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CAPITAL GAINS TAX: ANALYSIS OF REFORM OPTIONS FOR AUSTRALIA

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Executive Summary

Australia - Out of Step on Taxing of Capital Gains

Two U.S. economists of the 1920s and 1930s, Haig and Simons, still influence tax policy in English-speaking countries - three of which (the U.S., U.K. and Australia) have experimented with taxing capital gains at income tax rates, but only one (Australia) still continues to do that. Critics of the Haig-Simons "comprehensive income tax base" sometimes argue that the capital gains tax on income-producing assets should be zero, or at least relatively low, because the income will be taxed later, when it is earned. Proponents of Haig-Simons, by contrast, claim to see no difference at all between capital gains and a monthly salary or dividend check.

Australia's vision of "tax reform" has long been to shift away from excess reliance on a traditional "income" tax base toward greater reliance on a consumption tax base. But a high tax on capital gains moves in the opposite direction, and can only be rationalized on an archaic but currently controversial Haig-Simons definition of income.

In 1985, Australia went from having no comprehensive tax on capital gains to having by far the highest maximum CGT for individuals of any major economy. Many countries do not bother taxing individual capital gains, such as Germany, the Netherlands, Belgium, Hong Kong, and Singapore. Others, including Taiwan and South Korea, exclude corporate shares. Most other countries tax gains at rates no higher than 20%, although require a minimum asset holding period.

Lower Tax Rates Will Unlock Unrealised Gains

Nobody has to pay the capital gains tax, except in situations of financial distress. Taxpayers can simply avoid buying any more assets that are subject to this tax, and defer selling any assets they already own. The CGT is largely a voluntary tax, and Australia is short of volunteers.

Over the years -- as fewer and fewer pre-1985 assets remained in hands of their original, tax-exempt owners -- the revenue yield from Australia's CGT might have been expected to become significantly larger. Yet there has been no clear upward trend in CGT receipts from individuals (relative to GDP), which have largely moved up and down with the stock market.

The bulk of capital gains tax revenue comes from superannuation funds taxed at 15% and companies taxed at 36%. In 1996-97, individuals who realized gains and also had ordinary earnings of more than $50,000 accounted for 28.4% of *individual* capital gains realizations, or $823 million. The 47% tax rate thus accounted for only $387 million of the $2.1 billion of capital gains tax receipts from all sources. The 43% tax rate accounted for another $101 million of CGT revenue, and the 34% rate for $171 million. So, the top three tax rates combined brought in only $659 million, or 31% of total CGT receipts. If tax rates did not affect the amount of gains realized and taxed (which is emphatically untrue), then *reducing the top three tax rates to a flat rate of 30% would have reduced static revenues by only $191 million*. With even the slightest

induced increase in realizations from a lower tax rate, that minuscule "static" revenue loss would actually become a sizable revenue gain.

The U.S. tax rate on capital gains rose sharply from 1970 to 1977, and real revenues fell. The tax rate was sharply reduced in 1978, and again in 82-84, and real CGT revenues soared. CGT was increased at all income grades from 1987 to 1996, and realizations were no higher in 1995 than they had been ten years earlier. The tax was cut to 10-20% in 1997, and realizations jumped 40%.

In the U.S., where the highest tax rate has ranged between 20% and 28% for two decades, capital gains accounted for 9-10% of all *individual* income tax receipts in the 1990s. In Australia, where the CGT reaches 47% at an income only 1.4 times the average, total revenues from capital gains have accounted for only 1% of individual income tax collections.

Eleven leading U.S. studies estimate the impact of a lower capital gains tax rate in unlocking gains and thereby increasing the volume of gains realized and taxed. The *lowest* end of the range of U.S. estimates, found in only three studies, would translate into a revenue-neutral estimate for reducing Australia's three highest tax rates to 30% or less. The *average* of the low end of the range of all 11 studies implies that lower tax rates would result in a substantial *increase* in tax revenue. Every one of these studies, and certainly the average of them all, would have to be entirely incorrect before there would be the slightest risk that reducing Australia's capital gains tax rates of 34-47% could lose one dollar of revenue.

Some Haig-Simons theorists claim the observed increase in capital realizations and revenues following reductions in the tax rate will eventually prove temporary, because all gains must be realized within a person's lifetime, or because elasticity estimates larger than -1.0 would cause realizations to exceed accrued gains. Both claims are shown to be untrue.

Other Tax Revenue Effects of Lower CGT

Unlocking unrealized gains is not the only beneficial effect on revenues. The "clientele effect" explains why foreign portfolio investors in public companies, which are exempt from CGT, have accumulated more than a fourth of Australia's listed equities, while taxable residents naturally favor assets paying interest or franked dividends, or implicit returns (housing). A lower CGT would induce Australian investors to bid for many shares now held by tax-exempt entities, particularly foreign stockholders. A lower CGT is also typically capitalized in higher prices of stocks and bonds. Taxpayers save more and hold a larger fraction of their wealth in forms subject to the CGT, and less in cash, housing and consumer durables. Companies become less leveraged, replacing debt with equity and retained earnings, thus increasing corporate tax receipts.

Tax Avoidance Concerns Appear Unfounded

Vague anxieties about "tax arbitrage" and shelters are used as an excuse for a high CGT. But avoidance and evasion typically decline with a lower marginal tax rate. Economists' example of tax arbitrage and tax shelters have virtually nothing to do with the CGT. Tax arbitrage has to do

with interest deductions exceeding taxable interest income, and tax shelters result from inadequate recapture of depreciation allowance on assets (usually real estate) that have actually appreciated. The unexplained hunch that taxpayers can somehow "convert ordinary income into capital gains" has never been sensibly explained, much less proven. U.S. tax receipts from ordinary income did not decline, even among the most affluent 1%, when capital gains tax rates were reduced and receipts increased. In fact, U.S. tax receipts from the individual income tax have remained at 9-11% of personal income since 1951, regardless of whether the highest income tax rate was 28% or 91%, or the highest capital gains tax rate was 20% or 46%. Overall U.S. tax receipts were larger and grew faster when the capital gains tax was low than when it was high.

There is also no U.S. evidence that corporate share repurchases increased at the expense of dividends when the capital gains tax was reduced, nor that share repurchases declined relative to dividends while both were taxed at the same rate from 1987 to 1990. What happened instead was that (deductible) corporate debt increased after 1986, while the CGT was relatively high.

Capital Gains Tax Hits Older Tax Payers Hardest

The concept and measurement of "fairness" in taxation has been muddled by static views about the apparent burden in a single year (without even considering the lock-in effect), rather than over a lifetime. Young people begin their careers with valuable human capital, which depreciates in old age and must be replaced by financial capital. The immediate burden of a capital gains tax falls very heavily on the old. The U.S. capital gains tax accounts for a larger share of the tax burden on elderly taxpayers earning less than $20,000 than it does for younger taxpayers earning more than $100,000.

High CGT Retards Investment and Growth

In the longer run, a high tax rate on capital must discourage capital formation. That means capital will be more scarce in the future. Anything that becomes more scarce will also become more valuable. So, the pretax return to capital must rise to bring the after-tax return back up to normal. Besides, in a world of increasing capital mobility, the after-tax return on capital also has to rise to an internationally competitive level anyway, or capital will stay scarce (and possibly flee the country) until it does. Such a reduced ratio of capital to labor holds back growth of productivity and real wages. And that means the capital gains tax surely ends up being shifted to labor -- in the form of slower growth of wages and/or faster growth of consumer prices. This standard general equilibrium prediction, long taught by Joseph Stiglitz and others, is consistent with the widening tax wedge between pretax and after-tax returns to Australian capital since 1985.

U.S. studies linking lower tax rates to increased realizations do not include effects on economic growth. Yet that same evidence proves the capital gains tax causes huge, uneconomic distortions, and such distortionary taxes necessarily prevent economies from performing at their best. Since Australian tax receipts are a relatively constant share of GDP (and there are practical limits on raising that ratio), effects of tax policy on the long-run growth of real tax revenues are *mainly* determined by the effects of tax policy on GDP and thereby on the tax base.

Despite controversy over the *magnitude* of the adverse effects of a high capital gains tax, there is no room for reasonable doubt about the *direction* of those effects. Evidence shows that the Australian CGT has greatly increased the overall burden on capital, making fewer business projects viable, and also biased the financial decisions away from retained earnings or equity toward debt. The sharp decline in personal and corporate savings since 1985, and the related rise in dependence on foreign capital, is at least partly attributable to the CGT.

High CGT Retards Entrepreneurship

New research from the Harvard Business School indicates that a high capital gains tax has a powerful impact in discouraging entrepreneurship. Since venture capital partnership are subject to the highest CGT, they too are adversely effected. Imposing the highest CGT rates on foreign direct investment makes Australia extraordinarily uncompetitive in the global competition for risk capital to finance new entrepreneurial ventures.

The Reform Options

Some proposed solutions to the capital gains problem do not address the problem, which is that the maximum tax rates are much too high for the health of either the economy or the Australian Treasury. A "tapered" rate would add to the already powerful incentive to *defer* paying CGT, thus aggravating the lock-in effect with all its inefficiencies and lost revenues. A "targeted" rate reduction would invite favoritism of particular industries and misallocation of capital, because there are no objective criteria for imposing different CGT rates on different categories of investments. There is no reason to give up such desirable features as indexing or averaging in exchange for capping the CGT, because there is no evidence that a 30% tax on realized gains would yield less revenue than current rates of 34-47% on unrealized gains. Even the most ardent U.S. critics of a lower CGT acknowledge that there is a strong case for providing relief in the case of corporate shares, where retained earnings are treated less favorably by the CGT than are similar internally-financed reinvestments by proprietorships.

The simplest solution is also the best: Limit the maximum capital gains tax to no more than 25-30% at both the corporate and individual level by either capping the maximum rate or excluding half of the gain.

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Chapter 1: What Are Capital Gains and Why Do Some Countries Tax Them?

Hans-Werner Sinn of the University of Munich observes that "two out of three OECD countries do not tax capital gains after a holding period of more than one year. . . . The rare occurrence of capital gains taxes is a fact and it shows that the tax discrimination against corporate equity capital is more of an Anglo-Saxon specialty than a phenomenon with worldwide significance."[1]

Why is the taxation of capital gains an "Anglo-Saxon specialty"? Most likely it is because economists from the English-speaking countries have been disproportionately influenced by two defunct economists, Robert Haig (1921) and Henry Simons (1938).[2] Although earlier economists from John Stuart Mill and Alfred Marshall to Irving Fisher (and later Lord Kaldor) had favored consumed income as the basis for taxation (a position that has gained many adherents in recent years), Haig and Simons popularized the idea that taxable income "should" consist of consumption plus annual increments to net worth.

The U.S. Internal Revenue Service, like the Congressional Budget Office, remains devoted to the Haig-Simons ideal, explaining it as follows:

> The H-S [Haig-Simons] income of a household that consumed $25,000 and saved $2,000 in a year would be $27,000. Alternatively, the H-S income of a household that consumed $25,000 and had no additions to savings, but had assets that declined in value by $1,000 in a year, would be $24,000.[3]

In an insightful paper contrasting the old Haig-Simons accounting with contemporary optimal taxation theory, Graeme Cooper of the Sydney University Law School notes that "It is clear that the Australian Treasury regards the Haig-Simons or comprehensive income tax base tradition as the system implemented by the Australian income tax regime. . . . [And that] the Haig-Simons model is still the dominant force in tax reforms proposed by the Australian government."[4]

The Haig-Simons "accretion" definition of income was never a practical basis for taxation, and has never really been adopted except as some sort of conceptual ideal. More to the point, Haig-Simons requires that income that is saved pay higher taxes that income devoted to purchasing consumer goods or services. Getting deeply in debt, on the other hand, is a smart move under Haig-Simons rules, because debt can generate negative net worth and thus reduce other taxable income. In this system, income that is spent is taxed only once, when received. Income that is saved will be subject to additional taxes. Suppose an industrious Australian employee receives an extra thousand dollars for overtime work or as a bonus. After paying a marginal tax of 47% and a 1.5% Medicare tax, that leaves $515. If that $515 is spent on consumer goods, that is the end of the tax story. But if the $515 is saved, and invested in company shares, there will be additional taxes on dividends and/or capital gains, and on the earnings of the company itself.

Irving Fisher, by contrast, defined income on a "yield" basis — that is, money that is earned but not saved plus any consumption out of existing savings In contemporary terminology, this is similar to what is called a "consumption" tax base, but it may also be viewed as simply a way to

measure taxable income in a way that avoids taxing consumed income more generously than saved income. Within an income tax framework, to be merely "neutral" between choices to save or consume, income that is saved must either be deductible from taxable income (as in the "traditional" self-managed Individual Retirement Account in the U.S.), or the returns must be tax-exempt if saving out of after-tax income (as in the newer "Roth" IRA). Taxing income, as Haig and Simons chose to define it, requires taxing *saved* income more than once and being gentle on debtors. Arthur Hall explained the conceptual murkiness of treating capital gains as income:

> The value of capital is determined by the present (or discounted) value of expected future income. Income, therefore, is that which people capitalize. The practice of counting capital accumulation (savings) as income, therefore, ultimately results in double counting. It counts as current that which by definition is future — and it counts it again when the future arrives.[5]

Richard Wagner likewise noted that Haig-Simons concept "surely confounds the distinction between assets and their yields. If the income yielded by an asset rises, perhaps because of an increased demand for the product the asset is used to produce, the value of that asset will likewise rise. To count both the increased yield and the capitalized value of that increased yield is a clear confounding of income and capital accounts."[6]

Critics of the Haig-Simons "comprehensive income tax base" sometimes argue that the capital gains tax on income-producing assets should be zero (because the income will be taxed later, when it is earned). Proponents of Haig-Simons, by contrast, claim to see no difference at all between the odds of receiving a capital gain and the certainty of a monthly salary or dividend check. If they really believed that, they should be willing to forego their paycheck in exchange for the mere chance at a gain or loss of unknown magnitude at some uncertain future date.

The debate over how to measure income for tax purposes has been going on for many decades, and is not apt to be resolved here. Yet it is important to understand that statements about how capital gains "should" be taxed, or about what is "fair," are actually based on the old Haig-Simons notions about the propriety of certain accounting conventions. Those conventions are rather arbitrary and quite debatable, yet they inspired a generation of U.S. tax reformers.

As Richard Musgrave noted, "the comprehensive income tax base . . . became the banner of tax reform in the United States . . . It clearly provided the focus of analysis and delight for generation of tax economists in the United States."[7] That generation of economists, which included the late Joseph Pechman, Richard Vickery and Carl Shoup, were often as zealous as Henry Simons had been about using the tax system (rather than spending) to "redistribute" income, a venture now widely understood to be fraught with moral hazard and economic risk.

Henry Simons favored "drastic progression in taxation" for "ethical or aesthetic" reasons. In 1934-38 when Simons was writing the top U.S. tax rate was 79%, but that was apparently less drastic than he had in mind. Unlike some of his followers, however, Simons fully understood that such a policy "means a diversion of resources from capital-creation to consumption uses." He readily admitted that his "drastic progression" would "affect production and the size of the

national income available for distribution. In fact, it is reasonable to expect that every gain, through taxation, in better distribution will be accompanied by some loss of production."[8] Many of Simons' followers, to this day, continue to place his particular vision of tax "fairness" far above any concerns about economic efficiency and growth, although they are not always as candid as he was about that choice. If it works in theory, who cares if it works in practice?

Today, as McLure and Zodrow point out, "belief that global taxation based on the Haig-Simons definition of income could actually be implemented seems somewhat naive. . . . In retrospect, it seems that too little attention was paid to the distortions and disincentives caused by . . . high marginal rates."[9] As in Australia, however, it remains true that in many influential U.S. circles -- including revenue-estimating agencies and Brookings Institution -- the old Haig-Simons tax base still remains the *implicit* theoretical ideal, driving the rhetoric of capital gains taxation. Any deviation from theoretical purity is thus labeled as a "tax preference" or "tax expenditure," for example, even though a capital gains tax has no place under a consumed-income tax base. Dubious efforts by the CBO, JCT and IRS to reconstruct a Haig-Simons concept of "expanded income" from selective scraps of tax data are a routine source of confusion in U.S. policy debates about the alleged distribution of taxes and benefits.

Not one of the Anglo-Saxon countries that Professor Sinn singled-out as being uniquely fascinated with a CGT has ever come close to putting Haig-Simons ideals into practice. Even if one believes that Haig and Simons are absolutely right about the proper way of measuring income — such as basing tax liabilities on accrued asset appreciation rather than cash flow, or about anything other than straight-line depreciation being automatically labeled as "accelerated" -- it has nonetheless proven to be quite impossible to implement a Haig-Simons capital gains tax.

Under Haig-Simons rules, a capital gains tax would have to be imposed on gains as they accrue each year. Aside from the obvious administrative complexity of marking every resident's national and foreign assets to market on some arbitrary day ending the tax year, taxing potential revenues that people have not actually received has not been politically feasible. To impose a tax on hypothetical gains -- accrued on the books but not yet realized as cash in hand -- could force the least affluent investors to liquidate assets prematurely just to pay the tax, or to pay CGT by borrowing, if possible. Whatever the theoretical appeal of taxing individuals on unrealized paper gains, many practical and political problems would arise if that were ever attempted.

Even Haig and Simons did not approve of asymmetrical treatment of capital gains — taxing gains as income but not allowing full and immediate deduction for losses (carried forward if necessary) against any and all sources of income. Yet no country treats capital losses as negative income. The U.S. allows only $3,000 of annual net capital losses to be deducted from income, and Australia only allows capital losses to be deducted against gains. The reason, once again, is that the Haig-Simons paradigm is unworkable. If taxpayers could deduct all capital losses against ordinary income, as Haig-Simons requires, it would be easy to game that system so that the capital gains tax would almost certainly lose money, on balance. Treating capital gains and losses as income, symmetrically, would encourage taxpayers to accelerate loss deductions and delay (as they already do) realizations of gains. Tax shelters would arise to create "tax losses" to offset ordinary income. Since taxpayers cannot deduct all capital losses against ordinary income,

however, it is not true that capital gains are actually being treated like ordinary income, as Haig & Simons preached.

Whether or not a tax actually falls on "income" depends on precisely how income is defined, which is much more complex than it sounds. Even tax that is ostensibly levied on "consumption" must affect incomes of factors of production (suppliers labor and capital), partly by making reducing the volume of taxed sales (demand). Since most people spend most of their incomes over a lifetime, the *lifetime* burden of a consumption tax is not greatly different from that of an equivalent income tax (although the consumption tax is less distortive about choices between present and future consumption). But high *marginal* tax rates have undesirable economic consequences under *any* tax base.

Incomplete Integration of Corporate and Individual Taxes

Relief from double-taxation of dividends, with Australia's imputation system, is not a fully "integrated" tax system. Under true integration of the corporate and personal income tax, writes Leonard Burman, "corporate income, whether or not it is distributed as dividends, [would] be treated as income earned by shareholders and then taxed only at the individual level."[10] The Australian system does not do this. Corporate income that is *not* distributed is still taxed at the corporate level. And to the extent that retained earnings enhance the company's assets per share, that normally raises share prices and thus produces another tax liability for individual shareholders. Australia still leaves *retained earnings* subject to "double taxation," because investments financed from retained earnings result in taxable capital gains taxes for individual shareholders (as well as more taxable corporate profits in the future).

When corporate and individual tax systems are not fully integrated, as Haig-Simons prescribes, the taxation of retained income is quite different for sole proprietorships or partnerships than it is for corporations. Suppose, for example, that Mr. Smith purchased a small apartment complex for $1 million, and then saved the after-tax rental income until he had accumulated another $1 million. Then suppose the $1 million was reinvested in doubling the building's size. With twice the prospective rental income, the discounted present value of the property should double, to $2 million. If Mr. Smith sells the enlarged apartment at that price, however, he will *not* be subjected to CGT because his $1 million reinvestment of earnings is added to the basis, so the sale at $2 million yields no taxable capital gain.

Now, contrast the landlord's situation with that of a corporation. Suppose a thousand investors purchased shares in a new factory for $1 billion, and that company then saved its earnings until it accumulated another $1 billion. Later, that $1 billion was reinvested in doubling the factory's capacity. The company now has twice as many assets per share, so the share price is likely to double too. Unlike landlord Smith, however, investors who sell their shares in the enlarged company *will* be subjected to CGT as if the reinvestment out of after-tax income had never occurred. Corporate reinvestments financed with after-tax income are *not* added to the basis of the individual's capital gain. Yet individual stockholders own the corporation, just as the landlord owns his apartment or the shopkeeper owns his shop.

Robert Hall and Alvin Rabushka note that, "a capital gain occurs when the market perceives that prospective after-tax earnings have risen. When the higher earnings materialize in the future, they will be correspondingly taxed. In a tax system . . . with both an income tax and a capital gains tax, there is double taxation."[11] Whether we label this "double taxation" or not is a semantic issue of no significance. The larger point is that the combined corporate and individual tax burden (on reinvested earnings and on the capital gains they produce) creates powerful incentives for companies to finance investments with tax-deductible debt rather than with retained earnings or new equity.

Corporate earnings can either be retained and reinvested, or they can be paid out as dividends. Australia's system of imputation provides shareholders with a credit for ("franked") dividends pre- paid at the corporate level, so that dividends are *not* subjected to both the corporate and individual rate. Under this system, a company that wants to both please its shareholders and also minimize its cost of capital will finance plant and equipment through external borrowing, rather than internal earnings, thereby freeing-up more earnings (less interest expense) for dividend payouts. Corporate savings (retained earnings) will be lower than under any tax system that treats dividends and capital gains more symmetrically. And because individuals use some dividend income to finance consumption (in contrast to retained earnings, which are entirely invested), combined private saving of corporations and individuals is also likely to be depressed.

With heavy tax penalties on domestic savings, Australia is compelled to finance needed investments with inflows of foreign capital (the flip side of the current account deficit). Such inflows are most likely to be in the form of "hot money" (portfolio investment) because foreign direct investment is subject to the Australian CGT.

To someone not trained to look beyond statutory tax rates, a reduction in the tax rate on corporate profits may look like a certain way to boost investment and economic growth, while any impact of the capital gains tax on *individuals* might appear to affect only personal savings, at best. In reality, the tax burden on corporate capital includes both corporate and personal taxes. Corporations are very directly affected by taxes on their owners (shareholders), and also by taxes on their creditors, customers and employees (a high labor tax, for example, may be reflected in higher labor costs). And individual entrepreneurs (particularly partnerships and proprietorships) are mainly affected by *individual* income taxes, particularly on capital gains.

Australia's statutory corporate tax rate of 36% only applies to dividends paid to nonresidents. Profits that are either retained or paid as dividends to residents are often taxed at rates much higher than 36%. To the extent that stock market prices cannot fully anticipate all future earnings (as indicated by the fact that stock prices react to rumors and news about company earnings in the current quarter), any unexpected increase in retained earnings is likely produce a capital gain. The goal of reinvested earnings is to enlarge and improve the company, after all, and that means more and better assets per share. Any capital gain resulting from reinvested earnings is taxable to individual shareholders at rates up to 47%. But those same reinvestments (unlike dividend payouts) also increase future company earnings, which will later be taxed when earned.

Dividend payouts to residents, by contrast, are taxed only once, but often at individual tax rates much higher than the 36% rate *ostensibly* paid on corporate profits. If the corporate tax were reduced to 30%, or even 10%, dividend payouts would still be subject to marginal rates of up to 47% for resident individuals; stockholders would receive a smaller credit for corporate taxes paid. A smaller share of the tax would then be collected at the corporate level, a larger share from any domestic individual shareholders receiving franked dividends. (For superannuation funds, the effective tax on franked dividends would still be below zero). Reducing the corporate tax rate *could* help alleviate the "double taxation" of retained earnings, but not if it was offset by lengthened depreciation schedules that allowed inadequate recovery of the costs of plant and equipment.

A lower corporate tax would be favorable for *foreign* portfolio investors owning Australian shares, since they do not pay Australia's personal tax rates on dividends or capital gains. For U.S. multinational corporations doing business in Australia, however, reducing the corporate rate below the U.S. rate would just reduce the credit for foreign taxes paid, so a larger share of revenue from Australian subsidiaries would then go to the U.S. Treasury. Those more willing to reduce the "corporate" tax than the capital gains tax on individuals should note that unlike a nominal reduction in the statutory corporate tax rate, which largely benefits foreign investors and governments, a lower CGT on residents could only benefit Australians.

Practical Consequences

In the real world, all tax systems are hybrids, involving mixtures of income and consumption tax bases. It makes no sense to rule out a lower tax on capital gains simply because it fails to match a theoretical ideal -- accrual taxation with full deduction of losses -- that has never been put into practice and never will be. It is only when practical economic consequences are neglected that the Haig-Simons concept of theoretical purity attains more influence over policy than it really deserves.

Once the capital gains tax is based on realizations (as it always is) and losses are limited (as they always are), attempting to tax net gains at the various different "income" tax rates applied to individuals, companies and funds just creates enormous complexities and opportunities for avoidance. The wide variation of tax rates on "incomes," for example, creates incentives to realize capital gains in the lowest possible tax bracket (zero for foreign portfolio investors, 15% for superannuation funds, and as low as 20% for individual family members). Graduated income tax rates create incentives to time the realization of gains in years when other income is low (such as retirement).

Taxation of realized gains at various different income tax rates creates incentives that are quite different from those that would occur under Haig-Simons taxation of accrued gains. Taxation of realized gains is a type of transaction tax, incurred only if and when an asset is sold. For many assets, there tends to be positive real growth in value in the long run (particularly if reinvestment generates more or better real assets per share). As a result, the value of such assets incorporates some level of unrealized capital gain, with the amount of unrealized gain increasing with the duration of ownership.

Lock-in describes the fact that capital gains tax diminishes the benefits from trading for existing asset holders. As long as the cost of liquidating the asset is more than the benefit of having cash for consumption or investment, then the individual will not sell the asset. As capital gains tax increases the cost of liquidation, it will discourage efficient trades. Moreover, the ability to retain unrealized gains means that the cost of liquidation will tend to increase as the holding period is greater. This result leads to lock-in, where the tax system creates incentives for holding assets longer than is optimal. Investors end up holding assets they would not otherwise choose, and the efficiency of the capital market (in promptly moving capital toward its best uses) is impaired. As will be demonstrated in later chapters, this "lock-in" effect alone can easily make the highest tax rates on capital gains counterproductive, resulting in less revenue than would be collected at a more reasonable tax rate.

Chapter 2. CGT in Australia: Legislative Provisions and Tax Revenue

Australia introduced capital gains tax on 20 September 1985. There is an exemption for gains on assets purchased prior to that date. Legislation provisions for CGT are extensive, and this section does not attempt to give a comprehensive summary of these complex details. The purpose of the initial section is to identify key provisions that affect the capital gains tax base and revenue.

Capital assets include:

- land and buildings (except for an owner-occupied residence);
- corporate shares and other securities;
- units in a unit trust;
- collectibles which cost over $500 (for example, jewelry or artwork);
- personal use assets which cost over $10,000 (for example, a boat);
- contractual rights;
- goodwill;
- foreign currency.

Definition of asset as capital or trading stock

The definition of an asset as capital or trading stock is defined in the legislation. While the definition of assets for tax purposes is complicated, the main effects of these provisions is to allow individuals and other entities greater access to capital losses for tax purposes. For trading stock, entities are allowed to offset realized capital losses against ordinary income and to claim unrealized capital losses. However, the analogy with treatment of ordinary income extends to CGT indexation and averaging, which are not available for capital defined as trading stock.

Tax rates

For resident individuals, the marginal tax rate applied to a net capital gain is currently determined by averaging. The total taxable net capital gain is divided by 5, and this amount is added to other income to determine the relevant marginal tax rate. For example, if you have other income of $30,000 and a net capital gain of $60,000, then your marginal tax rate is for an income of $42,000. The whole value of the net capital gain is subject to capital gains taxation at the derived tax rate.

Companies pay CGT at the company tax rate (currently 36%), and superannuation funds pay 15% percent tax on capital gains.

Indexation

Indexation is an allowance which adjusts gains for the effects of inflation. It does this by giving an allowance equal to the amount by which the cost of the capital asset would have risen on a monthly basis if its value had kept pace with inflation since the asset was acquired (but only if the asset was acquired after 20 August 1991). Corporate capital gains are not indexed, nor are capital losses.

CGT for bequeathed assets

When you die, a capital gain or capital loss from a CGT event that results for a CGT asset you owned just before dying is generally disregarded (there are exceptions). This means that the capital asset can pass to a beneficiary and this change of ownership is not classified as a realization. The original cost base for the asset is carried over with the asset to the beneficiary.

Taxation of non-resident individual investors

Non-resident individual investors are subject to CGT unless the investment takes the form of a portfolio holding (less than 10 per cent of total shares) in a public company. Portfolio investments in public companies are exempt from CGT.

The rate of taxation for non-resident individual investors (other than portfolio investors) is generally taxed using an amended version of the progressive tax scale for personal income for residents. The rate scale is currently the same if the non-resident's total income exceeds $20,700, but income below $20,700 is taxed at 29% (whereas residents have access to a tax-free threshold and lower tax rate of 20% for income below $20,700).

Revenue raised

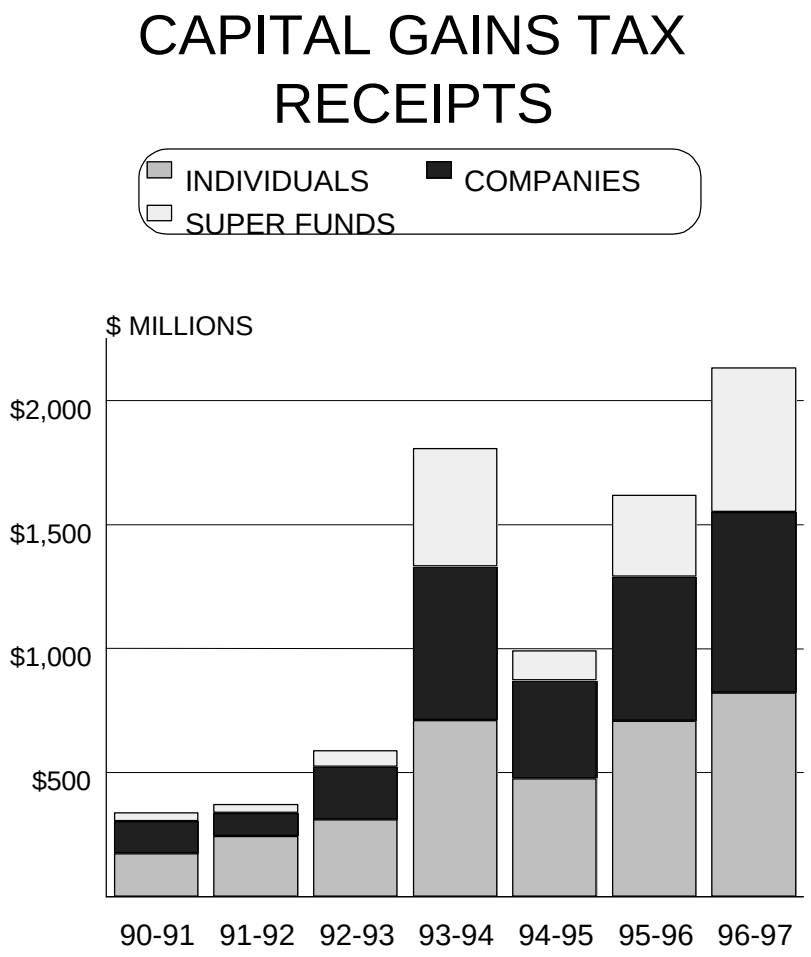
Compared to other countries, such as the US, Australia's capital gains tax regime is relatively immature. It has been operating for almost 15 years, whereas the US system began in 1921. However, Australia's CGT has been in existence for a sufficiently long time to consider the revenue raising potential of this tax.

Figure 1 shows the total revenue raised from capital gains tax from 1990-91 to 1996-97. Revenues were relatively low from 1990-91 to 1992-93, when recession and slow growth affected economic activity. Since then, revenues have increased greatly, particularly from companies and super funds. As CGT revenues are determined by realizations, they are prone to large swings from one year to the next, as the graph shows. Individual capital gains were atypically strong in 1996-7, thanks to an unusually strong stock market (even measured in U.S. dollars) in 1996.

A majority of CGT revenue is paid by companies and super funds. Revenue paid by individuals includes non-business individuals and unincorporated businesses (such as sole proprietors and partnerships). Revenue paid by individuals doubled from 1992-93 to 1993-94, but did not grow significantly between 1993-94 and 1996-97.

Most capital gains realized by individuals accrue to people with a taxable income (including capital gains) of more than $50,000. In 1996-97, about 74 per cent of CGT revenue was paid by people with a taxable income of more than $50,00. The average tax rate for CGT is below the statutory rates. For example, the maximum individual tax rate of 47 per cent begins at $50,000, yet the group of individuals with taxable incomes between $50,000 and $100,000 had an average tax rate of 32 per cent on capital gains in 1996-97. The main reason for this difference is that averaging reduces the marginal tax rate. For example, if you realize a net capital gain of $100,000 and have no other income, then averaging results in a tax rate for income of $20,000 is applied to the total net capital gain. Averaging pushes down the average CGT tax rate for many taxpayers. ATO data indicate that averaging represented a "static" revenue loss (i.e., assuming that just as many gains would have realized without the rebate) of about $140 million in 1996-97.

Figure 1



Source: ATO data.

Sources of Capital Gains Among Individuals

Table 1 shows ATO data on the source of capital gains by individuals in 1996-97. Gains are reported by individual, and some individuals recorded taxable capital gains for more than one asset category. Individuals reporting capital gains in more than one category accounted for 17 per cent of all gains for individuals. Shares is the asset category that recorded the largest value of capital gains for individuals in 1996-97. Real estate is also important, comprising 13 per cent of the total. Capital gains from trust distributions are attributable to gains earned by trusts and passed through to beneficiaries, so these gains can be derived from the sale of shares, real estate, personal use assets and other asset categories.

Table 1: Source of capital gains by individuals, 1996-97

Source of capital gain	*Taxable capital gain ($m)*	*% of total*
Shares	1,106	38
Trust distributions	577	20
More than one category	502	17
Real estate	377	13
Nonlisted personal use assets	144	5
Goodwill on the sale of a business	74	3
Plant and equipment	42	1
Other	78	3
Total	2899	100

Few Capital Gains Are Actually Taxed at the Highest Rates

The revenue yield from Australia's capital gains tax, particularly from the superhigh tax rates applied only to individuals, is nearly insignificant compared to what the U.S. collects with a much lower rate. The total capital gains tax on corporations, individuals and funds was unusually high in 1996-97, at $2.1 billion, but capital gains tax nonetheless only amounted to 2.4% of *total* income tax receipts (of $89.2 billion) and only 1.2% of *individual* income tax. "Individuals" -- mainly partnerships and other small businesses -- realized little more than 30.5% of total gains, with 38.2% of those gains ($1.1 billion) being from sales of shares.[12] In other words, *individual* stock trades (which apparently include only listed companies, not sales of small firms) counted for merely 11.7% of gains subject to the CGT. The rest was from corporations, funds and individual assets other than shares (such as real estate, business assets, etc.).

This section shows that revenues from the Australian tax are most meager where the rate is highest (individuals in the top two tax brackets) and for the types of taxable assets easiest to avoid (e.g., by neither buying nor selling company shares outside of a superannuation fund). Partnership gains, and sales of small business assets and farms, appear relatively vulnerable to the higher capital gains tax on "individuals." Capital gains realizations are largest where the tax rate on realization is lowest, namely on gains by funds (taxed at 15%) and by corporations (taxed at

36%). Although capital gains taxes are not confined to equities, it is nevertheless true that company shares are likewise predominantly owned by funds, corporations and foreign portfolio investors -- i.e., those not subject to the highest CGT. With a high CGT on individuals, zero-dividend growth stocks tend to be accumulated by entities that are exempt from CGT (such as foreign portfolio investors) or by funds taxed at 15%.

There is not one schedule of tax rates for capital gains in Australia, but four. The capital gains tax is imposed at rates of up to 47% on individuals, a flat 36% on companies, 15% on superannuation funds (since 1988/89) and zero on foreign portfolio investors, tax-exempt entities and tax evaders. Of these taxes, only the one on capital gains of individuals is "progressive" — that is, the tax rate largely depends on the amount of salary or other income, rather than on the amount of capital gain *per se*. Two taxpayers with the same amount of capital gain can pay greatly different tax rates depending on their other income during the year in which they choose to realize net gains.

Where the tax rate is highest — namely on *non-business* individuals with above-average incomes — Australia's capital gains tax yields surprisingly little revenue. In the U.S., capital gains accounted for 9-10% of all *individual* income tax receipts in the 1990s, compared with about 1% for Australia. In fiscal 1996, for example, the U.S. collected $66.4 billion from capital gains taxes on individuals, or 10.1% of the $658.2 billion in personal income tax. Australia's tax on *individual* capital gains, by contrast, collected only $823 million in 1996-97 out of $66.3 billion in individual tax receipts.[13] Yet the U.S. tax rate on capital gains has been no higher than 20-28% since 1978, while Australia's reaches 43-47% at incomes only slightly above average.

The fact that the low U.S. tax rate yields 9-10 times as large a share of personal tax receipts as Australia's very high tax rate is one of several reasons to question the revenue estimators' assumption that reducing Australia's capital gains tax to 30% or less is likely to lose *any* revenue.

Indexing of Australian gains cannot begin to explain this huge difference in revenue yields, because inflation has been very low in both countries in recent years, and because indexing only applies to *individual* capital gains in Australia (30% of total gains). Had there been no Australian indexing in 1996-97, revenues would have been larger by only about $50 million. Averaging cannot explain the gap either. As mentioned earlier, eliminating averaging would have increased revenue by only about $140-150 million in 1996-97, and even that modest figure depends on the nonsensical "static" assumption that individuals would have realized just as many gains at a much higher tax rate. Besides, even with averaging the effective tax CGT rate on individuals (revenues divided by gains) is 30% in Australia compared with about 20% in the U.S. The CGT yields so much more revenue in the U.S. because individuals choose to hold more of their wealth in the form of assets subject to CGT, and to realize gains more frequently.

The exemption of pre-1985 gains from Australian CGT is a *partial* explanation for the low yield, but one that should have faded in importance after so many years. Anyone who still own an exempt financial asset or real asset, has to take taxes into account before considering selling that asset in order to buy another. Shares in a promising new company might promise a higher before-tax return than the older investment, yet capital gains tax could nonetheless tilt the decision in

favor of holding onto the pre-1985 assets. This creates a capital market inefficiency and locks people into economically inferior assets in much the same way that a high CGT also discourages efficient reallocation of investments. Over the years -- as fewer and fewer pre-1985 assets remain in hands of their original, tax-exempt owners -- the revenue yield from Australia's CGT might have been expected to become significantly larger. Yet many years have already past, and there is no clear upward trend in CGT receipts from individuals, as a share of GDP. Most of the increase in CGT receipts has come from superannuation funds taxed at 15%, or from companies, while receipts from individual gains just move up and down with the stock market. In short, the exemption of pre-1985 gains is unlikely to be more than a minor explanation of why Australia's high CGT on individual investors yields so much less revenue than do America's much lower CGT rates.

The main reasons for Australia's low yield are the "tax clientele" effect and the "lock-in" effect:

- "Tax clientele" theory predicts, correctly, that many assets that would otherwise be subjected to high CGT have instead been accumulated by superannuation funds paying 15% or by foreign portfolio investors paying zero CGT.

- The "lock-in" effect (discussed at length in a later chapter on revenue estimates) simply means that assets that would face a high CGT if sold are rarely sold. And a high tax rate applied to very few transactions does not yield much revenue.

A pamphlet on CGT from the Australian Taxation Office says, *"80% of all tax paid on capital gains by individuals [in 1996/97] was paid by those with a taxable income of more than $50,000."* At first glance, that certainly *sounds* as though the higher tax rates have been yielding significant revenue. But any statement about CGT that only refers to individuals is disingenuous. The vast bulk of capital gains tax in 1996-97 was collected at either the 15% tax rate applied to funds, or the 36% rate applied to corporations, or at the zero rate on foreign portfolio investors -- *not* from the few *individuals* who were actually subjected (despite averaging) to effective tax rates of 43-47%.

In 1996-97, Australians *reported* capital gains amounted to nearly $10.2 billion, 7% of which was non-taxable. The tax collected was $2.1 billion, so *the average tax rate on all reported gains was only 20.6%*. The actual tax rate on gains from Australian assets would be much lower if we could measure capital gains received by foreign portfolio investors. A major reason why the average tax rate on capital gains is so much lower than the highest marginal rates is the "clientele effect" -- *extraordinarily high tax rates on individual gains divert the stock of taxable assets toward institutions that are taxed at lower rates* (super funds), *or not taxed at all* (foreign portfolio investors and tax-exempt organizations).

More than 40% of all reported gains were realized by funds, and therefore taxed at only 15%. Another 29% of gains were realized by companies, and taxed at 36%. Actually, these percentages are exaggerated, partly because 7% of reported gains were realized by non-taxable entities, but mostly because many capital gains on Australian assets accrue to foreign portfolio investors, who neither report the gain nor pay the tax. Many capital gains therefore yield *zero* tax

revenue, legally and otherwise. The higher the tax rate is the more serious that leakage becomes, because high rates discourage domestic investors from holding capital gains and assets, and high rates may encourage tax avoidance and evasion.

"Individuals" accounted for only 30.5% of all reported capital gains in 1996-97. And nearly two-thirds (64.3%) of the tax ostensibly collected from "individuals" was, in fact, collected from small business income (SBI), including partnerships. *Individual non-business (INB) incomes above $50,000 accounted for only $250 million of the $2.1 billion in capital gains tax revenue from all sources in fiscal year 1996-97*.

Imposing the highest tax rates on the smallest businesses appears singularly inequitable. A small business may have no choice but to liquidate part or all of the enterprise, either because of financial distress or to finance retirement. Affluent individual investors, by contrast, need never be in a hurry to sell appreciated assets, since such individuals are sufficiently creditworthy to borrow against assets. They can also avoid acquiring capital gains assets in favor of securities paying dividends or interest. Sale of part or all of a small farm or firm, by contrast, is unavoidably defined as a taxable gain.

Even among individuals and small businesses, who account for only about 40% of CGT revenue, the statement that nearly 80% of the tax is collected from those earnings more than $50,000 is true, but misleading. Although taxpayers earning more than $50,000 (including capital gains) were in the 47% tax bracket, that does not mean that *most* capital gains of these taxpayers were taxed at anything close to a 47% tax rate. Mainly because of averaging (and perhaps trusts), the "effective" tax rate -- taxes divided by gains -- has been far below 47%.

Taxpayers in the $50-100,000 income group paid $236 million in taxes on $737 million of capital gains, so their effective tax rate was 32%. *About 28% of all gains realized in the $50-100,000 income group were taxed at 47%, but the fact that the effective rate was only 32% shows that most gains were taxed at rates of 20% or 34%*. Those with incomes of $100-500,000 paid $304 million in taxes on capital gains of $750 million, so their effective CGT was 40.5%, still lower than the top two tax rates. Only 13.4% ($119 million) of the individual tax on capital gains was collected at an effective tax rate of 46%. *Although a portion of gains among those with lower incomes were taxed at rates of 43-47%, that portion could not have been very large or the effective tax rates in income groups of $50-500,000 would have been higher than 32-41%*.

In 1996-97, those who realized gains and had ordinary earnings of more than $50,000 accounted for only 28.4% ($823 million) of the $2.9 billion in capital gains realized by individuals. The 47% tax rate thus accounted for only $387 million (47% times $823 million in gains) – a small fraction of the $2.1 billion of capital gains tax receipts from *all* sources, including companies and funds. The 43% tax rate accounted for another $235 million of gains and therefore $101 million of taxes. In the 34% bracket, gains were $504 million and taxes $171 million. So, the top three individual tax rates combined brought in only $659 million.

If tax rates did not affect the amount of gains realized and taxed (which is emphatically untrue), then *reducing the top three tax rates to a flat rate of 30% would have reduced static revenues by*

only $191 million. With even the slightest induced increase in realizations from a lower tax rate, that minuscule "static" revenue loss would actually become a sizable revenue gain.

So, although most capital gains tax paid by individuals is indeed paid by those earning more than $50,000 -- *when the gains are counted as part of income* -- it certainly does not follow that individual tax rates as high as 43- 47% on capital gains yield much revenue. Very few capital gains have actually been taxed at rates anywhere near 47%, and it is a good thing for the Australian Treasury that they were not. If more gains had really been subject to tax rates of 43-47%, then many of the gains would not have been realized and therefore would not have been taxed.

Averaging is the main reason effective tax rates are well below statutory marginal rates.[14] In ATO tables grouping taxpayers by income, the entire capital gain is included. As a result, many taxpayers whose earnings would otherwise be below $50,000 are pushed into the above-$50,000 by a large, one-time gain. Even without averaging, those who would not otherwise be in the highest tax bracket in the absence of a capital gain would pay the highest rate on only a portion of the gain. A taxpayer with $30,000 of income and a $30,000 capital gain would have $10,000 of the gain taxed at 47% and $20,000 taxed at 43%, so the combined effective rate would be about 44%.

Some have proposed repeal of averaging as a way to raise more revenue, as a trade-off for the presumed revenue loss from a lower statutory tax rate. But static estimates of the amount of revenue lost from averaging (or from the lower tax rate) assume that taxpayers would realize just as many gains even if the effective tax rate were much higher. Only 12% of individuals in the $50-100,000 income group reported capital gains, but they accounted for more than 25% of all capital gains realized by taxable individuals. If the relief from averaging had not been available, the middle-income groups most affected by averaging would have realized far fewer gains. And if realizations had been only one-third lower than they were in among the $50-100,000 income group, a 47% tax would have raised *less* revenue from that group than the actual 32% rate.

Averaging was designed to alleviate a genuine problem that arises from applying progressive tax rates to periodic capital gains. Capital gains are often bunched into a single year, pushing affected taxpayers into the highest tax bracket even though their regular, recurring income may be quite low. This inequity would be attenuated by a lower tax rate, but it would not disappear. To abolish averaging on the basis of dubious static estimates of alleged revenue gains would be an unfortunate and unnecessary choice. There is ample evidence, discussed later in this report, that a capital gains tax no higher than 25-30% would increase realizations by more than enough to offset any apparent static revenue loss. We also report several other fiscal benefits of a lower CGT rate, not the least of which is the probable repatriation of Australian shares, from tax-exempt foreigners to taxable citizens.

High Tax Rates = Large Distortions and Little Revenue

The highest CGT rates do not fall on foreign portfolio investment in public companies (defined as owning less than 10% of public company), but they do fall on foreign *direct* investment in private companies and other entities. This is an enormous disincentive to foreign direct investment, including venture capital investment in new entrepreneurial firms.

The highest 47% CGT also falls on partnerships. In the U.S., partnerships have been vital sources of venture capital funding, and of buyout groups (such as KKR and Forstmann-Little) famous for improving the efficiency of many poorly managed firms. The risks to those engaged in such deals are high, but the social reward is a more dynamic, creative, entrepreneurial economy. Australia's steepest CGT on "individuals" (partnerships) is well designed to thwart such venturesome activities, and (since new firms rarely begin as corporations) to discourage entrepreneurship in general.

Business taxes are not very important to growing new firms, because they have high start-up costs and therefore little if any taxable earnings. But taxes on the capital gains of individual owners of enterepreneurial firms are of critical importance, because the chance of such gains is what motivates them to take large risks and little salaries.

As shown in a later chapter, the average of many U.S. studies indicates that *at tax rates as high as Australia's, each percentage point reduction in the average marginal rate of tax on capital gains should increase realizations by about 2%*. If all *individual* gains had been taxed at marginal rates no higher than 30%, the effective tax rate on *all* reported gains would not have been significantly lower than it was (20.6%). But realizations of gains, and therefore revenue, would have *been much* larger. And revenues would be larger for another reason too -- because Australian investors would be motivated by a lower CGT to repurchase Australian shares from foreign portfolio investors.

Chapter 3. Overseas Experience

Most countries do not tax capital gains at all, at least not gains on corporate shares. Countries without any CGT on individuals include the financial centers Singapore and Hong Kong, as well as Germany, Belgium, the Netherlands, South Africa, Austria (with some exceptions), New Zealand and (since 1990) Argentina. Germany and Argentina do tax *corporate* capital gains, however, and Germany also taxes individuals for gains on assets held fewer than six months. Indonesia's CGT is close to zero, at 0.1%.[15]

Many other countries tax capital gains on real assets, but exempt corporate shares. Stock market gains (only) are free from CGT in China, South Korea, Taiwan and Mexico. Before 1989, Japan also exempted stock market gains from CGT. There were very few capital gains on Japanese stocks or land in the decade between the introduction of CGT in 1989 and the reduction in marginal tax rates in April 1999, which is not entirely a coincidence. The few Japanese who did manage to eke out a capital gain, however, could choose between a 20% CGT or a 1.25% tax on the gross transaction.[16]

Japan's 1999 tax reform phases-out other securities transactions taxes, of the sort imposed whether or not there is any gain (such as stamp taxes in Australia). Sweden, Finland and Malaysia experimented with a securities transactions tax in the past, and the results were so disastrous to the economies and stock markets of these countries, and to overall tax revenues, that the securities taxes were soon repealed. As one study observed, securities transactions taxes were avoided by *"shifting trading to foreign markets or untaxed assets, or by reducing the volume of trade."*[17] Capital gains taxes have some similarities to securities transactions taxes, and may have some of the same harmful effects on financial markets.

Among the minority of countries that do tax long-term individual capital gains on corporate shares, the maximum CGT rates are usually low — 12.5% in Italy (which had no CGT until 1991), 15% in Brazil, 20% in India, 20% in Japan, 20% in the United States, 27% in Ireland, 28% in Norway. Most countries with a CGT have no minimum holding period, though several do.

Countries with tax rates much above 20% on long-term gains usually sweeten the deal with a generous annual or lifetime exemption. The U.K. exempts the first $11,225, in U.S. dollars, and now reduces the tax rate the longer an asset is held, which manages to combine two inefficient, revenue-losing mistakes. France, with a 26% CGT, exempts $8,315.

The U.K.'s 1988 reform pushed the capital gains tax rate up from 30% to 40%, but only after a generous annual exclusion (currently $11,225 in U.S. dollars) for capital gains. That policy of high rates and large exemptions ensures an inefficient tax — the exemption ensures that average tax revenue is very low, while distortions, disincentives and compliance costs of the 40% marginal rate are very high. But at least the U.K. did offer indexing, until 1998. And Britain, like most countries but unlike Australia, also offers rollover relief in cases of share-for-share exchange during a takeover or merger.

Canadian politicians briefly offered a huge lifetime exclusion of $500,000, which was promptly lowered to $100,000 — except for small businesses and farms -- and by 1994 even the $100,000 was being phased-out (but grandfathered). The exclusion effectively made nearly all Canadians exempt from the capital gains tax for a while, and small businesses and farms still are (possibly providing an incentive to invest in a fast food franchise rather than a new high company). Marginal gains above the exempt amount, however, are taxed at 75% of the income tax rate, which amounts to no more than 23.5% at the national level but provincial income taxes can push the rate much higher. In 1995, personal taxes on capital gains amounted to only $1 billion at the federal level — less than 1% of the $108.4 billion in individual income tax.[18] The Canadian system of taxing capital gains, like those of the U.K. and Australia, involves large marginal tax distortions in exchange for very little revenue. And although Canadian pension plans are required by law to invest nearly everything in Canadian assets, that has not prevented the Canadian stock market from being an unusually poor investment for many years.

Both the U.S. and U.K. have abandoned as failures their earlier efforts to tax capital gains at the same tax rates as ordinary income. Aside from Australia, do *any* other countries still tax capital gains as income? Nicaragua does, but its highest tax is 30%. Chile has a 45% CGT, but only after excluding $6,600 (in U.S. dollars). A study by three Chilean economists finds that all such efforts to "redistribute" income through the tax system are entirely ineffective (and virtually impossible), but that "around 23% of the potential tax base is not reported."[19]

In a Price Waterhouse survey of the tax systems of 115 countries, only two appear to have a CGT as high as Australia's. The top tax rate on capital gains can go as high as 50% in the Congo, and 54% in Iran, but unlike Australia the highest tax rates only apply at income that are far above average.[20] Iran and the Congo appear to be the only countries in the world with a maximum capital gains tax remotely comparable to Australia's.

Two Decades of U.S. Experience

From 1978 to 1997, periodic debates about the merits of reducing the U.S. capital gains tax were strongly influenced by econometric estimates which demonstrated that the highest tax rates could be reduced to 20% or less with no loss of revenue. The main explanation for this apparent paradox was the "lock-in" effect: A high marginal tax rate creates a powerful incentive to postpone selling capital assets except when such "realized" gains can be offset by capital losses.

The statistical assault on official "static" revenue estimates, which ignore behavioral reactions, was launched by private academics -- such as Joel Slemrod of the University of Michigan, and Martin Feldstein and Lawrence Lindsey while they were at Harvard University (Feldstein later became Chairman of the Council of Economic Advisers, and Lindsey was Governor of the Federal Reserve). This criticism was not well received by those being criticized — the agencies responsible for estimating federal revenues -- and it has been continually resisted by economists employed by those agencies. Official forecasts of capital gains realizations and revenues proved to be much too low after the top tax rate was nearly halved in 1978. "In April 1978, the Treasury Department stated that capital gains tax relief would cost $2.2 billion in revenue . . . [but]

revenues paid by individuals actually increased by about $1.6 billion, or 19 percent, the largest absolute gain in the history of the capital gains tax. Tax receipts were $3.5 billion, 56 percent higher than Treasury analysts predicted."[21]

Similarly, when the capital gains tax was *increased* after 1986, official estimates of realizations and revenues then turned out to be much too *high*. Martin Feldstein exposed this dismal record:

> The Treasury staff projected that capital gains would reach $256 billion in 1992, while the CBO projected capital gains of $287 billion. In fact, capital gains have continued to decline since 1988, falling nearly 40 percent in real terms despite a 34 percent rise in the real level of [stock] prices. The actual 1992 level of capital gains was only 41 percent of the level projected by the Congressional Budget Office.[22]

These errors in estimated realization were so huge and so persistent that in 1993 the CBO finally reduced its estimated future revenues from the individual income tax by as much as 1 percent of GDP, "with revisions to the forecast of realizations of capital gains accounting for about half of the reduction." [an *annual* revenue error of about $35 billion at that time].[23]

Repeated errors of this magnitude have been embarrassing, and undermined CBO credibility and influence. In a familiar bureaucratic pose of self-defense, a few staff economists began to spin clever theories and numbers to explain why their massive estimating errors were not really errors at all, if looked at in a certain way over some undefined "long run."[24]

Capital gains tax policy evokes strong feelings among some economists, taught to regard the full inclusion of gains within a "comprehensive" tax base as the hallmark of ideological purity. Practical issues about which tax policies really work — in the sense of raising revenue with the least possible damage to the economy -- are often overwhelmed by theoretical and ideological concerns about how taxes "should" be imposed. The dubious Haig-Simons definition of what should be counted as taxable income (consumption plus additions to net worth) inspired a generation of zealous "tax reformers," particularly in the English-speaking countries. And it is the English-speaking countries that have generally had higher capital gains taxes than the rest of the world (most OECD countries and virtually all of the fastest-growing economies of the world have no capital gains tax). Some professional economists are also amateur moralists -- believing that high tax rates on capital gains can and should be used to reduce high incomes or wealth, almost regardless of the impact on the economy.

In a new Brookings Institution book, *The Labyrinth of Capital Gains Tax Policy* by Leonard Burman (formerly with the CBO, now U.S. Treasury), the author claims that "taxing capital gains like other income is the fairest option."[25] With unusual candor, Burman avows that he regards his subjective opinions about "fairness" as far more important than such matters as saving, investment and economic growth:

> On the face of it, the most appealing argument for a capital gains preference is that it might encourage more saving, lower the cost of capital for firms, and thus spur

> investment and raise productivity . . . This argument makes sense if one is willing to trade off other objectives — especially fairness — for the gain in economic efficiency.[26]

Burman was an economist at the CBO when that agency's estimates of post-1986 capital gains revenues were under attack for being wildy exaggerated. He and a few other government economists (Jane Gravelle of the Congressional Research Service; Alan Auerbach, formerly with the Joint Committee on Taxation; Eric Toder, formerly with the CBO and the U.S. and New Zealand Treasuries; and Joseph Minarik, formerly U.S. Treasury) still continue to resist two decades of unambiguous evidence that lower tax rates on capital gains have, in fact, produced dramatic revenue windfalls for the U.S. Treasury. These perennial skeptics have two arguments with the facts. The first is an assertion that estimates of increased realization resulting from a lower tax rate are much too varied to be useful. "Because empirical estimates embrace a range of possible outcomes," writes Burman, "they do not settle the debate about revenues." As we will see, however, the elasticity estimates in most studies range from -0.5 to -1.6, with a central tendency very close to -1.0 -- the "revenue neutral" point at which a lower tax rate loses no revenue. At Australia's much higher tax rate, the average estimate would be above -2.0, which implies that lower tax rates would *surely* raise much more revenue. The only "possible outcomes" that suggest otherwise consist of the lowest of several estimates in a single study coauthored by Burman himself. That study is critiqued in a later chapter on revenue estimates.

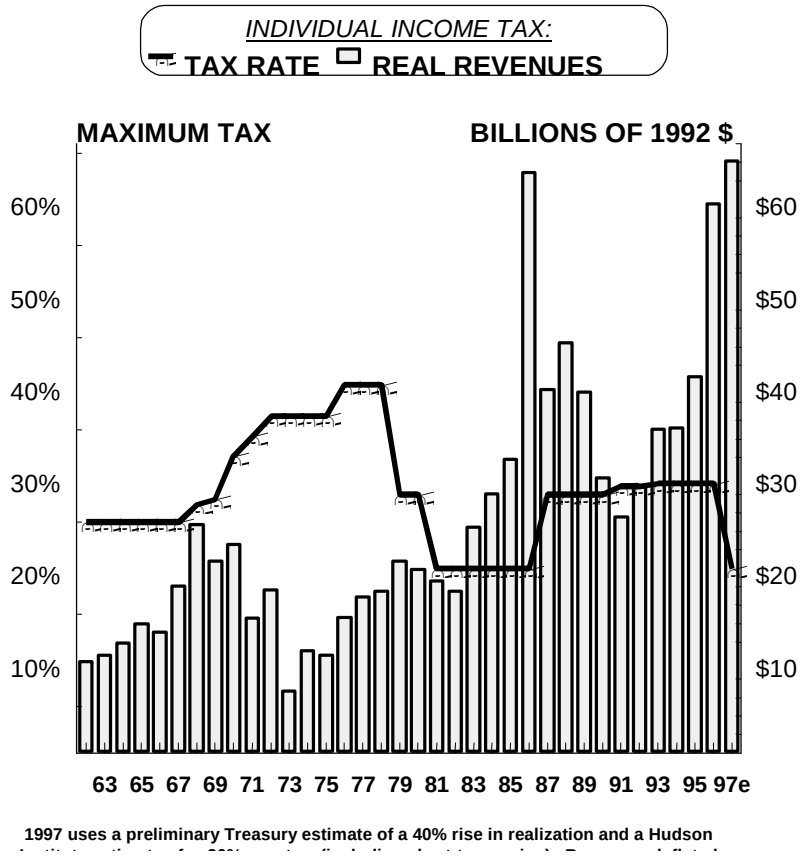
The second claim among those skeptical about revenue feedback effects is that any increase in realizations resulting from a lower tax rate is likely to be merely a matter of temporary timing which will subsequently be reversed as realizations decline in the future. The chapter on revenue estimates shows that this claim is based entirely on a superficially plausible theory which happens to be inconsistent with the facts.

Figure 2 compares real, inflation-adjusted revenues from the capital gains tax on individuals with the highest marginal tax rate applying to such gains. The tax rate rose sharply from 1970 to 1977, and real revenues clearly declined. The tax rate was sharply reduced in 1978 and further reduced in 1982, and real revenues clearly soared. The tax rate was increased from 1987 to 1996 (particularly at lower income levels), and realizations in 1995 were still lower, even in nominal terms, than they had been ten years earlier. The tax rates of 15% and 28% were reduced to 10% and 20% in 1997, realizations jumped 40%.[27] Because of that sharp rise of realizations, the graph estimates that real revenues from the CGT once again increased in 1997 (despite the fact that the lower 10% rate probably lost money). "Although gains realizations are still only about 7 percent of AGI," says the CBO, "they accounted nearly a third of the growth of tax liability relative to GDP from 1993 to 1997." Looking ahead, the CBO adds that "the increase in projected revenues is largely attributable to higher realizations of capital gains realizations."[28]

Figure 2

MAXIMUM U.S. CAPITAL GAINS TAX

& REAL TAX RECEIPTS



Looking at **Figure 2**, it is difficult to deny what the eye so clearly reveals — that *reductions in the highest tax rate on capital gains have always been associated with prolonged periods of rapid growth of real tax receipts, and that higher tax rates have always depressed receipts for many years.*

One might argue that poor performance of the economy and stock market, rather than a rising CGT, were the reason tax receipts declined in 1968-78. But that argument begs the question of the extent to which the prolonged weakness and instability of the economy and stock market before 1983 can be attributed to rising marginal tax rates, particularly on capital gains. One might likewise argue that the apparent surge in capital gains tax receipts in 1996-99 was due to a strong economy and even stronger stock market. But that too begs the question of the extent to which the 1997 reduction in CGT (to 10-20% from 15-28%) was capitalized in higher asset values and a lower cost of capital for business.

Out of the 35 years in **Figure 2**, only two years, 1986 and 1996, look slightly out of place. In late 1986, investors rushed to realize gains before higher tax rates took effect in January of the following year. This short-term timing effect probably depressed revenues in 1987-88, as Burman and others emphasize, but that cannot explain why 1995 realizations were still lower than in 1985.

In 1996, by contrast, realizations and gains were unusually strong the year before the capital gains tax was reduced. This was called an "April surprise," because (1) not many investors in 1996 thought the CGT would fall in 1997, and (2) it was not until the tax due date of April 15, 1997 that many taxpayers noticed just how much better the stock market had been in 1996 than in 1994-95. Many even owed tax penalties for not making sufficiently large estimated tax payments. Much of this surprise came from mutual funds, whose capital gains distributions reached $101 billion in 1996 (up from $30 billion in 1994).[29] Mutual funds alone, where taxpayers have little control over the timing of realizations, can explain the entire $20 billion gain in 1996 tax receipts. In any event, as strong as realizations were in 1996, they were followed by another 40% increase in 1997 after the top tax was reduced.

Recent U.S. experience with the CGT can be easily summarized. Tax receipts declined in real terms when the highest CGT on individuals was increased, and rose dramatically when the tax rate was reduced.

As for how Australia stacks up against the rest of the world, a key question that emerges from this brief survey is this: If Australia's 47% tax rate capital gains makes sense, then why is it that no other country in the world — with the partial exception of a couple of Third World tragedies — has found it wise or prudent to tax capital gains at similar rates?

Chapter 4. Estimating Realizations and Revenues at Lower Tax Rates

The U.S. experience with rising and falling tax rates on capital gains produced a rich minefield for econometricians, resulting in numerous studies of the extent to which lower CGT rate increase realizations. This relationship is described as an "elasticity." At a lower tax rate, there is more incentive to trade, so that many more unrealized gains (which are not taxed) become realized gains (which *are* taxed).

In the econometric studies, an elasticity of minus one (-1.0) means reduced marginal tax rates on realized gains would encourage enough more realizations to completely offset a somewhat lower "effective" tax rate (revenues divided by gains). That means that applying lower marginal tax rates to a larger tax base would be "revenue neutral." With an elasticity of -0.5, a lower tax rate would be associated with lower revenue, but the revenue loss would be only half as large as would be indicated by the usual "static" revenue estimates (which take realizations as given, unaffected by tax rates). With an elasticity higher than one, a lower tax rate would bring in *more* revenue. These elasticities are estimated to vary with marginal tax rates, so the higher the tax rate the less likely that a reduction in that rate would not cause any revenue loss, once added realizations are taken into account.

Table 2 shows revenue elasticity estimates from more than a dozen leading studies. They were the focus of comprehensive surveys of this topic by George Zodrow of Rice University and/or by Gerald Auten and Joseph Cordes of the U.S. Treasury.[30] All of the estimates included in Table 2 attempt to measure *permanent* effects, with the partial exception of the last two (which are excluded from the final average partly for that reason). Some of these studies report a range of estimates, but the range is narrow in all but two. The lower estimate, where offered, is usually the permanent effect. A lower CGT makes it feasible to trade more frequently, forever, because the pretax gain does not have to be so large to make realization of gains attractive. Studies have shown that the volume of trading on stock exchanges is pushed *permanently* higher when the tax on trades is reduced.[31] With more trades, there are likely to be more gains to tax over the long run.

Gravelle theorized that "aggregation bias" (averaging high and low tax rates) exaggerated the effect. Slemrod and Shobe investigated and found the opposite. Their conclusion was similar to others:

> The estimated magnitude of the realization response is large enough to substantially mitigate the revenue loss that a tax reduction would otherwise cause and may, especially in the short run, be large enough to generate a tax increase.[32]

Excluding Two Extremes

The study with the widest range, Burman and Randolph, is excluded from the average partly for that reason, as is the study by Feldstein, *et. al.*, which showed an unusually high elasticity (implying huge revenue gains from a much lower tax rate). Those last two studies on the list are excluded partly in order to focus on the broad consensus rather than the two extremes. The

average might be therefore be viewed as a *modal* average; an average that omits both extremes. But these two studies are also excluded for other reasons. They appear particularly troubled by problems of distinguishing short-term timing from long-term effects.

The seminal 1980 study by Feldstein, Slemrod and Yitzhaki refers only to corporate stock (where the lock-in effect was later shown to be most pronounced), and to a highly inflationary year (1973) in which the alternative minimum tax and other provisions could push the maximum tax rate on *nominal* gains as high as 45.5% at very high incomes.[33] The high elasticity of nearly -4.0 that Feldstein, Slemrod and Yitzhaki found may have been quite accurate for 1973, but it is nevertheless not comparable to other estimates that include years when tax rates were much lower. And, by definition, any single-year study cannot distinguish short-term from permanent effects.

The Burman-Randolph study came up with a short-term elasticity that is nearly double even the extremely high estimate in the excluded paper by Feldstein, *et. al.* Yet Burman and Randolph also estimate a long-term elasticity that is smaller than the bottom of any other range (about -.2), although their estimate does not rule out a long-term elasticity that is higher than the average of the eleven studies we surveyed. In his new book, Burman writes that "the response of individuals to permanent differences in tax rates was small or zero," but his study actually says the response ranged from zero to -1.0 (revenue neutral).

Burman and Randolph use the relatively small differences among state taxes on capital gains to estimate permanent elasticity "for a taxpayer with $100 million of taxable income" (a very small group, and one likely to be distorted by unusually large one-time gains). Bogart and Gentry had previously used a similar procedure in early 1993, and came up with a range of elasticity estimates (-.67 to -.82) only slightly below our rounded average of 0.9%.

Burman places great rhetorical emphasis on 1986 as an explanation of his high estimate of short-term elasticity. "The response of taxpayers to the Tax Reform Act of 1986," he writes, "amply demonstrates that [short-term] sensitivity."[34] People rushed to realize long-term gains in late 1986 because they knew the tax rate would rise in 1987. Yet the Burman-Randolph study covers only *1980 to 1983*, and does not account for expectations of future taxes at all. From 1980 to 1982, the U.S. economy and stock market were embroiled in a stagflationary mess. The Federal Reserve pushed overnight interest rates above 16% in 1982, and real GDP contracted by 2.1%. However, that monetary squeeze was followed by an 11% rise of real GDP in 1983-84. These were not typical years. First of all, the wrenching stock market collapse before the Fed relented in mid-1982 could, ironically, "unlock" many gains as investors rushed to avoid even lower prices.[35] Later, *the Dow Jones industrial stock index soared by 56% from June 1982 to December 1983* — a rally that surely had far more "short-term" impact on realizations than the modest and gradual change in capital gains tax rates in 1982-84 (the biggest tax reduction for capital gains actually occurred in 1978, well before the Burman-Randolph sample).[36]

Most important (because expectations are not accounted for), the tax cut enacted in late 1981 did *not* take effect in that year, as Burman and Randolph suppose. It was phased-in for all taxpayers except for a very small number at the very top, where the tax rate on investment income was

immediately reduced from 70% to 50%. For anyone not in that 70% tax bracket (and very few were), *the cumulative decline in tax rates on either capital gains or ordinary income amounted to only 10% in 1982, but 19% in 1983 and 24% in 1984.*[37] For nearly all taxpayers, most of the cut in marginal tax rates was trivial until 1983. For a married U.S. taxpayer earning three times the median income, the capital gains tax rate was 17% in 1981, 15.6% in 1982, 14% in 1983 and 13.2% in 1984-86.[38] *Taxpayers faced with the prospect of a lower tax rate in 1983-84 had an incentive to delay long-term realizations until then. And that is precisely what they did: Capital gains realizations were steady at 2.7-2.9% of GDP in 1980-82, but then soared to 3.6% of GDP in 1983 and 4.2% in 1984.*[39]

Table 2
Estimated Amount by Which U.S. Realizations Expand for Each 1% Drop in Tax Rate
(Long-term; usually assuming a maximum tax rate of 20-28% on long-term gains)

Author	Scope & Method	Elasticity Estimate	Lowest Estimate*
U.S. Treasury (85)	panel data 1971-75	-.8	-.8
Congressional Budget Office(88)	time series 1954-85	-.79 to -.89	-.8
Darby, Gillingham & Greenlees (88)	time series 1954-85	-.41 to - .67	-.4
Auerbach (89)	time series 1956-87	-.5	-.5
Jones (89)	time series 1948-87	-1.2	-1.2
Gillingham & Greenlees (92)	time series 1954-89	-1.07	-1.0
Bogart & Gentry (93)	interstate panel 1982-90	-.67 to -.82	-.7
Auten & Clotfelter (82)	middle-income panel data 1967-73	-.37 to -1.45	-.4
Lindsey (87)	cross section & time series 1965-82	-1.37	-1.4
Slemrod & Shobe (90)	high-income panel 1979-84	-.89 to -1.75	-.9
Auten, Burman & Randolph (89)	panel, 1979-83	-1.63	-1.6
Burman & Randolph (94)	high-income panel, interstate 1980-83	-.18 to -6.42	NA
Feldstein, Slemrod & Yitzhaki (80)	high-income cross section, 1973	-3.75	NA
Average of 11 studies (excluding last 2)	NA	NA	-.9

NA = not applicable *rounded to the nearest tenth

Although the Burman-Randolph study claims to deal with precisely these sorts of incentives to delay (or accelerate) realization of gains, its use of top tax rates alone explicitly ignores the phased-in 1982-84 reduction of marginal rates, instead viewing the entire tax cut as occurring (retroactively) in mid-1981. *Nearly all taxpayers were given ample advance notice to wait for lower tax rates on gains in 1983-84, but the Burman-Randolph model only sees the top tax rate*

and ignores expectations. The combined effects of gradual reductions in capital gains tax rates and extremely sudden changes in the economy and stock market during Burman and Randolph's short sample period could easily swamp the relatively small differences between state tax rates on capital gains.

There are other technical problems with the Burman-Randolph study, as Zodrow and others have observed.[40] But excluding this study does not really affect our average estimate at all. The authors acknowledge that *"long-run elasticities of 0.0 and -1.0 are both included in a 95-percent confidence interval."*[41] Since these equivocal results cannot rule out an elasticity of -1.0, there is no accuracy lost by excluding them from our average, which is actually slightly weaker than -1.0 at recent levels of *U.S.* tax rates -- although *not* at Australian tax rates.

Aside from the flawed study by Burman-Randolph study and the outdated one by Feldstein et. al., all remaining estimates end up being surprisingly similar, considering the wide variety of statistical methods used. Many are time series studies, showing what happened over time as the tax rate changed. Others use cross-section comparisons (including comparisons between states with different tax rates), or study a panel of high-income taxpayers over several years. Lindsey uses a mixture of methods. All of these techniques have been criticized as imperfect, as they undoubtedly are. But when such a large and varied sample of serious studies come up with similar conclusions, it is difficult to argue convincingly that it is merely a coincidence.

The following conclusion of Auten and Cordes is still an accurate description of the slightly updated evidence in Table 2:

> *Cross-section and panel studies generally imply that the elasticity exceeds 1.0. Time series studies generally imply that the long-run elasticity is between 0.5 and 0.9.*[42]

To make it easier to visualize how similar the long-run elasticities in all but two of these studies really are, the last column uses only the *lowest* estimates within a range (which often but not always refers to the long-run), and the figures are rounded to the nearest tenth of a percentage point to avoid spurious precision. *By setting aside the extremes in the last two studies, we arrive at an average long-term or permanent elasticity estimate of -0.9 at average marginal tax rates of 20-25%* (if that tax rate were doubled, the elasticity would likewise be doubled in most estimates). On average, the studies indicate that a 1% reduction in the (relatively low) U.S. tax rate could be expected to result in a permanent increase of nearly 1% in annual realizations of capital gains. If progressive tax rates are applied to capital gains (as in Australia and the U.S.), an elasticity slightly lower than 1% can still mean the highest U.S. tax rates on capital gains could be further reduced with no revenue loss, because capital gains can push other income into higher tax brackets.[43]

With Australia's highest capital gains tax rates more than twice those of the U.S., the elasticities would likewise be at least twice as high (or about 1.5 times as high at the 34% rate). That means lower tax rates would be associated with much *larger long-run* revenues. As Burman explains it, "the elasticity at a tax rate of 15 is half of the elasticity at a tax rate of 30 percent."[44] Even the

lowest end of the range of U.S. estimates (an elasticity of -0.4 to -0.5 %), found in only three studies, would translate into a revenue-neutral estimate very close to -1.0 at Australia's current tax rates. In short, the *lowest* two U.S. estimates of long-term elasticity implies that lower tax rates must be revenue neutral for Australia, while the *average* estimate implies a substantial *increase* in tax revenue. *Every one of these eleven studies, and certainly the average of them all, would have to be entirely incorrect before there would be the slightest risk that reducing all of Australia's CGT rates (except perhaps the 20% rate) could conceivably lose even one dollar of revenue.*

For additional evidence, consider the U.S. experience with higher capital gains tax rates after 1986. The U.S. tax reform of 1986 had many admirable features (notably, low marginal tax rates), but it was confounded by the notion that lower tax rates for human capital had to be matched by higher effective tax rates on capital invested in corporations, at both the corporate and individual level.[45] That pointless tradeoff resulted in a substantial increase in tax rates on long-term capital gains -- particularly at low and moderate incomes (although the tax on *short-term* gains at the highest incomes actually fell from 50% to 28%). Auerbach and Slemrod explained that although the 1986 law raised the top capital gains tax from 20% to 28%, the tax rate increase was much larger for those with incomes too low to have been affected by the previous top income tax rate of 50%:

> For a married taxpayer filing jointly with $100,000 of income in 1985 dollars, the increase would be from 18 percent to 33 percent; with $40,000 of income, the increase was from 11.2 percent to 28 percent.[46]

The *average* tax rate on capital gains thus increased much more than the highest *marginal* tax rate, at least on paper. In reality, relatively few gains were ever realized at the new 28-33% marginal rates, so the average rate turned out to be lower than the revenue estimators had expected. Long-term realizations were also *much* smaller than expected -- nearly $100 billion a year smaller through 1995. Short-term realizations (on which the top tax actually *fell* from 50% to 28-33%) were relatively strong. This experience persuaded nearly everyone (except a few diehards at the revenue-estimating agencies) that a capital gains tax as high as 28%, even when applied to taxpayers previously paying only 11%, had proven to be a revenue-losing proposition.

The elasticity estimates in Table 2 can be used to calculate a revenue-maximizing tax rate — which means the point at which either a higher or lower rate would yield less revenue in the long run. Lindsey calculated the implied revenue-maximizing rate from several studies available at the time of the 1986 rate increase, which are shown in Table 3 with the addition of one newer study by Gillingham & Greenlees.

Aside from the Congressional Budget Office, whose errors in estimating capital gains tax receipts soon proved legendary, only Joseph Minarik predicted that the higher capital gains tax after 1986 would raise more revenue than the previous law. But that was because Minarik reasoned that much higher rates on taxpayers with modest incomes would offset lower realizations at the top of the income scale.[47] Since the midpoint of Auten and Clotfelter's elasticity estimate was -0.9 -- the same as our average -- the "consensus" estimate of the revenue-maximizing is likewise close

to 21% (and ranges from about 18% to 24%). More important, it is a simple fact that *no* U.S. study (not even Burman-Randolph) has ever suggested that a tax rate much above 30% -- such as Australia's -- would raise more revenue than a lower tax. Even the CBO, in its error-prone early estimates, never came up with a revenue-maximizing tax rate higher than 26-32%.

Table 3
Estimated Revenue-Maximizing Capital Gains Tax Rate

Treasury	12%
Gillingham & Greenlees	17%
Lindsey	18%
Auten & Clotfelter	21%

To calculate a revenue-maximizing rate is not to say that the tax rate "should" be set at this level. A revenue-maximizing rate might impose great inefficiencies, distortions and disincentives, so the actual rate should be lower than the revenue-maximizing rate. Alternatively, the tax rate might be set above the revenue-maximizing level because some other goal, such as income-leveling, is given a higher political priority. What the elasticity estimates do show, however, is that tax rates much above 20% definitely impose serious distortions in behavior, which means a high capital gains tax is an extremely inefficient method of raising what little revenue is actually collected at higher tax rates. Even the most skeptical U.S. researchers have not claimed the revenue-maximizing rate is higher than 28%, certainly not as high as 47%.

With only one flawed and ambiguous exception (Burman and Randolph), *nearly all U.S. studies of the lock-in effect clearly imply that Australia's top tax rate on individual capital gains is at least double the revenue-maximizing rate.* Reducing the rate to 30% would raise more revenue, not less. And reducing the rate to 25% would probably raise even more than a 30% rate. Reducing the rate to 20% *might* raise less than a 25% rate, but not all studies agree about that.

The U.S. elasticity estimates in Table 2 *must at least be doubled for Australia*. Since 1978, the *highest* U.S. tax rate on individual capital gains (28%) was still lower than the *lowest* rate in Australia (29%). That makes a huge difference. Revenue elasticity is unquestionably higher at higher tax rates (it is also higher for stocks than for real assets). In 1994, CBO economists Kasten, Sammartino and Toder noted that *average* elasticity figures of the sort shown in Table 2 conceal the fact that the response is much higher than average among those in the top fifth of the income distribution (whose gains were taxed at 28%) than in the lower-income groups (whose gains were taxed at 15%): "The gains-weighted elasticities of realizations to marginal tax rates at 1989-law rates were: -0.16 in the bottom quintile . . . -1.13 for families in the top quintile of the income distribution."[48] Although an average of elasticities at all incomes and tax rates might not appear revenue-neutral, reducing the *highest* tax rate would be revenue-positive (larger than one), even within these notoriously cautious CBO estimates.

In the early 1990s, the Joint Committee on Taxation assumed a smaller *average* response to lower tax rates than the U.S. Treasury. This caused quite a heated debate at the time. Yet both agencies agreed that *revenue elasticity would be larger at even a slightly higher tax rate*:

> The JCT used a 0.7 elasticity at a 20 percent tax rate and a 0.875 elasticity at a 25 percent rate. OTA used a 0.9 elasticity at a 20 percent rate and a 1.125 elasticity at a 25 percent rate.[49]

Extending these estimates up the tax rate scale means *Australia's 47% capital gains tax faces a revenue elasticity of -1.65 to -2.24*. Either of those two official U.S. estimates is obviously well above the -0.9 to -1.0 elasticity needed to make lower tax rates revenue neutral. Even Australia's *lowest* tax rate is *above* the revenue-neutral level, according to the *lowest* of these conservative U.S. government estimates.

According to the two leading revenue-estimating agencies of the U.S. government, a sizable reduction in the highest Australian tax rates on capital gains would clearly *increase* revenue -- probably doubling annual realizations, and possibly even doubling annual revenues.

Does the fact that gains are indexed in Australia make the lock-in effect of a high capital gains tax any less troublesome? No, because Australian taxpayers cannot deduct "real" capital losses, nor deduct nominal losses against ordinary income. This can add another source of lock-in to the usual one, quite possibly making the overall lock-in problem even worse. Burman explains:

> Suppose a taxpayer had purchased an asset for $100, and the asset had increased in nominal value to $130 but the price level had risen in the same period by 50 percent. The asset would have a nominal gain of $30 but a real loss of $20. Because of the loss limit, the loss would not be deductible if the asset were sold today. If the asset were instead held and it increased in real value by $1, the real loss would be $19. Tax liability would be unchanged because the loss would still not be deductible. In this case. . . . the marginal tax rate on future gains would be zero, which would provide a powerful incentive to hold the asset.[50]

The research showing that capital gains realizations are sensitive to tax rates is not only important for revenue reasons. It is clear evidence that this is an unusually *bad tax*, one that inflicts maximum harm on the economy in exchange for minimal revenue. As Zodrow put it, "a large realization elasticity suggests that capital gains tax have important efficiency costs, since it indicates significant distortions of individual decisions."[51]

Still Waiting for The Long Run

In the U.S., the sole remaining criticism of the large body of evidence showing that a capital gains tax of about 20% yields more revenue that a higher rate (28%) is to assert that this is merely a short-term effect, and that any revenue gains in the first few years after the tax rate goes down will be offset by lower revenues in future years. This "long run" effect has not yet appeared more than two decades after the capital gains tax was first slashed in 1978. That was shown graphically in the previous chapter, and also by the fact that official revenue estimates were grossly exaggerated for many years after the capital gains tax rate was increased and also grossly understated for many years whenever the tax rate was reduced.

All the experience with rising and falling tax rates on capital gains since the 1970s has not yet convinced some of the same federal economists whose models failed to predict the dramatic rise in capital gains tax receipts after tax rates came down in 1978-81, and likewise failed to predict the stagnation of revenue after the tax increase of 1987-96. They have no evidence, but they do have a *theory*. Burman calls it "theoretical evidence," but there is no such thing as theoretical evidence. This particular version of the "life cycle" theory claims that ("in the absence of bequests") all assets must be disposed of sooner or later. If a high tax capital gains tax discourages realizations for a few years, there must be more realizations later. If a low capital gains tax encourages realizations for a few years, there must be fewer realizations later. A Federal Reserve economist explained this theory as follows:

> In the absence of bequests, theory suggests that the long-run realizations elasticity is much smaller than one in absolute value. This result is due to the assumption that all capital gains accruals are ultimately taxed during the life of an investor.[52]

This theory appears persuasive to those inclined to be persuaded. Gravelle even cites a few "simulations" derived from the theory, purporting to show that revenue elasticity is closer to -0.5 than -1.0.[53] But simulations are no better than the assumptions on which they are constructed. And the assumption that "all capital gains accruals are ultimately taxed during the life of an investor" is quite conspicuously untrue.

In Australia's case, few recorded capital assets even appear to be held by individuals with finite lives; most are held by corporations or funds. Besides, the same economists who rely on this assumption that *all* gains are ultimately taxed at individual rates (such as Jane Gravelle and Alan Auerbach), also complain that half or more all capital gains in the U.S. are *never* taxed. "Economists have estimated," writes Burman, "that about one-half of capital gains are held until death or donated to charity, thus escaping tax."[54] Henry Aaron adds a very important point -- particularly for Australia -- that another reason gains are never taxed is that they accrue to "foreign owners."[55] To the extent that a high capital gains tax makes Australians reluctant to hold capital gains assets, more of those assets are likely to up in the hands of foreigners who do not pay this tax (some may pay foreign CGT on Australian stocks, but never at rates as high as Australians are supposed to pay, but rarely do).

Even the Burman-Aaron-Gravelle-Auerbach estimates that half or more of all gains are never taxed exclude the fact that high capital gains taxes are often just *evaded*, as discussed below. Many other appreciated assets are donated to tax-exempt charities, foundations, museums and university endowments, so they vanish from the tax base. Other assets are given to heirs -- violating the key assumption of zero bequests -- which has slightly different effects in the U.S. than in Australia.

In the U.S., heirs inherit capital assets on a "stepped-up" basis -- at the market value when inherited rather than when purchased. Although Haig-Simons reformers have long been annoyed by this policy, it is politically inevitable because of high marginal tax rates on U.S. estates. Taxing both the value of inherited assets with the U.S. estate tax of 37-55% and also the appreciation of

those same assets with a capital gains tax would be virtually confiscatory, requiring the sales of assets (a family business or farm) to pay the tax. Australia, to its credit, has no estate or inheritance tax. But that does not salvage the erroneous assumption that lock-in cannot continue for many years beyond "the life of an investor." On the contrary, the absence of any death taxes in Australia means the "lock-in" effect might continue *indefinitely* -- not merely for years but for decades or *generations*. In both the U.S. and Australia, in short, the critical assumption that all gains must be realized within a lifetime is flatly false. Appreciated assets are often given to heirs, donated to tax-exempt institutions, titled as corporate assets, or concealed from tax authorities.

Another big problem with the notion that more realizations today mean fewer tomorrow, and vice versa, is that both the stock of assets subject to this tax and the market value of those assets can be affected by the capital gains tax itself. If the capital gains tax is too high, firms will finance themselves with more debt, less equity and retained earnings. Short-term debt is not subject to the capital gains tax. Aspiring new enterprises that cannot finance themselves with such bank loans or debt securities will simply not come into existence in the first place, or will fail if they try. Failed business plans also fail to generate taxable gains.

Moreover, privately-owned companies are typically reluctant to "go public" in countries with a high capital gains tax. The assets just remain in the family and are not traded in any organized market, so they cannot possibly generate taxable gains no matter how valuable they become.[56] An Australian study by Matt Benge finds the capital gains tax introduces *"a general bias in favour of investment by unincorporated enterprises relative to widely held companies."*[57] The fact that Australia's stock market capitalization is relatively low for an advanced economy -- 79.5% of GDP in 1996 compared with 115.6% in the U.S. -- is consistent with this pattern, often seen in other countries that impose heavy taxes on exchanging titles to shares of publicly traded companies.[58]

Yet another problem with the idea that there is some fixed pool of capital gains, so that only the timing rather than the amount of gain can vary over a person's lifetime, is that a high tax rate prevents many marginally profitable trades from ever taking place. A frustrated exchange of assets that might have appeared marginally attractive at a lower tax rate does *not* imply that the exchange will take place later. An investor might wish to sell his old stocks in company X in order to buy new shares in company Y, but company Y remains undercapitalized because such investors are locked into their less desirable investments. With a reasonable tax on asset trades, there will be more trades *every* year, including many that would otherwise never occur.

To make all their life-cycle theorizing appear somewhat empirical, Auerbach and Gravelle estimated that the higher elasticity estimates implied that a large cut in the capital gains tax would make capital gains realizations be even larger than accrued capital gains. Burman describes this argument:

> If the tax rate were cut by 50 percent, sales of assets would have to double for tax revenues to remain unchanged. That means annual sales of assets would have to equal or exceed total annual accruals for such a response to be sustainable over the long run.

This arithmetic would make some sense if anyone was really talking about halving *average* tax rates on both realized and unrealized gains, rather than trimming the highest *marginal* rates on those gains that happen to be realized. Because *at least* half of all gains are said to be untaxable, and much of the rest is receiving effectively low rates from prolonged deferral, the average tax actually paid on both *unrealized and realized* gains is already extremely low. Indeed, the relevant tax rate would *rise* to the extent that lower *marginal* rates resulted in shorter deferrals, or fewer donations and bequests.

Even if it were necessary to double the rate of realizations, is it really true that this would cause realizations to outrun accruals? *James Poterba calculated that realizations in 1994 amounted to less than 2.5% of unrealized gains.*[59] Even if the stock of unrealized gains was not growing every year (an absurd assumption), and annual realizations doubled (to 5% of unrealized gains), it would take a very long time before anyone would have to worry about the Auerbach-Gravelle "long run." Indeed, it might well take forever, because accrued unrealized capital gains have expanded very rapidly along with the U.S. stock market.

Auerbach and Gravelle published their estimates of realizations outrunning realizations in 1988-91. A key comment that Burman buried in a footnote reveals that, "recent accruals in the stock market have been much higher than the level observed by Auerbach and Gravelle." That is a magnificent understatement. The Federal Reserve Board estimates that just *the financial portion of household wealth (aside from homes and other real assets) increased from $13.1 trillion in 1988 to $30.1 trillion in 1998*, with most of that rise being in corporate stock (bonds also experienced large, unrealized capital gains). Even with annual realized gains soaring above $ 300 billion a year after the capital gains tax rate was reduced in 1997, there is certainly no danger of realizations outrunning annual wealth gains of nearly $2 *trillion* a year (not counting real assets), nor is there any risk of even making much of dent in the huge stock of *unrealized* gains.

The ratio of realizations to accruals or unrealized gains is an old question, and the old answers still remain relevant. In 1969, Bailey estimated that the ratio of accruals to realizations was well below 10% and possibly as low as 1% a year.[60] In 1970, McElroy estimated that accrued capital gains averaged more than four times realized gains over the entire 1946-68 period.[61]

It is not just that at least half of all U.S. gains are never taxed, it appears that an even larger portion may be almost never *realized* — not even by foreigners and tax-exempt organizations.[62] One reason is closely-held companies; the family owners of GalloWinery are not eager to sell. Even among public companies, founders of companies like Microsoft can realize or donate millions of dollars of gains without even making a serious dent in their holdings. But that certainly does not prove the size and timing of their taxed realizations and untaxed gifts are insensitive to the tax rate, nor that the decision to "go public" is not likewise affected by the capital gains tax (imagine how much smaller U.S. capital gains tax receipts would be if Microsoft had not gone public).

Australia's unrealized gains are undoubtedly enormous relative to the tiny amounts of gains realized each year, particularly by individuals. It is not necessary to "unlock" more than a small

fraction of the stock of unrealized gains, with the enticement of a lower tax rate, in order to discover a surprisingly large revenue windfall that lasts for quite a few years. This is why some U.S. estimates of *short-term* elasticity are four to six times the usual long-term estimate (of revenue neutrality).

The life-cycle theory behind speculations and simulations claiming that only ephemeral revenue gains can result from a lower capital tax rate is clearly based on many false premises. And by focusing exclusively on the unlocking of gains from an allegedly fixed pool of assets, it also ignores numerous other channels by which the capital gains tax can affect revenues.[63] We now turn to some additional effects of capital gains on public finances that are not included in the lock-in estimates, although a few of these effects may have been statistically confounded with the lock-in effect (because they operate in the same direction and are difficult to identify separately).

Other Potential Revenue Benefits

Although the lock-in effect has been the most intensely studied, a capital gains tax has several other effects which should, in theory, be expected to affect tax revenues. The most important of these concern effects on economic growth, through incentives to save, take entrepreneurial risks and improve the allocation of capital. The capital gains tax is another layer of taxation on the returns to business investment. Taxing shareholders hurts corporations as surely as the corporate income tax. Reducing the capital gains tax rate would reduce the cost of capital, making more business investments affordable and attractive. There are other benefits to economic growth arising from increased efficiency and mobility of capital. As the real economy grows faster, through stronger and more efficient investment, so will real tax receipts from a variety of sources.

The impact of capital gain tax on economic growth is a complex topic, which we deal with in a later chapter. It is briefly mentioned here only because it is literally impossible to estimate the effect of any tax on *long-term* tax receipts without considering its impact on long-term economic growth.[64] In Australia, as in most countries., national taxes have been a remarkably constant percentage of GDP (24-25%) in recent decades, aside from cyclical fluctuations. *With the ratio of tax receipts to GDP almost fixed, or at least severely limited on the upside, real tax receipts can only grow as fast as the private economy does*. Real government outlays tend to rise over time, requiring real growth of receipts. But real tax receipts cannot continually increase more rapidly than the private economy that sustains them. *The dynamic impact of tax policies on growth of the economy is far more important to the long-run fiscal health of the government than static revenue estimates which take economic growth as "given"* (even if all tax rates were halved or doubled).

Even aside from its impact on economic growth, or on unlocking unsold assets, there are many channels by which changes in the capital gains tax may affect revenues from the CGT itself and also from other taxes, such as taxes on corporate income. Consider the following examples:

1. Capitalization: A lower tax on capital gains should increase the present value of assets that yield little or no current income, but are expected to appreciate over time. As Auerbach puts it, "future taxes on capital assets are immediately capitalized."[65] The improvement in the prospective

net return following a reduction in capital gains tax should therefore be expected to raise the market value of growth stocks (and lower the cost of capital). In a general equilibrium model developed by Canadian economist Peter Klein, "capital gains lock-in shown to depress the pretax returns of securities with accrued capital gains."[66] Reducing lock-in by reducing the capital gains tax would therefore *raise* the pretax returns of such securities. Small capitalization growth stocks, in particular, are likely to benefit from *improved liquidity*, which is also favorable for asset prices. A recent study from the National Bureau of Economic Research finds that announcement of the 1997 cut in the highest U.S. capital gains tax immediately raised the stock prices of growth stocks by 6% relative to dividend-paying stocks.[67] Since dividend-paying stocks certainly did not fall in absolute terms, some of the market's awesome rise in 1997 was surely attributable to the lower prospective tax on realized gains. In 1990, Sinai-Boston Econometric model estimated that reducing the U.S. capital gains tax to 15% would create an "average annual change" of 16.3% in the S&P 500 stock index.[68] In 1995, Data Resources (DRI) and Laurence Meyer Associates, also predicted large stock market gains following a reduction of CGT.[69] With *larger* capital gains to tax, and less incentive to delay realizations, CGT revenues surge (as they appear to have done in the U.S. in 1997-99).

Burman acknowledges that "a lower tax rate on capital gains might also produce additional revenues in the short run, because it would . . . drive up the price of capital gains assets and the higher prices would translate into greater capital gains." However, he argues, "in the long run the price of capital assets is determined by their replacement costs, which are unlikely to be affected by a change in the capital gains tax. Such a move does not appreciably change overall investment, just the mix of financing between equity and debt."[70] The stock market puts a value on unique intellectual capital and intangible capital, not just homogeneous buildings and machines. And the mere "mix of financing" (more equity, less debt) that Burman dismisses has potentially huge and lasting effects on tax revenue and on the economy, as we demonstrate repeatedly throughout this report.

2. Bond Yields: Bonds, like dividend-paying stocks, are partly held because of the chance of capital gain. Although a reduction of capital gains tax is likely to have *relatively* more impact on prices of assets that rely entirely on capital gains for their return, bonds should nevertheless benefit in absolute terms from the higher prospective after-tax return on prospective gains.[71] A lower tax on capital gains should make it easier to sell bonds, thus reducing the government's borrowing costs. From 1986 to 1995, the yield on long-term Australian government bonds averaged 5.9 percentage points higher than the rate of inflation. That has been a high real interest rate by international and pre-1985 Australian standards. If the Australian government stopped trying to collect 47% of any capital gain, it would find it somewhat easier to sell its own bonds at lower interest rates -- for the same reason that tax-exempt municipal bonds in the U.S. carry a lower interest rate than taxable bonds. Interest rates incorporate a "tax premium" as well as an inflation premium. A lower bond yield would mean somewhat lower tax revenue from interest income, but that is only a partial offset to the related reduction of government outlays for interest expense.

3. Portfolio Shifting: A taxpayer's exposure to the capital gains tax can be minimized by "portfolio shifting" — holding a relatively larger share of assets in forms not subject to this tax,

such as housing and liquid assets. A tax-induced preference for income stocks that pay off in dividends rather than growth stock that might pay capital gains is an important variation on this same theme. One should expect stockholders in high tax brackets to hold relatively large portions of their fully taxable assets (outside of superannuation funds) in stocks of companies that paid franked dividends or interest rather than in new stock issues (IPOs) or "growth stocks" that merely hold out the hope of capital gains. That is because the imputation of franked dividends reduces corporate tax liabilities, while shares of companies that retain earnings and minimize debt are likely to be heavily double-taxed by both the corporate and capital gains tax.

According the Australia Tax Office, Australian taxpayers with incomes of $500,000 or more thus reported $514 million of income from franked dividends in 1996-97, and only $243 million of net capital gains. That is the opposite of the U.S. situation. Taxpayers with gross incomes above $200,000 in the U.S. reported $170.9 billion of net capital gains in 1996, but only $36.9 billion of dividends and $39.8 billion of taxable interest income.[72] One could certainly argue that the relative preference for capital gains assets in the U.S. reflects U.S. double-taxation of dividends, as much as Australia's double-taxation of capital gains, that does not quite explain the relatively low holdings of interest-bearing assets in the U.S. (corporate interest payments are deductible in both countries, therefore not double-taxed). In any case, the small size of reported capital gains among high-income Australians, relative to either Australian dividends or the portfolio mix in the U.S., shows one reason "the rich" pay such a small share of Australia's capital gains tax. High-income Australians apparently choose to minimize risky capital gains in favor of safe dividends, and/or they rarely sell such assets that they do own. Unfortunately, that means shares of established dividend-paying companies are tax-favored over younger firms whose high start-up costs make it impossible to pay dividends, and whose limited access to bank credit or bond markets makes venture capital and IPOs critically important. This *tax bias in favor of dividend-paying firms* has serious implications for the entrepreneurial vitality of the Australian economy, discussed later in this report. For now, however, the main point is to observe that high-income taxpayers can and do minimize exposure to double-taxation of corporate equity by simply holding relatively more of their wealth in the form of cash, housing, consumer durables and dividend-paying stock.

4. Corporate Leverage and Taxable Profits: Portfolio shifting by individuals implies that companies will be more leveraged or "geared up" than otherwise, financing themselves in ways that ultimate owners (individual owners of corporate debt or equity) prefer. As Feldstein put it, a high capital gains tax "will undoubtedly have the adverse effects of reducing the incentive to invest in equities, encouraging the corporate use of debt finance."[73] For the U.S., Randall Pozdena found that "an increase in the . . . tax on capital gains increases the use of debt generally and low-grade (risky or 'junk') debt specifically."[74] A comparison of Canada with New Zealand (which has no capital gains tax) found that alleviating double-taxation of dividends (as in Australia) should help to reduce leverage, but that "capital gains taxes can reduce the benefits of integration." [75]

Financing a public corporation's investments with debt reduces a company's taxable earnings, while financing investments with retained earnings results in the project being subjected to both the 36% company tax and the 47% capital gain tax on individual stockholders. For large

business and international companies, the Australia Tax Office estimates that the ratio of debt to equity averages 2.87. High interest expenses help reduce the effective tax rate to 14.1% of operating profit (among those firms still showing any profit after deducting interest expense). By providing a more favorable tax climate for new issues of corporate stock, a lower capital gains tax helps to raise the ratio of equity to debt. With smaller interest payments to deduct, corporate tax receipts would be much larger than otherwise. Excessive corporate leverage is a predictable effect of a high capital gains tax, yet it does not show up as a loss of revenue from the capital gains tax *per se.* Instead, it shows up in the form of reduced *business* tax receipts -- a much larger, more important revenue source. To consider the impact of a capital gains tax on revenues from that source alone is to ignore potentially more important effects on other taxes, particularly business taxes.

5. Personal and Corporate Savings: A capital gains tax can also be avoided by simply acquiring fewer assets — that is, by saving less at either the individual or corporate level (i.e., minimizing retained earnings). Australia's household savings rate fell from 10.1% in 1987-84, before the capital gains tax was enacted, to 4.7% in 1985-97. Although timing alone is not conclusive prove the capital gains tax is guilty of promoting reduced saving, that tax certainly belongs on a short list of suspects. Because the capital gains tax fall heavily on retained corporate earnings (which generate taxable gains to individual shareholders), it also discourages *corporate* savings. To the extent that reduced personal and corporate saving may well have been due to double taxation of the fruits of saving in risky forms (i.e., growth stocks), it would surely slow long-term growth of the real economy, and therefore of tax receipts from *all* sources. As Martin Feldstein put it, "*An increase in private saving increases the capital stock and the return on this additional capital investment increases corporate tax payments that offset the loss of personal tax revenue*."[76]

6. Asset Reallocation Away from Lower-Taxed Entities: Lowering the tax rate on individuals would make it attractive for them to bid stocks away from institutions, thus moving some of those assets into, say, a 30% tax bracket when they would otherwise be taxed at 15% or zero. Without the steep tax penalties on Australian ownership of growth stocks, Australians could be expected to bid shares away from tax-exempt foreign investors in Australian stocks, thus expanding the tax base. In the context of playing down the "capitalization effects," Burman begins by noting that "as asset prices increase, the quantity of those assets demanded by investors who are not subject to the income tax — or who are taxed at lower rates than the maximum — declines." He does not notice that moving assets away from those taxed at rates of 0-15% and placing them in the hands of individuals taxed at, say, 25-30% must result in more tax revenue.[77]

Shortly after the U.S. tax reform of 1986, raising the tax rate on capital gains, Gertler and Hubbard observed that the fraction of equity held by investors who paid zero tax on capital gains -- foreigners and tax-exempt organizations -- had grown from 22.1% in 1979 to 27.1% in 1988.[78] The capital gains tax on appeared to be higher, but the percentage of assets affected by this tax was significantly smaller. Similar diversion of capital gains assets into tax-exempt hands — particularly foreign investors -- is likely to involve much larger revenue losses for Australia, since foreign shareholders do not pay Australia's high individual tax rates on capital gains or dividends. An Institute for Public Affairs study by Warby and Nahan shows that the foreign share of business

assets in Australia really soared after 1985, rising from about 27% to 44% of the total.[79] *By June 1998, foreign investors owned 32% of the Australian stock market, while private domestic investors held only 23% (aside from superannuation funds).*[80] If a lower CGT merely caused those ratios to switch places — with the foreign share falling to 23% of the market and the domestic share rising to 32% — the tax base of the capital gains tax would be dramatically larger.

Diversion of capital gains assets into superannuation funds is quite apparent, since the funds realize much larger gains than individuals. But this may not cost the government much revenue, because very few gains realized at 15% would ever have been realized at the much higher individual rates. Moreover, assets held in pension funds do not really disappear from the Australian tax base, as assets held by foreign investors or tax-exempt institutions do. The purpose of accumulating assets for retirement is to draw them down in old age, at which point both the principal and the return on those assets is taxed by taxes on individual income and consumption (including these same taxes on heirs).

Representatives of Australian superannuation funds raise objections to reduced taxation of *individual* capital gains, presumably because they are thinking in zero-sum terms (i.e., that additional asset accumulation outside the funds means less saving for retirement). Actually, additional *individual* demand for capital gains assets would be met by companies substituting equity for debt, and by citizens buying back Australian shares from foreigners, not by individuals reducing their contributions to retirement plans. Instead of lobbying for high tax rates on their customers, the funds should consider arguing for repeal of the 15% annual tax on inside build-up. Taxing retirement funds before retirement is a myopic policy even from the viewpoint of long-term revenues. Without such a tax on the earnings and capital gains of superannuation funds, Australian citizens would quickly accumulate much larger retirement funds, which would eventually be taxed as individual income and consumption at tax rates well above 15% (as well as reducing the government's need to spend so much on an aging population).

Want More Revenue? Lower the Rate

If Australia's tax on capital gains transactions taxes were not so punitive, individuals in the higher tax brackets would invest in more assets that carry the hope of capital gains (thus helping growing firms to grow), and also trade securities more frequently (thus raising more tax revenue).

Writing in opposition to a reduction of the U.S. capital gains tax in 1988, Alan Auerbach said that "before policymakers take such a step [reducing the tax on capital gains], they should know far more than anyone yet knows about the permanent impact of taxes on capital gains realizations . . ."[81] But this is a prescription for policy paralysis. It suggests that governments should never do anything until all economists are in total agreement about the effects in the very long run. In reality, policymakers rarely have the luxury of waiting for absolute certainty, much less for agreement among notoriously quarrelsome economists. Indeed, Auerbach himself concluded, several years later, that "the information and advice that policymakers receive often ignores valuable lessons that academic research . . . can provide. The is little rationale for discarding partial information in favor of ignorance."[82]

Economists' knowledge about the revenue effects on high capital gains tax rates (or about almost any other imaginable subject) may never be 100% precise or flawless. But there is more and better information about the impact of the CGT on tax receipts than about virtually any other aspect of the tax system. Economists do not know who ultimately bears the burden of corporate taxes, for example, or why companies pay dividends.

Even the *lowest* elasticity estimates among the U.S. studies (-0.4 to - 0.5) imply that cutting tax rates as high as Australia's would be revenue neutral. The average estimate (an elasticity larger than -2.0 at a 47% tax rate, and about -1.5 at the 34% rate) implies that reducing Australia's capital gains tax rates would raise much *more* revenue than current law, quite possibly twice as much in the long run (and even more than that for the first several years). When other effects are taken into account -- such as the impact of reduced leverage on company taxes, capitalization of lower capital taxes in higher asset values, reallocation of assets away from entities paying taxes of 0-15%, and reduced incentives for avoidance and evasion — it is beyond reasonable doubt that Australia's amazingly high tax rates on capital gains are costing the Australian government a *lot* of money.

Chapter 5. Assessment of Alternative Means of Reform

There have been numerous proposals to change the way capital gains are taxed in Australia. There are also a few other possible policies, successfully used in other countries, which have not yet been under active consideration in Australia. What is most important is that the apparent rush to "reform" the CGT not result in hasty changes that are likely to prove unhelpful, or even harmful, yet difficult to reverse.

In this section, we review some alternative methods of taxing (or not taxing) capital gains -- nearly all of which have been tried at one point or another in the U.S., U.K., and elsewhere.

Tapered Rate Reduction vs. Capital Agility

Australia's 1985 capital gains tax was similar to the system which the U.K. adopted in 1982-85 (indexing) and 1988 (taxing gains as income), but recently abandoned. Once again, some Australians propose to emulate the latest fashion in British taxation — namely, to surrender indexing in favor of a "tapered" rate that declines the longer an asset is held. And once again, this would be a big mistake.

Deferral of taxation means the effective tax rate on capital gains falls the longer the asset is held. Proposals that the rates be reduced over time would increase this "lock-in" effect, with adverse effects on financial markets and government revenues. Lock-in is also of no help to companies, who care what their shares are worth, not who owns those shares.

It is not in the interest of efficient, liquid capital markets for tax policy to induce investors to hold shares one day longer than they otherwise would. Even without lower tax rates for shares held more than five years, any tax on realizations of capital gains already has more than enough of this "lock in" effect. The tax can be avoided indefinitely by simply not selling stocks or other assets which have risen in value. Deferring taxes for as long as possible (even beyond death) is already extremely valuable to shareholders, because the money that would otherwise be paid in taxes can remain invested.

Economic growth requires what Joseph Schumpeter called "creative destruction." A dynamic economy is constantly "restructuring," contracting older industries or plants to make room for the new. The *mobility* of capital -- from yesterday's to tomorrow's winners -- is therefore vital to the dynamism of an economy. A tapered CGT, by contrast, is deliberately designed to freeze investments in place, to strengthen the lock-in effect.

This idea is nothing new. The U.S. experimented with a tapered CGT from 1934 to 1937. Twenty percent of capital gains were exempt after one year, forty percent for assets held from two to five years, sixty percent after five years, and seventy percent after ten. In 1936-37, dividends became taxable for the first time and all income tax rates above 34% were increased once again, putting the top rate up to 79% (President Hoover had already tripled all tax rates in June 1932, and was subsequently surprised when revenues fell sharply). The higher income tax

rates of 1936-37 also meant higher capital gains tax rates. The maximum tax on gains began at 63% for assets held longer than one year, then declined to 47% after two years, 32% after five and 24% after ten.[83] If this was supposed to make investors wait before selling, it had the opposite effect. In early 1937, the stock market began to crash, falling by 32%. That was followed within three months by the third worst U.S. economic contraction on record, from May 1937 to June 1938.[84] This frightening recession within a Depression prompted Congress to slash the 1938 capital gains tax to 20% capital for assets held more than one year, and 15% after two years. The U.S. capital gains tax then remained below 26% until 1968-78, when various provisions gradually increased the top CGT to as much as 46% (and the S&P 500 stock index fell by 2.7%).

History is too easily forgotten, and tax history is no exception. By the late 1980s, Depression-era tax blunders had made a respectable comeback. Several U.S. politicians and appointed officials of both political parties (Republican OMB Director Richard Darman and Democrat Labor Secretary Robert Reich) seized upon the idea that stockholders supposedly care too much about a firm's short-term performance. They argued that tax policy should favor "patient capital" by reducing the capital gains tax only when the same stock is held for five years.

The "patient capital" idea soon spread to Australia, where the 1991 Fightback proposal envisioned excluding 10% of capital gains for each year than an asset is held, thus reaching a zero CGT after ten years.[85] In the U.S., the same theme influenced President Clinton's "targeted" capital gains tax cut of 1993, and also the major CGT cut of 1997, which included an extra reduction of two percentage points (to 8% or 18%) for assets held five years. Then in 1998, the U.K. adopted a complex scheme with all sorts of different tax rates depending on legal form of organization (companies pay only 20-30% CGT), the type of investment (business assets get the fastest and deepest tapered rate cuts) and, above all, the length of lock-in (ten years is considered ideal). Indexation was simultaneously repealed.

The tapered capital gains tax in the U.K. excludes 7.5% of gains each year for business assets, but 25% is the minimum amount subjected to a gain. For a taxpayer in the top 40% bracket, the CGT on business assets drops to 10% after ten years. Form a small company, and those tax rates are cut in half. Although lower tax rates on capital gains are better than higher tax rates, the many strings attached to qualifying for a lower CGT in the United Kingdom are indefensible in terms of economics. The *worst* aspect of the new British tax policy is the taper — offering extra bribes to keep taxpayers locked-in to old investments.

The revival of the failed U.S. tax policy of 1934-47 reflects a fundamental confusion about "short-termism" made popular by Michael Porter's writings about competitiveness. In his rambling 1990 tome, *The Competitive Advantage of Nations*, Porter began sensibly, noting that "most advanced nations do not tax long-term capital gains at all, encouraging investments with long time horizons." Two paragraphs later he shifted direction, asserting that "a tax incentive for long-term (over five years) capital gains on equity investments in companies would be a positive step. . . . The marginal tax rate on very short-term capital gains . . . can raised."[86] Porter did not explain what he imagined his tapered capital gains tax would accomplish or why. So far as can be discerned, no economist has ever attempted to offer any rationale for offering a lower tax rate the

longer an investor remains locked in. Advocates of Haig-Simons accrual taxation, such as Auerbach, propose the exact opposite policy — *higher* tax rates the longer an asset is held -- because deferral of CGT is analogous to an interest-free loan from the government.

Porter's accidental rediscovery of the 1937 U.S. tax scheme appears to have been designed to protect inefficient managers from being replaced through a takeover. Takeovers, he said, were "not the best overall solution" (at least not for existing managers, as opposed to shareholders). But the tapered CGT would not even protect sleepy managers from being sacked. Tax incentives designed to lock-in capital *gains* cannot prevent a stock from *falling*, and it is a weak stock price relative to a firm's potential that encourages better managerial teams to take over (often with the aid of buyout partnerships).

Perhaps the intent of the tapered capital gains tax was to shore-up the stock market values of companies that are facing temporary (or permanent) difficulties. Yet a lower tax rate on five-year gains would not have that effect either. *The market value of stocks does not depend on who happens to own title to the shares*. The mere fact that Mr. Smith has held shares in a company for five years, to qualify for a lower tax, does not make Mr. Jones more willing to pay a higher price for those shares at any time during or after those five years. In fact, the reduced liquidity of shares, due to tax-subsidized lock-in, should depress stock values in general, and certainly stock turnover.

If the intent of a tapered CGT is to encourage investors to hang onto stocks that have *fallen* -- as the phrase "patient capital" implies -- it definitely has the opposite effect. Suppose the tax rate on six-month gains was 47% while the tax on six-year gains was 30%. Smart taxpayers would then rush to realize losses right away. Each dollar of short-term losses could save 47 cents in taxes, while delaying realization of losses until the tapered rate took effect would shrink the tax savings to 30 cents.

Using tax incentives to bribe investors to hold onto shares for many years would also tend to discourage investment in risky, innovative new goods and services. Since investors would know they would face higher tax penalties for selling shares before five years, they would be much *less* inclined to get so locked-in with risky new ventures and much more inclined to play it safe with shares of established, dominant banks, utilities and manufacturers.

Porter argued that the market is short-sighted, unable to put a high enough value on business strategies and intangible investment (such as R&D) that are likely to pay off in the future. If true, that would imply that investors are continually missing an easy opportunity for almost certain riches, year after year, through value investing and long-dated call options. Porter's theory would also imply that stock prices of firms with high *current* earnings are typically overvalued, yet research by Robert Hall of Stanford finds that the exact opposite is true. Hall found, "there is *not enough* of the mentality that Porter criticizes on Wall Street." He also found "the market overvalues R&D, which cuts somewhat against the Porter critique." Hall concluded that "the external stock market does provide the best quantitative measure of a firm's performance."[87]

The whole idea that investors are impatient for quick results is inconsistent with the fact that the most popular and valuable U.S. stocks pay no dividends. If Microsoft were to reduce by half its R&D budget of more than $3 billion a year, using the savings to pay a dividend, could anyone really believe that myopic investors would be delighted and eager to bid the stock price skyward? If investors are really so impatient, why are so many of them willing to forego immediate dividend or interest income for the mere chance of capital gain? Indeed, shares of Internet companies with vaguely interesting *long-term* prospects have been known to sell at an amazingly high price despite little or no current earnings. The only explanation is that marginal investors take an extraordinarily long-term view of anticipated future earnings.

In any case, *short-term investment strategies do not induce short-term business strategies.* That is a hoary myth. Some investors trade stocks frequently, with either a gain or a loss, but for every seller there is a buyer. *The managers of firms are not influenced by how long investors hold their shares, but by the value the market places on their shares.* If investors are reaping capital *gains* from selling shares over a short period of time, the market has obviously *increased* the value of those shares. It makes no sense to argue that the market does not put a sufficiently high value on long-term performance, while simultaneously arguing that investors should face tax penalties for realizing gains when the stock market rapidly upgrades the value of a firm's stock.

Tax favoritism for capital gains on assets held for several years locks investors into yesterday's best investments, rather than tomorrow's. It reduces the mobility of capital.

There is some pragmatic justification for retaining income tax treatment for gains realized in less than 6-12 months, but not because quick trades represent evil "speculation." Speculation is what keeps markets efficient, including bonds markets, and a long-term holding (e.g., venture capital) can be more speculative than a short-term trade. One possible rationale for a higher tax on short-term capital gains is that short-term gains are more likely to represent pure "rent" — unexpected windfalls — which can be taxed without discouraging the underlying investment. Another is that positive returns from taking long or short positions in commodities, options and foreign exchange (matched by negative returns on the other side of the trade) might best be treated as ordinary income, and classifying them as short-term gains is one way to do that. U.S. short positions on corporate stock are arbitrarily classified as short-term gains or losses, however, even if the position is held for years, and that is an unjustifiable distortion.

There is some evidence that even the traditional U.S. distinction between short-term and long-term gains (which is far from universal in other countries with a CGT), causes uneconomic distortions and tax revenue losses.

Australia may well choose to draw some line between short-term and long-term capital gains. But extending that concept to a tapered CGT is a dangerously bad idea. Such related ideas as imposing tax penalties on "speculation" (i.e., liquidity) are also very ill-considered proposals.

"Targeted" Tax Cuts

Whenever Haig-Simons and "old view" theorists feel pressured to concede that the capital gains tax is not entirely harmless after all, one response is to say that reducing the rate is too blunt an instrument for the task. A lower capital gains tax should, they say, be "targeted" to organized venture capital devoted to manufacturing or exports, or to certain types of assets held for some magical number of years, or to whatever other worthy category that happens to be favored by omniscient central planners who are, of course, presumed to be immune from political pressures to favor one rent-seeking cause over another.

In Australia, the notion of targeted CGT relief has focused on small business, farms and/or venture capital deals. But all such categories are basically arbitrary, and impossible to define in an economically meaningful way, so the process of deciding which categories of assets are to be taxed at a lower rate is an invitation to political favoritism.

The U.S. has already tinkered with a targeted capital gains tax cut. Common illusions or deceptions about the way financial markets work led to some peculiar little changes in U.S. capital gains tax policy in 1993. That year's tax law appeared to offer some "targeted" relief from capital gains tax, but only for large investments in new issues in certain industries which are held for five years. Services industries, among many others, were excluded, as were Subchapter S corporations, which are taxed as individuals. That meant *most* of the newest enterprises are not able to benefit from this tax break. David Birch of Cognetics Inc. found that only 11% of his 3,500 "gazelles" (fast moving young companies) were in the manufacturing sector. And the vast majority of young enterprises, even in manufacturing, begin as Subchapter S corporations.

The first error behind the "targeted" capital gains tax of 1993 was the Michael Porter fallacy that stockholders need additional bribes to discourage them from realizing gains and thus paying the CGT. The second error was the idea that capital is only raised when stock is newly issued. That led to the notion that tax policy should favor initial public offerings over subsequent trading in the secondary market. In reality, it is impossible to have a strong market for initial stock issues without also having a strong secondary market when those issues are resold. The price at which new shares can be sold depends to a large degree on expectations about their future price in the secondary market. Because high marginal tax rates on capital gains, profits and dividends are damaging to the secondary market, they must also damage the primary market.

Governments are no more likely to be able to pick winners with a targeted CGT than they are through any other device for handing out favors to those with the most political clout. There is no fine line dividing venture capital opportunities from others, certainly no line that could be defined by those not intimately involved in each enterprise. Opportunity and risk are matters of degree, and matters of judgement. Innovation may occur anywhere, including within large existing corporations.

If anything good came of the U.S. targeted CGT of 1993, it has remained a well-kept secret. A handful of affluent investors lobbied for the specific targets, and are rumored to have been well rewarded. But the targeted CGT relief was otherwise just another failed effort at central

planning. Cutting the capital gains tax rate to no more than 20% in 1997, on the other hand, was followed by rather astonishing economic and financial gains.

A $1,000 Annual Exemption.

The idea of leaving a small amount of annual gains totally tax-free emulates another questionable British policy, although the U.K. exemption (6,800 British pounds in 1998-99) is nearly twenty times larger. No country with an exemption, such as Canada and France, has found it politically feasible to keep that exemption nearly as small as is now proposed for Australia. If the idea of an exemption takes hold, it is likely to grow.

An exemption, whether large or small, reduces average tax rates but not marginal rates. That means it would certainly lose money, but would have no beneficial impact at all on the economy, not even on the lock-in effect. Decisions to do more of less of anything, such as to buy or sell more assets, depend on marginal rather than average tax rates.

An annual exemption also distorts timing. In the U.K., it is a very common practice to sell just enough stocks at the end of the tax year to collect the tax-exempt gain, then buy back the same shares a few days later. An annual exemption also discriminates against "lumpy" gains on assets that cannot be divided as easily as corporate shares, such as older couples who hope to finance retirement by selling a small business or farm.

Exempting a certain amount of capital gains each year might simplify taxpayer reporting, but only if taxpayers were not required to prove that any gains were small enough to qualify for the exemption. If taxpayers were not required to report gains smaller than the exempt amount, that might invite evasion of tax on gains that were actually larger than the exempt amount. Assuming that taxpayers would still be required to report gains that were smaller than the excluded amount, there is no other apparent rationale for a small exclusion.

A $1,000 exclusion would have no effect on *marginal* decisions to save, nor to invest in assets subject to this tax, nor to realize gains more frequently. An exemption definitely loses revenue, unlike a reduction in the tax rate, but it does nothing to diminish the distortions and disincentives of a CGT.

Rollover Treatment for Stock-Swap Mergers.

Australia's "rollover provisions,"as Edward Evans noted in 1988, have always been "less generous than in most other countries."[88] The most troublesome example is scrip-for-scrip exchanges in takeovers and mergers. This issue must stand on its own, however, and not be considered as some sort of alternative to reduced marginal tax rates.

When the CGT was introduced in September 1985, assets acquired before that date were "grandfathered" — exempted from the CGT regardless when they are sold. That was the only reasonable thing to do, since the tax CGT had suddenly changed from zero to a very high tax. Today, many investors still hold pre-1985 corporate shares, which have normally appreciated

substantially over all those years. Accumulated gains are worth much more than comparable gains on post-1985 investments, of course, because grandfathered gains are still tax-free. If grandfathered shares are traded for those of another company, in a takeover or merger, the owners of shares in the target company suddenly lose their grandfathered status and become subject to capital gains tax. They may therefore prefer the *status quo* even though the merged company would be much stronger. Companies attempted to create efficient combinations of firms thus find that they have to sweeten the deal with cash, which could hurt the stock of the acquiring firm since the cash has to come out of retained earnings or be borrowed.[89]

The inability to rollover gains from one stock to another without taxes being due is a barrier to efficient combinations of companies, particularly where grandfathered stock is involved. Indeed, there is a good case for deferring tax on *any* sale of stock if the proceeds are promptly reinvested, as is currently the case only within tax-deferred U.S. pension funds (IRA, Keogh and 401K plans).

In short, there appears to be a strong case for reforming rollover provisions and there is certainly a strong case for reducing the highest capital gains tax rates. But fixing the rollover problem does nothing to alleviate the many problems of high tax rates, and lowering the tax rates alone would be a woefully inadequate solution to the rollover problem. These two CGT issues affect different people and firms in very different ways, so they need to be kept clearly separated, not bundled together as a package.

Across-the Board Rate Cut.

A graduated schedule of tax rates on periodic annual capital gains is not at all comparable to progressive tax rates on annual income. By making the tax on each dollar of capital gain depend on the amount of ordinary income during the year the gain is realized, a schedule of progressive taxes applied to realized gains introduces undesirable problems of equity and intertemporal efficiency. The capital gains tax is supposed to be a tax on gains, not a tax on incomes. There are already more than enough taxes on incomes.

Having different tax rates applied to the same amount of capital gains encourages people to shift the realization of gains into low-income years, and also to shift some of the ownership of affected assets (through trusts, partnerships or companies) to lower-income family members.[90] Progressive tax rates on capital gains distort the *timing* of realizations, because it pays to realize gains during years in which ordinary income is relatively low. *Since retirement income is usually much lower than employment income, progressiveness of CGT (as opposed to a flat rate) contributes significantly to the lock-in effect*, with related economic distortions and revenue loss. The *inequity* of this timing distortion is that it favors individuals with variable incomes, such as those mainly paid through sales commissions or bonuses, and self-employed proprietors who can shift income and expenses between one year and the next.

While the U.S. tinkered with several progressive tax rates on gains (there are now only two), the customary political method of reducing such rates was to exclude 40-60% of all gains from tax, effectively reducing even the lowest tax rates by the same percentage. In Australia, a 30%

exclusion would cut the lowest 29% rate to 20% and the 47% rate to 33%. *A 30% exclusion would reduce the unweighted average tax rate to 25.5% (under the new post-reform tax schedule), yet leave the two highest marginal rates at 28% and 33% — well above most U.S. estimate of the revenue-maximizing level.* Simply capping the maximum capital gains tax rate at 29% or 30%, by contrast, would be far more effective in reducing the highest, most damaging tax rates, but it would nevertheless leave the average tax much *higher*, at 29-30%. For those not totally convinced that a 20% tax rate would yield as much revenue as a 29-30% rate over the long run (the evidence is not 100% conclusive in that range), the flat rate option eliminates even the slightest risk of revenue loss.

Cutting the lowest tax rates as much as the highest rates would be relatively wasteful in terms of average tax revenue, yet relatively inefficient in terms of marginal rates. Most of the economic damage and revenue loss is caused by the highest tax rates, not the lowest. Cutting all rates equally, whether by an exclusion or directly, does not achieve quite as much "bang for the buck" as simply putting a 25-30% ceiling on the highest CGT. Still, a proportional reduction in the four income tax rates would certainly be a strong second-best option to a low flat rate on gains (assuming outright repeal of CGT is not a viable option).[91] If the exclusion was as generous as 50%, Australia's highest CGT would drop to 23.5% at incomes above $75,000 — obviously superior to a 30% cap, and close to the highest CGT in the U.S. (20%).

Exemption for Corporate Stock.

Even the most vocal U.S. critics of a lower tax rate for capital gains suggest making an exception for corporate stock. Burman says, "there is an argument for taxing capital gains on corporate stock at lower rates than other capital gains."[92] And Gravelle writes that, "a cut in the tax on corporate stock would be more likely to contribute to a more efficient tax system than an across-the board cut."[93]

Even the most ardent fans of a CGT have serious reservations when it comes to corporate stock, partly because of the uniquely corporate problem of ("double taxation" of) reinvested earnings. If the owner of a commercial building saved some rental income and used it to double the size of the building, the cost of those improvements would be added to the basis (the original purchase price) and therefore subtracted from the amount of taxable gain when the expanded building is sold. If a corporation likewise plows back some earnings into expanding the firm, owners of shares in that corporation are not permitted to add that cost of expansion to the basis of their investment and thereby reduce their taxable gain. The larger corporation, like the larger building, will generate more taxable business income, yet the corporation's reinvestment is not considered when calculating the owners' CGT. Corporate reinvestments are also not indexed, which makes indexing only partially helpful when it comes to capital gains on shares held for many years in a company that expanded through reinvested earnings.[94]

The lock-in effect provides another, more pragmatic, reason to take particular care to minimize the marginal CGT on corporate stock transactions, even if a higher CGT were retained on assets that do not produce taxable income, such collectibles or unimproved land. Although virtually all U.S. studies suggest that reducing tax rates as high as Australia's would be revenue-positive,

those studies that focused on corporate stocks are far more emphatic about the huge loss of realizations and revenues from high tax rates. Zodrow summarizes the unique sensitivity of stock trades to tax rates, particularly in high tax brackets:

> Feldstein, Slemrod and Yitzhaki . . . found that capital gains realizations on corporate stock held by high income taxpayers were highly sensitive to tax rate; the elasticity estimate of -3.75 strongly suggests that a rate cut would increase revenues . . . . The U.S. Departments of the Treasury . . . estimate for corporate shares (-2.07) was significantly greater in absolute value than that for real estate (-0.71) and all other assets (-0.43).

The U.S. Treasury estimates predict that a lower capital gains tax on stocks alone would have generated *much* more revenue than the relatively low CGT already in effect, even though the estimated elasticity averaged over all sources of capital gains was closer to revenue-neutrality.

Several countries, such as South Korea and Mexico, totally exempt corporate shares from capital gains tax, while taxing capital gains on real assets. Although that can be justified, it seems an unlikely policy choice in the English-speaking (Haig-Simons)world. Some proposals from the Bush Administration in the early 1990s would have reserved the lowest CGT for stocks and bonds, with slightly higher tax rates on real estate and collectibles. The 1998 British plan's preference for "business assets" also tilts in that direction.

Although such special attention to corporate stock can be justified by economic theory, it probably adds unnecessary controversy and complexity. And that could distract attention away from the paramount issue, which is getting Australia's marginal tax rate on capital gains as low as possible, certainly no higher than the revenue-maximizing rate.

Preferred Means of Reform: Cut or Cap the Rate, and Keep Indexing

The U.S. put a 28% cap on the capital gains in 1987 (when the top income tax rate was 37.5%) and again in 1990 (when the top income tax rate was 31%). In 1997, the cap was lowered to 20% and (for political rather than economic reasons), the lowest rate was cut from 15% to 10%. After five years, the U.S. rates drop to 18% and 8%, as a meaningless and complicated gesture to the old "patient capital" fable. The figure usually mentioned for a maximum tax rate in Australia has been 30%. But U.S. experience suggests that an even lower maximum tax rate (or 50% exclusion) merits serious consideration.

We have reviewed a dozen U.S. studies of the revenue effects of lower capital gains tax. Not one of the credible studies suggests that Australia would lose *any* revenue from limiting the highest CGT to 25-30%. Nearly all U.S. studies, and recent U.S. experience, would predict a sizable revenue *gain* from such a policy. That fact obviously calls into question any notion that some otherwise desirable tax policy — such as indexing or averaging — must be given-up in order to make a lower CGT "revenue neutral."

So long as there is more than one tax rate applied to capital gains (which is not necessary), averaging serves a useful purpose. And so long as there is even a remote chance of high inflation in the distant future, indexing serves an even more useful purpose. Inflation as measured by the broad GDP deflator was consistently above 7% as recently as 1983-89. Protection against the risk of that happening again -- which would cause taxes to be paid on illusory, inflated gains-- makes investors much more willing to finance, say, irreversible, long-term construction projects. The one-time jump of the CPI expected as a result of GST will not have any lasting impact on CGT revenues because it will not have any lasting impact on rates of inflation (as opposed to a one-time shift in the measured price level). Simplicity is a weak argument for repeal of indexing, because any investor who dislikes the complexity of calculating the real gain is already free to pay tax on the nominal gain. Unlike the estimates of revenue gains from repealing averaging, which are hopelessly static, repeal of indexing might indeed raise a bit more revenue. But it can only raise revenue by taxing unreal gains, those that represent no increase in real purchasing power.

There is a far fairer and more effective way to raise more revenue, and that is to reduce those tax rates that are above the revenue-maximizing level (which is certainly no higher than 25-30% and probably lower).

All that is needed to truly "reform" the CGT is to roll back tax rates to a more reasonable level. A capped rate is by far the best way to do this. A proportional reduction in progressive rates (such as excluding 30-50% of the gain) is a second-best way, but could be just as effective as a 25-30% capped or flat rate if the exclusion were sufficiently generous.

Anyone who suggests that a maximum tax of 30% or less on capital gains might result in less tax revenue must face a very difficult burden of proof. There is nothing in the large body of U.S. economic research, nor in the experience of Australia and other countries that have experimented with a high CGT, to indicate that individual tax rates higher than 30% on realized gains actually result in greater tax receipts that would be garnered by a lower tax.

Basing the tax rate on how long an asset is hold is not desirable, in terms of economic impact, nor is providing lower tax rates for politically-favored investments (such as farms) or methods of financing (such as organized venture capital). Proportional reduction in the lowest and highest tax rates would not be revenue-efficient, because high elasticities of realizations (and the associated distortions) are concentrated at higher tax rates. There is no need to eliminate either indexing or averaging to "pay for" reductions in the highest tax rates, because there is virtually no realistic possibility that reducing the highest tax rates will, in fact, result in any loss of revenue.

Chapter 6. Benefits of Reform: Entrepreneurial Investment and Competitiveness

Economic growth mainly depends on improvements in the quantity *and quality* of both physical capital (quantity of equipment and quality of technology) and human capital (quantity of work hours and quality of effort and skill). In contemporary research on economic growth, neither quantities nor qualities of capital and labor are regarded as merely "given" by some inexorable past trend. Accumulation of productive capital and knowledge are greatly affected by after-tax incentives. Enrique Mendoza of the Federal Reserve Board and Linda Tesar of the University of California reviewed eight empirical studies from the 1990s which were "consistent with [Nobel Laureate Robert] Lucas' findings in suggesting that a well conceived tax reform can improve the economy's savings, investment and growth rates and result in sizable welfare gains."[95]

Paul Romer and Robert Barro surveyed contemporary research for the National Bureau of Economic Research. "Recent work on growth," they explained, "extends neoclassical markets so that all economic improvement can be traced to actions taken by people who respond to incentives." This approach, they added, leads to "very different predictions about how such policy variables as taxes can influence growth. . . . If government taxes or [other] distortions discourage the activity that generates growth, growth will be slower."[96]

U.S. studies linking lower tax rates to increased realizations abstract from any other effects of this tax — including effects on economic growth. Yet that same evidence proves the capital gains tax is quite distortive. And distortive taxes necessarily prevent economies from performing at their best. Any improvement in the average pace of economic growth, in turn, must also enlarge the tax base for income, sales and property taxes, and thus raise the growth of real tax receipts over time.

Some distinguished tax theorists, such as Kenneth Judd of Stanford University, argue that the optimal tax on capital income is no higher than zero.[97] Others say this overstates the case, since a zero tax on capital implies too heavy a burden on human capital.[98] What all agree about, however, is that the higher the marginal tax rate, the worse the distortions. Judd voices a familiar rule of thumb -- "the efficiency costs of a tax are roughly equal to the square of the tax." A 50% tax rate is *four* times as harmful as a 25% rate, not merely twice as harmful.

An important econometric study, "The Deadweight Costs of Capital Taxation in Australia" by W. Edwin Diewert of the University of British Columbia and Dennis A. Lawrence of Tasmanian Asia Pacific, arrives at the following conclusions:

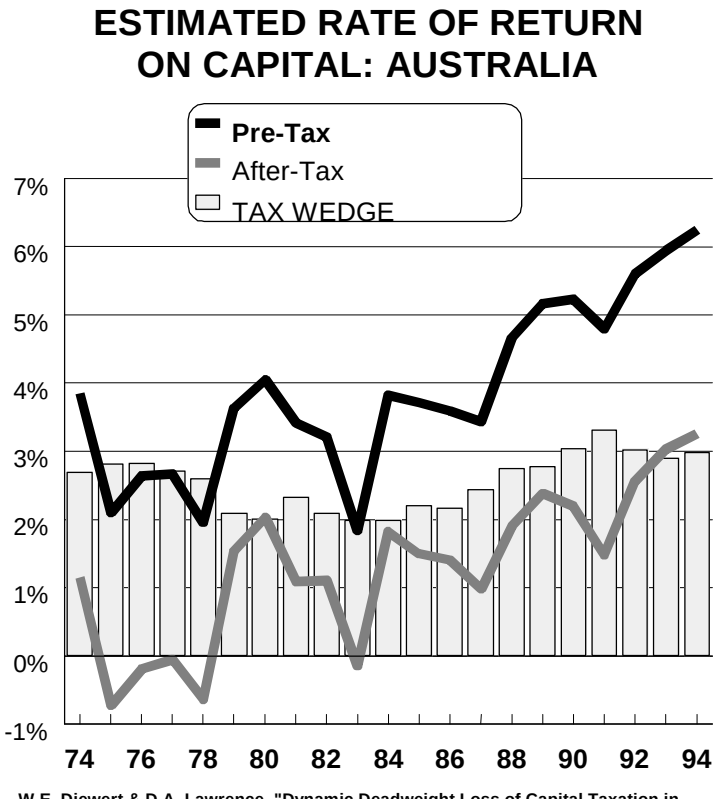
> Taxes distort the incentives to work, save and invest and the pattern of input use and production in the economy. The excess burden or deadweight cost of taxation is a measure of the efficiency costs of taxation — the value of opportunities that are effectively lost when taxation diverts labour, land and capital from their best uses. The excess burden of taxes on capital is likely to be particularly high given capital's increasing international mobility. . . . Changes to the Australian tax system

since the mid-1980s have fallen relatively heavily on capital and we find that the excess burden of capital taxation has increased in recent years [to an extra 48 cents for every dollar raised]. . . . The current public discussion of tax reform is missing the main point. . . . Australia's high capital taxes have reduced investment, lowered the size of our capital stock and impeded economic growth.[99]

What mainly changed since the mid-1980s, the authors note, was "the introduction of capital gains tax" at rates that are virtually the highest in the world. The capital gains tax results in distortions ("deadweight costs") far larger than the amount of revenue raised, resulting in both underutilization (lost opportunities) and waste (misallocation) of labor, land and capital.

A steep capital gains tax introduces a wedge between the return on a new investment and the return received by the individuals who ultimately finance such ventures. This tax wedge makes many otherwise attractive projects more difficult to finance. It raises the cost of capital, particularly of risk capital for new ventures. Estimates in Figure 3, adapted from Diewert and Lawrence, indicates that the gap between the pretax return and after-tax return — the "tax wedge" shown as a bar -- has widened from about two percentage points to three since the CGT was introduced.

Figure 3



Source: Diewert and Lawrence (1997)

Evidence that realizations fall sharply as the tax rate rises is also evidence that the capital gains tax is a great source of distortion and therefore of inefficiency. It imposes burdensome record keeping and reporting requirements on taxpayers, yet the tax is easily postponed or avoided by not trading assets subjected to the tax. Such avoidance, however, leaves individuals and companies worse off. They end up holding a mix of investments they would not otherwise choose, and they face perverse incentives to accumulate more debts and fewer assets.

When labor, land and capital are diverted from their best uses, resulting in lost opportunities, economic growth must be less vigorous than it would otherwise be. When comes to discussing the impact of the CGT on economic growth, however, economists usually neglect such microeconomic details in favor of macroeconomic aggregates that are easier to measure, such as reduced investment. Investment *was* reduced by the CGT, but it was also misallocated. Investment went into certain industries because of the CGT (e.g., housing), when it would have more productive in other industries. Tax-induced misallocation implies reduced capital productivity per dollar invested, and reduced labor productivity and wages.

When an economist asserts that a lower capital gains tax would be of "little" benefit to investment, productivity or economic growth (*nobody* dares to claim it would be of *no* benefit), does that mean the benefit to the private sector is not worth the cost to the public sector? There is *no* cost to the public sector, because the U.S. and international evidence shows that lowering a high CGT raises more revenue, not less.

Richard Schmalbeck of Duke University estimated in 1990 that the deadweight loss to the private sector from the U.S. capital gains tax was five and a half times as large as the revenue collected. [100] Diewert and Lawrence likewise calculate that raising an extra dollar of revenue in Australia through higher taxes on capital involves a disproportionate loss of net output and a huge deadweight loss (of consumer and producer surplus) amounting to several dollars per additional dollar raised. Actually, it is worse than that, because the U.S. evidence suggests that Australia bears all these efficiency costs without receiving any additional revenue.

Since it is a near-certainty that a lower CGT would cost the Australian government less than nothing in lost revenue, it makes little difference whether the benefit to the economic growth is only a few tenths of percentage point per year (as skeptics insist) or a much larger figure. Seemingly small annual improvements add up to a large cumulative rise in living standards, after being compounded over a decade or two. There is no disagreement at all about the *direction* of the effect: No economist could deny that the Australian economy would perform better with a lower CGT than with a staggeringly high CGT. The only controversy is about the *magnitude* of the economic benefits, and about the magnitude of the related *increase* in *overall* tax receipts (from the CGT and most other taxes).

When contemplating the implications of taxation for the international competitiveness of Australian business, it is a common habit to focus on corporate taxation, because mature companies account for most of the existing economy (though not necessarily for most new growth). For a new company, corporate taxation is less relevant to the extent that taxable profits

are yet to be generated. If the new company shows promise, a capital gain on the company's shares will normally accrue much sooner than dividends, as the share price embodies the expectation of future profits. Taxation of capital gains is far more relevant to the owners of a new, growing business than taxation of earnings or dividends. Those who develop new companies typically have a large ownership stake, and are primarily motivated by the goal of "going public" and seeing the value of their risky labors recognized through share appreciation. For entrepreneurs that do not use a corporate structure for investment, preferring to begin as a partnership or proprietorship, only personal tax rates are relevant.

If a new business has few binding ties to employees and capital located in Australia, it can be readily located in another country. This situation makes the level of personal tax rates quite relevant to the consideration of new business development within Australia. As noted in Chapter 3, Australia's CGT rate for individuals is much higher than in the U.S., or in other countries noted for developing and attracting entrepreneurial talent.

Entrepreneurship and Venture Capital

Those who claim the CGT has little adverse effect on the economy usually base their case on the macroeconomics of saving and investment, neglecting such vital microeconomic details as capital allocation, entrepreneurship and venture capital.

Actual entrepreneurs, such as those in Silicon Valley, have always insisted that the capital gains tax is extremely important for them, both in raising financial capital (through venture capital and initial public offerings) and also in recruiting and retaining *human* capital (talented and energetic managers and professionals). If economists cannot measure something, though, they tend to disbelieve it. Perhaps the only thing harder to measure than "venture capital" is entrepreneurship itself.

In early 1999, Paul Gompers and Josh Lerner of the Harvard Business School rose to the challenge, with an extensive study for the National Bureau of Economic Research, "What Drives Venture Capital Fundraising?"

> We find that . . . capital gains tax rates have an important effect at both the industry, state, and firm-specific levels. Decreases in the capital gains tax rates are associated with greater venture capital commitments. . . . Increases in capital gains tax rates have a consistently negative effect on contributions to the venture industry.[101]

The conclusion is not fundamentally different from that of a widely misinterpreted study by James Poterba of MIT. Burman, among others, claims that Poterba's finding that most venture capital comes from investors not subject to the capital gains tax (such as pension funds and foreign investors) means "changes in the individual capital gains tax rate may have only minimal effects on the supply of capital for new ventures." What Poterba actually discovered, by contrast, was "rapid growth of venture financing after the 1978 and 1981 reductions in capital gains tax rates." Poterba certainly did not suggest that changes in individual capital gains tax rate had "minimal

effects" on venture capital. The facts prove otherwise. Poterba and Gompers-Lerner agree that there will be much more venture capital at a low capital gains tax rate than with a high tax rate. What they argue is that this is mostly due to *increased incentives to become an entrepreneur*, not to increased incentives to supply venture capital. That issue remains unsettled, but it is not critical. *The evidence shows that capital gains tax has a major impact on the funding of entrepreneurial ventures, and just exactly how that happens is a relatively arcane secondary issue.*

The sensitivity of entrepreneurs to capital gains taxes, reported by Poterba, Gompers and Lee, is consistent with other evidence that *entrepreneurial investment and employment plans are highly sensitive to marginal tax rates* in general. A study by U.S. Treasury economists Robert Carroll and Mark Rider, Harvey Rosen of Princeton and Douglas Holtz-Eakin of Syracuse, found that "a five percentage point increase in marginal tax rates leads to a 9.9 percent decline in . . . entrepreneurs' investment spending."[102] An earlier study by the same team found that a six percent decline in the marginal tax rate of an entrepreneur in the top tax bracket increased by 11 percent the likelihood of hiring at least one employee.[103] These studies define an "entrepreneur" as almost any *unincorporated* business, for plausible reasons. That underscores the importance of the fact that Australia's highest tax rates *only* apply to such "individual" income, including capital gains.

Statistics from venture capital organizations inevitably neglect individual "angels," although such wealthy individuals are often extremely important sources of initial "seed money" for risky projects that no pension fund would dare finance at that early stage.

The fact that a large proportion of venture capital is supplied by organizations not subject to the capital gains tax certainly does *not* show the capital gains is unimportant as Burman and others suggest. It shows that as high as the return to risky venture capital investments might be, it is not quite high enough (on a risk-adjusted basis) to be worthwhile after paying capital gains tax. The after-tax return on venture capital has been sufficiently attractive to those exempt from the capital gains tax, but not to many of those facing a CGT (albeit at a rate that is low by Australian standards). *With a lower capital gains tax, many more individuals would participate, so many venture capital gains that are currently tax-free would thus become taxable.*

A high CGT discourages taxable individuals from investing in venture capital or any other risky asset. A recent study by Patrick Asea of UCLA and Stephen Turnovsky of the University of Washington concludes that "households discount very heavily the possibility of loss. If losses are not fully deductible against other income . . . there will likely be a switch from more risky to less reisky investments. A progressive personal income tax . . . will almost certainly have a net disadvantageous effect on investment in risky ventures."[104]

Although there is still be some academic controversy about the importance of the capital gains tax for venture capital *per se*, the leading doubters (Poterba and Gompers-Lee) nonetheless agree that the capital gains tax has *very* important effects on *entrepreneurship.* And that, after all, is really the ultimate goal — the enterprises themselves, not their method of financing.

Even if it is true for the U.S. that the capital gains tax mainly affects the supply of entrepreneurs, rather than the supply of venture capital funding, the CGT is certain to have *both* effects in Australia, where the highest CGT applies to foreign direct investment. Foreign investors contemplating taking a stake larger than 10% in the financing of a new venture must anticipate twice as large a *pretax* capital gain in Australia as they would need to obtain the same after-tax return from a similar investment in, say, New Zealand or Singapore. The nearly-prohibitive CGT on foreign direct investment is clearly a formidable hurdle for any venture capital deal that hopes to attract foreign financing, as most presumably must (because Australia is a large net importer of capital).

Capital Taxes and Investment

Studies purporting to find little impact of tax policy continue to be largely based on the 1956 macroeconomic growth model of Robert Solow. That model assumes that tax policy cannot (by definition) have any effect at all on productivity growth, whether through efficiency gains, education incentives, additional technological research, or any other means. The Solow model also assumes that labor and investment will ultimately be determined only by population growth in some distant "steady state." And the Solow model did not even incorporate James Tobin's prescient 1976 observation (which echoed Keynes) that "there is a point beyond which higher surtax rates collect less --not more— revenue."[105] Reuven Brenner of McGill University notes that in "Solow-type" models, "there is no uncertainty, no opportunities for trade to be discovered, no financial markets, no poor, no government, no wars, no cities, no diversity of skills, and no commercialization of knowledge. The only human thing in this model is a trivial choice between physical and human capital, depending on relative returns."[106] Solow himself wrote that, "I don't think that models like this lead directly to prescription for policy or even to detailed diagnosis."[107] Yet such abstract macroeconomic models continue to obscure the vital microeconomic details of tax structure.

Skepticism about the impact of tax policy usually centers around the effect of high marginal tax rates on things that are difficult to prove, such as intensity of work effort, decisions to invest time and tuition in upgrading labor skills, or decisions to retire prematurely. Where there is much less room for disagreement, however, is the impact of capital taxes on capital formation.

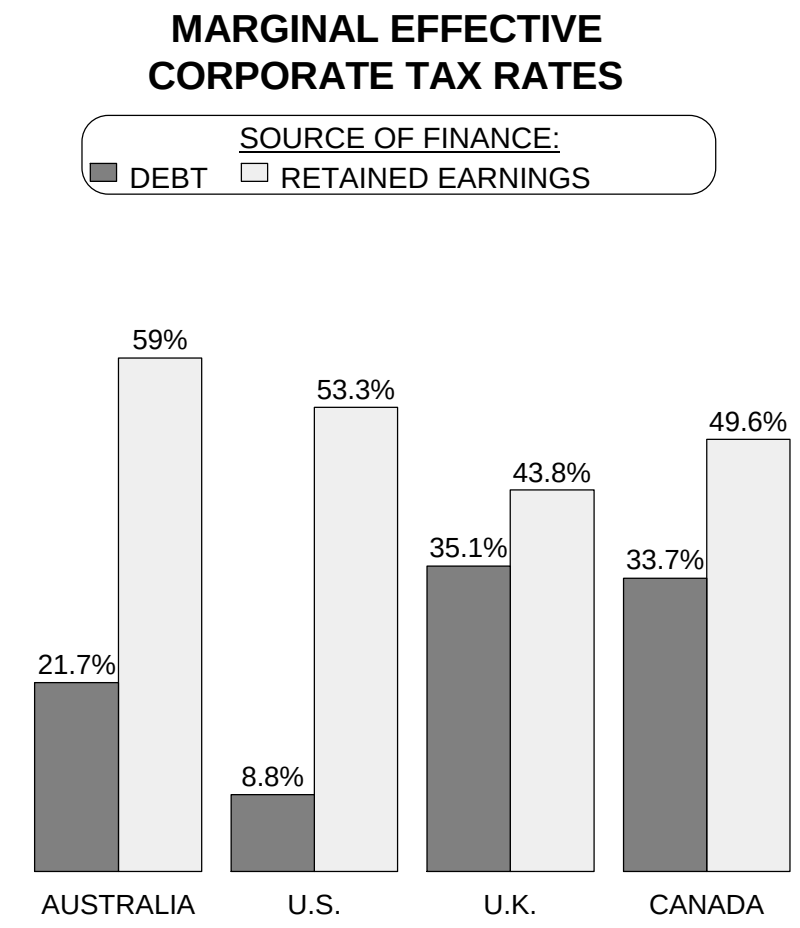
Even Engen and Skinner's overly-skeptical survey of the research on taxation and growth acknowledged that "a number of recent studies . . . have found significant effects of tax policy on investment."[108] Federal Reserve Board economist Kevin Hassett and R. Glenn Hubbard of Columbia University concluded that "most recent studies imply a high long-run elasticity of the capital stock to the user cost of capital [-0.5 to -1.0], so that tax policy clearly has the potential to have a powerful effect on equipment investment and the capital stock in the long run."[109] Another study by Hassett, Hubbard and Jason Cummins studied more than 3,000 firms in 14 countries from 1981 to 1992, finding decisive evidence that business investment responds quite impressively to capital-friendly tax reforms.[110]

Capital gains taxes are not, of course, the only tax policies affecting the cost of capital. Corporate depreciation schedules, R&D tax credits, and many other details of the tax code can also have "a

powerful effect" on long-run investment. What makes reducing high capital gains tax rates such a *unique* opportunity to improve the tax climate for private investment is that it is so cheap in terms of foregone government revenue, probably costing nothing at all.

Specific studies of the economic impact of the capital gains tax, as opposed to capital taxes in general, are more scarce and indecisive. What needs to be kept in mind, however, is that there is very little room for doubt that capital taxes hurt capital (tangible and intangible assets that produce future income), and that capital and the technology that it embodies is extremely important for economic progress. Nor is there any room for doubt that the capital gains tax is a big piece of that overall tax impediment to capital formation, and probably the only capital tax that can be *deeply* reduced without fear of revenue loss. *Since economists agree that capital taxes affect investment, and that investment affects economic growth, it would be illogical to claim (as some do) that high capital gains tax does not have an adverse impact on investment and growth.*

Figure 4

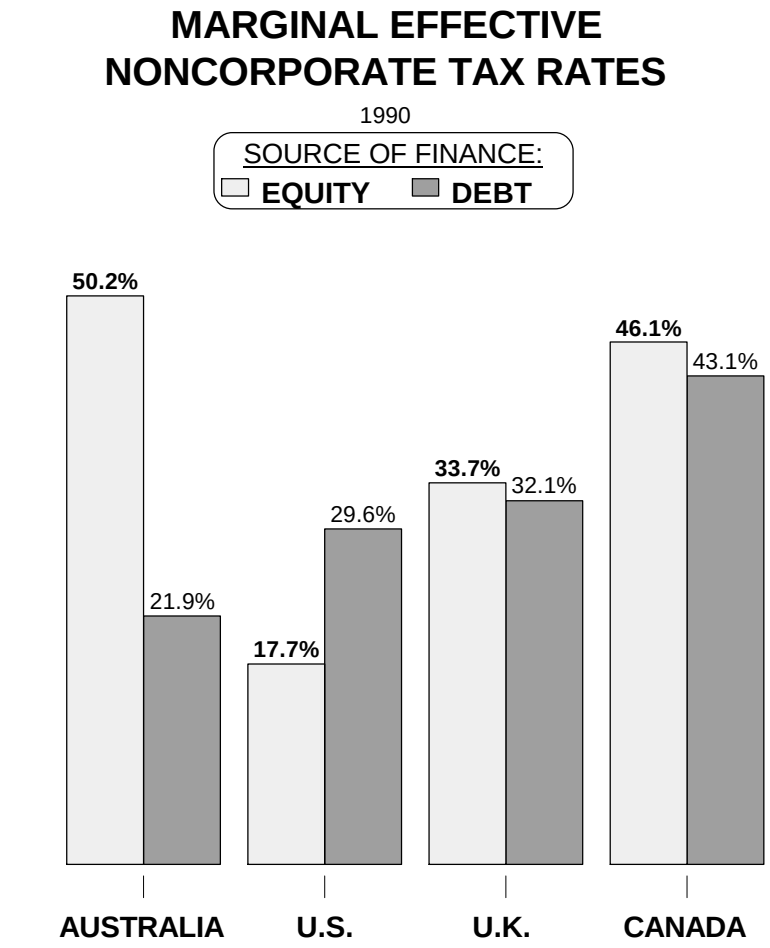


D. Jorgenson & R. Landau, Tax Reform and the Cost of Capital, Brookings Inst. 1993. Estimates are for 1990.

The capital gains tax raises the over all cost of capital, and biases corporate *and noncorporate* financing of new investments away from retained earnings and in favor of debt. This has numerous unpleasant consequences, the most obvious of which is to make otherwise feasible investments unprofitable if financed with equity or retained earnings. Since newer and smaller enterprises are often "liquidity constrained" — unable to issue bonds or borrow from banks — the relatively high tax burden on retained earnings and/or new equity means that many entrepreneurial ventures cannot get started, and that those that do get started cannot grow.

Figure 4 shows estimates of the marginal effective tax rate on corporate capital for 1990, from Dale Jorgenson of Harvard and Ralph Landau of Stanford. This is essentially the amount by which corporate and individual taxes would reduce the net return on any new plant and equipment. Even among these countries afflicted with the Anglo-Saxon propensity to tax capital gains, Australia stands out as imposing an unusually high burden on new corporate investments financed by retained earnings, and a relatively low burden if those investments are financed by tax-deductible debt.

Figure 5



D. Jorgenson & R. Landau, Tax Reform and the Cost of Capital, Brookings Inst. 1993. Estimates are for 1990.

Figure 5 shows comparable "noncorporate" rates — the marginal tax on small business investments. Here the contrast is even more striking. Australia's tax rates are formidably high if noncorporate investments were financed by equity, but not if financed by debt. The fact that superhigh individual tax rates are *mainly* collected from small business capital gains and earnings is clearly at fault. The high SBI tax on investments funded with equity strongly suggests that Australian start-up companies would have an unusually difficult time raising equity capital.

Australia Embraced the "Old View"

Suppose an economist was forced to choose between alleviating the double taxation of dividends or the double taxation of capital gains. That choice would largely depend on whether he or she accepted the "old view" or "new view" of corporate financing. The new view, as Zodrow remarks, "is associated with larger capital gains effects on saving and investment, since . . . [the new view] assumes dividend taxes are irrelevant to investment decisions."[111] Dale Jorgenson of Harvard University explains:

> In the 'new' view proposed by [Mervyn] King (1977) . . . the marginal source of equity funds is retained earnings. So that the tax rate on dividends does not affect the price of capital services or the effective tax rate on corporate income. . . . In the 'traditional' [old] view the marginal source of funds for the equity portions of the firm's investments is new share issues, since dividends are fixed [as a share of profits] by assumption.[112]

Sinn observes that companies use both new issues and retained earnings simultaneously, so neither the old or new view is *entirely* correct. He is more critical of the old view, however, noting that it is "based on the implicit assumption that firms maximize their costs of finance."[113] Moreover, notes Jorgenson, "since retained earnings greatly predominate over new issues, [Sinn's] approach turns out to be empirically equivalent to adopting the new view."

In the new view, dividend taxes are capitalized in share prices, with little or no impact on the marginal cost of capital on new investments. On the other hand, retained earnings are critical, at the margin. In the new view, notes Sinn, "the cost of capital depends as critically on the use of profits as on the source of finance." The importance of retained earnings, in turn, means the capital gains tax has enormous importance for the cost of capital. *A higher CGT raises the hurdle rate of return that an investment has to yield* in order to make the project worthwhile to individual investors, after subtracting marginal corporate and personal taxes.

From 1985 to 1989, Australia put the old view into practice to a degree that no other country ever has, before or since. It did so by introducing imputation for dividends (which the old view regards as important) while double-taxing capital gains on corporate shares (which the new view regards as economic suicide). In the old view, the only harm of that unique policy mix might be to reduce personal savings. Sinn notes that "holders of the old view often argue that the corporate tax is a tax on investment and the personal income one on savings." In the new view, a tax on business capital is a tax on business capital, whether ostensibly paid by the business itself or by its stockholders.

What appears to be a dispute between empirical studies is often a dispute between the old view and the new. In what appears to be an empirical estimate, Hendershott, Toder and Won count an *assumed* reduction in dividend payouts and an assumed loss of tax revenue as efficiency costs of a lower CGT.[114] Such old view predictions about the dividend payout rate have been proven false, as shown earlier, as were predictions of revenue losses when the CGT was reduced. Yet modeling exercises may still be based on such dubious old view assumptions.

In 1990, the U.S. Treasury used the new view to predict that President Bush's proposed 30% exclusion for capital gains would add 0.6% to real GDP. Private economists Alan Sinai and Gary and Aldonna Robbins predicted even larger gains, on the order of 3%. In the same year, simulations based on "old view" models were used to deny that economic growth would improve with a lower CGT. These studies were prepared by familiar defenders of a higher CGT — Auerbach, Gravelle and the CBO.[115] But if investment is affected by taxes on the returns to investment, and if investment is beneficial to growth, then how could a lower CGT possibly *not* be beneficial to investment and economic growth? Why is only the last part of that syllogism even considered debatable? The answer lies within the mysteries of the "old view," which assumes that corporations maximize the cost of finance.

Yolanda Henderson of the Federal Reserve Bank of Boston came closer to the "new view" by using factual information that new investments were typically financed by two-third equity (including retained earnings) and one-third debt. She then estimated that "from the [1986] changes in the capital gains taxes alone, the cost of capital increased by about 8 percent, to 7 percent." Her colleague Richard Kopcke later found the higher CGT had raised the cost of capital even more, by as much as 20 percent.[116]

Within the new view, the empirical findings of Henderson and Kopcke are not surprising. In the new view, the CGT's double taxation of retained earnings unambiguously raises the cost of equity capital and cuts investment. That has to damage potential long-term economic growth.

Australia's tax system has been heavily tilted toward the old view since 1985-87, treating dividends far more gently than capital gains. But logic and evidence now strongly favor the new view. There is nothing wrong with alleviating excessive taxation of dividends, but there is something very wrong with excessive taxation of capital gains.

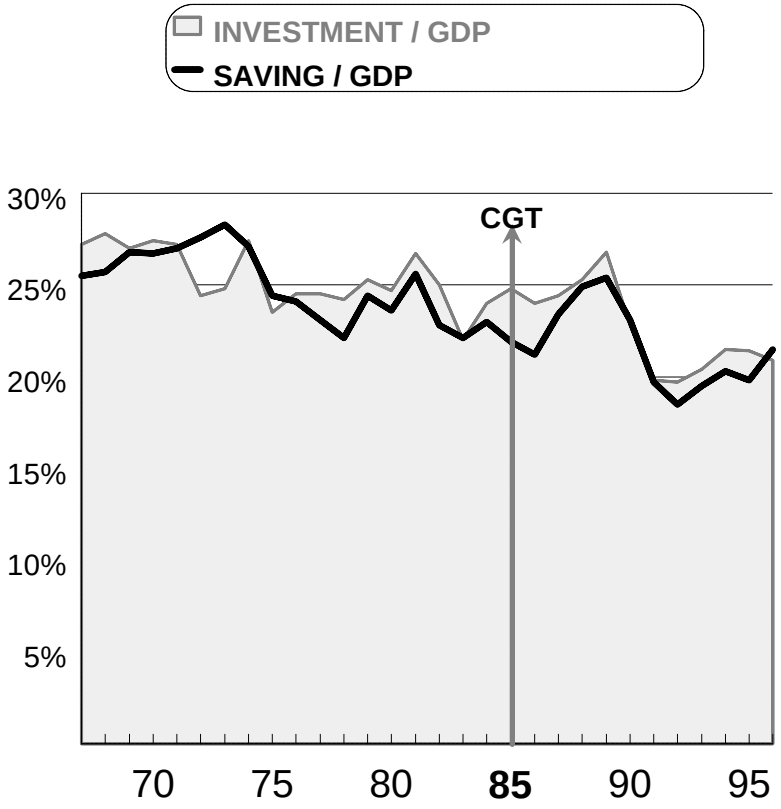
The Savings Question

Turning from investment incentives to saving, the 1998 *OECD Observer* shows Australia's net savings at only 3.6% of GDP. Among OECD countries, only Iceland and Denmark were lower.[117] Gross savings look higher because they include depreciation, but the low net savings imply that there is not much extra, aside from that needed just to replace worn-out equipment and buildings. Even gross saving dropped from 20.2% of GDP in 1978-85 (before the CGT) to 16.9% in 1990-96.[118]

Figure 6 shows that in Australia, as in most countries, investment is very closely linked to domestic savings. This is important because Zodrow and others have theorized that the effect of CGT on savings many not be so important, because in an idealized world economy investment could be easily financed by importing foreign capital. Australia certainly does rely on foreign capital, as shown by the chronic current account deficit (estimated at 5.5% of GDP for 1999), particularly with respect to investment income (as opposed to trade). Yet the graph shows that the ups and downs of investment are nevertheless closely tied to the ups and downs of savings. If nothing else, there are practical and political limits on how large a current account deficit most countries are willing to run.

Figure 6

SAVING & INVESTMENT SHARES OF GDP



IMF, International Financial Statistics Yearbook, 1997.

We have repeatedly shown that the CGT discriminates against retained earnings, *corporate* savings. When it comes to *individual* savers, however, Haig-Simon theorists pretend the capital gains tax does not matter at all. "As a practical matter," writes Burman, "Capital gains earned by individuals subject to the individual income tax are a small fraction of the returns from saving. Thus subsidizing [sic] capital gains has little effect on the overall incentive to save."[119]

In the U.S., individuals realized $260.7 billion of taxable capital gains in 1996, much more than the conventional measure of personal savings (which excludes those gains) of only $158.5 billion.

How could such enormous capital gains "subject to the individual income tax" be merely "a small fraction of the returns from saving?" The answer is paradoxical: Most personal savings are tied up in housing and pension funds, and therefore exempt from the U.S. capital gains tax. Because most such "returns from saving" are exempt from CGT does not, as Burman says, mean that *incremental* savings is exempt. The average tax on household saving thus includes limited amounts of savings that are tax free (pensions and home equity), but it is only the *marginal* tax rate that matters when it comes to decisions to do additional savings (e.g., beyond the tax-free limits). To argue that the *marginal* rate is unimportant simply because the *average* rate is low is a serious conceptual error.

In Australia, where the CGT is higher than in the U.S., individuals are even more reluctant to save in ways that would make them subject to that voluntary tax. As the OECD explains, *"There are two main tax preferred channels for voluntary saving in Australia — owner-occupied housing and superannuation — and not surprisingly, these are the vehicles through which Australians do most of their saving."*[120] The fact that Australians only save when shielded from the CGT certainly does not demonstrate (as Burman's argument implies) that the CGT is unimportant to savings. At the margin, where decisions to save more or less are made, the CGT is critical. *Once people have put all they can into housing and superannuation, the next dollar of saving will be subjected to brutal tax treatment.* So, additional saving outside of housing and funds is unlikely to happen at all. And to the extent that there is any marginal saving, beyond housing and superannuation, very little of it is likely to be invested in capital gains assets, such as growth stocks or venture capital. Far from proving that a high CGT is unimportant to savings, as Burman infers, these familiar facts show that *taxable* capital gains (and tax receipts) are a much smaller share of the return to savings in Australia than in the U.S. precisely *because* the Australian tax on such gains is prohibitively high.

Figure 7 shows that *personal* savings in Australia have also fallen sharply, relative to personal income, particularly since the CGT took effect. Although the CGT is unlikely to be the whole reason, it is certainly a prime suspect. And although the personal savings rate is a flawed measure in many respects, a downtrend of this magnitude and duration is not so easy to dismiss.

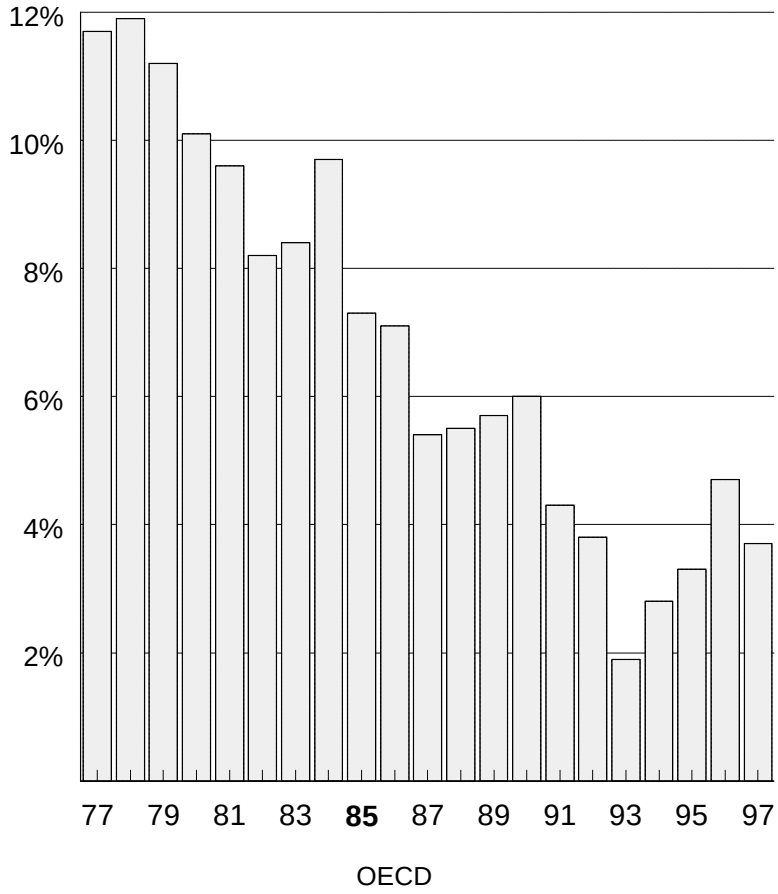
The connection between savings and the after-tax reward for savings has long been a contentious subject in the U.S.. The two sides may not even agree about what constitutes savings or how to measure it. Classic research by Lawrence Summers, now U.S. Treasury Secretary, found that after-tax returns have a substantial impact on savings. So did a famous earlier study by Michael Boskin, former Chairman of the Council of Economic Advisers.[121] Yet proponents of high marginal tax rates on savers continue to use strained arguments and evidence to buttress their claims that savings will be unaffected.

President Clinton's Council of Economic Advisers, in their 1994 *Annual Report*, claimed "the preponderance of evidence seems to indicate that the changes are small. Savings rates seem to be little affected by movements in after-tax interest rates."[122] There are two fatal flaws in that statement: *The "savings rate" is not the same as savings, and rising interest rates normally reduce rather than increase the total return to savers.*

Figure 7

AUSTRALIA

HOUSEHOLD SAVINGS RATE



First of all, the conventional "savings rate" -- savings divided by after-tax income -- can go up because income falls or because taxes rise. If savings stay the same and after-tax income falls, the “savings rate” will appear to rise. That explains why the "savings rate" seems to rise in recessions -- because incomes fall even more than savings -- even though the real value of past savings typically falls at such times (e.g., because stock, bond and/or housing prices fall).

Suppose the tax collector used to take none of your income but now takes half. In that case, maintaining precisely the same “savings rate” out of your reduced after-tax income will reduce your savings by exactly half. Moreover, since saving is calculated as income minus consumption, arbitrary definitions of what constitutes consumption (such as a college education or home computer) can make household savings look artificially low. In the U.S., a strong stock market means companies do not have to contribute as much to pension plans, but that is recorded as a reduction in personal savings and an increase in corporate savings. It is overall private savings that matters, not whether the saving *appears* to be done by households or firms.

It may be noted that a lower capital gains tax has not improved the "personal savings rate" in the U.S., but that argument has several problems. One is that a lower capital gains tax is most likely to improve retained *corporate* earnings, which do not show up as personal savings (even though individuals own the corporations). Another is that most changes in U.S. tax policy since 1986 have been *hostile* to savings. In their analysis of the 1986 tax reform, Skinner and Feenberg found that "the decline in marginal rates and the increase in the tax on capital gains largely offset each other"in terms of their net effect on the incentive to save. [123] However, the $2,000 annual deduction for contributions to self-managed Individual Retirement Accounts (IRAs) was also rescinded for most taxpayers after 1986, leaving overall savings incentives worse than before. The 1986 tax reform also greatly increased capital taxes at the corporate level, by stretching-out depreciation and repealing the investment tax credit. Marginal tax rates on those most likely to save (corporations and high- income families) were increased in 1990 and 1993, with the top income tax rate rising to 39.6% from 28%.

Another problem with the U.S. data is that increases in the market value of household assets (the astonishing U.S. stock market gains of 1995-99) do not appear at all in the usual measures of savings, although a higher net worth certainly does increase the ability of households to finance investment (including household investments in housing or education). The national income account measures of saving only deal with annual "income statements" of U.S. households, not their "balance sheets." This accountant's measure has no connection to the economist's concept of saving as an increase in net worth.[124] The Federal Reserve's flow of funds measure, by contrast, adds up the value of U.S. household assets, such as stocks, bonds, cash, and housing. The Fed's measure indicates that the real value of annual household savings rose quite sharply from 1983 to 1986 — *before* the CGT went up -- then fell quite sharply with the hike in marginal tax rates in 1993. In 1985, the Fed's measure of personal savings was up to 14.6% of personal income, near a record high. By 1996, it had fallen to 7.4%.[125]

When all else fails, those who assert that taxes do not affect savings or asset values will argue that it does not matter very much if they do. Gravelle says, "the process of altering the capital stock is a very slow process that takes many years."[126] The capital stock is huge, annual changes in that stock (investment) are relatively small, so changes in investments therefore take decades to have any effect on real GDP. As if to caricature this claim, Gravelle calculates that it would take 110 years for a capital gains tax cut to lift real GDP by little more than half a percentage point.

This story about the difficulty of altering the capital stock neglects the fact that new technology is embodied in new investments. When computers replaced typewriters, there may have been little or no "net" investment recorded, merely a replacement of depreciated capital. Yet the capital stock was dramatically altered, even if it had not been enlarged in a statistical sense. Suppose all of a country's old software was quickly replaced by new software, or every student outfitted with a new computer. Such dramatic changes would show up as modest annual changes in the capital stock, because computers and software are inexpensive while the "capital stock" includes every building, road, airport, dam and bridge in the country. But it is not necessary to replace a country's entire capital stock in order to *modernize* the relevant portion of that capital stock (which mainly consists of relatively short-lived equipment).

In a country like Australia, with a sizable and sustained current account deficit, an increase in domestic savings can rapidly affect the economy through other channels. Zodrow summarizes a Canadian study by David Burgess which shows that "increases in domestic savings reduce future export requirements [to service net foreign debt], improve the terms of trade, reduce the demand for externally funded capital and thus translate into increases in the domestic capital stock."[127]

Changes in the prospective after-tax return on savings are also quickly capitalized in higher market values of the affected assets, which lowers the cost of capital and has a "wealth effect" on household investments in housing, durable goods and higher education. The wealth effect may, ironically, reduce the measured "savings rate" because household investments are counted as consumption and because an increase in net worth is not counted as an addition to savings.

Savings Respond to Rising Returns, Not Rising Interest Rates

Aside from all the problems with the "personal savings rate," there are even more serious problems with the 1994 Council of Economic Advisers' claim that "savings rates seem to be little affected by movements in after-tax interest rates." Using changes in interest rates to measure changes in incentives to save can be extremely treacherous. *An increase in interest rates is equivalent to a capital loss on bonds. Stock prices too normally fall when interest rates rise. People are rarely eager to save and invest while prices of stocks and bonds are collapsing*, so statistical efforts to determine whether savings rise with rising interest rates come up with the wrong answer by asking the wrong question. Total return on savings includes capital gains and losses, not just interest rates.

To summarize, various efforts to show that taxes do not affect savings, or that savings do not matter, are not well grounded in fact or theory. If people did not respond to the incentives of tax rates then they would also not respond to the incentives of wages, prices and interest rates, and economics would have little to say about anything.

A high marginal tax rate on capital gains clearly reduces the *incentive* to save *at the margin* --i.e., after one has maximized contributions to a superannuation fund and housing investments. And to the modest extent that the tax is actually paid, it also reduces the *capacity* to save --i.e., the amount of disposable income remaining to be saved. After the tax collector has your money, you cannot save it.

The CGT also reduces the incentive for *corporations* to save. Retained earnings, unlike dividend payouts (which may be partly consumed) would be certain to be used for investments in plant, equipment and inventories. The capital gains tax is at least partly to blame for the fact that Australia's national savings *have* fallen since 1985, making the nation's investments precariously dependent on inflows of foreign capital. That dependence on foreign investors has, ironically, helped to move a very large share of Australia's assets out of the CGT tax base. At least one-fourth of listed Australian equities are now owned by foreign portfolio investors, who pay no CGT.

Macroeconomists often claim that reducing government borrowing requirements (budget deficits) are a more reliable way of increasing national savings than a savings-friendly tax policy. Yet the experience of the U.S. in recent years, as well as that of the U.K. and Sweden in the late 1980s, was that private savings fell by at least as much as the government deficit was reduced. In the U.S., gross savings averaged 16.3% of GDP from 1993 to 1998, down from 20.7% in 1984-88, when the budget deficit was much larger. Such imperfect substitution of public for private savings may have been because the government's revenue was enhanced at the expense of those who do the most saving.

Even if governments run surpluses, the resulting redemption of government bonds is a passive form of saving, not equivalent to individuals making venture capital commitments, participating in an initial public offering, or otherwise taking a stake in some struggling new enterprise. Governments have no business taking risks with taxpayer funds, but individual entrepreneurs and their financiers need to take risks in order to start new enterprises. Although Australia's broad aggregates, such as savings and investment, look somewhat weaker over the whole post-1985 period than they did before, that is less significant than the particularly destructive impact of a high capital gains tax on the incentives of potential entrepreneurs and venture capitalists. If domestic investment opportunities are bright enough, savings will normally pick up to fund them.

Chapter 7. Potential Drawbacks of CGT Reform: Tax Arbitrage?

Those who favor Haig-Simons tax treatment of capital gains may not reveal that this preference is based on subjective opinions about fairness or ideological perfection. They are more likely to frame their concerns in terms of either (1) tax avoidance or (2) tax fairness. The first of those concerns is that "preferential" tax treatment will supposedly cause people to "convert ordinary income into capital gains." The second concern is lower tax rates on realized capital gains would primarily benefit older people who own capital, and generally have higher incomes, which is said to be "unfair." The first section of this chapter deals with alleged effects of a lower CGT in fostering tax avoidance, and the second with questions concerning the distribution of income and assets.

The idea that we should be more concerned about tax avoidance from a low CGT than from a high CGT is paradoxical. In general, theory and evidence suggest that legal tax avoidance and illegal tax evasion are a function of the marginal tax rate — that is, avoidance and evasion are increase with higher tax rates and decline with lower tax rates. Clotfelter demonstrated that tax avoidance and evasion rises with higher marginal tax rates -- the higher the tax, the greater the incentive to cheat.[128]

When it comes to income taxes in general in Australia, three older estimates suggested that "one-fifth of potential income tax revenues is being lost through simple tax evasion."[129] More recently, Robert Jones noted that failure to report interest and dividend income is still a problem: "A comparison of interest and dividends with interest and dividends declared to the commissioner of taxation, reveals that a large proportion of such income is not directly taxed."[130]

Worrying about a *low* CGT causing tax avoidance seems peculiar in view of the familiar ways of avoiding a *high* CGT. Australians who want to get around the tax bias against investing in assets for capital gains may be able to make sure that gains are distributed through a trust to a student or spouse in a lower tax bracket. Or they might set up their own superannuation fund, buy assets expected to appreciate (rental property would also yield income), and take a deduction for making that contribution to the fund. If the property can later be sold at a profit, the capital gain would then be taxed at 15%, not 47%. Even if such clever tax planning can get the capital gains tax down to 15%, however, the tax bias still against growth stocks and in favor of dividend-paying, established firms still remains potent. As the *Canberra Times* explains, "Franked share dividends received by a superannuation fund thus pay an effective rate of minus 21 percent, meaning that surplus franking credits are available to pay tax on any other fund income."[131]

In U.S. experience, outright evasion of CGT (failure to report realized gains) has never been a big problem when it comes to financial assets. Capital gains on financial assets are probably better-recorded and more visible than even interest income (e.g., on informal loans between individuals).

In the U.S., and presumably also Australia, the most difficult transactions to tax are capital gains that arise from small-scale sales of *real* assets. Such U.S., evasion of CGT may include small parcels of land, rental properties, buildings and equipment. It also includes informal "cash

economy" sales of collectibles -- such as antiques, artwork, stamps, old cars and coins. Households gains from the sale of such real assets are so difficult to monitor that attempts to enforce a high tax on such gains would surely involve collection costs far in excess of any resulting revenues. A study by James Poterba estimated that the extent of under-reporting of capital gains was so sensitive to the tax rate that a lower tax rate might be self-financing (revenue-neutral) for that reason alone, even aside from increased realizations. The higher the tax rate, Poterba found, the fewer gains were reported, noting that "compliance is much lower for sales of real assets . . . than on corporate stocks and bonds."[132]

As far as perfectly *legal* avoidance goes, any tax on realized gains can be reduced by simply accelerating losses and postponing gains, and in theory (aside from transactions costs) by sophisticated strategies involving options or swaps.[133] Auerbach found that most U.S. taxpayers have *not*, in fact, gone out of their way to minimize the CGT by offsetting gains with losses. However, a different study by Auerbach, Burman and Siegel also found that "avoidance of tax on realized capital gains . . . increased after the passage of the Tax Reform Act of 1986 [which increased the CGT]."[134] There is also some U.S. evidence that legal avoidance of taxes on ordinary income also increased after the highest tax rates were increased in 1993.

With common sense and much evidence indicating that higher tax rates inspire greater avoidance and evasion, how can Haig-Simon theorists claim that when it comes to capital gains, the problem is reversed? That is, how could lower tax rates somehow produce more avoidance than higher tax rates? Answers to this mystery generally begin with a bold assertion that a lower tax rate on capital gains will somehow make it possible for many people to "convert ordinary income into capital gains." That must not be as easy to do as it is to say. If it was really so easy to convert ordinary income into capital gains, how could we explain the inconvenient fact that Australia's personal income tax yielded *at least* as much revenue when the capital gains tax was zero as it has since adopting the highest capital gains tax in the civilized world? Personal income tax was 12.5% of GDP in 1980, with no capital gains tax, and 12% in 1994. Before 1985, why did so few Australian taxpayers pay tax rates of up to 65% on ordinary income if they could have converted that income into capital gains and paid no tax at all?

Hong Kong never had a tax on capital gains. Yet after excluding non-tax revenues (such as land sales), Hong Kong tax receipts increased by 17.8 % a year from 1984 to 1996, according to the Asian Development Bank, compared to a 7.1% annual increase for the United States. According those who imagine that ordinary income can easily be converted into capital gains, Hong Kong taxpayers must have been missing many opportunities to eliminate their income taxes.

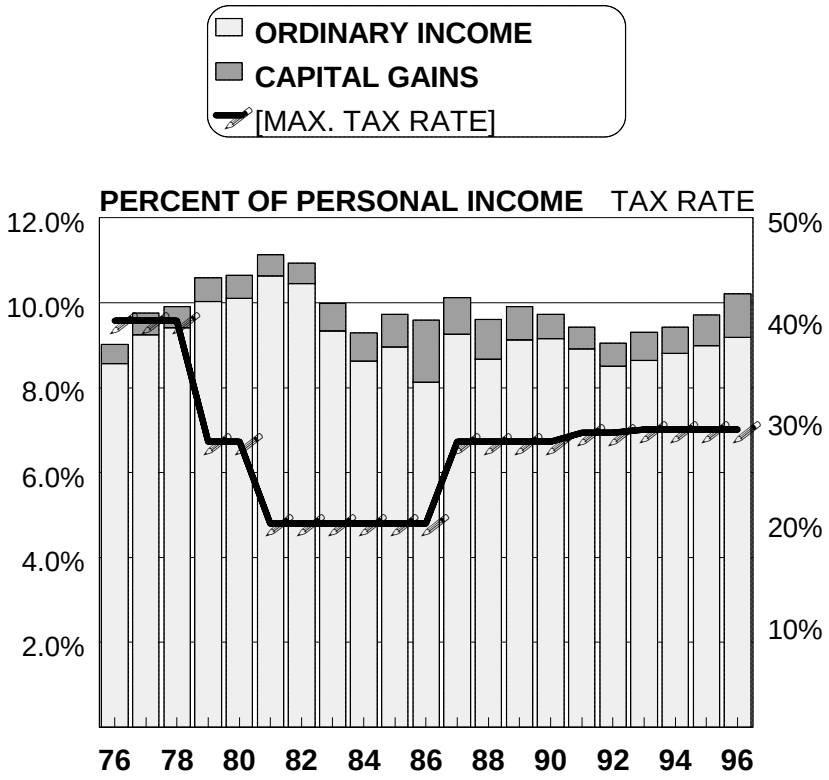
The U.S. has almost always had a much lower tax on capital gains than on ordinary income. Actually, U.S. tax receipts from the individual income tax have remained a surprisingly constant, at 9-10% of personal income since 1951, regardless of dramatic changes in the capital gains tax, and in personal tax rates in general. It did not matter whether the highest income tax rate was 28% or 91%, or whether the highest capital gains tax rate was 20% or 46%, the federal government only managed to collect as much as 11% of personal income during two years, 1969 and 1981, both of which were quickly followed by recession.

Figure 8 shows the percent of U.S. personal income devoted to taxes on ordinary income (the light bar) and to taxes on capital gains (the dark bar). The highest capital gains tax *rate* is shown as a line. The first thing to notice is that the combined height of the two bars — taxes on *both* income and capital gains — clearly moved *up* from 1978-82, as the top capital gains tax came *down*. This was largely due to inflation pushing more taxpayers into higher tax brackets (bracket creep). Then the recession of 1982 depressed overall receipts in calendar 1983 (when taxes were due on 1982 incomes). And income tax rates were cut by nearly 30% in 1982-84. Still, there is no evidence of the dark bar (tax on capital gains) growing at the expense of the light bar (tax on income).

Figure 8

U.S. INCOME TAX ON INDIVIDUALS:

PERCENT OF PERSONAL INCOME



OFFICE OF TAX ANALYSIS, U.S. TREASURY.

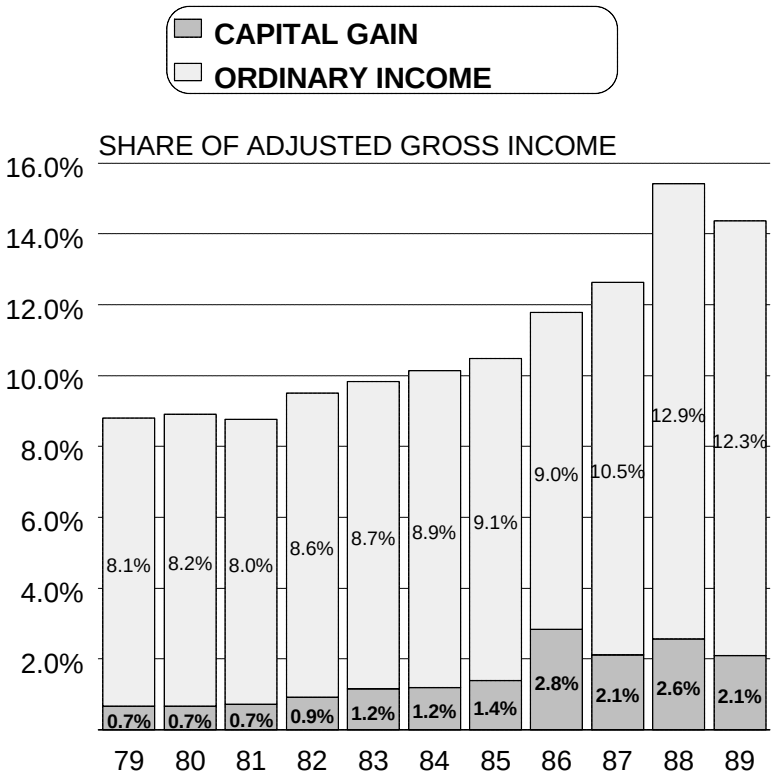
If there was substantial conversion of ordinary income into capital gains when tax rates on gains were substantially lower than those on ordinary income, then the bar showing capital gains taxes should have been much larger from 1978 to 1986 than it was after 1987. With the sole exception of 1986 (when people rushed to realize gains before the tax rate went up), no such pattern is visible. Capital gains receipts did *not* constitute a larger percentage of the total income tax burden

when the capital gains tax was "preferential" than when it was not. There is no substitution of capital gains for ordinary income evident in the data.

It might be argued that the aggregate data obscure a phenomenon that only occurs at the highest incomes. That too is incorrect. Figure 9 shows the share of adjusted gross income received by the top 1% of taxpayers, from a study by Feenberg and Poterba. With the possible exception of 1986, there is no indication that the share of taxable income reported by the top 1% was affected by minimizing ordinary income and maximizing capital gains before 1987, while the capital gains tax was relatively low. Conversely, the rapid increase in shares of income reported by the top 1% after 1987 was *not* at the expense of capital gains, which is what would be expected if pre-1987 tax law had been inducing conversion of ordinary income into capital gains.

Figure 9

SHARE OF INCOME AMONG THE TOP 1% OF U.S. TAXPAYERS



D. Feenberg & J. Poterba in "Tax Policy and The Economy," NBER ,1993

What apparently happened to encourage the rich to pay so much more in taxes after 1986 was what Feenberg and Poterba describe as "a tax-induced change in the incentives that high-income households have for reporting taxable income." In other words, taxpayers at the very highest income levels (mainly the top one-tenth of one percent) suddenly discovered *much* more income to report to the tax collectors after marginal income became taxed at 28%, rather than 50%.

They chose to take a larger portion of their compensation in the form of taxable salaries and bonuses rather than as deferred compensation and perks, and they chose to invest more in taxable investments rather than in, say, tax-exempt municipal bonds.

The increased *reporting* of high incomes while the highest marginal tax rate was cut from 50% to 37.5% in 1987 and then to 28% in 1988 greatly increased the share of taxes paid by the top 1%. *The top 1% paid 27.6% of all individual income taxes in 1988 -- up from 17.9% of the income tax in 1981.*[135] This was a major source of the dramatic increase in real federal tax receipts during the decade in which U.S. tax rates were sharply reduced. Measured in constant 1992 dollars, real federal tax receipts jumped from $889 billion in 1980 to $1,114 billion in 1989 -- an increase of more than 25%, in real terms.[136] The fact that the rich paid *much* more tax on *income* at the low rate (but only slightly more on gains) also helps to explain how taxes remained a steady 9-10% share of personal income regardless of marginal tax rates. When marginal tax rates were low, the rich paid the lion's share; when tax rates were high, taxpayers with more modest incomes paid a greater share of the tax bill. Larry Lindsey noted that United Kingdom had the same experience, with a rising share of taxes paid by high-income taxpayers after the highest marginal tax rate was first reduced. "By the fourth year after the tax cut, the top 2 percent were paying a greater share [of total income tax] than before the cut: 16.4 percent. In real terms, the taxes paid by the top 5 percent rose 35 percent."[137] After the top U.K. tax rate was further reduced to 40% in 1988, revenues from ordinary income (not from the increased capital gains tax) grew so rapidly that the budget was quickly pushed into substantial surplus.

To summarize the preceding section, academic speculations about a lower capital gains tax inviting a massive loss of revenues is just another theory in search of some facts. As we will see, the theory itself is badly in need of repair. If economists really knew how to beat the tax system, they would be writing best-selling books on that topic.

Seeking Shelter

"Tax arbitrage" is a compelling phrase, coined by David Bradford. It is also a potentially useful concept, but not if "arbitrage" is used as if it meant nothing more than another word for avoidance. The capital gains tax has literally nothing to do with tax arbitrage. And the most damaging varieties of tax avoidance, in terms of both tax revenue and economic waste, occurs because capital gains tax rates are *too high*, rather than too low.

Tax arbitrage has to do with tax treatment of interest and depreciation, not of capital gains. In fact, a 1988 study of tax arbitrage by Gordon and Feenberg came up with startling estimate that "abandoning entirely any attempt to tax capital income [i.e., income and capital gains from financial assets] while leaving the tax law otherwise unchanged would have resulted in a slight rise in government revenue." The authors go on to describe a "typical case" of arbitrage as follows:

> High-tax-bracket individuals, say in a 50 percent bracket, may borrow money at the going market interest rate, of say 8 percent, from lower-tax-bracket individuals, either directly or more likely through a financial intermediary, and invest the fund in tax-exempt bonds paying, for example, 6 percent. The interest

> payments they make on the borrowed funds are taxable. The interest payments received by the lower bracket individuals are taxable, but at a very low rate, say 15 percent, so that on net the government loses tax revenue.[138]

Borrowing to buy tax-exempt bonds is the favored textbook example of tax arbitrage. The first thing to notice, however, is that this arbitrage has absolutely nothing to do with capital gains. It is also nearly always true that if actual interest rates are substituted for those in any hypothetical example, it turns out that buying tax-free bonds with borrowed money is unprofitable. Why? Because interest rates adjust, falling on municipal bonds and rising on borrowers, to eliminate hypothetical opportunities. As Bradford has observed, most tax arbitrage opportunities cannot persist, but are a temporary disequilibrium phenomenon.

Perhaps the best-known book on tax arbitrage, Eugene Steurle's *Taxes, Loans and Inflation*, *never* attributes arbitrage to a low tax on capital gains. In fact, Steurle barely mentions capital gains, aside from a couple of pages about a hypothetical tax-avoiding strategy (not arbitrage) involving trading commodity straddles on foreign futures markets. Such complex avoidance strategies would obviously be *less* attractive at a lower capital gains tax rate, not more attractive.

It is also possible to make short-term gains look like long-term gains, through swaps and options rather than arbitrage.[139] In the U.S., very few short-term gains are realized, barely enough to be worth bothering with. Auerbach even calls waiting a year in order to qualify for a lower tax rate "passive arbitrage," but that is a meaningless abuse of the term.[140] The difficulty of separating short-term from long should make legislators think twice about trying to penalize so-called "speculation" with much higher tax rates on short-term gains. After all, Australia does not tax short-term gambling winnings at all, except for professional gamblers.

Like Gordon and Feenberg, Steurle's main concern about "tax arbitrage" has only to do with interest, not capital gains. He is concerned with the fact that most nominal interest *expense* is deducted, but the treatment of interest *income* is not symmetrical. Steurle estimated that nearly half of interest income went to tax-exempt entities such as foundations, university endowments, state governments and pension funds. So the federal government gets stuck with interest deductions on one side of leveraged deals, but receives very little revenue from interest income on the other side. *A lower capital gains tax could actually reduce this tax arbitrage, by making equity and retained earnings relatively more attractive (to companies and investors), and debt markedly less so.*

Auerbach describes a strategy for avoiding capital gains tax, similar to Steurle's, but it too does not involve tax arbitrage. Auerbach constructed a sophisticated variation on the theme that a high tax on realized gains creates incentives for realizing losses and locking-in gains: "An investor can take long and short positions in similar assets," wrote Auerbach, "and realize immediately whichever investment goes down in value."[141] If an investor is long and short the same asset, the potential gain is zero, but both positions could lose value unless realized at the same time. At best, Auerbach's strategy does *not* result in converting income into capital gains, but only in minimizing the CGT itself. A lower tax rate on gains would result in *less* such avoidance of CGT, not more. If the long position goes up, in Auerbach's scenario, you could use short-term losses on the shorts

to offset gains, but such losses are worth zero in Australia without gains to offset against them. If the stock is sold and the loss on the short position is large enough to cut the tax to zero, the taxpayer ends up with no CGT but also no net gain. If there was a net *short-term* gain, it would be taxed at full income tax rates in either the U.S. or Australia. The taxpayer might *defer* paying tax on the gain, but that is simply the lock-in effect, which does not require all this tricky trading.

References to "tax arbitrage" as a reason to keep a high CGT are misinformed. Tax arbitrage is about deducting the expense of borrowed funds to buy some tax-advantaged asset, such as U.S. municipal bonds. *Investment interest expense in the U.S. is only deductible against interest or dividends income, not against capital gains*. Indeed, this is one reason why taxable U.S. investors want some dividend or interest income — such income (unlike capital gains) becomes tax-free by deducting the interest expense of buying stock on margin. To the extent that an investor's margin interest exceeds dividend and interest income, it is not deductible.

Tax arbitrage is about such matters as nominal interest expense being broadly deductible while interest income escapes taxation. Tax arbitrage theorists have nothing to say about capital gains, except that a *high* CGT rate is likely to encourage clever strategies to offset any gains with losses.

Converting Ordinary Income Into Capital Gains

When people worry about "tax arbitrage" in the context of capital gains, they are usually thinking about one of two possibilities that do not really involve any "arbitrage" between securities and debt taxed or deducted at different tax rates. Instead, they are either worrying that (1) individuals will somehow "convert ordinary income into capital gains," or that (2) corporations will use earnings that would otherwise have been paid out as dividends to buy back their own company's shares and thereby reward shareholders with taxable gains taxed at a lower rate than dividends.

As noted previously, there is no evidence that taxpayers in countries with low or no CGT have been able to substitute capital gains for ordinary income. Taxes on ordinary income in the U.S. did *not* drop when taxes collected on capital gains went up (i.e., when the CGT rate went down). And countries without little or no tax on capital gains (including Australia before 1985) have *not* found it more difficult to collect income taxes than countries *with* a capital gains tax. Revenue from the CGT is only about 1% of individual income tax collections in countries with a very high CGT (Canada and Australia), which suggests that tax avoidance is *more* troublesome in those countries than in countries like the U.S., with lower tax rates that are actually paid. Such facts do not, however, prevent economists from talking about "converting ordinary income to capital gains," as though that was the easiest thing in the world to do. Indeed, why doesn't everyone do it?

To say that a lower tax on capital gains "creates incentives" to convert capital gains into ordinary income is not much more enlightening than to say that a lower tax on sales creates incentives to convert income into sales. Having an incentive to do something impossible does not make it any less impossible. There is ample evidence that a *high* tax on capital gains not only creates "incentives" for tax avoidance, but also creates *opportunities* for tax avoidance. When it comes

to converting capital gains into ordinary income, however, incentives alone are not sufficient. Taxpayers also have incentives to make taxable income invisible, but that is easier to say than to do.

Economists are too rarely asked exactly *how* one goes about converting ordinary income into capital gains. On rare occasions when economists try to grapple with that question, they invariably come up with amusing answers. Burman struggles with the following example in the context of writing about how much or little stock prices might rise if the capital gains tax were reduced:

> The equilibrium rate of return for assets that do not produce capital gains such as bond would have to increase . . . If saving is unresponsive . . . the effect of a capital gains tax cut would be primarily to reallocate capital from non-gain assets (bonds) to gains assets (stocks) . . . with little effect on the price of stocks. This *conversion of ordinary income into gains* corresponds to an indirect *revenue cost* from the tax change [emphasis added].

Even if assets had to be reallocated from bonds to stocks, as in Burman's two-asset model, how would that constitute a revenue-losing "conversion of ordinary income into gains."? If Mr. Burman sells his bonds to buy stocks, then someone else must be buying bonds and selling stocks. The bonds do not vanish, so bondholders (with the partial exception of foreign bondholders) will still owe taxes on their interest income. There is no "revenue cost" involved. On the contrary, there would be a revenue *gain* if more high-return assets ended up being shifted from tax-exempt to taxable owners.

What Burman does not appear to realize is that bondholders certainly do pay capital gains taxes when yields fall (and bond prices rise), as they have in Australia in recent years. In any event, the global supply of capital is not fixed, so there is no reason to suppose that investors could only bid-up the prices of stocks by bidding-down the prices of bonds (which implies that nobody anywhere in the world has cash). A reduction in capital gains tax improves the capital gains portion of prospective bond returns, after taxes, and does nothing to damage the other portion (interest income). So, bond and stock prices should both rise with a lower tax on their total return, just as stock and bond prices normally rise together (the ratio of S&P 500 earnings to that stock index is closely linked to bond yields). The beneficial effect of a lower capital gains tax on bonds should *reinforce* the benefit to stocks, not dilute it.

Eric Toder, who served as an economist with both the New Zealand and U.S. Treasury and at the CBO, had another curious suggestion about how to convert ordinary income into capital gains:

> Individuals may increase the rate of turnover of buildings, thereby producing more capital gain income for the sellers, but more ordinary income deductions (for depreciation) for buyers.

How could more frequent sale of buildings make them any more valuable, thus producing "more capital gain income for the sellers"? Toder may have been assuming that a lower capital gains tax would be capitalized in higher prices of buildings, but even if that happened it would not happen

over and over again, year after year, thus "increasing the rate of turnover of buildings." Since the rapid "turnover of buildings" means buyers soon become sellers, what sense could it make to suggest that buyers want the depreciation allowance while sellers are eager for capital gains? Those who sell a building have to stop claiming depreciation, and thereby lose that supposedly valuable deduction against income. With sensible recapture provisions (the absence of which is the real issue here), taxpayers have to, in effect, repay any "excess" depreciation deductions if the supposedly depreciated building is shown to have *appreciated* by the fact that it is later sold at a gain.

What Toder appears to be trying to describe is a tax shelter opportunity that arises from excessively rapid depreciation of buildings that are actually appreciating in market value (perhaps because of inflation, which often inflates tangible assets at the expense of financial assets). Demand is assumed to be high for such buildings because the rapid depreciation allowances can shelter ordinary income.

Toder's device of assigning separate motives to buyers and sellers does not begin to explain why they supposedly change place so often. The capital gains tax, whether high, low or nonexistent, is irrelevant.

Telling a similar tale, Burman says "a preference for capital gains, combined with generous depreciation schedules and recapture rules, made investments in . . . office buildings with few tenants seem profitable in the early 1980s."[142] But the source of this problem (aside from the impact of falling oil prices on Houston) was entirely "generous depreciation schedules and recapture rules," not the capital gains tax at all. Indeed, Burman ends by conceding that "some of these tax-sheltering schemes were profitable when the top tax on capital gains was 28 percent [the same as for income]. But total income tax receipts have soared, so it is not quite time to declare that the sky is falling."[143]

Stock Buybacks Instead of Dividends

Perhaps the most plausible (yet incorrect) theory about converting income into gains is the use of corporate stock share repurchases ("buybacks") to reward shareholders, at the expense of dividend payment. This too turns out to be a theory in conflict with the evidence. Before we turn to the evidence, however, it is important to realize that whatever the importance of stock buybacks in the U.S., this issue is entirely irrelevant for Australia. The alleged point of the stock buyback strategy is to avoid double-taxation of dividends. With Australia's system of dividend imputation, *any capital gains tax above zero still favors dividend payouts over retained earnings.* For funds, where the credit for dividends far exceeds the 15% tax rate, even a zero tax on capital gains would not be preferable to franked dividends. A reduced tax rate on capital gains would provide Australian corporations with no incentive whatsoever to cut back on franked dividends in order to repurchase their own shares (but Australian individuals would have an incentive to repurchase some shares from foreign investors).

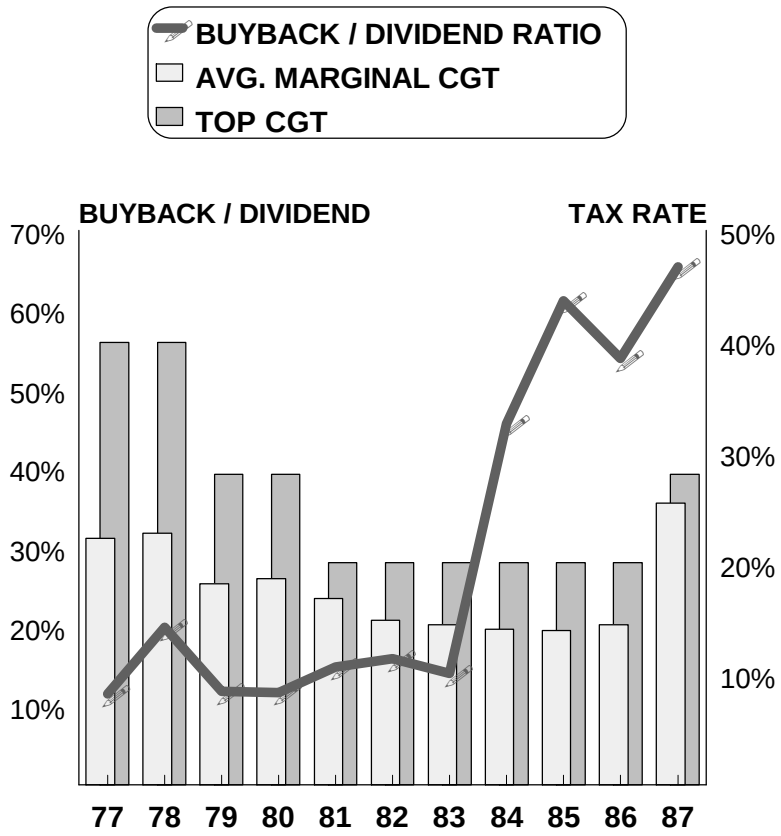
The theory that stock buybacks rose when the U.S. capital gains tax came down implies that increases in capital gains tax receipts may have been at the expense of losses in individual tax

receipts from other sources of income (i.e., dividends). Any such substitution of capital gains tax for other individual taxes is not visible in the data presented earlier. What may be more surprising, however, is the little-known fact that *stock repurchases did not rise relative to dividends when the U.S. capital gains tax fell below the tax on dividends, nor did repurchases fall and/or dividends rise while capital gains and dividends were taxed at the same rate.* In other words, the idea that pushing the CGT below the tax rate on dividends caused companies to buy back their stock rather than pay dividends is inconsistent with the facts.

Figure 10

RATIO OF U.S. SHARE REPURCHASES TO DIVIDENDS

UNRELATED TO TAX ON CAPITAL GAINS



L.S. Bagwell & J.B. Shoven, Journal of Economic Perspectives, Sum 89.
Avg. marginal CGT from A. Auerbach, Brookings Papers... 2:98.

The dark line in Figure 10 shows the ratio of stock repurchases to dividends for an ideal testing period, 1977-97, when the capital gains tax was first sharply increased in 1978, then sharply increased in 1987. The ratio is constructed from figures supplied by the leading proponent of this idea, John Shoven of Stanford, and coauthor Laurie Simon Bagwell of Northwestern University. Two measures of the U.S. capital gains tax are also shown as bars — the maximum CGT (from the U.S. Treasury) and an average of marginal rates (from Alan Auerbach).

If the CGT had been driving the decision to repurchase shares rather than pay dividends, then the ratio of share buybacks to dividends should have increased when the CGT fell after 1978, and fallen when tax rates on capital gains and dividends were equalized in 1987. The lesson of Figure 10 is inescapable. The CGT was greatly reduced in 1978, with no apparent impact at all on the ratio of stock repurchases to dividends. Buybacks grew dramatically, relative to dividends, as the economy and markets boomed in 1983. As mentioned earlier, 1983-84 (not 1981) was when most taxpayers first experienced a significant cut in marginal tax rates on capital gains, but they simultaneously received a proportional cut in the tax on dividends. Whatever the explanation of the post-1982 surge in stock buybacks (perhaps insiders thought the market was undervaluing their companies), neither the average nor maximum capital gains tax looks like the right answer. What is even more conclusive, the capital gains tax was dramatically increased in 1987 at both high and middle incomes, but the top tax on dividends fell from 50% to 28%. Capital gains were then taxed at the same rate as dividends. The "old view" theory says the ratio of stock buybacks to dividends should have fallen like a stone when capital gains and dividends were taxed at the same rate.[144] The facts say the opposite.

Eric Toder, while a consultant with the New Zealand Treasury, cited the Bagwell-Shoven study as demonstrating that because of a lower CGT, "corporations greatly increased the proportions of cash distributions to shareholders that took the form of share repurchases, taxed at capital gains rates, instead of dividends."[145] Bagwell and Shoven disagree. As they observe, "share repurchases in 1987 exceeded those in 1986. In fact, the figures for each quarter starting in 1987 are higher than the annual totals for all years before 1984. There were some predictions that the higher capital gains tax rate in the Tax Reform Act would slow the practice of share repurchases, but the evidence . . . says otherwise. . . . Though many investors predicted the 1986 Tax Reform Act would sharply curtail nondividend methods of cash payment, this has proven to be incorrect."[146]

Why was Toder's typical "old view" forecast that a lower CGT would inspire share repurchases at the expense of dividends "proven to be incorrect"? Because corporations concerned about the impact of a higher CGT on their shareholders had another very attractive alternative to either buying back stock or paying dividends. That alternative was corporate *debt*. Harvard's Robert Barro explains:

> Because the double taxation of debt-financed investment is more attractive than the triple taxation of equity-financed investment, corporations are motivated to use debt; moreover, this incentive increased with the effective rise in the capital gains tax rate in 1986.[147]

Sinn adds that "*share repurchases do not prevent the firm from having to pay corporate tax on retained earnings and they in addition create a personal capital gains tax liability because the remaining shares are gaining in weight.*" The idea that a low CGT will cause companies to cut dividends and buy back their own shares, notes Sinn, *assumes* the "old view" that "retained earnings in the sense of dividend reductions would be the only marginal source of finance . . . "[148] In reality, *debt* is another marginal source of finance, and debt is a tax deductible expense for companies and tax-free income for many bondholders. Debt can alleviate double-taxation of

retained earnings, but share repurchases cannot. Corporations have to repurchase shares out of after-tax profits.

During the brief period while the U.S. tax on an individual's capital gains was identical to the tax on dividends (which was literally true in 1987-90 and largely true through 1992), there was a dramatic, predictable increase in corporate leverage. The post-1986 surge in U.S. corporate debt was often associated with such newsworthy events as "leveraged buyouts" that turned public corporations into privately-held companies, and mergers financed with high-yield "junk" bonds.

The higher ratio of debt to equity induced by a high capital gains tax reduces income taxable to corporations, but individual holders of corporate bonds would likewise appear to have relatively more taxable interest income. As a result, *individual* taxes on capital gains and interest income may both rise in the process of share repurchases, even though taxes on dividend income decline. Unfortunately, as tax arbitrage theorists rightly emphasized, *many corporate bonds in both the U.S. and Australia are held by organizations that are tax-exempt, or taxed as low rates.* On balance, the incentive for companies to gear up under a *high* capital gains tax surely reduces overall tax receipts, possibly by much more than appears to be raised by the capital gains tax on individual investors. Once again, a relatively *high* capital gains tax (the U.S. from 1987 to 1996) clearly does reduce tax receipts -- in this case, by inducing corporations to float more bonds that are held by tax-exempt organizations. The opposite anxiety -- that stock repurchases would rise at the expense of dividends and thus reduce individual tax receipts -- has proven to be a hoary myth

Purely hypothetical anxieties about a *lower* capital gains tax leading to revenue-losing "tax arbitrage" strategies do not appear well founded, particularly for Australia, where there is no incentive to avoid double-taxation of dividends. On the other hand, Australians can be quite confident that there is substantial revenue loss caused by avoidance of a *high* capital gains tax. That revenue loss results from diverting asset allocation toward exempt assets (housing, superannuation funds and money market securities), from locking-in accumulated gains on appreciated assets, and from other factors enumerated in the section on tax rates and revenues.

Chapter 8. Potential Drawbacks to Reform: Distribution Issues

Sir John Hicks advised that, "If measures making for efficiency are to have a fair chance, it is extremely desirable that they should be freed from distributive complications as much as possible."[149] Unfortunately, when it comes to the capital gains tax, giving efficiency a fair chance appears painfully difficult for those eager to leap into "distributive complications." Recall the previous quotation from Henry Simons (in Chapter 1), who was unconcerned that his prescription for "drastic progressivity" was sure to cut production.

What the U.S. discovered, by varying the maximum capital gains tax, is that high rates of CGT are not only very effective in discouraging residents from buying and selling capital gains assets, but are particularly effective in discouraging "the rich" from paying this tax. The higher the capital gains tax, the less likely that much of it will actually be paid by those with the highest incomes.

Feenberg and Poterba found that "the share of all capital gains reported by top-income taxpayers was stable at approximately 45 percent throughout the 1950s and 1960s, but fell to only 20 percent in the late 1970s [when] . . . the marginal tax rate on capital gains received by high income taxpayers could exceed 40 percent."[150] When the capital gains tax rate went back up in 1987, higher-income taxpayers once again began to report fewer gains. Using 1985 as the base year (to avoid the pre-1987 spurt in realizations), real capital gains reported by the top 1% of U.S. taxpayers fell by 5.3% a year from 1985 to 1994, after rising by 19% a year from 1980 to 1985.[151]

The Australian experience is entirely consistent with this pattern. In Australia's case, redistributionist arguments for a high CGT are seriously compromised by the fact that the rich obviously shun assets subject to this tax. Australian with incomes above $500,000 report much larger dividend income than capital gains. And only 18 per cent of capital gains tax in 1996-97 was actually collected from individuals in the top tax bracket.

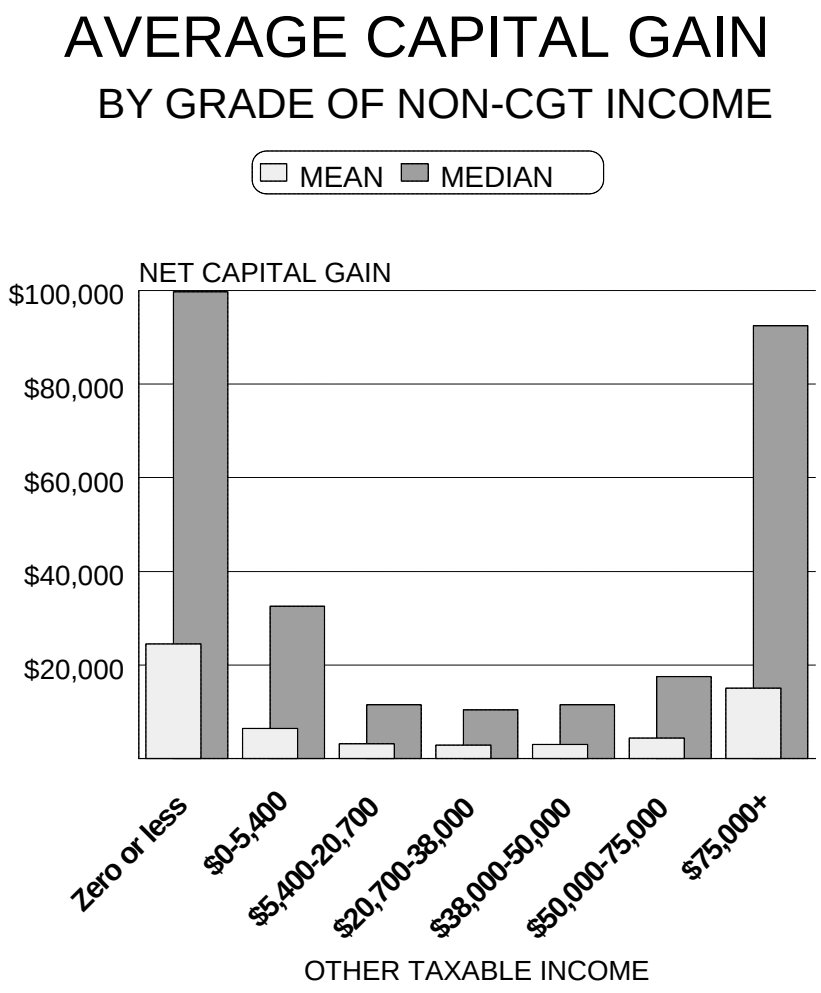
Figure 11 shows two measures of average (mean and median) net capital gains reported by Australian individuals in 1996-97, classified by their other income, aside from gains. There is an obvious U-shaped pattern, with the largest gains reported at both the lowest and highest income groups. There were a larger number of smaller gains reported in the $5,400-20,700 group, however, so that over a fifth of all gains fell into that 20% tax bracket.

It would be difficult to describe the Australian CGT as a tax on "the rich," since nearly 72% of all gains were reported by individuals with other taxable income below $50,000 (i.e., the 47% rate). Besides, even the highest 47% tax rate is reached at an income only 1.4 times the average (or about 2.1 times after the reform). By contrast, the top tax rate is not reached until income is 7 times average in Japan, or 9.7 times average in the U.S.[152]

The fact that very little revenue is collected from high-income individuals in Australia, or even from high-income small companies, has obvious implications for the usual claims of "fairness" for this tax. What is so "fair" about a tax so high that the rich simply refuse to pay it? The trivial

amount of revenue from tax rates above 30-40% on capital gains is mainly collected from small businesses, which are required to pay a much higher tax rate than large businesses. The "fairness" of that tax discrimination is difficult to understand, particularly in view of a massive body of U.S. evidence showing that much lower capital gains tax rates would raise more, not less government revenue.

Figure 11



Review of Business Taxation.

Even if top-bracket individuals actually paid any significant portion of Australia's capital gains taxes (they do not), it would still be incorrect to say that Australia's highest CGT applies to "the rich." Tax rates of 43-47% on capital gains apply to virtually all mature, educated workers in Australia, particularly if husband and wife both work. Since young people will eventually grow older, earning more money and accumulating assets when that happens, they realize that the higher rates of tax on capital gains are very likely to apply to them too, if they were to begin saving at an early age and realize gains later in life.

In the customary single-year snapshot used to depict the effect of tax changes on various income groups, students in graduate school are likely to look extremely poor in the annual data, even though they are unusually wealthy in terms of human capital. Some people receive large lump-sum capital gains in one year by, for example, selling a business. Anyone with a gain larger than $100,000 in one year must, by definition, have a measured "income" above $100,000 in that year, but bunching of such gains makes nonsense of tables purporting to show that most gains are realized by people with relatively high incomes. Economists have attempted to find out how important this is by examining a cohort of taxpayers over several years. Haliassos and Lyon found that more than 40 percent of those who realized gains in one year did not have another gain within the five years they examined.[153] Feenberg and Summers found that "fully 25 percent of capital gains are received by taxpayers whose non-capital gains income is negative." In Australia, more than 16% of all gains are likewise reported by those with no other apparent income. Feenberg and Summers insinuate that this phenomenon of gains without other income is entirely due to tax avoidance devices, and some of it probably is. Yet the "income" of many retired people, as well as those struck by unemployment or illness, really can consist entirely of capital gains in some years.[154] Besides, even the five year period used in many studies -- and in Australian averaging — is an inadequate proxy for lifetime living standards. Retired people frequently realize gains on life savings for more than five years, selling-off stocks and bonds in periodic increments, possibly producing what appears to be a relatively high income during some retirement years in which more gains are bunched.

A meaningful concept of the impact of any tax change must look at the incidence over a lifetime. In *Who Bears the Lifetime Tax Burden*?, Don Fullerton and Diane Lim Rogers found that "if we label the bottom 30 percent the 'poor' and the top 30 percent the 'rich,' we find that 13.8 percent of the annually poor are lifetime rich." They also found that "owners of capital are not just 'the rich' but are people whose earnings peak relatively early and who must therefore save more . . . The lowest income groups and the highest income groups have earlier peaks, saving more during life, and bear more of the burden of capital taxation."[155] In Australia, Creedy and Van de Ven likewise found that *lifetime* "inequality" is substantially lower than in any single year.[156] Incomes first rise with age, then decline. To narrow "inequality," we would all have to remain very young forever (which is something many middle-aged people might gladly trade for their higher incomes and longer period of asset accumulation).

Burden Tables

An efficient tax is one that does the least possible damage to economic incentives and efficiency per dollar raised. Capital gains tax rates of 36-47% do considerable damage to the financial and economic vitality of the Australian economy, in exchange for negligible revenue. Unfortunately, practical questions of how best to finance the government are often complicated by careless theories about *assumed* effects on income distribution. What is even more unfortunate, these theories are often disguised as statistical facts. Burden tables -- purporting to measure the effect of a change in tax policy on the "tax burden" by income groups -- typically depend on static, zero-sum, partial equilibrium assumptions.

Static accounting conventions assume tax policy has no effects on behavior, and therefore no effects on the economy. If any tax were doubled or cut in half, nothing would supposedly change except the government's receipts. When it comes to estimating how a lower tax on capital gains will affect various income groups, for example, static methods imply that any tax rate below 100% would appear to reduce taxes collected from high incomes, because even a 100% tax rate is assumed to have no effect at on how many of the assets affected by this tax the rich choose to buy or sell.

Failure to incorporate even the well-documented effect of capital gains tax rates on *realizations*, or any adverse effects on the economy, can easily make it look as though "the rich" will pay fewer taxes on gains if the tax rate goes down. Yet we previously presented unambiguous U.S. evidence that the most affluent 1% of taxpayers actually paid much, much more in taxes when the highest tax rates on both income and capital gains were reduced in the 1980s.

In the U.S. debates over whether the CGT should go up or down, the use of naive static revenue estimates has even appeared suspiciously political at times. While President Bush was in office, arguing with a Democratic congress about reducing the capital gains tax, The Treasury Department's Office of Tax Analysis (OTA) *did* include estimates of higher realizations in their estimates of the distributional burden of a lower capital gains tax, but the Congressional Joint Committee on Taxation (JCT) did not. The JCT also used low estimates of the response of realizations to tax rates, which resulted in an estimated revenue loss from a 15% CGT of about $2.7 billion per year. Yet the JCT burden tables showed taxpayers earning more than $200,000 paying $15.9 billion fewer taxes *in a single year* — far more than the entire "dynamic" estimated revenue loss over six years.[157] One could argue that high-income taxpayer would be better-off with a lower tax rate, despite paying more taxes. But the JCT burden tables did much more than that. The burden tables clearly implied the rich would actually pay much less in capital gains taxes if faced with a lower tax rate on capital gains, and those figures that could not possibly be reconciled with the same agency's own revenue estimates.

In 1995, when the President was a Democrat and Congress had turned Republican, the methodology of burden estimates switched sides, with Treasury using static estimates and the JCT incorporating estimates of higher realization.[158] Yet some people still take these burden tables very seriously.

As a result of the implicit assumption that tax rates do *not* affect realization, JCT burden tables in 1990 and Treasury tables in 1995 appeared to "prove" that even the slightest reduction in even the highest imaginable tax rate on capital gains (such as a tax rate of 100%) must result in the rich actually paying less in capital gains tax. Yet the evidence is indisputable that the rich actually paid much more when the capital gains tax comes down. Indeed, revenue estimates from these same agencies actually predict that the rich will pay more taxes at a lower tax rate, even though their burden tables say the opposite (whenever that conclusion appears politically convenient).

At times, the methodology underlying U.S. burden tables has been even worse than these nefarious games with capital gains taxes. During the debate of the 1986 tax reform, the JCT totally excluded the increased effective tax on corporations (slower depreciation and loss of the

investment tax credit) from its estimates of how individual taxpayers would be affected by the 1986 tax reform. The incidence of the corporate tax may be ambiguous, but it is not zero.

The U.S. experience has demonstrated that a low tax rate on capital gains has been good for the creation of new enterprises, for job growth and for the stock market (i.e., pensions), and therefore very good for government revenues. Since Australia starts with a much higher tax rate, such benefits could be far more dramatic. To distribute the future tax burden under a lower CGT on the basis of *current* incomes reported at a high CGT misses yet another point: Incomes will rise with a lower CGT, particularly high incomes reported to the tax authorities.
Static bookkeeping is also a common source of the zero-sum notion that anything that benefits one taxpayer must hurt another. Yet this is clearly untrue for a transactions tax that can be avoided by simply not trading assets, or by not investing in the first place. Everyone may lose from that sort of tax, and nobody loses from reducing it. Australia's highest capital gains tax rates clearly damage to investment, entrepreneurship and economic growth. As we will later show, the only debate is about how large the damage it, not about the undeniable fact that a lower CGT would benefit the economy. The U.S. experience and evidence is also very clear that Australia's capital gains tax is far above the level that would maximize revenues. Combining those two observations, it follows unavoidably that Australia's capital gains tax has been set at rates that cause maximum economic injury while minimizing government revenues from the CGT itself and also from other taxes.

Should Australia forego the increase in realizations and revenues that would surely occur with a CGT capped at 25-30% simply to maintain the *appearance* of progressive tax rates on voluntary transactions that can be either (1) postponed indefinitely, or (2) conducted mainly by those subject to much lower CGT, such as foreign portfolio investors and super funds.

Capital Taxes May Be Shifted to Labor

It is not merely the *lifetime* burden of capital taxes that complicates this "fairness" issue. In a general equilibrium analysis, a heavy tax on capital is bound to affect capital formation. And that means the true burden of capital taxes is very likely to be shifted to labor. Joseph Stiglitz first explained this as follows:

> The reductions in savings and capital accumulation will, in the long run, lead to a lower capital-labor ratio; and the lower capital-labor ratio will . . . lead to an increase in the share of capital. Since income from capital is more unequally distributed than is labor income, the increase in the proportion of income accruing to capital may increase the total inequality of income.[159]

Any high tax rate on capital must discourage capital formation. That means capital will be more scarce in the future. Anything that becomes more scarce will also become more valuable. So, the pretax return to capital must rise to bring the after-tax return back up to normal. Besides, in a world of increasing capital mobility, the after-tax return on capital also has to rise to an internationally competitive level, or capital will flee the country until it does. [160] Sooner or later, as Stiglitz observed, the reduced ratio of capital to labor means workers wind up with less

effective equipment to work with. That holds back growth of productivity and real wages. And that means any "*capital tax" ends up being mainly shifted to labor -- in the form of slower growth of wages and/or faster growth of consumer prices.*

This general equilibrium forecast -- that higher capital taxes are eventually reflected in a higher pretax return--has been roughly consistent with U.S. rates of return among nonfinancial corporations. The "tax wedge" between pretax and after-tax returns dropped from 4.1% in the 1960s to 1.9% in the 1980s and *pretax* returns likewise declined from 9.7% to 5.2% in the same period, leaving the share of national income going to capital little changed by seemingly dramatic changes in tax rates on capital income at both the corporate and individual level. Property income was 17.7% of national income in 1990-98, 17.1% in 1980-89 and 17.5% in 1970-79.[161]

As for Australia, OECD estimates show "capital income shares in the business sector"in Australia averaging less than 32.5% from 1970 to 1985, then jumping to 38% in 1988-96.[162] That pattern is consistent with tax-induced capital scarcity, of the sort Stiglitz theorized about. Diewert and Lawrence's finding of a rising tax wedge between pretax and aftertax returns after 1985 is also consistent with the Stiglitz prediction that *the pretax return rises to accommodate a higher tax on capital, thus shifting the burden to consumers and workers.*

Taxing the Aged

A capital gains tax on individuals is, above all else, *a tax on the old.* As Table 4 shows, the capital gains tax U.S. individuals under the age of 65 amounted to only 5.2% of individual income tax for those under age 65, but to 17.5% for those over age 65. The capital gains tax accounted for a larger share of the tax burden on elderly taxpayers earning less than $20,000 than it was for younger taxpayers earning more than $100,000. If such figures were constructed for Australia, they would surely indicate a similar pattern, with capital gains being particularly important (relative to ordinary income) among the retired.

It is true that household financial wealth rises with age, so the capital gains tax may *appear* to be a tax on the "wealthy." But this is only because accountants do not count human capital as something of value. Young people typically have an enormous stock of human capital — many years of future earnings — but little or no financial capital. Indeed, a young family may initially have a negative net worth, using credit against human capital assets (future earnings) to acquire a valuable college education, then a house, furniture and car.

As people get older, their human capital depreciates. Even if old knowledge and skills do not become obsolete, there are nonetheless few years left in which they will be used to generate income. Salaries generally peak by age 50, and may then decline in real terms. Understanding this life cycle pattern quite well, prudent people accumulate assets and pay down their debts as they grow older. At or before retirement, they begin to cash in some of those assets to offset their lessened ability to earn income through work.

If we ignore the enormous present value of human capital, then a capital gains tax may also appear to be a tax on the "wealthy" — in the narrow sense of those with financial capital. And,

since financial assets generate income, and inexperienced young workers earn little and own less, realized capital gains are also correlated with income.

Table 4

U.S. Taxes on Capital Gains As Percent of Personal Income Tax, 1993

Income	Under Age 65	Over Age 65
Less than $10,000	2.0	1.3
$10,000 - $20,000	1.3	6.8
$20,000 - $30,000	1.0	7.3
$30,000 - $40,000	0.9	11.5
$40,000 - $50,000	1.2	11.6
$50,000 - $75,000	1.8	14.6
$75,000 - $100,000	2.7	17.3
$100,000 - $200,000	5.1	21.7
$200,000 and Over	15.8	31.1
Total	5.2	17.5

Congressional Budget Office

When somebody raises the inevitable objection that any reduction in the highest capital gains tax rates would be an "unfair" gift to the rich, that assertion merits a much closer investigation. It is clear that very few taxpayers have been willing to realize gains in the higher tax brackets, so that the alleged fairness of imposing high tax rates on gains that are therefore not realized is a moot point at best.

If the capital gains tax rate were reduced to no more than the high end of U.S. estimates of revenue-maximizing rates, 25-30%, the effects on both the economy and tax receipts would clearly be positive and possibly quite substantial. Against such tempting benefits, one has to weigh the costs. What are these costs? Who could possibly lose anything at all from a reduced tax rate on Australian capital gains? This is a good question without any good answer.

Economists honor a famous Italian economist, Vilfredo Pareto, with a phrase used to describe an unusually rare and inviting policy opportunity. Any policy change that helps many citizens without hurting anyone is called "Pareto Optimal." Reducing Australia's capital gains tax rate is clearly Pareto Optimal.

Endnotes

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[12] Australian Taxation Office, "Capital Gains," Table 12.3.

[13] Unless otherwise noted, all Australian tax statistics throughout this report are from the Australian Taxation Office (ATO) website http://www.ato.gov.au/general/business/bus.htm.

[14] Family trusts may be another significant reason that so few capital gains are taxed at the highest rates. Nearly one-fourth of 1996-97 gains (24.5%) were realized by individuals who reported other taxable income below $5,400, which would mean the gains were taxed at very low rate, if at all. Some of taxpayers with gains but little or no other income presumably reflect trust distributions to non-working spouses or students.

[15] Most of the international comparisons in this section are from a report on 24 countries by Arthur Andersen for the American Council for Capital Formation, "An International Comparison of Capital Gains Tax Rates." In searching for the two countries with a CGT as high as Australia's, the source was Price Waterhouse, *Individual Taxes*, 1996, which covers 116 countries and territories.

[16] For a history of tax policy in Japan, see Alan Reynolds, "Toward Meaningful Tax Reform in Japan," Keidanren-Cato Institute conference, Tokyo, 6 April 1998. Available online at www. freetrade.org/pubs/speeches/ar-4-6-98.html.

[17] John Y. Campbell & Kenneth A. Froot, "International Experience With Securities Transactions Taxes," National Bureau of Economic Research (NBER), *Working Paper* 4587, December 1993.

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[19] Eduardo Engel, Alexander Galetovic & Claudio Raddatz, "Taxes and Income Distribution in Chile: Some Unpleasant Redistributive Arithmetic," NBER *Working Paper* 6828, December 1998, p. 27.

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[23] Congressional Budget Office, *The Economic and Budget Outlook*, Fiscal Years 1994-98, January 1993, p. 64.

[24] Congressional and Treasury revenue-estimating agencies have also been subjected to opposing partisan pressures. President Bush (who wanted to cut the capital gains tax) faced a Democratic Congress, while President Clinton (who wanted to raise tax rates in general) eventually faced a Republican Congress. The position of Treasury and Congressional economists on tax issues has appeared to vary with the Party controlling the White House or legislature.

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[26] Burman, *The Labyrinth of U.S. Tax Policy*, Brookings Institution, 1999, p. 42.

[27] Estimated realizations for 1997 are preliminary, from the author's conversations with Ann D. Parcell, Office of Tax Analysis, U.S. Treasury.

[28] Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 2000-2009*, January 1999, p. xxii.

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[32] Joel Slemrod & William Shobe, "The Tax Elasticity of Capital Gains Realizations: Evidence From A Panel of Taxpayers," National Bureau of Economic Research [NBER] *Working Paper* 3237, January 1990, p. 24. The NBER Working Papers, used extensively throughout this report, are available from www.nber.org (there is a modest charge for complete papers).

[33] This study (along with several other outstanding papers on this topic) is reprinted in Martin Feldstein, *Capital Taxation*, Harvard University Press, 1983, Ch. 12.

[34] Burman, *op. cit.*, p. 61.

[35] "In the 1954 and 1958 recessions, realized capital gains underwent . . . a sharp rise during the recession years." Wilfred Lewis, Jr., *Federal Fiscal Policy in the Postwar Recessions*, Brookings Institution, 1962, p. 49.

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[40] For a gentle but persuasive critique of the Burman-Randolph study, see Zodrow, *Canadian Public Policy, op. cit.*, p. S36.

[41] Leonard E. Burman & William C. Randolph, "Measuring Permanent Responses to Capital-Gains Tax Changes in Panel Data," *The American Economic Review*, September 1994, p. 805.

[42] Auten & Cordes, op. cit., p. 185.

[43] "If the income tax is progressive and the elasticity of realizations rises with tax rates, the break-even point occurs at a value slightly below 1.0." *Ibid.*, footnote 5.

[44] Burman, *op. cit.*, p. 63.

[45] It is commonly believed that reducing the highest individual tax rate from 50% to 28-33% involved giving-up individual tax deductions. Actually, deductions remained as large as before, except that the standard deduction was larger and itemized deductions smaller. The reduction in individual tax rates did not have to be "paid for" be "base broadening" because revenues were not reduced at all by the lower tax rates, either in real terms or as a share of personal income.

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