Chapter 2

THE CASE FOR ACCELERATED DEPRECIATION

Key considerations

What is accelerated depreciation?

Impact on the taxpayer

2.1 Accelerated depreciation is the allowance of deductions for declines in the value of an asset at higher rates than are expected to occur in practice. Accelerated depreciation does not increase the nominal entitlement to taxation depreciation over the life of an asset. Rather it brings forward deductions. This results in tax being deferred during the early years of an asset's useful life and increases tax in the later years.

2.2 The benefit to the taxpayer of accelerated depreciation is confined to tax deferral. In after-tax terms, accelerated depreciation increases the net present value of an investment, or its rate of return, above what it would be in the absence of accelerated depreciation.

2.3 Companies value accelerated depreciation because it provides important cash flow benefits. Where a company has made a substantial up-front capital expenditure early positive cash flows are important in determining the overall rate of return on the project.

Impact on government revenues

2.4 The revenue cost of accelerated depreciation flows from this tax deferral property. For any particular asset, accelerated depreciation is the equivalent of the government providing an interest free loan to the taxpayer: revenue collections are lower in the early years but this is entirely offset in later years. The real cost to the government is therefore the 'interest' on this 'loan' less any revenue from taxation of the extra income earned by the taxpayer as a result of the 'loan'. The actual impact on revenue flows will be a significant negative in the early years of the asset's life reflecting the making of the 'loan', offset by a positive impact in the later years of the asset's life as the 'loan' is repaid.

2.5 If the stock of investment were constant over time then the ongoing cost to the government of moving from effective life depreciation to accelerated depreciation would be no more than the cost of the interest-free loan, although year-to-year impacts would reflect the incidence of 'loan' outlays and repayments. However, the early years of the transition would show significant revenue losses as 'loan' outlays would far outweigh 'loan' repayments.

2.6 If the stock of capital subject to accelerated depreciation grows, as would be expected in a growing economy, then loan outlays always exceed loan repayments and the ongoing cost to revenue of accelerated depreciation can be significant. Of course, if accelerated depreciation is effective in boosting economic growth, the direct cost of the measure will grow but against this must be offset the benefits, including the higher tax revenues, flowing from the higher growth.

2.7 The same pattern is true of the revenue savings from moving from accelerated depreciation to effective life depreciation. If this change were implemented, the revenue savings in the early years would be significantly greater than the ongoing savings in later years. Once again the effect on economic growth, be it positive or negative, needs be taken into account in assessing the true cost of the change.

Impact of the trade-off between accelerated depreciation and company tax

2.8 A useful way of analysing the impact of accelerated depreciation on the structure of Australia's economy is to compare the option of maintaining accelerated depreciation with a cut in the company tax rate of broadly equivalent revenue cost.

2.9 Accelerated depreciation provides significant benefits to capital intensive industries such as mining and manufacturing while being of little benefit to service industries such as finance, tourism or retailing. A company tax rate reduction would provide benefits across all industries in proportion to their taxable income. If the trade-off were done on a revenue neutral basis, it follows that the relatively more capital intensive industries would suffer a net disadvantage and the relatively less capital intensive industries would gain.

2.10 The issue is whether such a redistribution of benefits across industries will increase or reduce overall economic growth, employment and welfare. The resolution of this question can only be taken so far through objective study and economic modelling. At the end of the day, it will remain a matter for judgment by government. However, some of the possible rationales for accelerated depreciation are discussed later in this chapter. The alternative of a revenue neutral reduction in the company tax rate is used to highlight the possible policy choice.

What arrangements apply at present?

2.11 Different capital assets are eligible for varying levels of accelerated depreciation and are covered by different depreciation regimes. For example,

one accelerated depreciation regime applies in the case of plant and equipment. A different regime applies to some capital expenditure incurred by the mining and resource sector — but accelerated depreciation only occurs if the project life exceeds 10 years in the case of mining and petroleum, 20 years in the case of quarrying and 25 years for timber mills. Further details on the existing law are set out in the previous chapter and its appendices.

2.12 Where accelerated depreciation does apply, the rate of acceleration is not uniform. In general, the longer the life of an asset, the higher the loading. This structure provides a greater level of assistance to investment in longer-life assets (typically associated with higher value and larger size projects).

2.13 *An International Perspective* measures effective tax rates for investments in selected countries. It shows that the effective tax rates for investments in wasting assets, such as plant and mining expenditures, are generally lower than for other investments. This reflects the position that most jurisdictions provide tax benefits for investments in such activities.

Possible rationales for accelerated depreciation

2.14 Possible rationales that have been suggested for accelerated depreciation are as follows:

- industries using assets eligible for accelerated depreciation may produce externalities, such as benefits for other industries, the introduction of new technology or other benefits not directly accruing to the owners;
- investments in wasting assets are inherently riskier than other investments and so accelerated depreciation is justified as a rough offset for other tax system biases against risk; and
- other countries provide such concessions and so we need to match them in order to remain internationally competitive.

Are there externalities associated with investments in wasting assets?

2.15 Mining, manufacturing and some infrastructure provision industries, such as power generation, are probably the largest beneficiaries of the accelerated depreciation provisions. Arguments could be made that there are possible externalities associated with these industries such as technology spin-offs and the importance of high quality infrastructure in attracting further industry. However, the extent of any externalities will differ markedly from

one industry to the next. It needs to be considered whether a broad ranging concession for investment in capital assets is an appropriate means of addressing such externalities.

Is there a bias against long-term investment?

2.16 The existing accelerated depreciation regime generally provides more favourable treatment for longer life assets compared with a comprehensive income tax base (see Chapter 1).

2.17 An argument sometimes put forward in favour of accelerated depreciation is that in the absence of such treatment, the tax system would be biased against long-term investment.

2.18 Several reasons put forward as to why this bias arises are as follows.

- Long-term projects cannot utilise income tax deductions in the start-up years before projects produce income. This cash flow disadvantage can be partly offset by providing accelerated depreciation once the project is operational.
- Long-term investments require higher before-tax rates of return (and hence higher project discount rates) relative to short-term investments because their pay-back periods are longer and hence they are inherently more risky.
- Such investments offer higher social rates of return (more externalities) and should be encouraged. For example, infrastructure projects facilitate lower input costs on other investment activities.

2.19 There is a possibility that if accelerated depreciation were not available, or it was made less generous in regard to long-life assets, significant prospective investments may be located in other countries in preference to Australia. The extent to which such investments may be lost to Australia is difficult to judge. It is also possible that if reductions in the company tax rate were funded by removing accelerated depreciation that investment, albeit of a different kind, would be attracted to Australia. As noted earlier the judgment as to where the balance of Australia's interests lies is a difficult one.

Is accelerated depreciation needed on grounds of international competitiveness?

2.20 Advocates of accelerated depreciation often benchmark our depreciation arrangements against those of other taxation jurisdictions. For example, in announcing the current rates for plant and equipment, the

former government specifically compared the new rates with those then being offered overseas.

2.21 *An International Perspective* concluded that Australia provides accelerated depreciation for short-lived assets more or less in line with the average for the countries considered. However, Australia's depreciation tends to be more favourable for assets with lives beyond about 8-10 years.

2.22 Clearly national taxation regimes do have an impact on international investment decisions. Equally clearly, many other factors also bear on such decisions. Qualitative surveys carried out from time to time have addressed the question of which factors are most important in influencing locational investment decisions. These surveys suggest that general demand for the end product, direct input costs (including input taxes), access to markets and political and macro-economic stability are equally or more important than tax in influencing location.

2.23 Other institutional factors influencing locational investment decisions include: the legal and regulatory system; financial market efficiency; communication infrastructure; the primary, secondary and tertiary education systems; the human capital skills base; and other public infrastructure services and facilities.

2.24 Other countries, however, do offer incentives to attract particular projects, including through tax concessions. There is enough anecdotal evidence available to establish that concessions can play an important part in the location of certain investments. It is possible that in some cases such fiscal inducements are needed to offset locational disadvantages of certain countries such as poor infrastructure, higher country risk or the impact of other (higher) costs on projects.

2.25 The provision of accelerated depreciation may also bear on the question of whether the tax system should provide incentives to encourage Australian industry to adopt the most modern technology to remain internationally competitive. If accelerated depreciation encourages business to update its capital stock more frequently, it could improve productivity and competitiveness.

2.26 A reduction in the company tax rate would also have a favourable impact on Australia's international competitiveness, in terms of both attracting foreign investment, and the ability of Australian industries to compete against overseas competitors. As noted earlier the relative impacts of accelerated depreciation and a reduction in the company tax rate differ quite significantly across industries. Which policy is likely to be the more effective in boosting international competitiveness and economic growth is not easy to determine objectively.

2.27 There is a limit to the extent that Australia can match taxation incentives provided by other countries. As noted in *An International Perspective*, if Australia attempted to match the incentives provided by other countries, it may finish up with a taxation system that would not generate sufficient revenue to fund the current level of government provided services. Thus, careful consideration is needed in providing incentives to ensure that the maximum benefits are likely to be achieved for the economy as a whole.

Reform options

2.28 The threshold issue is whether some form of accelerated depreciation should be retained or not. As noted earlier, this requires a balancing of offsetting effects and is ultimately a matter for government policy.

2.29 If the answer is no, then depreciation over the effective life of the asset should be introduced. If the answer is yes, then the precise form would depend on the rationale and objectives identified. The discussion below focuses on adopting effective life or retaining a form of accelerated depreciation based on applying uniform loadings to effective lives. This form of accelerated depreciation provides an equal advantage to all wasting assets to which it applies regardless of their effective lives.

Option 1: Replace accelerated depreciation with an effective life regime

2.30 An effective life regime would move the taxation treatment of wasting assets closer to their accounting treatment. It would make investment in wasting assets less attractive than at present.

2.31 The details of such an approach are discussed in Chapter 1.

Option 2: Apply effective life depreciation with a loading

2.32 Replacement of the accelerated depreciation provisions by an effective life regime with a loading would result in more uniform treatment of wasting assets with differing effective lives. This approach would work by determining the rate of depreciation based on expected effective life of the asset and then increasing this rate by a fixed percentage loading, say 20 per cent, to determine the rate of depreciation allowed for taxation purposes.

2.33 The extent of any loading would determine its revenue cost and the advantage conferred relative to other investments. A loading with an equivalent revenue cost to the current system as it relates to plant and equipment would approach 100 per cent. That is, it would allow assets to be written off over approximately half of their effective lives. An equivalent revenue neutral loading for mining and petroleum investments would approach 55 per cent.

2.34 There would be an issue as to which class of assets would benefit from accelerated depreciation. For example, the loading might apply only to plant and equipment or it could apply to a wider class of assets. This judgment would depend on the rationale and objectives of introducing a loading.

2.35 Figure 2.1 illustrates for discussion purposes how a 50 per cent loading might compare with the existing accelerated depreciation arrangements for plant and equipment.

Figure 2.1: Comparison of the existing accelerated depreciation regime with an effective life plus 50 per cent loading