Capital gains taxation in Ireland

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In considering the design and operation of a capital gains tax the first issue to be addressed is the rationale for the introduction of the tax in the first place. In general, a capital gains tax is presumed to be either part of a regime of capital or wealth taxation, or an element in the taxation of income, or both. In Ireland's case, the tax was formally introduced as part of a package of capital taxes, although closer analysis suggests that, in fact, it was seen as providing an additional element in the income-tax code.

Prior to the mid-1970s, there was no specific tax on capital gains in Ireland. Capital taxes were confined in the main to inheritance duties. These, in turn, were watered down by provisions affecting agricultural land (at the time, agriculture accounted for about 30% of employment and 25% of economic activity). The only other form of capital taxation was taxation of real estate by local authorities, an annual tax on a base supposed to reflect rental value. This rental value had originally been estimated in the middle of

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the nineteenth century in a survey of real state values, and by the late twentieth century was full of anomalies and inequitable treatment of similar properties. This tax was referred to as "rates," and was levied as a tax of so many pounds per pound of rateable value (the notional rental value of the property). It applied to residential, commercial, and industrial property and, to a lesser extent, to agricultural land. During the 1970s, political competition led to a program of elimination of rates on domestic housing.

A combination of immediate fiscal problems arising from the first oil shock and the ideological leanings of a centre-left coalition in office from 1973 to 1977 resulted in a radical departure in the field of taxation in 1974. This took the form of a package of capital taxes.

The Government published a White Paper in February of that year in which it outlined the case for the introduction of a package of three kinds of capital taxes: first, capital gains tax proper (*Capital Taxation* 1974); second a general wealth tax; and, third, a capital acquisitions tax, which covered inheritance, gifts and other transfers.

The initial motivation cited by the Government was to replace and reduce large elements of the existing taxation of wealth passing at death under Estate Duty. The pressure for this arose from the substantial increase in the value of land holdings in real terms after Ireland entered the European Economic Community.

The standard equity arguments for having capital taxation as well as income taxation were used to justify these new taxes: "Income, in the commonly accepted sense of the term, is not the sole measure of comparative circumstances . . . It is clear, therefore, that income taxation is inadequate on its own if the tax structure is designed to meet the test of taxable capacity" (*Capital Taxation* 1974: 23). Apart from a throwaway remark about encouraging the efficient use of capital assets by taxing them, the issue of the efficiency effect of these taxes was simply not addressed in the White Paper.

The public's response to the Government's proposals was mixed. The main emphasis of the ensuing debate was on the wealth tax and the sides taken were entirely predictable. The Opposition and the financial press were extremely hostile to the proposed wealth tax. The response from disinterested bodies was less critical but even there concern was expressed about details of the package. In relation to the capital gain tax it was immediately pointed out that the absence of indexation implied an effective rate of taxation

that could exceed 100% (NESC 1974: 7). It was also pointed out that restricting the tax to realized gains on disposal implied a lock-in effect (NESC 1974: 8). The question of lock-in had not even been addressed in the White Paper, nor had the inflation problem.

The wealth tax was subsequently repealed but the capital gains tax was retained, and the capital acquisitions tax was used to replace inheritance taxation.

The history of capital gains taxation in Ireland

The introductory phase[1]

Prior to the introduction of capital gains tax under Ireland's schedular income-tax system,[2] capital gains were taxable as income to the extent that they could be treated as income as defined by law. By and large, capital gains were not taxable unless an individual lived by trading in assets. In corporate hands, similarly, capital gains would be liable to corporate profits tax to the extent that they could be treated as profits. As a result of high marginal tax rates on income, the tax increased the incentive to re-structure the legal basis of accruals so as to transform taxable income or profits into non-taxable capital gains. Several cases of substantial tax avoidance based on this maneuver became public.

Whatever may have been the rhetoric about taxing wealth, the reality was that the principal effect of the capital gains tax was to supplement the conventional income tax. This effect was achieved by bringing an untaxed form of income into the tax net, albeit at a significantly lower marginal rate than that charged on personal income at the time. It should, therefore, be viewed as an attempt to move towards a more complete system of income taxation, as was proposed by Simons, who had argued that capital gains and income are equivalent because they affect equally the ability of individuals to consume without affecting net worth.

The provisions governing the capital gains tax in Ireland introduced in the middle 1970s were very much in the mainstream of the OECD. At that time and for a long time thereafter, many OECD countries did not have a specific capital gains tax in place. Instead, many imposed taxes on realized capital gains under the various income tax codes. In this sense, the detailed provisions of the Irish

tax code were very similar to those in effect in other countries of the OECD (cf. Sanford 1988: 121–54).

The grounding legislation in Ireland is the Capital Gains Tax Act, 1975, which became law in August of that year. It applied capital gains from the beginning of the fiscal year 1974/1975 or, more precisely, to gains realized after April 6, 1974. The tax was imposed on realized rather than accrued gains arising from the sale or disposal of a taxable asset.

Chargeable gain

For tax purposes, a gain is equal to the actual or, in the case of a transfer, notional price of the asset obtained on disposal minus the sum of its purchase price adjusted for certain costs and certain allowable deductions. The gain is based on the asset price after April 6, 1974. For assets held before that date, the gain is the smaller of the difference between the realization value and the value at purchase (including certain costs) or the value as of April 1974. Deductions include improvement expenditure and transactions costs. They do not include the costs of holding assets, like interest, insurance, and payments to asset managers. It is therefore clear that the tax is based on the realized increase in the market value of the asset, not on the increase in the asset holders' net wealth arising from the increase in the value of the asset. This aspect of the tax will be considered in a later section of this chapter.

Disposal and realization

For the purposes of a charge under the capital gains tax, a disposal or realization takes place whenever (with limited exceptions) the owner of an asset transfers it to another individual. This applies to gifts as well as to sales. On death, assets are taxed in the hands of the recipients and not of the transferor. Importantly, Irish capital gains tax law has never regarded the transfer of property at death as a disposal or realization subject to tax. In effect, all capital gains tax liabilities were expunged at death.

Furthermore, the recipients of assets through inheritance or bequest are considered to acquire the assets at their market value, not at the cost to the deceased. Capital acquisitions tax was (and is) levied on acquisitions in excess of threshold values. These refer to lifetime acquisitions. An individual is entitled to receive a cumula-

tive total limited by the threshold over his lifetime. The threshold values vary according to the relation of the recipient to the transferor. At a time when the thresholds for capital acquisitions taxation were quite low, the tax rate was 40% and there was a 2% probate tax, this regulation did not have much impact on property disposition. However, higher thresholds in recent years had the effect of enhancing lock-in effects.

In principle, the broad definition of a disposal leaves open the possibility of double taxation on a transfer by gift. This is so because the capital gains tax is applied upon a sale and purchase. However, the capital gains tax paid by the donor is credited against the capital gains tax liability of the recipient. The gift is taxed at its nominal value for the purposes of capital gains taxation, while the donor pays CGT on the amount transferred. For example, if *A* transfers £100,000 to *B* and attracts a tax liability of £15,000 on this disposal or realization, *B*'s tax liability is based on the entire £100,000. In other words, in this example the recipient is liable for money that he did not receive and, in effect, pays a tax on a tax already paid. However, this provision is made less onerous by the fact that, if the capital gains taxes are less than the charges under the capital acquisition charge, the former is credited against the latter liability. In practice, this provision means that a gift is taxed at the higher of the effective rates applicable to the donor or recipient, be it the capital gains tax or the capital acquisition tax. At present, the rates on the two taxes are the same and the provision is not important but this has not always been the case.

In most cases, disposals to the state, certain charities, and transfers between spouses are exempt from capital gains taxation. In the case of "accidental" disposal arising, for example, from a compulsory purchase order for land under eminent domain powers or a receipt of insurance compensation for the damage or destruction of an insured asset, roll-over relief prevents the accrual of capital gains tax obligations provided certain conditions are met.

Tax base: asset value enhancement

From the start, the capital gains tax was very much a selective tax on asset-value enhancement. A wide and economically significant range of wealth assets were excluded in part or whole from liability to the tax on any increase in value. For example, normally depreciable

assets are valued at their purchase price minus any depreciation. This rule does not apply to assets held as business equipment. Principal private residences (one per person) remain excluded from the capital gains tax.[3] The Government also exempted most liabilities of public sector financial intermediaries from the tax, no doubt reflecting the contemporary preoccupation of the authorities with the costs involved in financing the very high annual Exchequer borrowing requirement. Pension funds were accorded favorable treatment in terms of realizations and in terms of payments to beneficiaries.

Social concerns were also addressed by limits on capital gains taxes payable on the transfer of small family farms and businesses within the family. Gains accruing from the increase in the value of standing timber were exempt. Charities and certain public bodies were exempt from paying taxes on gains arising from disposals.

Where a wealth-holder sold an asset and invested the proceeds in another asset (i.e., could be said to be changing the composition of his portfolio rather than partly or wholly liquidating it), and the sale was exempt from CGT it was said to be covered by "rollover relief." Rollover relief was provided for the disposals of assets and re-investment of the proceeds within businesses. However, rollover relief is not available for financial portfolio adjustments by individuals. Instead, each disposal of an asset in a financial portfolio has to be treated as a stand-alone realization and all such disposals have to be aggregated within the relevant tax year to arrive at a figure for taxable gain. Realized losses can be used to reduce taxable gains. This provision leads to some "bed and breakfast" transactions at the end of financial accounting periods as portfolio holders have an incentive to "realize" losses on assets that they intend to hold onto in the longer term. "Bed and breakfast" is a term used to cover paper transactions designed to establish a particular tax liability position. For example, an asset holder might sell shares that had declined in value to establish a loss that could offset a chargeable gain and immediately re-purchase the same number of shares.

The present rules of capital gains taxation applied to the management of portfolios imply that those that are managed actively are taxed on approximately an accrual basis. On the other hand, portfolios that are not managed are taxed only when they are partly or wholly liquidated. As a result, the present system provides an implicit subsidy to passive portfolio management.

When financial assets are held through approved intermediaries, however, rollover relief is implicitly available because the gains are not chargeable to capital gains tax. However, losses in such funds cannot offset gains realized on other assets. The approved institutions are in the main pension funds and the like but other investment intermediaries can also operate funds that, in effect, defer any charge on net gains until the maturity of the individual's holding in the fund.

Further amendments to the Capital Gains Tax code and implementation procedures

When capital gains taxation was introduced the rate was 26%. This rate was about one third of the highest marginal personal income tax rate then in force. For small gains, individuals had an option of having the gain treated as income on the basis of a zero rate on a first tranche. Any gains above that tranche in a given year were subject a 50% rate of taxation. This fact implies that from the beginning the tax regime treated capital gains as a separately taxable form of income. In other words, the tax code acknowledged that the tax base was fungible. Corporations were able to have capital gains taxed under the Corporations Profits Tax so that they owed the same as if the gains had been imposed at the rate of the capital gains tax.

The high inflation rates of the 1970s resulted in high capital gains taxes on assets held for long periods. In response to protest over this unfair tax, some major changes in the original capital gains tax regime were introduced. The first of these, introduced in 1978, was an inflation-adjustment mechanism designed to limit the tax liability to changes in the real rather than the monetary value of assets. This adjustment took the form of what was termed an "inflation multiplier," which was simply the percentage change in the Consumer Price Index in the year up to the beginning of the current financial year beginning on April 6. In practice, the procedure requires an increase in the purchase value of assets by the rate of inflation. The resultant adjusted purchase value is subtracted from the disposal value to arrive at the taxable capital gain. Since the income tax code made no allowance for inflation in determining a person's tax liability on a nominal income, this adjustment marked a further substantial departure from the basic concept that the capital gains tax is a form of income that escaped the income tax.

The 1978 Finance Act also introduced differential tax treatments depending on the length of time an asset had been held. This arrangement can be seen as a form of inflation relief, which already had been granted through the inflation multiplier provision just discussed. So, why was it considered necessary to add this new provision? The authorities offered the argument that the capital gains tax was a disincentive to long-term, *genuine* investment. Such investment was needed to encourage capital formation, which would relieve Ireland's chronic problem of underemployment and foster structural change needed in the wake of accession to membership in the European Economic Community. On the other hand, accruals of wealth based on mere *speculation* were considered to be a legitimate target of taxation on the grounds of equity. Since assets held for longer time periods were already subject to inflation indexing, the lower rate of taxation for them means that they were over-compensated for inflation.

The standard equity argument for treating long-term gains more favourably than short-term gains arises from the existence of a progressive income-tax structure. Thus, if capital gains are taxed annually, they are likely to be subject to a lower rate than if the annual gains are accumulated and become so large that the taxpayer is pushed into a higher marginal tax rate in the year the gains are realized. In fact, however, this argument could not be used in Ireland because the relevant tax rate, the capital gains tax rate was flat. Except for an annual exemption of £2,000,[4] the marginal rate was the same whatever other income was gained or capital gains realized. There was, therefore, no justification for introducing the holding-period adjustment to rates as introduced in Ireland on the basis of higher rates on larger gains in the year of realization, as would have been the case if the CGT were similar to an income tax with increasing marginal rates.

In the case of small gains, the annual exemption did make a substantial difference. Consider a gain of £20,000 over five years on an asset held for five years. It would give rise to a tax charge on a gain of £18,000, if realized in year 5, but only on a gain of £10,000, if realized in five tranches of £4,000 over five successive years, as £2000 was exempt in each year. Hence, with five realizations of £4,000, 50% of the total gain would be exempt. For smaller gains, therefore, the lock-in effect of Capital Gains Tax was to some extent offset by the annual exemption

The 1978 review of the tax code increased the base rate on capital gains to 30% and introduced rate adjustments reflecting holding periods. This rate applied to *short-term* gains, defined as gains on an asset held for less than three years. If an asset were held for between three and six years before disposal, the rate fell to 25.5%. For each additional three years for which an asset was held, the applicable rate fell by amounts of between 3% and 4.5% until at 21 years any gain was tax-free.

The fiscal crisis of the early 1980s resulted in a sharp increase in the rates of capital gains taxation. Thus, in 1982 gains made within one year of purchase were taxed at 60%. For holding periods of one to three years, the rate was increased to 50% and, for assets held for more than three years, the rate was raised to 40%. In the case of development land, the lower rate was held at 50% and the inflation adjustment was limited to the value of the land prior to its being granted planning permission for development.

The tax rates related to holding periods were adjusted in 1986 and 1990 and the number of periods was reduced to four: less than a year—60%, less than three years—50%, less than six years—35%, and over six years—30%. Reduced rates were temporarily applied to gains on sales of shares in quoted companies in the Smaller Companies Market of the Irish Stock Exchange and to certain tax-sheltered investment schemes.

In 1992, it was found necessary to introduce a capital gains tax shelter for assets sold by owners to a company in their control in return for shares in that company as part of incorporation. For this provision to come into effect, the shares had to be held for at least five years. In effect, the policy provided a form of rollover relief.

In 1994, the capital gains tax was overhauled once again with the introduction of a single 40% rate. In addition, the distinction between short-term and long-term gains was abandoned for most purposes. In order to facilitate incorporation and acquisitions, it was provided that, in some sectors and where assets had been held for 5 years or more, gains on disposals would be taxed at 27%, reduced to 26% in 1997. Problems of rollover relief were also addressed again at this point in order to facilitate the sale and reinvestment of assets in small enterprises.

At the end of 1997, a further major shift in emphasis took place. The capital gains tax rate was reduced to 20%, with a *proviso*

that this rate was to be temporary on development land zoned residential: the tax on gains from residential development land is slated to be 60% from 2002. This provision was expressly designed to induce the advanced realization of gains in order to discourage *hoarding* of development land, a practice seen as contributing to a perceived growing housing shortage. Gains on other development land continued to attract a 40% tax. This latter change has introduced the possibility that the capital gains tax could actually be used to avoid income tax rather than complementing or completing it. This result is due to interactions among the capital gains tax and corporations tax on the one hand and the personal income tax at a rate higher than the first two on the other hand.

To take advantage of the different tax treatment, business, trade, or professional firms can incorporate. If profits are retained rather than distributed, they are liable to the corporations tax. There is incomplete allowance for corporation tax paid on profits out of which dividends are paid in computing the shareholder's personal tax liability on his dividend income. This implies double taxation of profits income. As a consequence, the tax code, until recently, penalized incorporation if a small business wished to accumulate capital. The tax charge was reduced by distributing all surplus as income and taxing it as earned income in the hands of the recipient rather than accruing it as retained profit within the firm and then distributing it. In recent years, however, the balance began to swing in the other direction, as the corporation tax was reduced towards a target rate of 12.5% on all profits.[5] From 2001, the first £100,000 profits is taxed at 12.5%. When the capital gains tax was reduced to 20%, the accrual of surplus as profit in a corporation allowed taxpayers to opt for paying the 12.5% corporation rather than the 44% marginal income-tax rate. The lower tax rate could be paid annually until the company is sold. At this point, the owner would pay the capital gains tax due on the retained earnings.

An example helps to illustrate this important point. Consider that £100 is distributed as earned income from the corporation to the owner. This payment attracts a tax and social-security charge of £46. But, if the corporation retains the earnings, there is a tax bill of £12.50 paid by the business, which has an extra £31.50 (£46 minus £12.50) to invest. As a result of this additional investment, the corporation's value increases and gives rise to a capital gain when

the owner sells it. The capital gain is taxed at 20%. In sum, without discounting and disregarding the earnings from the corporation's investment of the retained earnings, the tax liability on £100 retained is £12.50 plus 20% × £87.50 = £17.50, which makes for a total of £30. In effect, the reinvestment of the corporate earnings reduces the owner's tax burden to 30% from the 46% payable if the earnings had been distributed. It is clear that these conditions encourage not only the reinvestment of earnings by corporations, they also provide strong incentives for the incorporation of businesses.

To reduce these incentives for the evasion of taxes, the Government introduced a surcharge on some undistributed trading income in "close" companies in the 1999 Budget. More precisely, the surcharge applies to retentions in excess of 50% of profits after tax.

Experiences with the capital gains tax

Initially, the capital gains tax, in contrast to the personal income tax, required self-assessment. Thus, the capital gains tax could only be collected if taxpayers notified the revenue authorities that they had a taxable gain. Employees are supposed to file annual returns, which included reports on capital gains. But, the Revenue authorities did not in practice demand returns from lower-income employees and, hence, did not bother checking these cases for capital gains, presumably under the assumption that most employees have no other income or capital gains. Instead, the Revenue authorities sought returns only from higher earners or earners with multiple sources of income. This category does, in fact, contain most taxpayers with capital gains tax liabilities but without independent sources of information, the potential for evasion by the average taxpayer was very high. The laws applying to corporations are such that there have been few problems with the non-reporting of capital gains.

Since the middle 1990s, however, self-assessment has become the general principle for all personal direct taxes in Ireland, including the capital gains tax. Under self assessment for income tax, all tax-payers making a return of income tax are obliged in this return to make a declaration of asset realizations as part of their income-tax returns. Previously, an income-tax return could be made without declaring capital gains, as the latter involved a separate return.

The shift to self-assessment is generally accepted as having improved compliance, despite apparently creating of room for evasion. The reasons for this are the following. First, the presumption of truthful reporting reduced the quantity of paperwork demanded and improved relations between tax payers (and their advisers) and the Revenue authorities. Secondly, it took place at a time when tax rates were falling. Thirdly, it was accompanied by the introduction of random and statistical anomaly auditing along American lines, with a credible commitment to substantial penalties for evasion (previously penalties had been light and largely negotiable).

When the capital gains tax was first introduced, in its first full year of application it yielded a paltry £400,000 out of a total tax take of over £1.2 billion, or 0.03% of the total (see table 1). This revenue was equivalent to about 0.1% of the yield of the personal income tax. However, from 1978 on, there was a sharp increase in the yield in absolute terms and, by 1980, the yield was equal to 0.6% of the income-tax yield. It is worth noting that this increase in revenue occurred in the wake of the introduction of inflation indexing and differential taxing of short-term and long-term gains in 1978. It appears that these policies reduced tax liabilities on the one hand but encouraged realizations and reporting on the other sufficiently to bring the large increase in revenues. This result is consistent with the effects of changes on rates of capital gains taxation on revenue observed later. In particular, it suggests that within a reasonable range, the lowering of capital gains tax rates increases government revenues from that tax. However, it remains unclear to what extent this result stems from increased realizations, that is, the unlocking of capital, and to what extent from increased compliance.

Between 1983 and 1994, capital gains tax rates were high. Between 1984 and 1987, the yield from the capital gains tax rose from about £9 millions to £13 millions, though it remained more or less static at about 0.2% of total tax receipts and at about 0.46% of the income-tax yield. In the absence of any statistical analysis by the Revenue authorities of the reported realizations, it is not wise to offer strong conclusions as to the impact of the greatly increased rates and the reduced tapering rate for length of ownership imposed in 1983. In addition, it should be noted that during the years from 1983 to 1987 Ireland experienced the deepest and longest recession since the 1950s.

In the later part of the high-tax years, from 1988 to 1994, the average yields were substantially higher than in the earlier, higher-rate years. However, it is unclear to what extent these revenue gains were due to the fact that the economy was pulling sharply out of the recession. It is notable also that the yield was very volatile over these later years, which weakens any argument that rates affect the yield predictably, except perhaps in the short term.

Table 1: Tax receipts by calendar year (£ million), 1975–1997

	Total tax receipts	Capital Acquisitions Tax	Capital gains tax	Income tax	Corporations tax
1997	13,791	89	132	5,208	1,687
1996	12,092	82	84	4,579	1,428
1995	10,885	60	44	4,129	1,148
1994	10,416	59	47	4,098	1,141
1993	9,241	51	27	3,803	953
1992	8,560	33	58	3,414	739
1991	8,003	45	48	3,222	594
1990	7,616	38	28	3,029	475
1989	7,164	29	25	2,831	303
1988	7,068	27	33	3,051	335
1987	6,257	25	13	2,721	256
1986	5,861	21	11	2,416	258
1985	5,353	20	10	2,180	218
1984	5,115	18	9	2,046	210
1983	4,503	15	9	1,701	215
1982	4,014	12	8	1,458	232
1981	3,274	9	6	1,246	200
1980	2,584	8	6	1,013	140
1979	1,991	8	4	732	130
1978	1,709	5	3	604	106
1977	1,445	3	2	523	76
1976	1,222	..	..	461	29
1975	901	–	..	332	27

Source: Revenue Commissioners Annual Reports and Annual Statistics

The yield performance from 1995 to 1997 suggests that lower rates of capital gains taxation and simpler rules can raise revenues from the tax. But again, the performance of stock markets in Ireland and elsewhere plus a rapidly expanding economy with accelerating property prices limit the extent to which the experience can be used to prove that lower tax rates necessarily lead to higher tax revenues.

Compliance was a serious problem until the early 1990s. At that time the tax authorities obtained powers to demand information from auctioneers and stockbrokers about capital gains realized by their clients. This new policy and that of not permitting full self-assessment led to a high variability of yield from year to year. The tax authorities noted that the large revenue increases in some years were due to a number of large settlements. Despite the administrative and compliance problems just discussed, the capital gains tax by the middle 1990s yielded in excess of 1% of the personal conventional income-tax revenues.

Analysis and conclusions

Ireland's experience with the capital gains tax allows insights into the following questions relevant to policy-makers considering reforms of the Canadian capital gains tax system:

(1) the design and effects of indexation;

(2) valuation and compliance issues affecting certain assets;

(3) the question of interest and other costs in financing asset holdings;

(4) the impact of rate changes on yields and disposals;

(5) the treatment of losses;

(6) the differential taxation of short-term and long-term capital gains.

Indexation

Indexation means that the value of a realized asset is deflated by increases in the consumer price index since the time the asset was acquired. The concept and its implementation are simple. Thus, the authorities publish and supply to taxpayers a table of multipli-

er coefficients, which are used to adjust upwards the value of an asset for the time between its acquisition or purchase and the time it was sold. This process is extremely simple administratively and it is readily understood by taxpayers.

However, I have some reservations about the use of the consumer price index and concerns about the detrimental effects on efficiency that arise from the way in which indexation is applied in Ireland. The consumer price index was until relatively recently calculated quarterly rather than monthly and, as a result, the value of the index used to compute the inflation adjustment was that for February, which was the last quarterly figure in any given fiscal year, which, in Ireland, ends on April 5. As result of using the value for February rather than that for April, the indexation is biased downward during periods of rising prices. This bias can be serious for assets held for a short time but is much less serious for assets held a long time.

The use of the consumer price index is open to some criticism because it measures changes only in consumer prices, including indirect taxes and subsidies. Many economists prefer to use a more inclusive measure of inflation like the GDP deflator to reflect changes in the value of money more accurately. There is no reason why the GDP deflator should not be used except for the evaluation of short-term gains, because of lags in the availability of this statistic. With some effort, the government should be able to overcome this shortcoming.

Valuation and compliance

Problems associated with the valuation of assets give rise to the use of realized rather than accrued values as the basis for capital gains taxation. Establishing the value of assets on the basis of accruals is impossible in the case of goods for which no independent and unquestionable prices are known. This condition exists in the case of art works, most real estate, closely held shares of companies, and similar assets with unique characteristics and thin markets. On the other hand, accrual values could be used for financial assets like shares in publicly quoted companies, and short-term and long-term private-sector and public-sector debt paper. The relative merit of accruals and realization in the valuation of assets was examined in the early 1980s by a government commission in Ireland, which recommended retaining realization.

In the main, compliance to capital gains taxation of real estate and financial assets has not been a problem for the following reasons. Real estate transactions have to be disclosed to the tax authorities in order to ensure certainty of title. Financial transactions originating with companies are subject to commercial laws, which make it very difficult to conceal or even grossly under-report the value of assets. Furthermore, under-reporting by vendors creates a potential excess tax liability at a future date for purchasers.

To help ensure full compliance, the Irish Revenue Department has some other regulations. Stockbrokers can be asked to provide full details of all financial transactions undertaken by residents through stockbrokers. However, brokers do not have to notify the Revenue Department of transactions[6] but merely to offer their records for inspection upon demand by the authorities. There are no published data to reveal the extent to which the authorities demand records but informal inquiries suggest that the major brokers are not all that frequently subject to requests from the Revenue Department to examine their books.

Compliant taxpayers are required to report in the income-tax return all assets acquired or realized during the tax year. This information automatically triggers an assessment, if self-assessment is not forthcoming in later years. Taxpayers are also required to reveal the sources of the funds used to acquire assets. This policy suggests that the main emphasis of compliance is on the creation of a full picture of the asset profile of taxpayers. Such profiles allow the government to encourage compliance, especially since it has the power of audits and the accompanying mandatory revelation and inspection of accounts with financial institutions.

Auctioneers are legally obliged to supply information about sales of antiques, *objets d'art, objets de vertu,* and the like. It is hard to know with any precision how effective these provisions are in reducing evasion. Auctioneers are required to report individual sales valued at more than £15,000 (approximately CDN$27,500). The larger houses unquestionably comply with these requirements but informal contacts in the business suggest that, after the implementation of this requirement in the early 1990s, businesses not subject to the reporting requirement carried out increasing shares of auctions in Ireland. However, this method of evasion appears to have declined in the wake of lower capital gains tax rates and a growing climate of general compliance.

Interest and other costs

The purchase and sale of assets involves costs. Most assets require carrying charges while they are held. Under the existing tax code in Ireland, only some of these costs can be used to increase the costs of acquisition or decrease the value of a realized gain. As a result, the size of capital gains tends to be over-estimated and the capital gains tax is correspondingly unfair. Allowing adjustments to capital gains for these costs incurred would eliminate this lack of fairness.

However, if the capital gains tax is seen as a complement to the income tax, the absence of adjustment of realized gains through the expenditure of interest and insurance is not out of line with the general provisions of Ireland's income-tax code. Over the last decade, this code has steadily reduced the degree to which interest payments can be used to reduce taxable income. Initially, this provision applied only to consumer loans but in recent years it has been applied even to the politically sensitive interest cost of house mortgages. The deductibility of mortgage costs is now limited in amount and it results in less valuable tax credits rather than tax allowances.

The impact of rate changes

The 1997 Budget halved the rate of taxation of realized capital gains from 40% to 20%. The Minister for Finance was heavily criticized at the time for what was seen as a highly regressive change in the tax code. He responded to this criticism by arguing that the lower rate would increase revenues substantially. The data in table 2 suggest that the Minister was right. Revenues did indeed increase by large amounts. The table also shows that the forecasts of the revenue effects of the lower tax rates were far off the mark.

It is important to consider why lower rates of capital gains taxation give rise to higher rather than lower revenues. The main reason usually given is undoubtedly that lower rates increase incentives to realize gains on appreciated assets. This is a short-term effect and arguably goes some way to explain the rapid yield growth in the Irish case. At the lower tax rate, taxpayers retain more money from the sale of their assets, which is then available for reinvestment. The greater rate of realization induced by the lower tax rate reflects the unlocking of capital, which under the higher tax rates would have remained in the original use. The unlocking of capital induced by the lower rate explains a considerable portion of the higher revenues. It should be remembered, however, that a decision

Table 2: Net receipts the capital gains tax, 1995–1999

Calendar year	Net receipts	Excess over Budget estimate
1995	£44.5 m	£13.5 m
1996	£83.7 m	£25.7 m
1997	£132.4 m	£65.4 m
1998	£193.1 m	£89.1 m
1999	£356.2 m	£163.3 m

Source: Revenue Commission data.

to realize gains sooner and more frequently implies advancing the flow of tax receipts to the Exchequer rather than increasing its steady-state level. This implies a temporary rather than a permanent increase in revenues from a rate cut.

However, the unlocking of capital induced by the lower tax rate is also frequently argued to have the additional effect of increasing the efficiency of the use of capital in the country. As a result, labour productivity and economic prosperity are expected to be increased. In the long run, reflecting this, capital gains and opportunities for higher yielding investments grow in response and lead to even more realizations, higher revenues, and greater prosperity in a virtuous cycle. This may result in a permanent, or steady-state, increase in the yield of the tax.

In the Irish case, there is some evidence that suggests that the reduction in the rate of capital gains taxation may not have been responsible for all of the large revenue gains shown in table 2 (see Appendix 1). That said, there is no doubt that the Minster's confidence expressed at Budget time as to the likely yield of capital gains tax was subsequently justified by the yield figures.

The treatment of losses

Under the present tax code, realized losses from the sale of a capital asset may be offset against realized gains in the same tax year. If losses exceed gains in the same year, the losses may be used to reduce the value of capital gains in the preceding or following years. The system thus permits the offset of losses against gains but, importantly, only for gains and losses from the sale of assets and then only during a re-

stricted number of years. These provisions are inconsistent with the principles enunciated in the White Paper of 1975, which had envisioned complete offsets against all types of income and involves the fiscal authorities in sharing portfolio risks with taxpayers.

The incomplete sharing of the risk has important economic consequences in terms of potentially discouraging risky investments, which are essential to technical progress and economic growth. The analysis of the impact of loss-offset provisions on risk taking and its consequences for the riskiness of capital portfolios is complex. Some aspects of this problem in relation to the design of the Irish tax structure are considered in Appendix 2. What is beyond dispute, however, is that there is good reason to believe that incomplete loss offset will discourage risk taking. The policy also reduces the welfare of asset holders since they are induced to select portfolios different from what they would in either the absence of a capital gains tax or the full offset of gains and losses.

Differential treatment of short-term and long-term capital gains.

When Ireland first introduced its capital gains tax, it imposed rates on gains depending on the length of time over which the assets were held. This policy was modeled after one existing in Britain in the early 1960s. Subsequently, these provisions were dropped and the tax was imposed uniformly on all capital gains.

I believe that the adoption of the uniform rates is consistent with the first principle underlying the taxation of capital gains. Such gains allow owners of capital to increase expenditures just as income does. Both should therefore be taxed. Under this principle, it makes no sense to have different rates of taxation dependent upon the duration of the investment that gives rise to the capital gains.

One argument often used to justify the higher taxation of short-term gains is that it discourages speculation. Implicit in this justification is the view that speculation is economically and socially undesirable. This view is held by many, especially those whose interests are damaged by higher prices. However, most economists, including myself, believe that in market economies, speculation plays a beneficial role in the efficient allocation of resources through time. The suppression of speculation through taxation therefore reduces the efficiency of the economy, lowers income, and damages prosperity.

Appendix 1: Some reservations about the impact of the tax rate cut

Table 3 shows that the number of assessments and the total tax due on those assessments did not increase as quickly after the tax cut was put into effect on December 3, 1997 as might have been expected. Under existing accounting rules, gains realized in the year ending April 5, 1998 would incur a tax liability payable November 1998. The change in the tax regime took effect from December 3, 1997 and was not anticipated (in the sense that it took commentators by surprise).

Notice that between 1995/1996 and 1996/1997 the number of assessments (which in each case is the aggregate of realizations of an individual or of a couple) rose by nearly 25% and the tax to be paid rose by nearly 75%. In the following year, towards the end of which the rate cut came into force, the number of assessments rose by 87% while the tax due increased by 46%. In the next year, the number of assessments rose by 11% but the tax due rose by almost 57% (the results for 1998/1999 are preliminary; see note to table 3). That is, the tax yield increased by considerably more than the percentage increase in realizations.

If we analyze these data, the Laffer-type conclusions appear a little weaker than might be thought at first. In the first place, the Revenue Department itself applied health warnings to these fig-

Table 3: Assessments and tax due, 1993/1994 to 1998/1999

Fiscal year	Number of assessments	Net tax payable
1993/1994	5,189	£30.4 m
1994/1995	4,795	£71.9 m
1995/1996	6,360	£75.4 m
1996/1997	7,958	£131.2 m
1997/1998	14,886	£191.5 m
1998/1999	16,529	£300.5 m

Source: Revenue Commission data
Note: the tax due is what is assessed as due, rather than what was paid, and is subject to revision; the number of assessments, especially for 1998/1999, is likely to increase as returns are received and processed.

ures by noting that, in 1994/1995, 1996/1997, 1997/1998, and 1998/1999 (four of the five years), what are described as "significant" increases in net tax payable are partially attributable to assessments raised in a number of individually large settlements. Internal estimates supplied by the Revenue Department suggest that, in the four fiscal years 1995/1996, 1996/1997, 1997/1998 and 1998/1999, the yields of "once-offs" accounted for £22.2 millions, £31.8 millions, £17.6 millions, and £30.0 millions, respectively. The extent, therefore, to which the data may be construed as indicating underlying yield changes has to be open to question. Ignoring this reservation, however, we are still left with further reason for thinking that all is not as rosy as the Minister for Finance appears to believe.

In the first place, we do not know what proportion of the realizations in 1997/1998 took place between December 3 and April 5. If we extrapolate the trend from 1994/1995 to 1996/1997 into 1997/1998, we would have expected an increase in the number of realizations in excess of the exemption limits to have increased by between 25% and 30% in the latter year. That would give a total of between 9,500 and 10,300 (as opposed to the actual number of about 15,000). As an initial estimate, therefore, it appears reasonable to use a figure of about 5,000 assessments as being possibly due to the impact of the rate cut in terms of increased realizations. Even then, however, it should be remembered that an assessment is raised when the value of a realization exceeds the exemption threshold. Hence, the number of assessments can increase because either or both of two factors have an effect: an increase in the number of realizations (or reported realizations) and an increase in the value of realizations. With booming stock and real-property markets, the latter effect cannot be totally discounted.

In the following year (1998/1999), we see a small increase in the number of assessments but a substantial increase in the tax due, despite the tax rate being halved. That can only mean that the value of the average realization reported has increased very significantly. Again, if we extrapolate the trend before 1997, we would get a number of assessments of about 13,000 in 1998/1999 (actual value, 16,500). If we assume the average size of realization is driven by asset values, this would have produced a total for tax due of about £240 millions, or 80% of what was actually assessed. That suggests

that a 50% cut in the tax rate between 1996/1997 and 1998/1999 yielded at best something like a 20% increase in the tax yield. Even that number assumes that the increase in the number of assessments reflects an increase in the number of realizations rather than an increase in the average size of realizations.

The classic supply side argument about self-financing tax cuts cannot be supported by a simple reference to the change in the yield level after the rate cut at the end of 1997. The evidence, however, does point to the existence of some such effect, even if a good deal smaller than apologists claimed.

Appendix 2: Loss offset and risk taking

If we start from a position of a zero tax and an assumed optimal portfolio composition, a change in that composition arising from reaction to taxation constitutes a dead-weight loss flowing from the tax.[7] The impact of varying degrees of loss offset on portfolio composition as determined by acceptance of risk is dependent on assumptions about the behaviour of individuals with respect to risk. In the classic analysis, which treats portfolio variance as a risk measure (and implicitly assumes a quadratic utility function, with its limitations), it is possible, starting from a zero tax to identify two rates of tax,[8] $t = 0$ and $t = t^* > 0$, for which the risk characteristic of the portfolio is the same. The implication of this is that, for usual assumptions as to the utility function of the wealth holder, an increase from zero in the tax rate will result, at first, in a rise and, subsequently, a fall in the chosen value for the portfolio risk parameter. From a *high* value for the rate at which the tax is applied, a reduction in the tax rate will be expected to increase the risk parameter but continued reductions will lead to an eventual fall in the risk parameter. For small changes in the rate of taxation, it has to be accepted that the net effect on risk-taking is a matter for empirical investigation under zero, or less than full-loss offset. Incomplete loss offset, then, has deadweight-loss implications.

These results are strictly confined to an analysis involving the mean-variance analysis of risk in the presence of a utility function that is quadratic or to which a quadratic form is an acceptable nonlinear approximation. However, it turns out that when a less restrictive set of assumptions on utility and risk are adopted, the conclusions are reasonably robust in many circumstances.[9]

It might be thought that this reflects the inherent bias involved in permitting the Exchequer to participate fully in any realized gain but to avoid or reduce exposure to a realized loss. Implicitly, full-loss offset, in which the Exchequer participates proportionately in gains and losses, might be expected to avoid this deadweight loss. This, however, is not the case. Counter-intuitively, perhaps, but nevertheless demonstrably, full-loss offset applied to the capital gains tax in the (normal) case of the risk-averse portfolio holder results unambiguously in a shift in the underlying chosen position on the risk-return trade-off as a consequence of increasing

(from zero or any positive rate) the effective rate of taxation. That shift is towards a higher preferred level of risk. The intuition behind this is simple: with full-loss offset, an increase in the tax rate reduces risk and expected return *pari passu*. Risk aversion implies a diminishing marginal utility of income. At a lower expected income level, a risk-averse portfolio holder will choose to increase risk in order to replace lost income. Hence, under full-loss offset the chosen value for the portfolio's risk parameter will increase as the private wealth-holder adjusts to the tax. The Exchequer as sleeping partner has to accept this outcome: a higher expected value of the tax yield but increased variability.

The foregoing has interesting implications for the level and changes in the level of the effective rate when associated with changes in the approach to allowable deductions. First, starting at a low or zero tax rate, an initial *small* new tax or increase in the tax will increase the asset holder's preferred risk profile with zero or full-loss offset. However, with full-loss offset there is no substitution effect operating in favour of risk reduction. The substitution effect is negatively related to the degree of loss offset. It would seem to follow that, if the tax authorities wish to minimize the excess burden of the tax as measured by the consequent impact on portfolio composition, an initial *small* imposition of (or increase in) taxation should be accompanied by low to zero loss offset. To minimize the impact of a rate change on portfolio composition, a rise in the rate should be accompanied by a reduction in loss offset; a fall in the rate should be accompanied by an increase in loss offset.

With an existing *high* rate, these conclusions are reversed. Low offset at high rates results in reduced preferred levels of risk. Hence, if the rate is increased, portfolio composition neutrality requires improved loss offset. In tabular form, these conclusions can be presented as follows.

Existing Rate	*Low*	zero	High
Rate Change	+	-	+
Loss offset change	-	+	+

The definition of *high* and *low* rates is in terms of the impact of a rate change under zero offset. That is, a high rate is one at which the substitution effect of a rate change dominates the income effect

while a low rate is one at which the income effect dominates the substitution rate. This has to be determined empirically.

In the Irish experience, it is interesting to note that although the applicable rate has moved between 60% and 20% over a 25-year period, no non-trivial change has ever been contemplated in the provisions governing loss offset. This is at least consistent with the general design of corporate and individual taxation over most of the period although this has been to some extent modified recently with the implementation of a schedular approach to establishing tax liability. Under this approach, each separate component element in gross income is separately assessed. Expenses or offsets are applied only to the relevant income element. A loss under one schedule is not taken into account in computing tax liability under others but is allowed only against income under that schedule in future years. If full-loss offset were to be introduced, it would involve allowing realized capital losses against taxable income from other sources in the same tax period. This was expressly rejected.

The conclusion has to be that the way in which the tax has been implemented has been based on a lack of knowledge or a lack of interest in the marginal impact on risk taking. In designing a regime, or in modifying it, surely such concerns ought to be a major element.

This has not been because the matter has been ignored. The system in Ireland has been more or less unchanged structurally since it was introduced in 1975 and modified in 1978. In 1982, the Commission on Taxation established in 1980 studied it. That Commission made several recommendations for reform of the structures in the context of a complete reform of direct taxation (The Commission on Taxation 1982: 201–20). Since the overall reforms it urged were not adopted, many of the specific amendments suggested for the capital gains tax became redundant. However, on the point of loss offset the Commission was unambiguous in calling for full-loss offset against other income as being the only intellectually respectable position that a taxing authority could adopt. It noted that the limitations on such offsets in the American code owed much to a desire to "protect the tax yield" arising from the impact of capital losses on federal income-tax yields during the Great Depression but argued that this stance is not logically sustainable.

Notes

1 A good source for the structure and details of the CGT as introduced is to be found in Bale 1977. For subsequent years and a general account of modifications to the tax, the interested reader should consult the annual review of the Irish tax code produced by the Institute of Taxation in Ireland, which contains for any year the law and practice as they stood and any modifications in that year's finance legislation. The current edition is Corry, McLaughlin and Martyn (no date). A detailed account of the law and practice affecting CGT is produced annually as well. The current (11th) edition is Appleby and Carr (no date).

2 Irish income tax law was based on the 1918 codification legislation of the Westminster parliament, which was inherited by the Government of the Irish Free State when that dominion came into being in December, 1922. The British schedular system applied income tax differentially to incomes derived by individuals under five general classifications, schedules A, B, C, D and E. Schedules A and B referred to incomes from real property in agriculture and non-agricultural holdings, largely on the basis of notional rates. Schedule C covered, *inter alia*, income from the rental of property. Schedule D referred to the profits (income) from a trade, profession or avocation (in effect non-employee income). Schedule E referred to income from employment. If an accrual to an individual did not fall into one or other of these categories it was not an income for taxation purposes.

3 In Ireland about 80% of households own their homes, an extremely high percentage by European standards. Home ownership is the largest single category of privately held wealth.

4 The structure of exemptions for CGT in Ireland has always been based on an annual amount. It has varied as between an amount per individual or per household but is not subject to any life-time limit. This feature of the regime is consistent with the basis for the tax as a complementary income tax rather than as a form of capital taxation. For CAT (which includes transfers *inter vivos* as well as on death) life-time limits do apply.

5 At present, corporation tax is being reduced in stages towards a target of 12.5% for all corporations by 2003. The current 10% rate ap-

plying to manufacturing sector profits will be raised to 12.5% after 2011 and other concessionary 10% rates will be raised to 12.5% from 2006.

6 This does not apply to own account trading, where different rules apply.

7 The material in the next few paragraphs is an exposition of the results of standard neo-classical analysis of the tax-payer's response to the imposition of capital gains tax with imperfect or full-loss offset. A full exposition of the results of this analysis may be found in Musgrave 1959: chap. 14.

8 I assume a conventionally well defined and well behaved utility function defined over risk and yield and a monotonic risk-yield trade-off.

9 Using Arrow's definitions of absolute and relative risk aversion, $A(W) = -(UO(W)/UN(W))$ and $R(W) = -W\ (UO(W)/UN(W))$, respectively, Stiglitz has shown that, in the presence of full-loss offset, a general expected-utility-of-wealth function implies that private risk-taking will increase if the following conditions hold true: (1) the yield on the non-risky asset is zero; and $AN(W) > 0$ or $AN(W) < 0$ and $RN(W) > 0$ (Arrow's conjecture); (2) the yield on the non-risky asset exceeds zero and $AN(W) > 0$ and $RN(W) > 0$. A general expected-utility-of-wealth function does allow risk-taking to be reduced by taxation with full-loss offset if these conditions are not met. See Stiglitz 1969: 263–83.

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