RECAPTURING OF UNEARNED INCREMENTS,

LAND TAXES AND BETTERMENT LEVIES

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PREFACE

This is the final report of the research project entitled "Recapturing of Unearned Increments, Land Taxes and Betterment Levies" prepared for Canada Mortgage and Housing Corporation (CMHC). It reviews theories of recapturing gains in land values through land taxes and betterment levies and analyzes the experiences of Canada, Britain, Australia and the U.S.A. (Pittsburgh) in implementing these measures.

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Despite all this help, we bear the responsibility for the shortcomings of this report. The draft of this report was completed in October 1993 and the revised copy was delivered to CMHC in June 1994. Comments of anonymous referees on our draft helped clarify obscurities that were not obvious to us.

ABSTRACT

This study revisits the issue of recapturing increments in land values. It reviews the contemporary theories and examines empirical experiences of administering various recapture measures in Australia, Britain, Canada, and USA (Pittsburgh). Recapture measures can take four basic forms; ie. (i) site and land taxes, (ii) development cost charges, (iii) betterment levies and (iv) tenurial rearrangements, such as land readjustments. The theoretical review suggests that there are no unqualified advantages of any one instrument. The specific conditions in a particular situation have much more bearing on the outcome of a land tax or betterment levy, for example, than what is expected on the basis of conceptual arguments. The experiences of Australia, Britain and Canada do not offer conclusive evidence of effectiveness of land taxes or betterment levies in raising large revenues or fulfilling land use objectives.

The study found little basis for general purpose recapture taxes or levies. Rather the empirical experience suggests that any radical changes in the basis of property tax meets with political and ideological resistance. It appears that current impact fees, development charges and special assessments applied at the point of land development or change in land use offer promising ways of recapturing increases in land value. The public policy should focus on improving the efficiency, fairness and administrability of these instruments.

EXECUTIVE SUMMARY

This study was commissioned by Canada Mortgage and Housing Corporation to assess the effectiveness of various public instruments to capture land value increases. The work is mostly based on a review of literature. It reviews the theoretical and empirical literature dealing with land value taxation. Institutional issues are raised through published case studies describing precedent attempts to tax land value. Practical issues were explored through discussions with Canadian tax assessors and developers. The recovery options are described and the main conclusions are summarized below.

The Range of Instruments

The **first** set of instruments that can be used to recapture the "unearned" increments in land value include site and land value taxes. When improvements are taxed only partially and land fully, the tax is called a "graded" land value tax. Canada's western provinces use a graded land tax as do some provinces of Australia, New Zealand, Jamaica, India, South Africa, and the cities of Pittsburgh and Scranton in the U.S. Speculation taxes are also used to recover land value increases.

Land speculation tax is aimed at recapturing excessive profits realized by landowners from area development and growth. Ontario's land speculation tax (1974) is an example of a recapture instrument explicitly fashioned to deflate the land price spiral and to capture a portion of inflationary gains.

The **second** class of recapture measures are the development cost charges based on the public actions benefiting developers and property owners directly. The fees are established by the cost of providing services that increase land value. Linkage and impact fees extend the scope of recapture measures by requiring cash payments for the off-site community services that help sustain balanced development.

The **third** group of recovery instruments consists of the betterment levies that attempt to identify particular districts in which public investment and policy changes create development potential. They are based on land value increases, not necessarily service cost. They may be instituted by voluntary arrangements as in the creation of special tax districts.

The **fourth** group of recapture measures consists of tenurial re-arrangements. Examples include the expropriation of developable lands and interjection of public ownership for the time needed to transform the land use and provide the needed infrastructure. Land readjustment is a method of financing urban development whereby authorities develop services for private landowners in return for a portion of the land. This tenurial device has been extensively used in Korea and Japan. The creation of development rights is another tenurial approach to even out land value changes arising from public decisions. This group of recapture instruments are non-fiscal and they make use of public regulatory powers to recapture and redistribute unearned increments.

<u>The Expected Consequences of Land Taxes</u>

The theoretical review of the expected consequences of a shift from a general property to a land value tax yields the following conclusions:

1. The reduction in the tax on improvements encourages investment in real estate and reduces the distortions created by the excise characteristics of the balanced property tax, should a neutral alternative be used to maintain public expenditures. A change to a "hypothetical" neutral tax would increase land-use efficiency and the efficiency of resource allocation in general.
2. Localized increases in land value taxes coupled by reductions in property taxes can increase the market price of land within the jurisdiction. This conclusion is relevant to "special districts".
3. When land value is defined as "market value", the land value tax is not neutral but encourages early development. Early development lowers housing prices and lowers project density relative to what it would be under a perfectly neutral tax.
4. The reduction in project density due to the timing effect of the tilt in tax rates is likely to be less than the increase in density due to the substitution effect created by lowering the tax rate on improvements. The usual net effect of the tilt is to encourage the more intense use of land should all other factors remain

constant. Empirical work on specific local conditions is needed to develop a full assessment of the tilt policy.

5. The timing effects will, in most cases, be swamped by the expected future increases in development cost charges and the expected increase in resistance to urban growth. The extent of the consequences depend on market conditions.

6. Land value taxes based on assessments that do not consider the specific or potential uses of a site are neutral. A switch from a general property tax to a "standard value" land tax increases the intensity of land use and improves the efficiency of resource allocation.

7. The equity aspects of a neutral "standard value" tax have to be assessed empirically but it is most likely that tilting the tax rates creates higher regressive consequences. Land value taxes penalize most the owners of deteriorating inner-city buildings that offer low-priced housing. The tilt would speed up the replacement of the structures that under-use their site's potential.

8. A tax on development profits, when accurately assessed, is neutral.

9. When suburban developers and landowners limit their time horizons or do not consider development options as though they are changing over time, land value taxes increase a city's spread relatively more than do property taxes.

The Observed Consequences of Land Value Taxes

The review of empirical studies suggests that a shift from a

general property tax to site value tax coupled with an aggressive pro-development program may encourage commercial development and increase densities in the inner city. The change to land value taxes within parts of a metropolitan area is likely to redistribute development spatially toward the jurisdictions taxing land values and reducing burdens on buildings. The overall effect of a region-wide change on the density of residential development has not been determined empirically.

The published work on the Pittsburgh experience suggests that the incidence of the shift to land value taxation is regressive. The tilt in tax rates favours new office buildings and middle-class homeowners at the expense of commercial, industrial and multi-family buildings in poorer neighbourhoods. Much of the development activity that occurred in the downtown, however, is attributed to the pro-development environment and tax abatements rather than to the tilt policy.

In general, the published Australian studies are inconclusive and biased. A Melbourne case study appears to show that municipalities with the land value tax attract development and have higher density projects due to the substitution effect of the tax. This finding is in complete accord with theoretical deductions. When some municipalities within an urban region switch to a land value tax, more development and more dense projects can be expected. More work is needed to determine the extent to which taxes, rather than the other factors that may accompany a pro-development stance, affect development activity and project

density.

Impact Fees and Betterment Levies

It is extremely difficult to develop a system of cost-based development charges that furthers both efficiency and equity goals. Betterment levies are, from a theoretical viewpoint, neutral and have appeared to be equitable when accurately assessed and collected at the time of development. However, fairness and efficiency is not likely to be attained in practice given the measurement problems and administrative costs created by people wishing to exploit the situation. Allowing compensation for decreases in land value, as a general policy, will increase rent-seeking behaviour to the extent that would make the likely costs of the policy exceed the expected gains.

The general development cost charge based on average cost pricing that raises revenue but leaves locational choices unaffected is used throughout Canada and can have the beneficial political effect of helping reduce resistance to growth. This leads to more development in the long run and indirectly reduces housing prices. Political, rather than economic, factors make these instruments appear attractive.

The main concern with these charges is their fair and impersonal assessment. Voluntary associations with the public-private sector sharing the increases in land value can increase development opportunities during fiscally difficult times.

Institutional and Practical Issues

The assessment and monitoring of land values is a task fraught

with ambiguities and procedural limitations that have a bearing on the effectiveness of recapture measures. The frequency of assessment, the professionalism and credibility needed of the assessors, the existing tax and property laws, and the distribution of taxing powers among various levels of government are factors affecting the realization of recapture objectives.

Assessing land value separately from buildings is a complex and judgemental task. There is an inevitable disjunction between the current market values and the assessment values due to the time lags between assessment cycles and the business cycles driving land value trends. Assessments of site value seldom reflect the full market value of land as is assumed to be the case in theoretical evaluations of this instrument. Other assessment-related factors affecting the efficacy of these instruments are the definition of exemptions, the appeals and the public's lack of acceptance of the assessors' judgements. The experience of Canada and Australia suggests that the legal, procedural and political factors have a much stronger role in determining the structure of land taxes than is conceded by the public finance theory, or by the proponents of such taxes.

Market prices may not reflect the 'probable use' of a site as zoning becomes flexible and new practices of bonusing, negotiated development or Transfer of Development Rights create possibilities of increasing land values on strategic sites in unanticipated ways. These considerations distract from the exaggerated claims of proponents about the benefits to be realized from site value or

graded land tax.

The land value tax worked well in the early part of this century to realize the objective of breaking up large landholdings and accelerating the development of land. With increased urbanization and the evolution of land policy, new objectives emerged, such as the controlling of urban sprawl, curbing speculation and ensuring the adequate land supply of developable land for housing. The site value tax did not prove to be an effective instrument in the latter phases of national development and thus was rescinded. Today, the Prairie provinces of Canada and some states in Australia retain graded land tax. Yet in both these countries, the land tax is just a variant form of property tax and there is little evidence of any difference between the two in terms of policy outcomes. In Australia only a small proportion of the increase in land value has been recaptured. Requirements for the stability in tax revenues over time necessitated that sharp reductions of assessments in recessionary times be resisted. As the municipality's need for revenue increases, its land value tax has been redefined to resemble the broader based general property tax.

Our case study of the extensive British experience with betterment taxes yields the following conclusions:

1. Betterment levies affect property rights and their assessment raises strong ideological and political issues. Britain's betterment levies were introduced four times by periodic Labour governments, only to be rescinded or emasculated by the Conservative governments following them.

2. Betterment levies appear attractive in property boom periods, but the recession following booms precipitates the need for reducing the constraining effects of taxes on the area.
3. The recapture capability of a betterment levy depends upon the proportion of the land value increment that is taxed away. When the proportion is high, it dries up the supply of land by reducing the incentive to develop. When the proportion is low, the levy does not yield enough revenue to justify the assessment and collection cost.
4. Betterment levies in Britain have evolved since the nationalization of development rights in 1947. Each policy refinement to correct previous ills produced new contradictions and tensions. Each successive design of the levy responded to the unintended consequences of the last levy. Other policy objectives were continually intruding upon the initial goals of betterment levies and instrument was adjusted to help ensure adequate land for housing, offer compensation for decrements in land value, help meet the fiscal requirements of local governments, respond to the demands of assessment system, etc.
5. In Britain, each betterment levy produced much less revenue than was expected. The instrument was administratively burdensome and politically divisive. After four decades, Britain merged land value gains with capital gains for tax purposes.
6. Betterment levies make sense in periods of property boom but

before the instrument can be recalibrated and instituted to allow the full collection of land value increases, the market seems to take another turn.

7. Betterment levies and land taxes have not only to meet the criteria of equity and efficiency but also to hold up to the norms of neutrality, objectivity, simplicity and clarity, stability and administrability. The operational structure of a recapture measure is far more significant in determining its effectiveness than its conceptual elegance. The enthusiasm expressed by proponents of land value taxation is not justified by practice. The case studies do not show any unqualified advantage to be attributable to land value taxation.

The social and economic institutions of a country and its political conditions structure a tax or a recapture instrument. Presently, there is a state of 'satiation' with taxes of any land. Any new tax is likely to meet stiff resistance. The political and social costs of transforming property tax into land tax outweigh any promised financial and land policy gains.

CONCLUSIONS

Overall, this study points out that numerous land policy and fiscal objectives are linked with recapture measures. Often the fulfilment of one objective, say raising sufficient revenues, comes at the cost of others, such as rising land prices and consequently, housing costs. A land tax or betterment levy conceived for

realizing one objective often militates against other public purposes. There is little basis to hold any single measure, such as land tax or betterment levy, as the instrument of choice for fulfilling the multiplicity of public purposes. Caution should be exercised in attempting to any radical change in property taxation. Political, administrative and cultural factors affect the feasibility and the outcome of changes in the property tax.

In contemporary times, impact fees and special district assessments more promising instruments of recapturing increments in land values and recovering public investments. These instruments should be sharpened to make them more efficient, fair and administrable. This should be the focus of current policy thrusts.

RÉSUMÉ

L'étude commandée par la Société canadienne d'hypothèques et de logement visait à évaluer l'efficacité de divers instruments publics servant à recouvrer la plus-value des terrains. Il s'agit principalement d'une revue des études à caractère théorique et empirique portant sur la taxation de la valeur des terrains. Les questions institutionnelles sont abordées par le biais d'études de cas publiées présentant des tentatives d'imposer la valeur des terrains. Quant aux questions pratiques, elles sont examinées dans le cadre d'entretiens avec des évaluateurs et des promoteurs canadiens. On trouvera ci-dessous la description des diverses options de recouvrement et le résumé des principales conclusions.

La gamme des instruments

Le premier ensemble d'instruments qui peuvent servir à recouvrer la plus-value «non gagnée» des terrains comprend les taxes sur la valeur des emplacements et des terrains. Si les améliorations ne sont taxées que partiellement tandis que le terrain est taxé pleinement, on parle de taxe progressive sur la valeur des terrains. Les provinces de l'Ouest canadien utilisent cette technique, tout comme certaines provinces de l'Australie, la Nouvelle-Zélande, la Jamaïque, l'Inde, l'Afrique du Sud et les villes de Pittsburgh et Scranton aux États-Unis. Les taxes sur la spéculation servent aussi à recouvrer l'augmentation de la valeur des terrains.

La taxe sur la spéculation foncière vise à recouvrer les bénéfices excessifs réalisés par les propriétaires fonciers en raison de l'aménagement et de la croissance du secteur. La taxe de ce genre imposée par l'Ontario en 1974 visait expressément la déflation de la spirale du prix des terrains et le recouvrement d'une partie des gains inflationnistes.

La **seconde** catégorie de mesures de recouvrement comprend les droits d'aménagement perçus à l'égard des mesures publiques qui avantagent directement les promoteurs et les propriétaires. Les droits sont fixés en fonction du coût des services qui accroissent la valeur des terrains. Les droits de compensation poussent le recouvrement plus loin en exigeant des versements au comptant pour les services communautaires à distance qui permettent un développement équilibré.

Le **troisième** groupe comprend les droits d'amélioration par lesquels on tente de reconnaître les secteurs où l'investissement public et l'évolution des politiques suscitent des possibilités de développement. Ces droits se fondent sur la plus-value des terrains, et pas nécessairement sur le coût des services; ils peuvent résulter d'ententes volontaires, par exemples dans le cas de la création de districts fiscaux spéciaux.

Le **quatrième** groupe de mesures comporte les changements de mode d'occupation, par exemple l'expropriation des terrains aménageables qui restent propriété publique le temps qu'il faut pour transformer l'utilisation du sol et pour installer l'infrastructure nécessaire. Le changement de mode d'occupation est une façon de financer le développement urbain par lequel les pouvoirs publics aménagent des services pour les propriétaires privés en échange d'une partie des terrains. Cette méthode a été utilisée beaucoup en Corée et au Japon. La création de droits de développement est une autre technique pour égaliser les changements survenus dans la valeur des terrains à la suite de décisions publiques. Ce groupe de mesures de recouvrement est non fiscal et utilise les pouvoirs de régie pour recouvrer et redistribuer les plus-values non gagnées.

Les conséquences prévues des taxes sur la valeur des terrains

L'examen théorique des conséquences prévues du remplacement des impôts fonciers ordinaires par des taxes sur la valeur des terrains aboutit aux conclusions suivantes :

1. La réduction de la taxe sur les améliorations encourage l'investissement immobilier et réduit les déformations découlant du caractère d'accise de l'impôt foncier équilibré, si on utilise une solution de rechange neutre pour financer les dépenses publiques. L'emploi d'une taxe neutre «hypothétique» accroîtrait l'efficience de l'utilisation du sol et de l'affectation des ressources en général.

2. Des augmentations localisées des taxes sur la valeurs des terrains conjuguées à des réductions des impôts fonciers peuvent accroître la valeur marchande des terrains sur le territoire en cause. Cette conclusion s'applique au «districts spéciaux».

3. Lorsque la valeur des terrains se définit par la «valeur marchande», la taxe sur la valeur des terrains n'est pas neutre mais encourage un développement hâtif, c'est-à-dire que les prix des maisons et la densité des ensembles sont inférieurs à ce qu'ils seraient dans le cas d'une taxe parfaitement neutre.

4. La réduction de densité des ensembles due à l'effet de rythme du déséquilibre des taux d'imposition sera vraisemblablement moindre que l'augmentation de densité découlant de l'effet de substitution créé par l'abaissement du taux d'imposition sur les améliorations. L'effet net le plus fréquent est d'encourager une utilisation plus intense du sol si tous les autres facteurs demeurent constants. Il

faudra des travaux empiriques portant sur des conditions locales particulières pour évaluer pleinement cette politique.

5. Les effets de rythme seront dans la plupart des cas emportés par l'augmentation prévue pour l'avenir des droits d'aménagement et de la résistance à la croissance urbaine. L'étendue des conséquences dépend de la conjoncture.

6. Les taxes sur la valeur des terrains fondées sur des évaluations qui ne tiennent pas compte de l'utilisation spécifique ou potentielle d'un emplacement sont neutres. Si l'on remplace l'impôt foncier général par une taxe sur la «valeur normalisée» des terrains, on intensifie l'utilisation du sol et on améliore l'efficience de l'affectation des ressources.

7. Il faudrait une évaluation empirique pour mesurer les effets d'une taxe sur la «valeur normalisée» des terrains sur le plan de l'équité, mais il est très probable que le déséquilibre des taux d'imposition accroisse l'effet régressif. Les taxes sur la valeur des terrains pénalisent surtout les propriétaires d'immeubles en mauvais état dans les centres-villes qui offrent des logements à bon marché. Le déséquilibre aurait pour effet d'accélérer le remplacement des immeubles qui sous-utilisent le potentiel de leur emplacement.

8. Si l'évaluation est correcte, une taxe sur les bénéfices du développement est neutre.

9. Si les promoteurs et les propriétaires de banlieue limitent leur horizon temporel ou ne tiennent pas compte de l'évolution des diverses options d'aménagement, les taxes sur la valeur des terrains accélèrent l'étalement urbain relativement plus que l'impôt foncier ordinaire.

Les conséquences observées des taxes sur la valeur des terrains

Les études empiriques donnent à penser que le remplacement de l'impôt foncier ordinaire par une taxe sur la valeur de l'emplacement, conjugué à un programme dynamique d'encouragement du développement peut favoriser le développement commercial et accroître les densités dans le noyau central des villes. Le passage à des taxes sur la valeur des terrains dans certaines parties de la zone métropolitaine risque de déplacer le développement vers les territoires où l'on impose la valeur des terrains en réduisant le fardeau sur les édifices. L'effet global d'un changement à l'échelle de la région sur la densité du développement n'a pas été mesuré de façon empirique.

Les travaux publiés sur l'expérience de Pittsburgh indiquent que l'effet du passage à une taxe sur la valeur des terrains serait régressif. Le déséquilibre des taux d'imposition favorise les nouveaux édifices à bureaux et les propriétaires de la classe moyenne aux dépens des immeubles commerciaux, industriels et multifamiliaux dans les quartiers pauvres. Une bonne partie de l'activité de développement survenue dans les centres-villes est toutefois attribuée à un environnement favorable au développement et à des dégrèvements fiscaux plutôt qu'à la politique de déséquilibre.

En général, les études australiennes publiées sont peu concluantes et biaisées. Un étude de cas réalisée à Melbourne semble démontrer que les municipalités qui ont adopté une taxe sur la valeur des terrains attirent le développement et ont des ensembles de plus grande densité en raison de l'effet de substitution de la taxe. Cette conclusion concorde tout à fait avec les déductions théoriques. Lorsque certaines municipalités d'une région urbaine donnée passent à la taxe sur la valeur des terrains, on peut s'attendre à l'accélération du développement et à la densification des ensembles. Il faudra d'autres études pour déterminer dans quelle mesure ce sont les taxes, plutôt que les autres facteurs qui peuvent accompagner un préjugé favorable au développement, qui influencent l'activité de développement et la densité des ensembles.

Les droits d'impact et d'amélioration

Il est extrêmement difficile de mettre au point un système de droits d'aménagement fondé sur les coûts qui favorise à la fois les objectifs d'efficience et d'équité. Sur le plan théorique, les droits d'amélioration sont neutres et ont semblé équitables lorsque l'évaluation est correcte et qu'on les perçoit au moment du l'aménagement. Cependant, dans la pratique, il est peu probable qu'on réalise la justice et l'efficience, compte tenu des problèmes de mesure et des coûts administratifs générés par ceux qui veulent exploiter la situation. Une politique générale de compensation de la diminution de la valeur des terrains aura pour effet de stimuler de comportement de recherche de loyers à tel point que les coûts probables de cette politique dépasseraient les bénéfices escomptés.

Les droits généraux d'aménagement fondés sur le coût moyen, qui augmentent les recettes sans influencer les choix d'emplacement sont en usage partout au Canada et peuvent avoir l'effet politique bénéfique d'aider à réduire la résistance à la croissance. Il en résulte un développement accru à long terme et une réduction indirecte des prix des logements. Ce sont des facteurs politiques plutôt qu'économiques qui rendent ces instruments intéressants à long terme.

Le principal problème de ces droits est la justice et l'impartialité de l'évaluation. Des associations volontaires par lesquelles le secteur public et le secteur privé partagent l'augmentation de la valeur des terrains peuvent accroître les possibilités de développement malgré une conjoncture difficile.

Questions institutionnelles et pratiques

L'évaluation et le suivi de la valeur des terrains est une tâche lourde d'ambiguïtés et de difficultés techniques qui peuvent réduire l'efficacité des mesures de recouvrement. La fréquence des évaluations, le professionnalisme et la crédibilité dont doivent faire preuve les évaluateurs, les lois fiscales et foncières en vigueur et la répartition des pouvoirs d'imposition entre les divers paliers de gouvernement sont des facteurs qui influencent la réalisation des objectifs de recouvrement.

Évaluer la valeur des terrains à part de celle des bâtiments est une tâche complexe qui fait appel au jugement. Il est inévitable qu'il y ait un écart entre la valeur marchande et la valeur évaluée, en raison du décalage temporel entre les cycles d'évaluation et les cycles commerciaux qui régissent la valeur des terrains. Il est rare que l'évaluation de la valeur d'un emplacement corresponde à la pleine valeur marchande du terrain, comme le supposent les évaluations théoriques de cet instrument. Parmi les autres facteurs liés à l'évaluation qui influencent

l'efficacité de ces instruments, mentionnons la définition des exceptions, les appels et le manque de confiance du public envers les jugements des évaluateurs. L'expérience du Canada et de l'Australie porte à croire que les aspects juridiques, méthodologiques et politiques ont un effet beaucoup plus déterminant sur la structure des taxes sur la valeur des terrains que ne l'avouent la théorie des finances publiques ou ceux qui proposent de telles taxes.

Il se peut que la valeur marchande ne représente pas «l'utilisation probable» d'un emplacement donné, car le zonage s'assouplit et de nouvelles pratiques telles les primes, le développement négocié ou la cession des droits de développement suscitent la possibilité d'accroître de façon imprévue la valeur de certains emplacements stratégiques. Ces facteurs viennent mitiger les prétentions exagérées quant aux avantages qui découlent des taxes sur la valeur des terrains ou des taxes progressives.

Dans la première partie du siècle, la taxe sur la valeur des terrains a bien réussi à réaliser l'objectif de démanteler les grandes propriétés et d'accélérer l'aménagement du territoire. L'urbanisation accrue et l'évolution des politiques foncières ont fait apparaître de nouveaux objectifs, tels la lutte contre l'étalement urbain, la réduction de la spéculation et la prestation d'une offre suffisante de terrains aménageables pour le logement. La taxe sur la valeur des terrains ne s'est pas avérée efficace dans les dernières phases du développement et a donc été abrogée. Aujourd'hui, les provinces des Prairies du Canada et certains États d'Australie conservent une taxe progressive. Pourtant, dans les deux pays, cette taxe n'est qu'une variante de l'impôt foncier et on ne constate guère de différences entre les deux pour ce qui est du résultat. En Australie, on n'a recouvré qu'une petite fraction de l'augmentation du prix des terrains. L'obligation d'assurer la

stabilité des recettes fiscales interdisait de réduire considérablement l'évaluation en cas de récession. À mesure que les municipalités avaient besoin de recettes supplémentaires, on redéfinissait la taxe sur la valeur des terrains pour la rapprocher de l'impôt foncier ordinaire.

Notre étude de cas de la longue expérience britannique des taxes d'amélioration aboutit aux conclusions suivantes :

1. Les taxes d'amélioration influencent le droit de propriété et l'imposition de telles taxes soulève des problèmes idéologiques et politiques. À quatre reprises, un gouvernement travailliste a imposé des taxes d'amélioration en Grande Bretagne et à chaque fois, le gouvernement conservateur suivant les a abolies ou adoucies.

2. Les taxes d'amélioration semblent intéressantes en période de boom, mais la récession qui suit oblige à réduire l'effet restrictif de ces taxes sur le secteur.

3. La capacité de recouvrement de la taxe d'amélioration dépend de la proportion de la plus-value qui est absorbée par la taxe. Si cette proportion est élevée, cela peut tarir l'offre de terrains en réduisant l'encouragement à l'aménagement. Si la proportion est faible, les recettes de la taxe ne compensent pas les coûts d'évaluation et de perception.

4. Les taxes d'amélioration ont évolué en Grande Bretagne depuis la nationalisation des droits de développement en 1947. Chaque nouveau raffinement de la politique en vue de corriger les défauts antérieurs a produit son lot de contradictions et de tensions. Chaque nouvelle version de la taxe tenait compte des conséquences imprévues de la précédente. De nouveaux objectifs s'ajoutaient constamment

et il fallait modifier la taxe pour assurer une offre suffisante de terrains pour le logement, compenser la diminution de la valeur des terrains, satisfaire les besoins financiers des gouvernements locaux, tenir compte des exigences du système d'évaluation, etc.

5. En Grande Bretagne, les recettes de chaque taxe d'amélioration ont été inférieures aux prévisions. Cette mesure entraînait un lourd fardeau administratif et était source de dissensions politiques. Après quatre décennies, la Grande Bretagne a fusionné le traitement fiscal de la plus-value des terrains et celui des gains de capital.

6. Les taxes d'amélioration ont un sens en période de boom, mais il semble toujours que la conjoncture s'inverse avant qu'on ait eu le temps de les réaménager pour percevoir la totalité de la plus-value.

7. Les taxes d'amélioration et les taxes sur la valeur des terrains doivent non seulement se conformer aux critères d'équité et d'efficience, mais aussi respecter les normes de neutralité, d'objectivité, de simplicité et de clarté, de stabilité et de facilité d'administration. La structure opérationnelle d'une mesure de recouvrement est un facteur beaucoup plus important de son efficacité que l'élégance théorique. L'enthousiasme des tenants de la taxe sur la valeur des terrains ne se justifie pas en pratique. Les études de cas ne révèlent aucun avantage indubitable de la taxe sur la valeur des terrains.

Ce sont les institutions sociales et économiques d'un pays et ses conditions politiques qui structurent les taxes ou les instruments de recouvrement. On est actuellement «saturé» de taxes sur les terrains. Toute nouvelle taxe risque de se heurter à une forte résistance. Les coûts politiques et sociaux de la transformation de l'impôt foncier en taxe sur les terrains l'emportent sur les avantages qu'on en attend sur le plan financier ou politique.

CONCLUSIONS

Globalement, l'étude révèle que les mesures de recouvrement sont liées à de nombreux objectifs sur le plan des politiques foncières et de la fiscalité. Souvent, la réalisation d'un premier objectif, comme augmenter les recettes à un niveau suffisant, entraîne des conséquences négatives par ailleurs, comme l'augmentation du prix des terrains, et donc des coûts de logement. Une taxe sur la valeur des terrains ou taxe d'amélioration conçue en fonction d'un objectif donné est souvent contraire à d'autres objectifs publics. Il n'y a guère de justification pour faire d'une mesure unique, comme la taxe sur la valeur des terrains ou la taxe d'amélioration, l'instrument privilégié pour réaliser toute la multiplicité des objectifs publics. Il faut faire preuve de prudence lorsqu'on tente d'apporter un changement radical aux impôts fonciers, car des facteurs politiques, administratifs et culturels influencent la faisabilité et le résultat des changements dans ce domaine.

À l'époque contemporaine, ce sont les droits d'impact et les districts spéciaux qui offrent les meilleurs promesses de recouvrer la plus-value des terrains et de récupérer les investissements publics. Ces instruments devraient être raffinés pour les rendre plus efficients, justes et faciles à administrer. C'est cela qu'il faut actuellement viser.

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RECAPTURING OF UNEARNED INCREMENTS, LAND TAXES AND BETTERMENT LEVIES

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CHAPTER 1

CONTEXT AND CRITERIA

1.1 REPORT STRUCTURE

This report examines alternative ways of recapturing the gains in land value attributable to public investments and city growth. The first chapter presents study objectives, definitions and develops the planning context for instituting and evaluating such measures. It shows the place of the tax issue in the evolution of Canadian planning and local finance practice and demonstrates how local finance issues and planning contexts are inseparable. The goals that are sought through the use of land taxes, exactions and betterment levies are listed. Criteria used to evaluate tax options are briefly presented. A typology of recapture measures is developed and various taxes and levies are defined.

Chapter 2 focuses on general land value taxes and summarizes the theoretical literature on how a shift from a general property tax to one that places greater burdens on land is expected to affect urban densities, the price of housing, and the spread of cities. Empirical evidence from econometric studies of the shift are reviewed before developing conclusions regarding the likely consequences of such a policy. Because the chapter at first focuses on the theoretical literature, it is, at times, demanding of the reader's patience. Readers without a background in economics can skip the theoretical discussion and move to the review of the empirical findings and the conclusions without losing their place in the broader discussion of recapture options and their

feasibility.

Chapter 3 moves away from general tax policies that shift the burden from improvements to land and considers a different way to recoup public investment through taxes and user charges targeting specific sites or areas. It examines a range of exactions and betterment levies and shows how their design determines their impacts and, therefore, their evaluation and implementation. Cost based charges aim to recapture at least a part of the public infrastructure investment. They are described and assessed before considering betterment levies that constitute a tax on land value increases. The extent of the resources needed to design effective instruments is considered. Departures from the design principles modify their land use impact. Political considerations and the generally increasing demand for development regulation and growth control are also discussed, as they can form a second-best argument favouring the use of recapture measures.

Chapter 4 develops the case studies to show how land value taxes and betterment levies have been implemented and the problems and potentials that have emerged. The chapter starts by presenting Canada's experience with land taxes, speculation taxes and development charges. The U.K. history of planning gains and its attempts to recover all increases in land value is reviewed in some depth to provide information on institutional and administration issues. The Australian and United States precedents are reviewed. Exactions are also discussed.

Chapter 5 looks at the practical limitations to the

instruments by summarizing interviews conducted with Canadian tax assessors and developers. It explains the concerns assessors have regarding the implementation of non-market-price based assessment. The chapter also presents developers' reactions to exactions and shows the judgmental nature of the methods used to assess the tax liabilities.

Chapter 6 presents conclusions and recommendations.

1.2 STUDY OBJECTIVES

Our interest is in recapturing unearned increments for public benefits and in assessing the effectiveness of various measures to bring this about. To do this, the theory behind different types of local taxes will be reviewed. The institutional framework and land policy objectives will be explored to identify political and administrative factors that bear on issues of land taxes and recapture measures. Lessons of comparable experiences from the U.S., Britain and Australia will be presented. The review of new recapture measures, such as developer exactions, will examine the incidence of the recapture measure, i.e., who pays, and show how this is related to the design and implementation of the instrument. It is hypothesized that by focussing on developers, instead of landowners, the new measures have bypassed some of the political and administrative resistance to the policy of recapturing land value increases. This study, thus, describes the political economy of unearned increment taxation. The review and analyses of precedents yields recommendations regarding the potential of

instituting recapture measures.

This inquiry does not examine the validity of the theory of unearned increment but assesses the effectiveness of various measures and instruments. Undoubtedly there are contrary views on the doctrine of unearned increment, but none questions the basic premise that land values increase as a result of public investment and other people's actions. The dissent is usually due to the capital gains from land being treated differently than similar increases in the values of other goods and services. Why are land gains more "unearned" than other changes in rents? Why should landowners be especially targeted for recapture? Although the questions are appropriate for policy discourse, they have already been debated for almost a century and debated aggressively since the institution of betterment levies under the British Town Planning Act. The questions are ultimately dealt with as part of a more general public policy, often ideologically. Presently the search for new sources of revenue to finance urban development and to lighten municipal and provincial fiscal burdens are driving the search for recapture measures, and the search re-ignites questions regarding the appropriateness of taxing away the unearned increments.

The reward of urban land ownership is the unearned increment in values which in economic lexicon is a rent arising from scarcity and monopoly. From Ricardo to Pigeou, a long line of economic theorists have wrestled with the question of entitlement to land rents and appropriateness of land tax (Prest 1981: 21-30).

Neoclassical economics emphasize the substitutability of site characteristics and transport costs and view land prices as the result of an equilibrium between demand and supply, an equilibrium that is ideally established by a free and unconstrained market. Yet the special nature of urban land due to the extent of external consequences created by the use of the land cannot be ignored and the question of entitlement to 'unearned' values re-emerges regularly. The questions regarding the fairness of land value taxes are made more pointed by the fact that public investment is a significant contributor to increases in land values.

The fairness issue is also raised in the context of growing concern for the environmental degradation. The questions are raised, in part, because federal and provincial financial support for local programs is decreasing and municipalities try, at first, to overcome deficits by raising property taxes which provoke serious political opposition and, then, try just about anything else. James Nicholas describes the situation in the United States, "Every means of finance that could be envisaged has been tried." (Nicholas 1993: 201). Property taxes have fallen from a United States average of $1,421 per occupied dwelling in 1970 to $1,148 in 1988, a drop of 19% in real terms. Nicholas defines and evaluates briefly the "innovative" and "creative" finance instruments that municipalities have had to resort to:

> A creative method of finance is one that shifts the burden to someone--anyone--else. An innovative method of finance is one that gets that person to want to pay that cost. By these standards, many states and localities have been creative, but few indeed have been innovative. No painless methods of finance have been found other than

> those that do not raise money. The frequency of opting for painless taxes that do not raise revenue is reflected in the negative growth of public capital investment. (Nicholas 1993: 207).

The United Kingdom poll tax represented a "creative" fiscal change that did not succeed. Florida's failed effort to tax its corporations' world-wide income is another example of a "creative" effort that was not "innovative" because it raised no funds. The failure of attempts to develop creative and innovative fiscal instruments, Nicholas observes, leads to the

> loss of the qualities that orginally encouraged growth. Non-funding of programs that would correct for the external consequences of growth is [often due to] the inability of municipal officials to decide on who will bear the costs of growth. (Nicholas, p. 208)

In this context, site-rent taxation re-emerges as a potential candidate for funding services that reduce the external cost of growth. Unearned increments are, after all, unearned and perhaps undeserved. They are especially easy to tax when the increase in land value creates costs for other people in the community or region.

1.3 DEFINITION OF OPTIONS

The recapture of land value increments created by public actions has been the primary focus of public measures around the world. In Britain, these are recognized as betterment levies. As long ago as 1531, English sewage rates were levied on properties benefiting, even indirectly, from sewerage works and the Uthwatt Committee of 1942 deemed them to have established the precedents of

charging betterment levies (Expert Committee on Compensation and Betterment 1942: 1106). The Committee defines betterment as:

> ....any increase in the value of land (including buildings thereon) arising from central or local government action, whether positive, e.g. the execution of public works, or negative, e.g. the imposition of restrictions on other land. (ibid: 105)

The British term 'betterment' (or worsement) refers to increments (or decrements) of land values arising from government action. The American equivalent term for betterment is 'windfall' which is "any increase in the value of real estate - other than that caused by the owner - or by general inflation." (Hagman and Misczynski 1978: 15). Correspondingly, 'wipeout' is "any decrease in the value of real estate other than one caused by the owner or by general deflation." (ibid: 5). Windfall (or wipeout) as a concept includes value impacts of both public and private actions, whereas betterment (worsement) are terms referring primarily to the externalities generated by public actions. Windfalls arising from public actions largely come from infrastructure and services development, zoning and subdivision policy and site plan permissions. One way or another, windfalls or betterment are the externalities generated by the planning system.[1]

The foregoing definitions of betterment and windfalls raise two points. One, the positive increments in land values referred to in these terms arise, largely, from planning measures and thus are very much bound with planning objectives. This point is particularly germane to subsequent discussions. It underlines the fact that recapture measures serve two sets of objectives. They

are fiscal instruments to be evaluated by the criteria and objectives of public finance. Yet they are also embedded in land use planning practices and thus are expected to serve corresponding planning and urban development objectives. The British betterment measures always have been designed explicitly as a part of the town planning legislation. The same is the case with the new measures, such as exactions, special district and tax increment financing which are levied explicitly as a part of planning packages. These examples illustrate the dual nature of recapture measures; they are both fiscal instruments and land use planning tools.

Second, externalities that produce increments of land values for some land parcels can also cause the loss of values for others. Public investments and planning decisions also produce decrements or worsements. Zoning, for example, usually raises values of land designated for commercial use but depresses land values of parcels zoned for low density residential. Redistributive effects are also produced by infrastructure investments and policy that redirects growth within metropolitan areas. The negative impacts of public decisions call for compensation in Britain, though in the U.S. and Canada, a loss or reduction of an increased value is not usually enough by itself to call for financial redress. In some cases, the losses come under the provision of "taking" in the U.S. and "expropriation" in Canada if they are so grievous as to almost extinguish all value. From our perspective it is enough to underline that public investments and planning decisions do not always increase land value. They are also a source of loss of

values and practical issues are paramount when considering any local fiscal policy that opens the municipality to general claims for compensation.[2] This study will not address the question of decrement (worsening) primarily because it is a topic that requires another systematic investigation.

1.4 THE RECAPTURE INSTRUMENTS: DEFINITIONS

The focus of recapture measures has been, largely, on the unearned increments produced by public investments and decisions. Privately induced windfalls and wipeouts are usually left to be mediated through contractual arrangements in the market, or through the courts. Thus a discussion of recapture measures turns out to be a review of public instruments for appropriating gains in land values or for charging a fair price for the services that create the gains. These instruments can be grouped into four classes, as indicated in Figure 1. The first is the general land taxes forming the most common means for recapturing the gains in land values. The second is exactions and levies targeted at developers and newly developing areas to recover public costs of development. The third is the betterment levies that attempt to tax land value charges within more limited geographic areas. The fourth is the tenurial changes whereby the public sector assumes ownership of land for the duration of development to internalize land value gains, e.g. expropriation, recoupment or land readjustment. The following paragraphs briefly describe the better known recapture instruments of each group.

The **first** set of instruments are broad based and consider all property in the municipality or urban region as being in the tax base. The changes are levied on all land regardless of the specific improvements or policies the local governments direct on a particular sector or planning district. The three main instruments in this group are the site value tax, land tax, and land speculation tax.

The below-mentioned tax instruments have a broad sweep. They are aimed at almost all property owners. Thus, their enforceability depends heavily on their political and administrative viability.

(a) **Site value tax** is a species of land tax. It is a recurrent tax on the value of raw land, without improvements, in its highest potential use (paraphrased from Hicks 1970: 9). The term 'site value' separates improvements (buildings) from the land and refers to the discounted capital value produced by a stream of land rent in the highest potential use. Thus it incorporates the unearned increment arising from an increase in the usability of land in distinction to its present use. Site value tax has been a favourite of the people who favour recapturing rising values of land.

(b) **Land tax** is a generic term used to describe taxes levied, either exclusively or predominantly, on value. When improvements are taxed only partially (lower proportion of the value) and land fully, such a tax is called a graded land tax. The western provinces in Canada use a graded land tax as do

some provinces of Australia, New Zealand, Jamaica, India, South Africa, and the cities of Pittsburgh and Scranton in the U.S. The rationale of taxing land exclusively or primarily is that taxing land values will recapture part or the whole of unearned increments.

(c) **Land speculation tax** is aimed at recapturing excessive profits realized by landowners from area development and growth. Ontario's land speculation tax (1974) has an example of a recapture instrument explicitly fashioned to deflate the land price spiral and to capture a portion of inflationary gains.

The **second** class of recapture measures are more limited in scope. They focus on the immediate gains in prices arising from public actions and they affect only developers and property owners directly benefiting from change (in use) and development of land. Furthermore, this class of instruments differs from the following group by being cost based. Their burden is established by the cost of providing services that improve land value, not by the amount of increase in land value that is generated. The special assessment traditionally "has been a levy to finance all or part of the costs of public improvements." (Hagman and Misczynski 1978: 311). Such assessments are levied, usually, in a designated special district and they recapture public expenditures on services provided to the district. They are also sometimes called local development charges or exactions.

Exactions is a broad term covering a range of recovery

payments. Broadly defined, exactions are "requirements placed on developers through land-use planning controls to supply some public facility or amenity as a condition for permitting development." (Alterman 1988: 3). Exactions are meant to recover costs, fully or partially, of facilities and services extended to a new development. Thus, they recapture public expenditures which are significant components of unearned increments.

Exactions began as contributions in kind, such as the 5 per cent of land being set aside for parks and open space in new subdivisions in Ontario but have gradually evolved into cash payments and investments in hard and soft public services. Linkage or impact fees extend the scope of exactions by requiring cash payments for off-site community services that are thought to be necessary to sustain balanced development.

When impact fees are legislatively tied to the provision of specific facilities and services in a new development, they take on the form of a development cost charge. Ontario's Development Charge Act (1989) defines development charge as "a charge imposed with respect to growth-related not capital costs against land." This is another instrument of recovering public capital costs of development that normally turn into unearned increment on land value. The focus, like other exactions, is on a particular group of landowners, namely, developers and owners of properties undergoing change of use and infrastructure development.

The **third** group of recovery instruments, the betterment levy, is the oldest form of exaction appropriating a proportion of gains

in land value due to the granting of planning permissions. It is based on the premise that public costs have to be recovered and that land value is directly the function of the advantages conferred on a property by the granting planning permission. Betterment levies, unlike the general taxes on land value, attempt to identify particular districts in which public investment and policy changes create development potential. A betterment levy appropriates a proportion of the land value increase created by public policies. They may be instituted by voluntary arrangements as in the creation of special tax districts.

The **fourth** group of recapture measures consists of tenurial rearrangements to internalize the positive externalities for the public sector. Thus the unearned increment is recaptured as a benefit of realigned public tenure. Among the most common of such instruments are public land banks, expropriation of developable lands and interjection of public ownership for a short period to transform the land uses and infrastructure of an area. The latter's old pedigree goes back to the 19th century in what the Uthwatt Committee called recoupment, i.e., "where the authority responsible for a public improvement are empowered to purchase all or any of the lands in a defined area...with the object of securing to the authority (by subsequent sale, lease, etc.) the benefit of any increase in value...." (Expert Committee on Compensation and Betterment 1942: 116).

Land readjustment is a method of financing urban development whereby authorities develop services on land belonging to a group

of private owners; in return a portion of the developed land is ceded to the government in payment for public investment in services." (Dunkerley 1983: 27). This tenurial device has been extensively used in Korea and Japan.

Finally, creation of a market for development rights (transfer of development rights) is a tenurial approach to even out windfalls and wipeouts arising from public decisions. This group of recapture instruments are non-fiscal and they make use of public regulatory powers to recapture and redistribute unearned increments, including the public costs.

Overall, Figure 2 and the foregoing discussion provide a description of the variety of instruments available for recapturing the unearned increment. We will assess their relative merits in subsequent chapters. Presently the purpose is to underline the conclusion that recapture of gains in value arising from public investments and actions is practiced widely and in a variety of ways. Also, that the recapture measures do not have merely fiscal and economic objectives, but are deeply embedded in planning goals. At this juncture, we will turn our attention to the theoretical issues involved in recapture measures, particularly tax instruments.

1.5 RATIONALE FOR RECAPTURE

Land is a problematic economic goods. Unlike other goods it is not materially produced through human acts. Its physical base, in the form of three-dimensional space, is a gift of nature and by

and large fixed in supply. Yet the human agency has a dominant role in investing this gift of nature with economic value. It is true for all land, but it is truer for urban land whose value essentially derives from its location, provision of community facilities and services, tenure, surrounding activities and amenities, and the general economic and social conditions of a city (Downing 1973). Noteworthy is the fact that most of the attributes which determine value are spill-over effects or externalities of public investments and decisions on the one hand, and private initiatives and neighbourhood conditions on the other. The owner of an urban site is largely a passive agent. The value is largely situational and circumstantial resulting from externalities and public investments. This characteristic is a critical defining element of urban land and it, combined with the fact that its material base is a 'gift of nature', casts ambiguity over the owner's right to appropriate increases in land values.

This ambiguity is the source of long-running arguments about who is entitled to financial rewards arising from gains in land values. Even Adam Smith, the prophet of free markets, maintained that "ground-rents and the ordinary rent of land are species of revenue which the owner, in many cases, enjoys without any care or attention of his own." (Smith 1976: 843). The classical economists preponderantly leaned towards regarding land values and rents as, in the words of John Stuart Mill, riches accruing to owners "in their sleep, without working, risking or economising." (Mill 1909: 818). This notion that returns to land are not the result of an

owner's exertions but a product of, largely, a community's investments has proven to be enduring, despite numerous rebuttals. It is the basis for the doctrine of unearned increments in land values. The term 'unearned increment', though, applies only to increase and not to the whole of land value. The portion of value attributable to initial investments of an owner is often excluded from the purview of 'unearned', although Henry George and his single tax school maintain that land value in total is a community asset.

Inherent in the notion of unearned increment is the suggestion that the value gains thus realized do not entirely belong to an owner, thereby raising questions such as who should benefit from these increases in land values. Isn't the community entitled to a part or whole of financial gains arising from increases in land values? These questions have been not only discussed by economists and political philosophers since Ricardo's formulation of the land rent theory, but also they have been instrumental in shaping land taxation policies in many countries. We are not going to recapitulate the evolution of theories related to the notion of unearned increment and historical justifications for land taxes. This has been more ably done by others (e.g. Prest 1981).

The justification for considering methods that would recapture increases in land values lies in the notion 'unearned'. When increases in land values are produced by actions and decisions of actors other than owners, they represent spilled-over returns of others' investments and efforts. Thus there is ground to recover

leaked-out benefits. This recovery is all the more justified if value increments are attributable to public investments and decisions which often have real or opportunity cost. Furthermore, the financing requirements of public improvement also necessitate recovery of costs and dividends. This consideration is becoming very significant in these days of budget restraints. These arguments have informed the opinions of a long line of economists and political theorists in modern times.

Smith and Mill's views about taxing 'unearned' land rents have already been quoted. Henry George saw in the fixity of land supply the basis of landowners' monopoly which in turn led to a spiral of land values. His remedy, therefore, was taxing the land value increments (George 1879). Marshall, the father of neoclassical economics, thought land to be distinct from other agents of production due to fixity of supply and unique characteristics. For him "site value tax was analogous to the taxation of monopoly profits in that there was a surplus which could be tapped without any deleterious effects on resource allocation." (Prest 1981: 15). Similarly, Pigeou held windfall increments to be similar to wartime excess profits -- both arising from unforeseen circumstances and without efforts on the part of the recipient (Prest 1981: 18). All in all, classical and neoclassical economists have regarded increments in land value differently than capital gains and they have favoured taxing away windfalls. Recent neoclassicists, viewing rent as marginal return to qualitative and locational advantages of sites, tend not to favour treating windfall any differently than

other capital gains.

The idea of recapture is firmly entrenched in political economy and public policies. The practice of recovering public costs, in fact, has outpaced the theory. It is rooted in the ancient taxation doctrines of Britain as the following quote illustrates: "Persons whose property has clearly been increased in market value by an improvement effected by local authorities should specially contribute to the cost of the improvement." (Expert Committee on Compensation and Betterment 1942: 104). Precedents of this principle can be found five hundred years previously in Sewers, Land Drainage and Sea Defence Acts of 1427. It surfaced full-blown in the mandate of the 1894 select committee of the House of Lords on Town Improvements (1894) and thereafter it became a regular feature of town planning legislation of 1909, 1932 and 1947.

In the U.S. the land question was not as pressing; therefore, recapture doctrines and measures have evolved through local practices. The special district and the accompanying assessment to share financial costs of public improvements are an historic device for community investments. Similarly, other measures, such as public corporations and land banking, have been, occasionally, used to capture externalities and pool resources. These devices and measures have been frequently used for irrigation, drainage and urban development. They have shaped the doctrine of recapture in the U.S. It would be a digression to start tracing the evolution of recapture measures at this stage. It is enough to indicate that

recapture of public investment is a practice of historical antecedents with roots in theory and taxation policies. The legitimacy of recapture measures is so widely accepted that it received a universal endorsement at the United Nations Conference on Human Settlement in 1976. The HABITAT conference recommendations sum up the enduring justification of recapture: "The unearned increment resulting from the rise in land values resulting from change in use of land, for public investment or decision, or due to the general growth of the country must be subject to appropriate recapture by public bodies." (HABITAT 1977: 31).

1.6 DEFINITION OF SITE VALUE

An important goal of land value taxation is to improve the neutrality of local taxes and, thereby, promote land-use efficiency and reduce the sprawl of cities. Property, defined as land plus improvements, was generally considered as immovable and the property tax base was, therefore, not erodable. Improvements on land, however, can be undermaintained and the urban spatial structure may change as buildings deteriorate in one part and are rebuilt elsewhere. New construction can be deflected to areas with lower taxes on improvements. Property taxes are generally seen as being non-neutral. The aim of land value taxation is to shift the burden from improvements to land, the one component that is surely not erodable.

All attempts to develop land value taxes require the

definition of "land-value" and this definition is problematic. Urban land is almost always improved in some way by the action of the landowner or the municipality; it may, for example, be assembled, drained, stablized, served by road. Vickery (1970) assesses the importance of this point and suggests that neutrality requires that some "standard state" be defined for land and that the assessed value be based on the consideration of that hypothetical state. The standard state would tell of the characteristics relevant for taxation. It would describe the base condition for land value assessment. Parcels with more improvements would be assessed below the price they would sell for on the open market. Land with fewer than the "standard state" improvements would be assessed at a price above market sales values.

While the acceptance of Vickery's definition would reduce the distortion of the land value tax, assessors generally favour definitions of land value that can be directly related to its sales price without the conjecture about the price effects of deviations from hypothetical conditions. But, land value defined in this way includes the value of the "below grade" improvements and the value developed by plans showing how the site can best be used at present. Taxation based on such a definition would create distortions as illustrated in the following examples by Vickery.

Example 1

> Suppose on the one hand that developer A buys the Hotel Marguery on Park Avenue and 46th Street and demolishes it. It's now one big site, and he puts up a building. Another man goes out and, after years of effort and tremendous difficulty, puts together into one site fifteen or twenty brownstones on 38th Street and finally

sells this assembly or develops it into a new office building. Now what happens to the two under site value taxation?

Obviously, if you tax site value, the Marguery Hotel doesn't suffer very much in the way of an increased assessment, but the 38th Street fellow does. If you were to value each of these sites as a separate unit and then value them again later on as an assembled total, you would find that the tax assessment of the 38th Street fellow has gone up greatly as a result of his operation. This is the sort of improvement, if you like, to land through its assembly that I would hope the tax would not discourage; yet the sort of land value we have been talking about, market value, would almost certainly mean that a good deal of the gain in value which was produced from the efforts of this fellow in assembling the land would be taxed away. This is perhaps the most serious case that I can think of in which market value assessment (without some sort of a standardization) would have an important disincentive effect. In fact, it does in this particular case seem that there has been a misallocation of resources, as shown by the extent to which development has moved northward along Park Avenue instead of southward. (Vickery quoted by Black 1970: 255)

Example 2

Very seldom do you get a transaction in a redevelopment property where you have a site reduced to what I would call standard state. Even then, if you have in a development two sites, one of which as the street already paved and the sidewalk laid and everything else, and the other does not, these will result in different values per front foot or for whatever standard you wish.

Now you want to use these market transactions as the basis for valuing all of the other lots in that neighborhood which have buildings on them, and the question comes up, which of these two values do you use as a basis for valuing the others in the neighborhood, or do you use an average of one or the other? Do you value differently one neighborhood in which the one transaction that you have a record of is a transaction before pavement, and the other transaction in another neighborhood is a transaction after pavement? Do you want to say that the land values of all of the lots in one neighborhood are different from the exactly similar lots in the other neighborhood?

I think, in short, that far from increasing the difficulty, the ability to appeal to some sort of

> standard state would be an assistance in arriving at a uniform assessment. (Vickery quoted by Black 1970: 257)

At the Taxation Resources and Economic Development Conference being reported by Black, the assessors strenuously oppose the definition of "standard state" for land value determination and insist on a market price basis for assessment. Richard Chandler:

> As I said before, I can't accept it because only the economists would know what that standard state was. You might be able to train the assessor. But then the economist and the assessor would be the only two who knew. In other words, the great public would never know what that value represented. They would have nothing to tie it to....
>
> Take the simplest economic concept. How many of the great public know what economic rent is? Now you are going to ask them to understand why the standard value of a lot is different from its market value. The only thing they are going to think is that this is the greatest hoodwink that the economists have ever come up with. (Chandler quoted in Black 1970: 256)

Issues of assessment must be resolved in any attempt to move toward land value taxation. Practical issues are important determinants of the effects produced by a real world change in tax policy and these will be discussed in the case studies and key informant chapters before we can develop conclusions regarding attempts to implement a land value tax policy.

The definitional issue, however, will remain and practical definitions that are linked to the market price of land will fail to completely distinguish between property including improvements and land alone as a basis for taxation. The more appropriate quest is for a shift away from a tax that penalizes equally capital improvements and land to one that places a greater burden on the

land component but still taxes improvement, especially below-grade, at a lower rate.

1.7 GOALS AND CRITERIA OF LAND POLICY

1.7.1 Goals

The conventional economic criteria for developing tax options and evaluating proposed changes in tax policy are well established and can be found in most public finance texts. Boadway and Wildasin (1984) discuss the normative aspects of taxation and their incentive effects. Earlier, Carl Shoup (1969) divided the criteria into two groups as defined by the degree to which they allow or do not allow consensus among most people interested in public finance. Equity and efficiency concerns are distinguished. In the case of exactions and betterment levies, the conventional public finance criteria have to be expanded to recognize the linkage with land-use planning. This is done by considering the goals that are pursued by the use of exactions and betterment levies.

In practice, all recapture measures, be they taxes, levies or tenurial realignments, are intertwined with land use planning, assessment practices and public policies for the provision and financing of community services. These measures serve two purposes. They address substantive issues of local development and administration. Also, they serve as instruments of economic growth and revenue generation. Both these roles are subject to the criteria of efficiency and equity. Thus, any review of recapture measures has to take into account the legal and administrative

framework in which they are lodged and the variety of social objectives that they address.

The following objectives have been sought through combined planning and fiscal policy:

(1) **To curb speculation in land.**

Speculative rise of land value is regarded as a source of housing unaffordability, shortages of land supply and uncoordinated development in time and space. A notion of normal profit underlies the idea of speculation, and recapture measures appropriately designed are expected to appropriate excessive profits and thereby restrain land prices.

(2) **To ensure adequate and regular supply of land at appropriate locations.**

This goal relates to the functioning of the land market. It aims at ensuring a balance between supply and demand of urban land in quantitative as well as qualitative terms. A critical aspect of this goal is to discourage withholding of developable land and promote a steady release of land supply in the market. Site value or graded land taxes are often cited as suitable instruments for this purpose by their proponents.

(3) **To bring about a balanced pattern of land use.**

The realization of an efficient urban form reflected in proximity of complementary land uses and in appropriate spatial distribution of densities and activities is the guiding principle of urban planning. This is one of the

primary justifications for planning and plans. Yet designation of specific land for certain uses produces windfalls and wipeouts which, if left unaccounted for, result in the subversion of plans. Recapture measures are essential tools to counter such tendencies.

(4) **To preserve amenities and the natural environment.**

Through land use planning, historic buildings, open spaces, floodplains and wetlands are sought to be preserved. The environmental ethos and aesthetic considerations inform this goal which has gained a new urgency in contemporary times. Land banking, betterment/compensation arrangements, acquisition of development rights are some recapture measures deployed to realize this goal.

(5) **To promote adequate employment and housing opportunities for all social groups.**

The ultimate purpose of urban planning is to foster "economic, environmental, cultural, physical and social well-being" (Commission on Planning and Development Report in Ontario 1993: 13). This purpose translated into goals takes the form of affordable housing, local economic development, provision of infrastructure and health and welfare services, etc. The realization of these goals increasingly depends on revenues available for community facilities and services and on the regulatory devices of official plans and zoning by-laws. Exactions and development charges are widely used instruments for recovering public costs and implementing

official plans. Their role as sources of revenue for infrastructural development has become all the more important in this era of budgetary deficits and financial constraints.

(6) **To raise revenue for Infrastructure Development.** This objective has been always implicit in levying of taxes or charges. It has acquired a new urgency in these times when the state is confronted with both a fiscal crisis and fundamental change in the economy. Presently, there is a search for new or additional sources of public revenues, particularly those that can be levied without arousing the ire of tax-weary citizens. These compulsions are prompting a re-examination of recapture measures as a source of revenue for the financially strapped municipalities.

The assessment of impacts of recapture measures should, therefore, consider the political environment and budgetary alternatives should the instruments not be used. Avoiding exactions and increasing property taxes to fund low-priced housing or public infrastructure may, for example, increase the local residents' demand for regulation that prevents new development and fuels price inflation.

All recapture measures are, in practice, tied to one or more land use objectives. They are subject to two sets of criteria: social goals incorporated in land use objectives; and economic considerations of efficiency and equity. The assessment of the effectiveness of these measures becomes a matter of balancing the contribution of the instruments to divergent goals.

1.7.2 Equity Criteria

Taxes are often evaluated according to horizontal and vertical equity criteria. Horizontal equity relates to the equal treatment of people facing the same relevant circumstances. The decision to tax land rent, not the rent developed by the scarcity of baseball talents, for example, is based on the belief that the circumstances giving rise to the two rents are in some way relevant and justify different treatment. Less clear is the justification of the different fiscal treatment of established residents and the in-migrating residents or the new households that are being formed. The definition of the "relevant" circumstances is crucial to the assessment of the fairness of the tax option. The definition is subject to political decisions that affect the overall atmosphere within which business is conducted.

Vertical equity calls for the near equal treatment of people facing nearly equal relevant circumstances. This criterion suggests that some differences can be recognized in the tax system and that the difference can lead to different treatment. The criterion is usually used to justify progressive taxation. The criterion is primarily used to suggest that a small difference in circumstances should not yield a large tax difference. The system of taxation should be gradual in its differentiation across people facing different relevant circumstances. In our case, the likely regressivity of the shift to a land value tax becomes an issue that can only be assessed in the context of regulatory and expenditure policy discussed at the end of Chapter 3.

Among the consensus horizontal equity criteria is the goal of maintaining impersonality in setting tax obligations. This goal assures that property owners facing the same "relevant" circumstances are treated equally. To preserve the horizontal equity attributes of the land value tax, the conditions of the land to be taxed should be broadly defined so as not to allow the special treatment of individual tax payers. The certainty of the tax payment assures that taxpayers can adjust expenditures in light of upcoming tax obligations and guarantees equal treatment in successive time periods. Developers should know in advance of land purchase the charges they will face at a later date.

Continuity in the rate schedule assures vertical equity. Small changes in proposed land uses should not lead to large changes in exactions. Large and small projects should be treated similarly, ie. proportionally. All taxpayers should experience the same chance of making errors in the amount of tax they pay; owners of old buildings, for example, should have the same chance of having their land incorrectly assessed as owners of new buildings on recently sold land. Large developers with sophisticated accounting procedures should be subject to the same (usually meaning proportional) chance of error in the assessment as faced by less formal developers and land owners. Compliance costs should be the same, or proportional to the size of the tax payment. These criteria affect the design of the tax system but call for more refinement than is possible in this overview report.

Most people agree that the tax system should have desired

redistribution consequences but the nature of the desired consequences generates conflict. Most agree that taxes should not generate large and obviously undesirable changes in income and that the disadvantaged should not be excessively burdened. More realistically, special care should be taken in the design of a tax system to avoid hurting the people least able to cope with the added burden. The pursuit of efficiency gains may result in loss of equity position. This criterion may, for example, affect the evaluation of land value taxation. The owners of run-down rental buildings near prime locations have to bear a greater burden as their land is taxed at a higher rate. As the owners are encouraged to upgrade their land use, low-priced housing options shrink. The shift to land value taxation should be accompanied by remedial housing programs when policy makers want to avoid regressive income redistributions.

Among the more controversial of the equity criteria is the choice of the overriding fairness principle to be used in the design and evaluation of tax and expenditure policy. The degree to which a tax schedule is to be designed according to the taxpayer's "ability to pay" as opposed to the "benefits received" is controversial. Property taxes, "quasi taxes" and "prices", are payments for local services that may be justified by the benefits received principle. At times, depending on the design of the instrument, they are pure taxes for which no quid pro quo arrangement can be inferred and the tax should be designed to meet the ability to pay criterion. The design of the instrument and its

evaluation depends on the choice of the governing principle defining equity.

The degree of progressivity that a tax ought to exhibit to satisfy vertical equity is based on conflict criteria. The extent to which a local tax should or should not be used to redistribute income is a matter on which opinions differ. The definition of the "relevant circumstances" to be used to assess horizontal and vertical equity attributes is open to consideration: should the fact, for example, that the building is housing poor people be relevant in establishing its land value?. To what extent is the income of the property owner relevant to the tax assessment? Should owner-residents of rental buildings be treated the same as absentee owners? Is the use of a site to provide needed social services relevant in the assessment of its land value? Should non-profit, or "third sector" housing suppliers, in general, be exempt from the redistributive consequences of a shift to land value taxation?

The spatial distribution of the net benefits of tax and expenditure policy can also generate conflict. To what extent should provincial income tax revenues pay for local services? What is the spatial incidence of changes in tax policy and what type of evidence is to be used to determine the incidence, given that funds for exhaustive analysis are usually not forthcoming? Should inner-city landowners be helped relative to the owners of vacant land at the city's periphery? Should owners of vacant inner-city land be compelled to develop their land before development permission is extended into the hinterland? To what extent should property tax

revenues be redistributed across the municipalities of the urban region to reduce fiscal competition? Should the tax be designed to correct for price distortions created by constraints on agricultural practices at the city's periphery? These questions illustrate the breadth of the evaluation of tax alternatives. They illustrate the policy dimensions to be considered at the local level when considering changing tax bases.

The visibility of tax burdens, the extent to which burdens are real or illusory, is also established by the design of the tax instrument. Development cost charges, for example, make the developer appear to bear the costs of urban growth. The burden, however, is illusory if the developers raise housing prices according to what they say. The illusion of the burden, however, may assuage the existing residents wo bear the external costs of growth, and reduce the intensity of their demand for growth controls.

1.7.3 Efficiency Criteria

Tax policy can affect the way resources are allocated and the way a city evolves. Taxes and subsidies can affect employment levels, facility location, and service utilization. They can induce excess burdens by distorting choices among alternative projects and promoting land use patterns that fail to maximize social welfare.

It is generally agreed that a tax should be neutral unless it is used as a price to cover the cost of negative externalities. In terms of the options discussed here, the neutrality issue will

usually concern the effect of a proposed tax on the quality and timing of urban land conversion. The fiscal alternatives can have distortionary effects by encouraging developers to use more land in the production of housing services than would be the case should all resources and impacts be priced in proportion to their value. Taxes can affect the substitution of land for capital and lead to waste in the sense that a different allocation, a different density or land use pattern, could generate more valued output without corresponding reductions in value generated in other parts of the urban region. Property taxes can also affect the timing of development decisions and development strategy in ways that affect long-run housing price levels. Timing decisions affect the density of development. The next chapter discusses these consequences in the detail permitted by current knowledge.

Conflict criteria concern the extent to which the tax system should encourage economic growth and capital investment. Property taxes are a tax on capital and can affect the amount of savings and capital formation in the country as a whole. These effects are beyond the scope of this report. Urban growth issues are of increasing importance at the local level and tax policy can be used to stimulate or retard city growth. Again, this level of refinement in the design of general tax instruments is left for work by others.

The effect of taxes on risk taking is recognized and general agreement is not attained as to the extent to which risk taking should be encouraged. Taxes on development gains can, for example,

reduce risk-taking behaviour by penalizing potential profits while leaving losses uncompensated considerably. More research on developer risk perception is needed before this issue can be properly addressed. The issue is raised, at this time, to suggest caution before implementing major changes.

Administrative issues are important determinants of the efficiency of a tax system and these are discussed later. Collection and assessment costs are important. Growth elasticity is desired to ensure that revenues rise with population and economic growth and the need for municipal infrastructure and services. Stability in revenue yield is valued by all governments. The volatility of the real estate market should not drive revenue variations. These criteria affect the design of the tax system. They point to the advantages of departing from pure market price assessment to a more stable system.

1.8 Assessment Practices

Evaluation should consider procedures of assessment as well as the administrative arrangements for collecting taxes or levies. The transformation of a policy of recapturing land value increments into enforceable instruments is made through an institutional framework, namely assessment and tax administration and practices. As our case studies will illustrate, in the designing of recapture measures these factors exercise a determining influence. Smith, in discussing special tax on unearned increments, observes that "many of the theoretical advantages of such a tax are often lost when it

is translated from a concept into a specific legislation". (Smith 1976: 1).

The assessment of land value is at best an estimation procedure based on one or more of the three methods, namely (i) market data on sale of comparable land, (ii) replacement cost of a structure subtracted from market value of a building, and (iii) the capitalization of expected income. The determination of increment requires estimating land values 'before' and 'after' the situation causing rise in values and then identifying the component attributable to unearned gains. This is, in outline, the assessment process through which recapture related taxes and levies are turned into charges on individual properties.

The assessment of increment on vacant land where comparable market prices are readily discernible is easy and comprehensible. The process becomes judgmental and less precise in case of built-up areas where land value is estimated as a residual of the price or income of the building. The effectiveness of a recapture tax or levy depends on professionalism of the assessment establishment. For example, the 1968 British betterment levy led to a large volume of disputed cases and many public controversies yielding revenues small enough "to cast doubt upon the worth of levy". (Harriss 1972: 570). Earlier versions of the betterment levy did not fare much better.

The second factor bearing on the design of recapture measures is the tax rate or mill rate, namely, percentage of value collected as tax or charge. The revenue (R) realized for a tax or charge is

a function of the assessed value (V) multiplied by the tax rate (r).

$$R = V \times r$$

In case of a recapture measure, the critical factor is the proportion of increment that will be taxed away. A hundred percent tax on the increment will leave little incentive for an owner to sell land, thereby drying up the supply. Whereas a too low percentage as tax will not yield enough revenue or fulfil public objectives. Also the rate of a one-time charge (e.g. betterment levy) has a different implication than that of a recurrent tax such as a site value tax. The appropriateness of a rate depends upon the market conditions, the legal and administrative system and the policy objectives. It is very much a factor that varies from situation to situation.

Exemptions are another factor having a bearing on the effectiveness of recapture taxes. For almost all tax instruments, be they site value, land tax or betterment levy, some properties and certain forms of value increments are exempt from recapture taxes. Such exemptions are necessary to serve social policy goals. For example, exemptions from property related taxes for charitable institutions, the elderly or farmers. Also, in assessing increments, some exemptions have to be given to account for the owner's investments in the land. Exemptions could be based on historical limitations on public powers in certain cases (eg. aboriginal lands or crown properties). Altogether exemptions have to be built into the design of a tax instrument and they directly

affect the capacity to yield revenues and fulfil policy objectives. Presently the point to be considered is that exemptions are another institutional element that determines the form, substance and effectiveness of a recapture tax instrument. The unintended consequence of exemptions is that they induce a change in market behaviour as people seek to shelter their gains under them.

1.8.1 Timing Issues

The timing of assessment and of collections is established by the design of the contemplated recapture instruments and affects the determination of the magnitude of land value increment. Land values change with time and depend, in part, on the design of the tax instruments. Urban land values have shown cyclical patterns in many parts of Canada and rise and, at times, fall with the business cycle. Land values in Canadian cities have shown two booms and two busts over the span of the last twenty years. Increments estimated at the peak of a boom may disappear along with tax revenues two years later during recessions, for example. Longitudinal price movements make the timing and mode of collection important determinants of impacts and revenue generating capacity.

The timing decisions have bearing on land use and social policy objectives associated with recapture measures. They are directly related to the objective of bringing a steady supply of land to the market and discouraging the holding back of stock for speculative purposes. Proponents of site value or land taxes often argue that the instruments will increase the costs of holding land

and thus help release under-used land to developers. This proposition is based on the belief that there is a direct relationship between the timing of tax collection and the burden created by the tax and the landowners' development decisions. Whether the relationship is that direct is a debatable point.

The timing of the recapture of land value affects the capacity of the instrument to raise revenues, to determine the stability and growth elasticity of revenues and the administrative feasibility of implementing the new tax. It has a bearing on the public's acceptance of the policy. Case studies illustrate these points.

1.8.2 Administrability

A tax or levy should be simple and easy to comprehend for administrative as well as for equity and efficiency reasons. It should be sufficiently flexible to permit changes in revenues with increases or decreases of land values, but it should not be changeable to the extent that impartiality is threatened or certainty of tax burdens is compromised. It should be neutral in the sense that it should not result in unintended changes or distortions in behaviour. Administrative fairness and easy enforceability are other important characteristics of a tax or levy. It should not be open to abuse or arbitrary powers or avoidance. The administrative costs should be minimal in relation to revenue. A tax or levy should have a stable base over time.

1.8.3 Political, Legal and Social Context

The political system and the constitutional framework of a country determine the scope of recapture measures. The division of property rights between public and private domains and the public taxation powers and their distribution among federal, provincial and local jurisdictions are factors that shape recapture instruments. In the same vein, social organization and values lay the ground for who pays and who benefits from public policies. Altogether, these factors are significant contributors to the success or failure of recapture measures. The influence of these factors on the effectiveness of recapture measures cannot be delineated in a neat causal model and in a consistent function. The effects of these factors are conditional upon concurrence of certain conditions and thus they are demonstrable but not always predictable.

The land tenure system and the associated property rights determine whether public powers can be exercised to drain away profits from ownership. British nationalization of development rights and betterment levies would probably have been held unconstitutional in the U.S. The property rights in the U.S. have included the right to profit, and public actions that amount to taking property without compensation generally have failed the constitutional test. There is a large body of court rulings on taking issues and generally the public authority is limited in this respect.

In Canada, the land is an estate endowed by the Crown. The fact that the fountainhead of the bundle of rights in land is the

legislature has more than a symbolic meaning (Qadeer 1985: 9). In Canada, the development value can be recovered without prohibitive challenges. Canadian land use regulations have been seldom challenged on the ground of 'taking' of private property. The recapture measures, as long as they do not amount to expropriation, are within the orbit of legislative authority in Canada. The entrenchment of the Canadian Charter of Rights and Freedoms (1982) in the Constitution restrains public powers. So far property rights are not entrenched though there is a constitutional guarantee that property will not be expropriated without compensation. These are the tenurial and legislative parameters of Canadian land rights within which taxes and levies have to be conceived. The limitations of provincial jurisdiction for taxation are another matter.

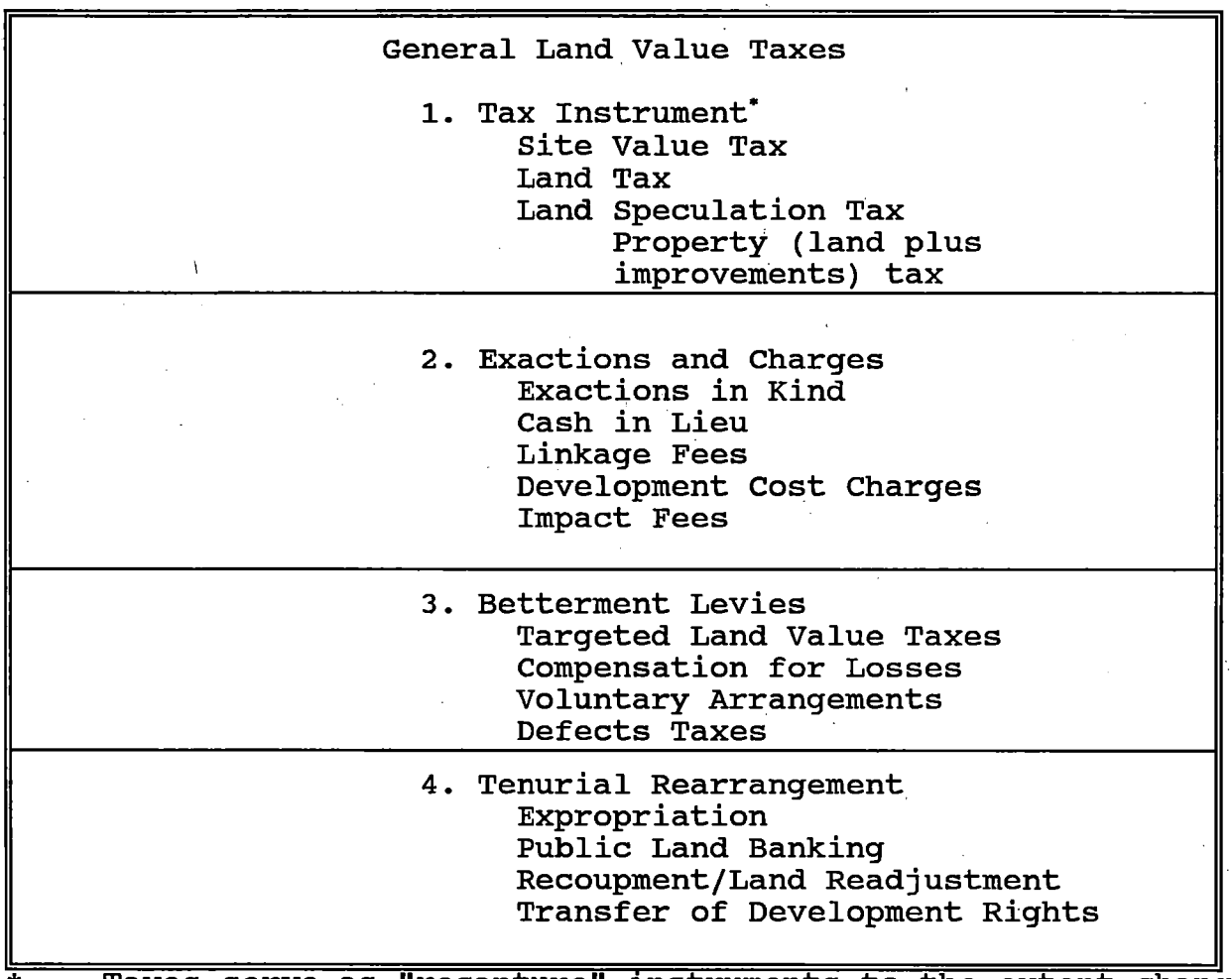
Under Sec. 92(2) of the Constitution Act (1867), provinces have no authority to impose indirect taxes. A betterment levy or development charge has to meet the test of not being an indirect tax. There is an appeal pending in Ontario Court of Justice. The Ontario Homebuilders Association challenged the authority of the York Region Board of Education to levy education development charges on new lots on the grounds of it being an indirect tax. The Court has upheld that charges are a form of indirect taxation contrary to the Constitution Act. All in all, Canadian provinces have the latitude to impose recapture taxes or levies as long as they do not step into the federal tax jurisdiction. Land taxes or levies fall within the scope of property taxes presently administered.

1.8.4 Property Tax Related Issues

Site value taxes or betterment levies are among the fiscal instruments for the recapture of land value increments that are lodged within the institutional framework of the property tax. Therefore, the current status of the property tax as an institution will not only have bearing on the evaluation of the implementability of recapture measures but also on their social acceptability and effectiveness.

FIGURE 1

CLASSIFICATION OF RECAPTURE INSTRUMENTS



* Taxes serve as "recapture" instruments to the extent changes in land values are reflected in the assessment base and tax rates.

ENDNOTES

1. Hagman divides planning induced windfalls into two types: Windfall I - increase in land value accruing from development (planning) permission - a kind of monopoly of land use; Windfall II - value increments resulting from government's installation of infrastructure (Hagman 1978: 364). This type of windfall is the direct result of public investments and is attributable to specific capital works or facilities and services. While Windfall I arises from advantages of restricted permission, Type II is a return to public expenditures.

2. Rachell Alterman, in a private discussion, points out that relatively few court cases (26 she believes) have been launched in Israel as a result of its new betterment/compensation policy. Cultural differences will preclude the replication in Canada. Compensation obligations stimulate rent seeking behaviour. People will not accept losses as part of their contribution to development.

CHAPTER 2

THEORY AND EVIDENCE OF THE EFFECTS OF LAND VALUE TAXATION

2.1 INTRODUCTION

This chapter reviews the theoretical literature that can help describe the effects of a shift from a balanced property tax to a tax on the land component of real estate. It also reviews empirical work on the impact of land value taxation on project density and development activity.[1] It considers the effect of a tilt in tax rates on the intensity of land use by looking at both substitution and timing effects. Incidence issues are discussed when conclusions are possible. Assessment practices are shown to be crucial in determining whether or not a tilt in the tax rates on buildings and land is neutral from an efficiency point of view. Institutional considerations and the effect of land-use regulations are briefly discussed to develop a more realistic context for the theoretical conclusions. The practice of land value taxation and the design of instruments is covered in later chapters.

2.2 THE TRADITIONAL VIEW

The traditional assessment of a general property tax separates the tax base into land and building components. Dick Netzer (1966, p. 204) points to the neutrality of the tax on the land portion of real estate, "since no possible response to the tax can ... improve the situation, assuming that landowners have been making maximum use of their sites prior to the imposition of the tax." The tax on

improvements, however, distorts the returns a property owner can gain from the building relative to the returns that can be gained from alternative investments. The tax on improvements to land raises the perceived cost of buildings and the owner can reduce the tax burden by choosing options that use more land and fewer improvements. The general property tax leads to lower than optimum densities and forces the city to spread more than it would had a perfectly neutral tax been used to finance the needed local services and infrastructure.

The perceived social cost of spreading urban boundaries has increased in recent years as residents resent the loss of access to natural amenities, as the concern for "sustainable development" enters the public's consciousness, as congestion costs rise, and, as limits to water supply and treatment facilities are reached. The perceived cost of the spatial distortions created by general property taxes has increased and the alternative, the land value tax appears to be more attractive. Efficiency and environmental arguments are now supporting the early equity claims in favour of land value taxation. The fairness of land taxation was established by recognizing that landowners do not expend effort in creating land value (Henry George 1979, 333-394).[2] Moreover, much of the value of urban land depends on the consequence of public infrastructure, and society should therefore reap at least a part of the windfall. A tax on land value was seen as a just return for the public sector's investment in infrastructure. A landowner's increase in wealth is a fortuitous event that can without advance

consequences or bad conscience be taxed away for the benefit of the society that creates it.

2.3 CHALLENGES TO THE TRADITIONAL VIEW

Recent developments in economic theory challenge the traditional view by showing that the neutrality of the land value tax depends on assessment practices and on the extent to which landowners and developers perceive their land-use options as changing over the time horizons of their decisions. Furthermore, a land value tax that is neutral from an economic efficiency point of view is inequitable from most points of view. Recent work also shows the dependence of the consequences of a shift from a general property tax to a land value tax on the nature of the local market and on the geographic extent of the tax change.

The next sections of this chapter review the theoretical literature presenting the challenge to the traditional view of land value taxation. It starts with traditional method of analysis and describes the substitution effects created by property and land value taxes. Dynamic considerations are then introduced to assess the timing effects of the land value tax and the consequences of timing distortions and assessment procedures. The discussion continues with the likely consequences of real-world constraints on developers and landowners. Empirical studies are described in the last section.

2.3 SUBSTITUTION EFFECTS

Jan Brueckner (1986) develops the best set of currently available conclusions regarding the substitution effects of a shift from a general property tax toward a land value tax. He considers the conditions that govern the equilibrium positions of profit-maximizing housing producers before and after a shift from a property to a land value tax. His conclusions apply to the projects produced by profit-maximizing developers or to a city formed by a building industry composed primarily of the firms whose managers behave as though they were profit maximizers.[3]

Brueckner examines a function that recognizes the property owner's annual profit per acre of housing production as the difference between the revenues gained from a building and the amortized after-tax expenditures on both the land and the construction component of property. The annual expenditure on improvements is equal to the interest paid on construction costs. Depreciation is ignored to simplify the analysis without damaging the conclusions.

The equilibrium conditions for the suppliers of housing are developed by differentiating the profit function with respect to the amount of the capital improvements placed on an acre of land and then setting the resulting equation equal to zero. Equilibrium, in this theoretical market, requires that the maximum profit per acre of land be driven down to zero by competition. All returns to development are, thereby, in the form of the "normal" profits that are included in construction costs, or in the returns to the

landowner in the form of site rents and increases in land value. At the time of construction the developer is likely to be the landowner and be interested in the increase in land value.

Brueckner examines the profit-maximizing conditions under three sets of assumptions. The **first** looks for the long-run effects of a change in the tax base while housing prices within the market are set exogenously and are not influenced by local conditions. This situation may hold when the change in tax base is limited to one of many metropolitan area municipalities. In this case, general housing price levels may be set by region-wide rather than local conditions. Housing prices (adjusting for quality differences) are the same across the region and the change in tax bases re-directs development to the municipality favouring the builders. The **second** case accepts the change in tax rates across the whole metropolitan area and, thereby, affecting aggregate housing supply. The new policy will affect the relationship between demand and supply in the region and change housing prices. The **third** case examines the immediate impacts of the tax policy. The short-run effects of the change in tax rates is considered to yield conclusions regarding the fairness of the policy and the likely cost of the adjustment to the new tax regime.

2.3.1 Case 1: Geographically Limited Changes in Tax Rates

Brueckner's analysis shows that an increase in the tax rate on land value while holding revenues constant will *usually* allow a reduction in the tax rate on improvements! The increase in the tax rate on land value will not affect the intensity of land

development while all other factors remain constant. A reduction in the tax rate on improvements, however, increases development intensity in the jurisdiction that attracts new development as a result of the new policy. Tilting the tax rates away from the building and toward the land component of property encourages the more intense use of the land and promotes the evolution of a more efficient spatial structure.[4] These conclusions correspond with the traditional view of land value taxation.

The increase in the tax on land value is capitalized into land prices and reduces the apparent size of the tax base. Brueckner's (1986, p. 52) analysis shows that the reduction of the tax on improvements increases the demand for land by builders and puts upward pressure on land prices within this jurisdiction. The analysis shows that the net effect of the increase in the tax rate on land coupled by a revenue equalizing decline in the rate on improvements normally leads to an increase in land values!

> The surprising implication of the analysis is that the positive effect of the lower improvements tax dominates, so that gradation unambiguously raises the value of land. (emphasis ours) (Brueckner, 1986: 52)

This conclusion departs from the traditional view and depends on the exogeneity of housing prices. Price levels can remain unaffected only when the tax policy is implemented over a small part of the housing market and, therefore, does not change the overall supply of housing in the region. The increase in development due to the reduction in the tax on improvements in one municipality does not depress housing prices in the region because offsetting reductions in development occur elsewhere. Land values

increase despite the higher tax on site rents because developers from the rest of the market area are attracted to the municipality that does not tax buildings and reduce their rate of return. In reality, the pro-development stance of the municipal officials will compound this effect.

A land value tax implemented in a special district can lead to an increase in development activity, project density and the market price for land in that district.

2.3.2 Case 2: Metropolitan Wide Changes in Tax Rates

When the tilt in tax rates applies across the entire urban region, housing prices are affected and the profit-maximizing condition have to be established after considering the equilibrium adjustments between demand and supply. Brueckner's analysis shows that the tilt toward land value taxation increases the intensity and the amount of development activity occurring in the region as predicted by the traditional view. This lowers housing prices in the region. The price of housing services must drop after the move to land value taxation to allow the market to clear as a result of the initial burst in development activity. A drop in housing prices normally reduces land values:

> In fact, a simple sufficient condition for dr/do [the total change in land rents due to a total change in the site rent tax rate] to be less than zero is that housing demand is inelastic .... When this condition holds, gradation of the tax system depresses land value. Since there is overwhelming empirical evidence showing that housing demand is actually inelastic .... a fall in land value appears to be a realistic outcome (Brueckner, 1986: 54).

This conclusion is important to city planners and local

government officials by showing that a metropolitan-wide tilt toward land value taxes reduces housing prices. This causes a drop in land prices but the drop is partially offset by the increase in the demand for land due to the resulting increase in the amount of development that takes place in the region.[5]

Other implications of interest are developed by recognizing that the effect of the tilt in tax rates is governed by the elasticity of demand for housing. Since higher income people are expected to have more elastic housing demand schedules, the tilt in tax rates across a metropolitan area favours the landowners in wealthier municipalities. The gradation policy may bring about regressive income redistributions across land and homeowners in the region.

2.3.3 Short Run Redistribution Effects

In the long run, "housing producers should be indifferent to the features of the property tax system since profit is identically zero" (Brueckner, 1986: 55). The microeconomist's usual assumptions may reduce the persuasiveness of their conclusions. "An old tax," George Break (1973) used to say, "is a good tax." With time, anomalies and secondary consequences are capitalized into land prices and decisions are made in light of future tax obligations and burdens. In the theoretical long run, no one can make above normal profits or sustain ongoing losses by virtue of the assumptions used to develop the equilibrium conditions. In the short run, a change in tax rates creates adjustment costs and induces capital gains and losses. Boadway and Kitchen see the

adjustment costs as paramount:

> Although in terms of equity and efficiency, site-value taxation may be superior to the present system of real property taxation, any conversion to such a scheme for local taxation in Canada would undoubtedly impose severe transitional costs on certain groups or individuals leading to unforeseen windfall gains or losses. For this reason and because "[t]here are no reliable estimates regarding the value of either the benefits of site taxation or the costs of making this change, ... it would be quite unwise to consider seriously such a transition at this particular time." (Boadway, Kitchen, 1984: 248).

Brueckner's analysis of the short-run effects of the tilt in tax rates considers the case in which housing prices are set exogenously and decline with distance from the city centre. His model has the capital intensity of real estate as well as land values and site rents decline with distance from the city centre. As the tax rates are tilted away from improvements and on to the land component of real estate, the revenues collected in different parts of the city change as a result of the difference in the relative value of land and improvements. Areas with higher ratios of land to improvement value face greater burdens as a result of the tilt policy. The spatial incidence of the policy is determined by the spatial differences in the ratio of land to improvement value.

The ratio of land to improvement value is shown by Brueckner to decline with distance from the city centre whenever the elasticity of substitution between capital and land in housing production is less than 1. As land value declines with distance from the city centre, the land component of housing services becomes less expensive to use. As the cost of a factor declines,

relatively more is used. The tilt policy would have no spatial effects if a decline in the price of land would result in a proportionally equal decrease in the amount of the improvements placed on the land (while keeping the output of housing services constant). It would have no redistributional effect if a 10 percent decline in land value resulted in a 10 percent increase in the amount of land used to produce the same level of housing services. Because complete one-to-one substitution between land and improvements is not possible for technical reasons, the ratio of land to improvement value declines with distance from the centre in the Brueckner model. This leads to the conclusion that the tilting of tax rates creates greater short-term losses on the most intensely developed parcels:

> This result might, at first, appear counter intuitive since parcels with high improvements per acre stand to gain the most from lower improvements tax. This observation, however, ignores the fact that such parcels also have a high land value which makes an increase in [the site rent tax rate] especially burdensome (Brueckner, 1986: 55-56).

Brueckner extends the conclusions to illustrate the incidence of the gradation on different land uses. Referring to impact analysis carried out elsewhere, Brueckner concludes that:

> Typically findings show that many commercial and industrial properties would face higher taxes, while single family homes would generally benefit from lower tax bills (Brueckner, 1986: 56).

This conclusion is dependent on the assumption that the elasticity of substitution between land and capital is less than 1, that the effects on the output of housing services of a 10 percent decrease in the amount of land used cannot be offset by a 10

percent increase in the amount of capital placed on the land. This assumption is reasonable within a land use category and might hold across a suburban municipality but it is not likely to hold across an urban region containing many land uses.

The increase in demand for proximity to the centre raises land rents and encourages proportionally more intense development that is accommodated by a switch from single-family houses to duplexes, rowhouses, townhouses, and then to lowrise apartments and finally highrise buildings. The simultaneous increase in land rent and proximity to the centre changes the characteristics of the improvements that can be placed on the land in a discrete manner enforced by zoning ordinances. Finally, the move to commercial and office uses increases substantially the ease of substituting capital for land as building depths are no longer restrained by the need for illumination by natural light.[6] Within the office sector, the elasticity of substitution between land and built space would most likely be greater than 1, should zoning allow the free variation of building bulk.[7]

These observations suggest that the tilting of tax rates would create windfalls for inner-city commercial developments while generating losses for the owners of deteriorated inner-city apartment buildings. Suburban residents would lose as they have the highest land to improvement ratios. Studies briefly described at the end of this chapter support these conclusions. The incidence of the gradation in tax rates can only be determined after linking the theoretical deductions with additional empirical work.

2.3.4 Summary of Substitution Effects

Tilting tax rates to favour improvements at the expense of land increases the intensity of land development when all other factors are held constant. The gradation can increase land values when it is applied to a small portion of a housing market. It reduces land values when applied across the entire housing market. The land value reduction is less than the capitalized value of the tax increase due to the policy stimulating housing development and reducing housing prices. The spatial incidence of gradation depends on the elasticity of substitution between land and improvements which can vary within an urban area and with distance from the centre of the city. Knowledge of the incidence requires more empirical work.

2.4 TIMING EFFECTS

The preceding discussion showed the effects of a tilt in tax rates on the substitution of improvements for land and on the intensity of land use. The model developing the conclusions considered a static city in which competition eliminated above-normal profits. The analysis showed the effect of the policy on the profit-maximizing tradeoff between land and improvements and the effect the tradeoff has on housing prices. Another set of economic models examines the conditions under which an individual landowner decides to develop or redevelop property rather than wait for more profitable future opportunities to emerge. These models consider the value of holding land up until the point in time that

its conversion to urban use fixes the nature of the improvement site and sets the future stream of rents.

2.4.1 The Costs and Benefits of Waiting

Wicksell (1934) considered the basic theoretical problem by examining the timing conditions that would maximize the profits of a landowner waiting for his or her trees to grow before being harvested. Waiting is profitable in that it allows the trees to grow larger and yield more lumber after they are cut down. Waiting, however, involves the loss of the opportunity for early gains from the sale of lumber and the use of the funds. As the owner of land near the built-up part of a city waits, the city usually grows and the intensity with which the site can be developed increases. As in the timber case, waiting to build later in time may allow more intense use of the land and, thereby, yield a more profitable development. Waiting, however, is costly because it postpones the collection of urban rents and precludes the alternative use of the money.

The relative benefits and costs of waiting are affected by policy and by changes in the rates at which land and buildings are taxed. The following sections show how taxes can change the value of waiting and, thereby, the intensity with which land is used. Changes in project density are likely to affect the rate at which the city is expanding into the countryside.

2.4.2 Timing and Density

Donald Shoup (1970) revisited Wicksell's work and examined the profit-maximizing timing conditions for a landowner considering

the development of vacant land. He dispels the traditional...

> notion that development or redevelopment would or should occur as soon as the development value of a site, net of clearance costs, exceeds the value of the existing improved property, as is sometimes stated. (Shoup, 1970: 40).

The landowner's profit maximizing development timing is achieved when the *rate of change* in the value of the development that could take place on the site (ie. the investment value of holding vacant land) is equal to the interest rate available on comparable alternative investments. The value of the profit-maximizing development that can be built on a particular site increases with time while the city is growing because of the nature of the project changes with growth in demand. Waiting is profitable while the rate of increase in the present value of the project that can be placed on a site exceeds the rate that can be gained from alternative investments.[8] When options change over time, timing decisions affect project density directly and cityspread indirectly.

Richard Arnott and Frank Lewis (1979) expand on Shoup's work by explicitly considering the change in the capital intensity of real estate development. The city is assumed to grow at a continually compounding rate and housing prices increase accordingly. Landowners will wait while land values grow at a rate greater than can be obtained through other investments. This is the basic requirement in all models discussed here.

Arnott and Lewis present the following decision-making model. Landlords pick the development time that maximizes the difference between the present value of rents and the construction cost per

unit area of land. To simplify, they assume that land rents before development are zero, buildings do not depreciate, and rental rates are expected to increase at a constant rate. The land use and timing decisions are based on a review of the conditions that maximize the developer's profit function. Arnott and Lewis (1979, p. 162) maximize the landowners' profit function with respect to, T, the development time and, K, the capital applied to land. They maximize:

$$\max_{T,K} L(T,K) = \int r(t)Q(K)e^{-it}dt - pKe^{-iT}, \qquad (1)$$

where: L(T,K) = present value of a unit of land if it is developed at time T with capital stock K; r(t) = rental rate of a unit of housing at time t; Q(K) = output of housing on a unit of land with capital, K[$Q'(K) > 0$, $Q''(K) < 0$]; i = interest rate; and p = price of a unit of capital. (Arnott and Lewis 1979: 102)

2.4.3 The Effect of Property Taxes on Project Density

The Arnott and Lewis analysis shows that the profit-maximizing time of development occurs when the ratio of the cost of improvement to the property value (improvement plus land value) is equal to the ratio of the "net of growth" interest rate to the interest rate, i.e.:

$$\frac{pK}{P(T)} = \frac{i-n}{i} \qquad (2)$$

where: pK is the cost of the improvement; p is the price of capital; K is the around of capital; P(T) is the property value at time T; i

is the interest rate; n is the growth rate. (Arnott, Lewis, 1979: 163)

This condition suggests that profit-maximizing developers wait until the rents foregone by not developing (i.e. the cost of waiting) are equal to the interest paid on the construction cost of the project (i.e. the cost of developing). Furthermore, the profit-maximizing development uses the land at the intensity that sets the output elasticity of capital in producing housing services equal to the ratio formed by dividing the cost of the improvement by the property value. This condition implies that the extra cost of increasing the size of the building that is placed on a lot should equal the present value, at the time of construction, of the resulting increase in future rents. Our lack of surprise at this conclusion provides comfort for the assumptions used to develop the conclusion by mathematical methods.

The profit-maximizing conditions developed by Arnott and Lewis allow two other conclusions relevant to our study. Increases in construction costs do not affect the intensity of land development. Increases in city growth rates, however, increase the rate at which property values appreciate and, thereby, increase the profitability of building a larger building on any particular site.[9] Increases in interest rates reduce the intensity of land use and, thereby, stimulate the suburban expansion. Increases in city growth rates and in the price of land helps check the expansion of the periphery. Price changes encourage conservation.

Arnott and Lewis introduce a property tax into their development timing model and allow the pre- and post-development rates to vary. Only the pre-development tax is seen to affect project density and, therefore, cityspread.[10] Taxes increase the cost of holding property vacant and favour its early development. This means that the project's profit-maximizing land/capital ratios are established by lower housing prices. When the output elasticity of capital is lower, less capital is used to improve a site, and project densities will be reduced compared to what they would have been had pre-development rates been lower. Pre-development taxes may create a liquidity problem for landowners that encourages early, less dense, development.

2.4.4 Distinguishing Between Land Value and Land Rents

The preceding conclusions are expanded by Bentick (1979). He considers the relative value of projects yielding immediate returns and projects that can be developed only at some future point in time due to the expectation of technological change or due to the landowners waiting for the "market to ripen". He illustrates the importance of the distinction between a tax on land value and a tax on land rents.

When timing decisions consider the marginal benefits and costs of waiting, then a tax based on the market price of land favours projects offering earlier returns. The value of future projects is capitalized into current land value as defined by its market price. The value of future projects is, therefore, subject to taxation today and the tilt toward land value taxation increases the cost of

waiting. Both the property and the land value tax penalize the holding of land for late development projects by taxing the value of the projects well before they are built and yield revenue.[11]

Bentick, and others, show that a tax on land rents (ie. a tax on the "value" of the land as determined by its "current" use (not its prospective future use) does not distort development timing because the tax increases due to changes in potential development come into effect only after the development takes place and the financial returns due to the project are actually being realized. As in all assessments of "excess" burdens, a tax that does not change behaviour can create no burden to society other than that due to the taxpayer's loss of the tax revenue.

> .... land taxes which are based on the current market value of land, as opposed to its current rentals, divert land and saving from investment projects with a long gestation period to those which produce returns relatively quickly. This is because the market value of land reflects its future rentals, so that a tax on market value causes taxes to be levied ahead in time of the returns on which the tax is based, thus creating a liquidity problem which cannot be resolved by a perfect capital market. The effect is similar to an increase in the rate of interest, and the tax therefore has important implications for the efficiency of allocation of land and saving within and between forestry, agriculture, urban construction, and mining, none of which can avoid the use of land. (Bentick, 1979: 860)

David Mills (1981) considers endogenous land market adjustments due to the distortions brought about by land value taxes. He recognizes that a policy favouring projects with early returns leads to the undersupply of projects offering higher but later returns and, therefore, raises the market value of the late yielding projects which should, in turn, increase the advantages of

waiting. Despite the increase in the market value of future projects, Mills shows that the general conclusions developed by Bentick hold true: a land value tax has the same effect on development timing as an increase in interest rates, it hastens development. Increases in interest rates favour plans yielding immediate rather than late returns.

The Mills' conclusion is not surprising given the earlier Arnott and Lewis demonstration that pre-development property taxes distort development timing decisions. Mills points out that a shift to land value taxation while reducing general property taxes raises substantially the rate at which the land component is taxed. The shift may create a considerable timing distortion that reduces the intensity of land use and brings about the undesired conditions that give rise to this inquiry in the first place.

> The neutrality claim can no longer be maintained in the case of a tax based on land value. (The claim is sustained for a tax on land-generated income, but administration of such a tax is fraught with formidable problems.) This should provoke a reconsideration of the presumption that a site value tax is more efficient toward resource allocation than a property tax. Granted, two distortions are operative in the latter: the traditional one penalizes capital-intensive projects and the other favours projects with early-payoff income streams. But if a property tax is to be replaced with a site value tax producing equal revenue, the tax rate applied to land value must rise significantly with the switch. While this eliminates the first distortion, it enlarges the second. It is therefore possible (although by no means certain) that the resource cost of the site value tax is actually greater than that of the property tax. (Mills, 1981, p. 129)

2.4.5 The Importance of "Land Value" Definitions

David Wildasin (1982, p. 105) builds on Mills' work and accepts the Bentick-Mills results but points out that land "value

taxation at non-differential rates amounts to per unit taxation...at differential, and hence distortionary rates." (emphasis his). Land value taxation based on the market value of land is, in a sense, an excise tax on a particular type of project and, therefore, introduces distortions. Under market value assessment, sites that are similar in most respects may be assessed differently due to the recognition by the market that one site is better left for later development while the other should be developed now. Market value assessment makes the land value tax discriminate against the sites that are best left for later use.

Wildasin's scepticism regarding the neutrality of the land-rent taxes is based on analysis showing that timing distortions can be completely avoided only when the tax rates on land rent are held constant over time and when subsidies are paid for some uses some of the time. Expectations of future changes in tax rates affect development timing. Subsidies (negative taxes) have to be offered while projects yield negative current income, i.e. during the demolition, construction and marketing periods. Wildasin shows that neutrality is maintained when the current and expected future tax liabilities are independent of the use to which land is put. The land value tax is neutral if it is based on a general assessment of the best use of the land independent of actual or prospective uses of particular sites. The standard value may be based on the general characteristics of the land as established by a "'physically defined standard state' as Vickery (1970) proposed" (Wildasin, 1982: 107).

> Whether a land value tax of the Vickery type is administratively feasible can be left to the reader's judgment. On the face of it, such a tax would certainly seem far simpler to administer than the non-neutral tax on current market value, since the latter would require *use-dependent* imputations of current values, and in many cases, the market will not aid the assessor with a convenient separation of ownership land and structures, with the land ownership frequently traded and valued in the marketplace. Perhaps in the case of land value taxation, there is a happy complementarity between neutrality and ease of administration.

Tideman (1982) furthers the qualification of the Bentick and Mills' conclusions by suggesting that our general understanding of the concept of "land value" is formed in the absence of specific views on the current or exact future uses of a site. In the case of existing property, "land value" is not generally thought of as a present value calculation but as a notion of the price the land might fetch on the open market should it have been vacant. Such an assessment of land value is independent of the current or specific future uses of the particular site.

> When the value of land is defined independently of how the land is actually used, not only is land value closer to something that could actually be observed, but also the amount of the tax on a given site under a land value tax is independent of how the site is used, and therefore the tax is neutral. (Tideman, 1982: 111)

2.4.6 The Importance of Options and the Landowner's Vision

Brian Bentick and Thomas Pogue (1988) appear to agree with Tideman's definitional issue and clearly illustrate the dependence of conclusions regarding the timing effect of property, land and development profits taxes on the nature of the underlying model of urban development and the assumptions regarding the extent to which future land-use options are seen to be variable.

Case 1: Fixed Development Options

The first of the three Bentick-Pogue models depicts the case in which only one urban use is possible for land before and after development decisions are made. The present value of land is formed by three components: the stream of net rentals due to the current use (agriculture) of the land up until the time it is developed; the present value of the post-development stream of rents; the present value of the conversion, development, and construction costs. The first model accepts that waiting does not affect the nature of the development that can be placed on the land because building type is considered and this is not seen to change over the landowner's planning horizon.

The change in the present value of land with respect to a change in development date is the present value of the difference in the rents charged in the new development and the amortized construction costs. Since waiting does not affect the nature of future development and future rents, waiting cannot yield benefits. Developers simply consider the current net return after development and proceed if it is positive.

When waiting does not change development options, a land value tax reduces the return to all development proportionally and, therefore, does not affect the amount of development that takes place on any site. Prospective projects offering a low yield before the tax would offer a smaller but still a positive return after the tax. A property tax, by increasing the annual cost of capital, reduces the net gain from the project. The reduction in profits due

to the property tax would preclude development in some cases. When land-use options do not change over time, the property tax reduces development activity to the extent of suburban expansion. A property tax would raise housing prices and reduce the spread of the city more than would an equal yield land value tax should all other factors remain the same.

The effect of a change from a general property to a land value tax depends on the future options considered by the developer. If the developer builds basically one type of house, he or she will consider the net gains from development as not changing over time. In this case, the general property tax reduces construction and leads to less extensive land development than does the land value tax.

Case 2: Changing Development Options

Bentick and Pogue's second model considers many future development options up until land is developed. Construction, however, fixes the use of a site forever. This is the conventional model used by the authors discussed in this section. In this case, both property taxes and land value taxes hasten development but the land taxes have the greater effect. Taxes on the land value penalize waiting and skew decisions in favour of projects yielding immediate returns. A property tax also penalizes waiting but has a smaller effect because the tax rate, being applied to a larger base, is smaller. The main difference, however, is due to the property tax creating two conflicting impacts (Bentick and Pogue 1988: 319). By raising the cost of capital the property tax delays

development; by increasing the cost of holding land the tax hastens development. The land value tax creates no impact that would delay development. The net effect of a tilt in tax rates is determined by the relative size of the growth rate in rents and the sum of the interest and tax rates. When the city's growth rate is slow, land rents rise slowly and an increase in the property tax rate would tend to delay development.[12]

Case 3: Intermediate Development Options

When land conversion from rural to urban use is seen as a one-time event, the increase in taxes on the land component hastens development leading to a less dense city. When developers consider intermediate uses, both the property and the land value tax can encourage waiting for the more intense land-use option to become feasible. In this way, both options reduce the intensity of land use by leaving more land vacant. However, when development does occur, the property tax will lead to more intense development than would have taken place had the delay not been induced. A land value tax that is not tied to the actual or potential use of the land is neutral and does not distort timing decisions.

2.4.7 The Net Effects of Changing Tax Rates

The switch to land value taxation hastens development and reduces land-use intensity relative to the density patterns that would be produced by a hypothetical neutral tax. The timing effect of the land value tax counters the substitution effect induced by the excise characteristics of the property tax. At any given point in time, how much development will the city have under the two tax

regimes?

The net effect of a tax on land was examined by Oates and Schwab (1992) with the help of a two-period model. An increase in the tax rate on land, holding all other conditions constant, reduces land value in the first period. This encourages early development and reduces density: the capital-land ratio (density) falls because land becomes less expensive due to the capitalization of the tax. The reduction in land costs stimulates more development in the first period than would be the case with a perfectly neutral tax.

The net effect of an increase in land value taxes on the amount of development that occurs in the first period is ambiguous and depends on the relative magnitude of the elasticity of demand and the elasticity of substitution between structures and land. However:

> We can also offer a conjecture on the sign of this result in practice. Typically, we would expect to find that the elasticity of demand is larger (in absolute value) than the elasticity of substitution. If the market is "small" in some sense, then demand will be very elastic, while the elasticity of substitution is unlikely to be larger than 1. Thus, except in very large urban markets where the elasticity of demand might be small, we would expect that an increase in a Bentick-Mills type land tax will increase current period investments. (Oates and Schwab 1992: 118)

The size of the housing market and the relationship between the jurisdiction implementing the tilt policy and its region determine, in part, the elasticity of demand for housing by affecting the ease with which households can move in response to housing price changes. The net effect of an increase in land taxes on the amount

of investment in real estate depends, to some extent, on the characteristics of the city and the prevailing market conditions. Again, empirical work is needed before conclusions as to the impact of a tilt policy can be determined. The impact depends on the nature of the city considering the tilt policy.

2.5 PRACTICAL CONSIDERATIONS

2.5.1 Zoning Constraints

Developers and landowners cannot make fine adjustments to their capital/land ratios or set project completion dates to fit precise profit-maximizing schedules. Zoning constraints limit the floor area of buildings and the number of dwelling units they can contain. Development approval processes may affect the timing of development more than the developer's intentions or calculations based on the time paths of expected profits. Municipal policy may create a level of uncertainty that swamps the possibility of any realistic assessment of changes in future development potential[13].

When zoning regulations establish minimum lot sizes and restrict land use to single-family detached houses, the tilt to a land value tax may increase the capital/land ratios by encouraging the construction of larger and more luxurious houses. Zoning may preclude the supply of more dwelling units per land parcel as might have been achieved by an unrestricted market. In this case, the spread of the city will remain unaffected and the intensification of land use will do little to reduce housing prices for lower- and middle-income people or to help satisfy environmental concerns.

Changes in inner-city zoning, rather than a change in the tax base, may be a more effective means of increasing the intensity of urban land use and reducing the extent of the environmental costs produced by city growth.

Severe zoning constraints are found in the City of Vancouver, for example, which force developers to base their timing decisions on the growth of the relative size of the potential units offered in the high end of the housing market, not on a growth in the number of units that can be placed on a westside lot. Landowners may wait, not for the opportunity to build larger apartment buildings to house more lower-income households, but to help them exploit the changing composition of the market and eventually produce luxurious houses. David Dowall (1984) in The Suburban Squeeze has attributed the observed San Francisco Bay area's shift toward luxury houses, in part, to the local constraints placed on development. If a developer can only build a few houses a year, they might as well be big. To the extent that a move toward land value taxes increases the developer's propensity to substitute capital for land, the change in tax policy is likely to encourage most the producers of high-priced housing. The net effect of the policy may be regressive.

2.5.2 Fixed Options

At the periphery of the city, zoning leaves developers with little choice as to building type. Developers building subdivisions tend to operate more as manufacturers seeking normal profits rather than entrepreneurs attempting to maximize potential land rents. The

first Bentick-Pogue model may well apply to suburban development in most Canadian cities. The land-use options available to developers may remain constant over time because they involve building a particular type and size of dwelling unit. The developer proceeds to build when profits are realizable. Waiting changes little. Development approvals processes may, in any case, dictate the rate of suburban expansion.

In retrospect, suburban house styles have changed from the 1200 sq. ft. 1960s house to the 2400 sq. ft. contemporary building. Landowners in the past, had they known or guessed at today's suburban housing patterns, might have waited longer to increase their profits. Discussions with CMHC analysts and consultants familiar with suburban developers suggest that most, not all, suburban developers adopt a short-term time horizon. They tend to make decisions based on current housing types and on their knowledge of how the existing models are being accepted by the market. In reality, it is unlikely that suburban developers consider the changes in capital/land ratios that may be possible should they wait. This suggests that the first Bentick and Pogue model applies and that a land value tax would lead to more extensive suburban development than is the case with the property tax.

When developers diversify their housing output in response to variations in the absorption rates of units offered in different price ranges, then a shift from a property tax (that places a smaller burden on lower priced housing) to a land value tax (that

levies an equal charge across most suburban house models) will encourage developers to target the higher-priced market. The difference in the holding cost of unsold high- and low-priced houses is reduced by the switch to land value taxation. The increase in the relative cost of holding lower-priced houses, offering lower profit margins, will make the developer plan production schedules to yield a shorter holding period for this stock. The shift from a general property to a land value tax is likely to yield regressive changes in suburban housing prices.

2.5.3 Future Environments

Development timing and density is affected by the expected changes over time in development cost and housing prices. Expected increases in future housing prices are capitalized back into land and increase the intensity with which it is developed. A reduction in property taxes would reduce the expected future cost of holding property and encourage the development of more land-intense projects. The shift toward land value taxes increases land-use intensity due to the substitution effect and reduces density due to the timing effect. Other factors will also change timing decisions and can possibly swamp the effects of a shift in tax base.

Development cost charges have been introduced in many Canadian cities and they have grown in size over the last decade. In British Columbia, DCCs are in the $5000 to $7000 range. In Ottawa, they exceed $20,000 per single-family detached house and are expected to increase. Growth is creating problems in British Columbia. Before the 1991 recession, concern for sustainable development and the

growing desire to maintain greenfields at Toronto's present periphery was to emerge as a demand for more regulations on development. Resistance to growth, in good economic times, is now common in North America.

Developers looking at the future path of potential profits are likely to see increases in their cost of doing business, and the magnitude of the future increases may not be subtle. The shift to a land value tax may, therefore, not have much of an additional effect on development timing. Expectations of a worsening development environment may swamp the timing effects of a tilt in tax rates provided the two events can occur simultaneously. Given the changing development environment in the growing parts of North America, the main effect of a shift from a property tax to a land value tax is likely to be through its substitution effect. However, the reduction in the tax on capital will not necessarily lead to more intense development as measured by the number of people or households per unit land area. Zoning and development approval constraints may preclude the restructuring of inner cities in ways that can exacerbate the external costs of urban growth. Without concomitant changes in regulations, the tilt in tax rates may yield more intense land-use projects in the sense of larger and more luxurious dwellings not in the sense of more units per acre. Increasing house sizes will not reduce cityspread and the costs associated with suburban expansion.

2.6 EMPIRICAL EVIDENCE

The preceding conclusions were developed by considering abstract profit-maximizing models that may depict either the conscious decision processes of developers, or reflect the processes that are implicit in the decisions made by the survivors of market competition. The theoretical conclusions can only be developed by using highly simplified models of decision making. Even then the mathematical prowess needed to appreciate the assumptions challenges most of us and makes it difficult to judge the true importance of the underlying assumptions. We may remain sceptical as to the policy relevance of the theoretical conclusions unless they are backed by empirical evidence.

Several jurisdictions have implemented land value taxation for the efficiency and equity reasons mentioned earlier and their experiences are described late in this monograph. A limited review is presented here to search for the empirical support of the theoretical conclusions. The discussion aims to answer a simple question: Does the shift to land value taxation really make a difference?

Fifty years ago Herbert Simon (1943) observed that while:

> there has been common agreement among two generations of economists as to the fundamentals of tax incidence theory, no consensus has been reached with respect to the incidence of a tax on urban real property.

The confusion created by the tacit assumptions and the errors in logic that were pointed out by Herbert Simon have been removed enough to allow Kenneth Lusht's (1992) observation:

> The focus has been on how a shift in the tax base from

> capital value to site value affects the incidence of the tax, and more recently, how it affects development patterns. Results are mixed, and it is fair to observe that there is an empirical outcome to fit almost any set of speculations. (Lusht, 1992: 1).

No definitive answer to the question should be expected. This, in turn, has obvious policy implications.

The following sections review the main econometric studies that attempt to identify the effects of a shift from a general property tax to a land value tax. It considers a hypothetical case constructed by using Hawaii data on hotels. It reviews the published work describing land value taxation in Pittsburgh, Australia and Melbourne. The search is for econometric studies showing the effect land value taxes have on the project density and development activity. Incidence issues are briefly reviewed in the Pittsburgh case and confirm the expectations raised in the last chapter.

2.6.1 The Hypothetical Hawaii Case

Pollock and Shoup (1977) estimate the effect of a shift to land taxation on the capital intensity of urban development. The authors develop a theoretical Cobb-Douglas revenue production function for land development that can be used to show how the shift in tax base would affect the incentive to invest in improvements. They estimate the revenue function using data on thirty large resort hotels built in Waikiki between 1965 and 1973. The estimated coefficients are used to derive the marginal rates of return to successive investments of capital for any fixed site.

Pollock and Shoup use their estimated model to determine the

optimal investment in improvements in the presence of the property tax. Their estimated elasticity of investment with respect to the property tax rate is -.25. They conclude:

> If the actual elasticity were of this size, a complete elimination of the property tax on improvements would in long-run equilibrium lead to approximately 25 percent increase in optimal capital investment...at higher interest rates...reductions in the tax rate would have a relatively smaller effect on investment. (Pollock and Shoup 1977: 79)

The findings provide, as the authors recognize, "tentative support to the view that a shift from general property taxation toward site value taxation can have a significant impact on the degree of capital intensity of improvements to land." (p. 75). That is, the shift can increase density by as much as 25 percent should no other factors constrain the amount of building that can be placed on a site. The Pollock-Shoup study did not explicitly address the effect of increasing the land value tax. Site taxes were assumed to be neutral.

2.6.2 The Pittsburgh Case

Pittsburgh shifted its tax rate away from improvements and on to the value of land to penalize the holding of vacant or underdeveloped land. Between 1914 and 1925, the ratio of 2:1 was achieved and was maintained until 1979. Since then the tilt has been varied. In 1983, the ratio was 5.6:1 (Weir and Peters 1986: 72).

> Generous tax abatements were granted for new construction...the city did not tax the additional value from new construction for the first three years. (Weir and Peter 1986: 75).

In addition, the Urban Redevelopment Authority offered low

interest loans for commercial and residential rehabilitation and construction (Oates and Schwab 1992: 5).

The first published study of the effects of land taxes in 27 Pennsylvania cities by Mathis and Zech (1982) found no evidence that the policy to tilt the tax rates had induced development. Their model, however, was marred by a misspecification pointed out by Coffin and Nelson (1983). Studies by Pollakowski (1982) proved inconclusive. Bourassa estimates an econometric model using the value of building permits for housing during the 1978 to 1984 period and finds that changes in the land tax rate has no effect on development while the tax on improvements affects the number of units constructed but not their average price. Bourassa (1983, p. 54) concludes that "Pittsburgh's land value tax has had an incentive effect but not a liquidity effect with respect to new housing."

Weir and Peters (1986) examine the effects of the shift from a 2:1 to a 5.6:1 ratio in the early 1980s. They observe the major increase in the valued building permits issued for new office towers in 1981 and 1982. Key informant interviews with bankers, contractors, investors, developers and real estate managers lead them to conclude that the increase in commercial development was due to pent-up demand, not the tax policy that caused an extra tilt in the tax rates. The 2.4 percent carrying charge (due to the tilt) was not seen as a sufficient penalty to force owners of vacant lots to develop their property (Weir and Peters 1986: 74). The authors suggest that developers are not all that sensitive to small changes

in carrying costs.

Weir and Peters examined 970 properties and grouped them by zoning district. The properties were ranked according to the ratio of their assessed improvement to land value and then grouped in quartiles. Development activity in the form of sales activity, permits issued, permit value were compared for each quartile for the 1976-78 and the 1980-84 periods. Correlation coefficients were computed to assess the relationship between extent of development activity as measured in various ways and the ratio of improved to assessed value. The finding of strong negative correlation would indicate that the under-developed properties, as determined by low improvement to land assessment ratios, were receiving the most development attention. The hypothesis suggesting that there was no relationship between the extent of development or underdevelopment sites and development activity could not be rejected. The link between development activity and the extent to which land is already improved was not changed by the tax policy.

> The correlation between development activities and the annual quartile rankings were low and there were no significant differences between the earlier period, pre-1979, and the later period, post-1979. (Weir and Peters 1986: 77).

The Western Division of the Pennsylvania Economy League that undertook the analysis "concluded that there is no discernible relationship between the state of development and development activity for city properties during the period 1976 through 1984 (Weir and Peters 1986: 78). The authors conclude that the penalty imposed by the land value tax was not enough to change development

patterns or activity.

The Weir and Peters' incidence assessment shows the tilt in tax rates to increase the burden on industrial and most commercial property. Most of the highrise commercial buildings in the downtown were either not affected by the tilt or saw their property taxes go down. Land value taxation favours new office buildings at the expense of older commercial and industrial buildings. Retail outlets bear most of the additional burden. Most middle-class residential properties benefited by the tax policy change while poorer neighbourhoods were penalized. In particular, single-family homes benefit at the expense of multi-family property in poorer neighbourhoods. The additional burdens, however, are small as the assessed value of property in the poorer neighbourhoods is low.

Ten years after the major tilt in tax rates, Oates and Schwab (1992) set out to assess the Pittsburgh experience. They accept the Weir and Peters' findings but believe that the move to land taxation would affect commercial property the most. It is no surprise, therefore, that residential development patterns were not affected. Their initial observation suggests that:

> The findings, taken at face value, are dramatic. Relative to fourteen other mid-west cities in our sample, Pittsburgh is a striking outlier: it is the only city to have experienced a large and significant increase in levels of building activity during the 1980s (Oates and Schwab, 1992: 1).

Oates and Schwab examine the history of the Pittsburgh economy and the specific character of the tax reform. Manufacturing in Pittsburgh provided half the jobs in 1940 and 16 percent in 1985. The city's population fell from over 700,000 in 1950 to 400,000 in

1980, due to urbanization. Public private partnerships led to the construction of new offices in the Golden Triangle in the 1950s. Shortages of office space led to a new renewed effort in the late 1970s.

The effect of the 1979-1980 tilt in Pittsburgh tax rates is revealed by comparing the 1960-1979 with the 1980-1989 annual (real) value of building permits for 15 cities and metropolitan areas in the general region. All but two cities showed a substantial decline in construction. Columbus increased slightly while Pittsburgh's annual building permits rose by 70 percent since 1980 (Oates and Schwab 1992: 6). The authors estimate several econometric models and consistently find that building activity in Pittsburgh was shifted upward since 1980. The coefficients from the time variables were negative for most cities due to the general economic decline. For Pittsburgh the shift (dummy) variable picks up the post-1980 increase in building activity and offsets the trend effect due to the declining economy. All approaches used by Oates and Schwab suggests that:

> Following the change in [tax] regimes at the end of the 1970s, Pittsburgh experienced a striking building boom, far in excess of anything that took place in the other major cities in the region. (Oates and Schwab 1992: 9).

The main effect of the tax change was in the commercial sector residential building activity where it increased only slightly. The development effects are attributed mostly to the tax abatements rather than the extra tilt in rates.[14] The abatements "offered a substantial and directly visible cost reduction for new building activity" (Oates and Schwab 1992: 10). The authors doubt that the

tax change induced a "timing effect" that hastened development. The authors conclude:

> ....it is important to remember that these fiscal incentives were put in place in a setting of strong demand for office space. We cannot conclude, from the Pittsburgh experience at least, that such fiscal incentives are in themselves capable of generating major urban renewal efforts. But in the general Pittsburgh context, it is our sense that they have played a supporting role for new urban construction. Our findings thus do not support some of the more extravagant claims that land-tax proponents have made for the effects of the tax in stimulating economic activity. But urban land taxes, while they may not provide much direct stimulus to development activities, can substitute for other taxes that penalize such undertakings. (Oates and Schwab 1992: 11).

2.6.3 The Australian Experience

The first major assessment of the Australian experience with land value taxes was by Hutchinson (1963). He compared states using primarily the land value tax with states using the more general property tax. Among his 21 indicators were: the rate of increase in the number of dwellings per 100 marriages; the value of improvements on land holdings; the mortgage assets of financial institutions. The ratio of new dwellings per 100 marriages was higher in the states taxing primarily land value (65.4 to 61 percent) (Edwards 1984: 485). The value of improvements to land was almost twice as high with the land value tax, and the registered mortgage assets were about five times higher in states using land value taxes. All of Hutchinson's measures point to the superiority of the land value tax. No effort was made to account for the other factors that might have produced the differences.

Woodruss and Ecker-Racz (1969) went to Australia to talk to

assessors and others about the effects of land value taxes and found absolutely no effects attributable to land value taxation. Bentley, Collins and Drate (1974) cannot find any effect of residential land value taxes and believe that households simply treat the taxes as cost without changing behaviour. Neutze (1969) believes that land value taxes discourage large-scale developments where most of the developers' returns are in the form of increased land value.[15]

Mary Edwards' (1984) published master's thesis presents an analysis of inner-state differences between 1952 and 1965 attributable to differences in tax regimes. She specifies a reduced form equation which places the total value of houses completed on the left side of the equation and regresses the variable against: the log of the average weekly earnings per employed male, the difference between long- and short-term interest rates, the housing consumer price index, the per capita expenditure on local governments, and the proportion of local governments in each state using the land value tax (Edwards 1984: 488). A second model places the estimated value of the housing stock in each state on the left side and promises a "more accurate description of the intensity of land use" (Edwards 1984: 489). The estimated models show the average house value series to be highly auto-correlated and corrections were made. After a number of model variants, Edwards complains that "some sort of multicollinearity must exist" (Edwards 1984: 491).[16] After a considerable model adjustment, Edwards finds that her results "coincide with the conclusions of A.R.

Hutchinson". Her normative conclusions suggest that "a community must see to it that it avoids the difficulties of an exceptionally watered down system of taxation" (p. 493). Overall:

> The weight of the evidence now at hand strongly indicates that if a new or reformed system is administered honestly, efficiently, and equitably, then a site value tax will result in a more rapid pace of development. (Edwards 1984: 494)

2.6.4 The Melbourne Case

The Melbourne Metropolitan Statistical District currently houses over three million people within 56 municipalities. Almost half (27) of the municipalities used site value taxes in 1986, half used the general property tax[17], and one municipality used a combination of both. Most of the shift to site value taxes occurred before the mid-1960s.

Lusht (1992) estimates a number of econometric models to determine the extent to which the site value tax increases: the residential value per acre, the number of occupied units per acre, the population density per acre, the number of building permits issued, the dollar volume of the permits issued. The econometric model accounted for the location of the municipality, its distance from the centre, the age of the residential stock, number of industrial establishments divided by the size of the municipality, and the size of the municipality.

The findings were consistent in all cases: the site value tax leads to 50 percent more development. The analysis suggests that new development is inspired by changes in tax policy that favour improvements:

> ....that the use of the site value tax stimulates development and that the advantage persist in the long run, although somewhat eroded. The results also suggest that the level of the property tax in Melbourne, which is similar to levels in typical U.S. cities, is sufficiently high to affect behaviour. (Lusht 1992: 11).

2.7 CONCLUSIONS

The theoretical review of the expected consequences of a shift from a general property to a land value tax yields the following conclusions:

1. The reduction in the tax on improvements encourages investment in real estate and reduces distortions created by the excise characteristics of the balanced property tax should a neutral alternative be used to maintain public expenditures.
2. Localized increases in land value taxes coupled by reductions in property tax can increase the market price of land. This conclusion is particularly relevant to the evaluation of special development and taxation.
3. When land value is defined as the "market value" of the assessed site, the land value tax is not neutral but encourages early development. Early development lowers housing prices and lowers the density of projects relative to what they would be under a perfectly neutral tax.
4. The reduction in density due to the timing effect of the tilt in tax rates is likely to be less than the increase in density due to the substitution effect created by

lowering the tax on improvements.

5. The timing effects may be swamped by the effects of expected future increases in development cost charges and the expected increase in resistance to urban growth.

6. Land value taxes based on assessments that do *not* consider the specific or potential uses of a site are neutral. A switch from a general property tax to a "standard value" land tax increases the intensity of land use and improves the efficiency of resource allocation when development options are seen as changing over time.

7. The equity aspects of a neutral "standard value" tax have to be assessed empirically. However, they are likely to be regressive as the tilt would penalize most the owners of the deteriorating inner-city buildings that offer low priced housing.

8. A tax on development profits, when accurately assessed, is neutral with respect to timing and substitution effects.

9. When suburban developers and landowners limit their time horizons or do not recognize that development options change with time, then the switch from property to land value taxes increases cityspread.

10. More empirical work on landowners' behaviour is needed before conclusions can be drawn regarding the incidence and the regional consequences of the shift toward land value taxation.

The review of empirical studies suggests that a shift from a general property tax to site value tax coupled with an aggressive pro-development program may encourage commercial development and increase densities in the central business district. The change to land value taxes within parts of a metropolitan area is likely to redistribute development spatially toward jurisdictions taxing the land values. The overall effect of a region-wide change on the density of residential development has not been determined by means of econometric analysis.

Empirical work on the Pittsburgh case supports the incidence conclusions developed earlier. The tilt in tax rates favours new office buildings and middle-class homeowners at the expense of commercial, industrial and multi-family buildings in poorer neighbourhoods. In general, the Australian studies are inconclusive and are biased by the research workers' commitments to the land value tax. The Melbourne case study does show that municipalities with the land value tax attracts development activity and have higher-density projects due to the substitution effect of the tax. This finding is in complete accord with Brueckner's theoretical deduction. When some municipalities within an urban region switch to a land value tax, more development activity and denser projects can be expected.

ENDNOTES

1. The substitution of a site value tax for a general property tax is simply a complete shift or a 100 percent tilt.

2. The counter argument suggest that rents and unearned profits are gained in many spheres of activity such as baseball and singing. To tax land and not the others would be unfair attempts. To tax all rents would create an administrative nightmare.

3. The theoretical conclusions presented in this chapter may also apply to the situation in which practice is established as though profit-maximizing development took place. We are aware that many developers are unable to fine-tune projections or even prepare their own reasonable cash flow schedules. In many cases, developers do virtually no market analysis and rely on CMHC insurance for funding approval. In these cases, profit-maximizing positions might be calculated by CMHC analysts.

4. The efficient spatial structure is the one that would have evolved had no distortions been introduced by the tax system. The shift in the tax rates improves the efficiency of land use provided there are no other overriding constraints on development such as zoning.

5. A general equilibrium analysis by Shawna Grosskept (1981) also concludes that a switch from a general property tax to a site value tax will not necessarily lower land values.

6. Construction cost land value ratios for Class A offices in the inner-city are in the 7.0/1 to 7.3/1 range. Ratios for single-family suburban houses are in the 4/1 to 2/1 range depending on market conditions and amenity attributes of the site.

7. Most new inner-city office buildings are built to maximum site coverage. A significant increase in allowable floor space would allow developers the option of adjusting building to land costs at the margin. It is relatively easy to expand office floor space beyond the usual 20 FSI plus plaza bonus. The discontinuity in the office space output to capital ratio occurs in the vicinity of 65 floors. Beyond this height, a two-tier elevator system is needed. Bulk can always be increased to yield increasingly more efficient floor space at some loss to the prestige attribute of slenderness in the case of an office tower.

8. Intense premature development has a low value because the units will remain vacant.

9. The profit-maximizing timing decision would have the output elasticity of capital equal the right-hand side of equation 1 in the last footnote. As the growth rate, n, increases the output elasticity of capital can drop. An increase in the city's growth rate makes development more profitable and allows developers to increase the amount of capital (investment) used to produce an extra housing unit. This does not mean that the developer would make all housing units on a site more expensive or more luxurious, only that the increase in expected future returns allows the developer to add an extra unit even when the extra unit costs more to produce. In practical terms, this condition means that an increase in city growth rates will make development on more difficult sites profitable.

10. John Anderson (1986) confirms the effects on timing and shows the other conditions (i.e., increasing or decreasing land values) determines how taxes affect timing decisions.

11. The pre-development property tax is a tax on land value which is determined by development potential. The value of future development is capitalized back into the price of land and forms a part of the tax base.

12. An increase in the effective discount rate delays development when the growth rate in rents is (approximately) less than half the real discount (Bentick and Pogue, 1988, p. 319).

13. Several articles have examined the effects of uncertainty on development timing. These are not presented here due to their complexity and general inconclusiveness. A paper by Clarke and Reed (1988) suggests that an increase in uncertainty delays development. This conclusion is in accordance with the conventional wisdom suggesting that an increase in uncertainty makes it better to have more rather than fewer options. Vacant land offers more options than does developed property. Current work by William Strange at the University of British Columbia Land Economics Department is challenging this conclusion on the basis that the time between development decision and project opening complicates decisions. Under conditions of increasing uncertainty, developers may wish to commit themselves earlier to projects that will come onstream two years hence.

14. The switch to a land value tax would penalize the downtown stores that are on the margin of survival. Bankruptcies would become a political issue as pointed out by Kochanowski (1991). He also suggests that the most common means in the United States of intensifying inner-city land use is through government purchase of properties through some kind of an urban renewal program. In most smaller cities where office jobs are not growing rapidly, land-use intensification is generally achieved by the local government offering a large exemption against assessed improvements .... the end result of these selective exemption

policies are quite obvious. First, the ratio of improvements to land .... drops .... (Kochanowski 1991: 52).

15. This point runs counter to the Pittsburgh experience. The Neutze argument points to the importance of assessment practices. If land value is site specific, then, indeed, the developer's unique contribution that results in high leverage is being taxed. Theoretically taxing the developer's rent creation proportionally should have no effect on project scale provided all projects are taxed proportionally.

16. The analysis was carried out at about the same time as the unit root problem was being identified and tests for cointegration of time series were developed. Edwards' correction for serial auto correlation may have in effect "differenced" the equations and limited the estimated coefficients to a short-run interpretation, and we have no expectations of a tax having a short-run impact on land-use intensity. The presence of a unit root can account for the apparent skittishness of the model (Chin 1992).

17. The property tax is based on a net annual value calculation. Residences are assessed at five percent of their market value. Rental properties are one year's rent and commercial properties pay tax on between seven and ten percent of property value (Lusht 1992).

CHAPTER 3

IMPACT FEES AND BETTERMENT LEVIES

3.1 INTRODUCTION

Interest in the role that impact fees and betterment levies can play in local government finance has been stimulated by the growing concern over the fiscal and environmental impacts of urban growth. Service adequacy, infrastructure availability, traffic congestion, and the loss of natural amenity have become major issues in parts of the United States and Canada that, at times, unify the demands of environmentalists, developers and business leaders for better city planning and more effective urban services. Growth creates costs that spread beyond a neighbourhood's or municipality's boundaries and the costs, some believe, exceed the benefits. Urban growth in Florida, for example, is seen by many to create net fiscal losses (Degrove, 1992), and coalitions of diverse groups are demanding stringent growth management to maintain the environmental qualities that generate the development potential. Regulatory policies that attempt to reduce the extent of the external costs are insufficient and growth management strategies of the late 1990s, it is generally thought, will differ from those of the last decade by accepting the importance of finance and the need for new local funding sources to facilitate implementation. The new funding sources are needed to develop the infrastructure that mitigates some of the external cost of growth.

The external costs of urban growth are, at times, increased by municipalities engaging in "fiscal zoning" that makes land-use

decisions by planners depend on their immediate financial impact rather than their long term economic and social implications. The cost of urban growth is also increased by municipalities making land-use decisions that ignore their adverse consequences on adjacent municipalities. Regionally beneficial projects are avoided when they create undesired local side-effects (Bollens, 1993). As environmental concerns become more important, the effects of fiscal instruments on the behaviour of local governments become more important.

The need for fiscal and regulatory policy is created by the awareness that impact fees and betterment levies can affect the behaviour of private firms and public officials. Tax instruments can affect the extent to which municipal officials are willing to recognize the social and environmental effects of local policies. The resistance to further property tax increases and the growing interest in reducing the spread of cities has resulted in the increased use of impact fees and in municipalities actively searching for alternative ways to generate the revenue for the projects and services needed to reduce the external costs of growth. Without a reduction in the external costs of growth, the demand for regulation aiming to prevent future growth is likely to increase and reduce future development opportunities. The political effects of fiscal constraints can intensify housing affordability problems of renters and new households.

This chapter discusses the design and evaluation of impact fees and betterment levies. It describes cost-based impact fees and

shows how their impacts are determined by their design. Betterment levies that try to recapture increases in land value are discussed last.

3.2 OPTIONS

The potentially creative and innovative local finance options available to a municipality can be classified as being primarily:

1. Cost-based exactions, development cost charges, or impact fees. The fee may include service and infrastructure cost. The fees may be extended to also include the external cost of urban growth.
2. Taxes on land value increases, or betterment levies. The tax returns a part of the financial benefit of land value increases to the municipality.

This chapter describes and evaluates the expected efficiency and equity impacts of impact fees and betterment levies. Whereas the design of a general land tax that would be neutral is based on assessments that do not consider the particular characteristics of lots, impact fees and betterment levies are designed to cover specific costs or to recapture the benefit of the investment outlays that bring about land value increases in specific locations. Impact fees, based on service and infrastructure costs are prices that are established by estimating locationally sensitive cost functions for urban services. The public investments, if efficient, will yield land value increases that

exceeds the cost of the investment and the charge can, in theory, be designed in ways that create few, if any, equity problems. The pricing mechanism, if designed properly, should also increase the efficiency of land use. With impact fees, landowners, like consumers of other goods and services, gain the surplus value produced by expanding the urban infrastructure.

The identifying characteristic of impact fees is due to their calculation being based on real resource costs and service use and not on some measure of the market's valuation of land. The rationale for using impact fees is based on the recognition that land value is, in part, established by public policy and that a municipality's attempt to tax the change in the value of its land (i.e. through the use of a betterment levies) might create conflicts of interest that harm social welfare in the long run. Taxing the value of land that is created by public policy can lead to the "fiscalization of land-use decisions",[1] it can induce planners to overly emphasize the short term fiscal rather than the long run economic and social consequence of their land-use decisions.

Impact fees can be designed to cover the general cost of urban growth and to include not only infrastructure costs but the other external costs of development. These charges may attempt to place the full cost of development on the residents creating the demand for the new housing or commercial facilities. While developers argue that these types of exactions raise land costs, the exactions may actually reduce the cost of developing land in the long run by

reducing public resistance to growth. Should the impact fees not be used, the municipality might be forced by the established residents to use its other regulatory instruments to constrain new development at the eventual expense of renters and new households. Impact fees are increasingly being seen as political instruments (Alshuler and Gomez-Ibanez, 1993).

The second group of instruments considered in this chapter are the betterment levies. As mentioned before, land value increases occur in the context of public and private sector actions and commitments. Current trends in development approvals and regulatory practice recognize the public's increasing concern over environmental issues. In high growth regions of North American, urban development is being recognized as a joint public/private sector venture. Land value changes are seen to be generated by the actions, intentions and interplay of both sectors. The tax on land value increases may be accepted as a return on the public sector's investment that helps creates the increase of land value.

Betterment levies can serve the public interest when implemented as a part of a joint public/private sector venture that creates development potential. The public sector's claim to a share of the land value increase through a betterment levy may represent its claiming for a share of the profits from a joint venture in urban development. This option differs from impact fees in that it is output-oriented, the public sector may gain or lose as a result of using betterment levies to pay for infrastructure and service expansion. Negative betterment levies are compensation payments for

the loss in land value due to public sector actions.

The rationale supporting the use of this instrument is created by its possible effect on public sector decision makers. Giving municipalities a share of the land value increase due to development potential creates incentives for efficient land-use planning. It may also, as Healey (1993) points out, encourage local officals to accept projects yielding immediate short-term fiscal relief at the cost of the long-run economic, social and environmental losses. Evaluation of this instrument must, therefore, consider the costs and benefits of its impact on public sector decision makers. These may vary across cities and general prescriptions cannot be made. The evaluation of this instrument has to include empirical work.

Betterment levies can be classified as to their timing of collection and as to their voluntary or compulsory nature. They can be set as a tax on the landowner regardless of whether or not land is being developed, or they can be set as a levy on the developer and collected at the time of land conversion. The instrument can be implemented on a voluntary basis after, for example, a petition for zoning changes or service extensions by a majority of landowners in a "special district".[2]

3.3 IMPACT FEES

3.3.1 Service and Infrastructure Costs

Impact fees designed to recover service and infrastructure costs are used by municipalities across Canada and are usually

referred to as development cost charges. Municipalities raise funds for on- and off-site services by charging developers a price for the permission to build. A part of the price is capitalized back into land prices when the housing market is demand-driven. In balanced markets, impact fees add to the cost of building houses and a fraction of the cost will be shifted forward to consumers depending on elasticities of demand and supply, landowners' behaviour, and the geographic coverage of the charges. The incidence of impact fees is discussed in Skaburskis (1990) and Skaburskis and Qadeer (1992).

The housing price increases change consumption patterns in the city and affect the location of new development. Without impact fees, suburban expansion may occur at a more rapid rate and be more extensive than is socially desirable because the price of peripheral lots would be set below their true economic cost. When the extra cost of extending infrastructure is not included in suburban house prices, the emerging spatial pattern is inefficient in that some of the households moving to the suburbs may not value this location by an amount that exceeds its full development cost. One of goals of an impact fee policy is the raising of the price of developed lots at the city's periphery to reflect the long-run marginal costs of city spread and to reduce the effect of regulation induced distortions in the relative price of agricultural land.

Raising house prices at the periphery to reflect the full infrastructure and service cost is an appropriate municipal policy

objective as long as the residents who occupy the new development do not have to pay for the remaining debt incurred when building the old facilities that serve only the existing population. If the new development is about to redistribute an existing population in a city that is not growing, then the extra cost of under-utilizing inner-city facilities should be included in the impact fees.

Impact fees that promote land-use efficiency do not need to cover all the costs of city growth. The inclusion of costs that are not linked to the location of development would create an excess burden by raising prices to exclude households valuing the suburban locations by more than their economic cost. If the impact fees are to promote land-use efficiency, they should include all costs due to the expansion of the city's periphery regardless of the government level that actually pays the bill. The impact fee schedule should, in theory, reflect the long-run marginal costs of developing land at each particular location. The following sections deal with the definition of such costs and illustrate the enormity of the problems to be overcome in the design of an optimal instrument.

3.3.2 Defining Long-Run Marginal Costs

The long-run marginal cost is the lowest possible cost of expanding municipal services by increasing either the variable operating or the fixed capital inputs. The total costs of expanding infrastructure to serve new development may or may not be recovered by the impact fees designed to promote land-use efficiency. The costs will not be covered when scale economies are present and the

deficit will have to be recovered through other taxes.

While the application of the long-run marginal cost principle would attain land-use efficiency goals in theory, its application is problematic for practical reasons. Difficult questions have to be resolved regarding non-contiguous development. Who pays, for example, for services extended through vacant land left to "ripen" for development at a higher density at some future date? How are discrete investments, yielding benefits to all future land in the sector, paid for? Bridges, for example, increase the value of land well beyond the initial development giving rise to the need for the bridge. Attempting to measure the increase in the value of the land creates formidable problems that are not likely to be resolved by sophisticated econometric analysis. In the United Kingdom, measures of the value of some public infrastructure investments have been branded by their critics as "nonsense on stilts". The main difficulty in allocating lumpy infrastructure costs to large tracts of unused land is due to the uncertainty of the rate of growth of the city sector. Some of these problems can be overcome by designing impact fees that average the costs over a planning sector and charge a price based on a compromise between marginal and average cost principles.

3.3.3 Assessing "Average" Long-Run Marginal Cost

Land-use efficiency can be promoted by distributing the cost of servicing a large "planning sector" or a "service district" evenly across all the development projects that are expected to take place within it. To develop the price schedule, municipal

planners would have to predict the extent of development that is likely to take place over a particular time period, determine the need for capital improvements in the sector, estimate their costs and then design a schedule of payments that will fairly distribute the costs across all future projects. The total amount to be recovered would be equal to the long-run marginal cost of the public sector investments that allow the development of the entire district. This amount should then be distributed across each parcel of serviced land according to its developable area and, possibly, the development timing to reflect interest costs. Since the charge is for the services that make land-use conversion possible, they should not differ across land uses unless it can be demonstrated that different uses incur different infrastructure costs.

Attempts to allocate the off-site infrastructure requirement across different types of residential uses are likely to introduce errors that reduce land-use efficiency and lead to regressive income redistributions. Developers of large lots will argue that their residents, being fewer in number, use less infrastructure service and create fewer costs than the more numerous households living in dense projects. Since the short-run marginal cost of using roads and most other site-related services is near zero until they become congested, the argument for a differentiated fee structure for this service is irrelevant. The cost of extending services over the greater distances created by low-density development is relevant and the arguments for charging the

developers of large estates a higher fee may be justified on efficiency grounds. Estate developments push the "opportunity location" of other development further away from the city centre and result in more land being removed from non-urban uses.

When the undeveloped land yields external benefits, then its conversion creates social costs that should be reflected in its price. If the market price for this land is below the economic cost of conversion, then the urban area will be, at each point in time, beyond the limit justified by efficiency considerations. Furthermore, low-density development leads to greater energy consumption and increased commuting expenses for everyone forced to live further away from the city centre. Finally, the practice of allowing different charges on different types of residential use increases the chance that impact fees are to be used to augment exclusionary zoning practices. The usual practice in many Canadian municipalities of charging lower fees per land area for lower-density residential development cannot be justified on efficiency grounds.

The average long-run marginal cost principle can be used to distribute the cost of site-related services equitably and efficiently. The application of the principle does not create the excessive administrative burden of the strict marginal cost pricing rule. The term "average" applies only to the way the long-run marginal costs are distributed across developers within a planning sector or service district and not to the way total costs are computed. The total costs to be recovered with impact fees should

include all capital outlays required for the development of the sector, not only the costs incurred at the time the land is developed. The municipality that expects continued growth should recover the cost of the facilities needed to maintain the existing level of future development opportunities.

Including the cost of existing facilities in the impact fee schedule is justified when new development reduces the overcapacity that was built into them for the purpose of accommodating future growth. Capital expenditures in other parts of the city's periphery may be required to maintain future development options. Attempts to charge for "reductions in future flexibility" of development will, however, be controversial because the impact fees would be based on hypothetical urban growth scenarios and a whole range of scenarios is possible. Some may argue that there will be no more growth in this municipality and redirect the infrastructure problem to other metropolitan area jurisdictions. This raises the main problem with expenditure recovery instruments--the municipality is exposed to the risks associated with changing growth rates. It will not recover the costs of servicing a district if a recession brings unexpected and long delays in development activity.

The American Planning Association publications have recommended the calculation of impact fees across planning districts. F. Ennis, et al. (1991) pointed out the key flaw in this approach: the cost recovery schedule of fees is highly sensitive to the timing of development within the sector. The municipality, in setting the fee schedules, is placed in the

awkward position of having to offer *adequate* services within the planning district and hope that it will be able to recover costs at a future date. Since scale economies and interest payments are involved, the municipality will absorb the front-end costs and the risk due to the uncertainty of future growth rates, interest rates, and locational preferences. This problem is avoided in the Ontario cities setting their development cost charges equal to the average cost of providing services. This move simplifies calculations and reduces the municipalities risk exposure at the cost of sacrificing land-use efficiency objectives.[3]

3.3.4 Services to be Covered by Impact Fees

The usual procedure is to first include the cost of building the distribution systems: roads, sewage, water and drainage. Only the location-specific components can be included in levies that aim to promote land-use efficiency. The charges should apply only to the distribution component of sewer and water systems and to the maintenance and operation of the road system. SInce the existing systems will have built in overcapacity, the fees have to consider the need to maintain the overcapacity. Two rules can simplify the determination of the impact fee in the case of overcapacity: the first says that use of overcapacity within systems located outside the planning sector be free provided land developers build in an equivalent overcapacity within their subdivisions; the second suggests that the levies include the cost of all distribution systems built within the planning sector to allow for its development. This rule would not permit impact fees for old roads

and highways built to connect the municipality to other cities but would allow the recovery of the cost of building new roads and water distribution systems through the planning sector.

The **second** group of services includes parks, recreation facilities, libraries, schools, fire and police stations built within the planning sector. The facilities should directly serve the sector. The total cost that should be charged is determined by considering the potential catchment or service area for the facilities that lie within the planning sector. The municipality may be required to show that the catchment area does not overlap those of existing facilities. To ensure that the municipality does not engage in strategies that would load more costs onto the developments, provincial standards for catchment areas may have to be set and applied.

The **third** group of services provides the off-site infrastructure that may or may not be located within the planning sector: sewage treatment plants, water purification or filtration facilities, central school facilities, open space and parks provided outside the planning sector. The need to expand these facilities is due to city growth and is not attributable to the location of new development. Cost recovery for the expansion of these facilities should be permitted for equity reasons only when the municipality subtracts from the levies the present value of the property taxes the new residents will be paying to help retire the municipal debt created by building the existing services. The municipality should also deduct the present value of the future

taxes that will be levied to replace the ageing facilities that were built to serve the existing population. Unless these deductions are made, the people buying new suburban housing, the first-time homebuyers and the renters within the municipality will end up paying more than the costs created by their need for off-site services. This payment may be justified by political, not economic arguements.

3.3.5 The External Cost of Urban Growth

A municipality's impact fees may begin to embrace a larger numbers of cost items as its residents stiffen their oppositon to continued urban growth. The problem may be expanded from a local to a regional or even national concern as the various levels of government decide to let the price of new houses reflect the full cost of urban development. Impact fees that cover the cost of city growth can be designed to include all the capital costs and changes in operating costs associated with increasing service levels. Under this objective, the fees are not limited to the costs uniquely attributable to the spread of the city and the particular location of developments but also include the cost of continuously expanding highways, sewage treatment, waste disposal and recreational services. The impact fees would cover the investments within built-up areas of the city to reduce congestion of existing facilities. Setting the impact fees at amounts to cover the full cost of city growth increases land conversion cost within stable markets in the manner discussed earlier in this paper. In demand-driven markets, the fees leave their burden with the landowner (Skaburskis, 1990).

The cost of urban growth can, in theory, be calculated by determining the added capital and operating costs incurred by a plan that allows population growth while maintaining the prevailing community standards and the current level of taxes on existing real estate. The municipality would add together all the cost items when determining the charges, then subtract the present value of the property taxes for retiring the debt incurred to build the existing facilities. Unless this deduction is made, buyers of new suburban housing and first-time homebuyers throughout the city will pay more than the service costs created by city growth. The pursuit of this objective is evaluated by reference to both land-use efficiency and equity criteria.

3.3.6 Efficiency Considerations of Including the Cost of Growth

Impact fees that cover the costs created by a developer's choice of location are prices for services rendered and create no excess burden. If no fees are charged, then developers would tend to overconsume land and overextend urban areas. When impact fees are set above the direct costs attributed to the location of the new development, excess burdens are incurred in cities with competitive and stable land markets. The excess burden is due to the exclusion of households that value and would pay an amount for a suburban location that exceeds its full development costs.

Impact fees set at levels that cover the full cost of urban growth may, in theory, have a desirable impact on inter-municipal migration within stable markets that are in equilibrium. If households choose the municipality they move to as freely as they

choose their location within a municipality (which is unlikely in reality), the cost of growth fee will induce households to move to lower-cost municipalities. Funds raised by these impact fees can be linked to projects reducing growth costs. This, in turn, may reduce resistance to growth and help stem the demand for more restrictive development regulations that would seriously increase housing prices.

In cities experiencing rapid growth, demand is likely to exceed supply at prices that cover the basic cost of serviced land. The growth in demand may exceed the building and development industries' response rate. It may exceed the rate at which local planning offices can process applications and approve subdivision plans. The developers and landowners that can supply lots will, therefore, gain scarcity rents as land prices are established by the characteristics of demand and not by cost considerations. Increasing the cost of land-use conversion by charging higher impact fees will, therefore, <u>not</u> affect the price of new housing. The impact fees will not redirect migration to municipalities with lower-cost servicing as their cost is absorbed in the scarcity rent. Since the fees create no efficiency concerns within demand-driven markets, their evaluation should consider equity issues.

3.3.7 Equity Considerations of Including All Growth Costs

In stable land markets, the impact fees that cover the cost of city growth increase housing costs at the periphery and then through the rest of the city provided no changes occur in regulatory policy and that the municipalities expenditure programs

are unaffected. The tax burden will be shifted forward to renters and first-time homebuyers. While the people causing growth are the prime beneficiaries of the infrastructure service expansion, they are not the only beneficiaries nor are they the only people who will be made worse off by the recapture policy. City growth benefits all landowners by increasing their property values and it benefits local business by increasing market potential. Existing residents gain variety in goods and services. Cost of growth fees redistribute wealth toward existing residents. The impact fee that includes all the costs of city growth but does not credit new residents for the benefits of growth does not satisfy the benefits-received criterion by which taxes are evaluated.

In equilibrium housing markets, impact fees raise the cost of developed lots at the city's periphery relative to what they would be if no charges or restrictions were placed on the land and then drive up the price of housing throughout the city (Singell and Lillydahl, 1990) unless the funds are used to provide new housing for lower-income people. Assuming a constant municipal expenditure program, the initial increase in housing prices will cause households to try to reduce their consumption of housing services as explained by Richard Muth's spatial equilibrium model (1969, Chapter 2). This, in turn, increases the value consumers can gain as a result of the reduced travel costs in more central locations. The increase on the demand for more central locations forces the land price gradient upward and makes it steeper towards the centre. The total price change in the inner city is, therefore, greater

than the impact fees placed on suburban development. The secondary effect of increasing land conversion cost at the city's periphery further redistributes income in favour of existing property owners. The induced price effect makes the total transfer of money from in-migrants, newly formed households and renters to existing property owners exceed the cost of urban growth.

The inclusion of all costs attributed to growth in a municipality's impact fee schedule does not score well on equity grounds unless:

1. The municipality decides that the "relevant circumstances" used to define equity should distinguish between existing property owners and all others;
2. The funds are directed to increase low-income housing.

Furthermore, if the principle calling for each new resident to pay for city growth is deemed to be fair and applicable at the municipal level, it should also be seen as fair and applicable at the provincial and national levels. Charging for growth at the local level would be similar to the higher-level government making immigrants pay an entry fee for the future services they will be consuming regardless of the future contribution the people will make to the evolution of the country.

The preceding arguments apply to equilibrium markets. In rapidly growing cities with demand-driven housing markets, the tax burden will remain with landowners. Since the impact fees will not be shifted forward, it does not have the adverse redistributional consequences described in the preceding section. The fees that

raise revenues for the local governments within demand-driven housing markets score well on the benefits-received principle because the burden of the tax is shifted back to the landowners who are already gaining excess profits as a result of the constraints that reduce the markets ability to attain an equilibrium between supply and demand.

3.4 BETTERMENT LEVIES

3.4.1 General Impact

The preceeding discussion concerned charges that would cover the municipalities cost for providing infrastructure, services and possibly the external costs created by development. A tax can also be placed on the land value increase due to the provision of infrastructure. Betterment levies can be instituted on a tax on an increment of land value change as established by assessors. To avoid liquidity problems created by homeowners holding wealth but not having income, the tax can be collected at the time the land is developed or redeveloped. In a sense, the betterment levy is a tax on scarcity rent. As such it scores well on the ability-to-pay principle, unlike the general land value tax discussed in Chapter 2 that is collected annually.

Within demand-driven markets, betterment levies do reasonably well on both the benefits-received and the ability-to-pay criteria. The horizontal equity criterion can be challenged as being discriminatory because it singles out landowners and leaves other types of capital gains and rents untaxed. Developers should be able

to determine clearly the size of their obligations before buying land, and the levies should be set impersonally, meaning that a relatively broad definition of "relevant circumstances" is needed to determine what groups of properties or developments fall into the different rate categories. The main problem with this instrument is in the difficulty and cost of measuring the change in land value.

3.4.2 Voluntary Levies

Betterment levies limited to special districts and implemented on a voluntary basis are expected to score well on economic efficiency and equity criteria. Developers, landowners and city officials may be willing to enter joint venture agreements to provide infrastructure to a district and open it to development or redevelopment. The municipality's sharing in the land value increase may encourage efficient regulation and infrastructure provision. The recapture policy may make development feasible in cities with residents resisting growth or property tax increases.

3.4.3 Tax Increment Financing

Tax Increment Financing is a method used in the United States to finance new industrial, commercial or residential projects. The financing method is described by Klemanski (1990).

> When a project is built within the TIF district, the value of the land increases, and any increases in the property tax revenues are retained within the district to help pay for project costs. Property taxes are still collected on the property, but the taxing authorities collect on an "original assessed value" or base year... Any increases in property values (and assessment) will result in a "current assessed value" of the property. The difference between the current and original assessed values is the "captured assessed value", which is

> retained by the TIF authority to pay for development costs or to repay loans...
>
> Tax Increment Financing offers local governments several advantages over other means of financing economic development. Administratively, TIF is fairly simple. In most states, a Development Plan must be completed, which determines the assessed value of the property, as well as the costs and benefits associated with proposed redevelopment within the District. Captured "increment" revenues are either accumulated or used to borrow money in the private lending market to pay for the redevelopment project. (Klemanski 1990: 24)

This financing method has had several consequences. Politically, it insulates elected officials from the consequences of growth related impacts. In practice, the method has led to the public finance of project components or infrastructure that would normally be supplied by developers. Since the projects within the designated area must be successful to raise property value redistribution objectives and other social goals are foregone.

The development or redevelopment authority accepts liability for the debt to be recovered by increases in local property value. United States experience shows some districts running into trouble but, for the most part, the recovery method works. It can be argued that the development would have taken place anyway and the tax increment financing scheme merely affects the location of development and draws away property taxes from other jurisdictions. The incidence of tax increment financing is not clear and more empirical work is needed. Klemanski (1990) cautions the use of this method.

> Unfortunately, many cities are caught in a trap from which they cannot easily extract themselves. At the mercy of political, economic, and demographic forces beyond their control, cities are often the most obvious victims

> of those very forces. As such, cities are forced to pay -- - in many ways. To the traditional economic and social costs are now added many of the costs of redevelopment or revitalization formerly assumed by other sources. However, the true net costs or benefits of state and local incentive packages cannot easily be determined. Most city officials assume that development would not have taken place without such incentives. Therefore, tax abatements and financing schemes are perceived as producing net benefits to a city. However, such programs do represent some costs to local and state governments. Michigan's Department of Treasury has estimated that the 1986 costs to Michigan counties alone in diverted TIF revenues totalled over $4 million, and the costs to cities equalled about $40 million. For the 1986-1987 fiscal year, local tax expenditures for commercial ($15 million) and industrial facilities development ($190 million), made through tax abatements, constitute a large cost of attracting businesses to the state. In addition, TIFs increase the need for the state to contribute funds through the school aid formula, to replace the diverted money, an amount costing the state another $14 million for 1985, and rising to almost $19 million in 1986. Such figures suggest that great care and caution be used when considering implementation of Tax Increment Financing. (Klemanski 1990: 27)

3.4.4 Recapture/Compensation Measures

Municipalities can use betterment levies as a pure tax to raise revenues. The main difference between the tax and the impact fees discussed earlier in this chapter is in the manner of assessment. Experience to be documented in the next chapter shows how general attempts to tax land value increases across the city create administrative costs that make the policy not worth considering in Canada. In particular, the general land value tax with a payment for loss of value will end in continuous appeals. Dr. Ann McAfee is concerned that taxing land value increases due to municipal investments or plans will create a precedent, opening the City of Vancouver to expensive litigation for losses in property value. Lawyers will have to untangle price declines due to

recessions, general policial atmosphere, increased congesion and new facilities.

Practical considerations should caution the search for policies that would tap land value increases and compensate for decreases. Impacts created by public projects, however, should be considered and compensated for both equity and efficiency reasons when the losses are beyond what one would consider as the "normal cost of living in a dynamic and progressive society." Some adjustments in asset value occur as a result of the regular functioning of government. Usually, the value increases. In the process, some people may sustain and bear the losses to allow the efficient administration and to ease the process by which change brings overall prosperity to most people. Over a lifetime, it is hoped that every person gains due to public actions exceed their losses. When the loss is sufficiently large as to preclude this hope, compensation is due.

The issue becomes one of determining what are the conditions and the magnitudes that constitute the "normal cost of living in a dynamic society." Judgement is involved in setting the compensation agenda. While transparency of policy is a general goal, a municipality's confession of its intent to compensate for losses beyond "normal" will stimulate growth in compensation claims to the extent that the administrative costs of the policy outweigh the equity and efficiency gains.[4]

3.4.5 Disguised Betterment Levies

In many Canadian municipalites, "development cost charges" are

in reality a betterment levy. Many municipalities do not have the analytic capacity nor the budget to hire sophisticated consultants to do the detailed cost calculations needed to set up a rational fee schedule. The fact that many development charges are very similar to betterment levies will be illustrated by the Chapter 5 interviews with developers. Municipalities often adjust their impact fees to correspond with changes in market cycles. Developer appeals for provincial intervention appears to follow market cycles.

During demand-driven markets, developers "pay to play" and share their profits by paying for infrastructure that is only vaguely connected to their projects. In some cases, impact fees are set by the local officials' determination of what the market will bear. When the market reverses, developers have smaller profit margins and fear smaller reprecussions as a result of their appealing a municipality's exactions. Retribution by municipal officials in the form of development delays are less costly when the market is slow and are less likely when municipal officials want to see growth. The link between development charges and market conditions is official in some places. Mississauga, for example, raises its charges in line with the Southam Construction Cost Index to reflect servicing costs. The index, however, reflects construction cycles and can, therefore, serve as a general proxy for land-value changes.

A formal evaluation of the practice of disguising betterment levies according to the criteria discussed in Chapter 1 would

conclude that the policy is unfair and inefficient. Using development cost charges as betterment levies violates the impersonality criterion when the developers receive better treatment and lower charges than their competitors. Horizontal equity favoured by a municipality is lost as the "founding" local companies are allowed to develop quite freely while outsiders face more obstacles and higher fees: Mississauga, for example, charges different developers different fees. The certainty of burdens is unclear when developers are subject to delays and discrimination. Efficiency is impeded by the lack of certainty of payment and the general uncertainty created by discretionary approvals processes.

3.4.6 Practical Considerations

A general betterment levy has not been cost-effective from an administration viewpoint as will be demonstrated in the next chapter. Betterment levies that return to the city a part of the land value increase in a planning sector will, however, promote both efficiency and equity goals when landowners, developers and city officials voluntarily engage in joint venture urban development projects. Betterment levies instituted on an ad hoc basis may be an unattractive but necessary feature of a municipality's urban development policy that can lead to lower housing prices in the long run. Resistance to property tax increases and the growing demand for regulation may leave municipal officials with few other methods for raising revenue. Without the charges, anti-growth sentiment can reduce the feasible amount of development for political reasons and, thereby, can lead to higher

housing prices.

3.5 CONCLUSIONS

It is extremely difficult to develop a system of cost-based development charges that furthers both efficiency and equity goals. Betterment levies are, from a theoretical viewpoint, neutral and has appeared to be equitable when accurately assessed and collected at the time of development. However, fairness and efficiency is not likely to be attained in practice given the measurement problems and administrative costs created by rent seekers. Allowing compensation for decreases in value, as a general policy, will increase rent-seeking behaviour to the extent that would make the policy costly in North America.

The general development charge based on average cost pricing that raises revenue but leaves locational choices unaffected is used throughout Canada and can have the beneficial political effect of helping reduce resistance to growth. This leads to more development in the long run and indirectly reduces housing prices. The main concern with these charges is their fair and impersonal assessment. Voluntary associations with the public-private sector sharing the increases in land value can increase development opportunities during these fiscally difficult times. Political rather than economic factors make these instruments appear attractive. The next chapter discusses practical and institutional considerations. Political reather than economic factors make these instruments appear attractive. The next chapter discusses practical

and institutional considerations.

ENDNOTES

1. The fiscalization of land-use decisions in frequently discussed in the current growth management literature that is reviewed by Bollens (1993).

2. A proposal in the Greater Vancouver Regional District, for example, asked for an extension of the Light Rail Transit System in return for increases in taxes within the proposed new station area.

3. Since the Ontario development cost charges do not exempt the new homeowners from taxes used to pay off the debt created by facilities built for the existing population, the fees are not justified by equity considerations. Their rationale is political.

4. A case study is presented by Skaburskis (1988).

CHAPTER 4

THE PRACTICE OF RECAPTURING GAINS: CASE STUDIES

4.1 INTRODUCTION

This chapter examines the actual experience of instituting land value taxes and betterment levies in various countries, and attempts to draw lessons from those experiences. It carries our discussion about the recapturing of development gains into the realm of practice and examines political, institutional and administrative factors that affect the outcome of such policies. Among the examples reviewed in this chapter are Canadian attempts to shift the tax burden to land, the British betterment levy schemes and the Australian site value taxes. Although Pittsburgh's land tax has been discussed previously, by re-examining it in this chapter its lessons for the recapture of gains can be highlighted.

As discussed previously, the objective of recapturing unearned increments is almost inseparable from other land policy goals, namely, controlling speculation, restraining sprawl and ensuring an adequate supply of land for housing, etc. Land taxes and betterment levies, thus, in practice serve as instruments of mopping up gains as much as tools of realizing other land-related objectives. It is, therefore, appropriate that our review of these instruments should take into account the associated land policy objectives over and above the fiscal goals. For this purpose, we will begin this chapter by tracing the evolution of urban land policy in Canada. This example will illustrate the policy context within which land taxes and betterment levies are often lodged.

4.2 CANADIAN LAND POLICY: THE HISTORICAL CONTEXT

Urban land is defined by location, use, provision of facilities and services, supply, demand, tenure, timing of development, etc. Any one of these dimensions can become a source of land problems. Among the common issues relating to urban land are: shortage of serviced land, physical limitations, high prices and speculative booms, inefficient pattern of land use, ownership monopolies and tenurial inequalities, complexity and costliness of development process, waste of prime agricultural land, neglect of ecological resources, unaesthetic urban form, poor planning, unaffordable housing, municipal financial deficit, and high cost of facilities and services. These conditions represent various aspects of an ill-managed and inefficiently functioning land market. Together they constitute the syndrome called the Urban Land Question.

The focus of the urban land question in Canada has been shifting from period to period, calling for a corresponding change in policy. The history of urban land problems and policies in Canada can be divided into four distinct phases.[1] Each phase is characterized by a specific configuration of land issues and corresponding policy proposals. Taken together, these four phases represent the evolution of an impressive array of land policy instruments in Canada. The following is a sequential description of each phase.

4.2.1 The Formative Years 1930s-1945

Up until the 1930s the land question in Canada referred to

distribution and settlement of newly opened lands. Urban land issues were relatively less pressing than the challenges of settling and developing virgin farmland. Cities though small were periodically caught in speculative booms resulting in large subdivisions of peripheral lands developed on public borrowings on the promise of expected tax revenues. Yet booms were followed by busts in the land markets resulting in bankruptcies of both individuals and communities. These land booms and busts prompted public demand for controlling speculation, and site value taxes were, many times, advanced as the instruments of choice (Owens 1953).

The site value tax was widely adopted in the western provinces of Canada in the first quarter of the 20th century. By 1914 about two thirds of all municipalities in British Columbia taxed only the land. Alberta experimented with the site value system for four years in the period 1912-16. Yet western cities continued to suffer the worst ravages of land speculation and premature subdivisions in the mid 1920s. City planning was limited to a few cities and even there it was largely focused on peripheral development for housing projects. The 1930s depression prompted the enactment of the Dominion Housing Act (1935) to fund housing schemes -- the first extension of public interest in housing and land. World War II interrupted even these rudimentary public initiatives. Urban problems were set aside for peaceful times. One lesson learnt in Canada in those days was that the land value tax was not as effective an instrument of controlling speculative

cycles as they appeared to promise. From then on the trend has been to increase taxation on buildings (Owens, 1953).

4.2.2 Institutional Development and Urban Expansion (1945-68)

This period is characterized by the institutionalization of city planning and housing development. It was also a period of rapid urban growth, the emergence of land development and the home-building industry and housing boom which entailed servicing vast tracts of suburban lands. A series of planning acts were passed by the provinces which are constitutionally responsible for urban development. At the federal level, the Canada Mortgage and Housing Corporation was established (1946) for the improvement of housing conditions and living environments.

By the 1960s, the new public and private institutions were bearing fruit. Problems of overcrowding and slum housing, premature subdivision and infrastructural provisions were brought under control. City planning as a public function was established in major cities and an institutional framework of mortgage finance had been put in place. Yet these successes laid the ground work for new issues. By the 1960s, a new agenda of land problems emerged, e.g. sprawl and inefficient land use pattern, displacement of viable communities by urban renewal, and spoilation of prime agricultural land. The policy agenda shifted to new challenges calling existing planning approaches into question.

Discussions about land banks and speculation taxes began to fill public forums. Helleyer's report (1969) captured this mood and concluded that "the present system for assembling and servicing

land in much of urban Canada is irrational..." (Federal Task Force on Housing and Urban Development 1969: 39). It was 'attracted' to the concept of site value taxation but recommended a special tax on sales of land without improvements. It offered a strong indictment of the planning system and the development industry. Among the remedies proposed by Helleyer were public land banking to capture socially created land profits and to reduce risks of development. From our perspective, the point to note is that the land question was transformed from inefficiencies of an incrementalist mode of development to inequities and contradictions of institutionalized planning and organized development industry. This phase, again, brought home the lesson that a means of recapture, whether taxes or tenurial changes, are essential for urban development. It showed that land issues are persistent, e.g. limitations of land supply, spiralling costs, speculative process, etc., and are complicated by differential distribution of windfalls and wipeouts.

4.2.3 Urban Reform and Public Policies 1968-78

This phase coincided with a general shift toward a reformist and activist state and commitment to an enlarged government role in social and economic development. Canada as a welfare state was consolidated in this period. A host of public initiatives were undertaken for regional development, urban reform, housing and comprehensive planning.

Public housing and suburban development commanded much public attention, though issues of sprawl, loss of agricultural land, environmental preservation and energy efficient land uses were also

much discussed in policy forums. Yet in the urban sector, spiralling housing prices purportedly propelled by the high price of serviced land became the touchstone of public interest.

Two opposing propositions emerged, anchored respectively in the right and left ideologies, to structure public discussion of urban issues, namely: (i) high costs (due to high standards and planning delays) of servicing urban land; or (ii) developers' monopolies and scarcity rents. Spurr's report fueled this debate (Spurr 1976: 396-397). The debate culminated in the establishment of an investigative task force known as the Federal/Provincial Task Force on the Supply and Price of Serviced Residential Land (popularly known as the Greenspan Report). It was prompted by the property boom of 1972-75 during which the lot prices increased by 41% in real terms--an unprecedented rise of land prices in such a short span of time.

By the time the report (1978) was published, the boom had died out and there was little urgency for any policy initiative. Yet the Task Force did not make any striking recommendations. It essentially held market conditions and spiking of demand responsible for the boom and exonerated developers as well as public planners from blame. It was primarily a balm for the aroused passions on both sides of the political spectrum.

From our perspective, this phase represents the emergence of the urban land question are in the forefront of the national agenda. The issue of high prices remained in the headlines, but the search for its causes led to questions of monopolies, costs of

planning, servicing standards, municipal revenues and expanding demand. Among the remedies were various ideas for recapture of unearned increments. Spurr recommended provincial and municipal programs for the development and supply of serviced land (Spurr 1976: 399). Ontario imposed a Land Speculation Tax (1974) on the sale of undeveloped land. It proved cumbersome and yielded little revenue. British Columbia instituted a land commission to preserve agricultural land. A common strategy recommended to deal with these issues was to institute some measure to deflate windfalls--whether it be done through taxes or through realignment of public/private responsibilities in the development of land. An interesting sidelight in this regard is the active role the Canadian delegation played in the adoption of the "appropriate recapture of unearned increment" clause in the recommendations of the UN HABITAT Conference in 1976 (Ministry of State for Urban Affairs 1977: 30-31).

4.2.4 Costs of Development and Public Fiscal Crisis (1979-93)

By 1979 a mood of exhaustion had set in regarding public policy for urban development in general and land markets in particular. Inflation was gathering momentum in the midst of a recession, public debt was mounting and social needs were urgent. The Conservatives came to power and brought a new social agenda. The recession of 1982-83 was followed by years of slow growth. Another property boom swept through Canadian cities in the 1986-89 period followed by the recent recession. Despite these economic

undulations, the 1980s are characterized by the relative flatness of the real estate market. An ideology of relying on market for resource allocation, an emphasis on privatization of public services and retrenchment of government programs took hold. The fiscal crisis of the state--all levels of government-- has been the defining element of this era.

The policy initiatives of the 1970s were gradually trimmed back or phased out. New land issues arose to define the agenda of the 1980s which revolved around servicing costs and local finance. In the spirit of privatization, increasing reliance was placed on passing on costs of services to developers, though area-wide infrastructure costs could not be off-loaded. Environmentalism gave new impetus to growth management strategies which relied on exactions and licences to realize its objectives. Again the role of fiscal and financial measures to cap the scale of profit through land development came into prominence.

The land question turned around public costs. Through financial exactions such as lot levies, impact fees, development charges and linkage fees, direct public investments began to be recovered. These practices have introduced new ways of recapturing potential increases in land values. Later we will discuss the effectiveness of individual measures. Presently it is enough to note that the new practices have spread widely and they are firmly rooted in planning practice.

4.2.5 Observations about Canadian Land Policies

The foregoing account of the evolution of urban land policy in Canada has three common threads.

(1) Urban land issues take on different forms and foci in successive phases of social and economic development. While old issues may be resolved, new ones arise precisely as a result of their resolution. For example, land price as a public concern may characterize two different periods, but it could be the result of a fragmented and poorly organized development industry in one stage and of predominance of oligopolistic and vertically integrated firms in another. The transformative tendencies of urban land issues are a special challenge for policy makers. They affect the stability and consistency of recapture measures over time. What is good in one phase may not be effective for new objectives.

(2) The management of land values is inseparable from land-use planning. One cannot be tackled without addressing the other. Thus recapture measures have been conceived as a part of comprehensive land policy and not merely as fiscal instruments to drain away unearned increments. They are both a financial tool and a regulatory device. The economic and social (land use) objectives have to be balanced.

(3) The magnitude of unearned increments, particularly those arising from public investments, depends upon respective public and private roles in land use and development. The recapture measures suitable for one set of roles may not be appropriate for another.

These observations suggest that the recapturing of unearned increments as a policy objective cannot be pursued all by itself. It is closely tied with other public objectives and its realization depends upon the market conditions.

In Canada, site value taxes have been offered as instruments of choice to deal with divergent issues and a variety of conditions throughout the 20th century. The advocacy of recapture instruments has been a constant presence in the evolution of Canadian land policy. Yet Canada has already considerable experience with land taxes and levies. Various provinces have experimented with site value taxes for short periods and the Prairie provinces retain graded land tax as the basis of local revenue. Despite a long history in some parts of the country, land taxes have not been adopted as instruments of land policy in most of Canada. Similarly, other recapture measures advocated in times of property booms have been largely ignored. The institutional resistance to recapture measures poses intriguing questions. To understand the basis of this resistance, it is necessary to review the experience of land taxes in Canada.

4.3 LAND TAXES IN CANADA

The western provinces in Canada opted for a graded land tax or some variant of site value tax almost from the day of their incorporation. For example, British Columbia was established as a province in 1871 and empowered to tax property a year later by the

first municipal act. Many cities in B.C. instituted exclusive land based taxes as early as 1874 (Hagman and Misczynski 1978: 408) though exemption of improvements from tax was not formally allowed until the Provincial Assessment Act 1893 (Stalker 1914: 12).

Alberta and Saskatchewan were incorporated as provinces in 1905, but a municipal ordinance of 1897 enacted by the Federal government for territories under its control authorized levying of "a rate...upon the actual value of all lands (without improvements)" (Stalker 1914: 27). Interestingly, in upper and lower Canada, (Ontario, Quebec and the Maritimes) the combined assessment of land and improvements was the basis of local taxes even under British rule. It is an intriguing question as to why Western Canada, the newest provinces, adopted land taxes and have been more inclined towards the site value assessment than the settled provinces of the East.

Could it be that the enthusiasm generated by Henry George's ideas in California coincided with the settlement of the West and influenced the public outlook in these territories of large undeveloped tracts of land?

Between 1903 and 1914, western Canadian provinces swung almost fully towards site value taxation, i.e. exempting improvements completely from property tax. "By 1914 about two-thirds of all municipalities in British Columbia had adopted the method. Alberta imposed the system by statute in 1912." (Finnis 1979: 18) Saskatchewan was not influenced to the same extent, but still improvements were taxed for 15%-45% of their values, and Manitoba

has been less influenced by the site value approach -- there, improvements were assessed at about 66% of their value and land purportedly at 100%. Ontario tried site value assessment in the early 1920s but soon abandoned it as it did not yield the expected benefits (Kitchen 1991: 121).

After World War I, the tide started turning back and the assessable portion of improvements values began to increase even in Western provinces. With the development of cities, buildings whose values were many times the price of land turned out to be a richer vein for assessment purposes. The demand for revenue to finance infrastructure and public services increased, and it could not be sustained by taxing land alone whose values fluctuated widely with business cycles. The land tax increasingly proved inadequate to meet the need for revenue.

On other criteria, the site value tax in Western Canada also yielded mixed results. Canadian local governments are responsible for hard (water, sewerage, garbage collection, transport, etc.), as well as portions of soft (education, welfare, health, social services, etc.), services. Thus, the expansion of public responsibility for education, welfare, health care and social services increased the demand for revenue, requiring extending the tax base through the
inclusion of a greater proportion of the building values. The objective of breaking up large tracts of unimproved land was realized but land speculation could not be restrained. Finnis observes that "the greatest land speculation in Canadian history

took place in the era of site valuation." (Finnis 1979: 18)

The Western Canadian heritage of land tax continues in a mild form in Saskatchewan and Alberta, where only 50-60% of building values are assessed for tax purposes while the land is assessed at a 100% level. Chart 4a shows that the three Prairie provinces retain some form of graded land tax while all others do not differentiate between land and building for tax purposes.

CHART 4a

Basis of Property tax in Canadian Provinces

Province	Basis of Assessment	Basis of Value Estimate	Type of Tax
Prince Edward Island	Land and Building	Market Value	Property Tax
Nova Scotia	Land and Building	Market Value	Property Tax
Newfoundland	Land and Building	Assessed value based on present use and rental value	Property Tax
New Brunswick	Land and Building	Assessed value	Property Tax
Quebec	Land and Building	Actual value	Property Tax
Ontario	Land and Building	Assessed value	Property Tax
Manitoba	Land - Full Value Building - 66.66% of the value	Market Value	Graded Land Tax
Saskatchewan	Land - Full Value Building - up to 60% of value	Fair Value	Graded Land Tax
Alberta	Land - Full Value Building - Percentage of Replacement Cost	Assessed Value	Graded Land Tax
British Columbia	Land and Building	Market Value	Property Tax
Sources: Compiled from Canadian Property Tax Association, The Appeal Process in Canada and the United States of America, March 31, 1993 as well as (Kitchen 1992, p. 21)			

4.3.1 Conclusions

a) Overall the site value tax, whenever introduced, has had a short life. It only survives in the form of graded land tax in three Prairie provinces. Site or land taxes showed some success in accelerating the development of hoarded lands or breaking up large land holdings in Western Canada in the early 20th century. Yet this

form of tax did not protect the Prairie provinces, and their cities, from land monopolies, boom-bust-cycles, speculation or sprawl. For example, the property boom of 1972-75 that prompted a federal inquiry was almost as severe in Calgary or Edmonton as in Ottawa or Toronto.

b) There are no known systematic studies of the land tax impacts on land values, timing and intensity of development in Canada. Yet observational and anecdotal information does not suggest that urban land markets of the Prairie provinces -- where graded land tax is the rule -- fare better on efficiency and equity or administrability criteria. There is no discernible evidence of the land policy objectives outlined in Chapter 1 being better fulfilled in those provinces than in the rest of Canada, particularly if differences in regional economies and level of urbanization are taken into account. Land prices, development patterns or local finance of Calgary, Edmonton or Saskatoon do not present a markedly better picture than those of Ottawa, Toronto or Halifax. These are crude and anecdotal comparisons, but they illustrate the point that, in practice, land taxes of the Prairie provinces are little distinguishable from the property tax as instruments of land policy.

c) It appears that the amount and time of a tax are prime considerations in market decisions. They are based on local revenue needs. The land market seems to have adjusted to differences in the assessment base, land or buildings, in various provinces. Overall, the institution of property tax has assumed certain uniformities

across Canada accommodating differences in assessment bases. Recently many provinces have undertaken a comprehensive review of their property tax systems. Site value or land taxes have been considered in most cases as a possible reform measure, but almost everywhere such options have been rejected. A brief excursion into recommendations of the property tax review commissions will elaborate this point.

4.4 PROPERTY TAX SYSTEM AND SITE VALUE TAX

In Canada, the property tax, in all its variants is a primary source of local revenues as well as a policy tool for economic and social development in Canada. It takes away 4-6% of personal disposable income. The per capita property tax in Canada averaged $742 in 1988; Newfoundland had the lowest tax, $212, and Ontario the highest, $915, per person (Kitchen 1992: 2). The property tax, though not a crushing burden, could be a substantial charge on household income, though it is really a levy on assets (wealth) locked up in the property.

Among advantages of the property tax are its success in raising revenue, its buoyancy in times of growth, its fairness in that it is not significantly regressive, taking into account exemptions for the elderly, widows and grants from higher levels of government (Smith 1990: 303-306). Yet it is always surrounded by some degree of discontent and demands for reform. It is often perceived to be regressive and volatile because assessed values change more rapidly than owners' perceptions or their ability to

pay. Among the sources of discontent are: the disparity of assessments and tax rates between various classes of properties, the divergence between household incomes and capital value of property assets, and the imbalance between taxes and benefits received. Although people's resistance to local taxes in Canada has not reached the level of that in California, there is concern over lack of an explicit connection between taxes paid and benefits received (Smith 1990: 30).

The result is that assessment and property tax reform are almost permanent items on the public agenda. Almost every province in Canada goes through a periodic (apparently decennial) review of the property tax system. To cite the example of Ontario, the province had a thorough review of the assessment system in 1969. The Smith Report (1967) laid the basis for the Assessment Act of 1970. In 1976, the province established another commission to review the property tax, i.e. the Blair Commission. This effort culminated in a White Paper which after a long public review led to the property tax reforms of 1979. The complexity of Toronto's assessment issues necessitated another review focused on Metro's problems. The Fair Tax Commission (1991) is re-examining the structure and bases of all taxes in Ontario. It has gone over the property tax again and made about 48 recommendations -- proposing a thorough overhaul of legislation, administration and procedure of property assessment and taxation. These commissions examined site value or land tax as an option of reform of the property tax, but each one turned it down in favour of Market Value Assessment (MVA)

combined with recommendations for changes in the procedures of property assessment and tax administration. The conclusion of Ontario's Smith Report about the site value assessment probably best summarizes observations of most governmental commissions.

The Smith Report (1967) concluded that for residential properties, site value taxation would increase the weight of taxes on farming operations, compress urban construction on more crowded sites and would not eliminate land speculation. It further maintained that "the tax, if it succeeds in appropriating state increments in value of land, will be a discriminatory levy so long as other forms of capital gains are not taxed" (Smith Report 1967: Vol 11, Chapter 11, Par. 15). The Blair Commission and the Toronto Task Force (1989) have reaffirmed this conclusion.

The Ontario Government's Fair Tax Commission's review of the property tax brings out some lessons that are applicable to the design of recapture instruments. It points out that a good property assessment system would be (1) neutral, (2) objective and impartial, (3) simple, (4) clear, visible and explicit, (5) certain, (6) stable, (7) administratively fair, (8) administratively simple and (9) free of negative impacts on other public policy objectives. It should not have negative impact on patterns of urban development, for example (Ontario Fair Tax Commission 1992: 49).

Chart 4b reproduces the Commission's evaluation of the graded land tax (two-tier) on these criteria. It concluded that a land tax will capture the unearned increment but will produce problems of

CHART 4b

Assessment of Two-Tier Land Tax System

CRITERIA	TWO-TIER TAX
Description of base	Land and buildings assessed and taxed separately, thereby permitting the taxation of land at a higher rate than improvements at local council discretion. Assessment at market value.
Assessment basis	Market value of land and improvements determined separately, using property appraisal methods.
Application of assessment method	Market value separately determined for land and improvements. Reassessment of land and improvements components would presumably take place regularly.
Application to different classes of property	Appraisal methods would be similar to market value.
Claimed benefits	Encourage improvement of land by reducing tax on buildings; taxes socially created land values; reduce taxes for homeowners; optimize vacant land use. Captures a portion of unearned increments in land values.
Tax policy flexibility	Separate tax rates can be set on land and buildings. Would indirectly permit variation in burdens on residential relative to other classes of property. If class banding also a feature (separate tax rates for land and improvements for each class of property could vary for classes of property as well.
Fairness Ability-to-pay Equal treatment of equals (horizontal equity) Appropriately unequal treatment of unequals (vertical equity) Household income impact basis	Statistical analysis suggests no reason to expect income incidence to differ materially from market value basis. Very high relative taxes on land would capture a portion of unearned increments. Serious problems with equity in older, central city areas and in farming areas under development pressure if land taxes high. continued.....

CHART 4b (continued)

Fairness Benefits received	No reason to believe two-tier is any more closely related to benefits received than any other system.
As simple as possible	Requires use of appraisal techniques for valuation, since actual transactions do not happen on a sufficiently regular basis. Separate value estimates for land and improvements currently prepared by assessors would be reported separately and tested separately on appeal.
Clarity, visibility, explicitness	Values determined using appraisal techniques. Complicated by the fact that two separate values must be created for assets that do not normally trade separately. Values of parcels are often higher than sum of land and improvements separately.
Neutrality - no unintended changes in behaviour	Behavioural change is an explicit goal of two-tier system with higher tax rates on land. Land intensification an explicit goal. Because tax is a very blunt instrument, difficult to predict development impacts. Not as flexible a planning mechanism as zoning.
Certainty	Relative tax burdens on residential properties determined annually in budget cycle.
Stability	Political decision regarding tax rates for land vs. buildings could effectively make assessment base unstable for government. For taxpayer, effective base could change from year to year as relative tax rates change.
Appeals	Complicated by two-tier structure of assessment. Appeals based on valuation methods. Separation of land and buildings for valuation purposes is difficult in most cases and expands scope and technical complexity of potential appeals.
Administrative simplicity	Two-tier assessment introduces element of complexity. Separation of land and buildings adds complexity to valuation process.

Administrative costs	No conclusion can be drawn with respect to administrative cost impact without further study.

Source: Ontario Fair Tax Commission, Property Tax, 1992.

equity in older, central city areas and in farming areas by taxing them high and pushing them into redevelopment prematurely (see Chart 4b). It could be entirely based on market attributes, because of the heterogeneity of land parcels and thus would require use of appraisal techniques which would detract from its simplicity. Its clarity and visibility would be compromised by the fact that land and buildings would be assessed separately, though they trade as one unit. It would add complexity to the assessment process and thus its administration.

All in all, the Commission's evaluation shows that the graded land tax would capture unearned increment but at the cost of administrative simplicity, certainty, clarity and, perhaps, at the sacrifice of other public objectives. What tilts this equation towards benefits or costs are the political system, structure of the land market as well as social values of a country or region. Regulations and practices that are acceptable in one place turn out to be a source of discontent on being transplanted to a different area.

4.5 POLITICAL ECONOMY OF THE PROPERTY TAX

The Market Value Assessment (MVA) finds most favour with the above-stated commissions. Ontario, Saskatchewan and Manitoba, for example, are all attempting to bring up their assessment rolls to market value of properties with increasing user charges for local services and exactions for newly developed land. The publicly induced unearned increments are largely recaptured in accordance

with the 'benefits-received' principle of equity. The realignment of public and private responsibilities will further erode the basis of unearned increments. On top of it all, MVA will make assessment practices reflect increments (decrements) arising from asset reevaluation or market-wide changes. Yet MVA itself will produce some radical social realignment of losers and gainers.

By and large, taxes on the downtown and central city properties will increase and the suburban assessments will decrease, producing corresponding repercussions in the equation of who pays and who gains. That is why MVA is meeting stiff resistance in cities of Ontario, Saskatchewan, and Manitoba, wherever MVA is being introduced. The political economy of assessment reform is a key factor in their success or failure. This is the lesson of the land taxes and assessment in Canada.

The public resistance, the public-private division of responsibility for services, the differences arising in the ability-to-pay on account of the divergence between the wealth (property values) and income of households are factors that will affect recapture measures in the same way as they influence the property tax. The current 'crisis' of property taxation, including public resistance, bears lessons for the design of recapture instruments. The fairness in property tax is a pressing issue on the public policy agenda. Alberta (1991) and Ontario (1993) have extensively reviewed their assessment and property tax procedures. Both provinces lean towards Market Value Assessment of land as well as improvements. Furthermore, user charges for local services are

being promoted as a remedy of property tax ills.

Recurring taxes as instruments of recapture will be subject to similar fairness tests, i.e. (i) ability-to-pay (taxpayers with similar capacities should pay similar amounts of tax), and (ii) benefits received (tax paid should correspond to the benefits received). For recapture instruments, where assessed values of land rise (or fall) resulting in increasing betterment tax, without corresponding increase in income, it will be met with citizens' resistance on account of its unfairness on the basis of ability-to-pay. Increased reliance on user charges will militate against the rationale for recapturing windfalls arising from investments in public services. These are the considerations that should guide the design of recapture measures.

The lesson from this discussion is that general purpose recapture taxes will require an institutional framework similar to the property tax, and they will encounter, sooner or later, the same social resistance by producing a new set of gainers and losers. This social cost must be kept in mind reviewing the feasibility or in designing land taxes.

4.6 ONTARIO'S LAND SPECULATION TAX

A case in point is Ontario's Speculation Tax. The case study of the Ontario Land Speculation Tax illustrates how the tax rate and assessment practices affect a recapture instrument. The Ontario Land Speculation Tax (1974) was imposed in the middle of an unprecedented land price boom. Its objective was to recapture

speculative gains on urban land, yet not to discourage development of affordable housing. The tax rate initially was set at 50% of gain in value of unimproved land, but if a parcel of land was sold with improvements, constituting about 40% of the disposition value, it was exempted from tax. The rate of tax was immediately reduced to 20% as the federal government did not allow this provincial tax to be deductible from the capital gains tax. The principal residences or vacation properties as well as industrial and commercial lands were exempted. The exemption provision had an unintended consequence. The land development industry, which was the primary target of this tax, proceeded to vertically integrate its operations leading to further concentration in the industry. It stimulated the vertical integration of land development and building construction activities, resulting in the emergence of a few large development building firms.

Administering the Land Speculation Tax proved costly and cumbersome, while revenues realized were minuscule. Only a few million dollars were collected as the speculation charge in the whole of Ontario over the four-year period that the tax was in operation. The scale of administrative work involved can be judged by the fact that in 1976, 250,000 applications were filed - 90% of which did not require any tax (Province of Ontario 1977). The difficulty of appraising increments in value was compounded by a need to examine all property transactions in the province for tax liens. Smith estimated that "the tax caused a temporary reduction in the price of houses but left upward trend unaffected" (Smith

1976: 5). It did not fulfil its objectives and produced an administrative burden for the provincial government. It was rescinded in 1978.

The Ontario Land Speculation Tax is not an isolated example of exemptions overwhelming the instrument. The British betterment levies in both pre- and post-war periods fared no better (Harris 1972: 569). From our perspectives, the following lessons can be drawn.

(a) The land speculation tax, a species of betterment tax, had to accommodate other policy objectives, i.e. encouraging housing development. Thus, it allowed exemptions which in turn prompted adjustments in the market that neutralized its impact.

(b) The assessment of 'speculative gains' posed a conceptual and administrative challenge. The financial and administrative costs of assessment and collection were so high that the tax was almost a failure.

(c) The tax may have temporarily restrained the rise of land prices, but over time the climb was resumed.

Overall, Canadian land taxes have functioned almost like the property tax for all practical purposes. Initially they may have helped breakup large land holdings held for speculation, but their proponents' promises that they stabilize prices and yield increasing revenues from land value gains are not borne out. In fact, the movement is away from purely land-based taxes, towards incorporation of improvement values in the assessment base, even in

Prairie provinces. A wide chasm seems to separate the theory and the expectations on the one hand, and the practice and outcomes on the other. The complexities of assessment, the costs of administration and the political economy of tax policies are some of the intervening factors contributing to the divergence between promises and results. Is the Canadian experience markedly different from other countries who have experimented with land taxes or betterment levies? To answer this question, let us analyze British and Australian experiences -- the two celebrated examples of recapture attempts.

4.7 BETTERMENT LEVIES IN GREAT BRITAIN

Betterment levy or tax on capital gains in land values is an old instrument of recapturing the unearned increment. It has a long history in Great Britain going back to medieval ages. The unbroken thread in the long history of betterment levy pertains to the recovery of benefits received by landowners from sewers and drainage projects. Its legislative origins can be traced to an act of 1427 (Uthwatt Report 1942: 106). The imposition of betterment levies for urban improvements (widening of roads, public works, etc.) is of relatively recent origin. The London County Council Act of 1895 is one of the early legislative measures empowering the county council to levy an improvement charge on any properties within a designated "betterment area" which has been "substantially and permanently increased in value by the particular street improvements." (Uthwatt Report 1942: 109). Apart from being

unearned, increments in property values resulting from public improvements became particularly troublesome as they fed back to the cost of public works by raising costs of acquiring land. The cost of land acquisitions, combined with the differential distribution of value increments and decrements, arising from planning permissions, turned the betterment (worsement) issue into a land-use and town-planning problem. The Town Planning Act of 1909 included a betterment levy and brought the fiscal impacts within the purview of planning legislation.

The implementation of betterment levy has precipitated a myriad of ideological, institutional and administrative issues which have led to frequent modifications, reversals and redesigns of tax provisions. The history of betterment levy in Great Britain is both complicated and chequered. There are numerous sources giving exhaustive accounts of its history in the 20th century (see Prest 1981, Cullingworth 1985, Hall 1975, Parker 1985, Rodriguez-Bachillar 1992). Presently, our interest is to understand the significant structural and conceptual changes that the betterment levy has undergone in the course of periodic attempts to collect value gains and to observe the impact it had on land policy. As the British betterment levy has evolved through various phases, it is, perhaps, useful to organize its analysis chronologically. The following account is meant to highlight important changes in the legislative provisions of betterment levy and their respective outcomes.

4.7.1 Round One: Laying Foundations

1909 The Town Planning Act laid down that 50% of increases in the value of property arising from the execution of particular public works and/or operation of the planning scheme was to be recovered by local authorities. The claim for recovery could not be made less than three months after notice of approval of a town planning scheme.

1932 The proportion of the increment to be taxed increased from 50 to 75% in the Town Planning Act (1932). The provision was also made for the deferment of tax claims until betterment is actually realized through sale, lease or tenancy.

Observations: Betterment levy proved difficult to collect. Only in three cases were cash payments of the levy actually collected up to 1947 and those too were prior to 1932 (Uthwatt 1942: 124). The difficulty of isolating the portion of increment ascribable to public works or planning schemes proved to be the major stumbling block.

1941-42 Under the chairmanship of Mr. Augustus A. Uthwatt, an Expert Committee on Compensation and Betterment (1941), consisting of four members, was established by the Minister of Works and Planning "to make an objective analysis of the subject of the payment of compensation and recovery of betterment in respect of public control of land." This Expert Committee on Compensation and Betterment, popularly known as the Uthwatt Committee, was one of the three committees established in the early 1940s to prepare recommendations for

reconstruction of the U.K. after World War II and to establish a national system of planning and development. The committee submitted the Final Report in 1942. The Uthwatt Committee report is a seminal document that continues to underpin public discussions of betterment and compensation even now.

The Uthwatt Report concluded that increments arising from public works or planning permissions cannot be separated from the total increase in property values. It, therefore, recommended another approach to internalize the unearned increment in public jurisdiction, i.e., "vesting in the state of the rights of development in all land lying outside the built-up areas." (Uthwatt Report 1942: 157). The committee recommended (i) a betterment levy in urban areas, and (ii) acquisition of developable rural land at use value in farm areas.

A betterment levy of 75% on increases in site value based on appraisals made every five years was proposed. Farm land was not recommended to be subject to the betterment levy. Whenever rural land had to be developed, the land was to be acquired by the government at the farm-use value of land (Hagman and Misczynski 1978: 423-424)

Observations: Reaction to the Uthwatt proposals was muted during the war years. The 1944 White Paper rejected a substantial part of the Uthwatt proposals, on account of their differential treatment of farm and urban land, and for administrative and equity considerations. Instead, the 1947

Town Planning Act proceeded to nationalize the development rights, partially, drawing inspiration from Uthwatt's recommendations.

4.7.2 Round Two: Betterment Levy and Town Planning

1947 Apart from laying the foundation of the contemporary planning system in Britain, the Town and Country Planning Act 1947 effectively nationalized the development rights in land. No development could take place without permission of the local authority. The denial of permission did not entitle landowners to compensation -- owners' rights were limited to the present use value. Any increase in land value due to planning permission or other public action was subject to a 100% development charge. A fund of £300 million was established to compensate owners for development value already precipitated on their land at the appointed day -- the day on which development rights were nationalized (Cullingworth 1985: 173). Thus, by nationalizing development rights, the government intended to get around the problem of appraising increments, attributable to public action, and the conundrums of betterment and compensation.

Observations: What appeared to be theoretically a perfect answer to the betterment problem, i.e. nationalization of development value, in practice did not work as smoothly as expected. First, development charges came to be passed on to buyers in the tight market of post-war Britain. Developers were prepared to pay more than the present use value for land,

whereas public acquisition of land proceeded at the value on the appointed day. This duality in market was a disincentive for the supply of developable land to the government. Prest observes that apart from the land price movements being at variance with the theoretical expectations, the administrative apparatus of the Central Land Board proved to be cumbersome in practice (Prest 1981: 91).

The distribution of the £300 million fund to compensate for the loss of development value also proved to be susceptible to inequalities. A quick distribution would have resulted in inflation. Claims for compensation from landowners who developed their land and those who did not, if treated on the same basis, were bound to lead to disparities. There were problems of assessment regarding compensation claims. These issues, arising from the implementation of the 1947 betterment-compensation scheme, soon necessitated amendments of the legislation.

1954 While the Labour Party was the author of the 1947 Act, the election of Conservatives in 1952 hastened the demise of the development charges. The 1954 Act abolished development charges because they were "too unreliable an instrument to act as the lynch-pin of a permanent settlement." (Cullingworth 1985: 177). Yet compensation provisions for the loss of development value, up to the point where the 1947 axe fell, were kept. The unearned increment now was left to be recovered by general taxation. Public acquisition of land

continued on the basis of 1947 use values. These contradictory provisions created dual markets in land: (i) one for public purchases, and (ii) the other for private transactions. "The contradictions and anomalies in the 1954 Scheme were obvious. It was only a matter of time before public opinion demanded further amending legislation." (Cullingworth 1985: 180).

1959 The Town and Country Planning Act 1959 abolished the development charge and, thus, bringing to an end the long attempt to collect betterment. It also restored 'full market price' as the basis of land acquisition, with the objective of removing the above-mentioned two tiers of the land market.

Observations: The 1959 Act brought down the curtain on betterment-compensation arrangements of 1947. The bold social experiment of legislating away development rights proved unworkable. The realization of betterment charges was disappointingly low -- less than £27 million were collected in 12 years of their existence (Prest 1981: 92). The objectives of betterment levy clashed with the land supply needs and produced a variety of unanticipated effects. Steadily the 1947 Act's financial provisions became more a hindrance than a help, in the pursuit of public objectives of equitable and efficient land markets.

The abolition of the development charge and the restoration of fair market price for land acquisition purposes did not recreate pre-1947 conditions. The planning controls

remained intact and planning permission had become, perhaps, the single most significant determinant of land prices. Because refusal of permission was not grounds for compensation, the duality of the land market remained intact. Land with development permission was at a premium and a source of speculation. Land shortages and high prices, with attendant windfall gains for some landowners, continued to be the pressing public issue of the day.

4.7.3 Round Three: The Land Commission

1964 The unintended consequences of the 1947 betterment levy, including the subsequent development charge, outweighed its objectives. The institutional (market) and administrative factors proved too complex for the policies conceived in the contextless world of theories and ideologies. Yet the latter were a force to reckon with. The Labour Party embraced the left-liberal ideology of public ownership of development rights and the Conservatives were wedded to notions of private property and free market. Land policy became the battleground of their ideologies. It swung from left to right and back, as successive elections brought one or the other to the government. Developers and landowners learnt to wait out unfavourable policies in the expectations of changes coming in the wake of the next election. This political see-saw became a structural feature of the land market in Britain. In 1964, the Labour Party wrested back control of parliament from the Conservatives and formed the government.

1967 The Labour government took another stab at the betterment question as a part of a broad initiative in land policy. The 1967 Finance Act introduced a capital gains tax applicable to land and property, but the Land Commission Act (1967) was the Labour government's instrument of choice to (i) ensure the adequate supply of land for the implementation of national, regional and local planning, and (ii) secure 'development value' for the community and reducing cost of land (Cullingworth 1985: 182).

A new betterment levy amounting to 40% of the development value was introduced which was projected to rise to 50 or even 60% later. Unlike the 1947 levy, this time only a proportion (40%) of the gains in land values was taxed to leave enough incentive for owners to release land for development. There were many complex regulations for calculating the charge. Six instances triggered the assessment of betterment charge: i.e., the sale of property, the granting of tenancy, the start of material development, etc. The base value for the levy was defined to include some development value (Parker 85: 25).

The Land Commission had the responsibility to bring on stream land for development if normal market operations were not adequately meeting housing and industrial-commercial needs. The Commission was given wide powers of acquisition to hasten the process of land assembly for development. These provisions, once again, reflect the response to limitations confronted by the 1947 Act. It will take us too far afield if

various functions of the Land Commission were to be discussed. From the perspective of the betterment levy, it might be mentioned that the expected returns from the levy were about £80 million per year, but the collected amount was £15 million and £31 million in 1968-69 and 1969-70, respectively. As in previous cases, the financial returns from the levy were much less than the promised riches.

Observations: The Land Commission tried to practice 'positive' planning by attempting to assemble land for development. Its vast compulsory purchase powers were held in reserve for more resistant owners, but its overall record is unimpressive. In 1969-70, 1,000 acres were purchased by agreement and 240 acres compulsorily, and another 2,500 acres were marked for public acquisition (Cullingworth 1985: 185). "There were tensions between the Commission and local authorities who felt that some of their powers had been usurped." (Parker 1985: 25). The local authorities had little interest in development charges. They felt that the value gains were created locally but that the charge filled central coffers.

By the time the Commission was getting into stride, the pendulum swung again towards the Conservatives, and their new government pledged to the nation that such a commission "had no place in a free society" and abolished the Commission in 1971 (Cullingworth 1985: 185). By this time a property boom had begun to unfold in the United Kingdom, resulting in rising

prices and land shortages. From 1967 as a base for an index number of 100, prices rose to 141 in 1969 and 458 in 1973 (Cullingworth 1985: 185-86). Obviously the betterment levy had not contained the price spiral, even though this was not the levy's explicit objective.

1970-74 The election of the Conservative Party government coincided with the property boom. Though the Conservatives abolished the Land Commission, they were under pressure to do something about the land shortages, particularly in the southeast. Since the abolition of the betterment levy, development gains had been subject to the Capital Gains Tax. After 1973 they (the gains) were treated as income and taxed under a new Development Gains Tax. The government also tried to accelerate the granting of planning permissions to reduce shortages of developable land. Thus this period marked a return to conventional instruments of planning and capital gains tax to deal with the property boom and unearned increments.

4.7.4 Round Four: Community Land Schemes

The political fortunes of the Labour Party changed again, and it was elected to form the government in March 1974. The property market was booming and Labour had promised to deal with this speculative boom.

1975 The Labour Government's White Paper Land defined two objectives: (i) to enable the community to control land development; (ii) to restore to the community the increase in

value of land arising from its efforts. By and large, Labour's land policy objectives had remained almost constant for the last thirty years. In pursuit of these objectives, the Community Land Act (1975) and the Development Land Tax Act (1976) were promulgated.

In this fourth attempt to bring land development into public jurisdiction, the local community, not the central government, its boards or commissions, was made the fulcrum of the new system. The local community was given the authority and tools for positive planning, i.e., to initiate and carry out development rather than just control and approve. The Community Land Act authorized each county to prepare a Land Acquisition and Management Scheme, laying out plans to acquire, manage, develop and dispose of land. The Act was to be implemented in three stages. Its essential feature was to internalize in the public sector the land development and disposal arrangement. It was a recoupment mechanism to recapture unearned increment. The land acquisition powers were the key tool for this purpose.

Paralleling the Community Land Schemes was the Development Land Tax, conceived as an interim measure to tax 80% of the development gains of private developers until most of the development operations were brought into the public sector. An intricate formula was devised to determine the base value for tax purposes. One of its provisions for estimating the base price was "110 percent of the purchase

cost of land plus the expenditure on improvements." (Parker 1985: 26). Acquired on this base price and disposed after development at the market price, the land was expected to yield gains for the community.

Observations: In actual operations, the acquisition price or base value turned out to be more than the current market price, particularly for sites desired by local authorities. The high base value was due to allowable compensation at 110 percent of the purchase price which in many cases was of recent origin. Local authorities used little of their powers under the Community Land Act -- only 150 acres were made available for development in England in two and one-half years of initial operation. Against the estimate of £500 million Development Land Tax per year, the gross figure for 1977/78 was £30 million (Prest 81: 99). Cullingworth concludes that "The scheme, like its two predecessors, had little chance to prove. The economic climate...could hardly have been worse and the consequent public expenditure crisis resulted in a central control which limited it severely." (Cullingworth 1985: 189)

In May 1979 the Conservatives returned to government for a long inning which has lasted up to now. The Conservative government (1979) repealed the Community Land Act and reduced the Development Land Tax to 62% of the value gains. The pendulum swung back once again towards policies emphasizing free market. And this trend gained strength as Thatcherite

policies of privatization gained momentum in the 1980s.

4.7.5 Lessons

The foregoing account of repeated British attempts to institute betterment levies or other taxes to recapture land value gains illustrates how institutional and administrative factors affect the scope of these measures. A policy that appears clear and uncomplicated in conception turns out to be contradictory and ineffective in the process of implementation. The institutional and administrative factors have to be taken into account at the point of policy formulation and not be left as procedural details to be worked out as the policy unfolds. This is one general theme emerging from the case study of Britain. Our purpose in examining the British experience, which represents probably the most sustained and systematic attempt to recapture land value gains, is to identify significant institutional/administrative factors and to draw some lessons for further guidance. The following is a brief account of these points.

a) The British betterment levy and subsequently the Development Gains Tax reflected the ideological commitments of the Labour Party. They were formulated in times of Labour's rule and were dismantled by the Conservatives as they followed each other in government through successive elections. There have been four rounds of establishing and dismantling of some form of recapture measures during four cycles of Labour and Conservative governments. Policies and instruments of each round were built on the experiences of the previous attempts. Thus, Labour as well as

Conservative governments demonstrated some level of social learning. It was not a mere matter of reenacting an ideological commitment each time a party came to power. Yet ideology and social values were the guiding principles of British policies. They are to be counted as the central elements of recapture measures.

b) The British example demonstrates that macroeconomic conditions affect both the purpose and viability of a recapture instrument. In a period of economic growth, land prices rise, building up governmental expectations of recovering unearned increments and restraining prices. Yet when a business cycle goes into the recessionary phase, the same instruments (e.g. betterment levy) come to be viewed as obstacles that are obstructing development. The Betterment Levy of 1947 as well as of 1967 lost their purpose as the national economy went into recession. Thus, in designing a recapture measure the changing macroeconomic situation must be kept in view.

c) A betterment levy or land tax serves multiple objectives. In Britain these instruments were an integral part of town planning and housing legislation. The restraining of speculation, the adequacy of land supply, the provision of affordable housing, the control of land prices were proclaimed to be objectives associated with these instruments at various times, along with the over-arching purpose of recapturing gains arising from public investments and planning permissions. The land and housing policy objectives necessitated exemptions which detracted from fiscal

goals. These divergent pulls resulted in fragmentation of land markets and inequities among owners of publicly vs. privately developed lands. These inequities were the unintended consequences of the 1947 and 1968 levies which fed back to militate against their effectiveness. The multiplicity of objectives and changing policy perspectives represent the dynamics of a real-life situation to which static conceptions of recapture theory seldom fit.

d) Another striking lesson of the British experience is that the revenues realized from betterment levies and development gains taxes fell far short of expectations.

		Revenues (millions)
	Expected	Collected
1947-1959 Betterment Levy	£340 in total	£27 in total
1968-1970 Betterment Levy	£80 per year	£25 per year
1977-1978 Development Land Tax	£500 per year	£25 per year

(Source: Prest 1981: 146)

This is a significant fact. The recapture taxes have proven to be complex to assess and difficult to collect. For example, the Development Land Tax was the most inefficient to collect in 1982. For each £1 spent in collecting it, only £13.5 were raised compared with £57.80 for all taxes taken together (Parker 1985: 27). There are so many legitimate grounds for exemptions and disputations in addition to the conflicting and changing objectives mentioned above. For example, the base value of a property is the recent

market price of the frequently sold and resold urban properties. A market-defined base price may already include the development value, leaving little to tax between the sale and the purchase price. The British found that relatively few (fewer than what was expected) sales were eligible for betterment levies.

e) The assessment of land values based on the projected use of the land is a complex and judgemental task. It is an estimate and hence subject to litigation. In built-up areas the separation of land and building values is another disputatious estimate. It is not an impossible task. Yet there will always be a range of variations in estimates of land values and therefore a high probability of errors and challenges. These aspects of assessment methods operate as intervening variables in the effectiveness of recapture measures. The public acceptability of betterment levies is low in view of the ambiguity of land value estimates. The methodological factors in concert with political and social values of landowners create resistance. This is why after every round of Labour-inspired betterment levy, the Conservatives could make it an electoral issue and gain votes.

f) Collection is another problem that detracts from the effectiveness of betterment levies. The timing of collection has a bearing on the efficiency and equity criteria. A collection at the time of appraisal, without actual realization, makes the tax a charge on the change in the book value that has to be paid from current income. While collection at the time of sale may limit the scope of the levy because land values may have come down by then.

The British experience bears out the difficulties of resolving this dilemma.

g) Finally, despite theoretical justifications of the efficiency and neutrality of recapture measures, the British experience shows that only a part of the development gains could be captured if an incentive was to be left for landowners to release the supply. The proportion of gain appropriated through tax had to be finely tuned to prevent the drying up of the supply. The motivational and institutional factors diverge from the economic assumptions.

4.8 AUSTRALIA

Australia is the most commonly cited example of a country that has relied on taxing the site or the capital value of land (Hick 1970, Harriss 1970, Hagman and Misczynski 1978, Lusht 1992). Australia's historical experience with the site value or land tax makes it an object of special interest for this study. This experience can be examined from the perspective of the effectiveness of these taxes in fulfilling land policy objectives mentioned earlier (Hutchinson 1963, Woodruss and Ecker-Racz 1969, Edwards 1984 and Lusht 1992). Australia's site value taxes also have been analyzed from other perspectives, such as recapturing unearned increments, raising public revenues and recovering costs of services -- a contemporary public interest.

Systematic studies of Australia's tax instrument are relatively few, though observational accounts abound (Herps 1977, Haratsis 1982). We will summarize from the literature observations

of their effectiveness in recapturing unearned increments and raising public revenues. Specifically, we will explore the effectiveness of land taxes, as they are actually administered, taking into account various political and social factors that define their scope. How are these taxes administered in Australia? How have they fared as instruments of recapture? What institutional factors have bearing on their implementability? These are addressed in this review.

Australia is almost as big as the continental United States. Its population of 16 million is distributed in six states and the northern territories. There are 808 local authorities. On the national level, Australia is sparsely populated given its small population and large area. Yet its settled parts have experienced all the land issues normally associated with highly urbanized countries: ie. speculation and rising prices of land, sprawl and inefficient land use pattern, housing shortages, developable land monopolies, etc. (Neutze 1978: 172-77). Urban land policies have evolved in response to successive problems emerging with the development of urban systems.

4.8.1 Origins of Land Taxes

One of Australia's pressing problems in the late nineteenth century was the holding of large tracts of habitable lands by speculators and absentee owners, not unlike Western Canada. Henry George's visit in late 19th century coincided with Australia's search for ways to resolve this problem. Australia, of course, did not buy into his 'single tax' proposal, but it adopted site value

or some form of land tax as the basis of assessment. "Beginning with the State of Victoria in 1877, all Australian States adopted a land tax to break the large estates and to recapture unearned increments by 1915. The national government had its own land tax, enacted in 1910 and repealed in 1952. Local governments also have been making use of land-only based property tax" (Hagman and Misczynski 1978: 404). This, in brief, is how Australia came to opt for land-based assessments.

4.8.2 Tools of Recapture

In Australia, three types of recapture instruments have been used.

(i) Site value or land taxes

(ii) Betterment levies

(iii) Public land ownership

Land taxes, of course, are the most common. They are recurrent, periodic and applicable to all real estate in a jurisdiction. Betterment levies are often one-time charges on designated properties, purportedly gaining from public investments and/or rezoning and planning permissions. Sydney's betterment levy of 1969-73 is a case frequently referred to in the literature (Archer 1976).

The Australian government has also used public ownership of land ostensibly to recapture increments of values. The Federal capital, Canberra, is an example of such tenurial arrangements for keeping increments for the public benefit. We will largely concentrate on land taxes, as they are the distinguishing feature

of Australian land policy.

4.8.3 The Institutional Framework

All three levels of the government have levied land taxes, though the federal government abolished its tax in 1952 for lack of adequate yield (Edwards 1984). States continue to have a considerable share of land taxes. Almost 50% of taxes levied on land, amounting to about $122 million in 1973-74, were collected by the states (Hagman and Misczynski 1978: 404). Local government and special authorities such as metropolitan water, sewerage and drainage boards claim the rest. Australian land taxes are comparable to Canada's property taxes except that they are assessed primarily on land. A large proportion of land taxes being assigned to states is a distinct feature of the tax administration in Australia. Yet land taxes per se are a relative minor source of revenue. The $122 million collected as the states' share of land taxes in 1973-74 was only 4.4% of the total state and local revenues (ibid: 404).

The states' land taxes, in many cases, have been progressive in structure. The tax rate increased with the size of holding of the landowner. States in Australia are responsible for education and welfare services, and, thus, perform functions that normally fall in local jurisdictions in Canada. These differences in the distribution of jurisdictional functions have a direct bearing on the operation of land taxes as instruments of public policy.

At the local level, land (property) taxes are a major source of revenue, i.e. making up about 47.5% of the total local revenues

in 1978-79 which is more than Canada's average of 37.4%. Local governments in Australia have limited jurisdiction and a majority have a relatively small population. In Australia land (property) tax supports only hard services of a local nature, whereas in Canada real property tax contributes to health, welfare, education and police protection as well as services to property, e.g. water, sewerage (Finnis 1979, p. 18). These differences are reflected in respective revenue-expenditure profiles of the two countries.

4.8.4 Bases of Assessment

It is not enough to say that the land value is the primary base of assessment. The crucial issue is how the value is estimated in practice and what criteria are used in assessment of land values. Much of the debate about the recapturing potential of land taxes revolves around these operational issues. The assessment practices vary among the states in Australia. Broadly, two distinct systems are used for assessment purposes: (i) Capital value, and (ii) Assessed Annual value. New South Wales, Queensland and Victoria are states that predominately use capital value system; whereas, Tasmania, Western Australia and South Australia rely on both Assessed Annual value and Capital value as the bases of assessment.

Capital value is defined as Unimproved Capital Value (UCV) or Site Value (SV). In principle, the UCV refers to the market value of a parcel of land assumed to be in a completely natural, primeval state. This basis of assessment disregards all improvements (e.g. buildings, fences, etc.), and it assumes that the land is vacant

and available for highest and best use, including distantly realizable potentialities (Haratsis 1982: 4) This definition closely approximates the concept of site value in general and Vickery's notion of the Standard State of land (Vickery 1969: 27).

A further complication is that some states include certain improvements for UCV and others do not. Similarly some states call this basis of assessment UCV and others SV. Furthermore, there are various exemptions and exceptions that assessors have to take into account in applying this definition. For example, in Queensland sites of single dwellings are exempted from considerations of higher use potentialities for valuation purposes as are agricultural lands in many states in deference to the goal of preserving farm land.

Capital Improved Value (CIV) is an Australian term that refers to the market value of the whole property. CIV is not an authorized basis of assessment in any state, but it is used for estimating annual values in some cases.

The second basis of assessment is Net Annual value (NAV). It is an estimate of annual rental value as in South Australia or a percentage of the capital value of a property as in Victoria where NAV is 5 per cent of CIV for owner-occupied houses. Although the capital value of land is a sum of 'discounted stream of rents' in the long run, rents often diverge from capital values particularly during the 'upswing' phase of business cycles. Thus taxes based on NAV may not recapture increments as well as those based on the capital value.

A point to note is that NAV is often based on land plus improvements values. Therefore, annual assessed value may not be a purely land-based tax. Thus the land tax, on closer examination, may turn out to be a veiled form of property tax.

4.8.5 Assessment Administration

Different bases of assessment produce different results in terms of recapturing increments in land values. The UCV (Unimproved Capital value) or SV better reflects changing land values, but its effectiveness depends on the frequency of assessment. The cycle of assessment varies from 2 to 8 years among states (Haratsis 1982: 7). South Australia is the only state with annual assessment; all others take longer to assess values of land (property) which results in capital values being unrepresentative of market prices particularly in periods of rising land values -- which is precisely the time for capturing unearned increments. Thus the administrative imperatives of assessment detract from fully capturing changes in land values.

Finally the tax rates are another intervening variable that affects the potential of land taxes as instruments of recapture. It is a complex factor with great variety of practices among local governments and states in Australia. Tax rates vary between rural and urban areas and have minimum and maximum limits in many cases. Combined with exemptions and concessions (for pensioners as an example), tax rates further militate against the clarity of the fiscal objectives. All in all, assessment practices are strong intervening factors affecting the efficiency of land taxes as

recapture instruments. Australian land taxes mediated through the assessment and tax collection system begin to appear familiarly like Canadian property tax.

The parallel with Canada even extends to the administration of assessment. The assessment of land (property) value is centralized at the state level in the office of valuer-general. Local authorities determine their tax rates on the basis of the assigned values. Almost the same procedures are followed in Canada. The point illustrated by this description is that Australian assessment administration closely resembles Canadian practices and is subject to similar political and organizational constraints. Chart 4c shows various elements of the assessment system in Australia.

It shows that Australia is not a land of pure site value taxation. The Annual rent (Net Annual value) is in fact a more common basis of assessment than the Unimproved Capital value. And

CHART 4c

STATE	ASSESSMENT BASE	ADMINISTRATION	ASSESSMENT CYCLE
New South Wales	• Unimproved Capital Value (A Change to Site Value is Proposed).	• Valuer-General • Private valuers appointed by council in some cases.	• Urban areas of Sydney, Wollongong, Newcastle - 2 years. • Other areas - 6 years.
Victoria	• Net Annual Value or Site Value • Combination NAV/Site Value on Different Sectors of Rate Base.	• Private valuers appointed by council, approved by Valuer-General.	• 4 years in metropolitan areas. • 6 years in other areas.
Queensland	• Unimproved Capital Value	• Valuer-General	• Not less than 5 years nor more than 8 years (average 6 years).
South Australia	• Unimproved Land Value • Assessed Annual Value	• Valuer-General or by Council-appointed valuer	• Every 7 years.
Western Australia	• Unimproved Value • Annual Value	• State Taxation Department • Private valuers in some cases.	• Metropolitan area: UV - 4 yrs AV - 3 yrs • Country towns: UV/AV - 5 to 6 years • Rural areas: UV - 8 years
Tasmania	• Annual Value • Unimproved Capital Value • Capital Value Composite • Composite UCV/CV	• Valuer-General (Must be adopted by council).	• Every 5 years

Reproduced from Haratsis 1982: 3.

in the annual rent are included returns to improvements. Similarly it also shows that despite the professionalization of valuation, there is, on the average, 4-5 years' lag in assessment of values resulting in taxes not being fully reflective of current land prices. Thus claims of land taxes being sharper tools to influence land markets have to be qualified by the practical considerations of fairly and quickly assessing and administrating taxes. The purity of theoretical constructs, such as site value tax, is considerably modified by such institutional realities.

4.8.6 Outcomes of Land Taxes: Some Observations

At this juncture, we may raise the question as to what are net outcomes of Australian practices in fulfilling land policy objectives and in recapturing increments.To answer this question, we will refer to observations and conclusions of various studies.

Edwards, through multi-variate regression analysis of aggregate data for four states in Australia, found that taxing land and exempting improvements from taxes results in increased investment in housing as reflected in a significantly higher average value of housing (Edwards 1984). There are some questions about the level of aggregation of data and the appropriateness of conclusions; yet taking this conclusion at its face value, it does not suggest that land taxes will help control speculation and return to the community its share of land prices. It affirms the proposition that land taxes lead to relatively more intensive development.

Lusht's study of Melbourne Metropolitan Statistical District reinforces Edwards' conclusions by comparing municipalities using NAV with those employing SV as the bases of valuation. He concludes that "the use of site value tax stimulates development and local government authorities using the site value tax showed 40-60% more housing stock per acre." (Lusht 1992: 11) Again the study shows that the intensity of development is greater with site value tax. It sheds no light on the recapture potential.

These two studies follow the econometric line of inquiry opened by Pollock and Shoup (1977) showing the effectiveness of site value tax as an instrument of accelerating and intensifying development. The stimulatory effect of the site value tax on timing and intensity of development is widely acknowledged. Archer demonstrated the increase "in the supply of sites for redevelopment" as a result of site value tax system in Sydney, Australia (Archer 1972: 38). Yet these positive effects have little bearing on the question addressed in this study: namely, the effectiveness of land taxes as instruments of controlling land speculation and of recapturing increments. On this multi-faceted question, only some informed opinions are obtainable.

Finnis, a Canadian property tax specialist reports observations of Valuer-General of New Zealand about the site value tax: it helps break up large individual holdings, but it "would not control urban sprawl and speculation in land or remove slums or stimulate building" (Finnis 1979: 20). These observations conform to the situation in Australia.

Hagman et al., after a brief review of Australian land taxes, observes that "even where unimproved land or land values are used, however, it is difficult to determine whether the tax has any significant effect on land development. The tax is not high enough to have the demonstrable effect on land development". They quote South Australian Local Act Revision Committee (1970) that "it (the Committee) is unable to recommend unimproved capital valuation as the most appropriate system for local government purposes", despite its extensive use in other parts of Australia (Hagman and Misczynski 1978: 405).

Taking these observations on the whole, it appears that the advantages claimed by the proponents of site value or land taxes are relatively limited in scope, even in Australia. Land taxes at best help realize some tenurial objectives (break-up large holdings) and stimulate redevelopment of high value lands. On other criteria, they show little promise. There is no clear evidence of their superiority in recapturing increments.

4.8.7 Lessons

What have we learnt from the examination of Australian experiences in applying land taxes? The answer to this question requires a leap from cautious empiricism to deductive generalizations. Listed below are results of this leap.

a) Site value tax is not levied all across Australia. It is used only in parts of two states, though a land tax based on unimproved capital value is more common. Yet these two taxes co-exist with Assessed Annual Assessment based on presumed rental income of

property as a whole.

All in all, the site or land values as the basis of assessment are only in a few jurisdictions in Australia. There is a general drift towards rental incomes as the basis of assessment which includes a return to buildings. Australia, thus, is not as much a home of Georgists as it is made out to be by the proponents of the site value tax.

b) In practice, levying of land taxes essentially means using land values as the basis of assessment. Once assessed values are established, the next crucial step is determining the tax rate which depends on the demand for revenue by both local and state governments. Thus the proportion of land value recaptured through site value tax depends on the fiscal needs of the levying authorities. A relatively small proportion of increments is taxed away in the form of land taxes. Australian land taxes are not primarily conceived as instruments of recapturing increments and fulfilling land policy goals. They are a form of property tax.

c) Overall, Australian land taxes have not produced unambiguous results in terms of revenue generation and control of sprawl, speculation or high prices. Fragmentary evidence that is available suggests that land tax revenue often falls below the expectations, except in situations where assessment cycles happened to coincide with the upswing in the cycle of land values. Similarly the betterment levy in Sydney averaged about $4.3 million per year for the three full years of its enforcement against the expectation of much higher yields. On the other hand, the levy contributed to

"increase in land prices to land users, the landowners were able to pass on most or all of the levy to land and home buyers" (Archer 1976: 341). Apparently there was a land price boom in 1971-73 followed by a collapse in 1974 resulting in liquidations of land holdings in 1975. Overall, by the criteria of land policy goals, Australian cities present a picture not much different than North American cities.

d) Land taxes seem to have a positive effect on the timing and intensity of development. It appears that land taxes, wherever applied, hasten the development or redevelopment of the ripe land and stimulate greater investments in buildings (higher intensity). As much as these are objectives of land policy, land taxes help realize them.

e) The scope and substance of land taxes in Australia are greatly affected by the assessment legislation and practices on the one hand and the tax rates on the other. The periodicity of assessment results in the lagging of assessed values to the market prices. The exemptions and concessions from taxes, given on basis of social policies, also influence the effectiveness of land taxes. The point is that land taxes as operational instruments are subject to competing objectives, legislative restraints and administrative imperatives. In operation, the land and property taxes come to resemble each other in many respects and they have similar results. Australia has been relying more and more on NAV (annual rent) as the basis of property tax. Recently serious questions have been raised about the appropriateness of site value as the basis of

property tax in Australia (Reece 1991: 3-4).

f) Finally, the Australian experiences indicates that the property tax system of a country is entrenched in its institutional framework. Its property rights, social values, tradition of public authority and professionalism of assessors, to mention a few, are factors that determine the form of its tax system. Property owners and developers base their decisions on the calculus of benefits and costs rooted in the institutional framework.

Any radical change in the tax has to take into account the institutional environment. It will generate a new set of gainers and losers in the property market. One has to ask the question whether such a change will bring a substantial improvement in economic welfare to justify social costs. Most experts find a switch from one system to another (from property to site value tax) not worth the uncertainty, disruptions and costs. Kitchen questions "the wisdom of such a switch" for Canada (Kitchen 1992: 127) as has Finnis maintained "advantages of any radical change to an established tax base must be very clearly demonstrable to make worthwhile the disruptions". (Finnis 1979: 20)

4.9 PITTSBURGH'S LAND TAX

The Pennsylvania legislature authorized the differentiation of tax rates on land and on improvements in 1913. By 1925, Pittsburgh had tilted its tax rate on land and building to a ratio of 2:1. The main aim was to discourage land speculations which resulted in under- and undeveloped land (Weir and Peters 1986: 72). In 1979,

the ratio was changed by the city to 5.6:1. The county and school district tax rates, however, remained the same for land and improvements. Total taxes in the city were 221 mills on land and 96 mills on improvements. Property is assessed at one quarter its market value (Weir and Peters 1986: 72).

Development activity had been extensive in the 1972-1978 period and continued this level until 1985. At this point development activity increased and the success was attributed to the graded tax ratio by some people. Others believe that the city's overall downtown development strategy tax abatement policy on new construction and its zoning strategy had a greater impact. The Pittsburgh Urban Redevelopment Authority offered low-interest loans for commercial and residential rehabilitation and construction and federal funds under the Economic Recovery Act of 1981 provided incentives by allowing accelerated depreciation and tax credits (Oats and Schwab 1992: 5).

The review of the journal literature on Pittsburgh's experience reveals no particular assessment problems. A tilt in tax rates requires the separate assessment of the value of land and improvements as is commonly carried out. The extra help developers were getting through other subsidies would make them oblivious to minor variations in assessment practices. The three-year abatement of property taxes on new improvements provided a stronger incentive to build than did the tilt in tax rates. The public-private partnerships that rebuilt the Golden Triangle first in the post-World War II period and again in the early 1980s assured that the

tax regime, zoning, financing and subsidies all worked toward a common goal.

Administrative issues can only be inferred for Pittsburgh. No issue is raised in the literature regarding the tilt in the tax rate. Indeed, the apparent success has led other municipalities to consider similar policies. The possible regressive effects of the tilt are either not known or do not appear to generate opposition due to the overall success of the redevelopment plan. The manufacturing base of Pittsburgh eroded drastically in the post-World War II era and the city was, virtually, saved by the development of its downtown administrative office sector. Its neighbours did much worse.

The lessons for administration that come from Pittsburgh might tell of the need for public-private partnerships and for comprehensive development policy that integrates fiscal, land-use, and governance concerns. The administration of Pittsburgh reform involves public-private partnerships and the guidance of a complex set of policy instruments. The Pittsburgh lesson might tell of the value of comprehensive planning and the avoidance of single policy instrument attempts to bring about complex changes. It is unlikely that a policy limited to the tax tilt would have changed Pittsburgh's development.

A review of the earlier literature on land value taxation provides a warning to people considering the switch to land value taxation today. Hicks (1970) attributes the success of Pittsburgh to the fact that they made the transfer over a 15 to 20-year

period.

> ....at a time when houses were nothing like so important as they are now, and second, because Pennsylvania is exceptionally generous in allowing the development of other sources of revenue, especially local income taxes. A similar change over was discussed in New York in the first decade of the present century...it might just have been possible to bring it off, since governmental commitments were only just beginning to expand and buildings to grow. But at any later date a total change over would have been impossible. (Hicks 1970: 15)

4.10 CONCLUSIONS

The three cases analyzed in this chapter highlight institutional and administrative factors that determine the structure of land taxes and betterment levies and outcomes arising from their enforcement. These are much cited examples of public attempts to recapture unearned increments in land values. It is not surprising that they come from countries, Canada, Britain and Australia, that share the common-law tradition and the Anglo-Saxon perspective on property rights. These three examples represent the arena where the theory meets the reality. The theoretical postulates about the efficiency and equity of recapture measures are put to the test in the real world of land markets and local finance through these cases. The significance of this chapter lies in recasting public discourse on recapture measure in terms of practice and implementability. Lessons of each case study are summarized at the end of respective sections. Here a recapitulation of main conclusions is offered.

a) The recapture measures primarily take the form of fiscal instruments, namely taxes and levies. There are two types of

recapture charges (i) recurring (annual) charges, and (ii) one-time charge. Land taxes represent the first type of charge, i.e. annual tax based on land values. They could be a pure site value tax (annual tax on land value only) or a graded/tilted land tax (wherein land is assessed at a higher proportion of its value than the improvements). The one-time charge includes the betterment levy, exactions or development imposts assessed at the time of threshold change in land values, primarily due to development. Both types of charges have been reviewed in this chapter, i.e. land taxes in Canada, Australia and Pittsburgh and betterment levies of Britain as well as land speculation tax in Ontario.

b) Land taxes as annual recurring charges on property capture value increments, if the assessments are kept current reflecting up-to-date changes in land values. And even then they can only capture a proportion of increment, depending on the tax rate.

The assessment and monitoring of land values is a task fraught with ambiguities and procedural limitations. These conceptual and procedural difficulties have a bearing on the effectiveness of recapture measures. The assessment system is a key institutional factor in the realization of recapture-related land policy objectives. The frequency and bases of assessment, professionalism and credibility of assessors, tax and property laws and distribution of taxing powers among various levels of government are the elements of the assessment system that function as 'intervening variables' in the realization of recapture objectives.

Assessing land value separately from buildings is a complex

and judgmental task. It is all the more so in built-up areas where there are not comparable sales. Undoubtedly it is not an impossible task as the Canadian Prairie provinces and two Australian states demonstrate, but there is an inevitable disjunction between the current market values and the assessment values. The disjunction may arise from the time lag between assessment cycles and market trends, from equalization practices, from time and cost of assessment and data limitations.

The result is that in practice the site value is seldom fully reflective of the market value which is often assumed to be the case in theoretical constructs. Other assessment-related factors affected are exemptions, appeals and public acceptability of assessors judgements.

c) Each of these factors is rooted in procedural and legal imperatives. Their influence may be reduced but not eliminated. The experience of Canada and Australia, in fact, suggests that they have a much stronger role in determining the structure of land taxes than is conceded in the theory or by proponents of such taxes.

d) The site value tax worked well to realize the objective of breaking up large land holdings and accelerating the development of land. In Canada of the 1920s and in early phases of Australian settlement, it proved to be an effective instrument for these purposes. With increased urbanization and evolution of land policy, new objectives emerged, such as controlling sprawl, curbing speculation and ensuring adequate land supply for housing, etc. The

site value tax did not prove to be an effective instrument in the latter phases of national development and thus was rescinded. Today, the Prairie provinces and some states in Australia retain graded land tax. Yet in both these countries, the land tax is just a variant form of property tax. There is little evidence of any discernible difference between the two in terms of policy outcomes. The land market makes little distinction. Canadian provinces where land tax is the basis of local revenue, Alberta, Saskatchewan and Manitoba, do not show any marked difference in the realization of contemporary land policy objectives than areas which rely on property tax. The proportion of improvement values in the assessment base has been steadily increasing. And the graded land tax neither yields any greater revenue per capita nor seems to have fulfilled other land policy objectives. The indexing of assessment, the periodicity for valuations and the differential tax rates for different land uses are as applicable in Western provinces as in Central Canada.

Australia is not entirely a land of site value taxes as some proponents make it out. There are different assessment traditions and practices in various states. The general tendency is to switch to NAV (a form of rental value) as the basis of land assessment thus including improvements in valuation. As the need for revenue increases, land taxes have been edging closer to property tax much like the Canadian Prairie provinces. All in all, practically, only a small proportion of value increment has been recaptured. Similarly, requirements for stability of tax revenues necessitated

that sharp reductions of assessments in recessionary times be resisted.

Any radical change in the basis of assessment realigns the institution and disturbs the social balance between gainers and losers in the distributional sense. The political economy of the property (land) tax is a significant determinant of its form and structure. Any institutional change in the basis of property tax must take into account the realignment of political economy.

Land taxes shift burdens to unbuilt land and properties on high-priced land, thereby increasing taxes in central areas, old neighbourhoods and peripheral undeveloped land and decreasing the burden for suburbs; correspondingly, associated social classes are affected too.

Also, market values may not reflect the 'probable use' as zoning becomes flexible and new practices of bonusing, negotiated development or Transfer of Development Rights create possibilities of increasing land values on strategic sites in unanticipated ways. These considerations and institutional factors distract from the exaggerated claims of proponents about the benefits to be realized from site value or graded land tax. Canada and Australia vividly illustrate these conclusions.

e) The one-time charge of betterment levy in Britain and in Sydney, Australia further bear out the above conclusions. Though differently assessed, betterment levies operationally encounter the same issues: assessment practices, tax rates, political economy, etc. Additionally, betterment levies affect property rights and

have strong ideological and political undertones. The British political see-saw between the Labour and Conservative parties was reflected in the fate of betterment levies. Four times, betterment levies were introduced by periodic Labour governments, only to be rescinded or emasculated by the Conservative governments following them.

Betterment levies had appeals in property boom periods, but the recession following booms precipitated the need for reducing their constraining effects. The jurisdictional wars between central and local governments and their respective roles in land policy further affected betterment levies. Finally, the recapture capability of a levy depended upon the proportion of value increment that could be taxed away. When the proportion was too high, it dried out land supply by taking away incentive for developers. When the proportion was too low, it did not yield enough revenue, while costs of assessment and collection remained high.

Betterment levy in Britain evolved from the nationalization of development rights and charge on gains in 1947 through development charge to capital tax on gains and community land banks. The evolution is described in detail in this chapter. What is striking is that each refinement of betterment levy to correct its previous ills produced new contradictions and tensions in the market. Each successive levy was always responding to unintended consequences of the last levy. Other policy objectives continually intruded upon goals of levies, e.g. ensuring adequate land for

housing, compensations for decrements, fiscal requirements of local governments, demands of assessment system, etc. Altogether, betterment levies produced much less revenue than what was expected in each round and were administratively burdensome and politically divisive. After four decades of betterment levies, Britain has resorted to levying exactions and merging betterment gains with capital gains for tax purposes. The market and development industry's response to betterment levies in Britain was recapitulated in the short-lived experiment of land speculation tax in Ontario. Overall, the power of institutional and administrative factors weighed heavy. Betterment levies make sense in periods of property boom, but before they can be fully collected, the market seems to take another turn.

f) Betterment levies and land taxes have not only to meet the criteria of equity and efficiency but also hold up to the norms of neutrality, objectivity, simplicity and clarity, stability and adminstrability. These latter criteria are rooted in the institutional framework. Ontario's Fair Tax Commission gives particular attention to these criteria. Taken together, they suggest that the operational structure of a recapture measure is far more significant in determining its effectiveness than its conceptual elegance. The legislative and administrative elements make or mar a tax.

How is a tax designed? What trade-offs are made between its various objectives and criteria in designing it? These questions underpin its effectiveness. The enthusiasm sometimes expressed for

site value tax or the development gains tax is seldom borne out in actual practice. The theory and ideology are intertwined in these instruments. The case studies do not show any unqualified advantages of these instruments.

g) The social and economic institutions of a country and its political conditions structure a tax, levy or a recapture instrument. Presently, there is a state of 'satiation' with taxes among citizens. Any tax or levy that becomes a general purpose charge is likely to meet stiff resistance. Witness the example of attempts to introduce market value assessments. The political and social costs of transforming property tax into land tax outweigh any promised financial and land policy gains.

ENDNOTES

1. These four phases correspond to periods identified by Carroll for the Canadian Housing Policy (Carroll, 1989).

CHAPTER 5

OPINIONS

5.1 INTRODUCTION

To supplement observations and conclusions derived from various published accounts of recapture measures, theoretical as well as empirical, we have also gathered opinions and judgements of a few provincial assessors, policy analysts and representatives of development industry.[1] They were specifically asked to comment upon the relative merits of the site value tax, property tax and impact fees from the Canadian perspective. Their opinions further reflect the institutional and administrative factors determining the workability of various recapture measures. In the following sections, a summation of their opinions is provided under relevant headings.

5.2 LAND ASSESSMENT IN PRACTICE

In 1979 the Province of Ontario permitted municipalities to adopt either partial or full market valuation as the basic tax assessment. Partial market value was favoured by the public because it was seen to not shift tax burdens to single-family residences, also because it retained the existing balance among various property classes for tax purposes.

The assessors unanimously favoured the market value method, because:

a. Market value measures relative wealth; it is a logical measure that people readily understand.

b. It is based on a clear and verifiable criteria and thus is perceived to be relatively non-arbitrary.

c. Market value captures development gains (losses) in that, if development increases the value of the property, assessment will increase; if development decreases the value of development, assessment will decrease.

d. Market value allows for equalization between municipalities with different assessment schedules or mill rates. Equalization based on market value of property reflects the general wealth of residents in the municipality and capital investment by the industrial and commercial sectors.

All of the assessors interviewed stressed that assessment is not, and should not be, tied to social goals, that it must be neutral to preserve objectivity and reduce appeals. The interviewed assessors and policy analysts strongly favoured market-value based assessments. They preferred it over alternatives such unit-value, site value and graded land tax.

The public's discontent with the current system arises from its perceived regressivity, despite redress offered in the form of exemptions for seniors and low-income earners. However, a great deal of data, analyzed by Ontario's Fair Tax Commission, do not indicate that the tax is regressive. The assessors felt that the Market Value Assessment, if kept current through regular reassessment, would help alleviate the perception of unfairness.

5.2.1 Assessing Land in the Downtown

Assessors agreed that the valuation of central city land, such as land in the Toronto downtown core, is difficult at best. "It's an operational problem, we have to back into the value, and it's fairly arbitrary." Without market activity to go by, an assessor attempts to gauge all possible alternatives for development on the site, as well as possible zoning changes and the developer or investor's intentions for the land. The discussion revealed that the process is ad hoc and dependent on each assessor's perception.

Assessments perceived to be based on judgements of professionals are often disputed and lead to frequent appeals. Presently assessment appeals in Ontario number between 100,000-150,000 per year. Site value assessment would have to be judgemental, particularly in built-up areas. At best, it would be a statistical estimate in those parts of a city where vacant land is scarce and comparable sales non-existent.

5.2.2 Other Proposed Assessment Measures

The Fair Tax Commission compared market value, unit value, and two-tier valuation. Unit valuation was opposed as it shifts the tax burden to less costly lots. Because it averages out unit values, those with the more expensive units (generally associated with higher-income households) will pay less tax, while the less expensive units, usually associated with lower-income households, will pay more tax. Market value and two-tier valuation have been discussed above. Based on their relative merits, the Fair Tax Commission recommended the Market Value Assessment as the preferred

basis of assessment on criteria of fairness, neutrality, administrability, etc. "Market value is a reflection of what has happened in the past, not what we want to happen. That's why it's neutral, because we are not favouring one use or another." Levies and impact fees are used by municipalities to further social goals, by tying development to specific provisions. But using taxation as a coercive measure, to attempt to force people to develop, is not the goal. "We just reflect what's already happening, and that is what the people are actually doing. That determines the market. The market dictates, not us," said a provincial assessor.

In defence of their opinions, assessors cited examples of Pittsburg and Australia. In Pittsburg, it must be remembered that the two-tier tax is only a municipal tax; one of many paid by property owners. Furthermore, it was instigated in a boom time, when development was on the rise. This is not the case here in Ontario at this time. In Australia, most of the land involved is crown land, and there is a difference in the spending of the funds involved. To look at the effectiveness of these taxes or their relationship to the system in Ontario, one has to look at the entire taxation system including land tenure, service provisions, user charges, assessment practices and tax rates.

5.2.3 Land and Site Taxes

Site value taxation was used in Ontario in the 1920s in order to break up huge tracts of land. The case studies presented in Chapter 4 present a brief history of this policy initiative.

The assessors did not favour instituting site taxation. They

opined, "We would have to up the mill rates significantly to generate the same level of revenue as generated by market valuation. The burden of taxation would then fall on lots, shifting onto unimproved land and the owners. This would often include low-income households, therefore raising questions of equity." This equity issue was described and confirmed by the Pittsburg empirical evidence presented in Chapter 2.

Site valuation, according to the interviewed assessors, is intended to maximize development by providing a financial disincentive to underdeveloped land. The so-called benefits of Site Value Taxation (SVT) include increased employment and the generation of wealth. Most studies have shown that site value taxation does not have this effect, and, if it did, there are several problems:

a. SVT presupposes unlimited demand for development.

b. There is a presumption of development as good and desirable.

c. One-time development may constrain future generations. We have "mortgaged the future of generations" for benefits we perceive development will bring today.

d. Development does not pay for itself; therefore, we must tax the development itself, not just its location.

e. SVT promotes measures that may counteract declared social goals. For example, if one wants to retain the downtown as the focus of the city, SVT will encourage development everywhere. This will also contribute to sprawl and

uncoordinated development.

f. SVT does not consider equalization between municipalities.

g. Wary of implementation, it is no good to use market valuation for site value, as is often done or proposed, because it contradicts the site value presumption - highest and best use is not the market value.

h. It is very difficult to assess land and improvements separately, especially when the last assessment on the land was done before development occurred.

i. Rates are arbitrarily decided upon.

j. Land is a higher percentage of property value, so there is the equity issue of penalizing small lots and homes.

5.3 Impact fees AND LEVIES

This topic was discussed at length with developers as it primarily concerned them. The discussion focused on the appropriateness of taxation versus impact fees given the purpose of the funds. Spokespersons for the development industry maintain, "It is not appropriate that new developments alone pay for services all people are getting. Why should the proposed extension of Toronto Transit Commission be funded by the creation of a special tax district? This is not appropriate and contradicts the highest and best use criteria."

The municipality wants the developer to cover as much of the development costs as possible. But these costs are just passed

along to the consumer anyway. Impact fees are part of capital costs. Taxes are operational costs, and in every case, it is the consumer that pays.

Furthermore, impact fees are local in nature; the funds raised are not for upper-tier governments which have responsibility for equalization between all municipalities. Therefore, they could never replace taxation altogether.

5.3.1 Types of Impact fees and Charges Currently Used

Developer representatives maintain that a broad range of instruments are applied to charge developers for public costs, or they are taxed informally for increases in land value. Among such charges or impact fees are parkland dedication and cash in lieu of parkland, schools, and art. The standard benefit to the developer is the increased density. The trade of density for consideration is a form of betterment tax. The municipality, by making the trade, gains for public benefit a part of the increase in land value due to higher density development. This suggests that an informal "betterment levy" is in place in many municipalities. It shows that the impact fees or taxes need not yield money but can take the form of improvements that are valued by the public. Impact fees can be anything: parkland, pools, and indoor tennis courts.

The disparity of development charges and bonusing agreements from municipality to municipality, and even from planner to planner within a municipality, is a source of considerable consternation among developers. One agreement on condominiums in the Greater Toronto area, for example, had over ninety clauses relating to the

developer's obligations.

5.3.2 Rationale for Development Charges and Bonusing

Developers accept the proposition that the costs of growth should be fairly reflected in the price of new homes. When development charges are used in this way, they are appropriate. However, if they are used to increase the levels of an existing service, then a developer is paying for unrealistic standards imposed by the government. "This is clearly an abuse of development charges." And how are the costs related to development clearly demonstrated? Over what time span are the costs calculated? These are some of the problems the Urban Development Institute has identified as the contentious issues of Ontario's Development Charges Act (DCA).

The rationale for bonusing agreements differs in every case of development. But it is seen as a necessary tool in a free market. The developer's spokesperson accepts the notion of a betterment levy so long as it is tied to identifiable increases in development potential and land value.

If one expects growth to pay for what already exists, then impact fees constitute double taxation. Education levies under the DCA are also double taxation.

Essentially, development charges are "a one-time hit," which really fall on the developer and are then passed along to the consumer through the price of land. If development charges are paying only for the costs of growth attributable to growth, then it is not double taxation.

It is purely deal-making by the market: "supply and demand set the stage." This seemed to be true of both development charges and bonusing. The municipality gets what it can from the developer, thinking that the developer will absorb this. That is not true; the consumer pays. And in recessionary times like this, nothing is happening, making the whole question of development charges ridiculous.

5.3.3. Advantages and Disadvantages of Using Impact fees

There must be a mechanism for the provision of hard services, and that is through development and development charges.

It is the soft charges that are at issue with developers: daycare and "stuff like that." Development charges reflect the choices of the community, but that can be at odds with what (private) development should be expected to provide. On the other hand, if the market is with development, it can be a good deal for everybody.

Development charges, properly applied, can ensure that the environment is properly protected by appropriate levels of service being utilized efficiently. They can also ensure the same level of service of water and sewage for all households, the spokesperson conceded.

5.3.4 Development Charges

The development industry wanted Ontario's Development Charges Act (DCA) in order to get a non-deal oriented, "level playing field" with the government. It was necessary in order to "protect the little guy," presumably in the development industry. The

development industry has always paid for water, sewer, roads, and anything else the municipality deemed necessary and "forced the industry into," the developer's spokesperson maintains. Furthermore, "Land isn't worth a dime if you're not growing something on it or building on it." The development industry had a vested interest in establishing some clear guidelines by which to bargain.

Representatives of the industry, including UDI, worked closely with the government to draw up development charges legislation, but last-minute amendments by the government have caused the current problems. Essentially, the government passed the Act and then said, "Let the market straighten it out. Then the city passes a by-law and says these are our charges: you want to build, you pay."

There are two basic principles in DCA: the percentage of the costs of development that are attributable to new growth, and the existing level of services. UDI wants a clear set of criteria as to how the development charges are arrived at. What level of service is used as the baseline? What about municipalities that increased their standards of service in boom times; shouldn't this be reviewed in these recessionary times? Over what period of time do you work out costs attributable to growth? UDI has one subcommittee that focuses on development charges, and UDI chapters around the Greater Toronto Area (GTA) do their own appeals. UDI does negotiate development charges with municipalities in order to avoid appeals, though this is not always successful.

DCA as currently interpreted in some communities <u>does</u> hurt

development. Oakville was the favourite example of this. It is contended that better informed municipal officials would arrive at a better interpretation of the Act.

A more crucial problem with development charges is allocated water and sewage that is not being utilized by the developer.

Development charges, however, were not meant to eliminate bonusing altogether. A city must have bonusing because unique sites demand unique planning. Without bonusing, Toronto would not look like it is now. Furthermore, it is a bad time to be discussing development charges. In the "boom" there were 51,000 houses sold in the GTA. The same time period today saw only 12,000 sold. This demonstrates the ramifications of legislation passed in one economic period on another.

ENDNOTES

1. Among those interviewed were:
   Morley Kells, President, Urban Development Institute, Toronto
   Mark Reeve, Vice-President, Development, Urban Development Group, Markborough Properties, Toronto
   William Wu, Senior Manager, Assessment Policy, Assessment Policies and Priorities, Ministry of Finance, Ontario
   Ed Hanowski, Manager, Assessment Policy, Assessment Policies and Properties, Ministry of Finance, Ontario
   Elaine A. Cash, Analyst, Assessment Policies and Priorities, Ministry of Finance, Ontario
   Chris Van Ember, British Columbia Assessment Authority, Victoria
   Hugh Morrison, Policy & Research Branch, Saskatchewan Assessment Management Agency
   Evelyn Filson, Director of Communication, Saskatchewan Assessment Management Agency
   Harold Williams, Chief of Standards and Research Division, Alberta Municipal Affairs
   Ken Friesen, General Policy Analyst, Manitoba Department of Municipal Affairs

CHAPTER 6

RECAPTURING INCREMENTS IN URBAN LAND VALUES: CONCLUSIONS

The theory of 'unearned increments' in land values has long provided the rationale for land taxes, special levies, impact fees, and public land banks. These are measures that purportedly recapture a portion of the increase in land value for public purposes. This study has reviewed the literature and examined some well-known examples of recapture measures to determine their effectiveness in meeting land policy objectives. A few key informants from the provincial property assessment departments, developers, and planners have also been interviewed to gain practitioners' perspectives in implementing such measures. The foregoing chapters describe in detail the theoretical criteria to assess recapture measures on the one hand, and the lessons deduced from case studies of land taxes, betterment levies and impact fees on the other.

To conclude this study, we will attempt to pull together significant themes and observations from preceding chapters to formulate a coherent picture of the relative merit of various recapture measures from public perspective.

a) Although the presumption of 'unearned increment' has not been critically evaluated, findings of this study imply that the magnitude of unearned increments varies with economic conditions and public versus private rights (responsibilities) in property development. The land tenure system, the arrangements for financing infrastructure and services, and the planning regulations define,

respectively, public and private domains in the land market. These factors vary and the public-private domains change over time and space. Thus, in communities where the public role is narrowly defined, private interests drive the land market, and the unearned increments are likely to be relatively small. For example, Australian municipal responsibilities differ from the Canadian and both diverge from the American practice, resulting in varying levels of unearned increments. Legal, political and administrative factors underlie the scope of unearned increments and they should not be regarded as of equal magnitude and significance everywhere. The institutional context is a significant determinant of both the unearned component of development gains and of the potential for recapture. This matter of context is relevant to present-day Canada, where public investments are being reduced, privatization is eroding public domains, and the information revolution is creating footloose establishments that can readily change locations and discard sites. In such urban systems, land value gains could be returns to private investments and user chares, thus reducing the magnitude of unearned increments.

b) The recapture measures, namely site value tax, graded land tax, betterment levy, impact fees, etc., do not only function as fiscal instruments. They are, usually, conceived as a part of the urban planning strategy and they serve its evolving objectives. These objectives include curbing of land speculation and excessive residential land prices, ensuring a regular supply of land, promoting a balanced pattern of development, preserving the natural

environment and amenities, generating public revenues, essentially, to recover costs of infrastructure and services and stimulating housing and employment opportunities. Not all of these objectives are high on the public agenda all of the time. One or the other set of objectives takes precedence at a particular time, depending on the nature of urban problems. The recapture measures operate within this policy context.

In Canada, Britain or Australia, site value taxes or betterment levies introduced in one period had to be rescinded or modified as the land market and policy agenda changed. It is, therefore, not appropriate to regard any particular recapture measure as an effective tool for all times. The cyclical changes and secular transformations of the urban land market require continual adjustment and monitoring of taxes and levies.

c) The recapture measures are conceived according to conventional economic criteria of efficiency and equity. This is particularly true of all the fiscal instruments such as taxes, levies and impact fees which constitute the bulk of recapture instruments. Chapters 2 and 3 of this study model these taxes and levies in accordance with the above two criteria. Yet the conceptual models of these taxes transformed into legislated tools and administrative practices have to measure up to other tests. They have to be neutral, fair, administrable and stable. These criteria assume greater importance in the operationalization of tax measures. Chapter 4 illustrates through case studies how the design of a tax or levy requires balancing various criteria.

The structure of a land tax or betterment levy is shaped by assessment procedures, exemptions (required to meet other policy objectives), timing of realizing a tax or levy, rate of a tax as a proportion of the value gain, the ability to pay and citizens' propensity to bear more taxes. As Chapter 5 illustrates, these institutional and administrative factors have a determining role in operationalizing a recapture measure. The chapter underscores the point that economic criteria embedded in a recapture instrument are mediated through institutional and administrative factors. It is not surprising that most observers of property and land taxes conclude that any radical change on the basis of assessment is not worth the effort, as its benefits may not outweigh the social costs of disturbing the existing market balance. This conclusion is affirmed by Ontario's Fair Tax Commission and by analysts such as Boadway, Kitchen, etc., as previously quoted.

d) The case studies, interviews, and review of literature suggest the conclusion that site value taxes and betterment levies are not panaceas of municipal financial crisis and urban ills, as their proponents claim. While the theoretical rationale for taxing away land value increases has some validity, the changes in urban structure have reduced the promise of the site value tax. Cities are now larger and more complex and land is owned by a broader spectrum of the populace.

Current economic theories point out that the site value tax is not neutral. It burdens capital at a macro level. It affects development timing in ways that counter the substitution effects.

Nevertheless, under most circumstances the reduction of the tax on improvements should, in theory, encourage the intensification of urban land use.

The implementation of site value or land taxes poses special assessment problems. Undoubtedly, land values are assessed on a regular basis, but they seldom fully reflect the current market prices of the land in its highest potential use - which is a crucial assumption of land taxes. The analysis of graded land tax in the Canadian Prairie provinces and in Australian states indicates that the assessed values are based more on assessors' judgements and indices than on market trends. And in this age of negotiated planning regulations, the future use of critical (downtown) sites is a matter of bargaining for density bonuses and impact fees. It has a floating value that may or may not crystallize and thus is hard to estimate. Altogether, these problems of measuring land values whittle away the promise of site value or land taxes.

There appears to be no acceptable or practical way to shift the entire tax to land and wholly free improvements. Below grade capital improvements would inevitably be reflected in land values. At best, the policy will shift burdens away from above grade capital and increase them toward the land component.

While a theoretical case can be made to suggest that such a shift will help intensify the inner city, and help sustain development at the periphery by reducing sprawl, two counter-arguments also arise. One suggests, as in the Pittsburgh case, that

the shift in taxes will not create a sufficient penalty to ensure city owners of parking lots and other under-used sites will convert their sites to more intensive uses. The shift to a standard land value tax that ignores current use and specific potential uses will be regressive. Inner-city low-priced rental areas will bear a larger portion of the burden to finance local government services than they do now under the general property tax. To the extent that the tax shift encourages redevelopment to more intense land use, it reduces low-income housing. As a result, the efficiency and equity consequences clash.

The Pittsburgh example provides some hope in association with other policy measures. The shift to a land tax here was associated with major changes in tax and expenditure policies undertaken by the municipal government to favour inner-city redevelopment. All signals let developers know they were welcome; tax holidays and zoning helped bring about the growth of the Pittsburgh CBD, while those of nearby cities declined. Many argue that the other factors were more important than the relatively small shift in the burden due to the land tax. Nevertheless, the change in tax base, in conjunction with other policies, can strengthen the signal sent to the real estate industry and show the city's commitment to development. Such symbolic changes may matter for they affect the expectations that drive land markets. Yet Netzer's longstanding advice holds true. "The conventional wisdom in public finance is that it is usually more sensible to try to effect non-fiscal ends by direct means, e.g. public acquisition of public space, rather

than by manipulating major general taxes for this purpose." (Netzer 1966: 207)

e) The general purpose of betterment levies, though theoretically appealing, have also not lived up to their promise. Britain has the longest experience of enforcing betterment levies on urban land. Chapter 5 recounts four periodic attempts to enforce some form of betterment levy in Britain. Each attempt turned out to be a disappointment. First, the betterment levy became an ideological battleground between the Conservative and Labour parties. The Labour governments legislated levies and the succeeding Conservative governments abrogated or emasculated them. Similarly, there were jurisdictional conflicts between central and local governments over the development-related objectives of betterment levies.

The betterment levy as a general tax also brings up the same conceptual and procedural problems as in land taxes: the timing of the incidence of levy, the assessment problems, the rapid changes in land values turning gains of yesterday into losses of today, tax rate and the land supply, etc. British experience is highlighted by one significant fact that the revenue realized from betterment levies always fell short of the initial expectations. The Canadian short-lived experiment in land speculation tax (Ontario) did not fare any better. All in all, general purpose levies are costly to administer, non-neutral and inequitable.

f) A targeted betterment levy or special assessment in a development district, as in Sydney, Australia, has proven to be

more effective, both in cost and in outcome. Betterment levies are useful recapture instruments for special districts for the purposes of controlling speculation and for the financing of infrastructure and services.

Cost-based recapture measures have the potential to raise revenues but not guide land use and to affect the efficiency of the urban spatial structure. The difficulty is not in theory, but in the demands on practice. Marginal cost calculations are complicated and costly. Average cost pricing, as is currently practiced, does not fully reflect values of resources. By having the system of charges based on the cost of infrastructure, some check is placed on the authority of local officials. With development charges based on public costs of a project, an explicit rule is established and every one is treated equally. Large inner-city projects may be treated differently after the clear identification of unique project-related costs. This is the ground for linkage fees and impact fees traded for density bonuses and special service provisions. Such deals are possible in the expansionary phase of the business cycle, but in a recession they fail to materialize. Thus special charges or impact fees are opportunistic instruments of recapture and not an enacted levy.

Here, there is real potential for city officials working with landowners and developers for mutual gain. The site value increases within the specially designated district can be tapped to help pay for the infrastructure and for the <u>net</u> negative consequences elsewhere. Financing special district infrastructure through

betterment levies offers the added advantage of encouraging municipal officials to maximize land rent, hence the value to be gained by the use of this scarcer resource. The process needs to be open to public scrutiny to ensure that the planners working on special districts do not limit the supply of sites for short-term gains at long-term costs. The external consequences of special district development have to be monitored and, indeed, compensated to ensure overall efficiency. The move toward more efficient land use may involve new financing methods, but it also should involve new ways of linking private and public sector activities.

g) Impact fees and development charges to be realized from developers are a limited purpose recapture measure. They concentrate on recovering public costs and appropriating a part of the development gain. Thus, land value increments arising from public investments are partially recaptured by passing on direct and indirect costs of infrastructure and services. The crucial legislative test for such charges and levies is the 'linkage' of attributed costs to a development.

Applied judiciously and fairly, impact fees and development charges are an effective recapture measure. Economically they relate public costs to development's benefits and balance interests of old and new residents and of an area. Politically, they are relatively more acceptable in that they target a producer's group, namely developers, and not the public at large. Undoubtedly, there are issues of equity and neutrality. Also, the administrability of impact fees and development charges can be complicated and

vulnerable to ad hocism. Yet these problems are being given some attention through provincial legislation authorizing development charges and establishing criteria for their assessment, e.g. Ontario's Development Charges Act 1989.

Impact fees and development charges come closest to being a suitable recapture measure for contemporary urban economies.

h) To sum up, this study has found little basis to be enthusiastic about general purpose recapture taxes or levies, be those site value or graded land taxes or betterment levies. Such taxes and levies will have to substitute for the property tax and, even if there are some minor advantages, these are so marginal and situational in nature that a wholesale realigning of the local finance system is not worth the effort. There is little evidence that they will produce substantially more revenue and may meet enormous resistance from the tax weary public.

What Clark, a Canadian, said about site value tax is worth heeding all the more in this era of global capitalism.

> Site taxation would fail to accomplish most of the things claimed for it.... Our modern cities are the product of immensely powerful economic forces and the impact of site taxation on these forces would generally be slight." (quoted by Milner 1963: 152)

For contemporary urban land markets, impact fees, development charges and special district assessment or betterment levies targeted for a specific value-adding stage in the development cycle are more promising recapture instruments. Sharpening these tools and making them more efficient, fair and administrable should be the objective of land policies in contemporary Canada.

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