 and 1991. Although some of this is likely to be made up from existing capacity, increased investment is certain to be needed. Total private business investment is now at historically low levels, its share in GDP amounting to 9.5 per cent compared to 12 to 13 per cent from 1965 to 1972. It would seem that investment may need to increase at rates higher than the 4 per cent necessary to keep the capital output ratios constant. This implies reduced domestic absorption, particularly as investment is highly import intensive, and yet higher public sector savings or profit shares.

#### **IV. MANUFACTURING AND THE ADJUSTMENT PROCESS**

As noted, the worsening current external position can also be related to structural factors. In particular, the heavy and increasing reliance on primary product exports throughout the seventies has aggravated the recent terms-of-trade losses associated with the international commodity price cycle. There is now widespread agreement that the export base of the country should be broadened and that manufacturing – as well as the mining, rural and service industries – should play a key role in correcting the external imbalance. The rapid fall of Australia in the “league table” of per capita income in the OECD<sup>48</sup> has also led to a questioning of development strategies pursued so far. The following paragraphs concentrate more specifically on developments in the manufacturing sector with a view to detecting structural weaknesses. The forces that have contributed to the shaping of the manufacturing sector in Australia and the role played by policies are also reviewed. Finally, the scope for enhancing supply responsiveness through elimination of restrictive work practices and improvement of training and skills is briefly assessed.

##### **Changes in the composition of aggregate supply**

As in most other Member countries, important changes have taken place in the composition of aggregate supply over the last fifteen years or so (Table 17). The share of agriculture in GDP has decreased, though remaining higher than elsewhere – as could have been expected given the country’s natural endowments. That of manufacturing has fallen faster than the OECD average, from 23.6 per cent during the 1970-72 period to 17.7 per cent during 1982-84, one of the lowest among Member countries<sup>49</sup>. However, other resources-rich countries (such as Norway, the Netherlands, Canada) have experienced a similar trend. The services sector has expanded rapidly, accounting for a large share in GDP by OECD standards. However, some of these services are, in fact, supplied by government, and the aggregate services/government share is in line with OECD averages. Finally, the mining sector enjoyed a remarkable growth – from 1.7 per cent of GDP in the early sixties to 3.4 per cent in 1970-72 and 6.4 per cent in 1982-84. Though the expansion in the mining sector was mostly in minerals (bauxite, coal, etc.), the increase in the sector’s share in GDP was of the same order of magnitude as in other countries that have seen important increases in oil production<sup>50</sup>.

##### **Structural features of Australian manufacturing**

Overall, broad changes in the structure of the economy have not been very different from those registered in other high-income developed countries, especially given Australia’s great wealth in natural resources<sup>51</sup>. However, a number of features of the manufacturing sector

Table 17. **The structure of GDP: an international comparison**  
Per cent of GDP

		Agriculture	Mining and quarrying	Manufacturing	Utilities and construction	Services	Government
Australia	1970/72	6.5	3.4	23.6	10.9	52.5	4.0
	1982/84	4.5	6.4	17.7	9.3	59.1	4.2
Austria	1970/72	6.2	0.6	33.4	11.3	35.9	11.0
	1982/84	3.7	0.5	27.1	10.4	39.4	13.6
Belgium	1970/72	3.7	0.9	30.8	9.2	44.4	11.0
	1982/84	2.5	0.6	23.9	9.1	51.3	14.7
Canada	1970/72	3.6	3.1	20.1	7.9	36.1	14.4
	1982/84	3.4	5.7	16.0	8.1	38.6	16.2
Denmark	1970/72	5.6	0.1	18.0	10.8	38.4	14.5
	1982/84	5.4	0.7	17.0	6.4	37.4	20.3
France	1970/72	6.3	0.8	28.5	9.1	37.8	10.1
	1982/84	4.0	0.7	25.3	8.3	43.3	12.8
Germany	1970/72	3.1	1.1	28.5	9.1	42.7	9.8
	1982/84	2.0	0.7	25.3	8.3	47.4	11.7
Italy	1970/72	7.7	0.0	28.7	13.4	39.2	11.3
	1982/84	5.7	0.0	27.4	12.6	41.0	14.0
Japan	1970/72	5.6	0.8	35.2	10.1	44.2	6.7
	1982/84	3.3	0.4	29.3	11.1	49.2	8.5
Netherlands	1970/72	5.3	1.7	25.3	10.0	39.5	12.3
	1982/84	4.3	7.4	17.5	8.0	45.2	13.0
Norway	1970/72	6.2	0.8	21.8	11.1	44.5	12.5
	1982/84	3.9	17.3	13.8	10.5	39.5	14.0
United Kingdom	1970/72	2.5	1.5	28.2	8.5	36.9	11.2
	1982/84	1.9	6.8	21.6	7.4	38.8	13.4
United States	1970/72	2.7	1.7	25.1	7.4	49.8	13.5
	1982/84	2.3	3.9	21.0	7.0	53.9	13.0

Source: OECD National Accounts.

warrant comment. Its productive structure is very broadly based and it has remained relatively stable, suggesting a rather slow pace of structural change. Furthermore, the importance of external trade has been smaller than elsewhere: exports have been mostly concentrated in resource intensive products with a relatively low demand elasticity and import penetration has been low. These trends reflect the limited involvement in intra-industry trade, the fastest growing area of international trade in the past decades. Despite the rather limited size of the domestic market, domestic production has met the bulk of demand in a wide range of products, while the share of exports in products where economies of scale have significant effects on costs has remained below average. These points are analysed in greater detail below.

Changes in the composition of manufacturing output appear to have been relatively limited, as suggested by the index of structural change<sup>52</sup> presented in Table 18. For the period 1970-1983, Australia ranks eighth, out of thirteen countries surveyed, despite a quickening in the pace of change towards the end of the seventies. After being the country with the lowest index of structural change in the earlier part of the period, it rose to the fifth position in the latter part. Conventional wisdom and economic theory suggest that flexible adaptation to changes in demand patterns is one of the preconditions for successful structural adjustment

Table 18. **Manufacturing output growth and structural change index**

	1970/72-1981/83		1970/72-1976/78		1976/78-1981/83	
	Index	Growth %	Index	Growth %	Index	Growth %
Australia	0.40	0.9	0.14	0.9	0.28	1.1
Belgium	0.44	2.1	0.25	3.0	0.27	1.0
Canada	0.35	-0.7	0.19	-0.2	0.24	-1.4
Finland	0.28	3.6	0.21	2.3	0.21	5.2
France	0.43	2.4	0.19	3.6	0.26	1.1
Germany	0.32	1.4	0.17	2.0	0.19	0.6
Italy	0.20	3.1	0.16	3.8	0.11	2.2
Japan	0.42	7.5	0.22	6.8	0.26	8.3
Netherlands	0.51	1.9	0.23	2.6	0.37	1.1
Norway	0.48	0.1	0.21	0.8	0.30	-0.6
Sweden	0.33	0.8	0.19	1.4	0.25	0.1
United Kingdom	0.54	-3.9	0.18	1.4	0.45	-9.9
United States	0.46	2.0	0.18	3.1	0.34	0.8

*Note:* The index of structural change is computed as the average absolute change in relative shares of 22 subsectors of manufacturing. Growth rates are percentage annual changes over the indicated periods.

*Source:* OECD Secretariat.

and maintenance of healthy economic growth. Admittedly, this synthetic indicator cannot capture all the specific features of growth patterns in different countries. In particular, high values of the index may result not only from shifts towards faster-growing sectors in a globally expanding context, but also from the demise of certain sectors, due for instance to inappropriate exchange rate policies or loss of cost competitiveness, without corresponding improvements elsewhere<sup>53</sup>. Changes within each sector are furthermore not captured by this indicator.

For reasons explored below, the manufacturing sector appears to have remained broadly based throughout the period, suggesting lack of international specialisation. Table 19 shows that in industries with low and medium technological input requirements and high natural-resources content, which account for the bulk of Australian manufacturing production, the country has maintained over the period a structure of production broadly similar to the OECD average. The index of relative production share for these two broad aggregates is indeed remarkably close to one. Only a few subsectors display strong deviations (notably non-electrical machinery, shipbuilding, petroleum refineries and non-ferrous metals). On the other hand, relative production levels in industries requiring higher technological inputs have been lower except in office machinery and computers. On the whole, the data suggest a more diffuse structure of production than elsewhere<sup>54</sup>. The standard deviation of relative production shares, an indicator of diffusion of production, is lower than that of all other countries in Table 18 with the exception of Canada and the United Kingdom. Secretariat calculations also show that Australia has maintained a below-average production share in industries where economies of scale have significant effects on costs.

As regards foreign trade, a number of features and developments also point to limited integration of Australian manufacturing in international markets. With the exception of the United States and Japan (where obvious differences exist in the size of the domestic market), Australia has the lowest share of exports relative to manufacturing production (between 16.5 and 18 per cent of turnover over the last fifteen years or so, Table 20). The share of manufactures in total exports (defined by the International Standard Industrial Classification sector 3) has also been much lower than the OECD average (38.4 per cent in 1985, against

Table 19. Relative production shares and revealed comparative advantage in trade

Sectors	1970/72		1976/78		1981/83	
	Production	Trade	Production	Trade	Production	Trade
Aerospace	0.755	0.082	0.871	0.303	0.266	0.180
Office machinery and computers	0.618	0.047	1.011	0.209	1.122	0.126
Electronic components	0.647	0.104	0.620	0.103	0.435	0.103
Drugs and medicine	0.859	0.640	0.903	0.560	0.829	0.544
Instruments	0.491	0.220	0.611	0.331	0.597	0.361
Electrical machinery	0.874	0.278	0.868	0.241	0.768	0.232
High tech	0.739	0.190	0.784	0.247	0.625	0.219
Motor vehicles	1.033	0.404	0.852	0.131	0.837	0.171
Chemicals	0.838	0.766	0.853	1.235	0.815	1.264
Other manufacturing industries	1.065	0.649	0.957	0.411	1.138	0.306
Non-electrical machinery	0.750	0.234	0.683	0.239	0.595	0.241
Rubber, plastics	1.230	0.276	1.230	0.129	1.280	0.172
Non-ferrous metals	1.560	3.534	2.004	3.601	3.331	5.035
Other transport	1.456	0.051	1.618	0.091	1.500	0.102
Medium tech	0.980	0.658	0.951	0.627	1.064	0.760
Stone, clay, glass	1.272	0.224	1.357	0.181	1.387	0.266
Food, drink, tobacco	1.363	6.238	1.361	6.019	1.265	5.023
Shipbuilding	0.651	0.163	0.599	0.186	0.670	0.364
Petroleum refineries	0.269	0.758	0.226	1.265	0.248	1.851
Ferrous metals	1.023	0.662	1.127	1.111	1.100	0.838
Fabricated metal products	1.153	0.587	1.259	0.423	1.363	0.494
Paper and printing	0.912	0.201	0.954	0.179	0.969	0.236
Wood, cork, furniture	1.122	0.255	1.164	0.712	1.256	1.014
Textiles, footwear, leather	0.883	0.428	0.870	0.586	0.939	0.699
Low tech	1.056	1.678	1.068	1.740	1.041	1.684

Note: The relative production share is given by the share in each sector divided by the average for the sample of countries. The revealed comparative advantage in trade is given by the ratio of the share of Australian exports in the particular industry to the total Australian share in total OECD exports.

Source: OECD Secretariat.

Table 20. Manufacturing exports as per cent of production, and import penetration

	1970/72		1976/78		1981/83	
	$X/Y$	$M/(Y + M - X)$	$X/Y$	$M/(Y + M - X)$	$X/Y$	$M/(Y + M - X)$
	(1)	(2)	(1)	(2)	(1)	(2)
Australia	16.5	21.0	18.0	25.4	17.1	26.6
Belgium	63.3	59.6	71.7	69.9	97.8	94.3
Canada	27.0	27.5	28.5	31.0	28.5	28.8
Finland	29.1	29.0	32.3	27.7	35.7	29.4
France	17.8	16.4	23.1	20.8	26.5	25.4
Germany	26.8	20.0	36.3	27.4	42.1	33.8
Italy	20.4	16.2	32.5	24.8	37.5	30.6
Japan	10.6	4.2	13.4	4.7	14.8	5.3
Netherlands	50.0	49.4	60.2	58.1	67.2	63.1
Norway	33.0	41.6	35.6	45.3	33.9	43.8
Sweden	32.4	31.0	38.9	36.7	47.4	43.3
United Kingdom	18.3	16.3	25.9	24.6	23.9	25.7
United States	5.6	6.0	7.6	8.1	8.7	9.8

1. Exports as a percentage of production or sales, depending on the country.

2. Imports as a percentage of apparent consumption.

Source: OECD Secretariat.

Table 21. Index of intra-industry trade, and relative importance of manufactured exports

	1970			1975			1980			1985		
	Share		Index	Share		Index	Share		Index	Share		Index
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Australia	58.2	19.7	0.33	53.6	23.0	0.37	57.1	20.1	0.41	38.4	20.2	0.39
Belgium	92.5	84.8	0.81	91.6	81.9	0.86	90.1	80.0	0.87	89.7	80.1	0.90
Canada	76.9	61.4	0.69	66.6	52.4	0.65	73.2	55.4	0.67	79.3	66.3	0.75
Finland	95.9	66.4	0.40	96.7	73.1	0.48	96.4	69.3	0.59	96.2	77.7	0.60
France	88.2	73.7	0.86	89.8	74.0	0.83	91.0	74.6	0.87	89.6	74.1	0.86
Germany	94.8	90.6	0.62	94.4	88.1	0.62	93.8	88.0	0.69	94.7	89.3	0.70
Italy	95.0	83.0	0.63	95.1	82.5	0.66	96.7	86.1	0.71	97.4	86.8	0.68
Japan	98.0	95.5	0.40	97.8	97.0	0.29	99.2	98.5	0.31	99.1	99.0	0.30
Netherlands	76.3	57.4	0.73	75.6	53.5	0.73	78.0	51.8	0.77	77.9	51.7	0.76
Norway	89.1	74.0	0.62	81.1	68.6	0.69	39.2	25.6	0.61	39.5	32.0	0.63
United Kingdom	93.6	85.7	0.66	91.4	83.0	0.74	80.6	72.0	0.83	71.8	64.1	0.81
United States	79.0	70.5	0.65	78.8	68.0	0.67	76.7	69.3	0.67	81.0	77.3	0.63

1. Manufactured goods exports (ISIC 3) as a percentage of total exports.

2. Manufactured goods exports (SITC 5 to 9) as a percentage of total exports.

3. Index of intra-industry trade. The index is equal one minus the sum of the absolute values of sectoral trade deficits or surpluses divided by total trade. It ranges between zero and one; a value of zero indicates no intra-industry trade.

Source: OECD Secretariat.

90 per cent). When items such as food and processed raw material are excluded (to cover only SITC categories 5 through 9), the weight of manufactured goods is reduced to around one-fifth of total exports, or considerably less than elsewhere in the OECD area (Table 21).

The index of revealed comparative advantage<sup>55</sup> in Table 18, suggests that the country's export performance was strong only in industries characterised by relatively high natural resources and low technological content – sectors that experienced slow growth of international trade. Their aggregate index has been well above unity for the entire period. However, this is largely explained by two “best performing” sectors: food, drink and tobacco – strictly linked to the agricultural sector – and petroleum refineries. The performance of wood, cork, furniture has been average, whereas it was relatively poor in other subsectors. Similarly, among sectors broadly classified as having a medium technological content, only non-ferrous metals (again with a strong link to natural resources, in particular bauxite), and chemicals have a better-than-average performance. The performance in high-tech sectors was generally weak. One general feature of external trade merits particular attention: the relatively little participation in intra-industry trade. As shown in Table 21, the index of intra-industry trade for Australia was one of the lowest among industrialised countries, Japan being the other notable outlier<sup>56</sup>. Protection of the domestic market has resulted in very little scope for making inroads in a type of foreign trade which has generated much of the growth in world markets. Intra-industry trade is particularly important in achieving economically-viable plant and production sizes, as world markets complement the insufficient size of domestic markets. Overall, the characteristics of manufacturing exports were not particularly conducive to rapid export growth, nor to giving the manufacturing sector a prominent position in foreign trade.

Constant market share analysis<sup>57</sup> also shows that the product composition of manufactured exports has been unfavourable: the growth of demand for the basket of goods exported by Australia generally lagged that for other industrial manufactures (Table 22). This was to some extent offset by a favourable regional composition; with exports concentrated in the fast-growing Pacific region, Australian markets expanded faster than world markets.

Table 22. Constant market share analysis

	Australia export growth	World imports growth	Difference	Market effect <sup>1</sup>	Product effect <sup>2</sup>	Residual
1970/71	7.2	13.5	-6.3	-0.9	-5.2	-4.0
1975/76	19.2	20.9	-1.7	2.8	-3.6	-3.2
1980/81	12.7	15.7	-3.0	3.8	-0.3	-7.6
1983/84	2.9	4.2	-1.3	2.1	-1.1	-2.7

1. The market effect measures the part of the difference between the growth rate of Australian exports and world exports which is due to regional composition of the Australian export market.

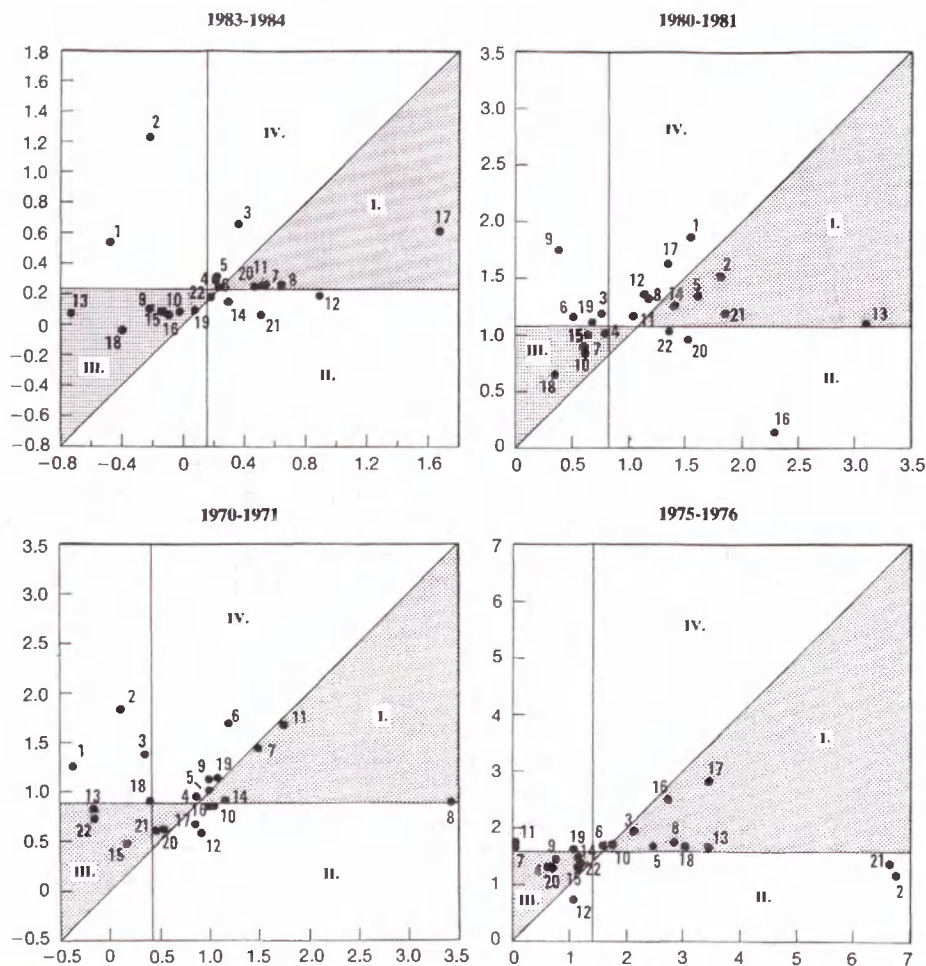
2. The product effect measures the part of the difference between the growth rate of Australian exports and world exports which is due to Australia's own export bundle.

Note: Figures are annualised average growth rates over the preceding five years. Columns need not to add up, due to annualisation.  
Source: OECD Secretariat calculations.

Reflecting the low levels of intra-industry trade, import penetration (defined as the percentage of imports in total production net of the trade balance) has been relatively low, particularly when compared with other countries of similar size. In 1981-83, Australia had an import penetration coefficient higher only than that of the United States, Japan and France.



Diagram 13. Gains and losses in market shares<sup>1</sup>



- I. Expanding markets, market share gains by Australia.
- II. Shrinking markets, market share gains by Australia.
- III. Shrinking markets, market share losses for Australia.
- IV. Expanding markets, market share losses for Australia.

1. For the definition of products 1 to 22, see Table 19.  
 Source: OECD Secretariat.

The share of imports in domestic consumption has risen over the past fifteen years, but much less than elsewhere. Substantial increases in penetration since the mid-seventies were registered in shipbuilding, petroleum refineries, electronic components, textile, footwear, clothing; in other sectors the share of imports remained fairly unchanged, or, in some cases – such as office machinery and computers – declined.

In summary, key features of industrial developments over the last fifteen years or so point to a decoupling between the productive structure and trade performance (cf. Table 19). Since Australia is less narrowly specialised than could have been expected for a relatively small high income country, its production structure has been less directly influenced by export performance than in other countries with small domestic markets that took advantage of the scope for intra-industry trade<sup>58</sup>. Only in natural resources-intensive industries is a strong trade performance associated with above-average productive shares.

### **Role of factor endowments and policies**

Three elements played an important role in shaping the structure of manufacturing: the distance from other industrial countries, the relative resource abundance of the country and the industrial policies pursued over the past decades. The geographical position of Australia provides obvious disadvantages for trade, as transportation costs are higher than among more neighbouring countries<sup>59</sup>. This was particularly so in the early days of Australian industrialisation, when trade relations were mostly with Northern hemisphere countries, in particular the United Kingdom. Transportation costs tend to reduce the range of traded commodities and consequently increase the lines of goods produced domestically. One should therefore not be surprised to find in Australia a wider variety of goods produced domestically than generally elsewhere. The effective barriers (or extra costs) added by distance in the case of Australia have been examined by various researchers. It has been estimated that, in 1973-74, the median effective rate of transportation for 84 manufacturing industries in Australia was 10.3 per cent (with a mean of 16.1 per cent)<sup>60</sup>. This compared with a median effective tariff protection of 32 per cent (or a mean of 36.5 per cent). Furthermore, depending on items and markets, effective rates of transportation cost have a very large spread, ranging from -19.5 to 139.2 per cent. While on average, transportation cost is not prohibitively high, it definitely is so for certain commodities and markets. Similarly, it has been estimated that the average effective transport cost for exports to the United States was almost four times larger than the effective tariff rate facing Australian exports in 1974<sup>61</sup>.

High transportation costs, acting as natural barriers, can be expected to shift the patterns of trade towards closer markets, when these open up to trade. As noted, the Western Pacific region has progressively become an area of concentration for Australian exporters, moving away from markets more expensive to reach such as the European countries. The share of the latter fell from 60 per cent in the early fifties to less than 20 per cent in the early eighties – a trend accelerated by the entry of the United Kingdom in the EEC. Furthermore, transportation costs have been sharply reduced over the last few years, becoming less of a hindrance to trade and, therefore, less of a justification for a non-specialised structure of production. The reduction of natural barriers is likely to further increase the exposure to international competition and the need for greater international specialisation and outward orientation of industry.

The country's rich natural resource base has been another important element in the shaping of domestic industry and in determining the structure of exports. In the past, shortlived commodity price booms often exerted pressure on the exposed sector of the economy. While in some other countries (cf. the United Kingdom, Norway, the Netherlands), commodity booms and other factors (wage push, poor productivity growth, etc.) also had detrimental effects on manufacturing trade performance, Australia resorted heavily to protection measures to compensate for loss of competitiveness (the "made-to-measure" protection).

Table 23. Effective rates of protection  
Per cent

Financial years	Average 1969/1973	1973/1974	1974/1975	1975/1976	1976/1977	1977/1978	1978/1979	1979/1980	1980/1981	1981/1982	1982/1983
<b>Industry</b>											
Food, beverages, and tobacco	18	18	21	20	16	10	14	13	10	9	9
Textiles	43	35	39	50	51	47	47	51	55	54	54
Clothing and footwear	91	64	87	99	141	141	143	135	140	204	220
Wood, wood products, and furniture	25	16	18	19	18	18	17	15	15	14	13
Paper and paper products, printing and publishing	51	38	31	30	30	24	26	25	25	25	24
Chemical, petroleum and coal products	31	25	23	24	23	21	19	17	15	14	14
Non-metallic mineral products	15	11	11	10	7	5	5	5	4	4	4
Basic metal products	29	22	16	16	14	10	10	9	10	11	11
Fabricated metal products	59	44	39	38	34	30	31	30	31	31	27
Transport equipment	50	39	45	59	54	48	53	59	63	71	72
Motor vehicles	52	41	77	116	104	100	111	120	126	143	147
Other machinery and equipment	42	29	24	25	22	20	20	21	20	21	18
Miscellaneous manufacturing	33	24	27	26	25	30	30	29	28	27	25
Total manufacturing	36	27	27	28	27	23	24	23	23	25	25

1. The forms of assistance covered by this table include tariffs, quantitative restrictions on imports, production and export subsidies, and special pricing schemes for sugar and petroleum products. The assistance provided by the motor vehicle local-content scheme is included only in the estimates based on 1977/78 production weights. Forms of assistance not taken into account include government purchasing practices and assistance from state governments, some descriptive details about which are provided in the Industries Assistance Commission's *Annual Report 1980-81* (Canberra: AGPS, 1981), Chap. 2 and apps. 2.2 and 2.3. Years 1968/69 through 1973/74 are at 1971/72 production weights; years 1974/75 through 1976/77 are at 1974/75 production weights, and years 1977/78 through 1982/83 are at 1977/78 production weights.

Source: Industries Assistance Commission, *Assistance to manufacturing industries, 1977/78 to 1982/83*.

The current structure of manufacturing industry has indeed been importantly influenced by industrial policies. Until recently, tariff policy was the major instrument of industry policy. (For a brief historical overview of tariff policy in Australia, see Annex III.) While in the postwar period most of the more advanced OECD countries took part in extensive tariff cuts under the various GATT Rounds, Australia largely abstained from across-the-board reductions within the context of the MLT framework<sup>62</sup>. Australia has maintained tariff barriers for manufactures at higher levels than most other OECD countries. As far as quantitative restrictions are concerned, Australia has mainly used tariff-quotas for TCF and motor vehicles. But it has not used unofficial import restrictions and voluntary export restraint agreements and is not a party to the Multi-Fibre Agreement. However, as regards non-tariff barriers, methodological problems make it difficult to draw any firm conclusions as to the relative position of the country vis-à-vis the rest of the OECD area. Table 23 lists average effective rates of protection for a number of manufacturing sectors<sup>63</sup>. Protection has remained high throughout the period under consideration, with wide discrepancies between sectors. A watershed year was 1973/74, when the 25 per cent across-the-board reduction in tariffs resulted in a fall in effective protection from 35 to 27 per cent. Tariffs were further lowered in subsequent years and effective protection reached its lowest level at the end of the seventies<sup>64</sup>. In the early 1980s, assistance to industries increased marginally, while its dispersion widened. Average effective rates for sectors not under sectoral programmes fell by 2 percentage points between 1978-79 and 1982-83; however, for selected sectors – motor vehicles, textiles, and clothing and footwear – protection increased substantially. For clothing and footwear, average protection amounted to 220 per cent and for motor vehicles to around 160 per cent. Greater dispersion of assistance is probably the most negative aspect of developments in this area. By distorting relative prices, a non-uniform tariff structure sends signals that may result in unwarranted allocation of resources to sectors where the country does not have a particular comparative advantage at world prices. In summary, the average and medium effective rates of assistance, while having fallen substantially, were still 25 per cent and 14 per cent respectively. For the approximate 90 per cent of manufacturing not covered by quota restrictions (i.e. outside clothing, footwear and passenger motor vehicles), average effective protection fell from 31 per cent in 1973 to 14.5 per cent in 1983<sup>65</sup>.

A somewhat different approach to industry policy began to emerge in 1983, after the end of the resources boom and the subsequent 1982-83 recession. The central objective was to place a wider range of manufacturing and service industries on an international footing. Policies with respect to the manufacturing sector moved away from the import substitution strategy, reduced the previous reliance on tariffs and introduced a range of more positive incentives to facilitate the structural and dynamic changes to certain areas of industry where this was judged necessary.

The reshaping of industry policy was part of a wider approach including four main lines of action. A first priority was to provide for a healthier and more open macroeconomic environment. Measures included the floating of the exchange rate, the deregulation of the financial and banking systems, taxation reform and the macroeconomic aspects of the Prices and Incomes Accord. Next, the business environment was to be improved by the easing of market rigidities, including government regulation and the greater co-ordination of other policies affecting industry, such as education, export promotion, transport, communications and State government policies. Thirdly, tariffs were to be gradually reduced and positive support measures were to be developed, both general and sectoral, to facilitate structural adjustment. Since 1983, sectoral programmes have been implemented for major mature industries, such as motor vehicles, textiles, clothing and footwear (TCF), steel and heavy engineering and what are deemed to be promising activities, such as computer hardware and

software and communications equipment. These plans cover a very substantial part of the manufacturing sector (about a quarter of total output). General incentives have focused mainly on investment and technology; they include taxation concessions for venture capital and R&D and provisions for accelerated depreciation<sup>66</sup>. Finally, all forms of policy formulation were to take place within a framework of consultation and a degree of commitment among government, employees and unions, helped by the formation of several "industry councils"<sup>67</sup>.

The rationale for the programmes involving declining industries is to allow them to gain international competitiveness through productivity increases and a streamlining of products, while minimising the short-run costs from reduced protection. Measuring costs and benefits of lower protection levels is not an easy task<sup>68</sup>. In particular, important dynamic effects influencing the medium-term resources allocation – such as the scope for increased efficiency through greater exploitation of economies of scale – are, by their nature, difficult to quantify. Uncertainties over the potential costs of a shift to a lower level of protection, particularly in the short run, have often weighed heavily in the policy debate. These issues have been addressed by several studies. For example, in a study by Parmenter<sup>69</sup> a complete abolition of manufacturing tariff protection would lead, in the short run, to an increase in farmers' incomes of the order of 17 per cent. Similarly, Dixon, Parmenter and Rimmer<sup>70</sup> show that an across-the-board reduction of protection of the order of 50 per cent would be likely to be broadly neutral with regard to key macroeconomic variables; small positive effects on the trade balance, inflation and employment might result even in the short run, the positive effects stemming from export oriented industries offsetting lower activity in protected industries<sup>71</sup>. According to other observers, it can be argued that in view of the geographic and skill distribution of the Australian labour force and the relative absence of industry "clusters" in particular areas of the country, the resources shifts across sectors linked to trade liberalisation might be accomplished with a lesser amount of economic dislocation than observed in other countries. A faster pace of trade liberalisation would no doubt hurt the most protected segment of Australian industry, at least in the short run. However, such a move would have long run beneficial effects for the economy by allowing a fuller exploitation of the country's comparative advantage. In this context, specific sectoral plans may help transition for the most affected sectors by facilitating and expediting the processes.

An important issue relates to the coherence of the present strategy. Important progress has been made in the elimination of some distortions, particularly in the dismantling of the state preferences system which was an important obstacle to the achievement of optimal plant size. Other examples relate to simplification and standardization of the structure of the Australian tariff and relaxation of foreign investment rules and export controls. As noted, the general level of tariff and non-tariff protection has also shown a tendency to decrease, and contrary to developments in other countries, assistance is becoming more transparent. Although there was a tendency to increased rate dispersion in the early eighties, the devaluation in 1985 and 1986 and the reduction in bounties by 20 per cent in the FY 1986-87 Budget, have probably resulted in a reduction in the dispersion of effective protection. Recent decisions regarding trade barriers indicate that this pattern should continue over a somewhat longer time horizon. However, the approach to tariff reduction has remained sector specific and it has not been reconsidered following the recent improvement in external competitiveness.

The programmes for mature industries introduced since 1983 have a number of common features. They have been negotiated in line with the microeconomic aspects of the Prices and Incomes Accord, and are subject to tripartite agreement on objectives. They place obligations on all the parties to them and are conditional upon those obligations being met. They operate

for a limited time. They generally involve a progressive movement towards greater integration with the world economy. They also generally provide for labour training and retraining as well as addressing restrictive work practices and management practices. However, the programmes do raise a number of issues, in particular the contradictory signals given with regard to greater opening to external competition. The Steel Plan, for instance, makes explicit provisions for productivity improvements and has met with substantial success. At the same time, it contains review clauses in case the share of the Australian market going to domestic producers should fall to less than 80 per cent. This safeguard provision seems to be in contradiction with the desired market orientation and the necessary outward thrust needed to achieve a viable scale of operation<sup>72</sup>. The Motor Vehicle Plan provides for rationalisation and streamlining of the model structure, with a view to increasing productivity and achieving a better integration in the world car market. However, the plan still envisages a 57.5 per cent level of tariff protection in 1992, which contrasts with average 2½ per cent rates in other industrial countries. Admittedly, these rates do not take into account unofficial import restrictions and voluntary export restraint agreements both of which Australia has not employed. Furthermore, although the 85 per cent local content provision has been the subject of adjustment and liberalization, it still represents an important trade restriction, preventing domestic producers from taking full advantage of the depreciation of the Australian dollar. As noted by the Automotive Industry Authority, in the short run, the increase in the Australian dollar value of imported inputs may result in a greater overall price increase in order to maintain the required domestic content proportion<sup>73</sup>. The recently unveiled plan regarding textile, clothing and footwear – a sector which accounts for approximately 10 per cent of manufacturing employment, or 1.5 per cent of total labour force – will not start before the expiry of the present plan in March 1989. It is expected to last for seven years, and, although quotas will be eliminated by the end of the period, protection levels will still amount to between 40 and 60 per cent. It also contains safeguard clauses, providing for review of assistance upon contraction of domestic activity of the sector of more than 10 or 20 per cent (depending on the subsector).

In addition, the plans vary considerably with respect to their objectives, time frame, type and ultimate level of assistance and review processes. The rationale for this diversity is not always clear. Yet, their influence on resources allocation should not be underestimated. Besides involving substantial budgetary support, they also provide for increased investment flows, thus continuing to commit resources to sectors where price signals are not yet allowed on equal terms with others. These plans are the result of laborious negotiations among many partners and are thus difficult to modify, when changes in external conditions occur. As noted, this is underscored by the fact that the recent sharp improvement in external competitiveness has not prompted a reassessment of the plans, or at least of the speed of implementation of their trade liberalisation clauses.

### **Measures to enhance supply responsiveness**

Public debate has long been focused on the desirability of greater supply response; particular attention has been devoted to the need to eliminate or reduce restrictive work practices<sup>74</sup> and to improve training and the strength of the educational system. The strong craft union structure has indeed created problems of demarcation and maintenance of job classifications that often have little relation to new technology and restrict the use of the full range of skills in which people are trained. It may have provoked somewhat greater resistance to change, because of fears regarding longer-term job security. The blame has also been put on

managerial attitudes, to the extent that insufficient attention would have been paid to on-the-job training and the most appropriate use of skills.

The extent of these impediments is difficult to assess. Some restrictive practices have already been eased or eliminated<sup>75</sup>. However, they continue to plague certain sectors critical for an improvement of export performance, such as shipping and freight<sup>76</sup>. And while some unions have merged, problems remain for negotiating changes which reduce the role and strength of individual craft groupings. Following a number of well publicised labour disputes, the Government has recently moved to address the question, and at a tripartite meeting between the ACTU, business groups and the Government it was agreed to study work practices in greater detail. Moves by business towards more efficient business practices, such as just-in-time inventory management may also impose greater constraints on individual union activities because of their potential impact on the rest of industry.

Another important structural issue relates to the education system and the breadth and depth of the skills required. Education policies are necessarily complex. Not only are their objectives diverse but responsibility for education in Australia is shared between the various levels of government. Comparative data suggest that Australia's level of educational attainment is not high by OECD standards and there is need to improve training and skills<sup>77</sup>. It is also felt that upgrading the skill level is an important ingredient in accelerating the pace of productivity growth. Although in a few areas – notably the number of higher degrees awarded – Australia ranks well, a relatively large number of students leave the education system without sufficient education to be employed in jobs requiring more than little or no skills. Comparative studies at the beginning of the eighties indicated that both the share of the 16 to 24 year old population in education and the share of students in engineering or technologically related disciplines were low relative to other highly industrialised countries. Conditions have improved substantially since then, with the number of students staying in school until the end of the twelfth year rising from around 35 per cent at the turn of the decade to 46 to 47 per cent in 1985 and increases also in participation in tertiary education. There remains, however, a number of areas of significant skill shortage, such as nursing and computing, and there is reason also to question the quality and depth of the national skills base. While the recent slowdown in demand may reduce potential mismatches in the labour market<sup>78</sup>, faster output growth in the manufacturing sector in response to the recent improvement in external competitiveness could well exacerbate problems in that sector. A rise in the broad educational attainment of the workforce would be an asset as the pace of change of the economy accelerates over the next few years.

In the last five years, national action has been taken to boost youth participation in post-compulsory secondary education and in technical and further education. But at the tertiary level – particularly in the technical and further education system (TAFE) and the colleges of advanced education – demand for places has outstripped supply. More generally, the Government's labour market programmes are giving increasing emphasis to training with less priority for job creation involving no formal training element. In addition, there have been a number of measures to improve education and labour force qualifications over the longer term. Commonwealth general recurrent grants for education to the State and Territory Governments will be focused on strategies for raising student standards in basic communication skills and numeracy and improving the relationship between secondary schooling and subsequent education and employment. A major restructuring of youth support payments – i.e. education and unemployment allowances – over the following three years was presented in the FY 1985-86 Budget and the Australian Traineeship System was introduced in 1985 to provide vocational training to those not completing upper secondary education<sup>79</sup>.

## CONCLUSIONS

Since Australia was last examined by the EDR Committee in June 1985, the country's economic performance has deteriorated considerably. Contrary to expectations, imbalances that were emerging at that time have become distinctly worse. To a large extent, this was due to the unexpectedly large terms-of-trade loss and related pressures on the exchange rate. This, combined with deteriorating confidence at home and abroad in the wake of the widening current account deficit, rapidly-rising foreign debt and concern over possible wage developments, created a particularly difficult external situation. But purely domestic factors also played a role. The country had moved cyclically out of phase with its main trading partners and strong domestic demand expansion had become incompatible with the maintenance of external equilibrium. In other words, large public sector deficits, not offset by rising private savings or by a reduction of domestic investment, were also fuelling the external deficit. However, since early 1985 there has been a major reorientation of policies and a marked improvement of external competitiveness.

Despite much weaker domestic demand growth over the last year or so, the country is now faced with a current external deficit of the order of 5¾ per cent of GDP, high and rapidly-rising external indebtedness (30 per cent of GDP), growing servicing costs and a rate of inflation of more than 9 per cent, far above that in most other OECD countries. Prospects over the next eighteen months or so point to some improvement of economic performance: positive GDP growth of the order of 3 per cent may be restored; tighter fiscal and monetary policies should contribute to achieving a growth pattern more conducive to external balance; and as the substantial improvement of trade volumes now under way progressively dominates the initial unfavourable price effects associated with the 35 per cent effective depreciation of the Australian dollar, the current external deficit should fall. By the first half of 1988, it may be brought down to some 4½ per cent of GDP. After peaking in the second half of 1986, inflation is projected to decelerate to around 5-5½ per cent by mid-1988.

In present circumstances, the overriding priority of policy will inevitably have to continue to be placed on reducing the current account deficit and stabilizing the external debt/GDP ratio over the medium term. Tentative Secretariat scenarios, presented in Part III of the Survey, suggest that the adjustment process may be lengthy and relatively painful. Considerable uncertainties surround growth prospects in the international economy, associated terms-of-trade developments for Australia, the country's ability to preserve the substantial gains of competitiveness achieved so far, and the reaction of trade flows to large changes in relative prices. However, on the basis of a relatively "neutral" set of assumptions, if the economy is to expand approximately in line with potential, employment to grow and the debt/GDP ratio to stabilize, then a substantial shift of real resources to the external sector – of the order of 4½ per cent of GDP – will have to take place by 1990-91. Achieving such a shift presents a major challenge for policies.

Chances of success will depend not only on the right setting of policies, but also on private sector behaviour. In this context, continued real wage moderation is essential. Such restraint,



which should preferably be achieved at a low rather than a high rate of inflation, is needed on three counts:

- *To maintain the competitive edge created by the depreciation.* It would be better to preserve external competitiveness through wage cost moderation and productivity gains. Further depreciation of the exchange rate could compound the adjustment task – at least in the short term – given, notably, negative valuation effects and adverse impact on expectations. A substantial erosion of competitiveness would ultimately push more of the adjustment burden on employment and domestic incomes, through more restrictive policies;
- *To achieve an appropriate development of income shares.* To get the necessary improvement in the underlying productive potential of the economy, the level of business investment will certainly have to rise, at least in manufacturing, implying a maintenance, if not an increase in profit shares;
- *To contain domestic absorption.* Given the required shift of real resources to the external sector, and the need for higher business investment, the room for real consumption growth will be limited even if a greater part of domestic demand can be met by import competing industries.

In this context, the changes in the wage determination process now envisaged are welcome. To its credit, the Accord has demonstrated much greater flexibility than generally expected when introduced. Indeed, combining, over the last eighteen months or so, a 3 per cent fall in real wages with rapid increases in employment and hours worked was no mean achievement. But the Accord and the centralised wage determination system have also had drawbacks. The uncertain outcome of lengthy negotiations between the Government and the union movement over the size of the wage adjustment probably had a negative influence on business and foreign investors' expectations. This is likely to have led to hesitancy over investment, and to have put pressures on the exchange rate and interest rates. Against this background, introduction of a two-tier wage determination process and abolition of formal reference to indexation would be more consistent with deregulated financial markets and the floating of the exchange rate. Hopefully, wage developments could also be more directly related to productivity trends and firms' performance. However, with the move to more disaggregated wage bargaining and in view of the uncertainties surrounding the principles that will apply to the second tier, the danger of excessive increases in overall labour costs cannot be entirely excluded. In this environment continued weight will have to be placed on monetary and fiscal policy to maintain a macroeconomic environment conducive to wage moderation.

Correction of the external deficit also implies that domestic saving be brought more in line with domestic investment. Given the limited scope for raising households savings and the need to maintain healthy business profits to enhance investment and raise the long-term growth potential of the economy, the financial adjustment will have to take place mainly through reduced public sector dissaving. Substantial progress has been made, so far, in reducing the Commonwealth Government deficit. While continued restraint of outlays at the federal level will be needed in coming years, greater efforts should be directed at curbing spending by State and local governments (now rising faster than GDP). Attempts by the Federal Government to better control overall public sector spending, through reduced revenue transfers and global limits on borrowing through the Loan Council, have not yet led to a containment of the net borrowings of the States. Indeed, there has been a substantial amount of financial reserves built up by States over the last four years which potentially could inhibit future efforts at containment. More effective co-ordination of fiscal policy between the

various levels of government is therefore desirable. More generally, steady reduction in the public sector borrowing requirement would reduce pressures on financial markets and the cost of funds. Fiscal restraint is all the more important, as excessive reliance on monetary policy would jeopardise the needed expansion of investment.

Given Australia's existing trade structure and the likely persistence of excess supply in world commodity markets, it would be unwise to rely on rapid rises in either volumes or prices of agricultural products and raw materials to correct the external imbalance. The export base of the country needs to be broadened by the development of viable and competitive service and manufacturing sectors. As argued in the Survey, a more efficient manufacturing sector would also lessen the cost burden on other sectors with beneficial effects for the competitiveness of rural, mining and service exports. The marked improvement of price-cost competitiveness has clearly created promising opportunities for manufacturing exports. However, a number of existing features of the economy will have to be modified. Distance from large foreign markets, the rich resource base of the country, and protected markets granted to domestic producers by long-standing import substitution policies, have resulted in insufficient specialisation of the manufacturing sector. Manufactured goods exports are largely linked to the country's natural endowments: other abundant factors (in particular, human capital) contribute much less to external trade. Over the last thirty years, "intra-industry" trade – which has provided the bulk of the increase in manufactured goods trade among many industrial countries – has played a minor role for Australian producers. Economies of scale through international specialisation have been limited and the country has probably lagged behind in the process of technological and product innovation.

An important issue relates to the need for greater opening of the manufacturing sector to external competition, through reduced levels of protection. The change of emphasis since 1983 is a step in the right direction. The wide dispersion of effective rates of protection among sectors is planned to be substantially lowered, thus reducing allocative distortions. But even by the end of a relatively long period of adjustment, assistance will remain excessive. For motor vehicles, textiles, clothing and footwear, tariff protection may still exceed 50 per cent in the early 1990s. The opportunity created by the marked improvement of competitiveness in the wake of the depreciation of the Australian dollar, should be seized to adopt more ambitious targets for dismantling protective arrangements. While faster trade liberalisation would no doubt hurt the most protected segments of industry in the short run, the long-run effects for the Australian economy at large would be beneficial. Resource allocation would be improved in the sector concerned, while costs for other industries would be reduced. To convey the right price signals, it would also seem important that reductions in external protection be perceived as irreversible. In that sense, the provision of safeguard clauses in the various sectoral plans is therefore regrettable.

More generally, greater supply responsiveness constitutes a crucial element in promoting the required reallocation of resources and longer-term growth potential. In this context, there appears to be scope for tapping potential productivity gains. Restrictive work practices that constitute serious impediments in certain sectors should be removed or reduced, through consultation and co-operation between employers and employees. In particular, efforts should be made to ease rigidities in shipping and freight, sectors which are critical for an improvement of export performance. Public debate in Australia has also concentrated on the need to improve training and the strength of the educational system. Further initiatives to develop vocational training and improve the skill base may be desirable.

In summary, Australia is now faced with a formidable adjustment task over the medium term. In many important respects, the adoption in recent years of far-reaching structural reforms and the reorientation of macroeconomic policies have laid the ground for resumption

of more balanced and sustained non-inflationary growth. Early signs of a re-establishment of confidence have also emerged. However, most of the adjustment still lies ahead. While a propitious macroeconomic framework will have to be maintained through stable fiscal and monetary policies, a key determinant of performance over the medium term will be the capacity of the manufacturing sector to adjust to the marked shift in relative prices. Micro-structural policies will have a critical role to play here in enhancing the flexibility of the economy. Ultimately, much will also depend on how economic agents respond. While greater labour union awareness of the issues has created a climate more conducive to achieving the needed reallocation of resources, the short-term negative implications for living standards will have to be duly recognised and accepted. It will also be up to the business sector to seek out and exploit the new opportunities created by the marked improvement in external competitiveness, implying a revival of both entrepreneurship and business investment.

## NOTES AND REFERENCES

1. All references to dollars refer to Australian dollars.
2. Gross public sector borrowing comprises the Commonwealth budget deficit and borrowings under the global limits by Commonwealth and State authorities. Estimates for net public sector borrowings are derived from national accounting statistics and represent the difference between outlays and receipts for the public sector. The differences between net and gross borrowing reflect definitional and timing differences as well as the inclusion in the gross measure of borrowing of the acquisition of financial assets. States' gross borrowing has for several years exceeded net borrowing, allowing a substantial build-up of financial assets. Net borrowing is the best indicator of the sector's demand on aggregate saving. For a further discussion, see Budget Paper No. 1, AGPS, Canberra, for both 1985-86, pp. 417-418 and 1986-87, pp. 371-375.
3. A "tax summit" was called in July to ensure that there would be a wide consensus for the changes to be introduced. The Government presented a number of options for reform.
4. The fringe benefits tax is imposed on employers. It applies to non-cash benefits provided to employees *inter alia* in the form of cars, low-interest loans, residential accommodation, living-away-from-home allowances, discounted goods and services, and expenses paid on the behalf of employees.
5. The Prescribed Payments tax system was instituted to collect tax at source for certain self-employed to reduce the possibilities of tax evasion.
6. The revenue impact on a full year basis has been estimated as:

	A\$ million	% total Commonwealth tax revenue FY 1986/87
Reduction in personal tax rates	-4 500	-6.3
Widening tax base	1 000 <sup>a</sup>	1.4
Extension of prescribed payments tax system	50	0.1
Foreign tax credit system	60	0.1
Company tax rate increase and imputation of company tax	-300	-0.5
Indirect tax system	110	0.2
Other	-50	0.1
<b>Total</b>	<b>-3 630</b>	<b>-5.0</b>

*a)* Excludes estimates for the capital gains tax.

7. The tax reductions were initially envisaged to take place from 1st September 1986 and 1st July 1987. The fall in the terms of trade led the Government to delay the introduction of the first *tranche* until the beginning of December 1986, with a revenue gain estimated at \$650 million.
8. For a number of years, the gross borrowing of the states has exceeded the net borrowing requirement and the difference has allowed scope to accumulate financial assets. In FY 1985-86, it is estimated that borrowings were \$2 billion greater than needs. In FY 1986-87, net borrowings are estimated to exceed gross borrowing suggesting that the States may run down their financial assets somewhat.

9. For a review of these changes, see OECD *Economic Survey of Australia*, June 1985. Major changes have included the termination of quantitative lending guidance previously given to trading banks, the relaxation of asset requirements on savings banks, the introduction of a prime assets ratio in lieu of the previous liquidity requirements, the removal of maximum/minimum periods that banks could offer interest on deposits, and the relaxation of interest rates which banks may charge.
10. In June 1986 these new banks held 4 per cent of assets of financial intermediaries.
11. Deregulation and increased competition have led banks to adopt more aggressive liability management techniques. This ability to bid for short-term deposits has given banks greater control over liability management and enhanced their ability to expand credit.
12. The main indicators included in the "check list" are money and credit aggregates, interest rates, the exchange rate, the external accounts, economic activity and inflation. The Reserve Bank does not have targets for the "check list" items.
13. The Reserve Bank of Australia publishes qualitative information concerning day-to-day operations – both before and after – and forecasts for the funds position in the following week. In conjunction with the Treasury, the RBA is also giving financial markets more information regarding government borrowing needs and the impact of the timing of government receipts on the seasonal fluctuations.
14. The Reserve Bank controls cash availability primarily through purchases and sales of Commonwealth government securities (CGS). The Reserve Bank added to its flexibility in smoothing the supply and demand for cash by introducing repurchase agreements for CGS between the Bank and authorised money market dealers in August 1984. This was further enhanced in August 1986 when dealers were allowed to enter into repurchase agreements with trading banks and other clients. This should increase their role to act as a conduit for the Bank's operations by providing more scope for futures operations and for increasing their access to CGS in the market.
15. More exactly, the base is now total liabilities other than shareholders' funds which are invested in Australian dollar assets in Australia. Prime assets include notes and coins, balances with the Reserve Bank, Treasury notes and other Commonwealth government securities, and loans to authorised money market dealers secured against CGS.
16. Trading banks established prior to 1981 are now required to observe a minimum capital ratio of 6 per cent. Previously the minimum ratio had been 5 per cent. At the same time, the definition of capital has been widened to include general provisions for doubtful debts, authenticated and disclosed undervaluation of assets and, to a limited extent, subordinated perpetual debt meeting specified criteria. The minimum capital ratio which trading banks established in 1981 and afterwards are required to observe during their formative years remains at 6.5 per cent.
17. Actual foreign exchange sales during the third quarter were US\$1.1 billion. In addition to these market transactions, the Reserve Bank sold foreign currencies equivalent to US\$0.7 billion to the Commonwealth Government.
18. The wage determination system is described in some detail in the 1984 OECD Economic Survey of Australia. The system was essentially based on minimum wages (awards) established for each group of workers by the wage tribunals at the Commonwealth and State levels. The national tribunal, the Arbitration Commission, sets national awards for all workers under its jurisdiction. From mid-1981 through to the end of 1982, negotiations on an industry-by-industry basis resulted in many consent agreements being ratified by the industrial tribunals. These agreements related to movements in prices and productivity and usually incorporated commitments by unions not to pursue extra claims for award or over-award payments during the life of the agreement. As strategic unions won substantial increases in pay and reduced hours, the concept of comparative wage justice was invoked to spread these to other sectors.
19. The initial Accord between the Labor Party and the ACTU took place in February 1983. When the Labor Party acceded to Government in March of that year, a tripartite conference was held to attempt to achieve faster economic growth. The parties agreed to a return to a centralised wage system under the auspices of the Australian Conciliation and Arbitration Commission. The

Commission established a set of wage principles to last for an initial period of two years, to be reviewed subsequently. The essential principle was full wage indexation to prices, unless the Commission was persuaded otherwise. The principles also provided for the Commission, upon application and not before 1985, to consider whether an increase in wages and salaries or changes in conditions of employment should be awarded on account of productivity.

20. Private pension schemes for individual firms or industry groups are fairly widespread. In the early 1980s these covered 40 per cent of the working population with least coverage for seasonal part-time and temporary workers. These schemes have grown fairly steadily in the postwar period.
21. Given that the decision was delayed by two to two and a half months, and prices were rising at 7 to 7½ per cent the additional fall in real award wages was between 1¼ and 1½ per cent.
22. The agreements had to be genuinely consented between the parties, and in line with government standards for pension funds. The cost should not exceed 3 per cent of workers' ordinary time earnings.
23. The problem of relativities may be exaggerated. In the case of nurses, a supplementary wage increase has been agreed while marked differences in *earnings* growth within the service sector are appearing. On the basis of partial information for the twelve months to November 1985 earnings growth ranged from 10.4 per cent in the finance sector and 8.7 per cent in the wholesaling industry to 3.0 per cent in electricity and 3.4 per cent in public administration. These comparisons are affected by the timing of receipt of national wage case decisions. Additional factors may have been compositional changes – particularly increased part-time work and the deregulation of the financial market.
24. When this report went to press, the Arbitration Commission had not announced its decision in the National Wage Case. The forecasts in this report are broadly consistent with a decision by the Commission to award a \$10 flat rate increase early in 1987 under the first tier and to allow negotiated increases under the second tier subject to a ceiling of 3 per cent. This is in line with the Government's submissions to the Commission in the case.
25. There are a variety of methods used to adjust for terms-of-trade changes. The one used here has revalued exports of goods and services by the deflator for imports of goods and services – thereby providing a measure of the purchasing power of exports over imports. See Quarterly Estimates of National Income and Expenditure, ABS, June Quarter 1986, Catalogue No. 5206.0, p. 2. The fall was 1 per cent on a seasonally adjusted basis from the second quarter of 1985.
26. These included: *a)* the expectation that lead-free engine vehicles – introduced in early 1986 – would cost more and be less efficient; *b)* a rush on existing stocks of motor vehicles triggered by higher prices for imported cars (following devaluation); *c)* the ending of the investment allowance at mid-1985 requiring orders to be placed before that date with delivery within 24 months; *d)* the expectation of reduced demand for rental vehicles by business following the introduction of the fringe benefit tax may have induced fleet owners to hold off purchases. To the extent that a large share of car sales are included in investment, these factors also affected investment in machinery and equipment.
27. See R.M. Simes and P.M. Horn, "Wealth, Inflation and the Consumption Function". Paper presented to the 15th Conference of Economists, Monash University, August 1986.
28. This reflected strong pent-up demand for accommodation and the impact of government incentives.
29. These primarily include the North West Shelf (liquified natural gas production) and at Roxby Downs (copper-uranium mine).
30. America's Cup defence in Perth in 1986-87 and the Bicentennial celebrations in 1988 are expected to increase the number of foreign visitors to Australia. Office and shop building has been concentrated in central business districts of most capital cities. This may be related to an underlying shortage of office space, following reduced building in the 1970s and early 1980s and

increased demand in the financial sector associated with deregulation and the entry of foreign banks.

31. See footnote 26 above. This sector also includes leasing to other sectors, it is difficult to disentangle the sectors actually reducing equipment use. Sale and lease-back transactions refer to the sale of certain public enterprise investments to the private sector. The project is then leased back to the public enterprise.
32. The number of firms operating at full capacity in manufacturing increased steadily but erratically through 1984 and 1985 peaking in the fourth quarter of 1985. Capital-output ratios for the whole economy have tended to decline since their peaks in 1982 and other indicators of capacity utilisation have also shown increases during 1985.
33. See Australian Financial Review, 23rd October 1986, p. 3 which reports on an analysis of debt levels.
34. 1985-86 Budget Paper No. 1, Canberra, AGPS, 1985, p. 20-22.
35. The number of full-time male workers was only 6.7 per cent above its previous peak; for full-time female workers the figure was 13.6 per cent and for part-time workers 22.5 per cent. The growth in part-time employment accelerated from an average rate of 4.1 per cent in the ten years to FY 1984-85, to 6.6 per cent in FY 1985-86.
36. Industry data employed here is drawn from the Labour Force Survey and should be treated with caution as it relies on those surveyed identifying which sector they belonged to. An alternative survey (SEE) based on data from employers is likely to give a better indication of the industrial composition of employment. On this basis, government employment in the period from mid-1983 to mid-1986 has risen by some 6.6 per cent (excluding temporary census workers) compared to 13.1 per cent for wage and salary earners in the private sector.
37. In this context, it is interesting to note that employment has grown most rapidly in small and medium-sized firms. In the period from August 1983 to May 1986, employment rose by 10.2 per cent for firms with 100 or more employees, compared to 16.2 per cent for firms with less than 100 employees.
38. Productivity in the service sector is biased downwards because of a rise in part-time employment.
39. Although causal relations are difficult to determine, real wages appear with a significant negative coefficient in simple employment equations for Australia. A comparison of cyclical upswings since the early 1970s, indicates that the employment response to higher output has been greater in periods when real unit labour costs have been lower. See Budget Statement No. 2 of 1985-86 Budget Paper No. 1, pp. 20-21.
40. In October 1986, 48.2 per cent of the unemployed had not worked for six months, 28.6 per cent for at least a year and 16 per cent for more than two years. This probably understates the number of long-term unemployed as there are a substantial number of discouraged workers. ABS surveys for September indicate that an additional 90 500 persons were not looking for work for reasons assessed to indicate discouragement. Since September 1983, the number of discouraged workers has fallen by 27 700.
41. Gross flows of employment indicate that the proportion of employment coming from outside the labour force rose from 62 per cent in 1983-84 to 65 per cent in 1985-86. The size of sampling errors suggest that these figures should be interpreted with caution.
42. In the first half of 1986, the average rate of inflation as defined by the private consumption deflator in the rest of the OECD area was around 2 per cent and 1¾ per cent in Australia's major trading partners.
43. The National Wage Case awarded 2.6 per cent in April 1985, 3.8 per cent in November 1985 and 2.3 per cent in July 1986.
44. It should be emphasized that these series are derived from different sources, are not always perfectly comparable and are open to sampling error. Costs for workers' compensation have risen in

recent years with a broadening in both the type of injury covered by compensation and the amount of compensation. In the second half of 1984, the Arbitration Commission handed down a decision in the so-called "Termination, Change and Redundancy Case", largely accepting the ACTUs demands to limit the employers' power of dismissal without notice or consultation and established minimum levels of severance pay. The introduction of these conditions into Federal awards has been generally slow as it has been into State awards. Currently only Victoria has decided to fully adopt the conditions of the Federal Commission's decision into State awards. See Frank Cawthorne, "Major Tribunal Decisions in 1985", *Journal of Industrial Relations*, March 1986.

45. Quarterly national accounts data are often heavily revised in subsequent quarters and should be treated with caution. In recent quarters high (low) quarterly growth rates tend to be revised downwards (upwards) in subsequent data releases. (See G.C. Lim, "GDP Growth Rates Calculated from Quarterly National Accounts: Discrepancies and Revisions", *The Australian Quarterly*, 4th quarter, 1985). Recent data have been marked by large revisions to the investment and government consumption series and by sharp quarterly movements in the statistical discrepancy between the income and expenditure sides of the account. Revisions may be particularly large for private investment and this has partly been taken into account in the investment forecasts.
46. Methods of calculating the level of stockbuilding in the quarterly national accounts may distort the level of stockbuilding where the deflators employed for estimating the value of stocks may differ between the enterprise sector and the ABS. As a consequence, the fall in the stocks in the quarterly accounts of the third quarter of 1987 may have overestimated the actual fall by a considerable amount. The profile of stockbuilding in the OECD forecasts presented here have attempted to abstract from these problems.
47. Australian residents were allowed to invest abroad without administrative constraint, some diversification of portfolios by institutional investors as well as increased direct foreign investment by Australian firms took place. Capital outflows rose to around 3 per cent of GDP in FY 1985-86.
48. The "lucky country" had the fourth highest per capita income in 1960, but in 1984 it only ranked sixteenth, in the OECD area.
49. Both output and the value-added deflators have increased less in manufacturing than in the rest of the economy, the latter trend reflecting stronger productivity growth in manufacturing.

**Average annual rate of growth 1970-72 to 1982-84**

	Manufacturing	Non-manufacturing
Output	1.1	3.3
Employment	-1.0	1.8
Productivity	2.1	1.5
Value-added deflator	11.0	12.0

At 1974-76 prices, the decrease in the share of manufacturing in GDP was therefore smaller (from 21.7 per cent to 17.2 per cent).

50. See for instance W. Kasper, in Kasper and Parry, *Growth, Trade, and Structural Change in an Open Australian Economy*, Center for Applied Economic Research, University of New South Wales, 1978. Australia's relative shares in output are shown to have followed "normal" patterns for per-capita income levels, with differences in absolute levels that are explainable by the particular resources endowment of the country.
51. The expansion of the relative importance of mining in GDP has been due to an important increase in output, rather than prices: the sectoral value added deflator has in fact moved less rapidly than the overall GDP deflator. For a review of the effects of the natural resources boom on the Australian economy, see J.F. Helliwell, "Natural Resources and the Australian Economy" in Caves-Krause (eds.), *The Australian Economy - A View from the North*, The Brookings



Institution, Washington DC 1984; see also P.J. Higgins, "Australian Mining and the Economy: A Computable General Equilibrium Analysis", Impact Project General Paper No. G-65, Melbourne, January 1986.

52. This index has been proposed by Lawrence in *Can America Compete?*, Brookings Institution, Washington DC, 1984; it is equal to one-half of the average absolute value of the changes in shares of subsectors in manufacturing. It gives the same relative ordering as the United Nations index, which is equal to the sum of positive changes in shares. These indices are very sensitive to the number of sectors considered; in this study, a 22-sector classification of manufacturing has been adopted (displayed in Table 19), based on OECD (1986).
53. Indeed, a simple rank correlation coefficient calculation between the structural change index and the growth rate of real output yields a negative value of  $-0.36$ , which is however statistically insignificant.
54. Cf. also Caves, R. (1984) "Scale, Openness, and Productivity in Manufacturing Industries", in Caves-Krause, *op. cit.*
55. The index of revealed comparative advantage, proposed by Balassa (1965) is given by the ratio of the share of a country's exports in a particular industry over the country's share in overall trade. If larger than unity, it displays a relatively over-average performance in the particular industry, thus "revealing" a comparative advantage there.
56. The index of intra-industry trade is equal to  
$$[1 - \sum_i \text{abs}(X_i - M_i)/(X + M)]$$

It ranges from 0 (no intra-industry trade) to 1.
57. The growth differential between world total imports of manufactures and the country's exports in the same categories is decomposed in three fundamental components: the *market effect*, that reflects the composition of the regional market to which Australia exports; the *product effect*, which incorporates the differential growth rate between world trade and Australia's exported commodities; and a *residual effect*. When volume export data are utilised, the interpretation of the residual effect is straightforward – it represents the evolution of competitiveness, broadly defined. The following calculations, however, use value data (given the insufficient level of disaggregation of export volume data), and the residual is not uniquely interpreted. The results of the analysis – and in particular the values of the product and market effects – are sensitive to the number of industries and partners utilised: they are based here on the same 22-sector decomposition of Table 19, and nine major destination markets for Australian exports.
58. Cf. OECD, Economic Survey of Belgium, 1986 Chapter 1.
59. See H. Linnemann, *An Econometric Study of International Trade Flows*, North-Holland, Amsterdam, 1986. The author develops a measure of "distance" in international trade, which is a weighted average of shipping distances to main trading partners. Australia is the second-worst country in a sample of 80, as far as distance from potential trade outlets. This does not contradict the results shown in the CMS analysis: Australia has concentrated its exports on the least distant export markets which happened to enjoy a faster growth than world markets.
60. See R.M. Conlon, "Transport Costs and Tariff Protection of Australian Manufacturing", *The Economic Record*, March 1982, pp. 73-81. The effective rate of protection provided by transportation costs is defined in the same way as the effective rate of protection, i.e. it takes into account the transportation costs borne by inputs in the production process. Nominal and effective rates can diverge widely; in particular, effective rates can be negative. For a discussion of effective rates of protection and their computation see, for instance, Caves and Jones, *World Trade and Payments*, fourth edition, 1985.
61. Sampson and Yeats, "Tariff and Transport Barriers Facing Australian Exports", *Journal of Transport Economics and Policy*, May 1977.
62. See R. H. Snape, "Australia's Relation with GATT", *The Economic Record*, March 1984.

63. The average effective rate of assistance to manufacturing industries, as calculated by the Industries Assistance Commission, includes the effects of quantitative restrictions and direct aid to industries.
64. See Soo Sun Chai and Peter B. Dixon, "Protection in Australia, a Description", IAESR Working Paper n.8/1985, September 1985. Using "ideal weights", that correct for distortions created by non-traded goods weight in manufacturing, they argue that "the reductions in tariff/quota protection of manufacturing in the period 1968/69 to 1977/78 were almost completely eliminated by the increases in protection of the period 1977/78 to 1981/82".
65. F.W. Gruen: *How Bad is Australia's Economic Performance and Why?* The Economic Record, June 1986.
66. EPAC, *High Technology Industries in Australia*, Council Paper No. 25, January 1987 points out that although Australia compares well with other medium OECD countries in terms of public sector R&D expenditure, business sector expenditure has been comparatively poor. However, the report also shows that in recent years there has been a significant improvement in Australia's private R&D effort. Private business enterprises increased their annual R&D expenditure by 52 per cent in real terms from 1981-82 to 1984-85. Also, the Report indicates that there has been significant growth in the availability of venture capital (both within and outside the venture capital tax concession scheme) and that several high technology industries have increased their exports markedly in recent years, although in most cases this increase occurred from a low base.
67. The eleven councils cover the following industry groupings: aerospace; automobiles; basic metals; chemicals and plastics; electrical, electronics and information; forestry and forest products; machinery and metal engineering; metal fabrication; paper conversion, printing and publishing; processing food; and textiles, clothing and footwear.
68. See OECD, *Costs and benefits of protection*, Paris, 1985.
69. B.R. Parmenter (1985), "What Does Manufacturing Protection Cost Farmers? A Review of Some Recent Australian Contributions", Institute of Applied Economic and Social Research, Working Paper No.7/1985, July.
70. P.B. Dixon, B.R. Parmenter and R.J. Rimmer: "Orani Projections of the Short-Run Effects of a 50 per cent Across-the-Board Cut in Protection Using Alternative Data Bases", Impact Project Preliminary Working Paper No. 0p-48, Melbourne, April 1984.
71. For a detailed discussion of the structure and the merits of Computable General Equilibrium models, cf Shoven-Walley "Applied General Equilibrium Models of Taxation and International Trade - A survey", *Journal of Economic Literature*, September 1984; cf also A.R. Pagan and J.H. Shannon, "How Reliable Are ORANI Conclusions?" Centre for Economic Policy Research, Discussion Paper No. 130, Australian National University, October 1985.
72. It should be noted however, that no protective action has been taken over the two years the plan has been operating, notwithstanding the fact that the safeguard provision has been triggered.
73. Automotive Industry Authority, "Report on the state of the Automotive Industry, 1985", Canberra, 1986.
74. Restrictive work practices are defined here to mean "particular ways of working which are introduced and maintained for reasons other than safety, effectiveness and efficiency. But as they are part of the cost structure of the firm, they represent part of the "remuneration package" of the worker. See "Restrictive Work Practices", Submission to the Economic Advisory Planning Council by B.N. Kelman and A.W. Coates on behalf of the Business Council of Australia.
75. See the *Australian Financial Review*, 10th September 1986. It is suggested that the obligation that unions provide productivity offsets to obtain a 38 hour working week in the early eighties led to many of the more obvious restrictive practices being removed.
76. The Government has recently approved an industry development package for the shipping industry which aims to change both work practices and shipboard organisation to permit smaller, more highly skilled crews on newly acquired Australian ships. In return for this improvement in ship

productivity, the Government will provide an investment incentive in the form of a cash subsidy of 7 per cent of the cost of newly acquired ships. The government has also recently requested the Inter-State Commission to supervise the results of the work of relevant industry and inter-governmental bodies with a view to achieving immediate improvement in the performance of the waterfront industry, and to develop a long-term integrated plan to meet efficiently its objectives of handling, storage and movement of cargo through Australian ports and to develop performance measures for the industry.

77. For a discussion of these issues see OECD, *Review of Youth Policies in Australia* 1984; EPAC, *Human Capital and Productivity Growth* Council Paper No. 15, February 1986; EPAC, *Trends in the Labour Market*, Council Paper No. 21, June 1986.
78. See EPAC, *Trends in the Labour Market*, Council Paper No. 21, June 1986.
79. A Standing Committee on Tertiary Education/Industry relationships was established in late 1985 to indicate areas where the higher education system can become more responsive to industry needs. A number of co-operative ventures with business associations are envisaged.

## *Annex I*

### REFORM TO THE AUSTRALIAN TAX SYSTEM

Since 1982, a number of tax measures have been introduced aimed at reducing more serious weaknesses in the tax system. In 1985, following the release of the Government's Draft White Paper on the Taxation Reform in June and the outcome of the National Taxation Summit, a major reform of the tax system was announced on 19th September. As the programme initially preferred by the Government failed to obtain the widespread community support considered necessary for its introduction, a more modest reform was introduced.

Major weaknesses in the previous tax system included, first, a heavy weight placed on income taxes. The income tax system provided substantial scope for tax avoidance and significant elements of income were not included in the tax base. To maintain revenues, marginal tax rates were high with the top rate reaching 60 per cent for incomes equivalent to 1.6 times average yearly earnings. High marginal rates increased the incentive for tax evasion. Second, foreign source income subject to foreign tax was not taxed in Australia. Third, there was double taxation of distributed company profits. Fourth, the indirect tax system was narrowly based with alcohol, tobacco, petroleum products, and motor vehicles accounting for two-thirds of the combined revenue. While such problems were often found in other tax systems, they had become particularly acute in Australia with vertical and horizontal equity of the tax system affected. Higher income groups were better placed to take advantage of tax loopholes. The indirect tax system imposed different tax burdens on individuals with different spending patterns and the tax system in general distorted decisions to work, save, invest and spend. The measures announced go a considerable way to resolving these difficulties. The major changes are as follows.

#### **A. Widening of the income tax base and closing tax loopholes**

The following types of income are now included in the tax base either by extending the base or eliminating deductions:

##### *i) Capital gains*

A capital gains tax has been introduced on real capital gains on assets acquired after 19th September 1985 where realisation occurs one year or more after the date of acquisition. Where an asset is disposed of within one year of the date of acquisition, the full nominal gain will continue to be taxed as income under existing taxation provisions. The capital gains tax includes provisions for nominal losses to be offset against current or future real capital gains. Taxable capital gains, net of allowable losses, are included in assessable income in the year of receipt and subject to income at the marginal rate of the taxpayer. Notional averaging over a five-year period is allowed. Capital gains on assets transferred at death are not taxed until the assets are subsequently disposed of by the beneficiary. Exemptions from capital gains tax include gains on a taxpayer's principal residence and part of the capital gain on business goodwill for smaller businesses. Deferrals of capital gains tax liability are allowed for asset ownership changes associated with business reorganisation where no changes occur in the underlying ownership of the asset concerned.

ii) *Fringe benefits and entertainment expenses*

A fringe benefits tax was introduced with effect from 1st July 1986. The tax is imposed on employers at the company tax rate in respect of the total value of non-cash fringe benefits provided to employees or their associates, including employer-provided cars, free or low interest loans, residential accommodation, board, living-away-from-home allowances, discounted goods and services and expenses paid on behalf of employees. Exemptions have recently been extended to ease problems and eliminate some unintended consequences. Specific concessions (in the form of a reduced liability for fringe benefits tax) are granted *inter alia* to remote area employers. In addition, entertainment expenses are no longer an allowable deduction.

iii) *Foreign income received*

From 1st July 1987, the foreign source income of Australian residents will be taxed in Australia with a credit being allowed against that tax for analogous foreign tax paid on that income. The system will tax foreign source income on a worldwide basis but credit will be given for underlying tax paid by unlimited tiers of subsidiary companies. No carry forward or carry back of excess foreign tax credits will be allowed but they will be transferable within wholly-owned company groups. The tax will not apply for most salaries and wages earned overseas.

iv) *Negative gearing of rental property investments*

Losses incurred in the operation of rental property because costs including debt interest payments exceeded net revenue, have been limited to the income and capital gains earned on the asset. Losses relating to high levels of debt interest will not be deductible against other taxable income but can be carried forward. However, a 4 per cent depreciation allowance for tax purposes on residential income earning property has been introduced and allowed outside the measure.

v) *Concessional rebates*

In the preceding system certain expenditures on education, medical expenses and superannuation contributions, etc., above minimum levels were eligible for a tax credit calculated as 30 per cent of spending above a minimum (A\$2 000). These have now been limited to medical expenses over \$1 000 per year.

vi) *Other*

Tax concessions relating to certain capital subscribed to petroleum and afforestation companies, to the Australian film industry and to expenditures on conserving and conveying water have either been eliminated or reduced.

vii) *Imputation of company tax*

An offsetting measure in terms of tax revenues will result from the end to double taxation of distributed company income. A full imputation system of company taxation will apply from 1st July 1987. Company tax rates will be increased to the maximum marginal rate of personal income tax of 49 per cent. Dividends received by resident individuals from resident companies will be grossed up by an imputation tax credit which will match the amount of company tax paid on the income underlying the dividend with total tax of the recipient reduced by the credit. Dividend withholding tax for non-residents is to be abolished for dividends paid out of taxed income and branch profits tax will no longer be payable by non-resident companies. Foreign tax on foreign source income can offset Australian company tax imposed under the foreign tax credit system, but imputation credits attaching to dividends paid out of the income will match only the Australian company tax.

### viii) *Certain public unit trusts*

Company tax arrangements have been extended to those public unit trusts which operate a trade or business (for any trust formed after 19th September 1985 or, for existing trusts, from 1988-89). Private trusts and more traditional public unit trusts (e.g. investing in property) are not affected.

## B. Income tax rates

Reductions in personal income tax rate scales were announced in the 19th September 1985 statement, which were to apply in two stages, from 1st September 1986 and 1st July 1987. For budgetary reasons, the first adjustment was deferred until 1st December 1986. The tax scales to apply are set out below.

Income range (per annum) \$	Marginal tax rate (cents per dollar)		
	Present	From 1st December 1986	From 1st July 1987
0 to 4 595	0	0	0
4 596 to 5 100	25	0	0
5 101 to 12 500	25	24	24
12 501 to 12 600	30	24	24
12 601 to 19 500	30	29	29
19 501 to 28 000	46	43	40
28 001 to 35 000	48	46	40
35 001 and over	60	55	49

The cost of the rate cuts, in terms of revenue forgone, will be considerable. The entire cuts to income tax rates are estimated to cost \$4.5 billion in a full year. This exceeds the estimated gain to revenue from other elements of the tax reform package by a large margin. As mentioned, the corporate tax rate will be raised from 46 to 49 per cent on 1st July 1987.

## C. Indirect taxes

The Government has not proceeded with the introduction of a broadly-based consumption tax. After considering a number of alternatives, it opted for a major rationalisation of the existing wholesale sales tax rate categories and classification of goods aimed at reducing anomalies and inconsistencies in the operation of the wholesale sales tax system. The indirect tax system thus continues to be narrowly based with significant distortions of relative prices.

## D. The effects of the measures

The impact of the tax system changes will be diverse. Because they will influence behaviour gradually and through many different channels, assessment is difficult. Overall, the measures would appear to have improved the coherence of the tax system and reduced or removed some major distorting features.

As regards income tax, the system is fairer than in the past. The widening of the tax base has largely affected those in higher income groups which have had the greatest possibility and incentive to avoid tax. This has been offset by reductions in marginal rates of tax at the higher levels of the income tax scale but these reductions will affect a fairly broad range of households<sup>1</sup>. Marginal tax rates are being reduced by only 1 percentage point in the two bottom tax tiers but the tax-free threshold has been raised by about

10 per cent. Taking all factors into consideration and applying average rates of tax avoidance to different income groups, the distribution of impact would be broadly neutral<sup>2</sup>. Tax pressure as a share of aggregate household incomes might fall by 1-1½ percentage points, suggesting that a considerable portion of the tax reductions are offsetting fiscal drag. The final impact on distribution, however, is clouded by the potential impact of the increased tax burden on the business sector. As mentioned, the tax rate on corporate taxable income is being raised to 49 per cent to help pay for the cost of imputation and firms will pay the fringe benefit tax. In both cases, some shifting of the tax may be expected. With fringe benefits no longer obtaining favourable tax treatment and costs of compliance high, there is a clear incentive to transform the non-cash benefits to cash benefits. There is also some possibility that the higher corporate taxes will be passed forward on to prices. Nonetheless, the higher corporate tax should be seen within the context of the abolition of the existing second level of tax at the shareholder level.

The changes in the tax system may affect business behaviour although the extent of the impact is difficult to judge and will inevitably depend on the extent of tax shifting. In the initial stages there could be some depressing effect on private investment reflecting the reduced cash flow as companies pay higher profits taxes and the fringe benefits tax. This squeeze on cash flow may also influence dividend behaviour. In theory, the end to double taxation of profits and the inclusion of capital gains in the tax base reduces the incentive to withhold dividends, although in practice, this effect will be mitigated by the fact that the many institutional holders of equities have always been liable to tax on capital gains while others have been tax exempt. However, if firms, under the new tax rules wish to retain the same amount of profits to maintain cash flow, they may tend to reduce dividend payouts. On the other hand, companies may reduce the impact of tax exchanges on cash flow by replacing dividend payments by "bonus" share issues to shareholders. In aggregate, dividend payments represent 55 to 60 per cent of after-tax company income and this is not likely to change appreciably.

Over the longer term, the effects on resource allocation will be influenced by reduced distortions on relative rates of return on assets. In the past, the tax advantages from investing in property were such as to encourage investment in areas with low gross rates of return. The "negative gearing" measures applying to rental property should redirect investment towards more productive purposes. A second longer-term effect may come through an equalisation of the tax treatment of equity and debt through the full imputation arrangements. In the past, debt finance has been more difficult to obtain in mining and agriculture because of higher risk and lower cash flow. These firms were less able to benefit from the tax advantage from maintaining high levels of debt relative to equity. The removal of this distortion should help equalise rates of return in the various sectors.

## Annex II

### ASSUMPTIONS UNDERLYING THE BALANCE OF PAYMENTS SCENARIOS

The balance of payments projections and scenarios up to the early 1990s were carried out using a modified version of the Australian submodel of the OECD's Interlink system. Projections for the period 1986 to mid-1988, correspond to the forecasts presented in Part II of the main report. Significant add-factors during this period were carried forward in an offsetting manner into the period mid-1988 to 1991; if exports were set to grow by less than predicted by the model in the period 1986 to 1988, they were set to grow by more than predicted in subsequent years. For the period from mid-1988 to 1991, a wide range of scenarios are possible depending on assumptions and the medium-term characteristics of behavioural equations. Since the focus was on the external sector, assumptions were made with a view to preventing demand and cost patterns from distorting the development of trade flows in an unwarranted manner. Key assumptions for the period after mid-1988 and their implications are:

- Domestic demand is varied with alternative scenarios to keep the growth of aggregate supply in line with a presumed growth in potential output of around 3 to 3½ per cent. Hence, for scenarios where the contribution of the foreign balance is larger, domestic demand growth is reduced, generally by varying government expenditure;
- Real wages rise slightly over the period but by less than productivity. This corresponds to a trend fall in nominal wage growth as inflation decelerates;
- There is a rise in the gross operating surplus share in GDP. The impact of this trend on total private sector savings is offset by a fall in household savings. Restrained government expenditure leads to a swing in the net lending of general government into surplus with the change totaling 2 to 2½ per cent of GDP depending on the scenario. The ratio of tax revenues and government expenditure to GDP decline slightly over the period;
- Private investment is set to grow at rates consistent with a constant capital-output ratio. Some decline in the stocks to sales ratio is allowed.

As regards the external sector minor modifications were made to study the impact of devaluation of trade flows. First, the import and export price elasticities and elasticities of exports with regard to market growth and that of imports with respect to domestic demand were reviewed<sup>3</sup>. These elasticities, with impact on trade flows over a two-year period, are shown in the following table.

Table 1. **Import and export elasticities**

	Import			Export		
	Share in total	Demand	Price	Share in total	Demand	Price
Food	3.8	1.0	0	31.7	1.0	0
Raw materials	2.5	1.0	0	13.5	1.0	0
Energy	5.3	1.0	0	22.7	1.0	0
Manufactures	67.4	1.2	-1.1	17.1	1.0	1.2
Non factor services	21.0	0.6	-1.1	15.0	1.0	1.5
Weighted elasticity		1.05	-1.0		1.0	0.45



Certain components of imports were assumed price inelastic – i.e. food, raw materials and energy. The weighted price elasticity for imports is roughly 1. For exports, agriculture, energy and raw material exports were assumed to rise broadly in line with markets with market growth estimates reflecting both demand and additional supply developments in Australia. Positive price elasticities were assumed for exports of services and manufactures giving an overall weighted elasticity of 0.45. Second, to allow for longer-term effects in scenario 3 and 4, the lags were lengthened from two to four and a half years such that the impact of the 1985 depreciation would still be felt in 1989-90 and the 1986 depreciation in 1990-91. In the scenarios where these longer-run effects were included, overall price elasticities were raised and the additional impact spread over the additional lags leaving the impact broadly the same in the period 1986 to mid-1988. Within this framework the following assumptions were made for the period after mid-1988.

*Export volumes.* Market growth for exports was based on GDP growth of around 3 per cent in the OECD area. Exports of food and raw materials are allowed to grow at this rate. As markets for raw materials and food generally grow more slowly than GDP, some allowance is made for improvement in competitiveness. Exports of energy rise at 3.5 per cent to allow for new supplies coming on stream (i.e. North-West Shelf). Market growth for exports of manufactures and non-factor services of around 5 per cent takes into account the relatively favourable geographic structure of Australian manufacturing and service trade in the past, with more rapid growth in the Pacific Basin than elsewhere. Relatively fast growth in this area is assumed to continue. Growth of manufactured goods and non-factor service exports deviate from market growth because of changes in relative prices with competitors.

*Exchange rates.* Constant nominal exchange rates are assumed based on exchange rates on 4 th November of US\$0.64.

*Trade prices.* An inflation rate of 3 per cent is assumed for the OECD area. Australian import prices rise by 3 per cent as do export prices of non-manufactured exports and export prices of Australian competitors. The export prices of Australian manufactured goods and non-factor services can deviate from export prices of competitors because of domestic cost developments. In general, terms of trade remain broadly unchanged from mid-1988. There is some deterioration in competitiveness over the period but little after 1988.

*Debt servicing costs.* The effective rate of return on liabilities and assets is assumed to decline by around 20 per cent from mid-1988. Assuming that 20 per cent of foreign held assets are domestically denominated, this would be consistent with a decline in domestic interest rates towards international rates with real foreign long-term interest rates of around 4 to 5 per cent.

*Debt accumulation.* For convenience the totality of the current balance was assumed to be financed through debt issue. While this assumption has little impact on the overall flows of invisibles, it will influence the development of the debt to GDP ratio. If a larger portion of the current balance were to be financed by direct capital inflow; the debt to GDP ratio would stabilize at a lower level.

### *Annex III*

## INDUSTRY POLICY IN AUSTRALIA

This annex briefly reviews the history of industry policy. The most significant departure from previous policies in recent years has been the introduction of industry plans. These are examined subsequently.

### **An overview of industry policy**

Historically trade protection has always played an important role in Australia and for many years was the principal instrument of industry policy. In the postwar period, the Australian economy developed around a framework of significant government intervention. The creation of a large and diverse manufacturing base was a high priority of successive governments. This was pursued through an import substitution strategy, supported in the immediate postwar years by import licensing, and later mainly through tariff assistance. In 1965, the Vernon Committee of Economic Enquiry concluded that tariff policy had been important in the development of industry, labour skills and technology. However, it argued against the indiscriminate application of tariffs and called for a more uniform level of protection. By the early 1970s, competitive pressure on the manufacturing sector increased substantially, through exchange rate effects from the growth in mineral exports as well as other inter-related factors such as wages push and falling productivity growth. Also, the emergence of Asian industrialisation and falling transport costs, eroded the level of natural protection previously afforded to Australian manufacturing. There was growing awareness that the level and "made to measure" nature of protection, while initially favouring the establishment of manufacturing, had helped create an industry structure that lacked coherence and produced too wide a range of products, often at high cost and which were uncompetitive internationally. With Australian exports experiencing relatively slower growth compared to the OECD average, policy began to shift, placing greater emphasis on developing industries in which Australia had a comparative advantage and which were internationally competitive. In 1971 a Tariff Review was initiated, to be spread over seven years. This was supplemented by a process of continuous review with the establishment of the Industries Assistance Commission in 1974. Tariffs were cut by 25 per cent in mid-1973. But as this occurred against a background of declining competitiveness, increased import penetration and higher unemployment as the economy weakened in 1974, a number of temporary assistance measures were introduced – including quotas and import licensing – in hard-hit sectors. The immediate effect was to increase protection in specific industries which already had the highest level of assistance (particularly the textile, clothing and footwear and automobile sectors), thus increasing the differences between the most highly and least protected industries and the risk of resource misallocation. Attempts were also made by the Government to improve the overall cost effectiveness of fiscal assistance to industry. The investment allowance was abolished and export incentives and industrial research and development grants were substantially modified. Pressure on declining industries also led to a minor, short-lived programme in which the Government accepted, subject to very strict criteria, some of the costs associated with structural adjustment<sup>4</sup>.

The latter half of the 1970s saw the occurrence of a number of significant changes in Australian industrial policy. In 1975, the Jackson Committee, which explored the future prospects for Australia's manufacturing sector argued for less reliance on tariffs and for a range of improved incentives for manufacturing, including the introduction of investment and R and D incentives, better depreciation allowances, financial assistance for mergers leading to economies of scale, and improved availability of finance for small and medium-sized firms.

The government responded in 1977 with a White Paper on Manufacturing which espoused a long-term approach to industry policy, aimed at a more specialised and stronger manufacturing sector in Australia, with concentration of effort in areas where industry has the best market opportunities. But major adjustments had to occur at a pace which did not cause undue economic or social disruptions. Suggestions on how this was to be achieved was left to the Study Group on Structural Adjustment which reported in 1979 and recommended industrial development incentives with a major increase in Commonwealth spending along the lines followed by Canada at the time. Tariff reductions in 1977, following IAC recommendations after multilateral trade negotiations, were specifically designed to cause the minimum disruption in manufacturing and they largely affected industries or classes of goods which required no assistance or were only lightly protected. This led to a reduction of 2 and 3 per cent in nominal and effective rates respectively and further widened the dispersion. Additional reductions in a number of sectors following IAC enquiries (shipbuilding and repair, electronic goods, commercial space heating and air conditioning equipment) reduced the average effective rate by an additional 1 per cent. The 2 per cent import duty on some imports formerly entering duty free as a revenue measure in 1979 raised the overall level of protection but did tend to reduce dispersion. In the early 1980s, assistance (effective rates of tariffs) to industries remained relatively stable but the dispersion of assistance increased further: Average effective rates for sectors not under sectoral programmes fell by 2 percentage points between 1978-79 and 1982-83. Effective rates for autos rose from 80 to over 120 per cent and for TCF from 120 to around 180 per cent from 1977-78 to 1982-83<sup>5</sup>. In summary, while both the average and median effective tariff for the manufacturing sector were around 36-37 per cent in 1968-69, by 1982-83 the average was 25 per cent and the median 14 per cent.

A somewhat different approach to industry policy began to emerge in 1983. Government has reduced reliance on protection and moved away from "made to measure" tariffs. The need to co-ordinate and harmonize all policies affecting industry – such as education, business regulations, transport and communication and trade – has been stressed. Major government programmes benefitting firms include:

- Export promotion through subsidies to firms trying to establish overseas markets (EMDG programme) and export finance and insurance (EFIC);
- Government procurement gives, in general, a 20 per cent cost advantage to Australian firms and requests offsets when major purchases are made abroad. Practices have now been harmonized between the States and the Commonwealth;
- A 150 per cent tax deduction for R and D and grants for small firms to induce research and development;
- Extension services are now being harmonized with the States (NIES);
- Financial markets have been liberalised and measures have been taken to plug gaps in the risk spectrum (second boards on stockmarkets and special incentives for risk capital for smaller firms (MICs).

### **Sectoral programmes**

The most significant departure of the current government has been the willingness to establish transitory arrangements for mature industries or sectors with growth prospects. Specific programmes have been established by the government primarily in sectors facing significant longer-term pressures from import competition and which have been subject to extensive intervention in the past. Although the object of these programmes is to orient the sector towards being competitive on world markets, levels of protection will still be high at the end of the programme period in a number of plans. Each programme

has been set up after extensive tripartite negotiations such that the obstacles to competitiveness are identified, funds are targetted towards their removal and made dependent on active support by labour and management. Most programmes include funds for labour adjustment in the form of retraining and relocation support, improved management efficiency and efforts to improve quality of performance and inducements to invest.

*i) Motor vehicles*

The Australian Government has intervened in the motor vehicle industry since production began in 1949. Currently there are five producers. In the late 1950s tariffs were high enough to promote domestic component production with remaining components entered virtually duty free. In the mid-1960s the government envisaged increased local content by relating tariff concession on components to commitments to increase local inputs. A series of plans were introduced which led to a fragmented and high cost production structure. In 1975, the government moved to consolidate existing programmes and in a ten-year programme, aimed at achieving 85 per cent local content. But with a sharp increase in the number of imported vehicles, quantitative restrictions were imposed early in that year. Quotas were set to ensure a 80/20 market sharing agreement on completely built-up vehicles. These measures led to a gradual rise in the effective rate of tariff in the early 1980s of over 70 per cent. The current Government's Passenger Motor Vehicle Plan for the long-term development of the industry came into effect on 1st January 1985. Within the context of the current plan, the government is aiming for some rationalisation of the industry with a reduction in the number of local manufacturing groups from five to three and in the number of models from thirteen to six, such that higher volume production can benefit from economies of scale. The existing 80/20 market sharing agreement for finished vehicles has been replaced by a tariff quota system. The duty on above quota imports was set initially at 100 per cent, is currently 90 per cent and will be phased down to 57.5 per cent by 1992 at which time quotas will be fully replaced by tariff only protection. The definition of goods coming under the quota was widened to include some vehicles formerly classified as utility vehicles and previously subject only to import duties. To continue to encourage exports, producers will be able to import a larger amount of components at concessional rates of duty to the extent that they increase exports. Under the plan, greater export orientation and enhanced international competitiveness are being facilitated through improvements in the Australian industry's cost structure and its closer integration with the industry in other parts of the world. These changes are to be overseen by the Automobile Industry Authority. The AIA is to monitor the outlook for the industry and will have a role of persuading existing firms to develop along the lines envisaged by the government, and in particular increase the efficiency of output. Firms withdrawing from output will be offered special quota rights equal to half their sales in the previous two years. Labour which is displaced will benefit from special retraining payments (Labour Adjustment Training Arrangements).

*ii) Textile, clothing and footwear industries*

Assistance to the TCF industries involve a mix of tariff quotas, tariffs and bounties<sup>6</sup>. Tariff quotas became the main instrument for protection and support after the marked increase in import penetration as from 1974. Since early 1975, the share of the domestic clothing industry assisted by tariff quota on imports has risen from about 40 to 90 per cent of production. The share of textiles has risen from 20 to over 30 per cent. Current assistance arrangements apply over a seven-year period from 1982 and involve tariff quotas for clothing, some fabrics and household textile products and footwear. Bounties provide some assistance for most yarns while most fabrics are assisted by tariffs. Annual quota increases allow for a controlled increase in imports. Quota increases comprise all assessed market growth and an automatic liberalisation factor equivalent to about 2 per cent of domestic production. Average annual quota growth from 1982 to 1986 was greater than 6 per cent. Australia's TCF industries are currently assisted by nominal protection levels of up to 130 per cent<sup>7</sup>. However, the Government recently announced an eight-year programme which comes into full operation in 1989 whereby the nominal tariff rate will be reduced to 60 per cent for clothing and household textile products, 50 per cent for footwear

and 40 per cent for fabrics. A safeguard mechanism could bring about a review of assistance arrangements and should aggregate TCF production decline by more than 15 per cent. Other features of the new plan include an Industry Development Strategy designed to encourage a more innovative, competitive and outward-looking TCF sector. The Strategy, which also includes labour and regional adjustment measures, will cost A\$200 million.

iii) *The steel industry*

Under the risk of a shutdown of steel production by the then sole Australian producer (BHP) the government set up the Steel Industry Plan in 1983. The objective was to provide for an internationally competitive steel industry over the longer term and was based on commitments from labour, the steel producer and State Governments. The main elements of the plan are:

- i) Bounties are paid on a sliding scale on domestic sales of five categories of steel, with the rate of bounty decreasing as domestic sales increase;
- ii) A "safety mechanism" provides for the review of assistance if the local industry's market share falls below 80 per cent or rises above 90 per cent;
- iii) Preferential rates of duty on directly competitive imports are applicable only to imports up to a given level with imports above the quota paying general rates of duty;
- iv) Unions gave a commitment not to ask for extra wage claims and agreed to target productivity levels and obtain a better dispute record;
- v) BHP undertook to continue the operation of its three steel plants, to provide job security, and to invest 800 million over the life of the plan in a new plant.

A Steel Industry Authority is responsible for monitoring the plan, and in particular, assessing the need for access to the "safety mechanism".

iv) *The shipbuilding industry*

Some additional support has also recently been obtained by the shipbuilding industry. This extends the existing 20 per cent bounty for ship construction to ships for export and eliminates the 2 per cent revenue tariff from materials used in ship construction. This programme also required commitments by the unions to encourage better training and flexibility in work practices as well as long-term commitments from employers. A Shipbuilding Consultative Group was also established to monitor developments in the industry.

v) *The heavy engineering adjustment and development programme*

In mid-1986, in response to an IAC report, the government announced a plan for the heavy engineering industry to operate for three years. The programme has five main elements:

- i) A labour adjustment programme including retraining and relocation assistance and a skill upgrading programme to enhance the mobility and skills base of the workforce;
- ii) A management efficiency programme to assist companies to develop corporate plans and marketing strategies as well as measures to enhance process technology;
- iii) An industry development programme focusing on upgrading quality and standards, developing new products, technology transfer/upgrades, and the acquisition of manufacturing licences;
- iv) A concessional finance programme to facilitate investment in productive buildings and equipment; and
- v) The establishment of the Heavy Engineering Board to monitor the progress of the package and advise on the eligibility for assistance under the above elements.

The budgetary cost of the package is estimated at \$90 million comprising \$30 million for concessional finance and \$60 million for the labour adjustment, management efficiency and industry development elements. The provision of assistance under the programme is conditional upon companies achieving

improvements in the area of work practices thus contributing to enhanced efficiency and productivity.

vi) *The communications equipment industry*

Another programme announced in mid-1986 relates to improving the communications equipment over a ten-year time horizon following IAC recommendations to reduce tariff barriers to this industry. Attention has been placed on this area because of its potential for export growth. This programme consists of two phases. First, the Government agreed to reduce tariffs from 30 to 20 per cent over four years. Second, the Government is examining the prospect of Australian trade developing an export strategy, the possibility of establishing an international trading company to market Australian products, closer co-ordination between government (both State and Commonwealth) and the industry for preferential purchasing of Australian products, more research by academic and government research bodies, greater use of offsets to develop export markets, and detailed studies of industry needs, issues and potential bottlenecks. The Authorities hope that these measures will induce existing companies in the industry – the majority of which are foreign owned and of small size – to become more outward looking.

*Annex IV*

CALENDAR OF MAIN ECONOMIC EVENTS

1985

*14th May*

The Treasurer announced expenditure cuts from forward estimates for FY 1985/86 totalling \$1 259 million. The majority of these cuts are on recurrent expenditure.

*24th June*

Import price parities on crude oil adjusted. Price of Bass Strait crude oil reduced by \$0.47 to \$44.5 per barrel. Results from decision to amend formula to reflect spot as well as official prices of Arab Light.

*16th August*

IPP reduced to A\$42.25 as a result of significant appreciation of the Australian dollar since July.

*20th August*

The Treasurer presented the 1985-1986 Budget.

*4th September*

An agreement between the Government and the ACTU was announced on a wages accommodation to the depreciation of the Australian dollar and a recommitment to the Prices and Incomes Accord for a further two years. The agreement provides for, *inter alia*, a 2 percentage point discount to the wage adjustment in the April 1986 National Wage Case, income tax cuts effective 1st September 1986 and deferral and moderation in the productivity case.

*19th September*

The Treasurer presented the tax reform package. For details see Annex I.

*23rd September*

Announcement of an assistance package of \$150 million for the sugar industry. It consisted of price support, adjustment assistance and research funding.

*26th September*

The first of the invited sixteen foreign banks commences business.

*16th October*

The Commonwealth Government introduced legislation which will enable the States to impose profits-based taxes on onshore oil production.

*29th October*

Further liberalisation of foreign investment in Australia.

*31st October*

Announcement by the Reserve Bank that the liabilities to which the Prime Assets Ratio (PAR) requirement applies will be extended to cover all liabilities which are invested in Australian dollar assets within Australia.

*4th November*

The Australian Conciliation and Arbitration Commission awarded a 3.8 per cent increase in award wages and salaries reflecting the change in the consumer price index over the first two quarters of 1985.

*First half of November*

Pressure on the Australian dollar. The dollar fell from US\$0.73 at the start of the month to a low of US\$0.655. The Reserve Bank increased its rediscount rate from 16.5 per cent in October to 19 per cent.

*28th November*

The Treasurer announced modifications to the proposed tax package.

*16th December*

The Government presented draft operational standards for the implementation of the proposed productivity decision. The guidelines provided for the negotiated implementation over a two-year period of a proposed 3 per cent productivity award, to be taken in the form of new or improved superannuation schemes.

*23rd December*

Import price parities on crude oil adjusted. Price of Bass Strait crude oil increased by \$1.46 to \$43.71 per barrel reflecting the depreciation of the Australian dollar.

## 1986

*23rd January*

The Minister for Primary Industry discussed with representatives of banks and farm consultants the extent of farm debt.

*24th February*

IPP reduced by A\$16.62 to A\$27.09 per barrel due to slide in world oil prices and accentuated by appreciation of the Australian dollar.

*27th February*

The Reserve Bank reduced its rediscount rate from 18.7 per cent to 18.1 per cent.

*March*

Reserve Bank reduced the rediscount rate on four occasions to 16.7 per cent at the end of the month.

*1st March*

Government decides to recoup part of the loss in excise revenue on oil production by increasing excise taxes on petroleum products.

*26th March*

IPP reduced by A\$6.10 to A\$20.99 due to continued decline in world crude oil prices.



*2nd April*

The Government announced a package of measures to support investments in dwellings. The measures include interest rate subsidy for existing home loans and the removal of the interest ceiling on new home loans.

*14th April*

Registration of the Australian Building Construction Employees' and Builders Labourers' Federation cancelled.

*28th April*

Announcement of reduction of import parity price for indigenously produced crude oil from \$20.99 to \$18.90 per barrel in light of continued decline in world crude oil prices.

*2nd May*

A National Preference Agreement was signed which abolished State Government Purchasing Preference Schemes.

*5th May*

Announcement of Grants for Industry Research and Development with an estimated cost of \$12 million.

*7th May*

Announcement on Adjustment and Development Programme for the Heavy Engineering Industry with an estimated cost of \$60 million.

*13th May*

Exchange rate peaked at US\$0.75.

New rebates on taxes on free market sales of Bass Strait oil production under a sliding scale depending on the price of the sale.

*28th May*

Announcement of increase of import price parity for indigenously produced crude oil of \$1.14 to \$20.00 per barrel to reflect an upward movement in world oil prices.

*29th May*

Fringe benefits tax of employer-provided motor vehicles amended which will reduce the tax by a third or more.

*11th June*

The Prime Minister foreshadowed the new Budget in an address to the nation. He announced that the Government will argue for further wage discounting at the next national wage case and a delay in the personal income tax cuts.

*13th June*

The annual Premiers Conference/Loan Council agreed to a 4½ per cent cut in real terms in the combined total of Commonwealth net payments and authority borrowings by the State and local government sector in 1986-87.

*20th June*

The Victorian Industrial Relations Commission granted nurses pay increases from 5 to 31 per cent.

*24th June*

Announcement of a decrease of the import price parity for indigenously produced crude oil of \$1.31 to \$18.73 resulting mainly from a decline in world crude oil prices.

### *26th June*

The Australian Conciliation and Arbitration Commission awarded a 2.3 per cent national wage increase from 1st July 1986 in relation to the 4.3 per cent rise in consumer prices in the second half of 1985.

### *28th July*

Strong exchange rate pressures and the Australian dollar reached a low of 57 cents. The rediscount rate increased by 1.6 per cent to 16 per cent.

The Treasurer announced a relaxation of the policy on foreign investment in manufacturing and real estate.

The Minister for Resources announced the reduction by \$2.98 to \$15.75 per barrel of the import parity price of Bass Strait crude oil. Reduction results mainly from further decline in world crude oil prices and partially offset by depreciation in the Australian dollar.

### *1st August*

The Reserve Bank increased its rediscount rate from 16 to 18 per cent.

Further changes to tax rebates on sales of Bass Strait oil production in the free market. All excise taxes on onshore oil production waived.

### *19th August*

The Treasurer presented the 1986-87 Budget with an estimated deficit of \$3.5 billion.

### *26th August*

Further amendments to the Fringe Benefit Tax were announced. IPP increased by A\$9.04 to A\$24.79 per barrel as result of OPEC decision to reduce member nations' production levels.

### *22nd September*

IPP increased by A\$1.15 to A\$25.94 per barrel in light of continued recovery in world crude oil prices that occurred following OPEC agreement to cut back production.

### *28th November*

The Minister for Industry, Technology and Commerce announced a new seven year Textile, Clothing and Footwear (TCF) Plan. See Annex III.

### *1st December*

The first stage of the reductions in personal income tax rates announced in the 1985 tax reform package came into effect.

### *3rd December*

The United States credit rating agency Standard and Poor's announced that it had reclassified the Commonwealth of Australia's credit rating to AA+.

### *10th December*

The Treasurer announced changes to the capital gains tax (CGT) treatment of partly paid bonus shares and partly paid bonus units in unit trusts issued after the date of announcement in respect of original shares or units acquired before 20th September 1985.

### *16th December*

The Treasurer and the Minister for Resources and Energy announced that the Government had decided not to remove the income tax exemption available to the gold mining industry.

### *17th December*

The Treasurer and the Minister for Housing and Construction announced tax changes to the capital gains tax (CGT). As a result benefits from allowances concerning interest or units in a trust where the

trust distributes income freed from tax because of depreciation allowances for income-producing buildings will no longer be offset by a higher CGT liability.

The Treasurer announced that the income tax law will be amended to deny a tax benefit to a taxpayer where another taxpayer is entitled under the laws of another country to a tax benefit on essentially the same outlay.

#### *21st December*

The Minister for Resources and Energy announced the Government's decision to increase the Import Parity Price (IPP) for indigenously produced crude oil from 1 January 1987, following the regular six monthly review, to reflect the increase in international oil prices over the past three months. This increased the IPP for Bass Strait crude oil by A\$0.11 to A\$26.05 per barrel.

#### *22nd December*

The Treasurer announced that the preservation standard for occupational superannuation funds is also to apply to new or improved superannuation arrangements which are not made the subject of the processes of the Commonwealth Conciliation and Arbitration Commission (or a relevant State Tribunal).

The Treasurer also proposed amendments to the Income Tax to ensure that persons receiving superannuation will be able to claim deductions from taxable income up to \$1 500.

The Minister for Industry, Technology and Commerce announced arrangements to ensure that the five car producers under the Passenger Motor Vehicle Manufacturing Plan finalise their plans to eliminate the production of low-volume models.

#### *23rd December*

The Full Bench of the Australian Conciliation and Arbitration Commission concluded in an interim National Wage Case decision that there would be insufficient commitment to the present wage package if it were to be continued, and that there was broad recognition of the need for change. The decision indicated that a Conference of the parties would be convened in January 1987 to discuss a number of outstanding matters.

#### *24th December*

The Treasurer announced that the Government had decided to exempt from ACT stamp duty insurance premiums received by an insurer for insurance, effected from 1 January 1987, of goods carried in international trade and of the hulls of vessels and aircraft engaged in international trade.

## NOTES AND REFERENCES

1. With average yearly earning for a full-time employee in the range of \$23 000 at mid-1986, those earning the average wage would be paying a marginal rate of 40 per cent and those earning 1.5 times average earnings are currently paying the highest rates of tax.
2. The Treasury has estimated that the proportional change in income of the representative tax payers might be of the order of:

Income level	Percentage change in income	Income level	Percentage change in income
10 000	2.0	32 500	3.0
12 500	1.8	37 500	2.7
17 500	1.6	45 000	2.0
19 500	1.6	75 000	1.7
22 500	1.7	100 000	-1.6
27 500	2.4		

See Reform of the Australian Tax System, Statement by the Treasurer, September 1985, AGPS, 1985, Attachment C.

3. See for example EPAC, *External Imbalance and Economic Growth*, Council Paper No. 22, October 1986. Elasticities for imports used by the Secretariat are higher than those used by EPAC for prices, but the (weighted) demand elasticity is somewhat lower. For exports, the EPAC price elasticity is much higher although it is close to the terms of trade adjusted value of 0.3.

	Demand		Price	
	OECD	EPAC	OECD	EPAC
Exports	1	1	0.45	1 <sup>a</sup>
Imports	1.05 <sup>b</sup>	1.2	1.0	0.7

a) Not taking into account terms-of-trade effects resulting from a devaluation. The elasticity adjusted for terms-of-trade is 0.3.

b) Elasticity with respect to import weighted demand. Import-weighted demand which gives a higher weight to machinery and equipment investment and non-farm inventories.

4. The Structural Adjustment Assistance programme and Special Assistance to Non-Metropolitan Areas programme only lasted until 1976 and costs were small.
5. See IAC, *Assistance to Manufacturing Industries, 1977-78 to 1982-83*, AGPS, Canberra 1985, figure 3.1 page 38. It should be noted that figures for TCF do not include certain sub-sectors which did not receive higher protection through sectoral policies.
6. Tariff quotas impose an additional penalty rate of duty on imports above a specified quota level.
7. Protection rates under a quota system vary with the value of the quota right. With the recent depreciation the value of the quota rights have fallen and nominal protection in recent months may now be closer to 80 per cent.

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*STATISTICAL ANNEX*

Selected background statistics

	Average 1976-85	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<b>A. Percentage changes from previous year at constant 1979/1980 prices</b>											
Private consumption <sup>1</sup>	2.8	3.0	0.8	3.1	2.6	3.2	3.6	3.1	1.5	2.5	4.3
Gross fixed capital formation <sup>2</sup>	2.3	4.7	-1.5	2.6	2.9	5.0	10.2	-3.2	-8.1	5.8	6.0
Public	0.4	-8.0	1.9	-1.8	-1.7	-1.8	-3.8	8.7	-1.5	4.5	9.1
Private	3.3	12.7	-3.2	5.0	5.2	8.2	16.2	-7.6	-10.9	6.4	4.6
Residential	3.6	30.1	-4.0	-4.3	9.3	12.8	3.9	-12.6	-14.6	19.8	4.0
Other	3.2	5.4	-2.8	9.7	3.4	6.0	22.4	-5.3	-9.5	1.4	4.8
GDP	2.9	3.4	1.0	2.8	4.6	1.7	3.3	-0.1	0.7	7.1	4.1
GDP price deflator	9.3	13.8	9.3	7.2	9.4	11.5	9.6	11.1	8.6	7.0	6.1
Employment <sup>3</sup>	1.3	1.4	0.9	0.6	1.2	2.8	2.1	0.0	-1.8	3.0	3.3
Compensation of employees (current prices)	11.3	15.3	10.5	8.3	9.7	14.6	15.2	16.6	3.7	10.9	9.3
Productivity (GDP/employment)	-1.5	2.0	0.1	2.2	3.4	-1.1	1.2	0.0	2.5	4.0	0.8
Unit labour costs (Comp./GDP)	8.3	11.4	9.3	5.4	4.8	12.6	11.4	16.5	3.0	3.6	4.9
<b>B. Percentage ratios</b>											
Gross fixed capital formation as % of GDP at constant prices <sup>2</sup>	27.4	25.3	24.7	24.6	24.2	25.0	26.7	25.8	23.6	23.3	23.7
Stockbuilding as % of GDP at constant prices	0.6	0.8	0.8	0.1	1.8	0.4	1.2	-0.4	-0.5	1.4	0.5
Foreign balance as % of GDP at constant prices	-0.1	-0.7	0.2	-0.1	1.6	-1.3	-2.4	0.3	1.4	-1.1	0.9
Compensation of employees as % of GDP at current prices	54.0	55.1	55.2	54.1	51.7	52.4	53.3	56.0	53.1	51.4	50.8
Direct taxes as per cent of household income	16.0	15.6	16.8	15.3	15.3	15.5	16.1	17.0	15.2	16.5	16.3
Unemployment as per cent of total labour force <sup>3</sup>	6.9	4.8	5.6	6.3	6.3	6.1	5.8	7.2	10.0	9.0	8.2
<b>C. Other indicator</b>											
Current balance (bill.\$US)	-5.9	-1.6	-2.8	-4.0	-2.4	-3.7	-7.4	-8.3	-6.6	-9.7	-12.4

1. See footnote (1) to Table B.

2. See footnote (2) to Table B.

3. See footnote (3) to Table D.

Source: Australian Bureau of Statistics.

Table A. Gross domestic product

\$ million, current prices

Calendar year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<b>Expenditure</b>										
1. Private consumption	47 772	53 266	59 611	67 074	76 300	86 220	98 430	109 492	119 832	134 285
2. Government current expenditure	12 283	13 832	15 648	17 024	19 880	22 971	26 155	29 384	33 117	37 128
3. Gross fixed capital formation	20 254	22 087	24 373	27 247	31 995	39 040	42 162	41 815	46 696	54 158
a) Private	13 407	14 415	16 306	18 610	22 337	28 744	29 290	28 071	31 521	36 156
b) Public enterprises	3 229	3 780	4 059	4 441	5 217	5 701	7 721	7 935	8 408	10 014
c) Government	3 618	3 892	4 008	4 196	4 441	4 595	5 151	5 809	6 767	7 991
4. Change in stocks	400	610	244	2 065	754	1 519	-566	-1 401	2 602	1 211
5. Exports of goods and services	12 338	13 822	14 630	19 477	22 249	22 049	24 479	25 795	30 512	37 350
6. Imports of goods and services	12 194	14 709	16 413	19 100	23 194	26 471	29 721	28 444	35 085	43 426
7. Statistical discrepancy	-166	11	215	-1 076	-409	-1 047	-608	-1 295	3 230	1 417
8. <b>Gross domestic product at purchasers' values</b>	<b>80 687</b>	<b>88 919</b>	<b>98 308</b>	<b>112 711</b>	<b>127 575</b>	<b>144 281</b>	<b>160 331</b>	<b>175 346</b>	<b>200 833</b>	<b>221 992</b>
<b>Origin</b>										
1. Agriculture, hunting, forestry and fishing <sup>1</sup>	..	..	..	..	..	..	..	..	..	..
2. Manufacturing <sup>1</sup>	..	..	..	..	..	..	..	..	..	..
3. Other industry <sup>1</sup>	..	..	..	..	..	..	..	..	..	..
4. Services <sup>1</sup>	..	..	..	..	..	..	..	..	..	..
5. Indirect taxes less subsidies	8 772	9 431	10 369	12 210	14 498	16 156	18 634	20 937	24 567	29 005
6. <b>Gross domestic product at purchasers' values</b>	<b>80 687</b>	<b>88 919</b>	<b>98 308</b>	<b>112 711</b>	<b>127 575</b>	<b>144 281</b>	<b>160 331</b>	<b>175 346</b>	<b>200 833</b>	<b>221 992</b>

1. These figures are unavailable on a quarterly or calendar year basis. See attached for financial year basis.

Source: Quarterly Estimates of National Income and Expenditure, March quarter 1985, ABS Cat. 5206.



Table B. Gross domestic product  
\$ million, average 1979-1980 prices

Calendar years	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<b>Expenditure</b>										
1. Private consumption <sup>1</sup>	66 049	66 608	68 643	70 418	72 688	75 281	77 589	78 730	80 685	84 166
2. Government consumption <sup>1</sup>	16 280	16 692	17 693	17 858	18 650	19 382	19 321	20 510	21 563	22 942
3. Gross fixed capital formation <sup>2</sup>	27 665	27 256	27 959	28 768	30 193	33 271	32 198	29 575	31 287	33 151
a) Private	18 273	17 683	18 362	19 531	21 124	24 546	22 715	20 235	21 526	22 506
b) Public enterprises	4 448	4 704	4 722	4 732	4 910	4 887	5 742	5 488	5 486	5 977
c) Government	4 944	4 869	4 675	4 505	4 159	3 838	3 741	3 852	4 275	4 668
4. Change in stocks	845	912	139	2 194	533	1 464	-519	-646	1 847	735
5. Exports of goods and services	18 410	18 558	19 170	21 363	21 047	20 208	21 757	20 953	24 225	26 822
6. Imports of goods and services	19 762	19 704	20 394	20 766	21 996	24 042	25 255	22 724	27 353	28 724
7. Statistical discrepancy	-239	20	258	-1 126	-421	-877	-469	-910	2 168	889
8. <b>Gross domestic product at purchasers' values</b>	<b>109 250</b>	<b>110 342</b>	<b>113 468</b>	<b>118 709</b>	<b>120 694</b>	<b>124 687</b>	<b>124 622</b>	<b>125 488</b>	<b>134 422</b>	<b>139 981</b>

1. Not adjusted for the impact of the introduction of Medicare from 1 February 1986, which had the effect of transferring certain expenditures on health care, formerly included as private consumption expenditure, to public consumption expenditure.

2. Not adjusted to remove the impact of the sale to the private sector of public sector assets under leaseback and similar arrangements.

Sources: Quarterly Estimates of National Income and Expenditure, Australia, September quarter 1986, ABS Cat No. 5206.0.

Table C. **Income and expenditure of households (including unincorporated enterprises)**  
\$ million, current prices

Calendar year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. Compensation of employees	45 097	49 764	53 927	59 150	67 732	77 978	90 798	94 213	104 453	114 117
2. Income from property and entrepreneurship	15 150	17 543	20 107	24 994	26 874	29 734	31 940	37 958	44 048	50 030
a) Farm	1 844	2 135	2 531	5 414	4 522	4 144	2 250	3 424	4 558	3 586
b) Non-Farm	13 306	15 408	17 576	19 580	22 352	25 590	29 690	34 534	39 490	46 444
3. Current transfers from government	6 882	7 997	8 808	9 733	10 836	12 110	14 385	17 880	20 346	22 181
4. Grants from non-profit institutions	598	704	799	930	1 117	1 460	1 678	1 879	2 433	2 692
5. Third party insurance transfers	210	230	264	332	405	582	762	1 024	1 400	1 700
<b>6. Income</b>	<b>68 227</b>	<b>76 586</b>	<b>84 343</b>	<b>95 648</b>	<b>107 626</b>	<b>122 626</b>	<b>140 467</b>	<b>154 126</b>	<b>173 946</b>	<b>192 447</b>
7. <i>less:</i> Direct taxes paid on income	9 910	12 027	12 096	14 122	15 825	18 816	22 951	22 361	27 561	30 103
8. Consumer debt interest	651	796	894	986	1 150	1 567	2 084	2 330	2 576	3 134
9. Other direct taxes, fees, fines, etc.	742	824	846	840	831	908	990	1 062	1 209	1 282
10. Current transfers to the rest of the world	300	318	377	386	396	471	563	678	699	695
<b>11. Disposable income</b>	<b>56 624</b>	<b>62 621</b>	<b>70 130</b>	<b>79 659</b>	<b>89 425</b>	<b>100 864</b>	<b>113 879</b>	<b>127 695</b>	<b>141 898</b>	<b>157 059</b>
12. Consumption expenditure	47 772	53 266	59 611	67 074	76 300	86 220	98 430	109 492	119 832	134 285
13. Food	7 668	8 773	9 941	11 280	13 025	14 673	16 327	17 932	19 068	21 154
14. Clothing	3 768	4 171	4 588	4 911	5 466	6 045	6 578	7 174	7 553	8 420
15. Rents	6 886	8 244	9 620	11 141	12 720	14 773	17 909	21 061	24 351	28 407
16. Other	29 470	32 078	35 462	39 742	45 089	50 729	57 616	63 325	68 860	76 304
17. Saving <sup>1</sup>	8 852	9 355	10 519	12 585	13 125	14 644	15 449	18 203	22 069	22 948
(Per cent of disposable income)	15.6	14.9	15.0	15.8	14.7	14.5	13.6	14.3	15.6	14.6

1. Obtained as the difference between disposable income and private consumption expenditure.

Sources: Quarterly Estimates of National Income and Expenditure, Australia, March quarter, 1985, A.B.S. Catalogue No. 5206.0.

Table D. Labour market

Calendar year averages	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
	Thousand persons										
1. Total employment <sup>1</sup>	5 946.0	6 000.1	6 031.1	6 110.6	6 284.3	6 416.5	6 414.9	6 300.4	6 490.5	6 704.1	6 952.0
a) Non-farm <sup>1</sup>	5 575.5	5 622.8	5 684.3	5 741.8	5 906.5	6 030.0	6 031.2	5 910.5	6 112.9	6 316.8	6 552.4
b) Farm <sup>1</sup>	370.5	377.3	354.8	369.7	377.8	386.5	383.7	390.0	377.7	387.3	399.6
2. Unemployment <sup>1 2</sup>	298.1	358.1	413.1	408.4	408.6	393.9	494.9	697.0	642.1	597.5	610.0
	Per cent										
4. Unemployment rate <sup>1</sup>	4.8	5.6	6.3	6.3	6.1	5.8	7.2	10.0	9.0	8.2	8.1
5. Participation rate: Male <sup>1</sup>	80.6	80.1	78.8	78.5	78.3	78.0	77.4	76.7	76.3	75.9	76.0
Female <sup>1</sup>	43.6	44.2	43.7	43.6	44.8	44.7	44.6	44.7	45.3	46.6	48.4
	Hours										
6. Average weekly hours worked <sup>3</sup> , all industries	..	..	34.3	35.3	34.5	34.7	34.4	34.2	34.6	34.4	34.0

1. In april 1986, the Australian Bureau of statistics extended the definition of employment to include unpaid family helpers in a farm or business who worked 1 to 14 hours, to accord with ILO guidelines. The revised series are available from march 1985, except for industry data.

2. These estimates are derived from the labour force survey which is now conducted monthly. Until February 1978, surveys were conducted in February, May, August and November each year. Estimates are averages of all surveys conducted in each of the years shown.

3. Refer to full-time employees. Figures are lower than for actual time worked; fractions of an hour are disregarded and persons stood down because of bad weather or breakdown are considered as working no hours.

Source: Australian Bureau of Statistics: Time Series Data.

Table E. Prices and wages

Calendar years	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
	Index 1979-1980 = 100										
1. Price deflators											
a) Gross domestic product	73.7	80.5	86.5	94.8	105.5	115.5	128.5	139.6	149.4	158.6	..
b) Private consumption	72.2	79.9	86.7	95.2	104.9	114.4	126.7	139.0	148.4	159.4	..
c) Gross fixed capital formation	73.1	81.0	87.1	94.7	105.8	117.1	130.9	141.3	149.2	163.1	..
d) Exports	67.0	74.5	76.2	91.0	105.7	109.1	112.5	123.0	125.9	139.1	..
e) Imports	61.7	74.7	80.4	92.0	105.4	110.1	117.8	125.2	128.0	150.9	..
2. Terms of trade	108.6	99.7	94.8	98.9	100.3	99.1	95.5	98.3	98.3	92.2	..
	Index, 1980 = 100										
3. Consumer price index <sup>1</sup>											
a) Total	68.6	77.1	83.2	90.8	100.0	109.6	121.9	134.2	139.5	148.9	162.4
b) Food	63.8	71.1	77.9	88.8	100.0	109.3	117.7	129.5	136.6	145.1	158.0
4. Award rates of pay <sup>2</sup>	71.0	78.7	83.9	90.1	100.0	111.3	128.9	133.9	143.2	148.6	..
5. Average weekly earnings <sup>3</sup>	68.2	75.1	81.6	88.7	100.0	111.0	128.6	137.9	151.7	159.0	..
	Dollars										
6. Hourly earnings <sup>4</sup>											
a) All industries	4.61	5.11	5.47	5.94	6.70	7.61	8.91	9.30	10.05	10.46	..
b) Mining and quarrying	6.11	6.84	7.45	8.22	9.36	10.82	13.16	12.96	14.48	14.90	..
c) Manufacturing	4.33	4.79	5.11	5.66	6.37	7.13	8.41	8.88	9.31	9.89	..
d) Construction	4.54	4.98	5.30	5.74	6.44	7.65	8.87	9.22	10.47	10.74	..

1. Not adjusted for the effects of Medicare. Based on the six state capital cities prior to 1981.

2. Award rates of pay for adult wage and salary earners linked on to the old weekly rates of pay for adult male wage earners series at 1976-77.

3. Average weekly earnings for all employees linked to the old male units series at the september quarter 1981.

4. Refers to full-time adult males (other than managerial, etc., staff) excluding rural industries and private domestic service, as at a pay period in october/november each year. Changes in the sample survey in 1981 and in 1983 introduce discontinuities into the series.

Source: Australian Bureau of Statistics, Catalogue Nos. 6302.0, 6304.0 and 6312.0

Table F. Balance of payments  
\$ A million

Calendar years	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<b>Current account</b>										
1. Exports, fob	10 613	11 897	12 328	16 635	18 930	18 462	20 471	21 644	25 992	31 962
2. Imports, fob	8 959	10 980	12 247	14 375	17 700	20 489	22 792	21 078	27 016	33 786
3. Trade balance	1 654	917	81	2 260	1 230	-2 027	-2 321	566	-1 024	-1 824
4. Invisibles, net	-1 510	-1 804	-1 864	-1 883	-2 175	-4 422	-2 721	-2 681	-3 556	-4 252
5. <b>Current balance</b>	-1 641	-2 828	-3 984	-2 377	-3 474	-9 429	-8 110	-6 074	-9 768	-12 504
<b>Capital account</b>										
6. Government	438	710	1 642	449	-81	315	1 063	431	1 314	1 938
7. Balancing item <sup>1</sup>	53	367	735	-174	709	1 255	1 019	1 526	854	1 972
8. <b>Apparent capital balance</b>	839	715	1 535	1 492	3 594	5 687	11 083	8 009	6 056	5 209
<b>Official monetary movements</b>										
9. Change in official reserve assets	-8	-851	-166	-525	259	74	4 744	3 342	-1 489	-3 287
10. Allocation of SDR	-	-	-	-94	-98	-86	-	-	-	-
11. Other transactions <sup>2</sup>	-303	-185	94	-81	272	-205	126	37	54	27
12. <b>Net official monetary movements</b>	-311	-1 036	-72	-606	531	-131	4 870	3 379	-1 435	-3 260
13. <b>Changes in market value of official reserve assets<sup>3</sup></b>										
a) Gold <sup>4</sup>	669	169	331	1 918	674	-1 120	718	-182	-348	680
b) Currency assets	318	-821	-105	-434	92	19	5 235	336	-1 205	-806
c) IMF: gold tranche	24	-2	6	3	90	-16	-260	126	96	82
d) Special Drawings Rights	-50	-16	89	-74	-38	46	42	1	164	202
<b>Total<sup>5</sup></b>	961	-670	321	1 413	818	-1 071	5 735	3 255	-3 343	158

1. Includes discrepancies in the current account as well as errors, omissions and timing differences related to capital transactions.

2. Includes:

- Drawings and repayments made by Reserve Bank of New Zealand under a special loan arrangement with the Reserve Bank of Australia for the purposes of financing Australian exports to New Zealand.
- Purchases by Australia of shares in the Bank for International Settlements.
- Government working balances, other than London, held overseas.
- Changes in the balance of foreign central monetary institutions with the Reserve Bank of Australia and changes in Australian currency liabilities (notes and coins in circulation) in Papua New Guinea.
- Changes in investments of the Bank of Papua New Guinea.
- Deposits of the Bank for International Settlements with the Reserve Bank of Australia.
- Use of IMF credit.

3. Includes changes due to fluctuations in the foreign currency value of assets, variations in exchange rates and the receipt of compensation under the Sterling Agreement. Foreign currency value of currency assets has been based on market quotations.

4. Prior to 1976 gold is valued at the IMF official price in SDRs converted to Australian dollars at the derived SDR/dollar rate. From 1976, gold holdings are valued at the average London gold price for the month, converted to dollars at market rate applying on last day of month.

5. Any discrepancy in the table between the sum of the components and the total is due to rounding.

Source: Australian Bureau of Statistics.

Table G. **Foreign trade-commodity and geographic structure**  
Per cent

Calendar years	Imports			Exports		
	1983	1984	1985	1983	1984	1985
<b>SITC sections:</b>						
1. Food and live animals chiefly for food	4.2	4.1	4.0	22.6	25.8	23.9
2. Beverages and tobacco	0.8	0.8	0.9	0.3	0.3	0.7
3. Crude materials, inedible, except fuels	3.3	3.1	2.9	28.6	26.0	27.6
4. Mineral fuels, lubricants and related materials	10.8	8.9	6.7	22.0	22.3	25.0
5. Animal and vegetable oils, fats and waxes	0.4	0.4	0.3	0.4	0.5	0.4
6. Chemicals and related products, n.e.s.	8.8	8.7	8.5	2.2	1.8	1.8
7. Manufactured goods classified chiefly by material	15.9	6.89	16.0	11.0	9.5	10.2
8. Machinery and transport equipment	38.8	38.2	42.0	5.7	5.0	4.8
9. Miscellaneous manufactured articles	13.1	12.8	13.1	2.3	2.0	2.0
10. Commodities and transactions not classified according to kind <sup>1</sup>	3.8	6.2	5.6	4.9	6.9	3.6
<b>Total (merchandise and non-merchandise)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
OECD Europe	24.6	25.1	26.2	13.6	12.9	13.3
<i>of which:</i> United Kingdom	6.8	7.1	7.0	4.3	3.0	3.0
OECD North America	23.6	24.2	24.3	8.1	8.9	8.8
Japan	21.8	21.4	23.0	26.3	25.6	25.8
New Zealand	3.7	3.6	4.0	4.2	4.6	3.7
Far East	14.2	15.2	13.8	19.4	19.9	21.0
Other non-OECD Countries	11.1	9.1	7.3	14.7	16.1	15.7
Non-specified	1.0	1.4	1.4	13.7	12.0	11.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

1. Including non-merchandise.

2. Including Mainland China, Viet Nam and North Korea.

Source: OECD, *Foreign Trade Statistics, Series A*.

*BASIC STATISTICS :*  
*INTERNATIONAL COMPARISONS*

**BASIC STATISTICS: INTERNATIONAL COMPARISONS**

	Units	Reference period <sup>1</sup>	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States	Yugoslavia
<b>Population</b>																											
Total	Thousands	1985	15 752	7 555	9 857	25 379	5 113	4 901	55 162	61 015	9 950	243	3 562	57 128	120 754	366	14 484	3 279	4 148	10 230	38 602	8 350	6 530	49 870	56 618	239 283	23 120
Inhabitants per sq.km	Number		2	90	323	3	119	14	101	245	75	2	51	190	324	141	427	12	13	111	76	19	158	64	231	26	89
Net average annual increase over previous 10 years	%		1.3	0.0	0.1	1.1	0.1	0.4	0.5	-0.1	1.0	1.1	1.2	0.3	0.8	0.1	0.6	0.6	0.3	0.6	0.8	0.2	0.2	2.1	0.1	1.0	0.8
<b>Employment</b>																											
Total civilian employment (TCE) <sup>2</sup>	Thousands	1985	6 676	3 235	35 607	11 311	2 522	2 427	20 916	25 011	3 588	114 (84)	1 056 (84)	20 509	58 070	160	5 083	1 329	2 012	4 029	10 623	4 299	3 171	15 213	24 089	107 150	..
of which: Agriculture	% of TCE		6.2	9.0	2.9	5.2	6.7	11.5	7.6	5.5	28.9	10.6	16.0	11.2	8.8	4.2	4.9	11.1	7.2	23.2	17.6	4.8	6.6	57.3	2.6	3.1	..
Industry	% of TCE		27.7	38.1	29.7	25.5	28.1	31.9	32.0	41.0	27.3	36.8	28.9	33.6	34.9	33.4	28.1	32.4	27.8	35.3	31.8	29.9	37.7	17.6	32.4	28.0	..
Services	% of TCE		66.1	52.9	67.4	69.3	65.2	56.6	60.4	53.5	43.8	52.6	55.1	55.2	56.3	62.4	67.0	56.5	65.0	41.5	50.6	65.3	55.7	25.1	65.0	68.9	..
<b>Gross domestic product (GDP)</b>																											
At current prices and current exchange rates	Billion US\$	1985	155.1	66.1	79.1	346.0	57.9	54.0	510.3	625.0	32.8	2.7	18.2	358.7	1 327.9	3.6	125.0	21.9	57.9	20.7	164.2	100.2	92.7	52.7	449.7	3 946.6	43.5 (84)
Per capita	US\$		9 847	8 743	8 022	13 635	11 319	11 024	9 251	10 243	3 294	10 958	5 123	6 278	10 977	9 745	8 628	6 722	13 960	2 032	4 255	12 006	14 195	1 057	7 943	16 494	1 896 (84)
At current prices using current PPP's <sup>3</sup>	Billion US\$	1984	..	85.7	119.7	382.2	68.0	59.6	694.7	811.6	62.3	..	27.6	575.1	1 468.4	5.3	168.9	..	63.6	50.9	317.8	..	..	..	625.2	3 634.6	..
Per capita	US\$		..	11 345	12 150	15 198	13 311	12 217	12 643	13 265	6 296	..	7 795	10 093	12 235	14 385	11 710	..	15 367	5 021	8 279	..	..	..	11 068	15 356	..
Average annual volume growth over previous 5 years	%	1985	3.0	1.6	0.6	2.6	2.3	2.6	1.1	1.3	1.0	0.7	1.8	0.9	3.9	2.4	0.7	3.3	3.1	1.0	1.4	1.8	1.3	4.9	1.9	2.4	..
<b>Gross fixed capital formation (GFCF)</b>																											
of which: Machinery and equipment	% of GDP	1985	24.4	22.3	15.9	19.6	18.5	23.4	18.9	19.5	19.0	21.5	20.9	18.2	27.5	20.2	18.6	25.4	21.7	21.8	19.1	19.1	23.8	19.8	17.2	18.6	21.9 (4)
Residential construction	% of GDP		10.4 (84)	9.6	5.3 (84)	6.6	8.6	8.8	9.4	8.4	7.9	5.8 (84)	11.0 (84)	7.9	10.1 (84)	8.9 (82)	8.1 (84)	12.3 (84)	6.3	13.7 (81)	6.1 (83)	9.1	8.0	9.1 (82)	8.1 (84)	8.4	..
Average annual volume growth over previous 5 years	%	1984	1.9	-0.5	-4.0	0.9	2.1	2.6	-0.1	-1.3	-2.8	-1.0	-1.9	0.3	2.7	-2.8	-1.0	6.6	-1.2	-4.5	-1.4	1.2	2.7	4.9	2.1	5.0	..
<b>Gross saving ratio<sup>4</sup></b>																											
	% of GDP	1985	20.1	24.4	15.9	19.0	14.9	23.7	18.0	22.2	12.2	16.3	18.1	17.7	31.4	65.3	24.1	20.9	30.0	23.1	21.0	17.8	30.0	18.7	19.2	16.5	..
<b>General government</b>																											
Current expenditure on goods and services	% of GDP	1985	16.7	18.7	17.3	20.1	25.3	20.2	16.3	19.9	19.9	18.0	19.1	19.5	9.8	15.6	16.3	16.4	18.6	14.2	14.0	27.4	13.2	8.5	21.1	18.3	14.0 (84)
Current disbursements <sup>5</sup>	% of GDP	1985	33.4 (84)	44.9 (84)	52.3	43.3 (84)	56.7	37.6	49.4	43.4	43.2	26.4 (84)	51.5 (83)	51.9	27.1 (84)	47.8 (82)	55.9 (84)	..	44.0	37.5 (81)	32.3 (82)	59.6	30.9	..	44.8 (84)	35.3	..
Current receipts	% of GDP	1985	34.1 (84)	47.0 (84)	46.5	39.9 (84)	57.0	40.6	48.5	45.4	34.6	34.8 (84)	43.6 (83)	44.1	30.3 (84)	53.0 (82)	54.3 (84)	..	56.1	33.2 (81)	31.2 (82)	59.8	34.4	..	42.8 (84)	31.1	..
Net official development assistance	% of GNP	1984	0.46	0.28	0.56	0.50	0.85	0.36	0.77	0.45	..	..	..	0.33	0.35	..	1.02	0.25	1.02	..	..	0.80	0.30	..	0.33	0.24	..
<b>Indicators of living standards</b>																											
Private consumption per capita using current PPP's <sup>3</sup>	US\$	1984	6 742 *	6 490	7 637	8 484	6 826	6 287	8 009	7 274	4 118	6 335 *	4 338	6 254	6 751	8 540	7 270	4 041 *	6 624	3 076	5 456	5 821 *	8 755 *	759 *	6 535	10 214	966 *
Passenger cars, per 1 000 inhabitants	Number	1984	..	306 (81)	335	421 (82)	282	303	360 (83)	424 (85)	108 (83)	418	206 (83)	359 (83)	221 (83)	414 (85)	341 (85)	455 (85)	365 (85)	135 (82)	231	369	392	18 (82)	312 (83)	473	121 (83)
Telephones, per 1 000 inhabitants	Number	1984	540 (83)	460 (83)	414 (83)	664 (83)	749	584	541 (83)	621 (85)	336 (83)	525 (83)	235 (83)	405 (83)	535 (83)	404	410 (86)	646 (85)	423 (85)	166 (83)	360	890	1 299	55 (83)	521	650	122 (83)
Television sets, per 1 000 inhabitants	Number	1984	..	300 (81)	303	471 (80)	371	364 (85)	297 (80)	372 (85)	158 (80)	290	181 (80)	243 (83)	330 (80)	336 (83)	317 (86)	291 (85)	330 (85)	140 (80)	256 (82)	390	329	76 (79)	336	621 (80)	175 (83)
Doctors, per 1 000 inhabitants	Number	1984	..	1.7 (82)	2.8	1.8 (82)	2.5	2.2	2.1 (82)	2.5	2.8 (83)	2.3 (83)	1.3 (82)	3.6 (82)	1.3 (82)	1.7	2.2	2.4 (85)	2.1 (83)	1.8 (82)	3.2	2.3 (83)	1.4	1.5 (83)	0.5 (83)	2.3 (83)	1.6 (82)
Infant mortality per 1 000 live births	Number	1984	9.6 (83)	11.9 (83)	11.3 (83)	9.1 (83)	7.7	6.5	8.9 (83)	4.1 (85)	14.6 (83)	6.1	9.8 (83)	12.3 (83)	6.2 (83)	11.7	9.6 (86)	11.5 (85)	8.3	19.0 (83)	10.5 (83)	6.4	7.1	..	10.1	10.6	31.7 (83)
<b>Wages and prices (average annual increase over previous 5 years)</b>																											
Wages (earnings or rates according to availability)	%	1985	9.0	5.5	5.8	7.2	7.1	10.2	10.8	4.1	25.1	..	12.0	16.3	4.6	..	3.3	10.3	9.2	19.2	15.0	8.7	..	..	10.2	4.0	..
Consumer prices	%	1986	8.2	3.8	5.7	5.8	6.3	6.9	7.4	2.6	20.4	42.4	9.0	13.7 (85)	1.8	5.3	2.9	11.6	7.8	23.2 (85)	11.1	7.4	3.1	37.8 (85)	5.5	3.8	56.3
<b>Foreign trade</b>																											
Exports of goods, fob <sup>6</sup>	Million US\$	1985	22 620	17 220	68 652 (86)	86 664 (86)	17 040	16 296 (86)	119 268 (86)	183 312	4 560	816	10 380	78 401	177 216	..	80 580 (86)	3 924	18 240 (86)	6 051	27 132 (86)	30 348	37 248 (86)	7 908	101 544	213 144	7 320
as % of GDP	%		14.6	26.1	86.8	25.0	29.4	30.2	23.4	29.3	13.9	30.2	57.0	21.9	13.3	..	64.5	17.9	31.5	29.2	16.5	30.3	40.2	15.0	22.6	5.4	16.8
average annual increase over previous 5 years	%		0.5	-0.2	4.4	4.2	0.4	3.1	3.3	-0.9	-2.5	-2.5	4.1	0.1	6.5	..	3.3	-2.2	0.3	5.5	5.8	-0.4	6.7	23.5	-2.5	-0.7	-3.1
Imports of goods, cif <sup>7</sup>	Million US\$	1985	23 508	20 964	66 432 (86)	81 312 (86)	18 192	15 300 (86)	128 760 (86)	157 584	10 224	900	10 044	90 506	131 304	..	75 420 (86)	4 639	20 292 (86)	8 148	34 920 (86)	28 476	40 860 (86)	11 328	109 920	345 276	8 364
as % of GDP	%		15.2	31.7	84.0	23.5	31.4	28.3	25.2	31.2	33.3	31.2	55.2	25.2	9.9	..	60.3	21.2	35.0	39.4	21.3	28.4	44.1	21.5	24.4	8.7	19.2
average annual increase over previous 5 years	%		3.1	-2.9	1.4	4.1	-1.2	1.5	1.3	-3.2	-0.8	-2.0	-2.1	-1.9	-1.4	..	2.7	0.4	5.4	-2.6	1.7	-3.2	6.0	12.6	-1.8	7.4	-10.3
<b>Total official reserves<sup>8</sup></b>																											
As ratio of average monthly imports of goods	Ratio	1986	6 202	5 778	5 724	3 348	4 116	1 528	27 071 (85)	45 443	935 (85)	255	2 658	18 661	35 394	..	10 687	1 464 (85)	10 774	1 978 (85)	10 686 (85)	5 568	20 726	1 200 (85)	15 726	38 412 (85)	1 062 (85)
			3.7	3.9	1.2	0.6	3.2	1.4	3.0	4.1	1.3	4.0	3.7	2.9	3.8	..	2.0	0.4	7.5	3.4	4.3	2.8	7.1	1.5	2.0	1.6	1.8

\* At current prices and exchange rates.  
1. Unless otherwise stated.  
2. According to the definitions used in OECD Labour force Statistics.  
3. PPP's = Purchasing Power Parities.  
4. Gross saving = Gross national disposable income minus Private and Government consumption.  
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.  
6. Gold included in reserves is valued at 35 SDR's per ounce. End of year.  
7. Including Luxembourg.  
8. Included in Belgium.  
9. Including non-residential construction.

Sources:  
Population and Employment: OECD Labour Force Statistics.  
GDP, GFCF, and General Government: OECD National Accounts, Vol. I and OECD Economic Outlook, Historical Statistics.  
Indicators of living standards: Miscellaneous national publications.  
Wages and Prices: OECD Main Economic Indicators.  
Foreign trade: OECD Monthly Foreign Trade Statistics, series A.  
Total official reserves: IMF International Financial Statistics.



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