

ACCELERATED DEPRECIATION

ONE of the most striking features of industrial and financial practice in the post-war world is the rapid writing off of capital costs. In essence, this is a response to a world situation in which technological change has become greatly accelerated and in which the pursuit of higher productivity has, for the first time, become a conscious objective of national economic policies.

Before the war in most Western countries—America was an exception—the prevailing industrial philosophy embodied the idea that when a piece of equipment or a machine was installed it would be used until it was more or less worn out. This concept was reflected in the basis upon which governments established their allowances for depreciation for the assessment of tax. Permissible rates of depreciation were set at levels based roughly on the estimated life of an asset so that over its life the asset would be written off. *This approach has been abandoned in the industrial philosophy of the post-war world.*

The new conception of rapid write-offs is attributable directly to two causes. First, was the need immediately after the war for governments to provide special assistance to industry to enable it to replace run-down plant and to install new plant at inflated post-war prices. The second, and later cause, arose from the widespread knowledge—fostered especially by the numerous productivity missions from Britain and the Continent to the United States—of the superior efficiency of American industry and the reasons which lay behind the superiority. It became clear that, by contrast with their counterparts in other countries, American industrialists were constantly engaged in installing the latest mechanical devices and in replacing existing equipment with better equipment. They did not hesitate to scrap machinery which had been out-moded by new developments.

At the end of the war the Australian Government followed the practice adopted overseas of permitting heavy initial depreciation allowances for tax purposes in order to assist the rehabilitation of industry. But whereas other countries apparently have realised the permanent advantages to industry of a policy which was first regarded as a temporary expedient and have continued to apply the principle of rapid write-offs of capital costs, Australia has, in the main, returned to the pre-war system of spreading capital costs over the estimated life of the asset.

The United Kingdom introduced initial depreciation allowances in April, 1946, of 10% of all expenditure on new industrial buildings and structures and 20% of new plant and machinery. In 1949 the rate for plant and machinery was raised to 40%. The 1951 Labour Government suspended the operation of initial depreciation allowances as from April, 1952, but they were subsequently restored at their 1946 levels by the new Chancellor of the Exchequer, Mr. Rab. Butler, as from April, 1953.

Australia followed a similar policy except that initial depreciation allowances were confined to plant and machinery. From 1st July, 1945, the rate for initial depreciation in Australia was fixed at 20%. In 1949 the allowance was increased to 40%. But special initial depreciation terminated altogether on 30th June, 1951.

THE North American countries and practically all the European countries, in one way or another, make provision for accelerated capital write-offs in calculating assessable income for taxation. Switzerland, for instance, permits initial depreciation rates of up to 80%. Dutch firms are granted a special initial allowance of 33 $\frac{1}{3}$ % and an additional 4% a year on top of the normal 10% depreciation charge for the next five years on all new plant and machinery installed. Other countries, such as Western Germany, give straight-out tax-free concessions for capital expenditures. United States and Canada provide accelerated depreciation or amortization rates for the installation of facilities in industries connected with defence. This provision is given a liberal interpretation. In the U.S.A., since the commencement of this scheme about 25% of all business expenditures on new plant and equipment have received the benefit of the special amortization provisions. In Canada, building and constructional work coming under these defence provisions can be depreciated by 70% over a four year period with a maximum allowance of 30% in any one year. Machinery can be depreciated by 50% over four years, but the maximum write-off in any one year must not exceed 20%. These *special* rates of depreciation are chargeable *in addition to* the *normal* rates permitted under Canadian taxation laws.

The United States Congress is now preparing a complete overhaul of the American tax code, including allowances for

depreciation. If and when these proposals become law, two-thirds of the value of plant and equipment installed as from Jan. 1, 1954, may be written off over half its useful life. These changes are completely distinct from emergency amortization for defence purposes.

Thus, while Australia has adhered to the antediluvian approach of spreading capital costs over the estimated working life of equipment practically every other country is going out of its way to use taxation policy to promote the more rapid replacement and expansion of capital equipment. Britain is now awaking to the competitive advantage being gained by Continental and American industries through government tax concessions.

The emergence of German competition, particularly in the capital goods and ship-building industries, has serious portents for Britain, Germany is outselling Britain in European and dollar markets. Last year Germany exported more capital goods to United States than Britain and well over doubled Britain in exports of capital goods to European countries. Western Germany has also built up her merchant marine from 300,000 tons in 1950 to over 2½ million tons and expects to reach 3½ million tons next year. Starting from scratch in 1946 with the barest essentials in equipment and materials Germany produced 400,000 cars last year or about 60% of British car production. The Volkswagenwerk (People's Car Works) is now the fourth biggest automobile producer in the world, led only by the "Big Three" in U.S.A. It is out-selling all other makes, including American, on unrestricted markets.

This remarkable industrial recovery was greatly aided by modern capital equipment received under Marshall Aid and by the ploughing-back of the greater proportion of profits into productive assets. For instance, under the special "7d. tax remission Clause" at least £20m. of ship-building profits retained in the industry were free of tax. The Volkswagenwerk G.M.B.H. has re-invested the whole of its earnings since 1948 running into many millions of pounds.

INVESTMENT ALLOWANCES

To strengthen Britain's competitive position the Chancellor of the Exchequer, Mr. Butler, has now resorted to the continental system of tax-free investment allowances. Under proposals announced in the 1954 Budget, industry will be

permitted to write-off 20% of expenditure on new plant and machinery and new mining works in the first year, and 10% for new industrial and agricultural buildings. *These allowances are in addition to and not in substitution of write-offs for depreciation.* Under the system of investment allowances, the total amount written off exceeds the cost of the machine by the amount of the allowance. This will help meet the frequent complaint of "capital erosion" arising from the inadequacy of depreciation provisions to cover higher replacement costs. As well as productive plant, equipment and buildings for scientific research qualify for the allowance, but not ordinary motor cars, second-hand plant or machinery. These excluded items will, however, still be eligible for the old initial depreciation allowance of 20% which is retained for any company or individual who desires to use it rather than the investment allowance.

Investment allowances are a signal step forward in placing additional funds in the hands of industry for development and modernisation. They amount to a government subsidy on investment as compared with what is, in effect, an interest-free loan under the alternative method of accelerated depreciation. By anticipating ordinary annual rates initial depreciation reduces tax liability in the year in which the investment takes place, but taxes become progressively larger as the amounts which can be claimed in depreciation are reduced. This does not apply to investment allowances because they do not mean any writing down of capital.

For each £1,000 spent on plant the difference between the operation of an investment allowance and an initial depreciation allowance works out as follows:—

	Initial and Annual Depreciation	Written-down Value of Plant
Original Cost—£1000		
1954/5—Initial (20%)	£ 200	£ 700
—Annual Deprec. (10%)	100	
1955/6—Annual Depreciation	70	630
1956/7—Annual Depreciation	63	567
Subsequent years	567	
Eventual Total	1000	Nil
Investment Allowance and Annual Depreciation		
Original Cost—£1000		
1954/5—Investment allowance 20%	£ 200	£ 900
—Annual Deprec. (10%)	100	
1955/6—Annual Depreciation	90	810
1956/7—Annual Depreciation	81	729
Subsequent years	729	
Eventual Total	1200	Nil

With the exception of certain agricultural operations the only allowable deduction on account of new investment in Australia is the annual depreciation charge based on the estimated working life of the item of plant or equipment installed. Under normal conditions and stable prices, taxpayers would have just recovered their capital outlay (in money) by the time the working life of their asset had expired. Laid down, as a general rule, many years ago the rates in the Australian depreciation schedule are woefully inadequate to recover present-day replacement costs. For example, a blast furnace built for, say, £1,000,000 pre-war would be written off after 10 years' life at an annual charge of £100,000. But only £1,000,000 would have been recovered to meet a probable present-day capital cost of £5,000,000. In order to maintain their assets intact, shipping concerns, the iron and steel and the sugar industries, indeed most highly capitalised enterprises, have had to set aside from profits large sums over and above depreciation permitted for income tax purposes. A perusal of the balance sheets of companies engaged in these fields will amply illustrate this.

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EXPANDING Australian industries face many handicaps compared with overseas competitors. In general, Australian profit rates on funds employed are lower and the amounts which may be re-invested in new plant and machinery correspondingly less. Antiquated depreciation provisions accentuate this disadvantage.

Australia is one of the few countries in the world where tax laws make practically no provision for depreciation on buildings. In 1949/50 Australian industry provided £3,000,000 for depreciation on buildings, but less than £100,000 was allowed by the Taxation Commissioner on buildings which were an integral part of plant. In Canada, frame buildings and component parts and oil storage tanks are allowed 10% depreciation, and buildings in general, irrespective of use, 5%. In United Kingdom a depreciation rate of 2% is allowed on all factory and industrial premises.

In Canada machinery is generally depreciated for tax purposes at 20% per annum. In Australia foundry plant is allowed 5%, boot and shoe machinery 7½%, galvanising plant 10%, motor trucks 15%. Most British depreciation rates are also more generous than in Australia. Iron foundry plant is allowed 10%, boot and shoe machinery 12½%, and motor trucks 25%.

It can, of course, be argued that even though an asset is written off over a longer period in Australia the end financial result is the same as abroad. But this ignores the great competitive advantage derived from earlier recouping of capital outlays in overseas countries, and their subsequent re-investment in new plant. *Australian manufacturers are more likely to expedite the installation of a new machine when they know that part of the cost will be provided by tax benefits than when it must be met from their own resources. The more liberal is a country's depreciation policy the greater will be its prospects of technical advance through replacement and modernization of capital plant and equipment.*

The United States is veering more and more round to a solution to the problem by establishing certain broad limits within which businessmen are permitted to use their own judgment in depreciating their assets.

Australia cannot escape the consequence of overseas technological developments. *Unless we liberalise our taxation laws concerning the replacement and extension of capital equipment we must be prepared to live in an industrial back-water.* A system of investment allowances similar to that recently introduced in Britain offers a possible remedy for Australia's problems.

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WHAT would be the cost to government revenues of a system of investment allowances? The data set out in the Appendix, suggests that new industrial and commercial building and construction in Australia may reach a level of around £100m. by 1954/5. A 10% investment allowance on new building would therefore probably reduce taxable incomes to the extent of £10m. This would affect company and per-

sonal income tax receipts by possibly £2m. to £3m. New investment in non-agricultural plant and machinery and commercial motor vehicles could reach £300m. A 20% investment allowance on this amount would entail a reduction of taxable income of £60m. with a consequent loss in tax revenue of say £15m. to £20m. However in the long run this would be offset by the stimulus it would give to higher productivity and the subsequent gain in the taxable incomes of companies and private individuals.

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THE policies being pursued overseas provide a direct incentive to mechanisation and modernisation which is lacking in Australia. Under the new tax schemes relating to capital expenditures producers are encouraged to install the most modern equipment. This must eventually be reflected in greater industrial efficiency, lower production costs, and reduced living costs for the consumer.

The plea for a more enlightened attitude to depreciation in Australia does not rest on the narrow issue of greater profits for industry. Much more is at stake. The problem must be viewed from the stand-point of sheer technical and economic necessity and of the future competitive position of Australian industry. Industrial practice in Australia should be re-shaped in line with overseas companies if we are to meet the challenge of a new industrial era characterised by accelerated technological and industrial change.

INVESTMENT IN FIXED CAPITAL EQUIPMENT IN AUSTRALIA

	1950/1951 to 1952/1953		
	1950/51	1951/52	1952/53
	£m.	£m.	£m.
Motor Vehicles	187	221	168
Other Capital Equipment	206	275	265
New buildings (excluding dwellings)	73	101	110
	466	597	543

Source: National Income Estimates 1952/53.

Notes:

- (1) Possibly 60% of motor vehicles are ordinary passenger cars which could be excluded as not being entirely devoted to business uses.
- (2) Possibly about one-quarter of "other capital equipment" represents tractors and farm machinery already enjoying the special 20% depreciation allowed to farmers.
- (3) Dwelling maintenance expenditures are included in the item "new building." Possibly one-third should be excluded on this account.