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Taxation of Capital Gains - A Review of the Main Issues

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Abstract

This paper reviews the main issues that needs to be addressed in the taxation of capital gains. The main focus of the paper is on the tax treatment of capital gains in the United States. The impact of inflation on asset values and the taxation of gains have led to calls for an inflation-adjusted taxation of capital gains. Others have called for the exclusion of a part of the nominal gains from taxation. This paper argues that if the exclusion method is used, the exclusion rate should increase as the holding period gets longer.

JEL Classification Numbers
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Summary

Taxation of capital gains is one of the most difficult issues in tax theory and practice. The debate over the capital gains tax is likely to continue for some time, but is unlikely to result in definite answers to some of the conceptual issues. Capital gains taxation becomes more complex as assets are held over long periods during which the general price level changes. Furthermore, selling assets that are not always divisible creates problems of "bunching" and could result in liquidity problems if gains are taxed before being realized. Tax arbitrage tends to put a lower limit on the tax rate, a rate which could still generate losses from an inefficient allocation of resources. Furthermore, the issue of equity and the distribution of the tax burden have to be considered in both the short and long run.

To achieve an efficient allocation of resources and to maintain tax equity, taxes may need to be assessed on an inflation-adjusted basis, although indexation is very complex and multifaceted. If current capital income is not indexed and capital gains are, it would be possible to deduct nominal interest payments and invest in appreciating assets, for which only the increase in real value would be taxable. This could lead to tax arbitrage.

Over the years, a number of methods to adjust capital gains for inflation have been presented. One proximate method is to exclude a fraction of the nominal gains from taxation. However, such rules make it difficult to achieve taxation of real gains without over- or under-adjusting for inflation. The proportion to be excluded is sensitive to actual inflation between the time of purchase and the time of sale, and the adjustment should depend on the length of the holding period.

The proportion of real gains to nominal gains decreases over time (assuming a constant inflation rate and a constant nominal rate of return). Therefore, the exclusion rate should increase as the holding period lengthens. This conclusion is at variance with the conclusion in some earlier studies. The difference depends on how the joint product (of inflation and real rates of return) is split between the inflationary component and the real component. The policy recommendation therefore depends on which view is taken on the relative growth of the two components. With either view, the exclusion rate should increase as the inflation rate increases.

I. Introduction

Taxation of capital gains is very complex since it often involves assets being held for a long period over which the general price level tends to change. To achieve an efficient allocation of resources and to maintain tax equity, taxes may need to be assessed on an inflation-adjusted basis. However, indexation is very complex and tends to make the tax system more difficult to administer. Furthermore, the possibility to convert ordinary income into capital gains can lead to tax arbitrage, with adverse effects for tax revenues. The purpose of this paper is to review some of the main issues in the taxation of capital gains, with a special focus on the tax treatment of capital gains in the United States.

The U.S. Administration has emphasized the importance of strong saving and investment for sustained growth and proposed several measures to increase savings and promote investment. These measures include the reduction of the tax rate on long-term capital gains. Under this proposal, individuals would be allowed to exclude a percentage of the realized capital gain from taxable income, and would apply their current marginal income tax rate on capital gains (either 15 or 28 percent) to the reduced amount of taxable gain. The amount of the exclusion would depend on the holding period of the assets: 30 percent for assets held for three years or more, 20 percent for assets held at least two years, and 10 percent for assets held between one and two years.

II. Alternative Measures of Income and the Treatment of Capital Gains

This section reviews the literature on how to define income for tax purposes, and specifically on how to treat capital gains when determining the appropriate base for income taxation. This review abstracts from the optimal tax debate concerning the "best" base for taxation. 1/ It is assumed instead that a decision already has been made to tax income, and attention is focussed on how that decision should be implemented when defining the tax base. The literature addressing this issue is in fact more pragmatic than the optimal tax literature. The literature on how income might be taxed recognizes more explicitly than does optimal tax theory the important roles of certain elements, including the capitalization effects that arise when changes are recommended for an existing tax system, the role of administrative costs in deciding how to structure tax systems, and the significance of tax arbitrage on the part of taxpayers.

The result is a complicated framework that has made the determination of the precise border around the concept of taxable income a hotly debated subject, despite the widespread agreement that the object of income taxation is to tax the flow of returns, i.e. income, without taxing away part of the stock of wealth. In particular, there have been differences of opinions as to the appropriate treatment of capital gains. One of the major arguments against levying income tax on capital gains is based on the view that taxes

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1/ Atkinson and Stiglitz (1980) provides an overview of the optimal tax framework in general, and the optimal tax treatment of capital in particular.

on capital gains are in the nature of a levy on capital rather than income. 1/ Taxing the increase in value in addition to taxing annual returns would, applying this view, result in double taxation.

Nevertheless, it is difficult to reconcile such arguments with the widely accepted economic definitions of income as the algebraic sum of an individual's consumption expenditures and the change in the individual's net worth. Such a measure is often referred to as the Haig-Simons measure. 2/ According to this measure, capital gains would be included in taxable income as the gains accrue rather than when realized. 3/ Such taxation, could lead to liquidity problems for the investor in the absence of perfect capital markets. Moreover, since some assets are not frequently traded and may therefore not readily be assessed, establishing a market value would meet with practical problems.

A somewhat different income measure was formulated by Lindahl. 4/ He argued that capital used for production may not readily be used for con-

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1/ This argument seems always to apply to increases in human capital. No country taxes increases in human capital in a similar fashion as increases in the value of a physical asset. A decrease in the top marginal tax rate, for example, increases net of tax wage income, which results in an increase of human capital, in particular for high income earners. This increase in human capital is not taxed as a capital gain and only the annual flow of income becomes subject to tax.

2/ See "The Concept of Income-Economic and Legal Aspects," in Robert Murray Haig, ed., The Federal Income Tax (Columbia University Press, 1921), pp 1-28; and Henry C. Simons, Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy (University of Chicago Press, 1938). The individual may not see the purchase of, say, a house as an investment aimed at increasing his command over consumer goods and services, and an increase in the value of the house would not increase rendered housing services. Conceptually this amounts to a rejection of the concept of income as defined by Haig-Simons in favor of an alternative which emphasizes physical quantities rather than monetary values. For a discussion, see "Inflation Accounting and the Taxation of Capital Gains of Business Enterprises," by Vito Tanzi, in Reforms of Tax Systems, Proceedings of the 35th Congress of the International Institute of Public Finance, Taormina, 1979, edited by Karl W. Roskamp and Francesco Forte (Wayne State University Press, Detroit, 1981).

3/ An excellent survey of the different concepts of income and capital gains taxes can be found in On the Development of Income Taxation since World War I, by Leif Mutén, (International Bureau of Fiscal Documentation, Amsterdam, 1967).

4/ See Erik Lindahl, Die Gerechtigkeit der Besteuerung, (1919), Ph. D. thesis, Lund University, Sweden.

sumption and therefore should receive a different tax treatment. 1/ This definition of income would not consistently exempt savings from double taxation; nor would it fully impose double taxation of savings. As it turns out, this view is close to generally accepted definitions of taxable income as practiced in a wide range of countries. The definitions of taxable income applied in those countries, however, generally do not derive from a consistent definition of income.

Instead, practical issues as well as differing perspectives on the nature and relative weights of equity and efficiency considerations have over time resulted in varied tax treatments of capital gains in different countries. Any evaluation of these tax treatments, in addition to taking account of how those treatments accord with the established norms already noted for defining the base for income taxation, must also assess the role of the effects of inflation. Inflation affects the value of monetary liabilities and the tax treatment of such liabilities for defining the base for the income tax becomes very important. In fact, the entire tax structure would have to be considered when capital gains tax rules are evaluated.

III. Practical Problems Connected with not Taxing Capital Gains

If capital gains are taxed less heavily than other forms of income, there is an incentive for the taxpayer to arrange matter so as to receive as much income as possible in the form of capital gains. In many instances, it is feasible to convert one type of income into another type of income. For example, if the owner refrains from taking out an annual yield, the value of his asset (or business) will increase by the compounded yield which eventually could be disposed of in the form of realized capital gains. In this connection, the tax treatment of different forms of financing is believed to have contributed to share repurchase programs and cash-financed mergers and acquisitions in the United States. 2/ Rather than paying dividends out of after-tax corporate profits, capital may be retained generating accrued capital gains on which taxes can be deferred until realization. There is even the possibility of completely escaping taxation

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1/ An owner of appreciated assets who may be deterred by taxation from selling them can nevertheless borrow against them to make new investments or consume. However, in one case (Woodsam Association Inc. v. Commissioner, 198 F.2d 357, 2d Cir. 1952), the court held that the owner of property is not taxed on "borrowed" funds received from a lender through a nonrecourse loan secured only by the property, even where the amount of the loan exceeds the borrower's basis in the property.

2/ For a discussion, see "Cash Distributions to Shareholders," by Laurie Simon Bagwell and John B. Shoven, in Journal of Economic Perspectives, Vol. 3, Number 3, Summer 1989, pp 129-140; and "Integrating Corporate and Shareholder Taxes," by Krister Andersson, in Tax Notes, Volume 50, Number 13, April 1, 1991, pp. 1523-1536.

on accrued gains if they remain unrealized until the death of the owner. 1/ If the capital gains tax were to be abolished altogether, the incentives to convert other forms of income into capital gains would increase. 2/

From an equity perspective, it is frequently argued that capital gains should be taken into account in determining the personal income tax liability as a measure of underlying ability to pay. In particular, since capital gains tend to be concentrated in the upper range of the income distribution, is has been argued that it would be unequitable not to tax capital gains. If taxpayers are classified by Adjusted Gross Income (AGI) for a single year, taxpayers with an AGI of $200,000 or more reported about 57 percent of all capital gains (see Table 1). However, looking at only one year tends to overstate the concentration of gains since it includes taxpayers realizing a large "one-time" gain. If U.S. taxpayers are grouped by their average incomes over a period of seven years, the proportion of gains realized by the highest income class is 45 percent.

Moreover, not taxing capital gains would likely result in violations of the principle of horizontal equity--individuals with equal income levels, but income derived from different sources, would face different tax liabilities. In addition, tax compliance may suffer if low and middle income earners view the overall tax burden as unfair in light of conspicuous tax exempt capital gains concentrated to higher income groups.

1/ In the United States, there are no capital gains taxes on an investor's unrealized gains at death. Should the heirs sell the asset, the capital gains tax is based on the difference between the selling price and the price at the time of inheritance.

2/ It is difficult to estimate to what extent ordinary income was converted into capital gains when they received preferential tax treatment (prior to the Tax Reform Act of 1986). Joseph Pechman writes, "The amount of ordinary income thus converted into capital gains is unknown, but a great deal of effort went into this activity and it must have been very substantial." J. Pechman, Federal Tax Policy, Fifth Edition, (Brookings Institution, Washington, D.C. 1987), page 117.

Table 1. The Distribution of Capital Gains by Income Class Under Alternative Measures of Income 1/

Income Class (1990 dollars)	Single Year Income	7-Year Average Income
$0 or less	2.8	3.1
$1 to $19,999	2.4	4.0
$20,000-$50,000	7.7	13.5
$50,000-$100,000	16.2	17.2
$100,000-$200,000	14.3	17.3
$200,000 or more	56.6	45.0
All returns	100.0	100.0

IV. Issues to be Addressed in the Taxation of Capital Gains

Taxation of capital gains is a complex issue and the tax rules are frequently changed in many countries. (A summary of prevailing rules in the OECD countries can be found in Table 2.) Frequent changes partly arise from shifts in the perceived trade off between economic efficiency and equity considerations. In the United States, capital gains of individuals have been taxed ever since the introduction of the income tax. Realized capital gains were originally taxed as ordinary income, but since the Revenue Act of 1921 they have been subject to preferentially low rates. The provisions applying to such gains have changed frequently. The Tax Reform Act of 1986 eliminated the distinction between capital gains and ordinary income. However, the Omnibus Budget Reconciliation Act of 1990 reintroduced a very limited preferential tax treatment of capital gains. While the top statutory tax rate on ordinary income is 31 percent, the tax rate on capital gains is limited to 28 percent. 2/

1/ Source: "Policy Watch: Cutting Capital Gains Taxes," by Gerald E. Auten and Joseph J. Cordes, In *Journal of Economic Perspectives*, Volume 5, Number 1, Winter 1991, pp. 181-192.

2/ The 1990 Act § 11101(a) raised the maximum marginal tax rate on ordinary income to 31 percent while § 11101(c) limited the top rate to 28 percent on long-term capital gains. In applying this preference, capital gains are stacked on top of other income. To the extent capital gains are taxed at rates below 28 percent, however, marginal rates above 28 percent may apply. Thus the effective tax rate on long-term capital gains cannot exceed 28 percent, but the marginal tax rate may exceed 28 percent as long as the effective tax rate on capital is below that.

Table 2. OECD: Treatment of Capital Gains, 1989

Country	Coverage	Threshold per annum	Rate of Tax: Long-Term gains	Rate of Tax: Short-term gains	Treatment at death	Treatment of gifts
			A. Separate Tax			
Denmark	Limited	No general threshold[a]	50 %	As long-term	Deferred	Taxable
Ireland	Intermediate	Ir £2,000[b]	1-3 years: 50% 3-6 years: 35% > 6 years: 30%	60% (gains realized within a year)[c]	Exempt	Taxable
Portugal	Limited	--[d]	12% (24% on building plots)	As long-term	Exempt	Exempt
Switzerland[e]	Limited	SF2,000	10-40%[f]	As long-term	Exempt	Exempt
United Kingdom	Intermediate	£6,600	30%	As long-term	Exempt	Deferred
			B. Integrate with Income Tax			
Australia	Extended	None	Real gain taxed as income[g]	Taxed as income	Deferred[h]	Taxable
Canada	Extended	Lifetime: C$100,000[i]	Three-quarters gain taxed as income	As long-term	Taxable[j]	Taxable[j]
Finland	Intermediate	Long-term	40% of gains over MK200,000 taxed as income	As unearned income; reduction for immovables after 5 years	Exempt	Exempt
France	Limited	FF6,000	Depends on nature of asset and period held	Taxed more heavily than long-term gain	Exempt	Exempt[k]
Japan	Extended	Y500,000	Half gain is taxed as income[l]	Taxed as income if held <5 years	Deferred	Deferred
Luxembourg	Intermediate	LF1,250,000 over 10 years	Half income tax rates[m]	As income tax	Deferred	Deferred
Norway	Extended	None	As income tax (land: 30%)	As long-term (shares: 30%)	Exempt	Exempt
Spain	Extended	None	As income tax[n]	As long-term	Taxable	Taxable
Sweden	Extended	None[o]	Proportion of gain is taxed as income	As income tax	Deferred	Deferred
United States	Extended	None	Taxed as income	As long-term	Exempt	Deferred

Memorandum items
1. Special provisions mainly restricted to short-term or speculative gains: Austria, Belgium, Germany, Turkey.
2. No special provisions, i.e. income tax applies, albeit with a narrow definition of capital gains: Greece, Italy, the Netherlands, New Zealand.

Source: The Personal Income Tax - Phoenix from Ashes?, ed. by Sijbren Cnossen and Richard Bird, North-Holland, 1990, pages 38-39.

Notes: [a] A DKr 6,000 threshold applies in certain limited cases.
[b] Double for married couple.
[c] Ireland does not make a formal distinction between short-term and long-term gains, but instead imposes a tapering rate.
[d] Agricultural land is exempt.
[e] In Switzerland capital gains on private property are taxed by the cantons. The information in the table refers to Zurich.
[f] Holding less than 2 years: extra charge; holding 5 years or more: reduction of tax.
[g] Subject to averaging provisions relating to a notional 5-year period.
[h] Except where bequests are made to tax-exempt bodies.
[i] Lifetime exemption of C$500,000 for farmers and shareholders in small business corporations.
[j] Liability is deferred for transfers between spouses or where a farm is transferred to a (grand)child.
[k] If not sold by donee within 5 years.
[l] Special rate on land and buildings; gain son certain securities taxed at 26 percent.
[m] In practice, long-term tax only applies to real property, with tax after 10 years confined to undeveloped land.
[n] Averaging provisions relate to number of years held. Lower rate for transfers at death or as gifts.
[o] Special threshold for shareholdings, depending on period held.

Tax changes in the area of capital gains seem to go in cycles. In times of a relatively high capital gains tax rate, the resulting allocation effects may be large and proposals to cut the capital gains tax rate are put forward. In times of a low tax rate on capital gains, equity considerations and the erosion of the tax base usually leads to demands for an increase in the capital gains tax rate.

In general, whenever reform of the capital gains tax is at issue, a number of fundamental questions are raised. They include whether to tax capital gains as they accrue or when they are realized, and whether to have a separate tax schedule or include capital gains in other types of income. Also, there are questions concerning the use of indexation, roll-over provisions, the treatment of losses, and the tax treatment of different kinds of capital gains. These questions are addressed in turn in the following subsections.

1. Should capital gains be taxed as they accrue or at realization?

Capital gains are usually not taxed as they accrue but when the asset is sold and the gain is realized. The tax payment is thus deferred from the accrual date to the realization date. The deferral reduces the present value of the tax payment and the reduction of the effective tax rate is higher the longer the asset is held. The realization criterion therefore tends to make it more profitable to hold assets rather than trading them often. This is referred to as the 'lock-in' effect and occurs when a taxpayer could sell an asset to buy another one with a higher expected return, but finds that after paying the capital gains tax, selling the asset would be less profitable than keeping it. The higher the tax rate, the stronger the lock-in effect. The lock-in effect can be reduced by lowering the capital gains tax rate or by making the capital gains tax rate higher the longer the asset has been held (thereby offsetting the increasing value of tax deferral over the holding period). Chart 1 illustrates the difference between being taxed every year as the value of the asset accrues to being taxed once at a flat rate after the gain is realized.

It is generally argued that accrual taxation would lead to inopportune liquidation of property rights as well as very difficult problems of tax accounting and valuation. Even if it were possible to borrow against the value of the asset to pay the taxes as they accrue, the issue of the appropriate values of the assets in question would still remain. Some assets are traded only infrequently, and an assessed value by the tax authorities would inevitably result in a large number of cases of appeals. Some form of taxation upon realization therefore has clear administrative advantages.

2. Schedular taxation versus a globalized income tax

In 1989, five OECD countries had a schedular approach to income taxation and therefore taxed capital gains under a separate statute. 1/ The choice between schedular taxation and globalizing all income hinges on whether capital gains should be subject to progressive taxation. If realized capital gains are taxed as ordinary income, realization of a large gain one year could be more heavily taxed than if the gain were spread over a longer period. Even though most tax systems have fewer brackets and lower top marginal tax rates than they typically had in the 1970s, a "one-time" realization of capital gains could be subject to relatively heavy taxation. It can be argued that capital gains and losses are among the most volatile elements of income and offer an example of the need for income averaging. It appears that many countries have moved toward schedular taxation of capital income in general and of capital gains in particular to address this problem. A further reason for schedular taxation is to eliminate the possibility for tax arbitrage whereby taxpayers would deduct interest payments against a relatively high marginal income tax rate and invest in low-taxed assets.

3. Issues related to the indexation of capital gains

Capital gains are often calculated as the difference between the selling price and the purchase price of an asset (or its value at acquisition), reduced by any depreciation that has been claimed for tax purposes. Conventional tax accounting leaves the recoverable basis of capital assets denominated in the currency at the time of acquisition, and the gains themselves are measured in nominal currency units at the time of realization. Part of capital gains may therefore be merely a reflection of a general increase in the price level. In fact, after adjusting for the change in prices, apparent gains may turn out to be actual losses.

The measurement of capital is distorted in two respects by inflation. First, capital income shares with wages the inflation-induced increases implied in a progressive tax structure (so called bracket creep). Second, even for proportional taxes the taxable capacity is overstated if a deduction is not allowed for the component of the return that merely maintains the purchasing power of initial net worth. Focussing on the second effect, the real effective tax rate 2/ increases in a non-linear fashion as the inflation rate increases at a given nominal interest rate. In the case of the United States, 3/ assuming a nominal rate of return of 8 percent, tax

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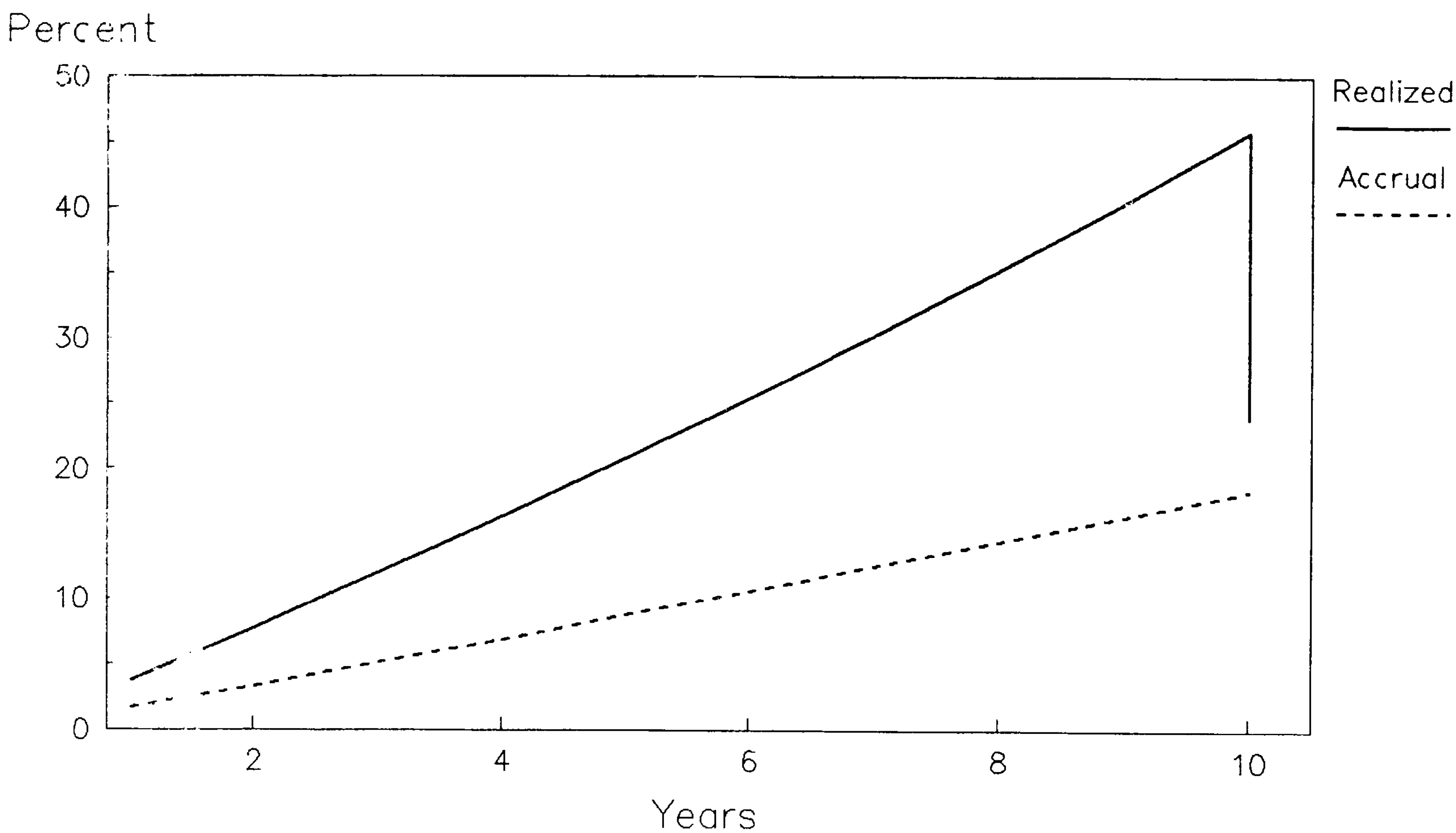
1/ The countries are Denmark, Ireland, Portugal, Switzerland and the United Kingdom. From 1991, Sweden also has applied a schedular tax to capital gains.

2/ Defined as tax payments (in present value terms) in relation to inflation-adjusted capital gains.

3/ Assuming a capital gains tax rate of 28 percent on nominal gains.

CHART 1: REAL AFTER-TAX RETURN

AT 8 PERCENT NOMINAL RATE OF RETURN AND AT AN INFLATION RATE OF 4 PERCENT



Taxation at realization occurs after 10 years.
Assumed tax rate 28 percent.

payments exhaust the real return when the inflation rate exceeds some six percent (see Chart 2).

To achieve an efficient allocation of resources and tax equity, taxes may need to be assessed on an inflation-adjusted basis. The issue of indexation is very complex and involves many different aspects. One such issue is what price index to use. 1/ According to the Haig-Simons' definition, the emphasis is on consumption possibilities, and it has been suggested that the consumer price index would be an appropriate choice for the price index. It also has been argued that specific indices for a particular branch or type of asset should be used. Moreover, inflation adjustment would need to apply to all types of income, not only to capital gains. If current capital income is not indexed while capital gains are, it would be possible to deduct nominal interest payments and invest in appreciating assets, for which only the increase in real value would be taxable. This could lead to tax arbitrage.

Over the years, a number of methods to adjust capital gains for inflation have been presented. Besides complicated rules aimed at separating nominal and real rates of return, it has been recommended that a portion of the sales price or the actual nominal capital gain be excluded from taxation. 2/ However, rules of this kind can result in over- or under-adjustment for inflation. Two important facts must be kept in mind. First, the proportion to be excluded is very sensitive to actual inflation between purchase and time of sale. Second, the adjustment should depend on the holding period.

Several complications arise when the route of excluding a portion of nominal capital gains as an inflation adjustment is selected. First, the appropriate exclusion would change with the holding period. For example, at an annual rate of inflation of 4 percent and a nominal rate of return of 8 percent, the proportion of real capital gains to nominal capital gains decreases from over 48 percent after one year to under 40 percent after ten

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1/ For a discussion on what index to use, see Tanzi op. cit.

2/ Other proposals have involved adjusting the asset values for inflation. Since many countries allow interest payments to be deductible when ascertaining taxable income, some have recommended that only the share of assets reflecting the ratio of equity to the total capital of the asset ought to be indexed (see e.g. An Inflation Adjusted Tax System, A Summary of Dutch Report, by H.J. Hofstra, Government Publishing Office, The Hague, 1978).

years (see Chart 3). 1/ For a specific holding period (at a given real rate of return), the proportion of real gains to nominal gains decreases with the inflation rate, a feature which will be preserved if a fixed proportion of the gains are excluded from taxation (see Chart 4). On balance, since the absolute inflationary component increases over time, exclusion of a constant fraction of the gain cannot provide an accurate adjustment for inflation except by happenstance for a certain inflation rate at one specific holding period.

The conclusion that the proportion of real gains to nominal gains decreases over time (assuming constant inflation rate and nominal rate) is at variance with the conclusion reached in Brinner (1976). 2/ A recent CBO study seems to have reached a similar conclusion to Brinner. 3/ In an inflationary environment, the CBO study reports an increasing fraction of real gains to nominal gains as the holding period increases. To achieve taxation of the real gain, the exclusion rate would therefore have to decrease over the holding period, and in the limit, all gains would be real and subject to tax. For an asset yielding a negative real rate of return, the real value would approach zero while the nominal value would increase, and this gain would be taxable. This conclusion is counter-intuitive and many proposals recommend an increasing exclusion as the holding period increases. The difference in views concerning the appropriate exclusion rate seems to depend on how the joint product (of inflation and real rates of return) is split between the inflationary component and the real component. The policy recommendation would therefore depend on which view is taken on the relative growth of the two components. However, with either view, the exclusion rate should increase as the inflation rate increases.

Given the sensitivity of the exclusion rate to the rate of inflation and the holding period of the asset, one must conclude that it would be difficult to ensure taxation of only the real rate of return using this approach. In a world of stable inflation, the inclusion proportion should

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1/ The calculation is based on the formula,

$$\left[\frac{(1+0.08)^n}{(1+0.04)^n} - 1\right] * \left[(1+0.08)^n - 1\right]^{-1}$$

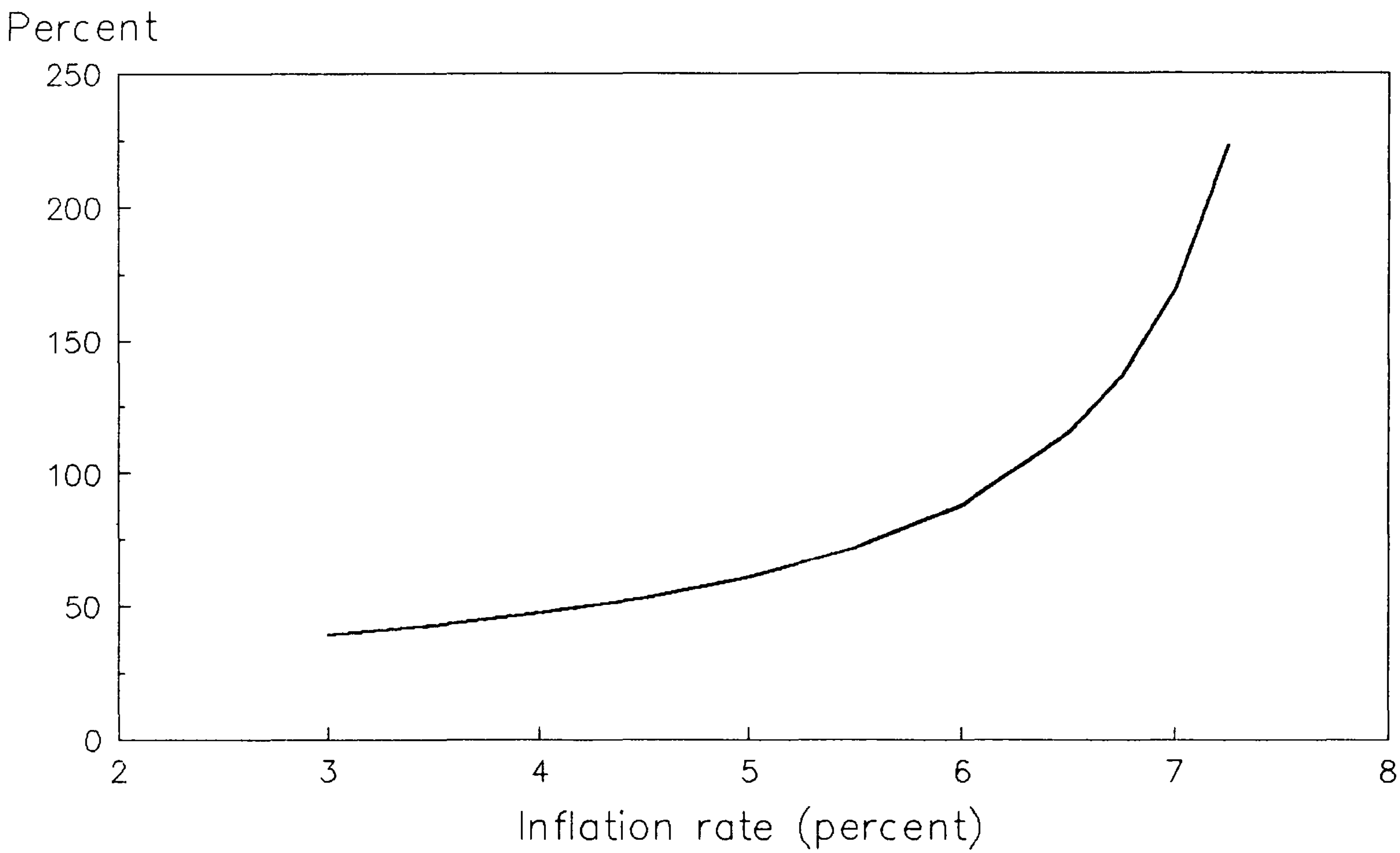
where the first bracket represents the real gain and the second bracket the nominal gain, and n stands for the holding period (in years).

2/ Brinner, Roger E., "Inflation and the Income Tax," ed. by Henry J. Aaron, (1976), The Brookings Institution (Washington), pp. 7, 127-128.

3/ Congressional Budget Office, Indexing Capital Gains, (August 1990), pp. 8-10.

CHART 2: EFFECTIVE REAL TAX RATE

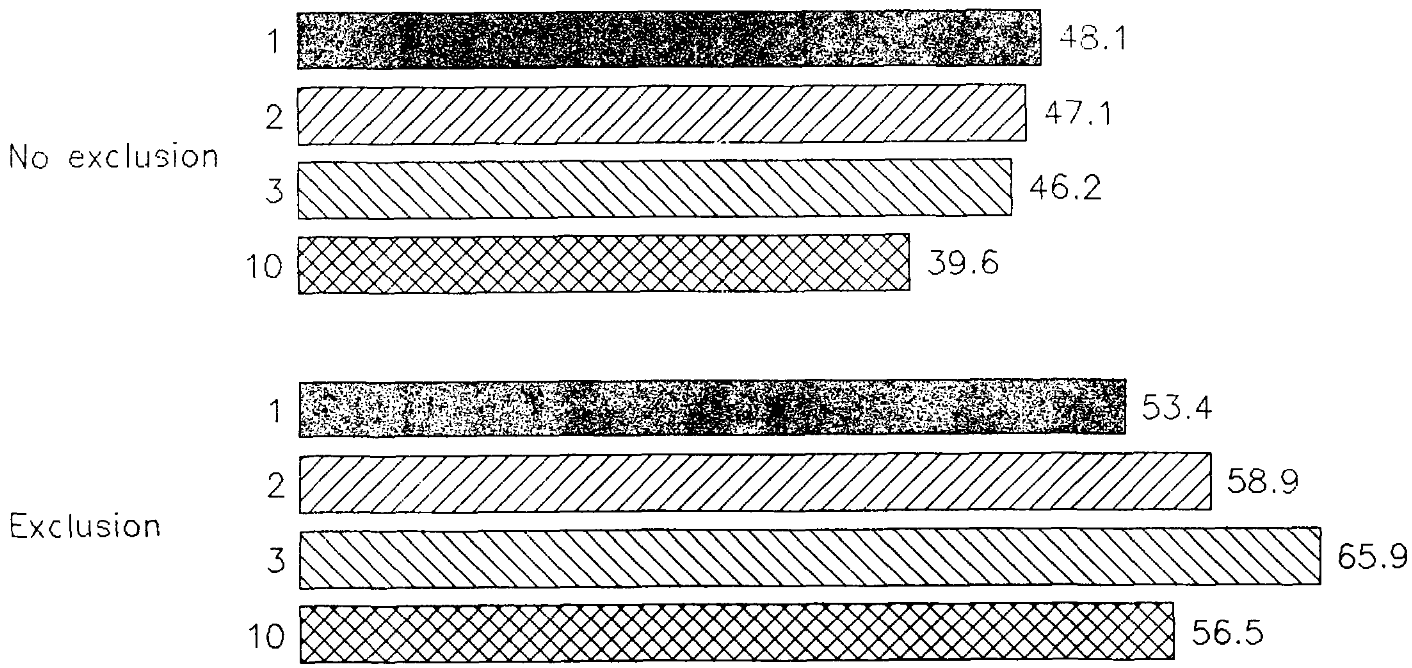
FOR AN ASSET HELD FOR 10 YEARS, NOMINAL INTEREST RATE 8 PERCENT



Assumed tax rate 28 percent.

CHART 3: THE PROPORTION OF REAL GAINS TO NOMINAL GAINS (in percent)

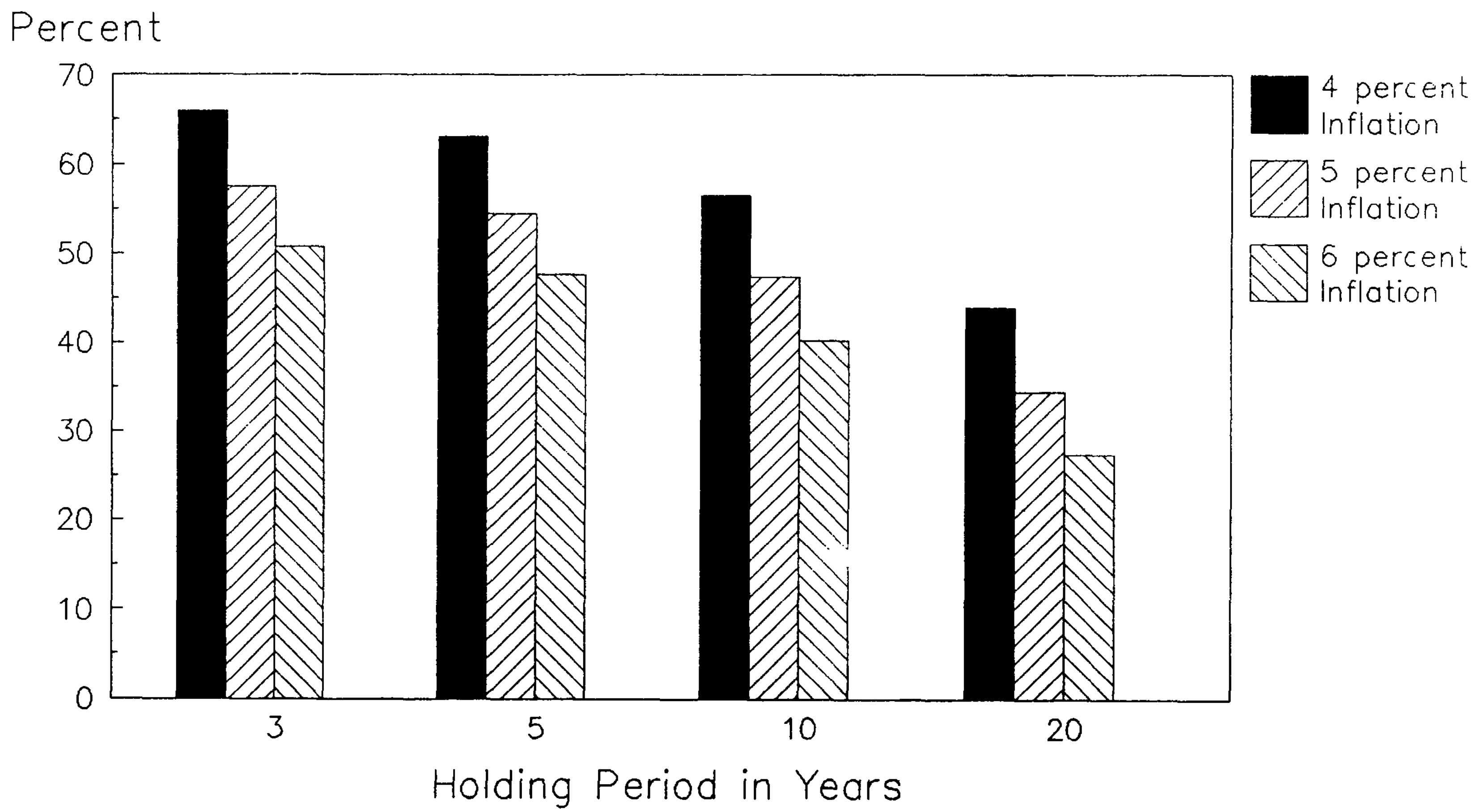
(AT 4% INFLATION AND 4% REAL RATE OF RETURN)



10 percent, 20 percent and 30 percent are excluded for holding periods exceeding 1, 2, and 3 years respectively (The U.S. Adm.'s proposal)

CHART 4: THE PROPORTION OF REAL GAINS TO TAXABLE GAINS WITH A 30 PERCENT EXCLUSION RULE

(AT 4 PERCENT ANNUAL REAL RATE OF RETURN)



30 percent of taxable nominal gains are assumed excluded from taxation.
Tax rate 28 percent.

fall in order to achieve taxation of only real gains. An exclusion rate which increases with the inflation rate and the holding period could, at least in theory, achieve such a goal. However, taxation of capital gains would then become very complicated. In this connection, however, it is worth noting that the U.S. Administration's proposal to exclude an increasing proportion of capital gains with a holding period up to three years and thereafter a fixed proportion (30 percent), would therefore increase the proportion of real gains to taxable gains (see Chart 3). For the first three years, the proportion of real gains to nominal gains would increase progressively and for longer holding periods, a constant increase in the proportion of real gains to nominal gains is achieved. 1/ The impact of inflation on taxable capital gains would be mitigated but only in very special circumstances would the tax be applied to the inflation-adjusted (real) capital gain. Nonetheless, the system is simpler than a fully inflation-adjusted system would be. The discretionary increases in the exclusion rate during the first three years (from 10 percent to 20 percent and to 30 percent) may, however, induce holders to hold on to the asset just to qualify for a larger exclusion rate.

4. A roll-over of capital gains?

The issue of roll-over of capital gains when the gains are reinvested goes back to the principle discussion of whether capital gains are income or not and whether the gain is kept in "productive" investments or used for consumption. 2/ Provisions for roll-over of capital gains have tended to focus on the taxation of realized capital gains on the sale of private residences. Among the OECD countries, Spain and the United States stipulate that the proceeds of the sale is tax exempt if used to buy another house. In the United States the relief is a deferment of tax, since the deferred gain is deducted from the cost of the new residence for capital gains purposes. The roll-over of capital gains is sometimes allowed if an equally or more expensive house is purchased. If the owner moves into a smaller house or rents a house, this event may coincide with retirement and other rules may apply. Presumably, for this reason, the tax code in the United States provides an outright once-in-a-lifetime exemption, up to $125,000, for capital gains on residential property accruing to a person aged 55 or older.

It is argued that a roll-over provision for capital gains on primary residential properties contributes to labor market mobility. If the capital gain were taxable it would become more difficult to obtain a similar house at a different location, especially when moving from a low cost area to a

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1/ For an asset which has been held for just over one year, the proportion of real gains to nominal gains would increase from 48.1 percent to 53.4 percent, an increase by 11 percent. A similar calculation for assets held just over two and three years yields an increase by 25 percent and 43 percent respectively.

2/ See Lindahl, op. cit.

high cost area. If living in a private dwelling is considered a social goal, it can be argued that taxes could prevent prospective home-buyers from entering the market if they had to pay capital gains taxes when they later sell their first home in order to buy a larger and more expensive home. A general provision for roll-over of capital gains would create some administrative difficulties but could result in less tax considerations for individual portfolios. In this case, however, the issue of indexation of the deferred capital gain as well as presumptive taxation at death may have to be addressed.

5. How should losses be treated?

The capital gains tax as applied in many countries is asymmetric in its treatment of capital gains and losses. In principle, capital losses should be deductible in full against other income. However, since the taxpayer can time his sales so as to take losses promptly and to defer capital gains for as long as possible, it has been considered necessary to have different tax treatment for losses and gains. Rules limiting the offset of losses against other types of income have been introduced in many countries. In the United States, while realized capital gains are fully taxed, only $3000 of capital losses in excess of realized capital gains are deductible. Furthermore, the voluntary nature of realizations and possibilities of transferring income from one source to another have resulted in legislation against so called wash sales. 1/

V. Possible Effects of Cutting the Capital Gains Tax

The economic impact of a lower capital gains tax rate on a range of markets has been debated at length. A number of possible effects have been studied; the effects on risk-taking, entrepreneurship and venture capital, investment and savings, international capital flows, competitiveness and the lock-in effect (see above). 2/ These issues are complex and cannot be covered adequately in summary form. The U.S. Administration has, however, paid special attention to the possible effects on savings and growth. On the latter, the U.S. Administration believes that a lower capital gains tax

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1/ The purpose of this legislation is to bar taxpayers other than corporations from selling stock or securities and promptly repurchasing substantially identical property. The time limit is 30 days.

2/ Other effects that have been mentioned as the potential result of a reduction in the capital gains tax burden are:
- Higher stock market prices and hence a lower cost of equity capital that would generate higher corporate investment;
- Higher real estate price that would help the federal government handle the savings and loan crisis, and raise the property tax revenue;
- A stimulus to venture capital.

See "The Perception of Power: The Capital Gains Story," by George F. Break, in Tax Notes, July 8, 1991, pp. 229-230.

rate would promote economic growth by encouraging productive risk taking and entrepreneurship.

The effect on national savings of a lower capital gains tax rate depends on how tax revenues and private savings are affected. The effect on tax revenues from a lower capital gains tax rate has been the focus of much research trying to determine the realization response. 1/ If a capital gains tax cut raises revenue, total national saving would increase even if private saving is unchanged.

Private savings may be affected since a capital gains tax cut could decrease the corporate dividend-payout ratio by raising the relative cost of paying dividends compared to retaining profits. Business savings in the form of retained earnings could therefore increase. 2/ A study by Hendershott et al concludes that the effects on net economic welfare of reducing the capital gains tax rate are more likely to be positive than are the effects on revenue because the reduction of the economic distortion due to the lock-in effect is significant even in cases where tax cuts reduce tax revenue. 3/

It also has been noted that a lower capital gains tax rate may reduce the double taxation of income from corporate equity making corporate assets more attractive compared to assets such as housing, which are taxed very lightly or not at all in terms of income and capital gains taxes. Critics have pointed out that housing is under-taxed and that, rather than decreasing other taxes, taxes should be increased on housing. Another possibility of reducing the double taxation of income from corporate equity would be to integrate the corporate tax and taxes levied at the shareholder level. The U.S. Treasury Department is currently undertaking a study in this area.

There has long been a concern that taxation of capital gains leads to a reduction in risk taking, especially when the tax schedule is highly progressive. The effects on risk-taking of a capital gains tax, and therefore, its impact on entrepreneurs to undertake risky ventures, depends however not only on the tax rate, but also on specific provisions for carry-over of losses, etc. Supporters of lower capital gains taxes argue that

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1/ For a review see "Implications of a Lower Capital Gains Tax Rate in the United States, by Krister Andersson, IMF Working Paper, No. 100, 1989 and "Policy Watch - Cutting Capital Gains Taxes," by Gerald E. Auten and Joseph J. Cordes, in Journal of Economic Perspectives, Volume 5, Number 1, Winter 1991, and "Limits to Capital Gains Feedback Effects," by Jane G. Gravelle, Tax Notes, April 22, 1991.

2/ For a discussion on the relative tax incentives and the dividend-payout ratio, see "Integrating Corporate and Shareholder Taxes", by Krister Andersson, in Tax Notes, April 1, 1991.

3/ "Effects of Capital Gains Taxes on Revenue and Economic Efficiency," by Patric H. Hendershott, Eric Toder, and Yunhi Won, in National Tax Journal, Volume XLIV, No 1, March 1991.

current limitations on deductions for capital losses discourage risk-taking because the government shares fully in the rewards but not in the potential losses of risky investments. In this regard, the direct rules concerning loss offsets against other types of income play a major role. Opponents doubt whether cutting capital gains taxes would significantly encourage risk-taking and point out that a lower rate would decrease the value of the deduction of losses. More generous provisions for loss deductibility could enable individuals to reduce their tax liabilities by means of tax arbitrage. 1/

VI. Concluding Observations

Taxation of capital gains is one of the most difficult issues in both tax theory and in practice. The complexity of the issue is often increased by a long holding period over which the general price level tends to change. Furthermore, the very nature of selling assets that are not always divisible into smaller parts creates problems of "bunching" and could result in liquidity problems if gains were taxed before being realized. Finally, it seems to be clear that investors do react to changes in the capital gains tax structure, but empirical estimates tend to be hard to interpret. In this connection, the possibility of using the tax code for tax arbitrage purposes tends to put a lower limit on the tax rate, a rate which still could generate losses from an inefficient allocation of resources. Furthermore, one has to consider the issue of equity and the distribution of the tax burden, both in the short and in the long run. The possible impact on investment and growth may be important issues for both efficiency and equity.

The U.S. Administration's proposal to exclude an increasing fraction of nominal capital gains from taxation the first three years of the holding period would mitigate the impact of taxation of inflationary gains. It would only under very specific circumstances assure that the tax would be levied on real capital gains. The sliding scale may introduce some new lock-in effect, but the lower effective capital gains tax rate would tend to lower the overall lock-in effect. The mitigation of the tax on inflationary gains seems to be smaller for holdings exceeding three years (since the exclusion rate remains at 30 percent after three years).

The capital gains tax debate is likely to continue for some time. Definitive answers will not be found to some of the conceptual issues. International practices tell us that countries have come up with very different 'solutions' to the capital gains tax question. The capital gains tax can not be separated from other aspects of the tax system and the solution adopted in each OECD country has to be viewed in that perspective.

1/ One possible example would be to buy shares just before dividends are paid out and to sell them after the dividends are received. The decrease in value of the stock would be deductible against other income, including received dividend payments, which would in reality be tax exempt.

Direct comparisons with other countries, looking at only the capital gains tax structure could be misleading. 1/ Instead, the overall taxation of capital income has to be considered.

1/ For example, in the absence of general capital gains taxation, the definition of what constitutes ordinary income, particularly business income, tends to be wide whereas, in contrast, countries with consistent capital gains taxation tend to have wider definitions of what constitutes capital gains, as opposed to ordinary income.

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