INDUSTRY POLICY AND THE ACTU: DIVISIONS BETWEEN THEORY, FORMAL POLICY AND PRACTICE

Stephen Anthony

Since the election of the Hawke Labor Government in 1983 there has been a conflict between the formal position of the Australian Council of Trade Unions (ACTU) on the issue of industry policy and the implicit support it lends to the economic policies of the ALP. In the original *Statement of Accord By The ALP and ACTU Regarding Economic Policy*(1983), price and non wage income controls were to be enshrined in the Accord as part of a package of progressive redistributive measures. More regulation was to be imposed on financial institutions, in particular to provide finance for investment purposes. Tight monetary policies were rejected. Full indexation against inflation was to be applied to income tax rates. Tighter control on foreign ownership through the Foreign Investment Review Board was to be introduced. Protection through tariff controls was only to be removed if compensatory measures were put in place. An interventionist industry policy was to be pursued. Each of these commitments has been either forgotten or directly contravened during the succeeding ten years.

What were the circumstances that enabled this wholesale reversal of the economic policy position to occur? It seems a combination of factors led to the increasing emphasis on economic rationalist market-oriented policies, which have had the implicit support of the ACTU executive. Bob Hawke had always argued for lower protection in his days as ACTU President(Capling & Galligan 1992:117), and he had a major input to the implementation of the Accord after the ALP was swept to victory. Paul Keating, inexperienced but determined to succeed in his

new Treasury portfolio, became the mouthpiece of his economic advisers at Treasury, The Reserve Bank and the Industries Assistance Commission. They encouraged him to undertake the most radical experiment in free market economics ever attempted in this country. It started with financial deregulation of the money markets in 1983/5. It then moved to the real sector of production in 1986 with the winding down of industry plans and increased emphasis on 'microeconomic reform' which has carried through to the present day. In 1988 a general reduction of tariff levels was announced, followed by the March 1991 commitment to a staged removal of effective protection by the year 2000. The final stanza of this experiment is now well under way with the move towards enterprise bargaining in the labour market.

All these initiatives have had the implicit support (or muted resistance) of ACTU Presidents Cliff Dolan, Simon Crean and Martin Fegurson and the ACTU secretaries Peter Nolan and Bill Kelty, who increasingly favoured Keating's approach. As part of the ACTU Executive, they gave ground on some major policy areas to enable the re-election of the ALP and to gain support for successive Accord wage agreements. In particular industry policy ceased to be a significant factor in the Accord negotiations. This also represented a fundamental shift in the philosophy of the ACTU executive, as the economic rationalist policies undermined the policy position of the ACTU Congress.

The formal policies of the union movement on key areas such as industry policy, as iterated at each successive ACTU Congress, never deviated from the principles of 1983. However, the theoretical model once put forward to support this approach has been shelved with no formal replacement. The model, which is a useful approximation of real world processes, had its development in the work in the metal trades unions (MTU) and illustrates the policies necessary to support particular industries as a means to combat economic stagnation. It has been the focus of previous articles by Stilwell (1984) and de Ridder(1986). I will attempt to update their conclusions in the light of recent empirical studies after considering the formal industry policy of the ACTU.

Formal Policy of the ACTU

The *Australia Reconstructed* report sets out the belief that market forces alone are insufficient in the allocation of resources and need to be supplemented with interventionist policy by government (ACTU/TDC, 1987:90). This requires national tripartite planning structures and sectoral councils, involving government, business and unions, coordinated by local and regionally delivered initiatives to encourage industrial development at the enterprise and regional level (ACTU, 1984:i).

The ACTU believes that industry development policy must be aimed at developing linkages between sectors. Support should be given to potential growth industries and not simply to maintaining declining enterprises (ACTU, 1987:83). In general, where industries are protected from international competition, tariff reductions are supported. However, they must be linked to removal of impediments to industry competitiveness e.g. microeconomic reforms (ACTU, 1991c:2).

Raising 'total factor productivity' levels (both labour and capital where possible) and improving Australia's external accounts are also ACTU concerns (ACTU, 1991b:19). The proposed vehicle for these improvements are programs aimed at encouraging export-orientation and high value added products and services, to supplement falling earnings from commodity exports subject to long run declining terms of trade (ACTU, 1991d :15). A sectoral approach to policy implementation is suggested, giving consideration to the most productive areas of industry. Opportunities for export encouragement and import replacement are seen to be paramount in the selection of these industries (Ibid: 18).

Foundations of the MTU Model

The neoclassical theory of production and the theory of comparative advantage have been rejected by the ACTU as being unrepresentative of the state of the domestic and international economy today (ACTU, 1991a:1). Neoclassical producer theory sets out to demonstrate that if

factor inputs(labour, capital) are combined in optimal quantities using the best available technology, the producer is operating efficiently so that community welfare is being maximized. This theory relies on three principal assumptions- resource endowment, constant returns to scale and resource substitutability, which run counter to observable reality (Stilwell 1984). The theory of comparative advantage claims that when a country can produce a particular commodity more efficiently then other nations in the absence of protection, it is said to have a comparative advantage in the production of that commodity and should devote resources to its production. Comparative advantage is determined by natural resources, human skills and location. The ACTU rejects this notion in a world in which imperfect competition and targeted assistance to industry is the norm.

The alternative was first put forward in a publication by the ACTU *Submission to the Review Of The Industries Assistance Commission* in October 1983 and elaborated upon in Metal Trades Unions, *Policy for Industry Development and More Jobs* in August 1984. Both documents were the work of the Metal Worker's fraternity (Colin Edwards, Ted Wilshire and Laurie Carmichael). They depend about key arguments about resource creation, increasing returns and industrial complementarities.

Resource Creation

Through the continuous process of industrial differentiation (division of labour), growth will result in a progressively finer network of industry specialization in manufacturing. Resource allocation will be dependent on the degree of specialization in industries and is internalized by the growth process itself. Productivity, technological change and consumer tastes, are endogenous to the growth process.

Increasing Returns

Increasing returns arise in the manufacturing of basic materials if output increases proportionally more than inputs. Increasing returns are generated from three sources:

- the relation between area and volume e.g, the materials required for the production of a oil pipeline increase with the square of its size while the capacity or volume increases by the cube of its size;

- the break up of complex processes into simple processes in which the latter lend themselves to more efficient methods of production;

- learning by doing - the expansion of existing knowledge of technologies and processes through experience with existing production, which foster invention and innovation.

All industries can generate increasing returns. However these effects typically find their origin in the manufacturing sector. Rising demand acts internally through the manufacturing sector, via the division of labour, and employment of greater capital/labour ratios, to generate technical change which passes externally to other sectors of the economy in the form of factor inputs.

Complementarity

The simultaneous growth and evolution of a wide range of industries in any one nation is characterized by a network of complementary purchases and sales across the group. Each industry's success relies upon the performance of others within the group. These input- output linkages also transmit technical change/higher productivity from one industry to another, a major source of increasing returns.

Role of Government Policy

A two pronged strategy could be employed to generate economic activity within the context of the current recession to stimulate a period of cumulative GDP growth. The first objective is to undermine all constraints on Australia's macroeconomic performance to enable a more expansionary role for fiscal and monetary policies to move the economy back to full employment. The second objective is the pursuit of industry specific initiatives aimed at increasing output directly.

A number of macro and micro policies initiatives have been proposed by the ACTU to overcome each of the constraints placed upon the Australian economy. The aim is to enable the use of expansionary monetary and fiscal policies to generate employment and output growth without placing pressure on the rate of inflation, the current account or foreign debt levels. (ACTU 1991e:2 &1990:2).

The activist use of monetary policies would lower interest rates, and raise interest sensitive expenditures. Likewise expansionary fiscal policies would act in tandem to undermine the capacity constraint of the economy, while also generating demand to enable the expansion of the private sector.

A further objective is to maintain control over the exchange rate (ACTU 1991e:23). This complementary approach to industry policy will also undermine the Public Sector Borrowing Requirement Constraint (aggravated by fiscal expansion) by generating taxation revenues from increased activity and reduced outlays on welfare payments.

The ACTU has also outlined industry or product specific development strategies which embody the concept of the achievement of cumulative growth in the economy (ACTU; 1990). This argument holds that in the long run, government intervention will not be required in industries where resource creation, increasing returns and complementarity enable scope for industry development policies to improve competitive advantage.

> Since industries differ in their ability to benefit from such policies, the most efficient use of resources allocated to such policies is to allocate them where there will be the greatest improvement possible in competitive advantage per dollar of expenditure. Hence, industry development strategies should be industry, or product specific. (MTU; 1984 :50).

Industries and products chosen for selective intervention would be characterized by growth potential and increasing returns to scale. Growth potential in both local and overseas markets is approximated by the income elasticity of demand for the products of that industry, defined here as the proportionate relationship between the percentage increase in world and domestic incomes and subsequent percentage increase in world and domestic sales of a particular good or service. However, these are often difficult to determine.

Increasing returns to scale characterize industries which reduce costs as they expand. They are an obvious focus for industrial development policies which aim towards enterprises producing "high value, high quality" manufactures which strengthen the overall technological base of the economy. Nominated industries include computer hardware and software, communication and aerospace equipment, scientific and medical instruments, auto products and engineering equipment used in the mining, agricultural and energy sectors (ACTU; 1990:19). The aim of the policy is to transmit developments in these industries to all sectors of the economy and achieve cumulative growth in output.

The plan outlined by the Metal Trades Union describes three stages of policy implementation: increasing output based on local protection; a phase of export growth; and a phased withdrawal and re-selection of new industries for development assistance (p. xvi). A generally expansionary economic policy is the necessary corollary. This would generate an upward revision of expectations of recovery, leading to a rise in business investment and private consumption and hence aggregate demand. This rising activity is afforded in the context of a lower rate of inflation and relative stability of balance of payments and foreign debt.

As firms expand output, unit costs fall and profits rise. This generates retained earnings, and hence funds for internal investment. Consequently the average age of capital stock falls, improving efficiency. There are also relatively more funds for training labour and for R & D, which should result in the generation of new products and processes (technical improvements). This will generate a more efficient overall operation of firm resources, and lead to greater product sales. Increasing returns will be further generated as the cheaper and technologically improving output of the initial firm passes through the chain of production to other industries. These processes are circular in that they reproduce themselves. They are cumulative as they generate increasingly more funds for further development.

The evidence supporting this vision deserves examination.

Empirical Support for Circular and Cumulative Causation

If resource creation, increasing returns and complementarities in production(given expansionary macroeconomic policies and targeted industry assistance) lead to circular and cumulative effects at firm level and generate GDP and employment growth, the following relationship should be observable: the faster the rate of growth of manufacturing output, the faster will be the rate of growth of labour productivity and the faster will be the rate of growth of Gross Domestic Product (GDP) .

The empirical measure of this phenomenon is given by the Verdoon Relationship which measures the elasticity of productivity with respect to change in output, i.e the possibility of increasing returns. Australian and international research supports the existence of increasing returns (Vaciago, 1975; McCombie and de Ridder, 1983; Michl, 1985). On the basis of manufacturing data from Australia, 1955-1982, the degree of increasing returns across industries has been estimated at 1.64% in output for each 1% increase in factor inputs (Bairam,1990 :111).

Metcalfe and Hall (1983) found a clear empirical relationship running from manufacturing output to increases in the rate of productivity, with

a proportionately smaller feedback to overall economic growth. This confirms the Verdoon Relationship. On the basis of study of the Australian manufacturing sector for the period 1954 to 1982, Whiteman (1985) found that demand growth of 4% p.a. was required to raise both productivity and employment in the manufacturing sector. Parikh(1978) used cross-sectional and time-series data for 12 OECD countries (1950 - 70) and found that demand factors (capital investment and export growth) were required to raise the rate of productivity in the manufacturing sector, employment and GDP growth overall. These studies confirm that macroeconomic stimulus and targeted assistance to industries on the demand side of the economy lead to real GDP growth, rising productivity levels and employment creation. The effects lay the foundation of further rounds of GDP growth, productivity increases and employment expansion. All the studies refute an alternative explanation of the Verdoon effect; the neoclassical notion that microeconomic reforms which induce movements in relative prices that result in changes in factor allocation, can raise productivity and hence achieve GDP Growth.

The critical factor in achieving these results is a rate of GDP growth greater then 4% per annum, or the process will work in reverse in a vicious circle. This is also the figure currently forecast by the Reserve Bank as the base rate of growth to reduce unemployment. Manufacturers can be made relatively less competitive by being forced to produce at insufficient scale. This leads to higher prices, diminished demand, smaller profits, less funds for investment and loss of opportunities for technical progress across the economy. This conclusion is supported by Shaw (1991), using time series data for the Australian manufacturing sector between 1963/64 - 1988/89. Each 1% increase in output of the sector led to a 0.38% rise in productivity. In the presence of contractionary demand policies this process broke down, appearing to result in productivity destruction as factors of production were underutilized.

Between 1980-81 and 1990-91, Australian GDP growth averaged 2.7% per year. Growth in the manufacturing sector averaged 1.7% per year (MEWU; 1992:15). During the same period, the share of GDP held by the manufacturing sector declined by 1.7 % to 16.7% The

manufacturing share of total employment fell 3.5% to 18.4%. Between the September quarter of 1989 and June quarter 1992, 132 000 manufacturing jobs were lost, partly as a result of both fiscal and monetary contraction of the late 1980's (BIE, 1992).

Growth Potential and Increasing Returns?

The case for zero protection in international trade hinges on three main assumptions: world markets are free from government intervention; labour and capital are mobile between industries and geographical regions; and there are no impediments to market- clearing wages in all countries. None of these assumptions are valid (Barber 1982). Alternatively, the case for specific intervention rests upon the existence of technologically driven industries in manufacturing which can potentially grow faster than other industries. Technologically progressive firms can enter a sector and, at least momentarily, extract economic rents.

Market forces alone are inadequate to provide incentives to invest in new technology industries. Insufficient experience combined with high risk may be too great a barrier to a single firm. The externalities accruing to other industries or firms within the same industry may justify such intervention (Whiteman 1989). The classic study by Solow (1957) illustrates the point . Solow found between 1909 and 1949, 87% of the growth of output per hour in the USA was not due to the additional employment of factors of labour and capital but a residual reflecting technical progress. Technical transformation in one industry spills over to others.

Growth potential and increasing returns to scale may justify the transfer of public resources to partly subsidize the initial barriers to establishing new technology industries.

Growth Potential

If the increase in demand for goods or services of a particular industry is faster than the rate at which incomes are increasing, we would expect an expanding market for a product. For example, Table 1 presents estimates of expenditure elasticities for goods purchased in the domestic economy.

Table 1: Estimated Expenditure Elasticities of Australian Purchasers

Commodity	Income Elasticity of Demand
Food	0.484
Tobacco	0.470
Clothing	1.153
Housing Durables	1.387
Rent	0.925
Other Goods and Services	1.142

Source: Adam, Chung and Powell (1988 :48)

If incomes rise by 1%, expenditure on Other Goods and Services (include manufactures) would rise by 1.142%. Expenditures on manufactures in the Clothing and Household Durables categories would rise by an even greater proportion then income. Unfortunately the classification of goods employed in this study is the only one available in current empirical work in this country and does not lend itself to definite conclusions about the manufacturing sector. However, the data lends general support to the proposition that manufacturing demand is sufficiently elastic to warrant consideration of specific intervention into particular activities. This reasoning obviously applies with less force to industries producing food and tobacco.

Increasing Returns To Scale

It remains an empirical question whether increasing returns to scale operate in practice. Table 2 presents estimates of the unit costs of

production in 19 Australian manufacturing industries during the post war period of 1954-55 to 1981-82.

Table 2: Rates of Change in Costs Per Unit of Production; Australian Manufacturing Industries

Industry	% Change in Labour Cost Per Unit of Production	% Change in Capital Cost per Unit of Production
Other Manufacturing	-1.0	0.0
Fruit & Vegetable Products	-1.1	-1.1
Beverages & Malt	-0.5	0.0
Textiles	-1.6	-0.9
Knitting Mills	-2.0	-1.8
Paper & Paper Products	-0.8	-2.2
Printing & Allied Industries	-0.8	-0.8
Basic Chemicals	-2.6	-2.0
Other Chemical Products	-0.2	-0.4
Cement & Concrete Products	-0.4	-0.5
Non-ferrous Metals Basic Products		0.2
Basic Non-ferrous Metals	-1.8	0.0
Petroleum Refining	-1.1	-3.5
Other Transport Equipment	-0.3	-1.5
Photographic, Professional & Scientific Equipment	-3.1	-1.2
Appliances & Electrical Equipment	-2.1	-0.8
Industrial Machinery & Fabricated Metal	-0.6	0.4
Rubber Products	-1.9	-0.6
Plastic Products	-3.1	-2.5

Source: Whiteman (1986:19)

The nineteen industries listed in the Table 2 exhibited declining unit labour costs as output expands. Fourteen of the nineteen industries also exhibited declining capital costs. This indicates significant learning by doing, R&D and scale economies. For example, as the output of the

Plastic Products Industry expands by one unit, the cost per unit of labour and capital falls by 3.05% and 2.51% respectively.

Where declining operating costs can be exhibited, yet industry formation is risky and expensive, there is a substantial case for targeted intervention into that industry of some form. The assistance to the industry (public equity, either capital or loan and/or tax concessions) needs to be repaid (as dividends, interest or through company taxation) when the firm or industry is able to profit from its cost structure. This policy would ensure the generation of externalities to improve competitiveness in the rest of the economy while also providing a dividend to the economy to justify the selective industry assistance.

Conclusion

Manufacturing unions within the Australian Council of Trade Unions have neglected to provide empirical data supporting a number of crucial aspects of the case for a more interventionist industry policy. However, this article shows that supporting evidence does exist. The evidence of the Verdoon relationship for manufacturing industries subject to increasing returns suggest that expansionary demand and export promoting policies would enable the achievement of the goals of industry policy. This indicates that the formal industrial strategy of the ACTU Congress is more likely to succeed then the current policies of economic rationalism pursued by the ALP government and supported by the ACTU Executive.

Why has the theoretical model of the metal trades fraternity been rejected by the ACTU Executive as a base on which policy should be formulated? The ACTU Executive has never been firmly committed to the sort of policies which arise from a belief in the Verdoon law. It seems that the metalworkers, as a vanguard of the labour movement, have failed to secure an adequate coalition with the other left power brokers, the public sector unions. Meanwhile, the dominant tenor of economic policy deliberations has been set by the Treasury and the Industry Commission, where the evidence for a vision reliant on effective demand and increasing returns is ignored in favour of a

dogmatic adherence to the unwritten commandment,"Thou Shalt not intervene".

There are no insurmountable barriers to the creation of a more significant role for elaborately transformed manufacturing and technological industries in Australia. As Keynes suggested in 1933, most modern processes of mass production can be performed in most countries and climates with almost equal efficiency (Barber, 1984:22.). It is not necessary for governments to successfully pick individual promising infant industries in order to improve the contribution of industry, technology, and trade policy to industrial transformation (Miller, 1984: 36). It is only necessary to have the capacity to target some policy measures on the general class of more competitive industries having growth potential in order to improve past performance in this area. This is the 'Barry Jones' formula for industrial development. It has never been implemented in a consistent manner and it has continued to be neglected in the One Nation and Fightback manifestos. Both of these statements reaffirmed the move towards negligible tariff levels in a deregulated environment in which a neutral approach to industry and the market is the norm. Limited public infrastructure spending and private investment incentives are the pseudo industrial policy in the absence of any long-term strategy.

It is technological advances, rather than the price of factors of production, which enable modern economies to continue economic growth. This can only be achieved through a healthy manufacturing sector as a leading player in the economy. As countries such as Japan, West Germany, South Korea, Sweden, Singapore and Finland have learned, industrial expansion depends upon societal desire for better living standards, translated through government policy to substantial export operations built upon stable domestic markets. Three of these countries have a smaller domestic market in terms of population then Australia, and all have less access to natural resources.

There has been some progress in the development of more export-oriented manufacturing industry in Australia. Between 1985 and 1992 the export of simply transformed manufactures grew by 13.1%, while exports of elaborately transformed manufactures grew by 17.4% (BIE, 1992). However, one third of this improvement in manufactured exports

overall is the direct result of export incentives provided under the Button Car Plan; which has been a form of specific intervention. Efficient industries are essential, as are microeconomic reforms in transport. But nothing breeds efficiency like growth, which generates the surplus funds for investment and reform across the economy as a whole.

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