INDUSTRY PROTECTION AND ADJUSTMENT: THE AUSTRALIAN EXPERIENCE*

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Australian industrial policy is primarily concerned with protecting the manufacturing sector by the use of tariffs and quotas. Over the last decade and a half successive governments have announced an intention to move towards lower tariffs. The result has been lower tariffs on average, but the introduction of import quotas in response to the 1974-75 recession has resulted in large increases in protection for the textile, clothing, footwear and motor vehicle industries. These sectors are covered by Industry Plans. There is a stated intention to liberalize trade, but for a decade the market share of imports has been fixed. On the basis of past experience, there is a low probability that significant trade liberalization will occur. Australian industrial policy has failed to create a more efficient manufacturing sector. It is reactive and has slowed the rate of structural change. It is a good example of the way in which initiatives to restrict trade flows by 'temporary' quotas — intended to provide a breathing space so an industry can reorganise and compete more effectively against imports — can result in import quotas becoming a near permanent feature of the economic environment. The Australian economy has also been subject to large exchange rate appreciations. Our experience is that unusual appreciations bring to the forefront of structural change those industries which have already set out upon a path of long run decline. Once the appreciations have passed, these troubled industries are not placed back in their original position relative to imports.

Keywords: industrial policy, protection, trade liberalization

INTRODUCTION

Industrial policy in Australia has been primarily directed towards the development and maintenance of those parts of the manufacturing sector that compete with imports. There is a range of policies towards research and development, export incentives, government

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procurement and so on, but the assistance involved is quite minor relative to the assistance provided by import tariffs and quotas.[1] Industrial policy, therefore, is primarily concerned with intervention in trade flows.

In this paper we describe the structure of the Australian economy and the events of the first half of the 1970s that led to a major change of protection policy for the manufacturing sector. During this period Australia moved from a stance of widespread tariff protection for manufacturing to the announcement of the intention to move towards lower tariffs and a more uniform distribution of assistance. It was planned that industrial policy should become more outward looking by reducing the level of incentives that directed manufacturing production towards the home market. The key element of industrial policy, therefore, was to become the ***reduction*** of industry assistance.

As the 1970s evolved, this intention was translated into policy that led first, to a lower general level of tariffs for manufacturing as a whole — primarily as the result of an across the board tariff reduction[2] — and second, to much higher levels of protection for a subgroup of industries. Since 1975 the footwear, clothing, textiles, and motor vehicles industries have been protected by import quotas which have, at this level of aggregation, effectively frozen the import share of the domestic market at the levels prevailing at that time. As comparative advantage has continued to move against these industries, the import quotas have translated into higher and higher levels of assistance, until today the implicit subsidies provided by tariffs and quotas are almost as large as the wage bill of these industries. We refer to the footwear, clothing, textiles and motor vehicles industries as the troubled industries and throughout the paper their performance over the last decade and a half is compared with that of the manufacturing sector as a whole.

The crucial period before import quotas were introduced in 1975 has many features that are common to the experiences of the US economy over the last few years and, as a result, there are interesting parallels that can be drawn between the outcomes of these experiences in Australia and the potential responses to the current economic environment in the US. The common experiences include a significant appreciation of the exchange rate, large declines in international competitiveness, increases in import shares in a range of import competing industries and significant declines in manufacturing employment. In both countries these events have led to strong political pressure from industry for policy initiatives to reduce the flow of imports. The Australian response to introduce 'temporary' import quotas, which a decade later have not been liberalized but deliver ever increasing levels of industry assistance, clearly illustrates the high economic cost that can flow from the introduction of short run

measures which can quite quickly become a part of the long term economic environment.

In this paper we focus upon the troubled industries and discuss the adjustments, relative to the manufacturing sector as a whole, that have occurred in output, productivity, employment and profits. Some attempt is also made to assess the costs and benefits that have been associated with import quotas.

We look also at the future plans for the troubled industries and consider briefly the latest initiatives in industry assistance. During the last economic recession, when unemployment increased from 6 to 10 per cent, the government was very reluctant to extend industry assistance. Indeed, statements of industry policy seem to indicate an even stronger commitment to achieve lower levels of trade barriers. There have been four new initiatives. First, the government has introduced a new institutional structure — a series of Industry Councils — which, it is hoped, will increase the degree and quantity of consultation between industry, unions and the government, and as a result lead to better industry policies. Second, there has been significant extension of industry assistance to the iron and steel industry. A direct subsidy has been offered to the iron and steel industry, which could be of the order of $350 million over the next five years and it appears that provision may have been made for *de facto* trigger import quotas. The Iron and Steel Industry Plan, therefore, has provision for anticipatory protection, a relatively new device in Australian industrial policy. Third, a new motor vehicle plan has been announced which, if fully implemented, would bring about radical changes in the industry. Fourth, the latest Textile, Clothing and Footwear Plan has provision for trade liberalization but as yet little has occurred. Finally, we attempt to draw together some lessons from the Australian experience of industry assistance over the last 15 years.

A BRIEF HISTORY OF AUSTRALIAN TARIFF POLICY AND THE MANUFACTURING SECTOR

Australia is a relatively closed economy. Over the last 25 years imports of merchandise have varied between 10 and 18 per cent of Gross Domestic Product. This degree of openness is marginally greater than that of the US, but very much smaller than the countries of Western Europe. Furthermore, unlike most OECD countries, the degree of openness of the economy has not increased significantly over the last few decades. Generally speaking, trade flows as a proportion of GDP slowly drifted downwards between the mid 50s and mid 70s and only recently has there been a hint of a trend reversal. Despite the relatively closed nature of the Australian economy, trade policy has been of central concern throughout our history and foreign trade shocks have

been the major source of economic instability in the domestic economy.

The Australian trade pattern is fairly easily described. About 80 per cent of exports are rural and mineral products. Exports of manufactured goods, excluding the processing of foodstuffs and basic metals, are negligible. The main export products are wool, wheat, coal and iron ore. Imports are almost all manufactured goods, two thirds of which are producer goods and materials, usually imported tariff free, and about a third of which are finished goods, usually subject to a tariff.

Australian manufacturing production is concentrated upon finished goods behind a tariff wall and tariff policy has, throughout this century, been by far the main instrument of industry policy. After World War II, and until the late 1960s, the Australian government was prepared to give protection to all new manufacturing ventures, often at very high tariff rates. In government circles this practice was generally seen as an essential part of a policy to industrialise Australia and to provide employment for relatively unskilled immigrants. It is only during the 1970s, with the exception of the introduction of import quotas for the troubled industries and the granting of subsidies to the iron and steel industry, that new tariffs at high rates have not been introduced.

One aspect of the outcome of Australian tariff policy is given by nominal tariff levels. By 1968-69 the average nominal tariff for the manufacturing sector was 24 per cent. For broad groups of industries the tariff ranged from 9 per cent for Food, Beverages, and Tobacco, to 45 per cent for Clothing. The average effective rate of protection[3] was much higher (Table 1): 36 per cent for the manufacturing sector as a whole and ranging from 16 per cent to 97 per cent for the same industries as above. At 1968-69 little use was made of import quotas or other non-tariff barriers, although import quotas had been wide ranging and important for almost a decade following the end of the Korean War.

Throughout the period between the end of World War II and 1968-69, the manufacturing sector grew in absolute terms and, for most of the period, in relative terms as well. By 1968-69 the manufacturing sector accounted for about 28 per cent of GDP and 28 per cent of employment. The 1970s ushered in a dramatic change of fortune for the manufacturing sector. This period is best thought of in terms of two episodes. The first episode, 1970-74, was a time when the stresses and strains that were to come could first be detected but their impact was hidden to a significant degree by a generally buoyant economy. The second episode, 1975-84, began with the sharpest recession experienced by the manufacturing sector for a decade and a half and has ended with the deepest recession since 1931.

TABLE 1

Average Effective Rates of Assistance[a], Manufacturing Sub-divisions : 1968-69 to 1981-82 (per cent)

ASIC Sub-division	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
21 Food, beverages and tobacco	16	17	18	19	19	18	21	20	16	13	13	11	9	8
23 Textiles	43	42	42	45	45	35	37	50	51	57	52	55	61	54
24 Clothing and footwear	97	94	91	86	88	64	71	99	141	149	145	137	141	204
25 Wood, wood products and furniture	26	27	26	23	23	16	18	19	18	18	16	14	13	13
26 Paper and paper products, printing and publishing	52	50	50	52	51	38	32	30	30	29	29	27	26	30
27 Chemical, petroleum and coal products	31	31	31	32	32	25	26	26	23	18	19	17	14	13
28 Non-metallic mineral products	15	15	15	14	14	11	10	10	7	5	5	5	4	5
29 Basic metal products	31	30	28	29	29	22	21	16	15	12	12	12	13	14
31 Fabricated metal products	61	60	60	58	56	44	41	38	34	32	34	33	34	34
32 Transport equipment	50	50	51	50	51	39	42	59	54	61	63	74	74	79
33 Other machinery and equipment	43	43	43	41	39	29	28	25	22	21	21	22	22	22
34 Miscellaneous manufacturing	34	35	32	32	31	24	25	26	25	27	27	26	27	27
TOTAL MANUFACTURING	36	36	36	35	35	27	28	28	27	26	25	24	24	26

(a) The estimates from 1968-69 to 1981-82 are in three series: 1968-69 to 1974-75; 1975-76 to 1977-78; and 1978-79 to 1981-82. The first series is based upon 1968-69 production weights; the second series uses 1974-75 production weights; and the third series employs 1977-78 production weights and also incorporates forms of assistance not included in previous series estimates.

Source: IAC, *1983-84 Annual Report.*

The First Period, 1970-74

During the first four years of the last decade there were two major influences upon the manufacturing sector. First, there was the strong economic boom of late 1972 to early 1974. This was a period of rapid price and wage increases and shortages of materials and supplies. Although unemployment was not at historically low levels, other evidence, such as wage increases and unfilled vacancies, suggested that labour was extremely scarce.

This boom period masked to some extent the effects of the second major influence, which was the largest change in relative prices facing the manufacturing sector since the Korean War period. Following the collapse of Bretton Woods, the Australian exchange rate appreciated in real terms by about 15-20 per cent between 1972 and 1974. This appreciation was accompanied by a comparable and marked deterioration in the competitiveness of Australian industry.

A second contributing factor to the relative price change was that on 19 July 1973, the Australian government reduced all tariffs by 25 per cent. This was the largest change in the tariff in the post World War II period. It occurred when overseas reserves were large and unemployment low. The average effective rate of assistance to Australian manufacturing fell from 35 to 27 per cent (Table 1). Finally, for some industries in high tariff categories the price of imports in foreign currency and net of the tariff also fell.

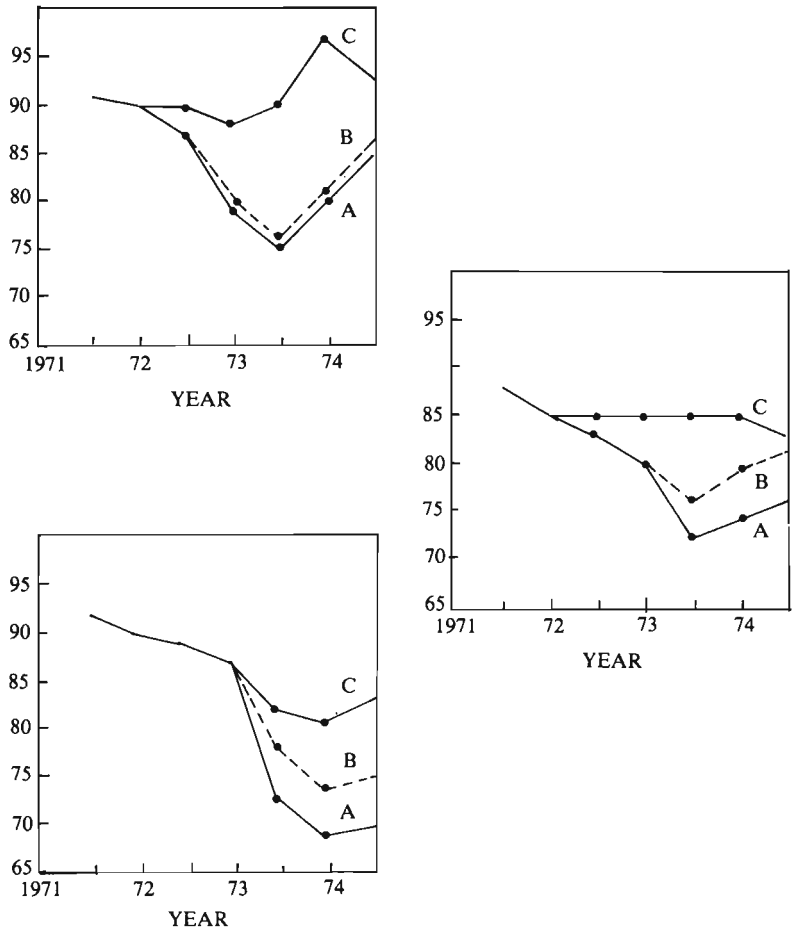
An illustration of the relative magnitude of these three price effects over the period 1970-75 is given in Figure 1a[4] to 1c. Figure 1a is for all imports, Figure 1b for dutiable imports and Figure 1c for imports which fall in the important nominal tariff category 35-44 per cent. In each Figure line A is an estimate of the price of imports relative to the Gross National Expenditure deflator. For all these categories the price of imports relative to the GNE deflator fell by 20-30 per cent within the space of 2-3 years.

The dotted line B is a hypothetical path of relative prices based on the assumption that the 25 per cent across the board tariff reduction did not occur. The calculation is based on the equation in footnote 3, and is therefore a *short run* calculation which does not take into account any general equilibrium effects of not changing the tariff. Line C is a similar calculation based on the assumption that the exchange rate and the tariff level remained fixed at their 1970 level.

It is clear from these figures that although most attention at the time was focused upon the effect of the tariff reduction, it was the exchange rate that dominated the short run relative price environment. This has continued to be the case throughout the last decade as the real exchange rate has devalued (1974-78) and appreciated (1979-1981) and finally once more devalued.

FIGURE 1

Import Prices, Adjusted for Exchange Rage and Tariff Changes, Divided by the GNE Deflator (1966-67 = 100)



A = f.o.b. price index of imports, Australian currency and adjusted for the general tariff reduction of 25 per cent, divided by the GNE deflator.

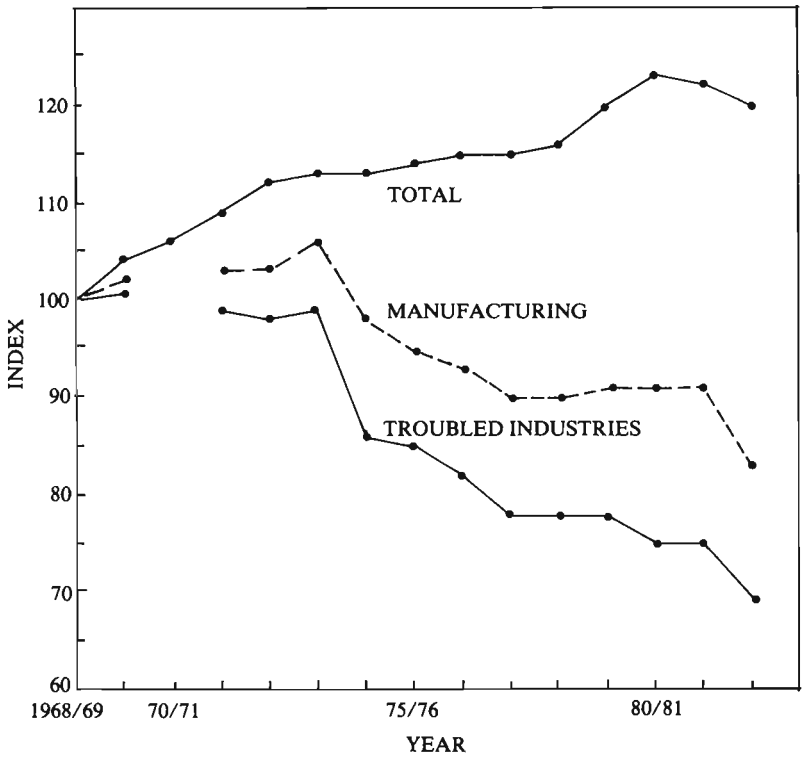
B = f.o.b. price of imports, Australian currency, divided by the GNE deflator not adjusted for the general tariff reduction of 25 per cent.

C = Calculated on the assumption of a constant effective exchange rate for each tariff category since 1969 and no general tariff reduction, i.e. an estimate of the relative price series which would have prevailed in the absence of exchange rate and tariff changes.

Some indications of the effects of the relative price changes on the manufacturing sector are summarisied in the output history of this period. Although manufacturing output grew in absolute terms between 1968-69 and 1973-74, it was becoming clear that the rate of growth was not keeping pace with the economy as a whole. Furthermore, within manufacturing it was clear that the output growth of the troubled industries was beginning to lag behind the output growth of manufacturing to quite a significant extent.

FIGURE 2

Employment Indexes 1968-69 = 100
Total, Manufacturing, Troubled Industries



Sources: *Manufacturing Establishments, Details of Operations by Industry Class,* ABS, Cat. No. 8203.0, various issues, *Labour Force,* ABS, CAt. No. 6204.0.

Notes: Troubled Industries: ASIC subdivisions — Textiles (23), Clothing and Footwear (24), Transport Equipment (32).

A similar experience was evident for employment growth as shown in Figure 2. Again, manufacturing employment grew over this period, but not as much as total employment for the economy. Employment in the troubled industries had began its absolute fall.

This period shares some similar characteristics with recent experiences of the US economy. In both countries relative prices moved against local manufacturing primarily as a result of exchange rate appreciations and within a short time there was a theory explaining the exchange rate change and suggesting that the relative price shift was either permanent or would prevail for some time.

In Australia that theory focused upon the rapid growth of a new export sector. Since the mid-1960s there had been an extensive development of mineral sector exports, primarily coal and iron ore, and it was argued that the new exports would crowd out traditional exports (rural products) and traditional import-competing activities (the manufacturing sector). In its simplest terms the argument proceeded as follows: the new exports would add to overseas reserves and cause the exchange rate to appreciate, which would cause the export prices in domestic currency to fall and thus contribute to a relative decline of rural exports. The exchange rate appreciations would also reduce import prices and lead to increased import flows which would tend to contract the manufacturing sector. It was also suggested that this phenomenon was far more important than the across-the-board tariff reduction.[5]

A similar argument is now underway in the US, only the role of the new exports sector is being played by the budget deficit. It is suggested that to finance the budget deficit will require large foreign capital inflows which in turn will lead to exchange rate appreciations. The appreciations crowd out exports, encourage imports and therefore crowd out domestic manufacturing activity which competes with imports.[6]It is clear in both countries that the exchange rate changes are large and to a significant extent *not* offset in the short to medium term by changes in domestic prices relative to overseas prices.

1974 Onwards

As might be expected, the combination of the significant fall in competitiveness and a booming domestic economy led to very large import flows which tended to peak after the economy turned down. The result was a very significant ratchet upwards in import shares of the domestic market for particular industries and considerable falls in employment.

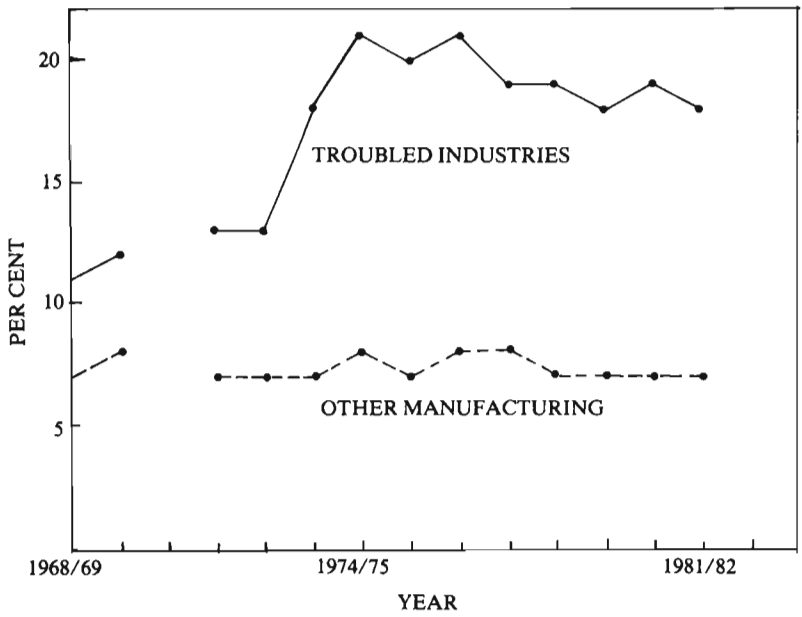
For the manufacturing sector dutiable imports increased their share of domestic demand from 11 to 20 per cent from 1968-69 to 1974-75, but almost all this increase was concentrated in the markets of the troubled industries, Textiles, Clothing and Footwear and Transport

Equipment. For these industries the import share increased from about 12 per cent in 1968-69 to 20 per cent in 1974-75 (Figure 3).

The government did not respond to the large import flows by reversing its decision on the across-the-board tariff reduction of eighteen months earlier. Instead it implemented import quotas for industries which had lost a significant share of the domestic market. Between 1974 and 1977 import quotas were introduced to cover 10 per cent of manufacturing production. The main industries to benefit from the quotas were the troubled industries. The quotas stabilised the import share of domestic markets at the new and higher level. Consequently there was no attempt to turn back the clock to the market shares that prevailed earlier, but the new policy would ensure that the inroads that imports had made into the domestic market

FIGURE 3

Dutiable Imports as a Proportion of Domestic Demand



Source: IAC, *1982-83 Annual Report*

Notes: Troubled Industries: ASIC subdivisions — Textiles (23), Clothing and Footwear (24), Transport Equipment (32).

would not continue at such a fast pace. When import quotas were introduced, it was implied that they were temporary and that there would be a planned but fairly slow liberalization.

The introduction of quotas, even at import shares of the domestic market that were twice as high as at the beginning of the 1970s, still resulted in a dramatic rise in the effective rate of assistance. Between 1973-74 and 1977-78 the effective rate of assistance increased 22 percentage points for Textiles, 85 percentage points for Clothing and Footwear and 47 percentage points for Motor Vehicles (Table 1).

Between 1977-78 and 1981-82 the effective rate of protection continued to increase in each of these industries (with the exception of Textiles). Indeed, it is apparent from Table 1 that there is no slow down in the rate of increase. The obvious reason for the effective rate of protection increasing each year is that the import quotas have not been liberalized. Overall the import share of the domestic market for the troubled industries has remained virtually at the level of a decade ago (Figure 3).

THE TROUBLED INDUSTRIES

As a policy package to bring about an orderly and planned scaling down of these industries, the import quota policy has failed. There has been no trade liberalization. We now document some of the effects of the quotas and discuss further the reasons for the failure of the policy. Import quotas were introduced to protect the factors of production used in the troubled industries against adverse market trends. We begin with an examination of the effect of import quotas upon labour.

Labour and Import Quotas

Import quotas, by restricting imports, protect jobs in the assisted industry. The cost of this job protection is higher product prices as domestic consumers have restricted access to overseas commodities which they judge to offer better value for money. The increase in prices can be thought of as a subsidy, paid by the consumer, to maintain employment in the favoured industry.

There are a number of ways of calculating the job subsidies that are implied by import quotas. One very simple and approximate method is to divide the subsidy equivalent of tariffs and quotas by the number of persons employed in the industry. Before the introduction of import quotas, but after the 25 per cent across-the-board tariff reduction, the average worker in the troubled industries was being subsidised to the amount of 49 per cent of the average annual wage each year. Relative to buying imports at world prices, about 6 months of labour directly involved in these industries in each year was wasted.

By 1981-82 the subsidy per worker had increased to 79 per cent of the average wage.[7] The subsidy per worker is clearly increasing at quite a rapid rate.

In the Australian context, where wage relativities tend to be fixed by an extensive network of craft unions and wage tribunals, it is unlikely that these wage subsidies have a large effect on the wage that workers received in their industries. Most of the subsidy to labour takes the form of increasing employment over and above what it otherwise would be, although Textiles, Footwear and Clothing have been particularly affected by the economy-wide introduction of equal pay for women.

The employment history of troubled industries is given in Figure 3. Over the year of the recession 1974-75, when imports increased rapidly, employment was particularly affected, falling 13 per cent for this group, 8 per cent for manufacturing in total, and increasing slightly for the economy as a whole. The large employment fall of 13 per cent against a general backdrop of suddenly increasing unemployment was probably the trigger for the introduction of quotas. Since then, despite the increasing subsidies behind the import quota barriers, employment has continued to fall. Quotas may have protected jobs relative to lower tariff levels, but they have not stopped a continued rate of job loss. By 1982-83, when the implied job subsidy had increased again, employment had fallen a further 20 per cent to be 69 per cent of the level of a decade earlier. The combined employment loss of these industries can be explained largely in terms of continued labour productivity growth accompanying a very poor output growth record.

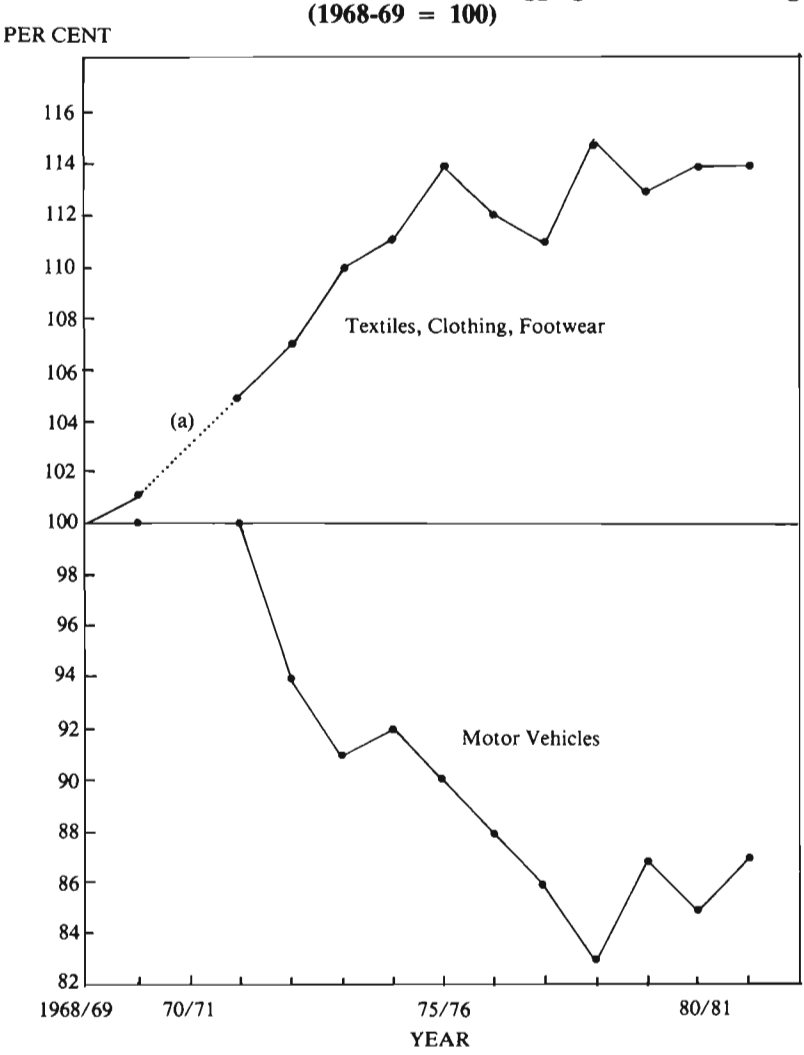
In response to the initial shock of increased imports, there were above average labour productivity increases in Textiles, Clothing and Footwear. For the depressed levels of output, therefore, these industries used less labour than might have been expected on the basis of past labour productivity trends. The initial shock effect, however, lasted for only a 2-4 year period and since the latter part of the 1970s the labour productivity growth has settled back to something close to its historical long term rate (Figure 4).

The motor vehicle industry response was different. There is no evidence of a noticeable change in the rate of growth of labour productivity. During the period of the rapid growth of imports, labour productivity continued to grow at extremely low rates which are below the average of manufacturing as a whole.

The second factor affecting the employment decline has been a depressed rate of growth for the products of these industries. Before 1974-75 the total demand for these industries grew at rates closely approximating that of manufacturing as a whole. Since the advent of import quotas the growth of the market has virtually stopped. In each

FIGURE 4

Labour Productivity: Ratio of Industry to Aggregate Manufacturing (1968-69 = 100)



Source: ABS, *Constant Price Estimates of Manufacturing production 1978-79*, Cat. No. 8211.0 (various issues).
ABS, *Manufacturing Establishments, Details of Operations by Industry*, Class. Cat. No. 8203.0 (various issues).

Notes: (a) Not available.

of these industries the total market demand of 1981-82 was less than that of 1973-74. The higher prices and restricted range of products flowing from import quotas appear to have been effective in depressing the rate of growth of demand.

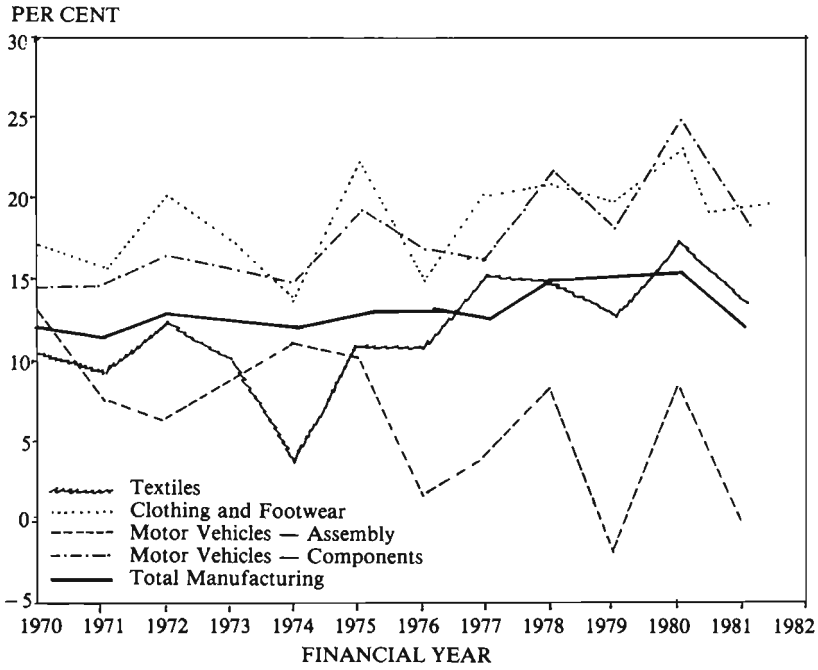
Capital and Import Quotas

Consistent with the poor rate of growth of output of the troubled industries, the rate of growth of investment has been marginally below that of manufacturing as a whole,[8] but the profitability record appears to be quite good.

For a number of years the Industries Assistance Commission has published the ratio of operating profit to funds employed from a survey of Australian manufacturing industries (Figure 5). These profit indicators suggest the following conclusions. The footwear and

FIGURE 5

Ratio of Operating Profit to Funds Employed



Source: IAC, *Annual Reports.*

clothing industries have remained remarkably profitable behind the protection offered by import quotas. The average ratio of operating profit to funds employed always exceeds that of the manufacturing average. The declining employment figures in these industries therefore do not have a counterpart in declining profit rates.

The profitability of the textile industry was well below the manufacturing average in the first few years of import quotas, but since about 1977-78, after the exceptional productivity growth rates mentioned earlier, the profitability of the textile industry has been about equal to that of manufacturing. The motor vehicle industry again needs to be split into two parts. The assembly process has not done well over the last decade despite quotas. The industry has not been able to increase volume enough to gain economies of scale. The component producing section of the industry, however, has done well with profit levels above that of the manufacturing average.

THE FUTURE

Over the decade since import quotas were introduced, the level of protection has increased and the factors employed in these industries have continued to earn wages and profits comparable with the rest of the community. Indeed, the return to capital in all but motor vehicle assembly seems to be above average. It is quite clear, however, that relative to free trade standards, the economic situation has become steadily worse. The stated rationale for the introduction of import quotas in 1974-75 — that they would provide a breathing space behind which industries could adjust so that they could face international competition on a more equal footing — has clearly been at odds with the subsequent experience. Today there is a higher adjustment required if protection is to be reduced to pre-import quota levels than there would have been a decade ago.

Textiles, Clothing and Footwear

There has been a gradual change in stated policy for these industries. Since the end of the 1970s, successive governments have come to regard import quotas, which protect about 90 per cent of production, as a *permanent* feature, and they no longer seem to believe that a *significant* trade liberalization is possible. For example, in August 1980 a seven year plan was announced to apply from January 1982, the stated aim of which was broadly to maintain the quotas for Footwear and Clothing, but with an increased allowance for flexibility in their allocation.

The volume of quotas was to be determined by:

(a) a quota allocation expansion factor which averages across categories at 2 per cent per annum;

(b) a market growth factor based on the advice of the Textiles, Clothing and Footwear Advisory Committee.

The spirit behind the Plan is to allocate all the market growth in Australia to imports. Hence the low quota expansion factor should bring about a slow but gradual reduction in domestic production. The degree of trade liberalization implied, however, will be quite small.

By 1984 there was still no evidence of signficant trade liberalization. The lack of trade liberalization can be seen indirectly from the prices that are paid for import quotas.[9] About 80 per cent of the quotas are allocated by administrative arrangement and 20 per cent by tender. Also, about 13 per cent of the administratively allocated quotas are traded within the industry. Prospective quota holders who tender for quotas bid the *ad valorem* tariff they will pay over the base rate for a quota.

For 1982 the average nominal duty paid for imports coming in under a tendered quota was a 46 per cent base rate (paid by all quota holders) plus a 28 per cent duty bid for the tendered quotas. The average duty paid for the marginal quotas therefore was 74 per cent. By 1984 the average nominal duty paid had increased to 84 per cent; the successful tender tariff had increased a further 10 percentage points.

Why has the stated policy failed? One difficulty seems to be that the Advisory Committee, which consists of an independent Chairman and two public servants, sees itself, naturally enough, as making recommendations which serve the interests of the domestic industry subject to the government guidelines. Consequently, it always adopts conservative forecasts of market demand, with the result that all the new market demand is not allocated to imports. It has also adopted a number of rules that minimise the growth of imports. For example, if the market growth is under-predicted in one year, that error is not added to imports the next year. Similarly if market demand falls, the new import level is calculated relative to the import quota base of 1981. In this way all market downturns are borne by imports. In circumstances where there is very little growth in the market these policies tend not to lead to trade liberalization and are associated with increasing levels of industry assistance.

For the textile industry, assistance has been moving away from import quotas towards bounties, a move which is welcomed. The introduction of subsidies has increased the assistance to textile users, who no longer need to pay a tariff, but provided that the government maintains the bounty system, there is a chance, given the pressure of the Departments of Finance and Treasury, that bounties may not increase protection as fast as import quotas would do if comparative advantage continues to move against this industry.

Motor Vehicles

The Australian motor vehicle industry has been subject to Industry Plans since the mid-1960s. In response to changing circumstances in the industry and pressure from motor vehicle manufacturers, none of these plans has remained intact over the planning period. The latest plan, for example, announced in May 1984, to be operative in 1985 replaces a plan announced in December 1981 that was to be operative from 1984. These motor vehicles plans have been extremely complicted, and there is not space to explain and analyse them in detail. Here we shall focus only on those aspects that are designed to reduce the overall level of assistance and arrest the continual increases in effective protection that have been occurring since 1974.

The motor vehicle industry needs to be treated in two parts: the assembly process and component manufacture. The two parts are linked together by a local content scheme whereby, in return for sourcing a given percentage of components from local suppliers, the assemblers are granted the right to import the remaining components tariff-free. The local content scheme is the main form of assistance to the component manufacturers. The assemblers receive their industry assistance primarily through import quotas which restrict the volume of imported cars.

(i) The Assembly Process

In many ways the motor vehicle assembly industry has been the most unsuccessful of the troubled industries. There has been no period of exceptional productivity growth following the increase in imports in the pre-1975 period and profitability has been low. The new plan, to extend to 1992, is to maintain the 80/20 market sharing arrangement for completely built up passenger vehicles for the early part of the planning period (80 per cent of cars to be produced locally, 20 per cent to be imported). Currently, there is a 57.5 per cent tariff for imports within the quota and this base level will remain. At the moment the quotas are allocated administratively, primarily on the basis of past history, but the plan envisages that an increasing fraction of the quotas will be subject to tender and that by 1989 all quotas will be allocated in this fashion. By 1989, therefore, the demand for imported cars will set the tariff, subject to a 57.5 per cent minimum.

To liberalize trade flows there will be provision for new tariff quotas over and above the 80/20 agreement. In 1985 the tariff to apply to imports outside the initial 20 per cent allocation of quotas will be set at 100 per cent and pared down to 57.5 per cent by 1992.[10] This scaling down of the tariff will set the maximum tendered value for a quota. By this time all quotas will be effectively replaced by a uniform 57.5 per cent tariff. (The tariff was 35 per cent in 1974.)

It is anticipated that the plan will lead to a reduction in the number of producers from five to about three. As a direct incentive to producers to leave the assembly industry, a producer ceasing production will receive a special quota entitlement equal to half the annual average of that producer's last two years' vehicle sales, including imports. There will be an Automotive Industry Authority to monitor the plan.

The philosophy of the motor vehicle plan, therefore, is different from that of the textile, clothing and footwear plans. The motor vehicle plan makes a provision for a *significant* increase in imports and for a large reduction in protection. There is no such element in the plans for Textiles, Clothing and Footwear, which place more emphasis on protecting domestic production. It is not clear why this is so. Perhaps it is only a matter of when the plans were developed. The textile, clothing, and footwear plans were introduced by the previous government.

The philosophy of the motor vehicle plan — that there should be fewer producers — has been adopted in principle in all previous plans, but governments have not been prepared to accept the employment loss if a producer were to leave the industry. One plant, for example, is located in Adelaide (a State capital city) and any suggestion that it would be closed has always led to a revision of the plans.

Current estimates of the implicit tariff provided by the quotas (about 80 per cent) suggest that a significant increase in imports should occur somewhere around 1987 which, extrapolating the experience of the last two decades, could well be on election year. It is not easy therefore to believe that the plan will remain intact. After all, the government has not accepted a faster scaling down of Textiles, Clothing and Footwear where the employment loss would be much less than if a motor vehicle assembler left the market. Indeed, it is important to note that although the plan calls for reduced assistance in the future, the actual operative action taken by the government in introducing the plan was to increase assistance. The government allocated $150 million over five years as subsidies for local research and design activities and extended quotas to restrict the importation of light commercial vehicles and four-wheel drives that the Australian consumer was increasingly substituting for passenger cars. The market share of these vehicles will be frozen at 1984 levels.

A likely outcome of the long run plan is that if there are significant employment losses the plan will be abandoned. However, if we are lucky, it will take a significant increase in imports to trigger that decision and there is a good chance that if the plan is abandoned the new plan will not reduce import shares to the old 80/20 ratios. The plan, therefore, is clearly a step in the right direction. We must wait to judge its success.

(ii) Component Supplies

The main form of assistance to component suppliers has been the local content scheme. Under the plans, motor vehicle producers have been requested to achieve a given local content across the range of vehicles produced. Under the plan operating to 1984 the local content was 85 per cent of the wholesale selling price across the range of vehicles produced. In return for achieving the local content desired, producers may import components duty free up to 15 per cent of the value of the vehicle.

Over the last decade successive governments have begun to scale down assistance to local component suppliers relative to the assembly process. This has come about by two types of decisions. First, there have been reductions in the local content requirement. In the early 1970s, for example, the local content requirement of the large producers for their large volume vehicles was of the order of 95 per cent. Today there is an 85 per cent local content defined over all products. Second, since 1982, there has been provision for local producers to reduce the local content requirement by exporting. Each dollar of export earnings can be set against a dollar of local content up to a certain level. The initial plan allowed a phased-in export credit scheme allowing for a maximum reduction of local content of 7.5 percentage points. The current plan allows for a reduction of 15 percentage points by 1987. This will allow local producers to reduce their local content to an average of 70 per cent, a very significant reduction indeed.

Already there has been some scaling down of local component production and this process should accelerate as local component suppliers are squeezed by export facilitation[11] and imported CBU (completely built up) vehicles outside the 80/20 rule. Already unions involved in component manufacturing have begun to lobby for a change in the plan.

A similar move against material suppliers is evident in the textile industry. There, countervailing pressure by textile users has not been successful at reducing industry assistance as yet, but it has changed the form of industry assistance away from quotas and towards bounties, a form of assistance that is probably less advantageous for the textile industry.

Industry Plans — The New Shape of Protection and Industry Policy

Since the introduction of import quotas about a decade ago, there has only been one instance of a significant increase in industry assistance as a result of new policy decision. This is the extension of industry assistance to the iron and steel industry during the economic recession

of 1982-83. This decision is particularly important because it can be used to indicate the trend in government thinking towards protection.

There is to be an Industry Plan to run for five years from August 1983. This plan involves the constitution of a Steel Industry Authority to report to the government and to monitor the plan in much the same way as the Industry Authorities operate for Footwear, Clothing and Textiles, and Motor Vehicles.

Industry Authorities and plans are becoming important. During the late 1960s and the first half of the 1970s, the Australian government had been strengthening that part of the institutional structure which was to take an economy-wide approach to industry assistance. On 1 January 1974, the government created an Industries Assistance Commission. Before a decision was made on industry assistance, a reference would be sent to the IAC which would then usually take 2 to 3 years to consider the reference. It would then make a public report and state its recommendation. The government would then reach a decision.

During the 1970s the influence of the IAC and its predecessor, the Tariff Board, can be seen in the lowering of the average and narrowing of the dispersion of tariff rates. The IAC quickly became an important source of a range of tariff information.[12] There was always some scope for circumventing the scrutiny of the IAC in the short run through a Temporary Assistance Authority, but in general this was a minor activity.

Many of the new initiatives in the Steel Plan involve a slight stepping away from an economy wide approach and a step towards more *ad hoc* industry specific measures. The Steel Plan accepts a philosophy similar to that of the Textile, Clothing and Footwear Plans. Government should become more involved in detailed planning for troubled industries. This move has not been widely acclaimed by disinterested commentators on industry assistance.

The key concerns are that the Industry Authorities will become captured by the local industry, encourage a greater degree of government participation in the economic well-being of the industry than is in the community interest, and slow down the rate of structural adjustment. Of course, these tendencies need not occur, but there is evidence that it is the Australian experience. As we saw earlier, the Textiles, Clothing and Footwear Advisory Committee has not as yet managed to liberalize trade flows.

The Steel Industry Plan consists of two assistance measures. The first is a range of sliding scale bounty payments — of up to $70m a year — applied to the domestic sales of four categories of steel produced by local manufacturers. Export production is not directly subsidised. If industry assistance was practically unavoidable, then the subsidy aspects of the plan are to be generally welcomed in that

bounties are to be preferred to import quotas. The assistance is visible and the Departments of Treasury and Finance will always provide a strong counter lobby to the extension of these demands on the government budget.

The second assistance measure has a number of more worrying aspects. It consists of a safety mechanism to provide for a quick review of assistance if the market share of the local industry in each of eight product groups rises above 90 per cent or falls below 80 per cent. This arrangement suggests a much greater degree of government involvement in the market fortunes of a company than is usual in Australia.[13] Already, less than twelve months after the agreement, only one of the eight categories remains within the 80-90 per cent band: three have fallen below 80 per cent and four have risen above 90 per cent. The Steel Authority has reported to the government on these matters and is awaiting a reply. In principle, therefore, it appears that the government could be introducing or repealing assistance measures almost on an annual basis.

Apart from a general concern that might be felt in response to the development of close relationships between the government and the steel industry, there is also some concern as to the strong anticipatory elements in the plan. Not only are there the safety mechanisms above, but there is also the introduction of an 'import watch' scheme to monitor closely a range of other imports (there are 7 other steel categories subject to continuous monitoring) and a fast track anti-dumping mechanism which gives the industry quicker access to anti-dumping duties than is usual for Australian industry.[14]

CONCLUDING REMARKS

Over the last decade there has been a consistent pattern of development of industry assistance in Australia which suggests the following lessons:

1. As far as import quotas are concerned, 'temporary' has been a long time. Once import quotas were introduced there was no further liberalization of trade flows. When the economy recovered, during the boom of 1980-81, no attempt was made to liberalize import quotas and to increase the import shares of the domestic market. Indeed, successive governments have moved away from a stated policy of significant trade liberalization for most of the troubled industries. Motor Vehicles have been the exception. Industry Plans have been adopted which are aimed at increasing the import share of the domestic market at an extremely slow and controlled rate. Implicit tariff rates are steadily increasing behind the import quota walls and the situation has become worse. The lesson seems to be that if there is to be an intervention in trade flows, a tariff increase, albeit to a high

level, is preferable to the imposition of an import quota. With a tariff, imports will increase as the ability of the domestic industry to compete deteriorates. There is no comparable market mechanism to liberalize import quotas. Governments will allow the implicit level of assistance to increase behind the quota rather than allow a significant upward movement in the market share of imports.

2. The initial increase in imports of the 1972-74 period and the pressure that was placed on Textiles, Clothing and Footwear, did lead to exceptional productivity gains for a few years, relative to past trends and relative to the manufacturing average. Over the last seven or eight years productivity growth has lapsed back towards the manufacturing norm. There was a belief, early in the period following import quotas, that if given a breathing space these industries could adjust so that they could compete against imports more effectively. There is little evidence to support this proposition in Australia. Once the pressure of an increasing import share of the domestic market has been removed, the troubled industries return to previous rates of productivity growth. Structural change is still occurring because market demand for these industries is not growing, but behind import quotas there are no extra mechanisms to force adjustment.

3. After the strong appreciations of the exchange rate and its return to more normal levels, the competitive situation in the troubled industries continued to deteriorate. Our experience, therefore, has been that unusual exchange rate appreciations seem to bring to the forefront of structural change and policy concern those industries which have already begun along a path of long run decline. Just as the belief that industries could adjust to become more efficient behind import quotas has been ill-founded, so has been the belief that if the exchange rate was not 'over valued' and not at historically high levels, the troubled industries would be placed back in their position, relative to the rest of the economy and relative to imports, that they held before the appreciations. In Australia each increase in the import share following an exchange rate appreciation appears to be permanent.

4. The quotas were introduced to save jobs. Employment in these industries has continued to decline, albeit at a slower pace. Relative to manufacturing as a whole, import quotas have not arrested the output and employment declines in the troubled industries.

5. In Textiles, Footwear, Clothing and Motor Vehicles, the ability to compete against imports in the absence of import quotas has deteriorated. If import quotas were removed, the adjustment process would be more serious both at a micro and a macro level than it was in 1974-75. In this sense the policy initiatives over the last decade have made the problem worse.

6. During the recession of 1982-83 the economic collapse for manufacturing has been comparable with 1974-75, but it has not been associated with large increases in imports. With the exception of the initiatives for the iron and steel industry, the government has not added significantly to the range of import restrictions, despite considerable pressure from the heavy engineering and metal industries. Existing import quotas have not been used to reduce import shares. The consensus against increasing industry protection seems to have strengthened. There is a growing recognition that the economic future of Australia, to a significant degree, seems to lie outside manufacturing activities. These new attitudes, however, have not developed sufficient strength to act against existing import quotas and no new initiatives to liberalize trade flows seem to be in the offing. It is probable that high employment growth and a much lower level of unemployment would be needed before further trade liberalization measures are taken.

7. The new Labor government has extended and developed further the Industry Plans and Industry Councils of the previous government. There is a belief on the government's part that if the affected parties, unions, producers and the government get together, they can plan for adjustment and in the long run facilitate structural change. The industry representatives and unions have welcomed these new initiatives.

It is not certain how successful these Industry Councils and plans will be at facilitating the rate of structural change. They should provide a greater degree of awareness of the adjustment problem among those concerned. This might help facilitate structural change, but there is a widespread concern among many economists that Industry Councils will just increase the efficiency of industry lobby groups. In this way they may act as a force leading to increased industry assitance and a reduced rate of structural change. We will need to wait a few years before the effect of these institutional initiatives can be evaluated. To date they have not been counter-productive.

8. Finally, at broad levels of aggregation, and over the last two decades, there is no instance in Australia of an industry policy for manufacturing that has been successful at either scaling down an inefficient industry so that it can survive at low tariffs, or reversing the trend of apparent comparative disadvantage.[15] The main effect of policy has been to restrict imports and this action has been associated with increasing the levels of assistance provided behind import quotas.

The most optimistic remarks that can be made about Australian industrial policy are the following:

(i) There seems to be an increasing awareness of the failure of policies based on trade restrictions. It could be argued that this

increased awareness has prevented new trade restrictions in the metal industries, and prevented import quotas from being made even tighter. Indeed, during the latest economic recession, when unemployment increased to 10 per cent, the government did exceptionally well not to extend industry assistance further than the new initiatives in iron and steel.

(ii) There is a degree of acceptance, perhaps greater than in the US, that there is nothing special about manufacturing activities and it is quite proper for the size of that sector to change as comparative advantage changes, in much the same way that the size of the agricultural sector has changed.

(iii) Over the last decade, industry policy has evolved in an environment in which unemployment has been steadily increasing. Under such circumstances it is extremely difficult to adopt policies that can be seen to be causing job losses in a particular industry. Perhaps, if unemployment were to fall significantly, there might be scope, outside the Industry Plans, to liberalize trade flows. The difficulty with Industry Plans and Industry Councils, though, is that they may limit the government's ability to reduce assistance suddenly. This may be a serious problem since all large trade liberalization measures in Australia have been sudden and unexpected.

(iv) There seems to be a clear move away from allocating import quotas administratively. Increasingly the government is moving quotas into a tender system. This should facilitate movements away from quotas and towards tariffs.

NOTES AND REFERENCES

1. For 1983-84 the largest items of government expenditure on industry assistance were Textile Industry Bounties ($75 million) and Industrial Research and Development grants ($66 million). Three or four years ago export incentives were important ($260 million in 1980-81), but they have recently been scaled down. The estimated net subsidy equivalent of the tariffs and quotas in 1981-82 was $4,060 million (1977-78 prices).
2. The motivation for this decision was to be found in macroeconomic policy rather than in industrial policy. See F. H. Gruen, 'The 25% tariff cut; was it a mistake?', *Australian Quarterly,* 47, 1975, pp. 7-20. See also R. G. Gregory and L. D. Martin, 'An analysis of the relationships between import flows to Australia and tariff changes', *Economic Record,* 52, 1976, pp. 1-25.
3. The effective rate of protection, ER, measures the protection afforded the value added of an industry. It takes into account both tariffs on outputs and inputs. It is calculated as

$$ER = \frac{t_i - a_{ij}t_j}{1 - a_{ij}}$$

Where t_i is the nominal tariff on the output of the industry and t_j the tariff levied on the jth input. The co-efficient a_{ij} is an estimated material output ratio adjusted for the tariff rates currently applied to inputs and outputs.

4. The domestic price of imports P_D can be written as

$$(1)\ P_D = \Psi\ (1 + t)\ P_m$$

Where P_m is the foreign price of imports, $(1 + t)$ the adjustment to the foreign price as a result of the nominal tariff rate, and Ψ the exchange rate which translates foreign prices into domestic currency. See R. G. Gregory and J. J. Pincus, 'Industry assistance' in L. R. Webb and R. H. Allan (eds), *Industrial Economics: Australian Studies,* George Allen and Unwin, Sydney, 1982, pp. 113-64.

5. This theory generated considerable controversy and a large economics literature. The basic idea in the Australian context was developed in R. G. Gregory, 'Some implications of the growth of the mineral sector', *Australian Journal of Agricultural Economics,* 20, August 1976, pp. 71-91. For a survey of the large literature that followed see P. J. Lloyd, 'Protection policy' in F. H. Gruen (ed.), *Surveys of Australian Economics,* George Allen and Unwin, Sydney, 1978, pp. 241-96.
6. The argument has been associated to a significant degree with Professor Martin Feldstein, until recently the Chairman of the US Council of Economic Advisors, e.g., "Large projected US trade deficits are a result of macroeconomic forces, particularly large budget deficits" (p. 67); "The most effective strategy the United States can pursue for its exporting and import competing sectors is to get its overall economic house in order — above all, by bringing budget deficits and real interest rates under control" (p. 70). *Economic Report of the President, February 1983,* US Government Printing Office, Washington DC, 1983.
7. These calculations are inevitably rough and are subject to severe limitations: — they impute all the protection to labour and not to other factors, they attribute protection to all labour and not that part which is dependent on import quotas, i.e. some employment would remain even if protection were removed, and they ignore any general equilibrium effects that would flow from the removal of import restrictions. Nevertheless, they do illustrate fairly well the general order of magnitude of the ineffectiveness involved in this system of industry protection and the rate at which this ineffectiveness is increasing.
8. See Table A1.1.2 Assistance and the performance of manufacturing industries: 1968-69 to 1981-82 in Industries Assistance Commission, *Annual Report, 1982-83,* Australian Government Publishing Service, Canberra, 1982, pp. 44-5.
9. These data are more recent than trade and production data. The latest available data on market shares show dutiable imports as a proportion of domestic sales for 1981-82. For Textiles this ratio is lower than for any other year since 1968-69. For Footwear and Clothing the ratio is marginally below the 1974-75 level.
10. This new plan embodies many of the characteristics of the old plan — fewer producers, more market oriented allocation of quotas — but it envisages less protection and more imports. The 1981 plan also made allocation for above quota imports, but the tariff rates were to be 150(100) at 1985 and 124 per cent (57.5) at 1992. The new plan tariff rates are those listed in brackets.
11. General Motors Holden, for example, has yet to use the credits it has earned, but recently they have announced a plan for significant reduction of local sourcing.
12. The Industries Assistance Commission has been a very worthwhile institution that has dominated the discussion of structural change. It is interesting to note that the Brookings Intitution has suggested that such an institution should be created in the US (A. M. Rivlin, *Economic Choices,* The Brookings Institution, Washington, DC, 1984).
13. The production of iron and steel in Australia is undertaken largely by one company, Broken Hill Proprietary Ltd.

14. In their 1983-84 *Annual Report* the Industries Assistance Commission comments on the Steel Plan as follows: "One feature common to all these schemes is that they focus on reducing the impact of adverse developments on the industry. In each case, a degree of assurance (or risk reduction) is provided so that higher assistance is potentially available if the market should deteriorate. Conversely, if the market for local production improves there is provision for the package of assistance to be reviewed" (p. 27).
15. Perhaps the whitegoods industry may be an exception. The whitegoods industry also received quota protection in 1974-75, but the government was able to replace this with higher tariffs in 1978-79 which subsequently have been scaled down. The long run tariff rate of 30 per cent is still, however, quite high. The industry has been subject to considerable rationalisation (Bureau of Industry Economics, *Structural Adjustment in the Australian Whitegoods Industry*, Research Report No. 12, Australian Government Publishing Service, Canberra, 1983). The number of local producers has fallen from 20 in 1971 to 15 in 1978, and the market share of the two largest firms has increased from 31 per cent in 1971 to 69 per cent in 1980-81. The scale of some product lines has been increased by the introduction of cross subsidy arrangements between the major firms. Obviously the government is hoping for a similar outcome for motor vehicles.