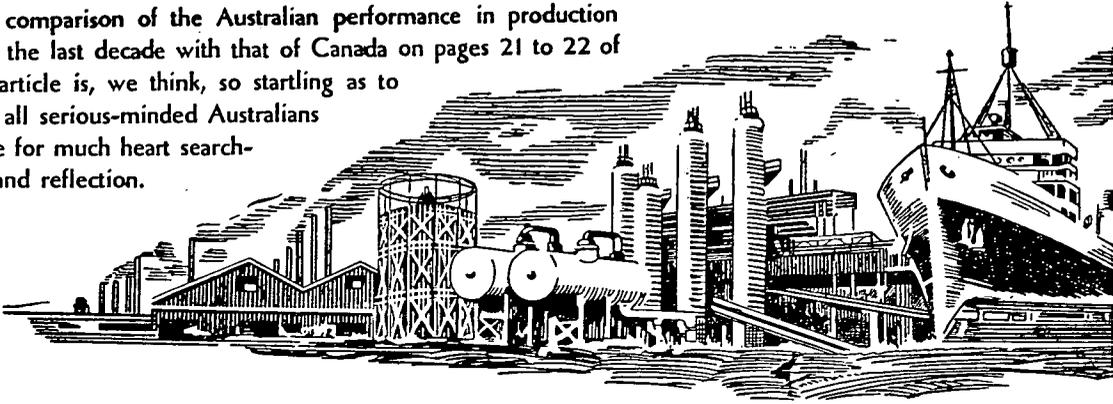


The comparison of the Australian performance in production over the last decade with that of Canada on pages 21 to 22 of this article is, we think, so startling as to give all serious-minded Australians cause for much heart searching and reflection.



On what foundation does the prosperity of a country, and the material welfare of its people, primarily and ultimately rest?

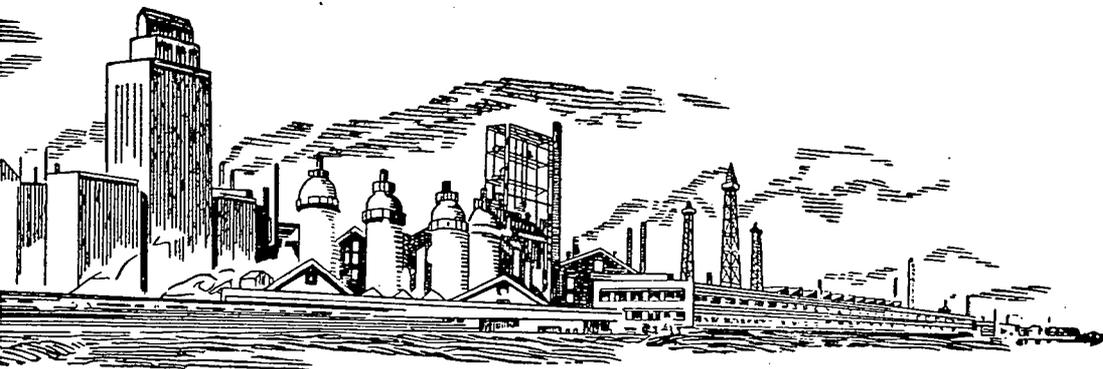
Until recently, economists, as well as the ordinary citizen, have been accustomed to think of and to measure prosperity largely in financial and monetary terms.

A great deal of argument, for instance, has yet failed to convince the average income-earner that the true value of his income consists not in the number of £ notes in his pay envelope, but in what those notes will purchase in terms of actual goods and services. When money wages and salaries are high, when business profits are soaring, when people have ample savings in savings bank accounts and insurance policies, when unemployment is negligible, then, according to the financial approach and the financial measurements, a state of prosperity exists. If the financial indicators are to be believed, then Australia has been in a marvellously prosperous condition since the end of the war—unemployment has never been lower; business profits measured in money, have seldom been higher; the farmer is receiving exceptional prices for his produce; pay envelopes have never been so bulky; and savings bank accounts are filled to overflowing. The Australian economy passes all the financial tests with flying colours.

THE PRODUCE

This way of thinking about economic prosperity is a natural carry-over from the conditions of the pre-war world, when governments and peoples were confronted with the perennial problem of under-employment of men and resources, a problem which periodically reached grave proportions. Economic discussion and governmental policy were concerned almost exclusively with matters of banking policy, budgetary deficits and treasury bill finance, and with the general financial strategy for the cure or prevention of depression. Economic stability, rather than economic progress, was the major obsession of economic theorists as well as of practical politicians.

But full employment, and the tremendous excess of demand over supply in the post-war world, have brought about a change of emphasis. Economists, and not economists alone, but labour leaders, now reiterate, with an almost monotonous frequency, that standards of living and prosperity, in the final summing up, must be measured not by the financial evidence, which is superficial and misleading, not even by full employment, but by produc-



ION STORY

tion and productivity.* If we wish to determine the true economic strength and wealth of a nation, we must refer not to the size of the money pay envelope, not to the level of money profits, but to the volume of production and the standards of productive efficiency achieved by its industries.

How, then, does the Australian economy stand, when subjected to this supreme and ultimate test of prosperity?

The test is, unfortunately, not easy to apply. For, while the *financial* facts of the economy can be readily and simply ascertained, the *physical* facts of production are inordinately hard to come by. It is a tremendous drawback to sensible thinking and a sound understanding of the

*Mr. Herbert Morrison (the Lord President of the Council of the British Government), "In the cockeyed economy of the thirties people imagined that the great problem was the abolition of unemployment. Today we know that even full employment is not enough. We must secure a greater output of goods and services all round for a decent standard of living; fair shares for all, and adequate incentives for all."

Mr. P. J. Clarey (Past-President of the Australian Council of Trades Unions), "It (the trade union movement), wants production to expand so that higher standards will be possible in the future for all."

Australian economy, that the overall truth about production and productivity is so difficult to unearth, because of the inadequacy of official statistical information. "The Monthly Bulletin of Business Statistics", published by the Commonwealth Statistician, contains, for instance, a table of indices showing the changes in total industrial production for eleven of the main industrial nations; but, significantly, there is no index for Australia itself.

The I.P.A. has made a painstaking investigation into production information for some of the main branches of the economy—power resources and steel, housing, building materials, roads and transport, primary production and materials and equipment used in primary production. We have endeavoured to compare our own performance in production with that of Canada, a country which in size of population and in resources is not dissimilar to Australia. Canada has been chosen, also, for the reason that since the war it has been governed by a liberal free enterprise government, whose policy has been to make full use of the free market mechanism and to provide attractive incentives, whereas Australia has been, in the main, under a socialist government pursuing a policy of tight economic control, heavy taxation, and nationalisation. *The results of our investigation suggest that, in spite of the*

THE PRODUCTION STORY (continued)

apparent financial prosperity in Australia in the post-war period, progress in production has been extremely mediocre, considered both absolutely and relatively to that of Canada and other countries.

* * * *

1. POWER RESOURCES AND STEEL.

Power — whether from primary or secondary sources — is the basis of a modern industrial economy. There are three main primary sources of power in Australia—black coal, brown coal, and hydro-electricity.

Black Coal.

Total black coal output has increased from an annual average of 12.4 million tons for the years 1937-39, to 15.0 million tons for the financial year 1948-9—an increase of some 21%. The great part of this increase has been absorbed by electricity generating stations and gas works, whose combined consumption has increased from an annual average tonnage of around 3 million, for the years 1937-39, to over 5 million tons. *Hence, only a little over a half million additional tons a year of black coal have been available either directly as fuel, or for coking for industrial purposes.*

Over the last decade industrial capacity in Australia has expanded considerably in the lighter industries which rely chiefly on electricity; the heavy industries have been forced to eke out a rationed existence because of inadequacy of black coal and coke supplies. For example, major blast furnaces in New South Wales have been

operating only at some 60-70% of capacity, with a consequent loss of ingot steel at the rate of approximately half a million tons annually.

Production of black coal in Australia has been estimated to be at least 3 million tons below requirements, not only because of the rapid increase in demand over the last decade, but also because of industrial unrest and lagging mechanisation in the mines, which have retarded increased output.

In the last three years, work stoppages and absenteeism have been responsible for the loss of at least two million tons of coal per annum. The alarming proportions of coal strikes in Australia are shown in a comparison with United States, by no means altogether free from industrial turbulence on the coal fields.

Since 1939, Australia has lost through strikes, per 100 man-days worked, five times the equivalent number of days lost in the United States.

Lack of adequate mechanical equipment is a serious drawback in Australian mines. Although coal seams are broadly similar, the U.S. miner produces twice the output of the Australian miner at the coal face, mainly because of the assistance of machinery. The horsepower ratio of machinery per man employed is 8.5 in United States compared with 4 in Australia. 80-90% of American coal is machine cut and 60% mechanically loaded as compared with 40% for cutting and 30% for loading of coal in Australia. The Davidson Report clearly demonstrated the backwardness of Australian coal mining because of the resistance of miners to

technological developments. The Report contrasts the attitude of American unionists who insist on the introduction of the very latest mechanical devices.

Despite some increase in machine cutting and loading since 1939, output per manshift is still below pre-war levels. However, efforts being made by the Joint Coal Board to secure greater use of machines in underground mines, to expand open-cut mining and to improve working conditions are brighter portents for the future. Production capacity in N.S.W. mines is now 10% greater than in 1942, when a record output of 12 million tons was reached.

With the defeat of extremist leaders in some mining unions, and signs of a changing attitude by the rank and file miners, the year 1950 opens more hopefully.

Brown Coal and Hydro-Electricity.

Victorian brown coal possesses only about a third of the heating value of New South Wales black coal. Production of brown coal rose from an annual average of 3.65 million tons for the calendar years 1937-39, to 7.02 million tons in 1948-49. But 80% of this increased output was applied for the generation of electricity, either directly or in secondary form as briquettes. Hydro-electric expansion, notably in Tasmania, resulted in an increase of from about 700 million kilowatts of electricity generated annually in the pre-war period to around 1,300 million kilowatts in 1948-49.*

*Projected developments in Victoria and New South Wales will eventually mean an immense expansion in hydro-electricity generation.

However, the increased quantity of electrical power available has not been sufficient to match the current demand, and electricity rationing has become a notable feature of the Australian economy in general, its effects being particularly severe on industry in New South Wales. Inadequacy of generating capacity is the direct cause, but at present it is difficult to see how adequate fuel for new thermal projects can be made available except by diversion of coal from our already hard-pressed heavy industries, or by heavy importation.

The expansion of many light consumer goods industries, which are very exposed to the cold winds of world competition, and which are not in any case, significant from the standpoint of long-term development, has thus been to some extent at the expense of the essential heavy industries.

The post-war expansion of heavy industry in Australia compares unfavourably with that of her sister dominion—Canada. *For example, Australian steel production has increased only about 10% since prewar; Canadian steel output has increased by some 120%.* Primarily, this Canadian expansion has been made possible by the increasing development of hydro-electric capacity, together with more intensive development of natural gas and petroleum resources—endowments so far denied to Australia. By the usage of these alternative sources of energy, and by heavy importation of coal, adequate quantities of coal have been available for the basic iron and steel industry as well as for other heavy industries.

THE PRODUCTION STORY (continued)

The following table shows the relative sources of energy available in Canada and Australia today compared with annual averages for the immediate pre-war years. *The table indicates that while Canada's available energy sources have increased by some 77%, Australia's have expanded by only 36%. Per head of population, Canada has double the amount of energy available in Australia.*

POWER RESOURCES—AUSTRALIA AND CANADA.

Production	Yearly average			
	1937-1939		1948-49	
	Tens of Bill. Brit. Therm. Units			
	Aust.	Canada	Aust.	Canada
Black Coal	33	38	40	47
Brown Coal	3	1	6	1½
Hydro-electricity	*	9	*	15
Natural Gas	—	3	—	6
Petroleum	—	3	—	9
	36	54	46	78
Imports				
Petroleum, etc. . .	8	20	14	40
Coal	—	38	*	80
Total	44	112	60	198

*Less than Ten billion units.

NOTE.—(The ratios used in this table for conversion of power resources to British Thermal Units are as follows:—Black coal, 12,000 per lb.; brown coal, 4,000 per lb.; crude petroleum, 18,000 per lb.; electricity, 3,400 per k.w.h.; natural gas, 1,000 per cu. ft.)

2. HOUSING, BUILDING CONSTRUCTION AND BUILDING MATERIALS.

Housing statistics are, in many respects, deficient; but, having regard to the great economic and social urgency of the housing situation, the material available suggests that the rate of building today compares unfavourably with the pre-war rate. In Victoria, production did not exceed the pre-war figure of 9,500 homes until 1948, despite the tremendous backlog of demand. It has been estimated that production for 1949 will be 14,000.

However, the homes are not strictly comparable; the quality is not as good and the average home is now 4 rooms, as compared with 5 before the war. Production has also been greatly facilitated by concentration on large estates for housing commission purposes; before the war housing projects were smaller, and styles were more individual.

The rate of factory and city building is much below the pre-war rate. Prior to the war 24%, on average, of the value of all buildings consisted of factories and city buildings other than dwellings; last year the figure was only 14%. The Building Industry Congress has estimated that we should be constructing in the Melbourne metropolitan area about £5 millions worth of building other than for habitation. During the past three years the average annual total value of new buildings in this classification in the metropolitan area has been £1¼ million.

At present, 29,000 persons are engaged in building construction in Victoria as compared with 34,000 pre-war, and the minimum post-war target of 36,000 laid down by the Commonwealth Government.

Nor is labour the only bottleneck. Essential materials are scarce relative to demand. There have been substantial increases in the production of cement plaster sheets, cement building sheets and native timber, but production of bricks, nails, roofing, iron, spouting, piping and other materials made from steel, lags badly. The deficiencies are largely traceable to the shortage of coal, although the labour scarcity is also an important contributing factor.

Restrictive practices are rife in the building industry, due largely to Communist control of the main unions. Before the war bricklayers handled up to 1,200 bricks a day, 700 bricks representing a fair average day's work. However, the present rate is estimated at 300 to 400 bricks a day; to what extent this ridiculously low rate is due to short supplies of bricks, and to what extent to deliberate restriction, are difficult to estimate. "Go-slow" tactics are also prevalent in other sections of the building trade. Material costs have risen 100% and building wages on average 120% since 1939. The actual % increase in labour costs, including the effect on output of "go-slow" tactics, would be far greater than this.

Those who suffer most are the fellow-workers of the building tradesmen. Thus, in 1939, it took the earnings of only 3 years to purchase a 2 bedroom brick dwelling; it now takes the earnings of 5 years to buy the same house despite the much higher average rate of earnings.

An estimate by the Building Industry Congress suggests that the construction of a medium-sized dwelling now requires 2,600 manhours compared with 2,000 before the war.

A comparison of the number of new dwellings units erected in Australia with the numbers erected in the U.S.A. and Canada is given in the following table:—

	Thousands of Dwelling Units.		
	Aust. 000's	U.S.A. 000's	Canada 000's
1938	42	515	42
1947	38	852	72
1948-49	52	931	75

Source: U.N. Monthly Bulletin of Statistics.
Commonwealth Department of Works and Housing.

Whereas production in U.S.A. and Canada is about 80%, Australia is less than 30%, above 1938. There are extenuating circumstances, certainly, but, all in all, the picture is not one of which Australia can be particularly proud.

3. ROADS AND TRANSPORT.

Roads.

Victoria's capital stock of roads and highways, because of inadequate maintenance, has been depleted since 1938-39. There has been little new road construction since the war. Many bridges are obsolete.

Labour costs of road maintenance and construction have risen about 160% since 1938. *Adjusting actual expenditure on roads by the Country Roads Board by this increase, expenditure on road maintenance last year was only 65% of 1938-39.* The labour force employed by the Board dropped from 7,000 to 4,000, although to some extent this was counterbalanced by greater mechanisation.

Expenditure by municipal councils on roads and streets (and incidentally on parks, gardens, recreation facilities and lighting, etc.) is little above pre-war. Allowing for cost increases the real services rendered to the ratepayer are certainly much lower.

There is good reason to believe that the position in Victoria is fairly typical of Australia as a whole.

Railways.

Australian transport facilities are in many respects lagging well behind modern world standards, and the important task of modernisation and expansion is being delayed by shortages of labour



THE PRODUCTION STORY (continued)

and of resources of materials and equipment.

Mr. John Elliot, the British railroads expert, in his recent Report on Transport in Victoria, affirms that Victoria's railways, the backbone of the State's transport system are gradually but surely running down for lack of staff and maintenance. Relaying of tracks is proceeding at less than half of required rates. The railways can only obtain two-thirds of their requirements of steel rails, and the number of sleepers used has dropped to a third of the pre-war number. Moreover, the quality is not half as good. Owing to the shortage of rails and sleepers, there is no renewal programme and maintenance is piecemeal. The average age of locomotives, trucks and passenger cars is well above established economic life. *One-eighth of passenger cars are over 55 years old, or 20 years more than their economic life.* Since 1939, despite a 50% increase in goods and live stock carried, an 80% increase in country passenger journeys, and a 30% increase in suburban passenger journeys, staff has increased only by 10%, even with the 40-hour week and increased leave. Current staff is only 90% of requirements.

Shipping.

Inefficiency and "go-slow" are rife on the waterfront. A committee of interested bodies, appointed to investigate the position in 1946, reported that the time involved in voyaging and handling of cargo was 50% higher than before the war, in spite of an increase in gangs and mechanical equipment. *Loading rates of Australian general cargo have dropped from 28 to 14 tons per gang-hour. Interstate cargo vessels, on average, now spend three to four months of the year in port as compared with one to two months before the war.*

4. PRIMARY PRODUCTION.

In view of the great world shortage of foodstuffs, the urgent food requirements of the British people, and the needs of our own expanding population, Australia's performance in the field of primary production is one of the most disappointing and disturbing aspects of the post-war economy.

The production of whole-milk, meat and wool is about the same as, or little above, pre-war levels; although, largely because of good seasons, the production of wheat is well above pre-war production. Exports of meat, dairy produce and other badly-needed items of diet for Britain are below the pre-war volume and show no tendency to increase. In fact, exports of these items in 1948-49 were lower than in 1947-48. *The numbers engaged in rural industry have fallen by 60,000 since 1939, despite a 10% increase in population and an increase of 500,000 in other occupations.*

Compared with our great sister dominion and competitor, Canada, Australian farms are poorly equipped.

In the prosperous year 1937-38, Australia imported 11,000 tractors, but during the war imports dropped to 3,000 per annum. Despite the huge backlog to be overcome, we have not yet reached the 1937-38 level of imports. Nor are the tractors, for the most part, of the heavy duty type suitable for Australian conditions; the majority are of sterling origin and somewhat too light for Australian requirements. In 1941, Canada, with three times our area under cultivation, had 160,000 tractors compared with 40-50,000 in Australia. *By 1947, she had added another 150,000 tractors to her holdings, whilst we have added only 30,000 new tractors since 1939.*

Similarly, since 1941, Canada has added 50,000 headers and strippers to her farms whilst Australia has barely maintained her pre-war position, because of the comparatively poor output of farm imple-

ments from Australian factories. *Production of header harvesters and strippers in Canada rose from 3,000 in 1939 to 12,000 in 1947, but, over the same period, production in Australia dropped from 2,568 to 1,683.* This is barely enough to meet replacement needs, let alone requirements for additional equipment.

Production of wire, wire netting and similar supplies is deplorable in relation to pre-war production, especially in view of the great backlog of demand to be overcome, and the favourable financial position of the farming community.

The following comparisons are indicative:—

	PRODUCTION.		
	Pre-War '000 tons	1948-9	Production as % of demand
Fencing Wire	23.4	10.8	39
Barbed Wire	10.8	7.9	43
Wire Netting	14.2	9.4	43
Field Fencing	10.5	3.7	26

Source: Production Bulletins, Division of Industrial Development and Bureau of Agricultural Economics.

5. COMPARISON OF PRODUCTION IN CANADA, U.S.A. AND AUSTRALIA.

It is illuminating to compare the progress made in Canada under a progressive non-socialist administration with the record of Australia under governments with pronounced socialist leanings.

Canada, like Australia, has been able to reduce unemployment to negligible proportions (2%), partly because of the unbounded prosperity of her export industries. *But Canada, unlike Australia, has increased manhour output by approximately 30% since before the war, compared with an increase in this country of only about 3%.*

The table on page 22 covering a wide range of physical production shows a comparative picture, of which Australia cannot be proud. The figures, in fact, are astounding. Canada has far outstripped Australia in production of industrial essentials—iron and steel, building

materials, farm equipment, etc.—and managed to equal, or exceed, our achievement in production of consumer goods for which there is a record demand because of high incomes.

Industrial production indexes for the U.S.A. and Canada show the following increases between 1938-39 and 1947-48:—

Canada	70%
U.S.A.	84%

No index is available for Australia. The best indication of the increase in total production in Australia is that provided by the estimates of Colin Clark, Director of the Queensland Bureau of Industry. Clark's estimates show an increase of between 20% and 25% over the period 1938-39—1947-48. Clark's figures which include rural production, are, however, not strictly comparable with the industrial indexes of the U.S.A. and Canada, which exclude rural production. The inclusion of rural production would give somewhat lower figures for the United States and Canada. "The Economic Report of the President" of the United States for the year 1948 estimates total U.S. production (including rural production) at 70% above 1939. The real comparison between the three countries is approximately as follows:

	% Increase 1938-39 to 1947-48
U.S.A.	70%
Canada	50% to 60%
Australia	20% to 25%

Economic development of supplies, government, fiscal and other policies, vigorous and efficient management, and hard work by labour, have all contributed to the great success of Canada in raising the living standards of her people to what is now, taking full employment into account, among the highest in the world. *Australia's failure to make use of its opportunities, as revealed by its comparatively poor performance in the production of goods and services—the stuff of which true standards of living are composed—throws some doubt on the wisdom of the economic policies pursued in this*



THE PRODUCTION STORY (continued)

country over the last decade. Canada, through a programme of enlightened liberalism, has far outstripped the economic progress achieved in Australia under policies of a strongly socialist character.

PRODUCTION—PRE-WAR AND POST-WAR. AUSTRALIA AND CANADA.

	Australia		Canada		% Increase or Decrease	
	1938-9	1948-9	1939	1948-9	Australia	Canada
Building Materials						
Timber, thous. mill. ft	0.7	1.2	4.0	5.2	71	30
Cement, mill. tons	0.9	1.1	0.9	2.4	22	167
Bricks, million	721	626	165	321	-13	94
Tiles, million	40	45	14	18	12	29
Nails, thous. tons	20	18	66	90	-10	36
Metals						
Ingot Steel, mill. tons	1.17	1.13	1.49	3.17	-3	113
Refined Lead, thous. tons	233	205	170	139	-12	-13
Refined Zinc, thous. tons	69.8	82.9	157	191	19	22
Consumer Goods						
Boots and Shoes, mill. pairs	14	15	25	35	7	40
Jam, mill. lbs.	85	134	55	96	58	75
Biscuits, mill. lbs.	74	107	112	182	45	63
Confectionery, mill. lbs.	102	136	84	108	33	29
Chocolate Bars, mill. doz.			20	57		185
Ice Cream, mill. gals.	4	14	9	26	250	189
Beer, mill. gals.	90	148	63	181	64	187
Tobacco and Cigs., mill. lbs.	28.5	28.1	*	*	-1	88
Radio Sets, thous.	164	333†	348	790†	103	127
Farm Machinery						
Ploughs, thous.	1938-9	1947-8	1939	1947		
	11.2	10.3	37.8	72.5	-9	92
Cultivators, thous.	8.2	13.5	5.9	29.5	65	400
Harrows, thous.	21.0	34.7	32.3	92.2	65	185
Drills, thous.	2.0	4.0	5.5	10.9	100	98
Harvesters, thous.	2.6	1.7	3.0	11.7	-35	290
Mowers, thous.	1.0	3.2	8.2	72.9	220	790
Primary Production						
	1937-	1947-	1937-	1947-		
	38 av.	49 av.	39 av.	49 av.		
Wheat, mill. bush.	171	206	270	367	20	36
Milk, mill. gals.	1173	1189	1507	1635	1	8
Meat, thous. tons	987	959	443	606	-3	37

*Index only. †1947-8.

Sources: Australian Production Bulletins, Parts I and II.
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The authorities for the facts and figures used in this article are as follows:—

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