Government Involvement in the Development of Australian Manufacturing since 1945

Paul Robertson and *Keith Trace*
University of Melbourne and Monash University

IN THE period since 1939 the Australian manufacturing sector has been transformed from an infant primarily devoted to supplying goods too bulky or perishable to be imported at an economical price, to a thriving sector that turns out a wide range of modern products comparable in nature, if not in cost, to those of North America or Western Europe. And it has achieved a position of maturity and decline that is comparable to that of other advanced countries since the early 1970s. Throughout, the Australian government has played a vital role, first in encouraging the expansion of manufacturing and, more recently, in attempting to mitigate or counteract the consequences of decline. In this paper we will briefly outline the types of action that the government has taken and show how these actions have affected the strategy of firms in two of the fastest growing areas of the postwar period; the motor vehicle and paper manufacturing industries.

Despite an energetic import substitution policy in the 1930s, manufacturing accounted for only about 16 percent of gross domestic product in 1939 [17, pp. 123–24]. The real beginnings of modern manufacturing derive from the war of 1939–1945 when the nation was cut off from overseas supplies of vital producer and consumer goods. To compensate, the government sponsored the construction of numerous plants throughout the country to produce goods ranging from textiles and clothing to explosives, pharmaceuticals, and precision optical equipment.

Much of the industry introduced during the war was unquestionably of a hothouse variety, but a relatively smooth and rapid transition to peacetime activities followed. By the end of the 1940s factory output averaged 25 percent of GDP. This rose to 28 percent in the 1960s before beginning a slow decline [17, pp. 123–24]. In international terms, by 1960 28.9 percent of Australian GNP was derived from manufacturing as compared to 26.0 percent for Canada, 29.3 percent for the United States, and 35.8 percent for the United Kingdom [26, I, p. 154]. In terms of value-added, the postwar expansion of manufacturing was led by the motor vehicle, chemical, electrical, and metal products industries. Food processing remained the largest industry, whereas textiles and clothing, although growing in absolute terms, underwent relative declines. By the 1960s Australia had clearly reduced her traditional reliance on primary production and achieved a modern industrial structure.

Many of the decisions that led to the encouragement of manufacturing in the postwar years were made when the war was still underway. In common with other combatants, Australia had begun to think about the shape that the economy should take in peacetime. As the country was ruled by a Labor government from 1941 onwards, it was perhaps inevitable that emphasis would be placed on government action, but the Liberal and Country parties changed the policy very little during their long period in power from 1949 to 1972.

Two principal considerations dominated government economic thought between 1941 and 1945 when the nature of the postwar economy was discussed. The first was the need to provide increased employment. At that time the government believed that, left to itself, the world economy would revert to the stagnation of the 1930s, when Australia had been severely affected as an important exporter of primary products. Secondly, for obvious reasons, the war had reinforced the traditional vision of Australia as an outpost of European civilization that was nearly indefensible because of her vast distance from potential allies. Therefore the government was concerned to increase the country's defense capabilities as quickly as possible [12, pp. 626–27; 14, pp. 26–27]. Both of these factors pointed to a need for a greatly expanded manufacturing sector. While Australia had a comparative advantage in primary production, especially in wool, the sector offered limited opportunities for increased employment. Increased immigration, one of the basic aspects of the defense program, also pointed to a need to emphasize manufacturing to generate employment opportunities. Arthur Calwell, the Labor Minister for immigration from 1945 to 1949, called for a net intake of 70,000 persons annually, or approximately 1 percent of the population in 1945 [22, pp. 118–19]. Calwell originally had a romantic vision of an empty northern Australia to be newly populated by rural migrants, but he was soon forced to look to expanded manufacturing to provide jobs for the 'New Australians' [22, p. 81]. Following World War I, large numbers of migrants receiving assisted passages had been drafted into rural employment. The results had been disappointing for, not only had a high proportion of migrants abandoned their holdings, but many native Australians were displaced and had moved to the cities and towns. Given the pessimistic projections for the primary sector following World War II, there was little reason to believe that such an exercise would be more successful this time [31, pp. 15–16].

Calwell then adopted the justification for immigration put forth by Ben Chifley, the Prime Minister who had appointed him to the immigration portfolio. Chifley and Calwell believed that the relationship between migration and economic development was symbiotic in several senses. First, a growing population with a large component of immigrants would help to make modern industrialization more practicable by allowing greater economies of scale. Secondly, migrants could provide the labor force necessary for industrialization, just as the new factories would provide the jobs needed by migrants. Because there had been little modern manufacturing until then, native skilled tradesmen had not been trained. Migrants, on the other hand, if chosen well, could supply from the more advanced but now devastated countries of northwest Europe, the skilled labor that was very scarce in Australia in the early postwar years. This was felt to be the cheapest, as well as the quickest, way of making good the deficiency [22, pp. 116–17; 15, pp. 318–20].

The mechanism that the Australian government employed to encourage expansion in the manufacturing sector was an indirect one. Almost without exception, ownership and management of firms was left to private enterprise. Even in the case of the automotive industry, where supervision was closest, the government's principal action was to choose the foreign company that best met its requirements. This does not mean, however, that the government did not have powerful tools at its disposal. Two of these, import and exchange controls, were used to great effect in the two decades following the war.

Import controls and licensing were briefly retained following the war as a result of an agreement between the Department of Trade and Customs and the Department of Post-War Reconstruction. In common with most other wartime regulations, they were soon allowed to lapse but were reinstituted in March 1952 in response to a balance-of-payments crisis during the Korean war. They then remained in force until 1959–1961 [23, p. 6]. Fully 98 percent of Australia's imports were subject to licensing arrangements, but the practical effectiveness of the controls was limited by existing tariff barriers that already severely limited imports of many items. According to Moffatt, "in aggregate, roughly 40 percent of manufactured output was noticeably protected by the controls" [23, pp. 6, 87]. From the standpoint of the government's ability to direct and stimulate the manufacturing sector, the impact of import controls derived from the ease with which they could be used to promote certain lines of activity and discriminate against others. Industrialization required capital goods that, for the most part, had to be imported from Europe or North America. Because the controls had been instituted to combat balance of payments difficulties, the government emphasized industries that promised to replace imports, as well as granting priority to basic industries as part of the overall push for manufacturing development. Applications for licenses to import capital equipment for industries not considered essential were often deferred or rejected [23, pp. 60, 86–87].

Exchange controls were an additional weapon used in tandem with import licensing. Under the conditions of the Sterling bloc, Australia discriminated against imports from the Dollar Area of the United States and Canada, and also against Japanese goods. Items of capital equipment from North America that were not deemed essential were strongly discouraged. Exchange controls thus increased the government's leverage in directing the course of industrialization without actually resorting to detailed planning. The fact that the guidelines were largely informal and that only a handful of industries such as automobiles and aluminum had been specifically designated as desirable in no way limited the effectiveness of exchange controls and import licensing as a means of promoting manufacturing growth along lines intended by the government [23, pp. 11–12, 76–78].

There can be no doubt that the government's immigration and import policies were highly successful in attracting manufacturing industry to Australia. Especially in the early years, immigrants were absorbed into the labor force with very little dislocation. Between 1948 and 1964 the unemployment rate never exceeded 2.5 percent and was frequently below one percent. Factory employment increased rapidly, as did employment in those sections of the service sector that involved handling manufactured products or enhancing the operations of factories [13]. The contribution of migrants to the work force in those years was overwhelming. According to the *Report of the Committee of Economic Enquiry* of 1965 ("The Vernon Report"), postwar migrants accounted for fully 73 percent of the increase in the work force between 1947 and 1961. Moreover, migrants were concentrated very heavily in manufacturing employment and, as Calwell and others had hoped, tended to be more highly skilled than Australian-born workers [26, I, p. 88; II, p. 522].

As the 1960s progressed attitudes towards the manufacturing sector slowly began to change. The desirability of manufacturing per se was not challenged because by that time it had proved itself as a major source of employment. Some observers did begin to question, however, whether some industries might not be too inefficient to merit continued protection at the expense of consumers. Older industries including clothing and textiles remained uncompetitive but employed large numbers, while even those 'modern' industries like automobiles, electrical and electronic goods, and metal products that had led the expansion of the 1950s and 1960s came to be perceived as an embarrassment because of their low productivity and poor export potential. Nevertheless, as large users of labor they could not be easily dismantled without incurring great short-run economic, social, and political costs.

Traditionally, the Tariff Board, which advised the government on levels of protection from 1921 to 1973, had recommended protection for almost any industry. This was especially likely if, as in the case of the textile, clothing, and footwear manufacturers, a high proportion of their activities were located outside metropolitan areas, in small towns with few alternative employment opportunities. The Board also created confusion by insisting on a case-by-case approach in which the level of protection decided on for each item was "made-to-measure," leading to over 3,000 separate rates in force simultaneously by the 1960s. Finally, the Board was rarely if ever asked to consider reducing existing levels of protection. Pleas generally came from firms that felt threatened by imports, which imparted an upward bias to the entire procedure of setting rates. This became particularly noticeable after 1960, when tariff protection regained its prewar significance following the abolition of import licensing. Nominal rates of tariff on dutiable goods rose from 21.9 percent in 1960–1961 to 23.7 percent in 1965–1966, 25.0 percent in 1968–1969, 26.3 percent in 1971–1972, and 29.8 percent in 1972–1973 [19, pp. 29–31; 20, p. 119].

After some preliminary skirmishes over the Board's policies and procedures, the rationalizers made considerable progress in the late 1960s and early 1970s. In 1965 the Board's aims were questioned in the *Report of the Committee of Economic Enquiry*. While the Committee accepted that the overall costs of protection were justified by the benefits, it called for a more selective approach in the setting of tariffs. The future of industries that required very high tariffs simply to survive ought, in the Committee's opinion, to be reconsidered by the Board [19, pp. 74–75, 150–54; 26, ch. 14]. Shortly afterwards, G. A. Rattigan, the Board's Chairman, began to enunciate a new set of guidelines. Throughout its history, the Board had taken a piecemeal approach, only undertaking investigations when asked by the government despite its legal right to initiate its own inquiries. Rattigan proposed that the Board could gain a more useful view of the economic effects of its policies by itself initiating a series of comprehensive industry-wide studies instead of continuing to act on a case-by-case basis and strictly when asked [25].

At this point the activities of the Board took on a new character. The research staff, which had previously been weak and inadequate, was augmented by a large component of enterprising and sophisticated economists, many of whom leaned towards free trade. An even greater transformation came in 1973 when the new Labor government of Prime Minister Gough Whitlam (the first Labor government since 1949) converted the Tariff Board into the Industries Assistance Commission (IAC), with expanded powers to advise the government "on assistance to manufacturing, rural, mining, and tertiary industries...." The IAC was given an active responsibility to reopen investigations into all long-term assistance rather than allow tariffs on specific items to remain unstudied, and hence unchanged, for decades as had happened in the past [19, pp. 46–50, 98–99, 111–16].

The impetus behind the creation of the IAC came from the Prime Minister, who was a confirmed rationalizer. Also in 1973, Whitlam engineered another change that drastically altered the support that the government offered to manufacturing. In order to eliminate a large balance of payments surplus and also to create additional competition within the domestic economy, on July 19 the government announced a 25 percent across-the-board reduction in tariff rates. This reduced the effective rate of protection from 36 to 27 percent [19, pp. 117–21; 20, p. 119].

The tariff cut and the establishment of the IAC represented the high point of rationalization in practice, although subsequent governments have continued to cling to it as a long-term goal. Manufacturers were upset by the secrecy with which the tariff cut was planned. Furthermore, the timing could hardly have been worse. Australian industry was deprived of a substantial degree of protection only months before local and international rates of inflation began to rise steeply. The anticipated rise in imports was matched by a sharp decrease in Australia's export competitiveness for many products. The recommendations of the IAC that large but inefficient industries such as motor vehicles or textiles, clothing, and footwear should be encouraged to put their houses in order by exposing them to greater import competition appeared impractical and impolitic.

After openly disclosing his displeasure with the IAC's activities following the Liberal Party's return to power in December 1975, Prime Minister Malcolm Fraser set about limiting the Commission's authority. Eventually a new Act of 1978 added three new commissioners and cut staff resources by one-third. With fewer staff at its disposal, it was expected that the Commission would be relegated to advising on measures for industries referred to it by the government [19, p. 158]. Nevertheless, the effective tariff rate did not rise; indeed, by 1978–1979 it had, in fact, fallen slightly, to 26 percent. But, as a substitute, import quotas have been reintroduced for such hard-pressed industries as motor vehicles and textiles, clothing, and footwear. By the end of the 1970s, quantitative restrictions applied to industries that accounted for around 10 percent of the total value and 15 percent of the employment of the manufacturing sector [20, pp. 119, 123]. Thus although rationalization has become the by-word of Australian policy in recent years, broad social considerations have made any kind of drastic change very difficult to accomplish.

These changing policies form the background against which businessmen have shaped the strategies of their firms. Naturally, this has not been a one-way process. Changes in technology or marketing conditions have also forced businessmen to call attention to government policies that are no longer pertinent and to seek appropriate accommodation. In some instances the position of a firm or group of firms has been strong enough to induce the government to adopt policies that it would rather have avoided. Nevertheless it is clear that the interaction between government planning initiatives and the market perceptions of individual companies has been the strongest force in determining the nature of the Australian manufacturing sector since 1945. The development of firms in two important industries, motor vehicles and paper products, illustrates this nicely.

THE MOTOR VEHICLE INDUSTRY

Because of the very limited economies of scale available in Australia, the course of development of the local automotive industry has been almost entirely shaped by government policy. In the absence of tariffs, quotas, and other restrictions, it is clear that automakers would have chosen to supply the Australian market with finished units manufactured overseas.

Automotive assembly in Australia dates from the 1920s when both Ford and General Motors began to produce vehicles with imported chassis and domestically constructed bodies. In the late 1930s the government tried to induce an Australian-owned company to begin production of engines, but action was forestalled by the war. When the issue was reopened in 1944, the government decided that a local automotive industry would need access to modern technology and, accordingly, sought out an overseas producer that would be willing to manufacture a car that would be substantially Australian in design and content [27; 18, ch. 2; 12, pp. 753–56].

The offer accepted was that of General Motors-Holden's. Although the parent company refused to invest any additional capital in its Australian subsidiary, the government arranged bank finance of 2.5 million dollars and made other concessions in return for a guarantee to produce a model with 90–95 percent local content. When the Holden was finally introduced as the first Australian car in 1948, it proved to be an instant success that restored American domination of the local auto industry. By 1959, GM-H models, including the Holden, accounted for more than one-half of total Australian sales, and British producers were well into the decline that had virtually eliminated them from the market by the mid–1970s [12, pp. 755–59; 27, pp. 27–28].

The government was able to induce General Motors to produce the

Holden because it made foreign exchange available to the firm and eliminated tariff duties and sales tax on necessary imports of capital equipment. Other firms that were not offered these concessions could not have produced at comparable costs. Moreover, in the case of Ford and Chrysler, exchange controls precluded substantial imports of cars or components, thus leaving a large segment of the market largely free of competition for the firm that had received the government's blessing. Through its use of a mix of economic tools, the government was able to generate foreign investment and local employment on a gratifying scale.

Paradoxically, the removal of exchange and import licensing requirements also resulted in increases in investment in the automotive industry. As restrictions were relaxed after 1957, it became feasible to produce cheaper and more popular cars in higher volume by using more imported components. Ford responded by introducing the Falcon late in 1960, and Chrysler followed with the Valiant in 1962. Both cars were highly popular and led to great extensions of the firms' manufacturing capacity in Victoria and South Australia [23, pp. 91–92; 27, p. 28].

In the early 1960s, the government began the series of policy shifts that, it could be argued, have led to a continous destabilizing of the industry. The advent of the Falcon and the Valiant meant substantial increases in local investment and employment as well as increased choice for consumers who wished to buy Australian-produced cars. Because of the way in which this was accomplished, however, it also generated a sharp decline in the ratio of local content, from 77 percent in 1957–1958 to 67 percent in 1962–1963. Rather than emphasize the employment and cost benefits that had ensued, the government took the side of component manufacturers who would gain if all models could be produced with the 95 percent level of local content that Holden had achieved. Therefore, from 1965 the government decreed that any model with a volume of production greater than 7,500 units annually would need a local content of at least 95 percent in order to qualify for tariff concessions on the remainder. In doing this the government chose to ignore that GM-H had been able to gain such high levels of local content and still produce at reasonable costs because of a high volume per model. In this way, the government obliged firms manufacturing locally either to do so at greatly increased unit costs or, as Volkswagen in fact did, to withdraw altogether from Australian manufacturing [19, pp. 160–61; 27, pp. 79–91; 23, pp. 93–94].

The tension between the interests of the manufacturers and the component makers resulted in several modifications to the plans after 1965, but the industry remained Balkanized, with large numbers of models manufactured locally, almost none of them at volumes that could justify the high levels of local content required. By 1973 the Labor government (which was in the process of implementing the 25 percent across-the-board tariff cut) became more aware of the structural irrationalities of the industry. Although the current automotive local content plans were not scheduled to expire before 1979, the government asked the Tariff Board to report on the industry [19, pp. 161–62].

By the time the report appeared, the Tariff Board has been transformed into the IAC, and the report fully reflected the latter's rationalizing preferences. The IAC recommended that the plans be abolished and that the tariff be reduced to 25 percent over a period of seven years. In effect the light vehicle end of the market was to be conceded to the Japanese because it was unlikely that Australian producers could ever compete. On the other hand, Australian firms in the medium range of the market would be strengthened and could better adjust their cost levels to international standards. Some component manufacturers would be bolstered, but others would fail. On balance the IAC predicted a long-term reduction of 2,000 workers out of a labor force of 88,000 [19, pp. 162–63]. Although economic conditions were still good while the report was being prepared, by the time it was published the situation had deteriorated greatly. In the early months of 1974, local costs rose disproportionately, which further increased imports and devastated exports. In January 1975 the government, which had repudiated the IAC report, accepted a suggestion from GM-H that made local content rules somewhat more flexible and also imposed import controls for the first time in fifteen years, thereby guaranteeing 80 percent of the local market to Australian manufacturers [19, pp. 163–67; 21, pp. 80–81, 256].

These actions pleased the local industry, but the next phase in the government's action certainly did not. In 1976, the new Liberal government convinced Toyota and Nissan to enter the new 85 percent local content plans. For some time both firms had assembled vehicles in Australia, but now they would assume full status as manufacturers. The three existing manufacturers, all American-owned, objected but the government persisted because of the large and growing consumer demand for smaller cars. In addition, the government may have been anxious to appease Japan, the largest purchaser of Australian exports [21, p. 81].

The move did not turn out as intended. The government had hoped that the two new manufacturers would share four-cylinder engine facilities with Chrysler. For a while Toyota did purchase engines and panels from GM-H, but soon built its own plant. By 1982 all five producers were manufacturing four cylinder engines but only GM-H could hope to attain a volume that would permit prices competitive at world levels [21, p. 82]. Thus the industry had returned to conditions of 1965, with five manufacturers all contending for a share of a market that is very small by international standards.

The local content plans of 1975–1976, which had been intended to remain in effect until 1984, were hurriedly changed in 1979 when GM-H gave the government twenty-two days to reply to a request to implement an export facilitation program under which local manufacturers would be given the right to import additional components free of duty in return for exporting components of equivalent value. The intention of GM-H, which has subsequently been realized, was to link into the General Motors world car program by producing four cylinder engines in Australia to be exported for use in J-cars built in Germany. Other firms, however, have not found it as easy to justify the export of components from Australia. Furthermore, the new Labor government elected in March 1983 has hinted that it may not allow the full 15 percent of export credits, obliging firms to accept a reduction of only 7.5 percent in local content requirements in return for component exports and, yet again, upsetting the long-term investment plans of the manufacturers [1; 2; 7; 21, pp. 82–83, 259; 11, p. 13].

The role that government policy has played in bringing about the deterioration in the industry's position is perhaps best expressed in the most recent report on the industry by the IAC:

> During this period (1965–1981), a series of Plans have been devised with the intention of providing a stable long-term framework within which the industry could plan its investment and product development. The numerous revisions to the assistance package show how difficult it has been to achieve simultaneously the objectives of increasing the industry's international competitiveness, reducing disruption to existing facilities, and encouraging relatively high local content [21, p. 84].

Of the local manufacturers, only Ford has been consistently profitable in recent years. In interviews several of the firms indicated that they probably would not have commenced manufacturing in Australia if they had known how badly fragmented the market would become but added that it would now be too expensive to pull out. The government's original intention of creating employment has been fulfilled, but the aim of import replacement is still possible only because of severe tariff and quota restrictions that prevent Australian buyers from exercising their preferences. The current situation reduces to a trade-off between jobs and prices, and in the present depressed economic climate it is likely that the costs will continue to be borne by consumers rather than risk the loss of employment that rationalization would entail.

THE PAPER-MAKING INDUSTRY

Ownership in the Australian paper-making industry is relatively highly concentrated, the three largest firms having historically accounted for at least 80 percent of industry output. Moreover the true degree of concentration would appear to be even higher. According to Joe Bain, an industry is a sub-group of firms whose "outputs are relatively close substitutes for each other and relatively distant substitutes for all other products" [10, p. 6]. By this definition the industry category 'paper-making' is too broad for it includes several groups of outputs that clearly are not close substitutes. The industry may be subdivided into 'heavy paper,' 'fine paper,' and 'newsprint.' 'Heavy paper' includes paper and paperboard for wrapping and packaging, industrial building, and laminated papers, and tissues. 'Fine paper' includes printing and writing papers and specialized coated papers, while 'newsprint' is literally paper for newspapers.

Each of these sub-groups of the Australian paper-making industry is dominated by a single firm. Australian Paper Manufacturers Ltd. (APM) has confined its production to heavy papers, a field in which it has historically faced limited competition from other domestic producers. Associated Pulp and Paper Mills Ltd. (APPM) has been concerned with the production of fine papers. While APPM has had almost complete control of the domestic production of fine papers, the company has faced relatively more intense competition from imports than has APM. Australian Newsprint Mills (ANM) has a monopoly of newsprint production in Australia "in the simple and literal sense that it is the only Australian producer" [16, p. 125]. While it is clear that the basic technology of paper-making is such that it would be technically feasible for the three firms to invade each other's markets, no such competitive incursions have in fact occurred. Although the companies may be thought of as potential competitors, the actual overlap between their fields of production is extremely limited.

Australian production of 'heavy paper' dates from the nineteenth century, domestic production of coarse papers being based on the pulping of imported newspapers and paperboard. The properties of Australian native timber species posed serious technical problems for both heavy and fine paper-making. These problems were not resolved until the interwar years. Ownership of mills in the 'heavy paper' sector assumed its modern pattern when a 1926 merger between producers in New South Wales and Victoria led to the formation of APM. Prior to 1938, when APPM began production at Burnie (Tasmania), all of Australia's 'fine paper' requirements were imported. The translation of the pilot plant process relating to the production of fine paper from Australian hardwoods to full-scale production required considerable capital. It was not until the 'Collins House Group' of mining and metal companies invested in the industry via APPM that fine paper production based partly on domestic raw materials began.

It is clear that government actions designed to influence the level of economic activity, the direction and level of trade flows and, hence, the balance of payments, the degree of competition within individual industries, and the geographic locations of industry have each influenced the paper-making industry and that, overall, government has played a significant role in shaping the strategy of firms within the industry.

The paper-making industry of the 1950s and 1960s is generally characterized as one of the heartlands of Australian protectionism. Indeed judging from annual reports, APM's and APPM's chairmen appear obsessed with the level and effectiveness of import controls and tariffs. We have earlier shown that import controls and licensing were in force during World War II and were reimposed in the 1950s. The Australian paper-making industry, though admittedly experiencing cyclical fluctuation, appears to have flourished under the import control regime of the 1950s. For example, demand for APM's heavy papers exceeded supply during the early 1950s, with the result that APM decided to concentrate on the heavier grades of paper and leave the lighter grades to be supplied by imports.

Events following the removal in February 1960 of restrictions on paper and paperboard imports point to the importance of government trade regulation to Australia's paper-making industry. Given the high level of activity in the economy in early 1960, demand for all types of paper remained at a high level in the months immediately following the removal of import controls. However, in late 1960 and early 1961 the paper-makers complained of a 'flood of low-priced imports,' APM arguing that imports directly competing with its product range increased threefold over the twelve-month period [8]. Both APM and APPM sought immediate protection under the emergency tariff procedure as well as a review of tariff levels. Some temporary assistance was granted and the companies were able to persuade the Tariff Board that Most Favored Nation tariff levels should be increased. In arguing for an increase in protection, the companies relied heavily on the arguments that Australia's price level had risen faster than that of competitors and that inflation had severely eroded the protective effect of a tariff expressed in terms of value per ton of product. The effect that the import controls might have had in raising Australia's price level relative to that of less sheltered competitors was discounted. In paper-making as in other industries, the Tariff Board thus reverted in the 1960s to a case-by-case consideration of applications for increased protection.

The Whitlam government's 25 percent 'across-the-board' reduction in tariffs of July 1973 was traumatic for the paper industry. Here again the short-term effect was cushioned by the world shortage of pulp and paper products during the commodity boom of 1973 and early 1974. By late 1974 domestic demand for paper and paperboard had fallen substantially while a higher proportion of the domestic market was supplied by imports [3, 4, 5]. Stocks of both domestically produced and imported paper increased. Sharp cuts in production and drastic retrenchments were forecast by the local industry. In early 1975 APPM asked the Temporary Assistance Authority to declare a nine-month embargo on imports. Following the rejection of this request, APPM decided to cut production at its Burnie plant. The threat to jobs in an already depressed Tasmanian economy led to the Whitlam government's offer of special aid to the firm.

Federal government legislation regarding monopolies and restrictive practices has also influenced the strategy of the paper-making companies. In the early 1960s both APM and APPM operated merchanting agreements that had the effect of limiting competition from other domestic producers and from imports. Prior to October 1962 APPM sold only through merchants who "were required to limit their sales of papers competitive with APPM's papers to a maximum of 10 percent of each merchant's purchases from APPM" [30, p. 14]. APM operated a range of merchanting agreements, some of which were so effective that the Tariff Board felt "that APM could expect to maintain its sales of these products, independently of any import competition, at least for the term of the agreements" [29, pp. 27–28].

It has been argued that the emphasis in the federal government's 1965 Trade Practices Act was "not an outright prohibition but on examination of particular agreements and other behaviour to see if ... they are against the public interest" [16, pp. 24–27]. In any case the 1965 Act did not require that vertical agreements such as those between the paper-makers and their merchants be registered, nor were the agreements examinable by the Trade Practices Tribunal [16, p. 117; 24]. However, public attitudes towards restrictive practices changed in the decade after 1965, and the Trade Practices Commission (TPC) considered that the agreements violated the Act as amended in 1974. In 1977 the agreements between APM and its merchants were rejected by the TPC on the grounds that the benefits claimed by APM were either private to APM or did not flow directly from the agreements [6, 9]. Thus changing public attitudes to restrictive trade practices forced the paper-makers to abandon their exclusive merchanting agreements in the late 1970s.

State governments may also influence the strategy of the paper-making companies. Not only are the states able to offer a range of positive investment incentives, but they may also offer remission of payroll taxes and rates. In particular, control over Crown Land gives state governments a considerable say in the paper industry's investment decisions. Wood for APPM's pulp and paper production, for example, is felled not only in the company's freehold forests in Tasmania but from large areas of Crown Land over which APPM has cutting rights under several acts of Parliament. In 1961 APPM entered into an agreement with the Tasmanian government under which the company agreed to begin construction of a pulp mill at Wesley Vale no later than 1978 in return for exclusive rights to pulpwood on Crown Land over a large area in the central north of the state. The company has yet to honor the agreement, although several feasibility studies have been conducted. The Tasmanian government would, however, appear to be in a strong position to enforce compliance if it so chose.

The evidence suggests that government policies have significantly influenced the strategy of the paper-making companies. During the 1950s and 1960s Australian paper-makers, protected first by import licensing and later by 'made-to-measure' tariffs and able to operate merchanting agreements, had access to a high proportion of the domestic market under relatively favorable terms. During this period the three major companies (APM, APPM, and ANM) kept within their own bailiwicks, making no attempt to invade each other's territory, to diversify into related or unrelated areas, or to develop significant export markets. Equally the changing public attitude towards the manufacturing sector, expressed in the general tariff cut of 1973 and a stricter interpretation of trade practices legislation, appears to have been a significant factor leading to changes in strategy in the late 1970s. APM began to diversify into areas unrelated to its paper-making business in 1978 with the acquisition of the manufacturing and merchanting business of Brown and Dureau. Although APPM has yet to diversify into unrelated areas, the company is currently pursuing an 'outward-looking' policy, seeking to sell aggressively in export markets.

In the expanding world economy of the 1950s and early 1960s, it was relatively easy for the Australian government to make sensible use of the tools at its disposal to encourage the development of a modern manufacturing sector. It has proved much more difficult to cope with the situation in recent years, when both external and internal conditions are far tighter. The recommendations of the Study Group on Structural Adjustment, the most recent government committee to examine the economy, accurately reflect the current prospects for further industrial rationalization. In common with other recent committees, the study group outlines several ambitious ways in which the government might take the lead in helping private enterprise to operate efficiently and productively. Among these are policies to aid certain problem industries to become more competitive, a call for a government authority to coordinate research activities, government export incentives to generate greater economies of scale, and, of course, a general reduction in tariff levels. The study group also recognizes, however, that these are long-term adjustments that can be undertaken more smoothly in a buoyant economy. It therefore concludes that most of its proposals should be postponed until the unemployment rate falls below five percent, a prospect that seems even further away now than it did when the committee reported in March 1979 [28].

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