



Russen's working bakery at the Tasmanian International Exhibition, Launceston, 1891-92.

QUEEN VICTORIA MUSEUM AND ART GALLERY, LAUNCESTON

CHAPTER 36

INDUSTRIAL DEVELOPMENT

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IN 1851, THERE WERE but 10 800 manufacturing employees in Australia. Twenty years later, they numbered 52 000 and by 1891 there were 149 000. Despite the depression of the 1890s, growth in manufacturing employment continued strongly. At Federation in 1901, Australia had 198 000 factory workers. With continuing industrialisation, the figure topped half a million during the late 1930s and a million in 1954. Peak employment of 1 388 000 was reached in 1973-74, since when there has been a decline to a little over one million.

The rise and, lately, retreat of Australian manufacturing is told in several thousand books, articles and government reports. They show that New South Wales has always been the leading manufacturing state; that, originally, it was followed in importance by Tasmania and South Australia; that these colonies lost their place to Victoria; and that, since the late nineteenth century, the spatial pattern has consolidated to leave New South Wales and Victoria as the core surrounded by other states in far more peripheral roles. This chapter details the literature that describes these events and many more besides. For convenience it is divided into three parts: statistical, official and documentary sources; material written in and relating to the years 1850-1950; and finally, in greater detail, writings from and about the period 1950-83.

STATISTICAL, OFFICIAL AND DOCUMENTARY SOURCES

Research into Australian industrialisation should start among the publications of the Australian Bureau of Statistics (ABS) and its predecessor organisations. The *Yearbook of Australia* presents a section of consolidated statistics that are fleshed out in regular publications issued by the Canberra and state offices (see also chapter 9). Users should consult the ABS 8100-8300 reference codes (others before 1969) for annual manufacturing censuses and assorted production bulletins. The ABS list also contains significant material under other codes (for example, transport, building and national accounts), and those interested are advised to consult the reference works cited under chapters 7 and 8.

Parliamentary papers and transcripts of debates are important for the serious investigator. The former contain reports of the Australian Industries Assistance Commission and the erstwhile Tariff Board (1921-74), and the results of numerous inquiries and commissions dating back to the time of self-government among the colonies. (See Borchardt's *Checklist of royal commissions, select committees of parliament and boards of inquiry* in chapter 8.) Indexes of this material have been provided by Linge (1964, 1967) and the Australian Industries Assistance Commission (1974).

Before 1901, key sources are papers of colonial parliaments and, of course, their statistical registers.

State departments of industrial development set up in the post-1945 era often interpret and republish statistical data and provide local reports. On the international front, the United Nations *Statistical yearbook* and the economic surveys of the Organisation for Economic Co-operation and Development (OECD) provide valuable comparative data on Australian manufacturing.

Directories should also be consulted. Some of the major ones are the *Australian handbook* (1870–1906), Wise's post office directories for each state (for example, *Tasmanian post office directory*, 1890–1949), Sand's directories (for example, Sydney and New South Wales, 1863–1933; Melbourne and Victoria, 1857–1974) and Pugh's Queensland almanacs (1859–1927). *Jobson's investment digest of Australia and New Zealand*, which began in 1920 as the *Australian investment digest*, is the best single source on particular firms.

Useful journals with which to investigate Australian industry include the *Economic record* (1925–), *Australian economic papers* (1962–), *Economic analysis and policy* (1970–), *Australian economic review* (1968–), *Australian geographical studies* (1963–), *Australian geographer* (1928–) and the *Journal of the institution of Engineers, Australia* (1929–). Among the business periodicals, one could consult *Ryldges, Business review weekly*, the *Australian Stock Exchange journal* and *Australian business*. The most important newspaper is the *Australian Financial Review* (1951–).

There is a considerable literature about the role of entrepreneurs in Australian manufacturing. Notable examples include Essington Lewis (Blainey, 1971) and Thomas Sutcliffe Mort (Barnard, 1961); many more examples can be found in Marshall and Trahair *A checklist of biographies of Australian businessmen*, 1980 (see chapter 20).

FROM 1850 TO 1950

The history of Australian industrial development between 1850 and 1901 is yet to be fully recorded. A difficulty with the pre-Federation era is that very few primary accounts take an Australian overview. Before 1901, one is largely left with aggregate material from the six colonies and, invariably, more information is available on New South Wales and Victoria than on other areas. Specialised texts deal with these two colonies whereas industrial coverage of the others is mostly buried within general economic reporting.

A major secondary source covering pre-Federation industrialisation is Linge (1979). A historical geography organised on a colony-by-colony basis, it features a 34-page appendix on manufacturing statistics from 1860 to 1890 and 66 pages of footnotes and references which detail archival holdings including company records. One should also note G.D. Patterson (1968) which proceeds chronologically through the period and devotes much attention to the ramification on industrial development of protectionism in Victoria as opposed to the free trade of New South Wales. The central role of tariff questions in Federation is additionally considered.

Post-Federation primary literature, 1901–50, is more broadly focused than the foregoing works and is increasingly analytical and academic. Early twentieth century sources of particular interest are those of foreign trade officials or consuls. For instance, Morgan (1908) reported to his sponsors in Great Britain that

capitalists need have no fear of labour in Australia ... the Australian is an excellent worker, and if his wages are high and he is aggressive and sometimes troublesome, it should be remembered that the profits of manufacturing are also high and the country is extremely prosperous (64).

Morgan's point was not lost on politicians of the time who found it expedient to ensure that wages and profits did not sink to European levels. Interstate trade in Australia had been free since 1901: thereafter, protectionists exerted significant pressure for the establishment of national tariffs to safeguard local industry against overseas competition. The tariff occupies a central and revered place in Australian industrial literature. Reitsma (1960) highlights the main events between 1901 and 1950: the first impositions of 1902; the 1907 Lyne round; the activities of the

Interstate Commission after 1913 in investigating and publishing findings on a range of industries; the 1921 'three-decker' tariff and the appointment of the Tariff Board; and the Scullin round of 1929–31 which, in response to emergency depression conditions, greatly increased duties and prohibited many imports.

That the 1920s were a turbulent and formative period for Australian manufacturing is reflected in a secondary text by economic historian Colin Forster (1964). Forster concentrates on motor vehicles, cement, textiles, electrical equipment and ferrous metals. In 1933, the academic Windett also reviewed post-World War I industrialisation with similar emphases, while Pratt (1934) is organised by state and provides detail down to individual company annual reports. Mauldon and others (1938) deal with all economic sectors, but especially manufacturing.

Emerging academic and policy debate about industry was halted by World War II but from 1945 to 1950 a series of useful works appeared. Industry was considered as a facet of postwar reconstruction policy in texts such as those of the Australian Institute of Political Science (1945) and Walker (1947). Fascinating advice to industrial workers intending to migrate is given by Douglas (1947). The immediate postwar era also saw debates on regionalisation of industry among writers of the Australian Institute of Political Science (1948), Halsey (1949) and Gates and Drane (1953).

INDUSTRIAL DEVELOPMENT SINCE 1950

According to Wadley and Rich (1983, 9–12), Australian industrial development since 1950 falls into three phases which may be related to different types of writing: a boom until the early 1960s produced a literature of expansionary tenor; a decade of flowering and faltering after 1962 was attended by a more sophisticated and diverse commentary; a decline after 1974 engendered pessimism and the emergence of a radical critique. The following discussion is organised around these broad chronological and thematic categories.

Descriptions based on statistical publications mark writing on early postwar manufacturing, the task being to rebuild a data base for existing industries and to establish one for new forms of production. The federal Department of National Development, established on 17 March 1950, provided a unique insight into Australian industry of the time in a key document (1952) which systematised information to supplement basic government statistics. It should be read with the department's *Industry review series* (1948–57) of foolscap mimeographs which, from 1958 to 1962, was continued by the Commonwealth Department of Trade as the *Industry study series*. The 52 volumes so produced offer a detailed view of Australian industries in the first postwar phase: similar work is now undertaken by the Industries Assistance Commission.

The Department of Trade produced other significant series including *Developments in Australian manufacturing industries*, *British manufacturers in Australia*, the *Directory of United States investment in Australian manufacturing industry* and the *Survey of manufacturing activity in Australia*. Such publications had their political purposes in an economy oriented to expansion. Nevertheless, they now afford a cumulative account of the growth of secondary production, entries neatly grouped by industry.

The cataloguing of capacities and resources occupied many state government departments. They handed the results of resource surveys to regional development committees which, several years later, produced plans for their respective areas. A good example is a 1950 survey of the Newcastle region by the New South Wales Premier's Department which was followed in 1955 by a report of the Newcastle Regional Development Committee. Two years later the economist F.G. Davidson produced the first of many editions of *The industrialization of Australia* (1957). Simultaneously, E.L. Wheelwright (1957) presented a new analysis of the voting stock of 102 of the nation's largest public companies. It was followed by a further examination coauthored with Judith Miskelly (1967) focusing almost exclusively on the secondary sector.

The Manufacturing Industries Advisory Council presented a report (1959) which is an important precursor of the Vernon Report (Australia. Committee of Economic Enquiry) of 1965. The council's other study (1962) details products which could be developed to save imports

and promote exports as a way of sustaining rapid economic growth. Nowhere, however, does it outline a preferred direction of manufacturing development: policy statements were generally lacking in the literature of this time.

FLOWERING AND FALTERING 1963–73

With the data base on Australian manufacturing now reasonably established, studies after 1962 became more analytic, growing in sophistication and diversity. The chief data base was that of Alex Hunter (1963); part 1 outlines forces then influencing manufacturing, while part 2 analyses many major Australian industries.

On another scale, analyses of metropolitan industry engaged several workers. In Adelaide, Smailes (1967) documented manufacturing change in inner areas; Rimmer (1969) analysed the diffusion of industry from central Melbourne to suburban or periurban locations. Michael Webber (1972) wrote Australia's principal theoretical account of industrial location.

The role of government was frequently emphasised in the literature of 1963–73. Among forms of industry regulation, the tariff came in for renewed attention. Leading commentators were Reitsma (1960) and Hunter (1963). After 1954, the Tariff Board became an active participant in debates about protection: the call in its 1967 *Annual report* for economic efficiency in tariff considerations is regarded as a foundation for the increasingly critical attitude after 1974 of its successor, the Industries Assistance Commission. Reflecting interest in other roles of government, geographers Linge and Rimmer (1971) organised a wide-ranging seminar.

The Australian constitution determines that the states, rather than the commonwealth, determine the spatial dynamics of manufacturing. During the 1960s the New South Wales Department of Decentralisation and Development moved vigorously to promote intrastate decentralisation, its 'manifesto' being the report of the Development Corporation of New South Wales of 1969. It argued for selective decentralisation, as advocated two years earlier by the Victorian Decentralisation Advisory Committee (1967). These papers stimulated considerable debate on industrial location policy (see Committee of Commonwealth/State Officials on Decentralisation, 1975).

RETREAT 1974–83

The demise of Australian manufacturing after 1973 was unforeseen by many contemporary observers and this seems due to a too narrow discussion of industry policy.

As the fortunes of the secondary sector waned, it attracted increasing attention. The main industry studies of 1974–83 were provided in the analyses of Solomon (1975), the Australian Institute of Urban Studies (1977), in Davidson and Stewardson (1979), and in vol 4 of the Jackson Report (Australia. Committee to Advise on Policies for Development of Manufacturing Industry, 1976). The Jackson Report also heralded the plethora of post-1975 writing on structural change (see, for instance, Linge, 1976 and Aislabie and Tisdell, 1979). It is usually read together with the Australian government's *White paper on manufacturing industry* (1977) and the later Crawford Report (Australia. Study Group on Structural Adjustment, 1979). All these documents aimed to help manufacturing cope with the simultaneous impacts of post-1973 exchange problems, rising labour and energy costs, technological change, strong imports competition, reduced population growth, inflation and cuts in tariff levels.

The Crawford report was to present a long-term policy to rectify problems with regard to employment prospects and the capacity of the economy to sustain change. Restrained by its terms of reference, it met a hostile reception from an audience which was looking for incisive action to resuscitate the sector. So-called economic 'dries' stressed the need for a spirited, self-starting, achievement-oriented, free enterprise manufacturing industry, largely unassisted by bounties, subsidies or other public measures. The case is foreshadowed in the readings of Kasper and Parry (1978) and underscored in a 'libertarian' scenario by Kasper *et al* (1980).

By 1980, the debate on structural change was breaking little new ground, even though the important international underpinnings of industry's malaise had yet to be emphasised. A bright

future, now recognised as at least premature if not illusory, was held up around election time in a 'resources boom'. The various proposals produced technical reports such as James B. Croft and Associates' environmental impact statement for Hunter Valley smelters (1980). They also attracted a radical critique virtually unknown several years earlier (cf McColl, 1976). It questioned the socioeconomic impacts of massive infrastructural development and the diversion of public funds to support private corporate investment (Hunter Valley Research Co-operative, 1981). Subsequent downturn in the world economy and the increase in interest rates showed the substance to these objections.

For the first time since 1910 Australian manufacturing has less than 20 per cent of national employment (see Johns and Metcalfe, 1980, Australia, Bureau of Industry Economics, 1981a, 1981b). Since 1980, there has been a concerted, positive examination of the potential relationship of government and manufacturing (Cardew, 1981; Loveday, 1982), and fresh interest is shown in industry policy (Parry, 1982; Warhurst, 1982). The 'Swiss scenario' of a high technology industry, building on Australia's earlier investments in higher education, emerged as an option from the structural change debate (North, 1978). Lately it has been endorsed by federal Labor minister Barry Jones (1982). The urgings of technological optimists prompted the former Liberal government to establish the (Myers) Committee of Inquiry into Technological Change in Australia; in 1980 it produced a four-volume *Report*. It reviews key issues of technological change, describes potential technologies, examines government policies related to the introduction of new techniques and presents selected research papers. Closely allied with technology observers are those connected with employment issues. Industrial unemployment was little debated for several years after 1974 but public attention was drawn by Keith Windschuttle (1980).

A further nexus has emerged between employment analysts and those monitoring transnational corporations, foreign investment and Australia's role in global restructuring. The Transnational Corporations Research Project at the University of Sydney has produced a critique in Crough and Wheelwright (1982). Foreign investment is dealt with from different viewpoints by geographers such as those contributing to the Linge and McKay (1981) readings on industrial restructuring. The other side of the coin, Australian offshore investment, is handled by Bennett *et al* (1981) and Metcalfe and Treadwell (1981) on behalf of the Bureau of Industry Economics.

At the broadest scale, writings on manufacturing and international economic relations become synonymous. They concern a variety of intergovernmental agreements such as the closer economic relations with New Zealand, the Pacific basin concept, the north-south dialogue and the proposal of a new international economic order. Observers include the authors in the Crough *et al* (1980) readings, Fagan (in Linge and McKay, 1981) and Linge and Hamilton (1981).

Australians have made a fair contribution to the world literature on manufacturing through works in economics, economic history, geography and related fields. Australia's exposure to multinationals is a study in its own right, particularly in aluminium, coal and iron ore in which the nation specialises. Our compendious output on structural change provides something of a reference manual, notably in its foci of tariff issues, employment and industry studies. The country now has some experienced commentators on technological change, and industrial policy is no longer neglected.



- AISLABIE, C.J. AND TISDELL, C.A. eds, *The economics of structural change and adjustment: proceedings of the conference held at University of Newcastle, November, 1978*. Newcastle, Institute of Industrial Economics, University of Newcastle, 1979. 410 p. (University of Newcastle. Institute of Industrial Economics. Conference series, 5.)
- Several economists examine structural change in all sectors of the economy in this major set of readings.
- AUSTRALIA. *White paper on manufacturing industry*. AGPS, 1977. 37 p.
- Follows the 1975 Green paper on industrial policy. Purportedly definitive paper but widely criticised for lack of decisiveness. Continued support for protectionism.
- AUSTRALIA. Bureau of Industry Economics. *Industrialisation in Asia: some implications for Australian industry*. AGPS, 1978. 130 p. (Research report, 1.)
- First of many high quality analyses in this series. Highlights potential impact of rapid industrialisation in certain Asian nations. Reprinted with corrections in 1980.
- AUSTRALIA. Bureau of Industry Economics. *The long-run impact of technological changes on the structure of Australian industry 1990-91*. AGPS, 1981. 380 p. (Research report, 7.)
- Projections based on econometric SNAPSHOT model of Australian economy. Assessments by industry for all sectors of economy. Estimates now subject to some debate.
- AUSTRALIA. Bureau of Industry Economics. *The structure of Australian industry: past development and future trends*. AGPS, 1981. 167 p. (Research report, 8.)
- Broad review and useful source document. Projections from SNAPSHOT econometric model (see above).
- AUSTRALIA. Committee of Economic Enquiry. *Report...* Canberra, Government Printer, 1965. 3 vols, maps.
- Full-scale macro and microeconomic inquiry leading to growth-oriented prognosis for the economy. Some contentious arguments for greater planning stimulated criticism and discussion. Chairman: Sir James Vernon.
- AUSTRALIA. Committee of Inquiry into Technological Change in Australia. *Technological change in Australia: report of the Committee of Inquiry into...* AGPS, 1980. 4 vols.
- Major governmental inquiry into impact of technological change. Chairman: Sir Rupert H. Myers.
- AUSTRALIA. Committee to Advise on Policies for Manufacturing Industry. *Policies for development of manufacturing industry: a Green paper*. AGPS, 1975-76. 4 vols, illus, maps.
- Full-scale inquiry into the ills of manufacturing. Stresses externally induced change and concentrates on quality of work environment. Vol 4 is a series of industry studies. Chairman: R.G. Jackson.
- AUSTRALIA. Department of National Development. *The structure and capacity of Australian manufacturing industry*. Melbourne, The Department, 1952. 528 p.
- Study of broad industrial groups, each comprising individual manufacturing activities. Industry statistics, estimates of demand and capacity, market prospects and availability of inputs.
- AUSTRALIA. Industries Assistance Commission. *Index of Tariff Board reports 1921-1973, classified by industry*. Canberra, The Commission, 1974. 233 p.
- Advice to users, summary of the Australian Standard Industrial Classification and index for ASIC divisions A-D (agriculture to utilities).
- AUSTRALIA. Study Group on Structural Adjustment. *Report, 1979...* AGPS, 1979. 2 vols.
- Outlines a policy to rectify problems with regard to employment prospects and capacity of economy to sustain change. Recommends on industrial and resource development, industry-specific and manpower policies, capital and regional strategy and information provision. Chairman: Sir John Crawford.
- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE, 11th Summer School, Sydney, 1945. *Australia's post war economy*. Sydney, Australasian Publishing Co, 1945. 292 p.
- World postwar economy, wool industry, agricultural prospects, secondary industry and industrial relations.
- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE, 14th Summer School, Goulburn, 1943. *Decentralisation*. A & R, 1948. 204 p.
- Implications, constitutional problems and economic aspects of decentralisation. Local and higher level government machinery. Five substantial chapters by different authors.
- AUSTRALIAN INSTITUTE OF URBAN STUDIES. Victorian Division. *Manufacturing in the Port Phillip Region*. Canberra, The Institute, 1977. 156 p, maps. (AIUS publication, 66.)
- Comprehensive regional analysis of manufacturing around the Melbourne metropolitan area.
- BARNARD, A. *Visions and profits: studies in the business career of Thomas Sutcliffe Mort*. MUP, 1961. 234 p, illus.
- Biography of one of Australia's most famous nineteenth-century entrepreneurs who had interests in mining, engineering, refrigeration and wool marketing.
- BENNETT, R.B. et al, *Motives for Australian direct foreign investment*. Canberra, Bureau of Industry Economics, 1981. 59 p. (Bureau of Industry Economics Working Paper, 23.)
- Theory of direct foreign investment and survey results of 225 Australian firms with offshore operations.
- BLAINEY, G.N. *The steel master: a life of Essington Lewis*. Melbourne, Macmillan, 1971. 217 p, illus.
- Lewis who was managing director of BHP, 1926-38, and its chief general manager, 1938-50, was involved for most of his life with the development of Australian heavy industry.
- CARDEW, R.V. *Government regulation of industrial property development*. Canberra, Australian Institute of Urban Studies, 1981. 115 p, illus. (AIUS publication, 92.)
- Examines the role of government in development process and costs to developers, and makes suggestions on how to improve the efficiency of development control and methods of approval.
- CAVES, R.E. et al, *Australian industry: structure, conduct, performance*. Sydney, Prentice-Hall, 1981. 155 p, illus.
- Local version of key North American text on microeconomics but no specific case studies.
- COMMITTEE OF COMMONWEALTH/STATE OFFICIALS ON DECENTRALISATION. *Studies commissioned by the Committee of Commonwealth/State Officials on Decentralisation*. AGPS, for the Dept of Urban and Regional Development, 1975. 429 p, maps.
- A series of key studies on the decentralisation issue, some originally commissioned by state authorities.
- CROUGH, G. AND WHEELWRIGHT, E.L. *Australia: a client state*. Ringwood, Vic, Penguin, 1982. 255 p.
- Emanates from work in the University of Sydney Transnational Corporations Research Project. Calls for a policy of self-reliance to restrict foreign domination.
- CROUGH, G. et al, *Australia and world capitalism*. Ringwood, Vic, Penguin, 1980. 310 p.
- Socialist view covering unemployment, work and technology, income, corporations, capital concentration, foreign investment and the means of political restructuring.

- DAVIDSON, F.G. *The industrialization of Australia*. MUP, 1969. 91 p, illus.
 Background, structure and potential of Australian manufacturing. Early postwar reference and critique, first published in 1957.
- DAVIDSON, F.G. AND STEWARDSON, B.R. *Economics and Australian industry*. Melbourne, Longman Cheshire, 1979. 309 p.
 Standard microeconomics text examining different market forms with illustrations from various Australian industries and also retailing. First published in 1974.
- DEVELOPMENT CORPORATION OF NEW SOUTH WALES. *Report on selective decentralisation: the case for concentration upon growth points as a strategy for effective decentralisation*. Sydney, Government Printer, 1969. 96 p, map.
 Sophisticated application of economic theory to support selective decentralisation. Examines cost differentials in utility provision and comparative availability of services.
- DOUGLAS, I. *Opportunity in Australia*. London, Rockliff, 1947. 186 p, illus, map.
 Popular text for intending migrants with several chapters on industrial conditions and proposed development. An enlarged and revised edition was published in 1958.
- FLETCHER, P. ed, *Queensland: its resources and institutions; essays ...*. Brisbane, Government Printer, 1886. Variously paged.
 A collection of fourteen essays, including H. Earle's 'The commerce and industries of Queensland', prepared for the Colonial and Indian Exhibition, London, 1886.
- FORSTER, C. *Industrial development in Australia 1920-1930*. Canberra, Australian National University, 1964. 256 p.
 Analyses manufacturing in the post World War I period, including industrial growth, industry case studies and labour, finance, productivity and prices.
- GRIFFIN, G.W. *New South Wales, her commerce and resources*. Sydney, Government Printer, 1888. 293 p.
 Résumé of a range of primary, mineral and secondary industries, functionally organised.
- HUNTER, A. ed, *The economics of Australian industry: studies in environment and structure*. MUP, 1963. 543 p, maps.
 Standard text on Australian industry. Includes chapters on the manufacturing environment and case studies of individual industries.
- HUTCHINSON, F. ed, *New South Wales: the mother colony of the Australias*. Sydney, Government Printer, 1896. 369 p, illus, maps.
 Covers aspects of agriculture, mining and social conditions. Includes F.J. Donohue's 'The manufacturing interest'. Reads like a statistical yearbook. Good account of resource utilisation and processing.
- JAMES B. CROFT & ASSOCIATES. *Environment impact statement for an aluminium smelter at Tomago, N.S.W.* Sydney, Tomago Aluminium, 1980. 3 vols in 2, illus.
 Example of environmental impact statement for development in the sensitive Hunter valley of NSW. Smelter represents a major project in the 1980 'resources boom'.
- JOHNS, B.L. AND METCALFE, J.S. *The increasing competitiveness of developing economies and their impact on Australian industry*. Canberra, Centre for Economic Policy Research, Australian National University, 1980. 56 p, illus.
 Reflects growing realisation that Australia's manufacturing problems were not purely domestic but a part of global restructuring.
- JONES, B.O. *Sleepers, wake!: technology and the future of work*. OUP, 1982. 285 p, illus.
- The Minister for Science sets out a technological manifesto for Australia in the 1980s. Influential book.
- KASPER, W. *et al*, *Australia at the crossroads: our choices to the year 2000*. Sydney, Harcourt, Brace, Jovanovich, 1980. 311 p.
 Free market strategists analyse the past and likely future of Australia's economy, society and geopolitical region. 'Mercantilist' and 'libertarian' scenarios are painted within which industrial policy would be applied.
- KASPER, W. AND PARRY, T.G. eds, *Growth, trade and structural change in an open Australian economy*. Sydney, Centre for Applied Economic Research, University of NSW, 1978. 399 p.
 Industrial and trade economists argue that 'increasingly urgent structural adjustment should be left to private sector, responses, government restricting itself to broad-brush, liberal policies that create foresight and continuity'.
- LINGE, G.J.R. *Index of Australian tariff reports, 1901-1961*. Canberra, Research School of Pacific Studies, Australian National University, 1964. 95 p.
 Extremely handy reference with which to tackle the Australian parliamentary papers to identify Tariff Board and other reports. A supplement covers reports from 1961 to 1967.
- LINGE, G.J.R. *Industrial awakening: a geography of Australian manufacturing, 1788-1890*. ANUP, 1979. 845 p, illus, maps.
 Important work on the historical geography of early Australian industry.
- LINGE, G.J.R. ed, *Restructuring employment opportunities in Australia*. Canberra, Dept of Human Geography, Australian National University, 1976. 215 p, illus, maps.
 Multidisciplinary readings on a variety of themes relating to the distribution of the labour force.
- LINGE, G.J.R. AND HAMILTON, F.E.I. 'International industrial systems' in F.E.I. Hamilton and G.J.R. Linge, eds, *Spatial analysis, industry and the industrial environment: progress in research and applications*. Vol 2. *International industrial systems*. Chichester, England, Wiley, 1981, 1-117.
 Thoroughgoing account includes consideration of global restructuring and new international division of labour.
- LINGE, G.J.R. AND MCKAY, J. eds, *Structural change in Australia: some spatial and organisational responses*. Canberra, Research School of Pacific Studies, Australian National University, 1981. 329 p, maps.
 Industrial geographers enter the structural change debate with analyses at the international, national, regional and metropolitan levels.
- LINGE, G.J.R. AND RIMMER, P.J. eds, *Government influence and the location of economic activity*. Canberra, Dept of Human Geography, Research School of Pacific Studies, Australian National University, 1971. 500 p, maps.
 Papers from a broad ranging seminar, including Australian and worldwide coverage of themes not merely confined to the secondary sector.
- LOVEDAY, P. *Promoting industry: recent Australian political experience*. UQP, 1982. 223 p.
 Examines federal and state initiatives with particular reference to aluminium and petrochemical industries.
- LYNE, C.E. *The industries of New South Wales*. Sydney, Government Printer, 1882. 288 p, illus, map.
 From articles originally published in the *Sydney Morning Herald*.
- MCCOLL, G.D. *The economics of electricity supply in Australia*. MUP, 1976. 159 p, illus.

- Authoritative study of electricity industry in Australia, covering costs, revenues, pricing policy, capital investment and current issues.
- McLEOD, D. *Melbourne factories*. Melbourne, Walker, May & Co, 1868. 68 p.
Description of 26 industries.
- MANUFACTURING INDUSTRIES ADVISORY COUNCIL. *Australian manufacturing industry in the next decade: the main issues facing the Australian economy during the next decade, with particular relevance for the manufacturing sector*. Sydney, The Council, 1959. 42 p.
Optimistic and expansionist outlook for Australian manufacturing during the 1960s, prepared for the council of 22 business leaders chaired by Dr J. Vernon. The document expresses continued support for the tariff.
- MANUFACTURING INDUSTRIES ADVISORY COUNCIL. *Major gaps in Australian industry . . .* Sydney, The Council, 1962. 113 p, illus.
Stresses need to develop import-saving and export-competing industries as a way of sustaining rapid economic growth. Reviews various parameters of a myriad of industrial products.
- METCALFE, JS. AND TREADWELL, R. *An overview of Australian direct foreign investment*. Canberra, Bureau of Industry Economics, 1981. 53 p. (Australia. Bureau of Industry Economics. Working paper, 18.)
Size, regional and industrial composition of Australian direct foreign investment and government policies on the issue.
- MORGAN, BH. *The trade and industry of Australasia: being a report on the state of and openings for trade, and the condition of local industries in Australia and New Zealand*. London, Eyre and Spottiswoode, 1908. 250 p, illus.
Deals with practical, commercial aspects of the Australian market, in particular export opportunities to Australia and local labour conditions. Several industry studies.
- NORTH, P. *Indigenous technology: industry's ultimate protection*. Sydney, University of Sydney, 1978. 16 p. (George Judah Cohen memorial lecture, 1978.)
Early call for high technology scenario relying on intellectual input as a means of industrial growth.
- PARRY, T.G. ed, *Australian industry policy*. Melbourne, Longman Cheshire, 1982. 320 p.
Covers industrial organisation and competition policy, foreign investment, technology and structural adjustment.
- PATTERSON, G.D. *The tariff in the Australian colonies 1856-1900*. Melbourne, Cheshire, 1968. 174 p.
Analysis of tariff history with emphasis on colonial NSW and Vic and reference to other colonies.
- PRATT, A. ed, *The national handbook of Australia's industries*. Melbourne, Specialty Press, 1934. 671 p, illus, maps.
Organised by states with detailed views of industries and companies. Lavishly illustrated.
- REITSMA, AJ. *Trade protection in Australia*. UQP, 1960. 195 p.
Pre-Federation tariffs, events to 1921. Discusses establishment of Tariff Board, and income, trade, economic development and other arguments in favour of tariffs. Balance of payment considerations.
- RIMMER, PJ. *Manufacturing in Melbourne*. Canberra, Research School of Pacific Studies, Australian National University, 1969. 201 p, maps.
Analyses diffusion of industry from central to suburban Melbourne 1871-1964. Pioneering study in using advanced computer classifications of types of manufacturing.
- SMAILES, PJ. *Manufacturing industry in Adelaide's inner suburban ring*. Sydney, Dept of Geography, University of Sydney, and the Geographical Society of NSW, 1967. 38 p, illus.
Manufacturing change in Adelaide examined through field surveys and data of the South Australian Chamber of Commerce.
- SOLOMON, R.J. ed, *Industrial land in Sydney*. Canberra, Australian Institute of Urban Studies, 1975. 89 p, maps. (AIUS publication, 51.)
Macro and micro analyses of industrial land in Sydney covering metropolitan socioeconomic trends, zoning, planning, supply, demand and price.
- VICTORIA. Decentralization Advisory Committee. *Report on the selection of places outside the metropolis of Melbourne for accelerated development*. Melbourne, The Committee, 1967. 52 p, illus.
Early advocacy of selective decentralisation for sake of economic efficiency. Identifies five non-metropolitan growth centres. Report became basis of subsequent state policy.
- WADLEY, DA. AND DRICH, DA. *The Australian industrial system 1950-81: review and classified bibliography*. Hobart, Dept of Geography, University of Tas. 1983. 207 p. (University of Tas, Dept of Geography. Occasional paper, 13.)
Review chapters on postwar Australian industrialisation and the literature attending it. Thematic, spatial, chronological and alphabetical classification of 2062 references.
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