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RESEARCH REPORT

FEDERAL TAX REGIMES
AND RENTAL HOUSING

by

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Régimes fiscaux fédéraux et logement locatif : Résumé

Une étude conceptuelle explore cinq modèles pour l'évaluation des mesures fiscales concernant le logement locatif : le modèle des coûts-avantages; le modèle de faisabilité financière; le modèle du secteur privé; le modèle d'équilibre général; et le modèle dynamique ou modèle de croissance. Des critères communs d'évaluation ont été déterminés pour évaluer chaque structure ou modèle conceptuel. Les critères comprenaient des concepts tels que l'efficacité, l'équité, la flexibilité, les contrôles budgétaires et politiques, la simplicité administrative et les coûts de conformité. Le Programme d'IRLM (immeuble résidentiel à logements multiples) a servi à illustrer combien de modèles différents peuvent être évalués avec les mêmes critères d'évaluation tout en produisant des conclusions et des résultats différents quant à l'efficacité d'une disposition fiscale particulière.

Voici les faits saillants qui ressortent de la mise en application des modèles sur le Programme d'IRLM :

À titre indicatif, on a supposé que les objectifs du Programme d'IRLM consistaient à créer des emplois dans une industrie de la construction en crise et d'accroître l'offre de logements locatifs abordables pour les personnes à faibles revenus.

- Une analyse coûts-avantages dans sa forme la plus pure vérifie jusqu'à quel point le bien-être de la société a été maximisé. L'efficacité du Programme d'IRLM est évaluée en fonction de la plus-value et des avantages nets créés pour la société par les nouveaux logements locatifs. Cependant, l'analyste rend également compte, en tant qu'information secondaire, des estimations du nombre d'emplois de construction créés et de l'offre de logements locatifs supplémentaires construits pour les personnes à faibles revenus.
 - Dans le modèle de faisabilité financière, les effets financiers purs du Programme d'IRLM sont importants. Par exemple, si la valeur actuelle nette de revenus gouvernementaux non gagnés (escomptés aux taux d'intérêt du marché plutôt qu'aux taux d'escompte social) était de 500 000 \$ par logement locatif, ce modèle conclurait alors que le programme est inacceptable du point de vue financier.
 - L'efficacité parfaite du marché privé constitue la base du modèle du secteur privé. Le modèle considère donc le Programme d'IRLM comme une interférence qui empêche le marché du logement locatif d'affecter des ressources dans le secteur de la façon la plus efficiente possible.
 - L'analyse de l'équilibre général aborde une évaluation du Programme d'IRLM en analysant toutes les conséquences de la politique sur l'ensemble de l'économie, plutôt que de se concentrer uniquement sur un secteur ou même un ensemble résidentiel particulier, comme cela se produit dans l'analyse des coûts-avantages. L'analyse de l'équilibre général a tendance à être trop globale pour fournir une information suffisamment détaillée aux fins de l'analyse des effets en matière d'équité, des politiques. Toutefois, certains modèles fournissent de l'information sur les effets de distribution pour les propriétaires des différents intrants factoriels (capital, travail ou biens réels), différentes régions ou différents secteurs industriels qui pourraient être utilisés par les décideurs.
 - Le modèle dynamique ou modèle de croissance est centré sur les effets des politiques qui changeront vraisemblablement beaucoup la capacité de produire de l'économie. On a jugé que ce modèle était un moyen impropre d'examiner les questions de fiscalité concernant le logement locatif.
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I. REPORT OBJECTIVES¹

This study explores conceptual frameworks for assessing rental housing tax measures that may give rise to different conclusions with respect to the benefits and costs of specific measures. It is not concerned with differences in evaluation conclusions that might arise because of the application of different assessment criteria or differences in the underlying data. Thus, this study should be viewed as preliminary in scope to both the design of analytical frameworks for particular rental housing tax expenditures, and the actual undertaking of evaluations within those frameworks.

In accordance with the Terms of Reference, the study has the following specific objectives:

- a) to provide a compendium of all federal tax measures directed at rental housing investors introduced since 1972;
- b) to identify the criteria that are appropriate to apply in assessing the different measures; and
- c) to describe, assess and illustrate by example the alternative models that might be used in evaluating tax incentives targeted at rental housing investors.

The three separate objectives are addressed, respectively, in sections II, III and IV of this paper. A principal objective of section IV is to highlight how different economic evaluative models are inevitably based on different assumptions and philosophies determining the interrelationships among variables. I shall attempt to demonstrate how different evaluators can undertake objective assessments of the costs and benefits of the

same rental housing tax measures, and still draw different conclusions about the effects and efficacy of these measures, despite common data and assessment criteria. As also specified in the study terms of reference, alternative frameworks discussed will be applied in section V of the paper to the Multiple Unit Residential Building (MURB) tax expenditure. A hoped-for indirect benefit from this study is better insight into ways of making the underlying assumptions, philosophies and perspectives of different evaluation frameworks, and their potential implications, explicit in evaluations of rental housing tax expenditures.

II. EVOLUTION OF FEDERAL RENTAL-RELATED TAX REGIMES

As part of the study terms of reference, CMHC officials provided a list of rental housing tax measures that they had compiled. In reviewing the list, I had to decide on a selection criteria to determine whether specific measures should either be added to or deleted from the list. My intent was to compile a final list that included rental housing tax measures that, either alone or together with other tax and direct expenditure measures, might be subject to evaluations.

i) The Concept of Neutrality

The principal criterion I applied is a modified version of that used by the Department of Finance in compiling past tax expenditure accounts--namely, that of neutrality.¹ Essentially, under the neutrality criterion, no differential tax treatment is given for any special circumstances applicable only to a particular group of taxpayers. As applied to the income tax, this criterion is basically analogous to the concept of horizontal equity--that is, that taxpayers in similar circumstances should pay the same amount of tax. In the case of the commodity tax regimes (the old manufacturers sales tax, the new goods and services tax, and excise taxes), the neutrality criterion implies that under the benchmark system all consumers face the same rate of tax on all final purchases of goods and services. This criterion is consistent with the stipulation in the study Terms of Reference that broadly-based measures affecting both rental and non-rental investments, such as the changes to the capital gains exemption prior to 1992, are not intended to be classified as rental housing tax expenditures in the present context.³

Essentially, in applying the neutrality criterion in the context of rental housing investments, I was interested in whether or not the measure could potentially affect the cost of constructing or

investing in real estate, relative to most other investments. I applied the neutrality criterion to the list of tax measures provided by CMHC with the study terms of reference. To attempt to ensure that the list of measures selected is complete, I also undertook a search of annual Department of Finance Budget Papers and press releases, annual editions of the Canadian Master Tax Guide, and existing tax legislation. Thus, the selection methodology has been to apply existing general principles of tax expenditure identification to tax changes that have been introduced over the past twenty years (1972-92).

It should be noted that (in addition to broadly-based measures), the selection criterion excludes tax measures that selectively target other groups of taxpayers but that do not exclude only or primarily the rental housing sector, even though such measures might have a significant effect on the relative attractiveness of rental housing investments. An example of this would be a measure that changed the attractiveness of investment in another sector (e.g. manufacturing, small business) and thereby affected investment in rental housing and other sectors. Other examples are the Registered Home Ownership Savings Plan (RHOSP) and the non-taxation of various home ownership grants introduced over the period that do not uniquely exclude the rental housing sector, although they affect the attractiveness of investing in that sector. The non-taxation of imputed rent on owner-occupied housing is also excluded on these grounds and because it was not introduced during the past two decades.⁴ Therefore, the resulting list does not include all tax expenditures either available to or affecting the rental housing sector, and indeed undoubtedly excludes many measures that have a significant impact on the sector. Rather, it is a list of those tax changes that were introduced over the period, whether or not still in effect, that were more or less directly targeted at the rental sector.

The list of rental housing tax expenditures is provided in the appendix at the end of this Report. As it turns out, it is essentially identical to the list originally provided by CMHC officials.

ii) An Overview of the Measures

Background

A brief overview of rental housing tax measures is useful in order to highlight the major policy goals and concerns that the changes were intended to address, as well as insights into at least some of the issues that evaluations in this area have to confront. In the table in Appendix A, the tax changes over the period 1972 to 1992 are grouped under four headings--namely, capital cost allowance, capital gains, soft costs and "other". The "other" category contains sales tax changes, measures relating to Multiple Unit Residential Buildings (MURBs), and tax changes relating to the treatment of property taxes and land carrying charges. In describing the changes below, I have listed measures chronologically, based on the year the change was introduced. First, however, it is appropriate to describe briefly the general concerns which motivated most of the changes in the major categories of the appendix table.

Capital cost allowance is the tax counter-part to the accounting concept of depreciation. Most assets depreciate in value over time as a result of wear and tear. Capital cost allowance rates applying to different classes of assets are generally intended to provide an approximation for their real rates of depreciation, although in some cases, rates are set intentionally above estimated average depreciation rates in order to provide an incentive for investment in those assets. There has been long-standing tax policy concern about the ability of taxpayers to deduct CCA for rental housing units against other sources of

income because, unlike some other assets used to earn income such as machinery and equipment, rental buildings sometimes appreciate in value and CCA rates on buildings, particularly in the past, have often been well in excess of the true rate of depreciation. While any excess of the sales value of the property over the cumulative CCA deductions claimed results in recapture at time of sale, there is a tax deferral advantage (under the right circumstances, of essentially indefinite duration) that can attract tax shelter activity by high income investors.

Appreciation in the value of a rental property may be eligible for favourable capital gains treatment. The various tax-shelter advantages that may arise from this favourable treatment has also long been of concern to tax policy officials.

The term "soft costs" refers to such costs as interest expenses, promotional costs, legal fees, and so on made or incurred during the period of the construction, renovation or alteration of a building. Policy concerns in this area have centered around the fact that a tax shelter opportunity can arise if the expenses are permitted to be fully deducted when incurred, when, in fact, they may relate to a much longer period--up to and including the full life of the building.

The Individual Changes

In 1972, a measure was introduced that prevented individual investors from deducting from other sources of income CCA in excess of the amount required to reduce rental housing income to zero. Any excess CCA would have to be accumulated and carried forward to be deducted against future years, rental income. In the same year, a further restriction required that all rental properties with a capital cost in excess of \$50,000 be put in a separate CCA class. This prevented the deferral of recapture when

a rental property was sold through the acquisition of other properties that were in the same CCA class.

In 1974, a new measure prevented land developers from deducting from income from other sources property taxes and interest expenses relating to the land. This obviously increased the costs of carrying land for many potential rental housing investors.

In the same year, the Multiple Unit Residential Building (MURB) program was introduced. Under the MURB rules, investors in properties certified by Central Mortgage and Housing Corporation to be MURB properties were permitted an exemption from the general rule disallowing the deduction of CCA-generated losses on a rental property from income from other sources. To be certified as a MURB, not less than 80% of the floor space of the building must be used to provide self-contained domestic establishments and related parking, recreation, service and storage. For eligibility, construction had to begin between November 18, 1974 and the end of 1975 (subsequently extended later in 1974 to units begun prior to January 1, 1978).

1974 also saw the introduction of a measures abolishing the sales tax (under the Manufacturers Sales Tax) on all major classes of construction equipment, and reduction in the rate of sales tax on construction materials from 9% to 5%. The reduced rate also applied to manufactured goods used in building construction which alternatively could have been fabricated on a construction site (such as ready-mix concrete, pre-caste concrete structures, septic tanks, steel structures, etc.). Both of these measures could obviously reduce the potential purchase price of a house.

The change to the terminal loss rules introduced in 1976 required that terminal losses relating to a given CCA class be deducted in the year in which the asset was disposed of. This prevented the carry-over of terminal losses to be applied against income in

other years in which the taxpayer had high income from other sources and hence was in a high marginal tax bracket. In the same year, it was also made mandatory that any negative balance in the undepreciated capital cost of a class of depreciable property be recaptured in that year. This prevented the carryover of amounts for recapture to years in which the taxpayer might have a lower taxable income and thus be in a lower marginal tax bracket.

In 1977, a measure was introduced that permitted expenses incurred in disposing of depreciable property to be deducted from the proceeds of disposition in determining recapture or eligible capital amounts. Recognition of disposal costs for tax purposes merely resulted in a more accurate measure of the true net gain for tax purposes.

The reduction in 1978 in the CCA rate on wood frame buildings from 10 percent to 5 percent achieved symmetry across building types, thus neutralizing the incentive that previously favoured wood frame construction on commercial buildings.

Also in 1978, the Murb program was extended to 1979. Also in that year, interest and property taxes on land held by developers and that are incurred after November 16, 1978 were permitted to be deducted from other income as they are incurred. This reversed the earlier restriction introduced in 1974.

In 1979, a measure introduced required certain soft costs to be deducted over the period to which they related. For example, fees for a cash flow guarantee for a period of five years would have to be prorated over that five-year period rather than deducted when paid or incurred.

In 1980, the MURB program, which had been allowed to expire in 1979) was reintroduced to be available for buildings whose construction began between Oct. 28, 1980 and Jan. 1, 1982.

The half-year rule introduced in 1981 limited the amount of CCA deduction to one-half of the regular rate in the year an asset was acquired. This provision removed the favourable tax treatment previously accorded asset acquisitions that were made late in the year, but for which a full-year CCA claim could still be claimed.

In 1981, a measure restricted the exemption for principal residences to one principal residence per married couple. The primary effect of this for rental markets was to lessen the attractiveness of owning and renting out secondary residences. The change in 1982 relating to lease-leaseback arrangements eliminated a previous exemption that permitted full CCA-generated loss deductibility in cases where a rental property was built on land leased from its owner and subsequently leased back to him or her. A change to the terminal loss rules was also introduced in 1982 relating to demolitions or other disposition of buildings. If the taxpayer owned other buildings, the loss was required to be added to the capital cost of the other buildings and depreciated along with it. If the taxpayer did not own any other buildings but owned land, the demolition or disposal costs would be added to the cost base of that land, thus reducing the amount of any capital gain realized on the land. In all other cases, one-half of the terminal loss associated with the demolition would be treated as a business loss. Prior to the introduction of these rules, it was often advantageous for the vendor to tear down an existing building and sell the land in cases where the purchaser was not interested in the existing building but instead wished to redevelop the land. This would avoid the recapture of capital cost allowance in respect of the building, trigger a terminal loss on the building, and would permit the vendor taking his or her overall profit on the transaction as a capital gain on the land, only 50 percent of which was included in income for tax purposes at that time. The taxable capital gain would be offset in whole or in part by the terminal loss.

Also in 1981, a new measure required the capitalization of soft costs into the cost base for the real property to which they related. As a result of this measure, soft costs would be deducted according to CCA rates applying to the undepreciated capital cost base for a building, rather than being deducted immediately when made or incurred. The provision did not apply to corporations whose principal business activity was renting or leasing real estate, who would be permitted to continue deducting soft costs. A further measure introduced in that year disallowed a deduction for carrying costs of land adjacent to uncompleted buildings. This prevented circumvention of the general disallowance of deduction of carrying costs that might otherwise be possible for certain idle land, owing merely to the land's proximity to a construction site.

In the same year, the half-year rule was extended to MURB designated properties beginning in 1982. This meant that new MURBs constructed in 1982 could claim only half of the regular CCA allowance in that year.

Beginning in 1982, interest expenses incurred to earn investment income from property can only be deducted to the extent of such income (exclusive of capital gains) for the year, with any excess carried forward against future investment income. This restriction, which applied to both MURB and non-MURB rental properties, prevented the deduction of interest generated losses from other income sources of investors. This reduced the tax advantage arising from immediate deduction of full nominal interest charges (including the inflation expectations component), when appreciation in the rental property value often received preferential and deferred capital gains treatment. The measure did not apply on funds borrowed to finance rental property acquired before Nov. 12, 1981.

In the same year, a reserve was permitted for the profit attributable to unpaid instalments associated with the disposition of real property that give rise to ordinary income. This, of course, not affect rental investors who were accorded capital gains treatment on the sale of their property. The "Put-in-use" rule introduced in 1987 placed restrictions on the timing of the commencement of CCA deductions in respect of an asset acquired after 1989. Commencing in that year, CCA deductions could only begin at the earlier of the year the property was first available for use, and two years after the date of acquisition by the taxpayer (in which case the half-year rule would not apply). In the context of rental housing property, this restriction prevented CCA deductions in respect of property that was not immediately placed in active use by the owner.

Beginning after 1987, an additional measure further reduced the attractiveness of CCA deductions on buildings by lowering the CCA rate from 5 percent to 4 percent.

Also in 1987, a measure was introduced that phased out the 1981 exemption for principal business corporations from the soft cost capitalization rules, thus placing them on the same footing as unincorporated taxpayers. The phase-out was according to the following formula: 1988 - 20% of soft costs must be capitalized; 1989 - 40%; 1990 - 60%; 1991 - 80%; 1992 and subsequent years - 100%.

1987, also saw the introduction of a measure that required carrying charges on vacant land owned by land developers or sellers, and on vacant land held in the course of business to be capitalized subject to the same transitional period as for soft costs. This prevented the tax advantage of full nominal interest deduction when there might be preferential and deferred capital gains treatment for the associated land appreciation.

In the same year, the tax shelter for investments in existing MURBs ended. Persons who acquired existing MURBs after June 17, 1987 were no longer allowed to create tax shelter losses by deducting depreciation against other income, and after 1990 (subsequently extended to after the end of 1993), existing MURB owners will not be able to create such losses.

1988 saw the introduction of the CNIL (cumulative net investment loss) rules, which reduced in many cases the attractiveness of owning rental properties. Under the CNIL rules, certain investment expenses for a capital property, including interest and carrying costs, were to be accumulated and applied to reduce the individual's capital gains exemption--at that time equal to \$100,000.

In 1991 the manufacturers sales tax was replaced by the 7% Goods and Services Tax (GST). Under GST rules, the full purchase price of newly constructed rental housing that is acquired for lease to others is subject to the new tax. Input tax credits in respect of construction costs may be claimed by the purchaser in this case. Residential rentals and the resale of used residential dwellings are generally exempt from GST. The GST rules for rental properties raise the costs of acquiring and renting new rental properties relative to existing properties.

In 1992, secondary residences were made ineligible for the \$100,00 capital gains exemption. This further reduced the attractiveness of holding secondary properties for rental purposes.

iii) Concluding Comments

It is obvious from our review of the tax measures applying to the rental housing sector that changes have been both relieving and restricting in nature. An overriding consideration that has

motivated many of the restricting measures been concern with potential tax abuse, rather the attainment of other policy objectives. Indeed, even the MURB incentive (perhaps one of the more significant relieving provisions), merely reinstated for certain defined categories of rental investments, the general principal of global loss offsetting against other sources of income. Other relieving provisions have violated the tax rules generally applying to other taxpayers, presumably with the intent of achieving more general housing or social policy objectives. Thus, in the context of assessing evaluation frameworks for rental housing tax measures, careful attention must be paid to the joint tax policy and more general economic effects and motivations of measures.

III. ASSESSMENT CRITERIA

This section of the paper is concerned with identifying a set of common assessment criteria to be applied in evaluations of rental housing tax measures. I will use the widely accepted assessment criteria that derive from the welfare foundations of economic analysis. The basic standard of maximization of societal welfare requires maximization of social benefits in relation to social costs. Benefits include those effects of a policy that increase social welfare and costs those that reduce it.⁵ Overall societal welfare may be affected by both changes in the aggregate quantities of goods and services available to members of society and by the way in which those goods and services are distributed among members of society. The standard economic criteria for assessing the attainment of social objectives for any policy initiative are, therefore, those of efficiency and equity.

i) Efficiency

Efficiency deals with the maximization of societal welfare through the optimal allocation of resources in production and exchange. An efficient economy is generally assessed under the commonly applied Paretian criterion as being one in which it is not possible to improve the welfare of one individual without reducing that of another individual--that is, without affecting a redistribution, or, in other words, without confronting issues of inter-personal equity. A policy initiative has efficiency implications if it causes the total real (that is abstracting from any purely inflationary effects) discounted value of resources available to society to change. The total efficiency effects are the sum of the values that members of society place on the resulting changes, without differentiating in terms of the benefits and costs accruing to particular individuals.

Criteria for assessing the efficiency effects of tax regimes and elements of tax regimes, including those relating to rental housing, are not conceptually different from those appropriate to assessing any policy initiative. Nor does it matter whether a rental tax change has primarily tax or other policy objectives; the principles for assessing efficiency effects are unchanged. Tax measures differ from other policy initiatives only in the way in which they induce efficiency effects.

Tax measures may affect the allocation of resources in myriad ways. By resulting in changed prices confronting consumers and businesses, they may divert resources to uses that maximize welfare from less preferable alternatives, and vice versa. Rental housing tax incentives often affect rental housing markets by altering the price (i.e. the after-tax rate of return) of rental housing investments to investors. For example, tax incentives may encourage investment in the construction of rental units by increasing deductible capital cost allowances or interest costs, by reducing taxes on construction inputs, or by giving more favourable capital gains treatment. The value to society of the extra rental housing units, in comparison with that of the foregone output of the resources employed, reflects net benefits of the measure, assuming that no other resource effects are induced by the tax changes. Tax measures may also, of course, deter investment in rental housing, with net benefits measured as the value of the forgone rental units in comparison with the value of the new output produced by the resources. The intent in devising policies is always to minimise unintended distortions in private markets and the resources utilised in accomplishing objectives.

A number of points should be borne in mind when assessing efficiency effects of any policy initiative, whether a direct expenditure program, a tax measure or a regulatory provision. First, care must be taken to distinguish between targets and

instruments. To be judged successful on general economic grounds, any policy initiative must ultimately increase net social welfare--often taken to be real incomes. Such things as increases in investment or employment are intermediate steps that may or may not be evidence of an increase in social welfare. Take, for example a policy initiative that increases capital investment. If the measure does this by reducing the cost of capital relative to other factor inputs such as labour, there may actually be a decrease in overall national income, despite solid evidence forthcoming from the evaluation of increased investment. Similarly, a measure that successfully increased employment cannot be judged a success on economic grounds unless such jobs result in a sufficient increase in productivity and real national income; in the absence of this, the measure may simply have resulted in a redistribution of income and perhaps even have imposed a deadweight cost on the economy through distortions in factor prices. The point is that both increased employment and investment are means to an end--the increase in real national incomes--and are not ends in themselves.⁶ It is important to bear this in mind since evaluations commonly focus on investment and employment, either because of confusion on the part of the analyst, because this is the only practical alternative owing to data constraints, or because in some cases this is sufficient to prove the point that the analyst wishes to make.⁷

A second important point relating to the measurement of efficiency effects is the distinction between partial equilibrium effects and general equilibrium effects. Partial equilibrium analysis focuses only on a particular sector or sub-sector, while general equilibrium analysis traces through the complete final effects of the change on all sectors and markets. Failure to track the full general equilibrium effects of a policy initiative can result in incorrect conclusions from an evaluation.

A third point worth mentioning is that, because the effects of policy initiatives are often felt over time, the choice of a suitable discount factor is necessary in order to place all benefits and costs in constant dollars. A number of different discount factors are available, however, and depending on the focus of the analysis or the perspective that the analyst takes, one discount factor may be more appropriate than others. The choice of the discount factor can significantly influence the measured net efficiency of a measure.

Final points should be noted about the actual measurement of efficiency effects. For one thing, efficiency effects can arise with respect to non-produced resources, such as with the pollution of a river or the improvement of a natural park. Moreover, there need not currently be any explicit market activity with respect to the resource affected that causes overall societal welfare to change. In some cases, it may even be extremely difficult to attribute a value to changes that are qualitative in nature, such as those involving issues of aesthetics, sovereignty, or that favour either public or private modes of production. Even if there is currently a market for the good or service in question, market prices need not be the most appropriate to use for calculating welfare changes. This might be the case in the presence of externalities or market distortions in current prices owing, for example, to imperfect competition in markets or the existence of distorting taxes and subsidies. In all such circumstances, shadow prices that reflect true social costs, rather than market prices, are used in the measurement of costs and benefits.

Many of the above issues that arise in measuring efficiency effects will be discussed in more detail in the next section of the paper when we discuss the linking of assessment criteria.

ii) Equity

Equity considerations arise if a measure results in changes in the distribution of net resources (i.e. benefits minus costs) among members of society. Any policy that entails efficiency effects must necessarily entail equity effects. This is because it is not possible to change the total of society's resources without also effecting a change in the absolute distribution of resources among members of society. A policy change may, however, involve changes in equity without entailing changes in efficiency. This could occur as long as only the distribution of resources among individuals is affected by the policy, while leaving both the total value and composition of resources unchanged.

Because the concept of equity is a cornerstone of tax policy, the delivery of rental housing incentives through the tax system will inevitably confront issues of equity.⁸ Two concepts of equity have been established in the public finance literature-- horizontal equity and vertical equity. The horizontal equity objective strives for the equal treatment of equals. This has generally been interpreted to mean that those with equal ability to pay should pay equivalent taxes. Ability to pay is generally taken to be evidenced by equivalent real discounted incomes. In the context of rental housing measures, then, one assessment criteria will often relate to changes in the distribution of benefits, across groups of taxpayers with equivalent ability to pay (i.e. those with equivalent real discounted incomes).

The concept of vertical equity deals with the distribution of benefits across groups of taxpayers with differing abilities to pay. It is generally assumed that taxpayers with greater ability-to-pay should bear a greater proportion of the tax burden--that is, that the tax system should be progressive in its incidence. However, that is a value judgement that can be skirted here. The

relevant assessment criterion is simply whether, and to what extent, a rental housing measure results in any redistribution of benefits across groups of taxpayers with differing abilities-to-pay.

Horizontal and vertical equity originated as taxation concepts, but there is growing recognition that, from a global perspective, both the benefits resulting from increased tax revenues and the distribution of tax burdens must be taken into account in assessing the overall equity implications of tax changes. In assessing changes in equity in the context of rental housing, therefore, benefits would be defined in terms of distribution of tax burdens and rental housing benefits, as well as any other indirect effects on resources resulting from the policy. Normally, in assessing direct expenditure programs, only the latter issue arises because direct housing expenditure programs are typically funded from general consolidated tax revenues. Policy evaluations of such measures would rarely attempt to estimate the overall effects of the incentives on the distribution of total tax burdens. In the case of tax initiatives, however, the incidence of the funding for a particular measure is usually more readily identifiable. Typically, rental housing tax expenditures will involve a specific tax change for select groups of taxpayers, an equal but opposite change in either overall tax revenue collections or the deficit, and a change in rental housing benefits for certain individuals. The specific tax change for select groups of taxpayers will usually be of interest in evaluations, so that tax equity issues would often be an integral component in evaluations of such measures.

The concepts of horizontal and vertical equity can, in actual practice, have other dimensions besides the distribution of benefits across real income classes. For example, in some cases the analyst may be interested in changes in the distribution of

benefits for particular disadvantaged groups, such as disabled, elderly or native people, or residents of particular regions. In such cases, such factors could be interpreted as proxies for otherwise unmeasurable inequities that are perceived.

iii) Other Criteria

In addition to the efficiency and equity criteria, the public finance literature has developed additional standards that are appropriate to apply in assessments relating to tax systems, including flexibility, budgetary and policy control, and administrative simplicity and certainty.¹ It is appropriate to discuss how these inherently sensible value judgments about the characteristics of a good tax system can be translated into a set of objective criteria that are consistent with the efficiency and equity criteria appropriate to assessing the general economic welfare implications of any policy initiative.

Flexibility

Rental policy objectives evolve over time so that measures delivered through the tax system must be assessed in terms of their potential flexibility. One aspect of this relates to the ability to design and introduce tax legislation rapidly enough to respond to changed objectives or circumstances such as overall economic conditions. Another relates to the availability of taxation data to assess current circumstances and to respond to them. Inflexibility, whatever the cause, will increase the ultimate real resource costs of accomplishing any rental housing policy objective.

Budgetary and Policy Control

A related issue is that of budgetary control. Tax incentives are typically open-ended with the ultimate tax cost dependent on

take-up by taxpayers. This may have two implications that should be considered in the evaluation of measures. The first relates to the ability of policy makers to control the costs of measures. The second relates to possible "over-achievement" of policy objectives--for example, over-investment and resulting excess capacity in rental housing markets. This would show up in increased resource costs required to achieve the targeted or full-capacity level of rental housing units.

Administrative Simplicity and Compliance Costs

Two important assessment criteria that arise whenever the tax system is used relate to the administrative burden imposed on revenue officials and the compliance burden imposed on taxpayers.¹⁰ Since the mandate of Revenue Canada is revenue collection, not the administration of rental housing policy, any assessment of rental housing tax expenditures should assess carefully the extra burden that the measure imposes on them. This can include extra resources required to distribute policy information to select groups of taxpayers, to process additional tax return information, to certify rental units, or to undertake required audit and tax compliance procedures. Evaluations should also consider the resource requirements imposed on the taxpayer in qualifying for the measure, including the value of his or her time and that of any tax professionals required. Similarly, when a restrictive tax measure has been applied to the rental housing sector to prevent tax abuse, any evaluation of the possible removal of the measure should not overlook potential increased compliance costs.

Because they may affect both the total resources available to society and the distribution of those resources, issues relating to flexibility, budgetary and policy control, and administrative simplicity and compliance may, therefore, entail both efficiency and equity effects.

IV. LINKING ASSESSMENT CRITERIA

The purpose of this section paper is to discuss alternative evaluation frameworks that might be used by evaluators of rental housing tax measures for linking the standard assessment criteria identified in the preceding section. I shall attempt to demonstrate how different evaluators can undertake objective assessments of the costs and benefits of the same rental housing tax measures, and still draw different conclusions about the effects and efficacy of these measures, despite common data and assessment criteria. I discuss five different model frameworks-- the cost-benefit model, the financial feasibility model, the private sector model, the general equilibrium model, and the dynamic or growth model. The models considered are not exhaustive of those that might be used by different evaluators. I have, however, tried to include a broad enough selection of models to illustrate conceptual differences that might arise.

i) The Cost-Benefit Model

As discussed in the preceding section, overall societal welfare may be affected by both changes in the aggregate quantities of goods and services (or more generally, resources) available to members of society, and by the way in which those goods and services are distributed. This gives rise to the standard efficiency and equity effects, which are the core of any cost-benefit analysis.

Linking Efficiency Criteria

The approach for combining efficiency effects in the cost-benefit literature is, in principle, straightforward. Essentially, the approach is to develop dollar measures of benefits and costs, and then to consolidate the real time-adjusted (i.e. discounted) values to an overall measure of net benefit.¹¹ This permits

assessment of each individual policy initiative, as well as comparison across alternative possible initiatives.

The cost-benefit model has certain characteristics or underlying assumptions, which distinguish it from other models. For one thing, the model is partial equilibrium in nature and is based on the assumption that prices in other markets or sectors, other than the one under consideration, do not change significantly. The model has been most widely applied in the area of government investment projects where this is a reasonable assumption. To the extent that the policy initiative causes product or factor prices in other markets--such as the average wage rate, the general cost of raw materials, the exchange rate or, indeed, even the value of money--to change, the conclusions reached from cost-benefit analysis become increasingly inaccurate. Of course, even though the model is static, benefits still take into account crowding out and substitution effects of policies within the market concerned. For example, investment effects are measured net of any investment that would have taken place within the sector but that is specifically supplanted by investment induced by the policy change.

Another characteristic of the model is that it is static in nature in that it is assumed under cost-benefit analysis that the policy change does not affect the overall growth path of the economy. If, however, the project significantly affects the rate of change in the capital/labour ratio over time or the rate of technological innovation, the application of cost-benefit analysis becomes inaccurate.

The cost-benefit model also has a number of other characteristics relating to the way in which costs and benefits are measured, which distinguish it from other models. For one thing, cost-benefit analysis relies on shadow prices, rather than market prices, in measuring costs and benefits. Shadow prices are prices

that better reflect social values of resources than market prices and are used in cost-benefit analysis when market prices are distorted. This could arise, for example, in the presence of externalities such as pollution or when product or factor markets are imperfectly competitive. While the use of shadow prices is perfectly valid, their use does introduce an unavoidable element of arbitrariness in some cases and also differs from the assumptions sometimes employed in other models, such as the next model discussed below. In some cases, the very presumption of an average shadow price among members of society with respect to a particular resource may be tenuous at best. The choice of shadow prices can be particularly difficult and arbitrary with respect to qualitative factors such as aesthetic or quality of life considerations.

On a related issue tax costs to the government may be an inaccurate indication of true costs in cases where the outlay simply results in a transfer of resources among members of society, not a real resource cost. In the rental housing context, a tax subsidy to renters might partly reflect resource costs and partly a simple transfer of tax revenue to renters from other taxpayers. Care has to be taken, therefore, to distinguish between transfers and true economic costs.

Another distinguishing characteristic of the cost-benefit model that we shall consider relates to its approach to discounting costs and benefits that accrue over time. When the time dimension enters into a particular policy change, costs and benefits naturally have to be discounted to a common reference point to avoid comparing apples and oranges--that is the comparison of costs and benefits measured by prior or future year dollar values with those measured by current values. Discounting is common to any evaluative model, however, the conceptual basis for the discount factor underlying cost-benefit analysis differs from that underlying other models. Somewhat analogous to the

application of shadow prices, cost-benefit analysis uses the social discount rate rather than market interest rates as a discount factor.

There are, however, at least two competing views on how to measure the social discount rate, which can result in marked differences in measured discounted costs and benefits in different particular applications. The Treasury Board in its Benefit-Cost Analysis Guide (Canada, Treasury Board, 1982) recommends a social discount rate of 10 percent, which corresponds to the estimate by Jenkins (1977) of the weighted social rate of return on capital (the average real rate of return in the public sector) in Canada. On the other hand, Helliwell et al. (1973) found the real supply price of capital (the average real rate of return in the private sector) in Canada to average 5 percent.

Another underlying assumption to cost-benefit analysis is that it assumes social objectives are known, when in fact it may be extremely difficult or even impossible to determine what social objectives or preferences are. Moreover, there may be multiple objectives with respect to a certain sector or activity and the policy change may relate to several of these, making overall assessment extremely difficult. Consider, for example, a rental housing tax policy change that results in the construction of new rental units but discourages home ownership, when encouragement of home ownership is a secondary policy objective. Cost-benefit analysis also assumes that there are no preferences about the way in which social objectives are pursued when, in fact, members of society may have very strong views about such things as the use of the public sector versus private markets, issues relating to nationalism and so on.

Finally, the cost-benefit model is based on the assumption that governments have infinite financial resources, or at least that

there are no binding financial constraints that preclude the pursuit of particular social objectives.

Integrating Equity Considerations

There has been serious and extensive debate over the years as to whether equity is a legitimate criterion for assessment in cost-benefit analyses (see, Musgrave, 1969). Arguments that equity should be ignored are commonly based on the compensation or Kaldor-Hicks principle. According to this principle, a policy change would be judged preferable if those who gain from the policy initiative could compensate those who lose and still have some gains left over. In its guide to conducting benefit cost analysis, however, the Treasury Board (Canada, Treasury Board, 1982) argues persuasively for consideration of both equity and efficiency effects criteria. Moreover, it is a central tenet of this study that consideration of equity effects is absolutely mandatory, in the context of assessing tax measures.

Integrating equity effects with efficiency effects has always been a controversial and problematic issue within the cost-benefit literature. Undoubtedly the most common approach is simply to skirt the issue by relying on the Hicks-Kaldor compensation criterion. Since a socially desirable policy initiative under the cost-benefit framework is one that results in positive overall net-benefits, it is argued, by those who support the application of the Hicks-Kaldor criterion, that no separate consideration of distribution effects is therefore warranted.¹²

Many economists feel uncomfortable with this, however, because it avoids the distribution issue, and thereby the thorny issue of inter-personal comparisons of net-benefits, by relying on the implicit assumption that society values equally net benefits that accrue to separate groups in society. Other approaches have,

however, been employed that deal explicitly with the distribution or equity issue.

Under the first approach, both equity and efficiency effects are combined in a total global measure of net benefits. Equity is dealt with by assigning weights to the gains and losses accruing to different income and wealth classes.¹³ For example, suppose there are two income classes--low and high--and that net tax and rental housing benefits accruing to each of these from a particular tax measure are, respectively, \$200 and \$100. If benefits are intended to be targeted to low income people, then the positive net benefits accruing to high income people might be assigned a value of zero. As a result, overall assessed benefits, given the objectives of this measure, would be \$200 (i.e. $\$200(1) + 100(0)$).¹⁴

Under the second approach, efficiency benefits and costs are identified and measured, and any redistribution of benefits and costs are reported separately from the efficiency effects.¹⁵ Proponents of this approach often base their position on one or more of the following views:

- concepts of equity are inherently value judgments and there is no universally agreed upon mechanism for weighting the net benefits accruing to separate groups;
- the analyst should not be introducing his views on equity into an otherwise objective assessment; and
- equity issues are generally of a decidedly lower stature than efficiency issues since (implicitly by resort to the Hicks-Kaldor criterion), subsequent redistributive measures could be introduced to offset any undesirable equity implications of a measure.¹⁶

My view is that each of the above two approaches has merit in the context of assessing rental housing tax expenditures. It is useful to report distributional results separately from efficiency effects so that policy makers can see the full effects of measures and apply distributional weights that are appropriate in light of evolving political objectives. On the other hand, the application of alternative weighting schemes by the analyst will often usefully demonstrate the sensitivity of conclusions to different assumed value judgments about redistribution. Also, it will often be impossible to avoid formally incorporating equity effects in cases where the precise objectives of the measure are explicitly stated and involve the attainment of specific redistributive results. For example, in the example cited above, positive net benefits accruing to high income taxpayers are ignored because the policy is targeted explicitly at the poor.¹⁷ Thus, while the net benefits to the high income group may be significant from a pure economic welfare perspective, they are discounted from a policy perspective in this particular context. While some may instinctively find the application of value judgments to positive economic findings offensive, this is inevitably what is done by policy makers in an informal way in many circumstances. The formal weighting mechanism merely makes these value judgments explicit and apparent.

It should be obvious from the above discussion that fundamental differences about the relative efficacy of a rental housing measure, even when assessed under the cost-benefit model, could arise because of different views with respect to the distributional consequences of different tax policies.

ii) The Financial Feasibility Model

This model differs from the cost-benefit model in that the principal objective is the provision of public goods and services at minimum tax cost to government, rather than maximization of

social welfare or net social benefits. Under the financial feasibility model, the government is assumed to face constraints, that force it to deviate significantly from the cost-benefit focus and methodology in linking benefits and costs. It faces financial constraints very similar to those confronting a private sector organization. It does not have access to unlimited borrowing, it must respond to actual prevailing interest rates rather than social discount rates, and financial benefits and costs have much more practical significance than abstract social benefits and costs and their associated shadow prices. Furthermore, the government does not have perfect information about social preferences and, in general, operates in a world in which there is considerable uncertainty and disagreement about the social benefits and costs associated with many policies. This model might be particularly appropriate at times such as the present when governments face deficits.

In assessing a particular public outlay, the financial feasibility model would measure as costs both the transfer element of government outlays as well as the true implicit resource cost, rather than just the latter as under the cost-benefit model. Moreover, the opportunity cost of funds might be measured at their higher marginal value than at their average value and much greater attention might be paid to prevailing interest rates in computing this.

Equity considerations are likely to receive much more explicit and direct consideration under the financial feasibility approach than under the pure cost-benefit model. Since the government is much more concerned with the attainment of specific objectives than social welfare maximization, it may be more inclined under this model to totally ignore net benefits accruing to specific non-targeted groups than under the cost-benefit model. Also, under this model, deadweight costs imposed by policies on the economy might be downplayed or ignored altogether. For example, a

rental housing policy might be considered a success, even if it created some distortions in real estate markets, so long as it resulted in sufficient numbers of low rent units at low tax cost to the government.

Another characteristic of the financial feasibility model is that, as with the cost-benefit model, it is partial equilibrium in nature. Indeed, because of the presumed narrow focus of the government under this model, analysts utilizing this framework may be inclined to overlook even many indirect effects that are taken into account under the cost-benefit framework.

iii) The Private Sector Model

The predominant assumption underlying this model is that private sector markets are efficient and should be relied upon as much as possible to allocate resources within the economy. Under this framework, the role for governments is limited and an important objective of policy is to minimize government interference in markets. By way of contrast, an implicit underlying assumption to the cost-benefit model is that many markets are imperfect and require government involvement to correct such imperfections or "market failures".

Under this model, policies that restore market neutrality are given much greater precedence than under the cost-benefit model. An example of the application of this approach to policy making might be provided by certain policies implemented under the tax reform initiatives implemented in Canada, the United States and other countries over the past few years. For example, one important element of the corporate initiatives was the reduction in substantial differences in marginal effective tax rates (METRs) across industry sectors, firm size classes and so on. This was often done with no attempt to assess formally the objectives, costs or benefits associated with differences in

specific cases. The underlying assumption seemed to be that elimination of METR differences was good in and of itself based, presumably, on a reference base of private market neutrality.

Under the pure private sector market approach to policy making, there is no need for an analyst of a particular policy to link efficiency criteria. The reference base underlying any policy prognosis is always the pursuit of competitive markets. The pursuit of equity objectives may still be supported by proponents of the market approach to policy making to complement the purported efficiency advantages of relatively unimpeded markets. This is because resources, including natural ability and acquired human capital, are not equally distributed among members of society.

iv) The General Equilibrium Model

An alternative evaluation to the essentially partial equilibrium analysis of cost-benefit model is that of general equilibrium analysis. Unlike cost-benefit analysis, general equilibrium analysis assesses the full implications of a policy change for the entire economy, rather than simply the limited partial equilibrium effects for the market or industry most directly affected by the policy change. Most general equilibrium analyses tend to be highly aggregative in nature with few economic sectors identified separately. This contrasts with the usually highly refined sectoral or even project-specific focus of most cost-benefit analyses. Most general equilibrium analyses also tend to be based on comparative static analysis wherein the beginning and final effects of a policy are captured by the model, but not the timing or specific path that the economy will follow in attaining the new equilibrium. Dynamic general equilibrium models that map out the transitional path from one equilibrium to the next are, however, possible.

General equilibrium analysis tends to be employed where the policy changes are relatively large and where their influences are felt across a number of sectors and markets, such as the free trade agreement or assessment of the effects of the overall tax reform package. The evaluation results may, in some cases, be quite different when the full general equilibrium effects of a policy are examined than results from a partial equilibrium cost-benefit analysis. For example, an inappropriate partial equilibrium analysis of the effects of caps on rent charges may conclude that they reduce rents for tenants. However, a general equilibrium analysis may reverse that conclusion based on an analysis of the overall long-run situation prevailing after all markets achieve equilibrium under the new policy regime. The conclusion from this analysis may be that capital shifting out of rental markets to other sectors where returns are higher may actually result in fewer rental units and higher quality-adjusted rents for tenants.

As with cost-benefit analysis, efficiency effects under general equilibrium analysis are linked by converting all effects to common real discounted terms, often expressed as a percentage of GDP, GNP or national income. General equilibrium analysis tends to be too aggregative in nature to provide sufficiently detailed information for analysis of the equity effects of policies, although some models provide information on distributional effects for owners of different factor inputs (capital, labour or real property), different regions or different industry sectors. These effects would typically be reported separately from efficiency effects for consideration by policy makers.

Qualitative effects are often impossible to evaluate within a formal general equilibrium framework.¹⁸ Thus, model conclusions may be challenged when such effects are likely to be significant.

v) The Dynamic or Growth Model

A final evaluation framework we will consider is the dynamic or growth model framework. In comparison with static evaluation frameworks that tend to ignore the dynamic implications of policies, growth models have as a central focus, the effects of policies that are likely to significantly change the capacity of the economy to produce over time. This evaluation framework tends to be appropriate when a policy is likely to have a significant effect on the rates of capital accumulation, factor input development or technological innovation. Examples might be major policies affecting research and development, education, training, savings or the development of energy reserves.

Under the growth model framework, efficiency effects would again typically be linked by aggregating all such effects and expressing the result as a percentage of aggregate product or income. As with general equilibrium models, detailed equity implications of policies are ignored in growth models.

The results of applying a growth model framework may in some cases overturn conclusions based on analyses that ignore the long-term dynamic implications of policies. For example, some serious analyses of Canadian energy policies during the seventies and early eighties have concluded that restrictive pricing policies over that period (which may well have been introduced based on short-term considerations) had a significant long-term negative impact on industry adaptation and innovation and thus on ability to compete internationally.

A growth model framework would typically be inappropriate for examining issues relating to the taxation of rental housing because of the magnitude and nature of taxation changes affecting the sector. It is, however, possible for rental housing tax changes to be affected by larger policy initiatives that are

motivated by growth concerns. For example, a general growth oriented environment that favoured low rates of taxation on capital investment might significantly affect the types of policies that are brought in for specific sectors such as rental housing. The impact of the growth concerns might therefore overpower most other considerations in the design of tax policies affecting the rental housing sector during such a period.

V. AN APPLICATION OF THE FRAMEWORK: THE MURB PROVISION

In this section, I apply elements of several of the different frameworks for linking assessment criteria outlined in the preceding section in a purely hypothetical and highly stylized examination of the multiple unit residential building (MURB) tax provision. The intent is not to design a complete evaluation framework for the MURB provision. Rather, in accordance with the study Terms of Reference, the objective is simply to illustrate how applying different linkage models to the same assessment criteria generate different outcomes.

As discussed in Section II, the Multiple Unit Residential Building (MURB) provision is an exception to the general provision that losses for tax purposes arising from the application of capital cost allowances (CCA) to rental property income cannot be deducted from other non-rental income. The CCA on MURBs can be offset against any other income as an incentive for taxpayers to invest in these types of dwelling units. Thus, tax deferral benefits from faster write-offs are more widely available. With respect to the creation of new MURBs, the provision terminated at the end of 1981. However, the ability of CCA-created losses to be deductible against other income continued to be permitted for MURBs existing at that time. A measure introduced in 1987, disallowed the deduction of CCA-generated losses from other income for persons acquiring existing MURBs after June 17 of that year, and for existing owners of MURBs, after 1990. A subsequent change extended the deadline for existing MURB owners to the end of 1993.

As will be the case with many rental housing tax expenditures, it is unlikely that the precise objectives of the MURB provision could ever be discerned with complete precision.¹⁹ In part, this is because it is impossible to get inside the heads of policy makers of that time to determine the precise considerations and

expectations that motivated a particular measure. Also, it partly reflects the fact that the objectives of any policy measure will vary from individual to individual, including policy makers.

For example, some may view the MURB as primarily a potential stimulus to disadvantaged regions or to a depressed rental construction industry. Others may view it as a way of assisting renters, and particularly lower income renters, by expanding the availability of rental units and hence lowering rents. Others may view its objective to be simply that of a tax shelter--as one more way of lowering effective tax rates on higher income investors, presumably to stimulate savings and investment. Still others may view its objectives as being nothing more than to reinstate what they perceive as "normal" tax rules in the case of personal investments in rental housing. The different objectives that could be ascribed to the MURB provision is therefore quite large and diverse.

The measurement of efficiency and equity effects for the MURB provision, or any other provision, do not depend on knowledge the part of the analyst of the past objectives of the measure. These findings are the outcome of positive economic analysis. In addition, knowledge about the past objectives of measures may be irrelevant in particular cases. The original objectives may have been ill-conceived or may have changed over time due to changed circumstances.

Insight into current objectives is useful, however, in order to assess which potential impacts are most significant for policy decisions, and to compile findings in ways that best highlight these impacts. This applies to both efficiency and equity effects. Assistance in doing this could come from a variety of sources, including statements by politicians, theoretical insights from positive economics about the potentially most

significant impacts of the particular measure, and current policy statements by government departments.

I will assume for purposes of this illustration, that the current objectives of the MURB program are to create jobs in a depressed construction industry and to increase the supply of affordable rental housing for lower income individuals. I examine in turn below how the study might be approached from the perspective of several of the different evaluation frameworks outlined above and how different conclusions might result from the different frameworks. It should be emphasized that the discussion is fairly general in nature.

i) Cost Benefit Analysis

Cost-benefit analysis in its purest form is concerned with the maximization of societal welfare. The efficiency effects relating to the MURB program might, however, be interpreted in an evaluation to be measured by the net incremental value to society of the new rental housing units created by the MURB program. As secondary pieces of information, the analyst would naturally also report estimates of construction jobs created and of the supply of additional rental units for lower income individuals.

There are many potential ways of approaching this issue at a technical level, however, we will avoid issues associated with methodology and assume that the study finds the following facts with regard to the specific impacts of the MURB program on the rental housing sector:

- net present value (NPV) of incremental rental units created (as indicated by the net present value of all future rents minus input costs, all discounted at a social discount rate of 10 % and employing shadow prices where appropriate): \$1 bil.;

- number of additional construction jobs created in person-years: 6,000;
- distributional information:
 - gross NPV of incremental low income units: \$1 bil.
 - gross NPV of incremental high income units: \$3 bil.
 - NPV of program resource costs: \$3 bil.

Based on the NPV of net benefits of \$1 billion, the project would have to be considered a success in terms of its overall welfare effects, at least if one accepts the appropriateness of the underlying partial equilibrium focus of the study. Based on the two primary objectives of current policy makers, however, the program might well be scrapped because it has net resource costs of \$3 billion and creates only 6,000 construction jobs (\$500,000 per job) and because the NPV of incremental low income units resulting from the program (\$1 billion) falls short of total program resource costs (\$3 billion) by \$2 billion. In a different economic environment in which relatively low priority was placed on the creation of construction jobs and redistributive effects (for example, in a buoyant economy experiencing a general shortage of rental units), the program might well be judged favourably, again assuming that the underlying partial equilibrium nature of the analysis is appropriate. Thus, the effectiveness of a program as indicated by a cost-benefit analysis might be judged significantly differently under different economic conditions or policy environments.

ii) General Equilibrium Analysis

An underlying assumption for the results of the cost-benefit analysis to be accepted is that the tax changes under the MURB

program affect largely only that sector and do not have a significant effect on prices or resource allocation in other sectors. Careful analysis may, however, indicate that assumption is inappropriate under the circumstances and that the magnitude and potential impact of the program is sufficient to warrant extending the analysis to an overall assessment of the final economy-wide effects of the program. Again avoiding questions of methodology, the analysis might conclude that, the resource costs are much larger than estimated under the partial equilibrium cost-benefit analysis and that the measure is inefficient. This might, for example, be the case if significantly higher taxes had to be imposed on other industries in order to maintain government revenues constant under the program, and this created significant distortions and imposed large deadweight costs on the economy.

iii) Financial Feasibility Analysis

During periods of significant budget deficits, policy makers may be less concerned about the pure welfare effects as indicated by either partial equilibrium analysis or general equilibrium analysis. They may, instead, give much higher weight to the purely financial implications of the MURB program. A financial feasibility analysis might find that the net present value of foregone government revenues (discounted at market interest rates rather than social discount rates) was \$500,000 per rental unit created. It might therefore conclude that the program was completely unacceptable on financial grounds. Under this analysis, the government, by basing cost on tax rather than resource costs, is including purely revenue transfers as costs of the program, and is ignoring all indirect distortions and private sector costs created by the program. Depending on the relative values of these components, the financial feasibility model might arrive at either more or less favourable conclusions about the program than the cost-benefit model.

iv) The Private Sector Model

An adherent to the perfect efficiency of private markets might view the MURB program and the tax restrictions it addresses as nothing more than market interference that prevents rental housing markets from allocating resources to and within the sector as efficiently as possible. He or she might conclude, on prior grounds, that the redistributive objectives of the MURB program (subsidization of renters and support for the construction sector) are misguided and that income support for low income people would best be pursued through other more direct, less distortionary mechanisms.

v) The Growth Model

As noted in Section IV, growth model considerations are unlikely to be directly relevant in the context of rental housing tax measure such as the MURB program.

VI. SUMMARY AND CONCLUSIONS

In this study, I have addressed issues associated with the identification of tax measures applying to the rental housing sector, the criteria that are appropriate to apply in their assessment, and some different model frameworks that might be employed in their evaluation. In identifying rental housing tax expenditures, I have concentrated on those tax measures that do not satisfy the criterion of neutrality with respect to their application to the rental housing sector. Tax measures were thus identified that more-or-less specifically target the rental housing sector or that exclude that sector from rules that apply generally to other sectors. These exclusions may be either relieving or restricting to the rental housing sector, thus giving rise, in this context, to tax measures that have positive and negative effects on investing in the sector.

I then discussed the concepts of equity and efficiency, the generally accepted economic criteria for evaluating government policies. I highlighted aspects of those criteria that should not be overlooked in evaluating rental housing and other tax measures. In part, that discussion was intended to emphasize issues that arise because of the joint tax policy and rental housing objectives and impacts of such measures.

I then discussed five different model frameworks that might be applied by analysts in assessing evaluation criteria in particular evaluation contexts. The intent of the analysis was to highlight that different frameworks, based on different underlying assumptions, perspectives and objectives and conducted in different policy environments, could result in significantly different conclusions about the effectiveness and desirability of a particular tax provision. Alternative model frameworks were applied in the context of the MURB tax provision. A hoped-for indirect benefit from this study is better insight into ways of

making the underlying assumptions, philosophies and perspectives of different evaluation frameworks, and their potential implications more explicit in evaluations of rental housing tax expenditures.

**APPENDIX: FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL
INVESTMENT**

FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL INVESTMENT

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>Other¹</u>
1972	<p>Rental investors except corporations in the business of real estate and life insurance companies are no longer able to reduce non-rental taxable income with CCA deductions from rental property.</p> <p>CCA recapture can no longer be avoided by pooling different rental properties. All taxpayers must include any rental property with a capital cost of \$50,000 or more and acquired after 1971 in a separate class for CCA purposes.</p>			
1974				<p>Land developers may no longer deduct property taxes or interest payments (on funds borrowed to acquire or develop land) from other income.</p> <p>The Multiple Unit Residential Building (MURB) program is begun, allowing investors in MURB certified rental projects to use CCA, soft cost deductions to offset income from other sources. The program is applicable to units begun between November 18, 1974 and the end of 1975. (Certain other conditions apply)</p> <p>The sales tax on all major classes of construction equipment is abolished.</p>

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1. "Other" includes MURB program changes and changes in the treatment of CCA and Soft Costs specific to MURBs.

FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL INVESTMENT

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
1974 cont				<p>The sales tax rate on buildings and construction materials is cut to 5% from 8%.</p> <p>Manufactured goods which alternately could have been fabricated on a construction site are not taxed on their sale price - though their inputs are subject to the reduced sales tax on building materials. Examples of such goods include ready-mix concrete, pre-cast concrete structures, septic tanks, and steel structures.</p>
1975				<p>The MURB program is extended for two years, for units begun prior to January 1, 1978.</p>
1976	<p>The deduction for terminal losses is made mandatory in the year in which the last asset in a class is disposed of, and the provision for terminal loss deduction is added to the Income Tax Act. For taxation years beginning after May 25, 1976, any negative balance in the undepreciated capital cost of a class of depreciable property must be recaptured.</p>			
1977		<p>Expenses incurred in disposing of depreciable property may be offset against the proceeds of disposition, in determining recapture or eligible capital amounts.</p>		<p>The MURB program is extended for one year, to the end of 1978.</p>

FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL INVESTMENT

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
1978	The permitted rate of CCA write-off on wood frame buildings is reduced from 10% of the undepreciated balance to 5%, in line with the available CCA rate on other buildings.			<p>The MURB program is extended for one year, to the end of 1979.</p> <p>Interest and property taxes on land held by developers which are incurred after Nov. 16, 1978 may be deducted from other income as they are incurred (reversing 1974).</p>
1979			Certain soft costs incurred in a building's development and construction must be deducted in the period to which they relate (e.g. fees for cash flow guarantees must be pro-rated over the guarantee period).	
1980				The MURB program is reintroduced, to be available for buildings whose construction begins between Oct 28, 1980 and Jan. 1, 1982. (Program was allowed to expire Dec. 31, 1979)
1981	In the year an asset is acquired, CCA deductions are limited to one half the normal depreciation rate available. The provision is applicable to assets acquired after Nov. 12, 1981. (This is referred to as the "half-year rule".)	The capital gains exemption for principal residences is restricted to one principal residence per married couple. The exemption will not apply to unmarried individuals under 18 years of age.	Costs related to real property or the acquisition of real property (e.g. promotion expenses, legal fees, interest expenses during construction, property taxes) incurred after Nov. 12, 1981 must be capitalized in the purchase price instead of being deducted as they occur. Principal business companies are exempted, and the deduction for carrying costs of land adjacent to uncompleted buildings is disallowed. Relief is granted for buildings begun prior to January 1, 1982, (subsequently extended to taxpayers with building footings or other base supports commenced in 1982.)	The half-year rule applies to MURB designated projects beginning in 1982.

FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL INVESTMENT

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
1982	<p>The exemption permitting CCA deductions to reduce non-rental income is removed for land developers where a lease-leaseback arrangement exists; a separate CCA class is prescribed for such property. (Such an arrangement would exist where a taxpayer or partnership has a leasehold interest in a property and the property is leased by the taxpayer or partnership to a person who owns the land on which the property is situated or an interest therein.</p> <p>Terminal loss rules are modified to deny full deduction for demolition or other disposition of buildings after Nov. 12, 1981. The loss is either added to the capital cost of any other building owned by the taxpayer and depreciated, or the loss is added to the cost base of any land owned by the taxpayer. In any other case, one-half of the loss on demolition of the building will be treated as a business loss.</p>		<p>Projects qualifying for soft cost deductions will not lose eligibility because of a construction delay in 1982, provided construction proceeds in 1983 without undue delay.</p>	<p>For MURB projects afforded relief from the "half-year rule" of 1981, construction is required to proceed without undue delay.</p> <p>Interest expenses incurred to earn investment income from property can only be deducted to the extent of such income (exclusive of capital gains) for the year, with any excess carried forward against future investment income. These rules do not apply on funds borrowed to finance rental property acquired before Nov. 12, 1981.</p> <p>A reserve in respect of the profit attributable to unpaid installments is provided over a maximum period of three years for dispositions of real property that give rise to ordinary income. The computation of the reserve will be based on the portion of total proceeds that remain unpaid over a three year period.</p>

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<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
1987	<p>For assets acquired after 1980, CCA may not be claimed until the year in which the asset is put into use. CCA will be claimable at the earlier of: 1) the time at which the property is first available for use, 2) two years after the date of acquisition by the taxpayer. Where the claiming of CCA has been delayed for two years after acquisition, the half-year rule will not apply.</p> <p>The rate at which CCA may be charged on buildings acquired after 1987 is reduced from 5% to 4%, on the declining balance.</p>		<p>Construction period soft costs incurred after Dec. 31, 1987 must be capitalized subject to the following five year transitional period: 1988 - 20% capitalized, 1989 - 40%, 1990 - 60%, 1991 - 80%, 1992 and subsequent years - 100%.</p>	<p>Carrying charges incurred after Dec. 31, 1987 on vacant land owned by land developers or sellers, and on vacant land held in the course of business, must be capitalized subject to the same transitional period as for soft costs.</p> <p>The tax shelter for investments in existing MURBs is ended. Persons acquiring existing MURBs after June 17, 1987 will not be allowed to create tax shelter losses by deducting depreciation against other income, and after 1990 (subsequently extended to after the end of 1993), existing MURB owners will not be able to create such losses.</p>
1988		<p>The availability of the capital gains exemption for individuals is reduced, in any year, by the amount of "cumulative net investment loss" (CNIL) claimed after 1987. CNIL is equal to the amount by which an individual's investment expenses for the year and prior years commencing after 1987 exceed his or her investment income for the same period. Investment expenses include, for example, interest relating to a property that will yield income, or a loss for the year from leasing or renting real property owned by the taxpayer or a partnership. Investment income includes interest, dividends and other income from property, and income from renting or leasing real property and not otherwise included. (CNIL did not affect the exemption prior to 1988.)</p>		

FEDERAL TAX CHANGES SINCE 1972 APPLYING TO RENTAL INVESTMENT

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
1991				The manufacturer's sales tax is replaced with the 7% Goods and Services Tax (GST). When newly constructed rental housing is acquired for lease to others, the full purchase price is subject to the GST. Residential rents have tax exempt status (so that tenants do not pay tax on their units).
1992		The \$100,000 capital gains exemption for secondary residences is removed. This does not have any impact on gains from real estate used in an active business.		

TAX STATUS OF RENTAL INVESTMENT PRIOR TO 1972

<u>YEAR</u>	<u>CAPITAL COST ALLOWANCE</u>	<u>CAPITAL GAINS</u>	<u>SOFT COSTS</u>	<u>OTHER</u>
Status Pre- 1972	<p>Depreciable assets such as rental housing are allowed a depreciation expense, or capital cost allowance (CCA). The CCA rates for each class of asset (such as wood frame buildings) are intended to accord roughly with the economic life of the asset. CCA is subject to recapture (i.e. brought back into income) when the asset is sold: the difference between the sale value and the undepreciated value of the asset is added to the investor's taxable income.</p> <p>CCA recapture can be avoided if property of the same class is acquired in the same tax year as the year of disposition, for an amount at least equal to the amount of recapture.</p> <p>All investors may use any excess CCA deductions (above the amount required to reduce taxable rental income to zero) to offset taxable income from sources other than rental property.</p> <p>The full rate of CCA deduction can be applied from the first year of acquisition.</p> <p>Where the owner of rental property disposes of all property in a particular class and does not acquire property of the same class prior to the year end, he or she is permitted to deduct as a terminal loss the undepreciated capital cost of the class which was not previously written-off.</p>	<p>Capital gains arising from the sale of an asset are not taxable.</p>	<p>First time costs/expenditures incurred by the owner of a new rental property which are not related to the actual acquisition of the fixed assets are the project's "soft costs". They include mortgage insurance and application fees, interest paid during construction, cash flow guarantees, landscaping, legal fees, property taxes and levies etc.</p> <p>Soft costs can be deducted as paid, regardless of the period to which they relate. Costs can be deducted against income from other sources, and are subject to recapture.</p>	<p>Land developers can deduct from other income the carrying costs incurred on their land holdings. These costs include property taxes, interest payments on funds borrowed to acquire or develop land, and other costs associated with holding undeveloped land.</p> <p>Losses on rental property arising from a situation where rental revenues are insufficient to cover the out-of-pocket expenses associated with the project generally can be deducted from income from other sources. Such expenses include interest payments and operating costs.</p>

ENDNOTES

1. Preparation of this report was done under the auspices of the Strategic Planning and Policy Division of Central Mortgage and Housing Corporation. The technical and financial assistance of the Corporation is gratefully acknowledged.
2. See Canada, Department of Finance (1985).
3. In selecting rental housing tax measures for inclusion, I deviate in one significant respect from the past practices used by the Department of Finance in identifying tax expenditures. In the tax expenditure accounts released to date, the Department has identified and estimated costs for only positive tax expenditures--that is, tax expenditures that confer a benefit on certain taxpayers. I have attempted to ensure that all measures that are selective in their impact on the rental housing sector are included, irrespective of whether that impact is positive or negative.
4. In the 1979 and 1980 tax expenditure accounts, the Department of Finance identified the non-taxation of imputed rental income from owner occupied housing as a tax expenditure. The Department excluded the measure from the 1985 account on the grounds that it was "...universally viewed as not being a source of funds that should or could feasibly be subject to tax." However, various countries have taxed this item so that the argument does not appear defensible. Moreover, feasibility is a matter to be determined in an evaluation rather than dismissed in an ad hoc manner.
5. See Winch (1973), for a concise overview of the welfare foundations of policy analysis in economics.

6. Indeed, both increased investment and increased labour employment are properly measured as costs since they represent the utilization of scarce resources that have alternative uses. It is the output that these factors produce that is the benefit to society. Increased employment is sometimes measured as a benefit when there is extensive unemployment. However, the correct treatment is to assign labour a suitably low (or even zero) opportunity cost in such cases.

7. An example where the focus of an analysis on intermediate objectives may be justifiable is provided by Jenkins (1990). Jenkins finds that two tax shelter finance arrangements (limited partnerships and flow through shares) typically result in a significantly greater tax cost to the government than is actually received by the developer. He therefore concludes that the tax finance schemes are cost-ineffective. Jenkins notes (p. 273-274) that full evaluation of the financing vehicles would necessitate evaluation of the induced real investments as well as the financing scheme. He still, however, concludes (correctly, in my view) that the schemes are wasteful since other means of transferring money to developers could readily be devised that did not result in more than one dollar in tax cost for every dollar transferred.

8. for a discussion of the need for unified assessment of both equity and efficiency criteria in the assessment of tax policies, see Bitker (1980).

9. See, for example, Richard Musgrave and Peggy Musgrave (1980), chapter 10; and Boadway (1979), chapter 9.

10. For an analysis of these costs in the case of the Canadian income and payroll tax systems, see Vaillancourt (1989).

11. Conceptually, net benefits are measured under the cost-benefit model by summing changes in surplus accruing to consumers and owners of factors of production as a result of a policy change. Positive surplus arises if consumers (owners of factors of production) value the good acquired (factor supplied) more (less) than they value the total resources given up (acquired).

12. This is essentially the view taken by Musgrave, 1969.

13. For a discussion of applying this approach, see Gramlich (1981).

14. Many alternative weighting schemes have been developed in the economics literature (see Gramlich 1981), including weights of greater than one for some groups in circumstances where social welfare preferences or constraints on redistribution indicate this is appropriate.

15. The Treasury Board (Canada, Treasury Board, 1982) came down on the side of separate reporting of distributional benefits, essentially in the context of direct government expenditure programs.

16. This is a common argument for either ignoring or down-playing equity issues in evaluations. I personally disagree that equity issues are typically of lower status than efficiency issues, particularly in the case of rental housing tax measures, which will often be introduced to achieve equity objectives. If subsequent redistributive measures are introduced to offset inadvertent equity effects, then the two measures should be evaluated together. This is, in part, because the two measures are intended to achieve one combined set of objectives and, in part, because efficiency-neutral redistributive measures are few and far between so that any efficiency effects of the subsequent redistributive measure should also be assessed.

17. It will always be necessary, however, to measure the full efficiency costs of the measure and to compare those to the weighted benefits accruing to different individuals.

18. General equilibrium models have, however, been applied in the analysis of qualitative factors for which quantitative proxies can reasonably be devised, such as in analysis of the pollution consequences of alternative energy policies.

19. For some ruminations on the possible motivating factors behind the MURB provision, see Brown (1982).

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