# Reforming business taxation - an Australian perspective

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*The reform of business taxation is high on the political agenda in many Western countries. Increasing government spending, continuing effects of inflation, an eroded tax base and perceived inequity have produced pressures for change. In this article Mr Sieper discusses the need for reform, tax avoidance, capital gains taxation, indexation and the options for reform of the classical system of combined corporate and personal taxation.*

## I. INTRODUCTION

Tax reform stands high on the political agenda of a number of Organisation for Economic Co-operation and Development countries. The U.K. last year experienced (endured?) yet another comprehensive business tax reform. Less than three months ago the U.S. Treasury Department presented the President with a comprehensive proposal for the reform of the Federal tax system. A "Tax Summit", scheduled for July 1985 will consider government proposals for the reform of the Australian tax system. In New Zealand a Task Force on Tax Reform in 1982 suggested numerous reforms and recommended that certain areas, among them business taxation, be the subject of further study.

In all these countries, systems of broadly based income taxation, introduced at very low rates of tax in the early decades of this century, have performed increasingly poorly as the revenue requirements of governments, growing at rates far outstripping the rate of growth of Gross Domestic Product (G.D.P.), have confronted a tax base suffering cumulative erosion at the hands of legislatures and, in Australia at least, of the judiciary.

The inevitable result has been that the majority of taxpayers have found themselves facing vastly increased average and still more increasing marginal rates of tax. These increased tax rates in turn have exposed serious flaws in the design of the income tax system. While most of these have always been present, the incentives to exploit them have grown enormously under the combined influence of rising marginal tax rates and of sustained inflation at rates which the tax system never contemplated and which it has been totally unequipped to handle.

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In Australia, for example, the ratio of public sector outlays to GDP, which stood at around 20 percent in the late 1950s, has grown from 30 to 42 percent over the past decade. During this same decade, the public sector borrowing requirement has gone from 1.6 to 8 percent of GDP. These figures reveal the ominous fact that, despite a large rise in the weight of taxation, *less than half* of the increase in the share of GDP absorbed by governments (and their dependants) over the past decade is in fact currently being financed by taxes.

Moreover, concern for the welfare of low income taxpayers has seen the real value of the tax-free threshold grow enormously between 1959 and 1984 (by a factor of 4.5 for a single individual and by a factor of 3.5 for a married taxpayer with a dependent spouse).

Under these influences, high marginal rates of personal income taxation, once reserved for those with the highest taxable incomes, have become a fact of life for middle-income earners. Whereas thirty years ago taxpayers did not reach a 60 percent marginal tax bracket until their taxable income was approximately 6 times average weekly earnings, they are now confronted by this marginal tax rate at a taxable income of only 1.75 times average weekly earnings. At the same time so little tax revenue is now collected from the 61 percent marginal tax bracket that reducing it to 47 percent would, on a *ceteris paribus* basis cost less than 1 percent of total personal tax collections, and reducing it to zero would reduce such revenue by only 3.4 percent.

Current demands for comprehensive tax reform are in part the result of the widespread recognition that the dynamic interaction between marginal tax rate escalation and tax base erosion can only be interdicted if the base can be sufficiently broadened simultaneously to allow tax rates to fall significantly. There exists, moreover, a growing popular perception that the opportunities to shield income from tax that have been increasingly exploited in recent years, have been very unevenly distributed across the tax-paying population. Those taxpayers whose income is largely withheld at source under the PAYE system (where collections have grown from 78.7 to 83.3 percent of total personal income tax receipts over the past decade) and especially those not in receipt of substantial untaxed fringe benefits, together with the less financially sophisticated, have been particularly poorly placed to avoid growing tax burdens. As a result the progression nominally present in the income tax scales is not mirrored in the distribution of tax burdens and the "fairness" of the tax system has become a major issue.

In fact, much of the perceived horizontal and at least some of the apparent vertical inequity of the tax system is likely to be illusory. It is an economic fact of life that as markets adjust to horizontal inequities and to certain sources of apparent vertical inequity, these tend to disappear, to be replaced instead by economic inefficiencies; a process presumably familiar to many participants in tax shelters, whose depressed gross-of-tax rates of return have often disappointed great expectations.

While data on the distribution of tax burdens will therefore exaggerate the benefits of established tax shelters to participants, it remains the case that their abolition will set in train a process of reverse economic adjustment. Since this

reverse process will typically be triggered by large capital losses on tax-sheltered assets, their current owners can be expected to resist vigorously such reforms.

It will therefore be interesting to observe the rate of the proposals for the wholesale slaughter of tax concessions recently advanced by the U.S. Treasury Department[1] and instructive to contemplate the outcry that would have resulted had that Report pushed its logic still harder — particularly in respect of the taxation of the imputed income of owner-occupied housing, personal durables etc.

The practical implication is that tax reform proposals cannot be considered in a vacuum but must, as a matter of political reality, pay careful attention to the design of the transition from the old regime to the new.

The further major obstacle in the path of otherwise sensible proposals for comprehensive tax reform is the well-founded public suspicion that an initial process of tax base broadening will ultimately merely serve to facilitate still greater expansion in the size of the government sector. Those who find this prospect unpalatable are driven to the conclusion that tax design issues can only be sensibly addressed when governments are able to find better yet (since concerns about burgeoning government deficits would remain) levels of government expenditure.

The three "assurances"[2] given by the Australian Prime Minister during the recent election campaign (a further reduction in the deficit, no increase in the ratio of taxation to GDP, the growth rate of government outlays not to exceed that of the economy) might be seen as a first small step in this direction. However the equivocation that has immeditely surrounded these promises in the aftermath of the election, to say nothing of their original ambiguity, serves only to emphasise how difficult it will be for governments to deal effectively with the wholly justified cynicism of the electorate in these matters.

The particular subject of this paper is the reform of the taxation of business income. Over the past decade corporate tax collections in Australia have fallen from around 15 to about 10 percent of Commonwealth tax receipts, while the share of those receipts contributed by non-PAYE individuals has also fallen: from about 12 to around 10 percent. Inevitably therefore, many will regard increased taxation of the income from capital as a major objective of Australian tax reform.

In part for this reason, the issue of capital gains taxation is central to the Australian debate; the Australian Council of Trade Unions having indicated that its support for a move towards greater reliance on broadly based indirect taxation (which will apparently be proposed by the government) is conditional on the

1 *Tax Reform for Fairness, Simplicity and Growth* (United States Treasury Department, 1984) Vol. 1.

2 Originally referred to by the Prime Minister as his "trilogy" (on one dictionary definition "a set of three tragedies to be performed in immediate succession") these assurances, in acknowledgement of the improbability of getting them home, have been elsewhere dubbed the "trifecta" cf. J. O. S. Stone "Fiscal Policy 1985-86: The Prime Minister's Trinity" (Centre of Policy Studies, Monash University, Melbourne, 1984) ).

introduction of an effective capital gains tax. The merits of and difficulties posed by such taxation, are considered in Part III of the paper.

Part IV examines the critical question of inflation indexation of the business income tax base.

Part V considers some of the alternatives to the present, largely incoherent, classical system of combined corporate and personal income taxation that have at various times been proposed. Three such proposals are singled out for attention: the abolition of the corporate income tax, the conversion of the classical system into one that ensures the full double taxation of economic income generated in the corporate sector, and the full integration of the corporate and personal income taxes.

Before turning to questions of tax reform, I propose to attempt to discover what lessons for tax design are to be found in the entrails of a few of the more notable schemes of tax avoidance (and evasion) that have flourished in Australia over the past two decades. Attention is given both to those "paper" schemes whose use has now been severely curtailed by the introduction of the new omnibus anti-avoidance section (Part IVA) of the Income Tax Assessment Act 1936, and to the more conventional "tax shelters" which remain largely untouched.

## II. TAX AVOIDANCE

There have, in Australia, been no comprehensive attempts to reform the business tax system. Equally, there has in recent years been no shortage of private initiatives designed to exploit its ramshackle structure. Governments, to the extent that they have responded at all, have been so occupied protecting the Revenue against predation that they have paid little or no attention to more fundamental reforms.

While some of the schemes of tax avoidance and evasion discussed below have been at least temporarily disabled, both by the introduction of Part IVA of the Income Tax Assessment Act 1936 and by the passage of ad hoc legislation, it is arguable that the suppression of the symptoms of decay ought not to be confused with the successful treatment of the underlying disease.[3]

### *A. Fringe Benefits*

I have remarked on the extraordinarily low tax collections from the highest personal tax bracket in Australia. A considerable part of the explanation can be conjectured to lie in the widespread existence of untaxed fringe benefits received by employees. Since section 26(e) of the Australian Income Tax Assessment Act 1936 makes such benefits (with the important exception of superannuation) assessable, one can only marvel at the apparent extent of the Commissioner's failure to enforce rigorously this section of the Act. Not surprisingly, the extension of such

3 Broadly speaking, Part IVA, which carries Draconian penalty provisions, allows the Commissioner to avoid for tax purposes any scheme (and there seems to be nothing that a taxpayer might do which could not be described as a scheme) which first, provides some tax benefit and second, of which it "would be concluded" on the basis of certain specified tests, that any person entering into the scheme did so with the sole or dominant purpose of obtaining such a benefit for some participant.

benefits to their members is increasingly becoming an objective of Australian trade unions. Moreover it is one that currently receives further artificial encouragement from the provisions of the "Prices and Wages Accord", which, while endeavouring to limit formal wage increases outside national wage cases, ignores non-wage elements of a worker's compensation.

The bold approach to this problem taken by the 1984 Budget in New Zealand is one that also forms part of the tax plan recently advocated by Hall and Rabushka[4] for the U.S. It should be noted however the taxation of fringe benefits at the company tax rate fits more logically into the Hall-Rabushka plan since it involves a constant marginal tax rate of 19 percent on both the cash flow of businesses and on wage incomes.

*B. Income Splitting — Unincorporated Business*

Rapidly rising marginal tax rates at relatively modest levels of income, together with large increases in the real value of the tax-free threshold, have given taxpayers a growing incentive to arrange their affairs so that family income is treated by the tax systems as being derived by the widest possible range of family members.

The splitting of interest and dividend income among family members has never been difficult and was, in Australia, facilitated by the abolition of gift duty in 1978.

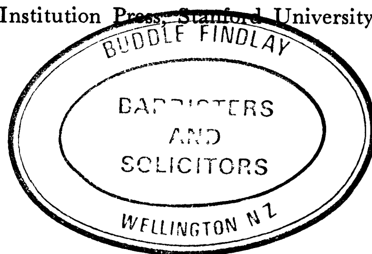
While income from personal exertion has long been regarded by the tax law as adhering to the individual supplying the labour, partnerships have always provided "non-professional" small businessmen with the opportunity to split such income with their spouses. In the professions, by contrast, the restrictions placed by professional associations on incorporation and on the categories of persons who may join a partnership have, traditionally restricted this avenue of avoidance.

Administrative service trusts have provided some solution to this problem, and in recent years further scope for income splitting has been provided by legal decisions which have upheld the effectiveness for tax purposes of assignments of rights to a portion of partnership income to non-members.

In certain areas of the economy even those in a stable employment relationship with a single employer have found it advantageous to sever that relationship and instead be employed by a discretionary trust which leases their labour to the former employer. "Friday-Monday" arrangements, as these have become known, have recently come under attack by the Commissioner.

Other recent amendments to the Australian Income Tax Assessment Act 1936 (Division 6AA) have severely restricted the tax-free threshold on unearned income derived by minors (to a mere $400) and levy punitive rates of tax on such income in excess of the threshold.

4 R. Hall and A. Rabushka *The Flat Tax* (Hoover Institution Press, Stanford University, 1984).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Such ad hoc responses reflect the enormous tensions that exist in the present tax system between the conflicting principles of individual and family unit income taxation.

*C. Avoiding the Corporate Tax — Trading Trusts*

Under a system of full corporate and personal tax integration of the type advocated by the Campbell Inquiry[5] in Australia, (and earlier by the Carter Commission[6] in Canada) all investors would receive a net of tax rate of return on their investment in corporate equities determined by their marginal personal tax rate. As will be argued in more detail below, this system ought therefore unambiguously to be preferred to the classical system of combined corporate and personal taxation by investors whose marginal personal tax rate is below the corporate rate.

Such taxpayers, at least, will have a strong incentive under the present system to invest in business structures which by piercing the "corporate veil", can provide them with an effective tax integration scheme.

At the private company level the discretionary trading trust allows this to happen and the rate of conversion of private companies into this form in recent years has been remarkable. Partnership income has of course always been taxed on an "integrated" basis. Discretionary trading trusts however offer the advantages of limited liability (through the use of a corporate trustee) and readily allow trust income to be split among minors.

The phenomenon of private tax integration has in recent years also emerged as a force on the public company scene. Large scale "limited partnerships" in the U.S. and, in Australia, public unit trusts have become prominent vehicles for roll-your-own integration. By distributing 100 percent of their income to unitholders such trusts are able to avoid income tax themselves. This income is therefore subject to tax solely in the hands of the unit holders without their losing the advantages of limited liability and ready marketability offered by corporate equities. In effect full integration has been achieved by unitholders in property trusts and by those in public trading trusts such as the Queensland Coal Association Trust and the Argyle Diamond Trust, without their needing to wait on tax reform of the kind recommended by Carter and Campbell.

While further conversions of existing private companies to trading trust structures have been discouraged by recent amendments to the Income Tax Assessment Act, nothing appears to present new ventures from being set up in this way.

Moreover the supply of capital to fund future public unit trusts will surely be amply maintained by the obvious attractions such trusts hold for superannuation funds seeking equity investments. Through public trading trusts such funds are

5 Campbell J. K. et al. *Australian Financial System Enquiry: Final Report* (Australian Government Publishing Service, 1981).

6 Carter K. Le M. et al. *Report of the Royal Commission on Taxation* (Queen's Printer, Canada, 1966).

able to avoid entirely the income tax on equity investment without having to enter into partnership arrangements.

*D. Avoiding the Personal Tax on Distributions — Dividend Stripping*

Under Australian tax law distributions made to individuals, out of post-corporate-tax income, by a company in liquidation will be deemed to be dividends and, as such, will be subject to personal tax. Should the company instead be disposed of by sale, the proceeds received by the shareholders will normally be treated as tax-free capital gains. In the normal course of events the assets acquired by the purchaser of the company, which shall for simplicity be assumed to consist (almost) entirely of accumulated income-profits will retain this character in the hands of the purchaser and will thus continue to carry with them a contingent, if imprecisely defined, personal tax liability payable on distribution or liquidation.

Companies with income-profit retentions can, for this reason, be expected to sell in the market for less than the cash value of their assets.

Many enterprising Australians however discovered that they could nonetheless capture something approaching, or even (as shall be seen) an amount in excess of, the full cash value of unwanted private companies by selling them to share-traders whose trading gains and losses are treated for tax purposes as income. Provided that they took some care to remain in ignorance of the plans the share-trader had for their company the courts would treat the realisations of the original shareholders (here assumed to be equal to the cash in the company) as tax-free capital gains.

What of the tax consequences for the sharetrader? Suppose, to take the case most favourable to the Revenue, that the sharetrader was unincorporated. Having purchased the target company for an amount which shall, for simplicity, be assumed to equal the cash value of its assets (which assets would in such cases have already been converted to cash) the sharetrader would then pay him- or herself a dividend equal to (almost) its entire cash reserves. Though this dividend would be taxable in the sharetrader's hands, the sale of the now virtually worthless company for a negligible sum would produce an almost exactly offsetting tax-deductible capital loss. Clearly, this entire transaction enables the contingent personal tax liability attaching to corporate retentions to be totally avoided.

Consider now the consequences where the sharetrader is a listed company. In this case the dividend which strips the company of its assets formerly escaped corporate tax under section 46 which exempts inter-corporate dividend distributions from tax in the hands of the recipient company. At the same time, the capital loss "suffered" by the sharetrader on resale of the now worthless shares remained deductible against corporate tax. Given that the sharetrader had sufficient taxable income to make use of this loss (and at the time these schemes flourished the transfer of tax losses could be arranged) the Revenue has at this juncture not only failed to collect the personal tax that would have been due from the original shareholders had the original company made a dividend distribution to them, but it has also lost an amount of corporate tax essentially equal to the product of the

corporate tax rate and the cash in the original company. Of course a partial clawback of tax revenue (equal to the product of the corporate tax rate, the relevant personal marginal tax rate and the cash in the original company) is to be found in the correspondingly greater (contingent) personal tax liability of the shareholders in the sharetrading company that results from its avoidance of corporate tax.

So profitable was this operation that even where a target company contained only cash that would in any case entirely escape personal taxation in the case of a liquidation (e.g. cash resulting from capital profits at the corporate level) the stripping of such profits by a corporate sharetrader was presumably the preferred method of disposal.

When recourse to the omnibus tax avoidance section of the Income Tax Assessment Act, the former section 260, was denied to the Commissioner by the courts in such cases, the initial response of the legislature was to deny the section 46 tax rebate to the corporate dividend-stripper. This legislation avoided the additional revenue loss identified above but entirely failed to come to grips with the avoidance of the personal tax on distributions.

While Part IVA of the present Income Tax Assessment Act appears, for the time being, to have made such operations a thing of the past, the fundamental design defect of the system remains. Corporate sharetraders are still able to buy shares in public corporations cum-dividend, hold them until the dividend is paid, receive section 46 treatment for the resulting dividend and, after selling the shares ex-dividend, receive a deduction for what will (at least on average) be a realised capital loss. This transaction is indistinguishable from the private company dividend-stripping operations described above, except that transactions costs will loom larger in relation to the gains involved.

The "loop-hole" revealed by schemes of dividend-stripping could be attributed to the absence of generalised capital gains taxation. Notice, however, that if such a capital gains tax were to apply to all corporate dealings in shares it, in conjunction with the section 46 rebate, would place all corporations in a position to profit from (even limited) dividend-stripping operations. Consistency with the principle of section 46 would suggest that corporate sharetrading gains and losses should be exempted from tax but this course of action would in turn raise numerous other design problems. More fundamentally, it might be argued, it is the failure of the classical system to impute corporate income to shareholders as it is derived by the company that lies at the heart of the dividend-stripping problem.

*E. Homemade Full Loss-Offset and "Bottom of the Harbour"*

Tax law is as inclined to deny taxpayers full loss-offset as economists are inclined to recommend it. Why the difference?

At least two considerations seem to be involved. The first is the attempt by the Revenue to protect itself against operations which by, for example, claiming as a business expense what is in fact simply private consumption, maintain a perpetual tax loss situation. Of course, the Commissioner must also attempt to police such activities in the case of businesses registering positive taxable incomes. However,

there seems to be an especial reluctance on the part of the Revenue to incur cash rather than mere opportunity costs. Secondly there is the desire to limit opportunities for tax arbitrage across different marginal tax rates that arise out of the failure of the Income Tax Act to properly tax economic income.

The failure of the tax law to provide cash payments to companies with tax losses, the fact that such losses can be carried forward only for a maximum of seven years, and the fact that no interest factor is applied when this is done, provides taxpayers with an obvious incentive to find other means of consolidating profits and losses. Certain schemes devised to further this end ultimately led, in Australia, to the notorious "bottom of the harbour" episode.

Initially, it appears, companies with current-year losses would be acquired by companies showing current-year profits in a quantity sufficient to largely extinguish the latter. The failure of the tax law to apply a nominal interest factor to nominal tax losses carried forward makes the profitability of such tax-loss consolidation greater the higher is the rate of inflation. Moreover, the investment allowances and schemes of accelerated depreciation, introduced to offset in a rough and ready way the higher effective tax rates on real company income which result from inflation, presumably placed more companies in a tax loss situation. Account should also be taken of the need to make use of the tax losses created by the dividend-stripping operations (and by the related "Curran[7] schemes") described earlier.

In this situation the emergence of promoters who would acquire, for purposes of profit and loss consolidation, companies with current-year tax liabilities and others with accumulated tax losses, was a natural enough outcome of market specialisation.

Ultimately, however, some promoters dispensed with the step of injecting losses into companies with current year profits.[8] Instead these companies would simply be rendered incapable of meeting their tax liabilities via some device such as a collapsible loan in favour of an associate of the promoter. Such companies were then consigned to the deep; or, more accurately, on-sold to, often unsavoury, "straw" purchasers.

Company and undistributed-profits tax revenue well in excess of $600m has been estimated to have been evaded by these means. Such operations of course can be, and apparently have been, used also to evade other corporate tax liabilities, such as those in respect of sales and payroll tax.

The Australian Parliament in 1982 passed the Taxation (Unpaid Company Tax) Acts[9] to recover from the vendor shareholders most of the company and

7 *Curran* v. *Federal Commissioner of Taxation* (1974) 5 A.T.R. 61.

8 To the extent that necessity is the mother of invention, it may be significant that from the 1978-79 fiscal year, deductions for unused tax losses generated in earlier years by a number of tax avoidance schemes, including dividend-stripping and Curran schemes, were disallowed. This action can be presumed to have had the potential to inflict severe capital losses on many promoters.

9 Taxation (Unpaid Company Tax) Assessment Act 1982, Taxation (Unpaid Company Tax Vendors) Act 1982, Taxation (Unpaid Company Tax — Promoters) Act 1982, Taxation (Unpaid Company Tax) (Consequential Amendments) Act 1982 (Aust.).

undistributed-profits tax evaded by these means (the remainder is intended to be recovered from the promoters).

The various Taxation (Unpaid Company Tax) Acts, both those that passed the Senate and those Bills that did not, nicely illustrate the ambiguity that surrounds the liability to personal income tax on distributions under the classical system.

Proponents of tougher legislation argued that the existing tax recovery legislation was defective in failing to take into account the personal tax liabilities to which the shareholders in the target companies would have become subject had the company tax been paid and the resulting accumulated post-tax profits distributed. Opponents of the legislation countered that there was no presumption that such profit distributions would in fact have taken place.

The Labour Government's first (May 1983) Taxation (Unpaid Company Tax) Amendment Bill sought to make vendor shareholders (in cases caught by the 1982 Taxation (Unpaid Company Tax) legislation liable for personal tax on a deemed dividend equal to the entire accumulated profits of the company. Moreover it did this even where these profits were not revenue-profits but were attributable to a capital-profits reserve. While such profits would have been taxable had the distribution been made by a continuing enterprise, they would, as we have already noted, have escaped personal tax had the company been liquidated.

At the same time the proposed legislation removed shareholder liability for undistributed-profits tax (due at the rate of 50 percent of 20 percent of the post-company-tax profits). The second (August 1983) attempt by the Labour Government to capture some tax in respect of the contingent personal tax liabilities of the vendor shareholders restricted the deemed dividend to the after-tax income of a company in the year in which it was stripped of pre-tax profits. Neither of these Bills nor the subsequent November 1983 Bill secured the assent of the Senate.

*F. Tax Shelters*

The political bargains that shape the tax system invariably accord certain real investment opportunities more favourable income tax treatment than others. Notorious examples are provided by the ability of state and municipal governments in the United States to finance their activities by issuing tax exempt bonds and, in Australia, by the exemption of income from gold mining. Only slightly more subtle are those investment opportunities whose present and future tax deductions, when capitalised at the net-of-tax internal rate of return, are below the present value of economic depreciation, similarly capitalised.

At equivalent gross-of-tax rates of return such investments will enjoy a tax-preferred status relative to those receiving approximate comphensive income tax (C.I.T.) treatment. Thus a *marginal* investment which may be treated as expenditure for tax purposes (in lieu of economic depreciation) shares the equivalence between its gross- and net-of-tax rates of return that obviously characterises one whose income is tax-exempt. Let the present value of the tax write-offs exceed the cost of the investment and the investment will be negatively taxed in the same sense that its pre-tax rate of return will lie below its post-tax rate of return, making the effective tax rate negative.

Thus while net-of-tax rates of return are likely, at least in an ex ante sense and on average ex post, to be bounded below by zero, gross-of-tax rates of return recognise no such restriction — being constrained only by the capacity of the legislature (or in our part of the world the executive or some subset thereof) to think big.

The introduction of tax preferences will divert investment towards the sheltered activity with the result that its gross-of-tax rate of return will fail. If all investors faced a common marginal tax rate of 30 percent in an economy where the gross-of-tax rate of return provided by normally-taxed investments was 10 percent, the reallocation of investment towards an effectively tax-exempt activity (the case I shall here analyse) could be expected to proceed to the profit point where, at the margin, the shelter yields before tax only the 7 percent that unsheltered investments offer net-of-tax. In such a situation investors would no longer have a particular tax preference for the shelter and none of the tax benefit would accrue to those investing in it, despite the superficial appearance of "tax avoidance" on their part.

Notice, moreover, that this process of competitive adjustment should not necessarily be assumed to be a protracted one. While, for example, dud films take time to produce, the rents earned by movie directors etc. are capable of adjusting with considerable speed.

Where different investors face different marginal tax rates, the tax-sheltered investment will be most valuable to those in the highest marginal tax brackets. In this case competition will reduce its gross-of-tax rate of return to the point where it provides a net-of-tax rate of return to high bracket taxpayers equal to that obtainable on alternative unsheltered investments.

Thus in the example considered above if there are sufficient investors located in the highest tax bracket of, say, 60 percent, a gross-of-tax rate of return as low as 4 percent will be required to leave them indifferent between the tax-sheltered investment and regular investmnt opportunities.

The excess returns offered by the tax shelter are smaller for low than for high tax-bracket investors from the outset. In equilibrium with its gross-of-tax rate of return reduced to only 4 percent the sheltered activity will be unambiguously unattractive to taxpayers in lower tax brackets who are able to earn higher net-of-tax rates of return than this elsewhere. "Tax avoidance" will be concentrated among the wealthy.

Should such tax-sheltered assets be available in sufficient quantities to require their absorption by taxpayers in the next highest tax bracket of, say, 50 percent, equilibrium will require the gross-of-tax rate of return on the sheltered asset to settle at 5 percent. Since its gross-of-tax rate of return is no longer competed down to such low levels the tax-favoured activity receives less encouragement. The other side of this coin is that some of the tax benefit will now stick with those previously in the highest tax bracket.

Since the spate of anti-avoidance legislation in Australia in recent years has made alternative avenues of tax avoidance far more hazardous, it is not surprising that schemes involving tax-favoured investment opportunities have received

greater attention among potentially high tax bracket individuals.[10] Such areas include gold mining where income is tax exempt, and activities such as forestry investment, film production, high technology ventures, capital-intensive horticultural farm land development, livestock breeding etc. where allowable rates of deductibility of capital expenditure are well in excess of economic depreciation or where development costs can be treated as revenue items rather than receiving proper cost capitalisation. It can be conjectured that equilibrium gross-of-tax rates of return in these sectors will be further depressed as a consequence of the Commissioner's success on other tax-avoidance fronts.

*G. Leveraged Tax Shelters*

"Abusive" tax avoidance is often argued to occur where a taxpayer borrows to finance his or her investment in a tax-sheltered investment — and the resulting debt service charges are freely deductible against tax.

Thus Bossons[11] maintains that

> . . . tracing rules and interest deductibility restrictions are essential to protect the tax base from the substantial erosion otherwise caused by the combination of unrestricted interest deductibility and tax sheltered assets.

In the same way the U.S. Treasury[12] has argued that —

> When investments benefitting from tax preferences are debt-financed, the preferences generally are magnified. . . . As long as high-income investors are able to borrow funds to acquire investments which pay tax preferred income, and deduct currently (sic.) the interest expenses incurred to borrow those funds, tax equity will suffer and the marginal tax rate needed to raise a given amount of revenue will be higher than would otherwise be required.

The attempt to limit the tax deductibility of interest incurred to finance tax-sheltered investments creates obvious conceptual and administrative problems. Attempts to apply tracing rules can typically be avoided by minor rearrangements of financing transactions designed to prevent an investment on which interest deductibility would be denied from being associated with the debt incurred to finance its acquisition. Only for taxpayers without existing unsheltered assets against which they could readily borrow could such rules be expected to be unambiguously effective.

Moreover, while the prevailing opinion, that constraints should be placed on highly-geared tax shelter investments, has found expression in the tax laws of many countries, the analysis supporting this conclusion[13] when applied, as it commonly is, to other than *personal* tax shelters is, in my view, simplistic; concentrating as

10 Cf. Reithmueller M. "Commissioner's Views on the Technical Issues Posed in Tax Shelter Situations" *Workshop on Tax Planning, Avoidance and Evasion* (Faculty of Law and Centre of Policy Studies, Monash University, Melbourne, 1984).

11 Bossons J. "Indexing for Inflation and the Interest Deduction" (1984) 30 Wayne L.R. 951.

12 United States Treasury, supra n.1, 140-141.

13 Cf. Meade J.E. et al. *The Structure and Reform of Direct Taxation* (Allen and Unwin, London, 1978) 55-56 and 68-70; Dixon D. A. "A Consideration of the Theory of the Deductibility of Interest Payments and the Personal Tax Base" (1968) Economic Record Bossons, supra n.9, 946-952.

it does on only the taxes avoided by a levered investor while showing a totally unwarranted disregard for the implications of capital market equilibrium.

Thus while the distinctly different tax treatment of owner-occupied housing in the U.S., where mortgage interest is tax deductible, and in Australia, where it is not, can easily be shown to have substantive effects, quite different considerations apply to tax-sheltered assets yielding pecuniary returns.

To the extent that equity-financed investments will in any case eliminate the excess net-of-tax returns to a tax shelter, laws which allow such investments to be debt-financed, will normally have no further effect on resource allocation and need have no implications for tax revenue despite the spectacular avoidance of taxes by debt-financed tax shelter investors on which the conventional view rests its case. Although the argument is an elementary one, considerations of space preclude its further development here.

## III. CAPITAL GAINS TAXATION

The Australian Income Tax Assessment Act does not attempt an exhaustive definition of "income". Judicial interpretation of this concept has therefore been necessary and it has proceeded on the basis that, for the purposes of the Act, income must be[14]

> determined in accordance with the ordinary concepts and the usages of mankind, except in so far as the statute states or indicates an intention that receipts which are not income in ordinary parlance are to be treated as income, or that special rules are to be applied for arriving at the taxable amount of receipts . . . .

The economist's concept of "income" (i.e. "economic income" in the Haig-Simons sense) has evidently been seen by the judiciary as one of the *extraordinary* concepts and usages of mankind (I recognise that less charitable interpretations are possible) since the judicial notion that "income" should embrace only receipts that are on "revenue account" to the exclusion of many realised, much less accrued "capital gains" is strikingly at variance with the economist's insistence that income should be taken to include both on an equal footing.

The result of the sharp distinction drawn for tax purposes between income gains and capital gains has been that (with minor exceptions) the only categories of capital gains that are treated as income for tax purposes are gains on trading stock, and (via section 25A) capital gains on items which, while not trading stock, have nevertheless been acquired for the *purpose* of profit-making by sale. In addition, estimated capital losses on fixed capital equipment are, by way of depreciation deductions, removed from the tax base.

The obvious weakness of this approach lies in the manner in which systematically appreciating assets (e.g. land, timber, livestock, minerals etc.) and assets which can artifically be made to appreciate (e.g. zero coupon bonds) are liable to be significantly under-taxed unless some clear-cut purpose of profit-making by sale can be established. Where such a purpose can be argued to be incidental to the holding of the asset, as it normally can, liability to tax is avoided.

14 *Scott* v. *Commissioner of Taxation* (N.S.W.) (1935) 35 S.R. (N.S.W.) 215, 219.

Similarly, assets which exhibit a periodic time path of income can in the absence of a capital gains tax, be profitably transferred between taxpayers on different marginal tax rates (ideally with the high bracket taxpayer taking the deductions and the low bracket taxpayer the income). Under an ideal economic income tax profitable tax arbitrage of this kind would be impossible.

Inevitably therefore, the absence of comprehensive capital gains taxation creates a significant class of tax-sheltered assets. The implications of such categories of assets for economic efficiency and the progressivity of the tax scale have been discussed above.

There exists a widespread expectation in Australia that some form of comprehensive capital gains tax will emerge as a part of the tax reform package that emerges from the "Tax Summit".

While the introduction of such a capital gains tax will no doubt owe a good deal to the respectability that public finance theorists in the Haig-Simons tradition have given this form of taxation it is almost certain that the tax finally adopted will deviate dramatically from the comprehensive, indexed, accruals tax that is the theoretical ideal.

Real world capital gains taxes are (almost everywhere) flawed by features such as their failure to tax capital gains on accrual, their failure to exempt purely nominal gains due to inflation, and their failure to provide proper loss offsets. Moreover other design faults of the tax system, such as the failure to allow income averaging under a progressive marginal rate structure, can become more serious in the presence of such a tax.

In recognition of these weaknesses, further provisions (themselves unsatisfactory if viewed in isolation) such as the partial inclusion of capital gains in income, the partial or total exemption of certain critical assets (such as owner-occupied housing), the introduction of roll-over privileges, and in some cases the waiving of liability at death, are part and parcel of capital gains taxes around the world.

At some cost of simplicity it ought however to be possible to design a capital gains tax that avoids the worst features of those that we know at a distance. Two aspects seem to be absolutely critical to the design of a sensible capital gains tax: propert inflation indexation and "accruals equivalent" taxation. Were these to be incorporated in such a tax many of the other unsatisfactory features of such taxes, noted above, could in all probability be dispensed with.

### *A. Inflation Indexation*

Unless it was intended that true money income should be the tax base even in times of inflation (an unattractive option analysed in the section on tax indexation) the exclusion of purely nominal capital gains from the tax base is obviously required by considerations of equity and efficiency alike. Indexation of the cost basis of assets using tables of general price index factors recognised for tax purposes does not seem an impossibly complex matter.

*B. "Accruals Equivalent" Taxation*

The valuation problems posed by the taxation of capital gains and losses as they accrue and the political unpopularity of taxation based on imputed income, will inevitably mean that the tax will be levied at realisation. (The only significant example of accruals taxation appears to be the Canadian Indexed Security Investment Plan covering share trading gains and losses).

It is however possible, in principle, to tax capital gains and losses on realisation but to do so on an "accruals equivalent" basis. To do this accurately would of course reintroduce all of the valuation problems associated with taxing capital gains as they accrue. There is much to be said, however, for basing the calculation of taxable profit on the arbitrary assumption that the rate of increase of the (real) price of the asset has been constant over the holding period. The accrued capital gains imputed on this basis would then be capitalised at a post-tax real rate of interest determined by the marginal tax rate of the taxpayer and included in the tax base in full.[15]

Though seemingly complex, this rule-of-thumb has the advantage that it would largely remove the "lock-in" effect which is otherwise one of the major disadvantages of capital gains taxes. The "lock-in" effect of course arises because, when the liability for tax is based simply on the algebraic difference between the sale and purchase prices of the asset, the taxpayer benefits from deferral of tax (he or she in effect receives an interest-free loan from the government equal to the deferred tax).

This tendency to "lock-in" portfolios is a major efficiency cost of real world capital gains taxes, and one which is exacerbated by the roll-over provisions and provisions which enable the avoidance of liability at death, that such taxes often contain (cf. the U.S. capital gains tax).

Real world capital gains taxes appear never to provide for full loss-offset (typically capital losses may only be offset against capital gains and there are inadequate carry forward provisions). This represents another serious deviation from the efficiency (and equity) ideal which may be hypothesised to arise out of the concern of treasuries that taxpayers will exploit the ability selectively to realise losses when these can be offset against other income. Taxation of capital gains on an "accruals equivalent" basis would obviously significantly reduce the incentives for selective realisation of losses.

Moreover, if the tax is not levied on an "accruals equivalent" basis, with the result that the effective tax rate decreases as the time to realisation lengthens, taxpayers wishing to consume a portion of accrued capital gains, or to adjust their portfolio somewhat, will be considerably advantaged by having a widely diversified portfolio since they will then more readily be able to generate a pattern of realisations which shows a zero net capital gain. Since transactions costs make portfolio diversification an increasing function of portfolio size, a capital gains tax which is not levied on an "accruals equivalent" basis can be more readily postponed (and thereby partially avoided) by the rich than by the poor. Let the tax be voided at death, as in the U.S., and the very wealthy may be able to avoid it in its entirety:

15 Meade, supra n.13, 133-135.

an outcome that is a far cry from the expectations held by those, such as the Australian Council of Trade Unions, who presumably see the capital gains tax as a promising means of soaking the rich.

Other inequities exacerbated by a capital gains tax, such as those caused by the bunching of tax liabilities under the progressive personal tax scale, will, for precisely the same portfolio diversification reasons, be more easily avoided by the wealthy than by the poor. Indeed, while the less well-off are likely to be forced into higher marginal tax brackets by occasional asset realisations, those of the wealthy with large and diversified portfolios but fluctuating incomes, may be able to make profitable use of the capital gains tax by employing it to smooth and thus diminish their tax liabilities.

## IV. TAX INDEXATION

Indexation of the business income base for inflation remains one of the most urgent aspects of tax reform. The distortions caused by the interaction of inflation and the traditional historical cost income tax base are serious at even moderate rates of inflation; at the rate of inflation to which we have become accustomed they are dramatic.

While one might have thought it a simple matter to devise a logical set of principles on which to base the indexation of the existing tax base for inflation, as indeed it is, the debate on the appropriate form of adjustment has become thoroughly confused because certain well publicised indexation proposals have attempted simultaneously to import into the tax system various "real" reforms totally extraneous to the indexation question.

In order to separate the logically distinct issues of inflation indexation and "real" tax base reform I shall proceed on the assumption that the provisions of the Income Tax Assessment Act 1936 as they existed prior to the onset of high rates of inflation provided an adequate measure of real economic income in a non-inflationary setting; a proposition which is supportable to the extent that the tax treatment of trading stocks would then approximate the taxation of real capital gains and losses on an accruals basis and the former schedule of allowable depreciation rates approximated true economic depreciation.

Consider the current cost accounting (C.C.A.) definition of real income. Its adoption for tax purposes would remove (real) capital gains and losses on revenue items from the tax base and would adjust depreciation allowances in line with realised movements in the prices of specific capital assets. From the standpoint of "real" tax base reform neither of these changes to the historical cost tax base has anything to recommend it.

Both the Haig-Simons and the C.C.A. concepts of income define it as the amount which could be consumed or distributed over a period by an individual or a business while maintaining the real value of the entity's wealth unchanged. However, where real wealth is defined by reference to a general index of prices, and therefore by reference to command over goods and services in general, in the case of the Haig-Simons definition, the C.C.A. definition insists that it should be defined in terms of the particular bundle of assets that happens to be owned by the entity in question.

Why the C.C.A. definition should be thought to form a suitable basis for accounting records is impenetrable to the economist. That it has nothing to recommend it as a basis for taxation follows immediately from the fact that while taxation on a Haig-Simons basis will drive a uniform wedge between the expected gross and net rates of return on all assets regardless of expected movements in their relative prices (and will thus ensure that asset valuations are independent of an investor's (time independent) tax rate) taxation on a C.C.A. basis will systematically under-tax the expected return on assets whose prices are expected to rise relative to the general price level and overtax those whose prices are expected to fall.

The indexation proposals contained in the Richardson Report[16] were based on a C.C.A. definition of business income. In Australia the Mathew's Report,[17] while also recommending C.C.A. indexation adjustments for stocks and depreciation, explicity recommended against the C.C.A. adjustment for nominal capital gains and losses on debt and failed to suggest any alternative method of removing the purely nominal component of interest from the tax base.

The Australian Treasury[18] argued strongly against partial indexation of this kind, taking the position that since —

> . . . our taxation system as a whole centres on taxation of money income, not real income . . . it is difficult to see that there is any special flaw in the way taxation is levied on businesses or that it involves the taxation of more than true money income.

The Treasury position was and remains deficient in at least two respects. In the first place the Treasury argument that no changes to the historical-cost tax base are required for "true money income" to form the basis of taxation is simply wrong. Secondly the Treasury position fails to properly acknowledge that both under the historical cost tax base and with a tax base given by true money income, effective rates of taxation of real income will, at unchanged scheduled rates of taxation, rise dramatically with the rate of inflation.

Consider the first of these questions. While the Treasury was correct to maintain that by the standard of "true money income" no particular inflation adjustment is needed for trading stocks it wrongly implied that the same was true for depreciable assets. In fact what would be required to maintain a true money income tax base in the face of inflation is first that the historical cost depreciation allowance of any year be indexed for the movement in the general price level since the plant was installed, and second that the product of the rate of inflation and the indexed undepreciated capital stock, be added to the tax base.

While the first of these adjustments reduces the tax base, the latter increases it and, contrary to the Treasury view, there is no presumption that the two adjustments will offset one another in present value terms over the life of the plant.

16 *Report of the Committee of Inquiry into Inflation Accounting* (Government Printer, Wellington, 1976).

17 Mathews R.L. et al. Report of the Committee of Inquiry into Inflation and Taxation (Australian Government Publishing Service, Canberra, 1975).

18 Australain Treasury *Income Tax Treatment of Stocks and Depreciation under Inflationary Conditions* (Australian Government Publishing Service, Canberra, 1975) 11.

Indeed in the case where assets depreciate exponentially over time and inflation proceeds at a steady rate, the reduction in the tax base implied by the indexation of depreciation allowances must necessarily fall short of the increase in the tax base implied by the taxation of the purely nominal appreciation of the value of the capital stock. It follows that a system of historical cost depreciation is in fact "too generous" by the standard which takes true money income as the tax base (a point which can readily be appreciated by considering the case of a non-depreciating asset whose investment allowances are in any case zero).

The kind of bias that steady inflation imparts to the choice among alternative assets under the historical cost taxation system may be summarised as follows: to provide a given post-tax real rate of return the pre-tax real rate of return must rise most for investment in rapidly circulating trading stock, where it is approximately true that the nominal appreciation of the stock is included in the tax base. For example, to provide a post-tax real rate of return of 5 percent, at a scheduled tax rate of 50 percent and an inflation rate of 10 percent, the pre-tax real rate of return on investment in stocks must rise to 20 percent implying a real effective tax rate of 75 percent. The *slower* the rate of stock turnover, the *smaller* is the rise in the effective tax rate implied by inflation.

For durable assets the required rise in the pre-tax real rate of return and thus the rise in the real effective tax rate, resulting from the failure to index depreciation allowances, is less than for rapidly circulating trading stock but is larger the more rapid the rate of economic depreciation of the asset. For fixed assets which depreciate at 25 percent per annum a pre-tax real rate of return of 16.25 percent would be required to give a real post-tax rate of return of 5 percent (again at 50 percent tax rate and with a steady 10 percent rate of inflation). The implied effective tax rate is therefore 69 percent. For fixed assets which depreciate at only 10 percent the corresponding required real rate of return pre-tax is 14 percent, giving an effective tax rate of 64 percent. Finally for non-depreciating assets, whose depreciation allowances are in any case zero, the impact of inflation is also zero and the effective tax rate remains at 50 percent.

Suppose then, that the tax base were to be adjusted so as to approximate true money income for investment in durable assets; as it currently does for investment in trading stocks. While such a tax system would remain neutral in the sense that effective rates of tax would not differ among alternative business investment opportunities, the effective rate of taxation on the real return on all forms of investment would then rise with the rate of inflation in the dramatic manner indicated above for investment in trading stocks. It is precisely this aspect of the present tax system which is so strongly emphasised by businessment who deplore the taxation of "ficticious" gains in times of inflation and which the Australian Treasury position chooses to ignore.

If the tax system were indeed to be modified so as to be fully based on money income in times of inflation, scheduled rates of taxation on income from capital would need to be reduced in an offsetting manner if real effective tax rates were to remain independent of inflation. One could in theory imagine a tax system which adjusted the corporate tax rate for inflation in this way and defined an

inflation-dependent exclusion rate for non-wage income at the personal level. While the difficulties involved in separating wage and non-wage components of income in unincorporated enterprises or for private companies make such exclusion rate adjustments seem hopelessly impractical, it should be noted that the recent U.S. Treasury tax reform proposal suggests treating interest income in just this way.

The preferred path is clearly comprehensively to adjust the historical cost base to bring it into line with real economic income. This would require first, an adjustment to the cost of trading stock to correct for inflation. Second, historical cost depreciation allowances would need to be indexed for inflation, and third the capital gains and losses on debt denominated in money terms that are due simply to inflation would need to be excluded from the tax base. The theoretically correct price index to employ in making all three of these adjustments, given that traditional historical cost depreciation allowances can be assumed satisfactorily to measure economic depreciation in the absence of inflation, will be a broadly based consumer price index.

The accounting system that proposes this set of adjustments to correct for inflation is Current Purchasing Power (C.C.P.). While it is undoubtedly logically inferior for purely accounting purposes to systems of relative price level accounting such as Continuously Contemporary Accounting (C.O.C.O.A.), Current Purchasing Power has the virtue of avoiding the difficult valuation problems posed by the latter systems; valuation problems identical to those that would be faced by any attempt to tax capital gains and exempt capital losses on durable assets on an accruals basis.

The Current Purchasing Power adjustments therefore fit neatly into place with the existing tax system. In Australia tax base adjustments based on these principles were given some support by the Campbell Report. In New Zealand they have been advocated by the McCaw Report.[19]

Both in Australia and elsewhere, governments have thus far failed to respond to sustained inflation by adjusting the tax base in a neutral fashion. That is to say they have neither made those adjustments to the taxation of real assets necessary to preserve money income as the tax base nor have they adjusted the tax base so as to approximate real income.

Instead the common practice has been to leave nominal interest payments taxable and nominal interest receipts deductible, as required by a money income base, while at the same time introducing ad hoc tax relief in the form of investment allowances and schemes of accelerated depreciation for fixed capital. In the Australian case, a partial trading stock adjustment based on one half of the movement in the Consumer Price Index was introduced in 1976-77 and withdrawn in 1979-80. The relief from the weight of taxation provided by such expedients has been distributed in a manner which can be presumed to have been highly discriminatory among alternative forms of real investment.

19 McCaw P.M. et al. *Report of the Task Force on Tax Reform* (Government Printer, Wellington, 1982).

Moreover, even if the tax relief given to real investment could be argued to have been that required to preserve real income as the tax base in some rough and ready sense, the anomalous treatment of interest payments and receipts has introduced a whole new set of distortions into the tax system.

To illustrate the nature of these biases in the simplest possible way I shall consider an economy specified after the fashion of that used earlier in the paper to analyse the consequences of the availability of tax-sheltered investments. Real investments yield a fixed rate of return gross of tax of 10 percent and are held by two classes of investors, "poor" low bracket taxpayers on a marginal tax rate of 30 percent and "rich" high bracket taxpayers facing a 60 percent marginal rate. Nominal interest payments and receipts are taxable and deductible to borrowers and lenders at their respective marginal tax rates. The prior existence of tax-sheltered investments is ignored.

In a non-inflationary situation post-tax yields will be 4 percent for high bracket investors and 7 percent for those in the low tax bracket. The existence of consumption loans is ignored so that nominal debt, which is taken also to yield 10 percent, is essentially a redundant asset. Thus while some investors may, if they so choose, borrow to increase their holding of real assets above the value of their net wealth while others lend, thereby holding nominal debt rather than real assets, such transactions hold no advantages to either party and as can be readily checked, have no tax consequences. The existence of such debt as is observed can be rationalised on the basis of minor transactions costs which provide the basis for a repackaging of claims to the returns from real assets.

We shall now introduce a fully anticipated rate of inflation of 10 percent into this scenario, and analyse the adjustment of the economy in three polar cases. In the first the government adjusts the tax base in the manner required to preserve real income as the basis of taxation. In the second it makes those adjustments necessary to retain money income as the tax base, while in the third it taxes only the real return to real assets but continues to recognise nominal interest payments and receipts for tax purposes.

This final case is intended to provide an elementary illustration of the consequences of differentiating between real and financial assets in the manner advocated by the Mathews,[20] and Sandilands Reports.[21] To the extent that accelerated depreciation, investment allowances etc. can be regarded as ensuring in some very approximate and aggregative sense that only the real income of real assets is taxed, this third case might also be taken to provide some insights into the distortionary interaction between inflation and taxation under the present tax system.

*A. Real Income Base*

If the tax base were indexed on a comprehensive real income basis, the post-tax real rates of return on real assets would remain at 4 and 7 percent for high and low bracket taxpayers respectively. While the nominal interest rate would rise to

20 Mathews, supra n.17.
21 *Great Britain. Inflation Accounting Committee Report* Cmnd. 6225 (H.M.S.O., London, 1975).

20 percent to compensate lenders for the anticipated erosion of the real value of their nominal holdings of debt, this inflation premium is ignored for tax purposes so that the post-tax real rate of return on debt and the post-tax cost of debt finance would remain equal to the rate of return on real assets for each category of taxpayers. Apart from the consequences of the inflation tax on the real cash balances of the public and the banking system, which shall be ignored, anticipated inflation has induced no (new) distortions.

*B. Money Income Base*

Consider next the consequences of the money income base favoured (but not understood) by the Australian Treasury. With depreciation allowances indexed and the nominal capital gains on fixed assets taxed, holders of real assets will be charged tax on the nominal yield of their real investments. Post-tax real rates of return therefore fall to *minus* 2 percent for high bracket investors. That is they will be taxed at 60 percent on their 10 percent real return *and* on their 10 percent nominal capital gain leaving them with a nominal after-tax rate of return of 8 percent from which must be deducted the 10 percent return needed to hold their real wealth constant. Low tax bracket investors by the same logic will receive 4 percent after tax.

The post-tax real rate of return on debt must match that on real assets for each class of investors. Since nominal interest is taxable and deductible under a money income base, this will be achieved by the same rise in the nominal interest rate to 20 percent as occurred in the real tax base case. As with a real tax base, inflation does not distort the choice among assets.

However, in conformity with the rule that under a money income base, effective tax rates on business income are equal to the product of the scheduled rate and a factor equal to the ratio of the nominal to the real gross of tax yield on investment, there has been a swinging increase in the effective tax rates on *real* income. These rates double for all investors — rising from 60 to a confiscatory 120 percent for high bracket investors and from 30 to 60 percent for those on a "low" marginal tax rate.

While the simple expedient of halving all scheduled tax rates would restore the status quo so far as investors are concerned, it can be conjectured that the Treasury might at this juncture pause to consider the consequences of this for the taxes it is collecting on wage incomes. Here effective tax rates have of course remained unchanged, since the Treasury, no doubt for "political" reasons, forgot, in 1975, to recommend that, in order to preserve the ideal of true money income as the tax base, wage earners must be taxed not only on their wage income but also on the accrued nominal capital gains on their entire human capital.

*C. Mixed Real Income/Money Income Base*

This case is the most analytically interesting of the three. Real income is adopted as the tax base for the income from real assets so that, just as the proponents of C.C.A. indexation desire, real post-tax rates of return are preserved at their non-inflationary levels of 7 and 4 percent according to the tax bracket of the investor.

Nominal interest receipts however remain taxable and nominal interest payments deductible. If we now compute the nominal interest rate required to leave each category of investor indifferent between holding real assets and nominal debt, we find that a nominal interest rate of 35 percent is required to satisfy investors in the 60 percent tax bracket while one of "only" 24.3 percent is needed by those taxed at 30 percent. Since the nominal interest rate cannot simultaneously settle at both of these levels something has to give.

Suppose, purely for the purposes of the argument, that an intermediate nominal interest rate of, say, 30 percent were established in the market. Low tax bracket investors would find that they could earn 11 percent real on bonds which beats the 7 percent provided by real assets. For high tax bracket investors on the other hand, bonds, despite their high nominal interest rate, would show a return of only 2 percent and thus be inferior to real investments which offer them 4 percent. The other side of this coin of course is that, with nominal interest tax deductible, the real cost of borrowing net of tax faced by high bracket investors is also only 2 percent.

The financial incentives are plain. Bonds are now over-taxed as an asset and under-taxed as a liability. But, as seen when discussing tax shelters, under-taxed securities must gravitate into the portfolios of high bracket taxpayers and over-taxed securities into those of the low. Clearly the desire of low tax bracket tax payers to abandon real assets in favour of bonds will be happily accommodated by the eagerness of high bracket taxpayers to gear up to invest.

Where will this process end? In the present rock-bottom-simple model where debt, when accorded neutral tax treatment, exists only to allow minor transactions costs to be avoided, the limiting case, in which such costs are for simplicity neglected, will involve the total abandonment of real assets by low bracket taxpayers in favour of debt issued by high bracket taxpayers to finance their holding of the economy's entire stock of real assets.

The puzzle of the equilibrium interest rate can now be readily resolved. At our arbitrarily assumed interest rate of 30 percent, borrowing to finance real investment remains profitable for individual high tax bracket investors. Competition among them for the tax advantages provided by the issuance of debt must therefore raise the nominal interest rate to 35 percent, at which point their incentive to gear up still further will necessarily disappear.

Of course all this tax-induced shuffling of portfolios would in practice leave high bracket taxpayers considerably exposed to market risk — a factor which our simple model ignores. Conversely low bracket taxpayers would find themselves with portfolios which contain only price level risk, and if the debt that is issued is very short term, not a great deal of that. The repackaging of debt to look like equity for purposes other than the assessment of tax surely looks a promising financial innovation in this inflationary world — enter the leveraged lease and the non-recourse loan.

What changes in tax burdens are implied by inflation in this "Mathew's Report" world? Notice first that the "rich" are avoiding a great deal of tax. On the real

assets transferred to them by the "poor" they earn a taxable return of only 10 percent while on the debt used to finance this investment they receive tax deductibility for nominal interest payments of 35 percent per annum. Since the difference between these rates multiplied by their marginal tax rate of 60 percent is 15 percent we conclude that the "rich" have lightened their tax burdens by a full 15 percent of the value of their tax-induced borrowings.

The "poor" by contrast are saddled with a considerably higher tax burden, since where they previously only paid tax on a 10 percent rate of return on their wealth they now pay tax on the full 35 percent nominal rate of return on their holding of debt. Taking account of their 30 percent marginal tax rate we find that their annual tax payments have risen by an amount equal to a full 7.5 percent of their wealth.

It is evident that the tax assessability and deductibility of nominal interest under conditions of inflation has provided the "rich" with massive tax deductions and left the poor with vastly increased tax liabilities. Yet the temptation to moralise about this shocking redistribution of the burden of taxes from the "rich" to the "poor" should be severely resisted.

It is often only too quickly forgotten that it is not tax liabilities per se, but after-tax incomes that matter, and when these are examined it is readily seen that it is, alas, the "poor" not the "rich" who have gained — at least as we have told the story so far. The "poor", after all, now earn an after-tax real rate of return of 14.5 percent on their wealth, a dramatic improvement on the 7 percent they were receiving before. The "rich", by contrast, only end up earning on their net worth the same 4 percent real after-tax rate of return that they were permitted to enjoy before inflation set in.

The gains of the "poor" are of course matched precisely by the considerable losses of the Tax Commissioner and this class of individuals may therefore find themselves billed on some other tax margin as these Revenue losses are made good.

It is indeed ironic to reflect that the Mathews Report attempted to bolster its case for excluding the tax indexation of nominal interest from its package of proposals to index the income of real assets with the argument that[22]

> . . . the reduction in the tax base which would result from tax indexation of interest receipts and payments would be far too great to be acceptable in the light of the revenue effects likely to result from the other changes which are being proposed in personal and business taxation.

In practice of course there exist marginal tax brackets between those of 60 and 30 percent postulated by our illustrative example. Moreover, as we have seen, the tax deductions received by high bracket investors as they gear up under the inventives provided by the interaction of taxation and high inflation, will be very large. Thus it likely (and more likely the higher the rate of inflation) that as real

22 Mathews, supra n.17.

assets are transferred to investors in the highest tax bracket, their taxable incomes will fall sufficiently to leave them confronting a marginal tax rate lower than that which they would have faced in the absence of inflation.

Should this occur the nominal interest rate will rise less in response to any given rate of inflation, its increase being determined by an adjustment factor governed by the highest effective rather than the highest scheduled tax bracket. Middle income earners who were in the highest effective tax bracket will neither gain nor lose, while the "rich" (now defined as those who in the absence of inflation would have been taxed at higher marginal rates) will join the "poor" (now to be understood as those who remain below or enter the middle tax bracket) in gaining at the expense of the Consolidated Revenue.

To the extent that the tax base, as it is presently defined, approximates that analysed above one should expect to observe some of the consequences of its warped logic — very high nominal interest rates, unprecedentedly high real rates of interest on nominal debt *gross of tax*, the adoption of highly geared portfolio positions by those in, or potentially in, high tax brackets and the simultaneous disappearance of significant revenue collections from these same tax brackets.

*D. Specific Design Proposals*

Even where there exists an agreed theoretical basis for comprehensive tax indexation there remains a wide choice among alternative tax rules which arises because tax liabilities are assessed annually rather than continuously and because some forms of indexation adjustment may better serve the desireratum of simplicity in tax design. Thus the proposals of the McCaw Report and those of the U.S. Treasury, though having a common philosophical basis, differ markedly in their details.

The indexation of depreciation allowance for inflation is relatively uncontroversial. With respect to trading stock, however, the U.S. Treasury recommends indexed first-in-first-out for all items of stock while the McCaw Report suggested a cost of sales adjustment which involved multiplying the arithmetic average of opening and closing stock by the ratio of the price index at the beginning of the year to the arithmetic average of the price index at the beginning and at the end of the year. The product of the resultant average stock value and the percentage change in the price index (bginning of year base) would then be allowed as a deduction.

The adjustment proposed by the McCaw Report for monetary assets and liabilities was based on the same principles as that for trading stock with the inflation adjustment to be added to the tax base in respect of liabilities. The U.S. Treasury proposal on the other hand would exclude from the tax base a proportion of nominal interest receipts and payments; the proportion being given by the ratio of the inflation rate to a specified nominal interest rate. While somewhat arbitrary this proposal avoids the need to bring the outstanding stock of debt into the calculation.

Complications are introduced by the practice of the banking system and other financial intermediaries, of pricing financial services below cost in exchange for

the payment of lower rates of interest on deposits. So far as personal depositors are concerned this practice is identical to the barter transactions that characterise the "underground" economy. Under the U.S. Treasury proposal the choice of a nominal interest rate undistorted by such practices (e.g. some government bond rate) would reduce the incentives for such tax avoidance by more the higher the rate of inflation. If a "McCaw style" adjustment were adopted consideration might need to be given to imputing a "market" rate of interest to deposits for taxation purposes.

*E. Transitional Arrangements*

As has been earlier observed, it is one thing to design a set of tax reforms and another to devise a politically acceptable set of transitional arrangements capable of ensuring their acceptance and implementation. Such problems loom largest in areas where taxpayers have entered into long-term commitments predicated on the existing tax system.

The adjustment of the cost basis of trading stock for current inflation is a reform that would clearly arouse little opposition were it to be implemented immediately. Indexed depreciation could be provided retrospectively for the entire capital stock or prospectively for the entire capital stock from the date of implementation of the tax reform. Alternatively it could be applied simply to new investment occurring subsequent to the reform. The third of these options is that most likely to be favoured by governments (vide accelerated depreciation, investment allowances etc.).

The most difficult of the three inflation adjustments to introduce will undoubtedly be the nominal interest adjustment. The difficulty in this area arises where medium and long term fixed interest contracts are concerned. Here creditors will enjoy a windfall capital gain and debtors a corresponding capital loss as a result of indexation. In the commercial arena the problem is somewhat mitigated by the fact that the average maturity of borrowings has in fact shortened considerably with the onset of high inflation. Governments on the other hand will see themselves as losers in respect of their outstanding debt, much of it of long maturity. However, for the kinds of tax arbitrage reasons discussed above, the available evidence appears to suggest that in Australia the budget sector as a whole is presently a net loser from the tax treatment of nominal interest.[23] In the U.S. where personal borrowing is tax deductible the figures appear even more striking.

The U.S. Treasury proposal recommends that the transitional problem be handled by delaying the indexation of nominal interest for two years from the date of announcement of the reform. Hall and Rabushka[24] advance the novel suggestion, in the context of a radical cash flow taxation proposal under which the taxation and tax deductibility of interest would ultimately be abandoned entirely, that during the transitional period interest be taxable to the lender only where it has been claimed as deductible by the borrower. Their proposal provides for a small but growing exclusion rate for borrowers which it is argued will

23 Sieper E. "Campbell on Taxation" (1984) Australian Economic Papers 2.
24 Hall and Rabushka, supra n.4.

provide the latter with an incentive to approach lenders to renegotiate the terms of the loan to the mutual advantage of each. While the practicality of this proposal must be evaluated in the light of the flat tax on wage income and the cash flow of businesses at the rate of 19 percent advocated by them, it is one that even then would create considerable administrative problems. The administrative problems involved in distinguishing "old" from "new" debt instruments and applying different tax treatment to each are explored by Bossens.[25]

## V. REFORMING THE CLASSICAL SYSTEM

The classical system of combined corporate and personal taxation is notoriously unpopular among economists. In large part this is due to the simple fact that there exists no convincing analysis of its economic consequences. Not surprisingly, most of the thoroughgoing reforms of the classical system at various times advanced by economists are ones which would transform it into one whose effects elementary economic analysis is better able to comprehend.

### *A. Full Double Income Taxation*

One such proposal, recommended some years ago in Australia by Downing et al.,[26] would convert the system into one which unambiguously levies *double* taxation on economic income in the corporate sector. Under the Downing proposal corporations would lose deductibility for interest payments and would be subject to a prohibitive "super-tax" on profit retentions. This tax, which was to be superimposed on the corporate tax and was to be applied at the highest marginal personal tax rate, was intended to ensure, much after the fashion of the Division 7 tax levied on excess private company retentions, that *all* post-corporate-tax income was annually distributed to individual shareholders to be taxed again at the personal level.

At the same time the corporate tax rate was to be reduced to 25 percent (from the then rate of 40 percent for public corporations). To prevent this from reducing tax revenue collected on dividends remitted overseas (a considerable problem facing most radical tax proposals) withholding tax on such dividends was to be raised correspondingly.

Under this proposal the combined system of corporate and personal taxation would clearly penalise corporate investment and could therefore be expected both to discourage the corporate form of business organisation and, to the extent that close substitutes such as trading trusts could not readily be found, to restrict investment in those sectors of the economy where the benefits of incorporation were particularly great.

To the extent that capital is allocateed to equalise net-of-tax rates of return, the gross-of-tax rate of return in the corporate sector would have to rise relative to that in the unincorporated sector by enough to make the post-corporate-tax rate of return equal to the gross-of-tax rate of return in the unincorporated sector. Thus,

25 Bossons, supra n.9.
26 Downing R. I. et al. *Taxation in Australia* (Melbourne University Press, Melbourne, 1968).

if the latter were (say) 10 percent, a gross-of-tax rate of return in the corporate sector of 13.33 percent would be required given the 25 percent corporate tax rate contemplated by the Downing proposal. In effect the classic analysis of the impact of the corporate tax due to Harberger would then be fully applicable.

That this simple story does not fit the facts of the classical system is clear; since under that system, corporate interest payments *are deductible* from the corporate tax base, while corporate income is taxed at the personal level not as it accrues but only when it is *distributed.*

While the notion of doubly taxing income in the corporate sector makes for a tax system that is relatively easy to comprehend, it is not one that many would nowadays favour.

*B. Abolition of the Corporate Tax*

Some would argue that it would be preferable to dispense with the corporate tax altogether.[27] If this were to be done and no other changes were to be made, corporate equity income would clearly not be subject to economic income taxation at all. That is to say, because corporate income would be taxed only as and when it was distributed, the rate of return on corporate capital would be unaffected by tax in much the same way that investments in pension funds, the income of which is exempt while retained in the fund, accumulate at a gross-of-tax rate of return. Under this scenario the corporate sector could be expected to *expand,* rather than contract, relative to the unincorporated sector where economic income taxation applied.

Of course the pension fund analogy is not exact since subscriptions to such funds are tax deductible when made. To carry this principle over to the corporate arena, subscriptions to new share issues would have to be made universally tax deductible in the manner that subscriptions to mining company share issues have on occasion been in Australia.

The fact that corporate investment receives "pension fund treatment" only to the extent that it is financed by retentions can be conjectured to explain the relative insignificance of new share issues as a source of corporate finance.

Of course pension rights are not freely marketable so that the tax due when the funds are withdrawn cannot be avoided by selling those rights to a low or zero rate taxpayer. Corporate shares may however be freely exchanged; a fact that lies at the heart of the dividend-stripping schemes analysed earlier. The analytical difficulty posed by this aspect of the classical system is that of finding some plausible prediction of the capitalisation factor that the market applies to corporate equities in these circumstances.

Of course those who, like Shoup, ask whether we might not do well to abolish the corporate tax, intend also that a fully effective capital gains tax, levied at personal income tax rates, be imposed on corporate shareholders. Were this to be done corporate income would in fact bear the full weight of economic income

27 Shoup C. S. "Taxation of Capital Gains Abroad" [1984] Australian Tax Forum.

taxation at the personal level. To see this it is necessary only to notice that in such a case corporate share values could be predicted to rise by the full amount of any corporate retentions with the result that the entire income generated by the corporation would be annually subjected to personal tax.

The explanation for the somewhat puzzling fact that share values will rise by the full amount of retentions in the presence of a fully effective capital gains tax when they will not do so in its absence, is to be found in the fact that, with a capital gains tax in place, any subsequent distribution of those retained earnings will lower share values in a manner which will ensure that no net tax will then be due on those distributions.

A considerable obstacle that any such proposal to abolish the corporate tax would immediately encounter if applied to Australia, is to be found in the fact that, with dividend withholding taxes set at levels much lower than corporate tax rates and with the capital gains accruing to foreign investors unlikely to be taxable at all, a very large part of the $2 billion of corporate taxes presently collected from foreigners would almost certainly vanish.

### *C. Tax Integration*

The tax integration scheme put forward by the Campbell Report[28] represents a method of (in effect) abolishing the corporate tax, which at once avoids the need to rely on the capital gains taxation to capture the income tax due on corporate retentions and offers the hope that the equity income accruing to foreigners will yield something like the present quantum of tax.

The essence of this proposal is that the corporate tax be retained and levied as at present, but that the entire pre-corporate-tax income of corporations be imputed to shareholders each year (rather than being actually distributed to them as under the Downing proposal). This done (and rules governing inter-corporate distributions would obviously be needed so long as the corporate tax rate were below the maximum marginal personal tax rate) the corporate tax would be treated, after the manner of P.A.Y.E. deductions as a pre-payment of the personal tax due in respect of corporate income. Shareholders on marginal tax rates in excess of the corporate tax rate would be liable to pay additional tax, while (ideally) those facing lower personal marginal tax rates would receive a tax refund.

In effect individual corporate shareholders would be taxed on a partnership basis and the analytical conundrums posed by the classical system could be safely forgotten.

Of the many administrative issues that would need to be resolved before such a system could be put into place, undoubtedly the most significant is the question of whether the corporate tax-credit due to domestic shareholders against their personal tax liabilities in respect of their share of corporate income could be successfully denied to foreigners.

28 Campbell, supra n.5.

It is of course the attitude of the U.S. which is critical here and that country adheres very strongly in its double tax treaties to the principle of "non-discrimination; which it interprets to mean that any tax concessions extended to residents must also flow through to others.

One might attempt to get around this potential problem by adopting the suggestion of the Campbell Report that, at least in the initial stages, no refunds of tax withheld at the corporate level be granted to shareholders whose marginal personal tax rate is below the level of the corporate rate at which tax is withheld.

It is, I believe, idle to speculate on how this issue might ultimately be resolved. The better course, were one convinced that tax integration was a desirable goal, and especially if one were a New Zealander, might be to try it and see.

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