Centre for Urban Economics and Real Estate

Real Estate Capital Gains and CCA Recapture
Tax Deferral:

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November 2013

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We are grateful to the Victoria Real Estate Board for their support of this research and discussion
Introduction

In Canada the tax upon income from capital gains is due upon the sale of the asset. As in most countries, recapture of excess depreciation deductions taken for tax purposes occurs at the same time. This potentially large tax incidence due at asset sale creates an incentive for investors to refrain from selling these assets to defer the tax liability, a phenomenon referred to as “lock-in.” This discussion paper examines the economic issue generated by this “lock in” effect in real estate. The first section of the paper summarizes the relevant academic literature on the theoretical and empirical effects of lock-in, for assets in general and as it relates to real estate. In the second section, we present the economic theory case for allowing investors in real estate to roll-over their tax exposure from real estate assets they sell to other real estate assets they acquire with the proceeds from those sales.

In the Canadian income tax system, capital gains are treated differently from income with respect to timing and rate. While income is taxed as it is accrued, capital gains are taxed at the point where the gain is realized. Consequently, there are many rules and provisions relating to the limitation of loss deductions and the definition of the realization event. The rate benefit is affected through the partial exclusion of gains and in some cases a limited life-time exemption. For instance, on the disposition of qualified small business corporation shares (and farm property) to publicly listed shares of small companies. Or the roll-over and deferral for the capital assets of corporations acquired through merger, bankruptcy, or re-organization.

There have been numerous calls to address this phenomenon. The Investment Industry Association of Canada (IIAC) has long been lobbying for a reduction of capital gains taxes through various measures. The 2006 Conservative Party federal election platform proposed that capital gains earned by individuals on real and
financial assets be exempt from taxation if the proceeds were reinvested within a six month period, a form similar to the Section 1031 Like-Kind Exchanges in the US.¹

Authors such as Mintz and Wilson (2009) outline the general case against the current tax treatment of capital assets and propose solutions that they hope might be politically palatable. The purpose of this discussion paper is not to present a policy proposal, nor even to make a case for a particular change to the current tax code. Instead, the objective is to answer two questions: what do we know about the affects of the current capital gains tax regime on investment behavior and what is the case for granting a roll-over provision for real estate assets.

In this paper we examine the academic literature related to the impact of relaxation in the rollover/reinvestment provision on sales (mobility). This includes both theoretical work on the effect of the lock-in phenomenon on portfolio choice and empirical studies on the effects of changes in capital gains rules that reduce the incentive for property owners to hold properties to avoid tax incidence. The second part of the paper outlines the theoretical argument for specifically targeting the lock-in problem in real estate. It presents the negative costs to society more broadly when real estate investors avoid selling properties because of the tax incidence that such a sale would trigger. This discussion suggests that there are clear social benefits from allowing real estate investors to roll-over their tax liabilities from properties they are selling to those they are buying with the proceeds.

¹ Section 1031 of the IRS Code allows for the non-recognition of gain or loss from exchanges solely in-kind. The Code holds that property must be productive or investment property and exchanged for a property that is of like kind. In general, the realized gain at sale is equal to the net selling price of the property minus the adjusted tax basis. Within 45 days of the sale of the relinquished property, the taxpayer must formally identify the replacement property. The taxpayer must acquire the identified replacement properties within 180 days of the date of the closing of the relinquished property. Mechanisms like the use of a recognized third party to act as trustee for the cash from the initial sale allow for a sale to be made before the subsequent asset is identified.
A Review of the relevant Economic Literature

Theoretical Papers on "Lock-In"

The theoretical work on capital gains taxation and investment “lock-in" studies the effect on an efficient allocation of capital. This body research estimates the potential effect on equilibrium asset prices and the allocation of capital across assets.

Klein (1999) develops a theoretical model that specifically highlights how the “lock-in” effect results in inefficient portfolios. His result can only occur if investors are unable to replicate asset returns without incurring taxable capital gains through short selling and perfect substitute securities that would allow investors to re-balance their portfolios without realizing their gains. Based on these assumptions, investors are forced to make a trade-off between portfolio re-balancing and capital gains realization. In equilibrium investors skew their portfolios in favour of stocks in which they have accrued capital gains and away from stocks in which other investors have accrued capital gains.

In a subsequent paper, Klein (2004) relaxes the assumption regarding the presence of perfect substitute securities exist. Klein proves that relaxing this assumption does not eliminate the “lock in” effect of accrued capital gains on equilibrium prices and that the presence of perfect substitutes does not necessarily allow investors to re-balance their portfolios without realizing at least part of their accrued capital gains. This paper highlights the problem that property owners with accrued capital gains problem face in practice. Given their tax situation it may be less costly to sub-optimally rebalance their portfolios without selling an asset that would cause them to realize a capital gain.

A direct modeling of the effect of deferral by Auerbach (1991) introduces the

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2 This assumption means that in order to perfectly hedge a position in the risky security with a capital gain the investor must sell some of the security that he has a capital gain.
retrospective tax on investment returns as an alternative to accrual (the system for regular income and dividends) and realized based capital gains taxes because the retrospective tax avoids deferral and lock-in problems. In the model, the lock-in effect and tax arbitrage possibilities associated with deferral are eliminated by effectively charging interest on past gains when realization finally occurs in addition to taxing capital gains on realization. This approach eliminates the incentive to defer realization if the interest rate on accrued gains held for longer periods of time is set high enough to offset the deferral advantage. The paper also shows the effect on tax revenue of such a change as a retrospective tax extracts less revenue than an ordinary accrual tax on investment income when returns are high and more revenue when returns are low.

Kanemoto (1995) calls into question the argument that there is always a “lock-in” effect under the current system of a tax on realized capital gains is its. Using a simple land development model to examine the impact of the taxation of realized capital gains he finds that the lock-in effect occurs when the basis for taxation is low, but if the basis is high, the tax induces the owner to sell his land immediately. The surprising result that the “lock in” effect does not arise if the basis for the capital gains tax (usually the price at which the owner acquired the land) is sufficiently high, so that gains are “low enough” and the owner has perfect foresight of future land prices. In this particular case, there is no delay or lock-in, as the landowner sells the land immediately even if development occurs much later.

A sufficient condition for the non-existence of the lock-in effect is that the basis is the purchase price that was formed under perfect foresight. The lock-in effect arises only when unexpected capital gains exist. While perfect foresight is easy to create in a theoretical economic model, it is rather unlikely to occur in actual market conditions.
Empirical Research Using the US “Taxpayer Relief Act of 1997”

The second area of relevant research involves empirical studies that take advantage of changes in the US tax code to identify whether changes in capital gains affect asset holding periods: is there a lock-in effect. These empirical tests use the US “Taxpayer Relief Act of 1997” to see how residential mobility changed as a result of changes to the treatment of capital gains for households.

Prior to the passage of the Taxpayer Relief Act of 1997, homeowners in the US were entitled to a one-time capital gains exclusion that sheltered a significant portion of the accumulated price increases on their primary residences, but the exclusion required that the primary wage earner be over 55 years of age. Younger taxpayers could only avoid taxation on gains when changing primary residences by continually trading up in housing because sales proceeds that were not reinvested in a more expensive residence were subject to taxation at the capital gains rate. In addition, the capital gains tax rate was raised from 20% to 28% by the Tax Reform Act of 1986. The 1997 legislation contained three important changes in the way that taxes were assessed on capital gains on residential real estate.

- It removed any age-preference restrictions so that all homeowners were subject to the same capital gains treatment.
- It allowed capital gains to be realized and excluded from taxation as often as every two years, regardless of whether or not the proceeds were reinvested in residential real estate.
- The maximum capital gains exclusion was raised from $125,000 to $500,000, ($250,000 for single taxpayers).
Most of the research using the 1997 tax changes looks at the effect of the changes on the mobility decisions of homeowners. The academic research that uses this tax law changes uniformly conclude that residential capital gains taxes lock homeowners into their current houses by discouraging moves. While we cannot be sure that investors will behave similarly to homeowners, the behavioural response observed in homeowners should be replicated by investors when faced with similar changes in the tax code.

Cunningham and Engelhart (2007) focus their analysis on homeowners just below the age threshold of 55, as they would be most likely to be influenced by this change. They compare mobility patterns between homeowners aged 52-54 and 56-58 before and after the passage of Taxpayer Relief Act of 1997. The authors find that mobility rates among taxpayers aged 52-54 increased by 20 to 30 percent after the tax reform became effective. The increase in mobility is consistent with a reduction in the lock-in effect because of the enhancements to the ability of homeowners to defer their capital gains on the sale of their principal residence.

Prior to 1997, the US tax rules on capital gains from a principal residence primarily affected homeowners who wanted to downsize, or reduce their consumption of housing. Biehl and Hoyt (2009) examine the impact of 1997 changes on the propensity of some homeowners to decrease their housing consumption (which can only be achieved by selling the current home and purchasing another). They find evidence that groups of homeowners that were most likely to desire less housing were more likely to decrease their housing consumption after 1997, when

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3 An exception to the US tax code change work is Lundborg and Skedinger (1998) study of the behavior of Swedish households following changes in the treatment of capital gains for a principal residence there. Their results are similar to those in the US based research described in more detail here.

4 Segmented sample results indicate that mobility rates increased by more if the homeowners could be classified as highly mobile, e.g. were divorced, had no children living at home, faced higher marginal capital gains tax rates or lived in states that experienced higher nominal rates of house price appreciation.
homeowners buying up and those buying down began to have the same tax
treatment. These results suggest that the more the liberal roll-over and deferral
provisions of the US Taxpayer Relief Act of 1997 increased the volume of residential
transactions, since greater homeowner mobility indicates more frequent
adjustments in housing consumption and more home sales.

The studies described above use large data sets covering thousands of individuals.
Shan (2008) takes a different approach by using more detailed data from 16 towns
around Boston to identify the specific effects of capital gains on the likelihood of
house transactions before and after 1997. She finds that the 1997 changes in US tax
treatment of principal residence capital gains increased the average sales rate of
homes with less than $500,000 gain by 13 to 22 percent. Among homes that had
appreciated less than $500,000, she concluded that the change caused a 17 percent
increase in sales in the decade after 1997. This evidence supports the theory that
the "lock in" effect resulted in homeowners avoiding paying the tax by simply
staying in their homes.

One paper that looks at the effect of the 1997 changes on investors in real estate is
Sinai and Gyourko's 2004 study of the US real estate investment trust (REIT) pricing
before and after the changes in capital gains tax rates that were part of the 1997 act.
They take advantage of the rules that allow owners of real estate assets who sell
them Umbrella Partnership REITs (UPREITs) to defer capital gains taxes.\textsuperscript{5} To an
UPREIT, the capital gains tax deferral is a subsidy similar to an investment tax
credit, lowering the prices they pay for properties and increasing the yield.

\textsuperscript{5} Unlike a regular REIT, which must pay for properties with cash or stock, an UPREIT's structure
permits the issuance of operating partnership (OP) units in exchange for properties. Consequently,
transferring buildings to a traditional REIT requires that the seller pay applicable capital gains taxes.
However, transferring buildings to an UPREIT is not a taxable event as long as the seller receives OP
units, not cash or stock, even though OP units are typically exchangeable one-for-one into common
shares and pay the same dividend as common shares. In this case, the Internal Revenue Service treats
the deal as a tax-free exchange, with the building seller deferring her capital gains tax liability until
either she converts her OP units into stock or the UPREIT sells the contributed properties.
If competition among REITs and UPREITs for acquisitions raises property prices until all firms are just making their (common) required rate of return, then UPREITs and REITs will pay the same pre-tax prices for properties and the entire benefit of the capital gains tax deferral accrues to those sellers who sell to UPREITs. However, if competition among property owners to sell buildings makes them willing to accept a lower after-tax price, UPREITs conceivably could capture up to the entire value of the capital gains tax deferral since they can reduce the price they offer below competing REITs’ prices until the after tax benefit to the seller of selling to an UPREIT or REIT is almost identical.

By comparing the performance of two organizational forms of publicly traded real estate companies, Gyourko and Sinai identify the effect of the capital gains tax rate changes on investor choices. They find that the capital gains tax rate changes, which favour regular REITs over UPREITs by reducing the value of the capital gains deferral for UPREITs led to an 8% decline in the share price of UPREITs relative to REITs. The contribution of the work is in showing unambiguously how changes in capital gains taxation affect investor behavior.

Effects of Section 1031 Like-Kind Exchanges

Section 1031 of the IRS Code allows for the non-recognition of gain or loss from exchanges solely in-kind. The Code holds that property must be productive or investment property and exchanged for a property that is of like kind. In general, the realized gain at sale is equal to the net selling price of the property minus the adjusted tax basis. However, under Section 1031 of the Code, real estate owners who dispose of their investment, rental, or vacation property and reinvest the net proceeds in other “like kind” property are able to defer recognition of some or all of the capital gain realized on the sale of the relinquished property.
Within 45 days of the sale of the relinquished property, the taxpayer must formally identify the replacement property. The taxpayer must acquire the identified replacement properties within 180 days of the date of the closing of the relinquished property; that is, the 45 and 180-day periods run concurrently. There are no exceptions to these time limits and failure to comply will convert the transaction to a fully taxable sale.

There are several motivations for use of Section 1031 exchanges.

- Exchanges serve as an effective shelter from taxes, thereby preserving investment capital.
- Exchanges can be used to upgrade portfolios (Fickes 2003). By deferring taxes, the taxpayer can also leverage appreciation and afford to acquire a larger/higher priced replacement property.
- Exchanges can also be used to consolidate or diversify properties, exchange low-return properties for high-return properties, or to substitute depreciable property for non-depreciable property (Wayner 2005a, 2005b).

Despite the potential advantages of tax-deferral, Section 1031 exchanges have several drawbacks.

- The larger the amount of tax-deferral, the smaller is the depreciable basis in the replacement property and, therefore, the smaller is the allowable annual deduction for depreciation.
- The larger the amount of tax-deferral, the larger will be the realized gain if and when the replacement property is subsequently disposed of in a fully taxable sale.

Until recently 1031 exchanges have received limited attention in the literature. The large appreciation and subsequent decline in the 2000’s have brought the 1031 tax
provision into focus. In particular, academic research has identified that section 1031 exchanges distort behaviour of the asset holders because it incentivizes investors to hold assets eligible for the deferral longer than they would without the tax advantage. The deferral also encourages investors to hold assets that are eligible for deferral, particularly real property and may lead to inefficient portfolio allocations that are overweighted in real property. This is in contrast to bond owners are not eligible to defer gains, and therefore face no incentive to remain invested in bonds or like assets.

Holmes and Slade (2002) examined the impact of tax-deferred exchanges in the commercial real estate market of Phoenix, Arizona. They find that the “price pressure hypothesis” is responsible for increasing the price of the replacement property, though the price of the relinquished property is not affected. Thus buyers who are acquiring property as part of a like-kind exchange pay more for commercial property and take on more risk than buyers not exchanging property. Taxpayers face significant time constraints when seeking to complete a delayed tax-deferred exchange before the 180-day window expires. In a perfectly competitive market, a weakened bargaining position would not affect the transaction price. However, in illiquid, highly segmented commercial real estate markets, the exchanger may be required to pay a premium for the acquired property relative to its fair market value in order to meet the 1031 requirements and be able to roll capital gains tax liability from one property to another.

Similarly, Ling and Petrova (2008) study the effect of tax-deferred exchanges on transaction prices in multiple commercial real estate markets. They focus on a buyer’s theoretical reservation price and observed market price. Using a large dataset of commercial property transactions they find that tax-motivated exchange buyers pay significantly more, on average, than non-exchange investors for their apartment and office properties, all else equal. This research highlights the value investors place on the ability to defer the payment of capital gains taxation from an asset sale until when they exit an asset class and realize the gains as income.
The Economic Theory Case for Deferral

As a general rule economists do not support policies that favour one industry or asset class over another. Advantages to one and not to others distort the decisions of economic actors with effects on the efficient allocation of resources. Allowing investors to defer capital gains earned upon sale of real estate as long as the proceeds of the sale were re-invested into other real estate assets, if not extended to all other investment assets, would thus distort the allocation of capital by favouring real estate investment over other asset classes. The caveat to this general principal is that differential tax treatment that addresses the presence of externalities associated with one asset class will increase economic efficiency.

Externalities are the positive or negative effects of one actor’s actions or another who is not party to the decision.\(^\text{6}\) Taxing actions associated with negative externalities or granting preferential treatment to actions that result in positive externalities encourages independent actors to make the choices that reflect the external costs or benefits that result from their actions. In real estate there are numerous instances of externalities. A property can impose positive benefits on adjacent properties; creating a more pleasant built environment that raises the value of neighbouring site or a one commercial site attracting shoppers who then shop at other nearby properties. They can be negative, such as a rundown building lowering the value of neighbouring properties. The original intention of zoning was to address the negative external effects of “inconsistent” uses, particularly noxious industries, by keeping them apart, so that negative externalities would be reduced.

\(^\text{6}\) The classic example of an externality is pollution. Those affected negatively by pollution to not have a say in the polluter’s decision to pollute. Externalities can be positive: a building with beautiful landscaping delivers benefits to those who pass by, even though they do not pay the cost of creating and maintaining the landscaping.
In this section we describe how allowing owners of commercial property to defer their capital gains on real estate for funds re-invested in real estate can address the negative externalities associated with inefficient and inappropriate building forms and urban sprawl. The “lock-in” effect of capital gains and depreciation recapture imposed at sale, which encourages investors to continue to hold and not sell assets, prevents the redevelopment of these assets as developers are not able to acquire the sites. Instead, either land acquisitions costs must rise, with affects on affordability, or developers must look elsewhere, typically the urban fringe for development sites, resulting in increased urban sprawl.

In the standard urban economics model of the urban real estate market, there is a single integrated market for land. Land values at all locations will move together as they react to the same changes in the local economy and household demand for real estate. Prices in one location can change relative to prices in another only when unique local characteristics, referred to as neighbourhood amenities, become more or less in demand or re created or destroyed. Otherwise prices in all locations will move together. The implication for an investor is that any one real estate asset in a given market is an extremely close substitute for another. From a portfolio perspective, there is little reason to sell an asset to buy a close substitute. The presence of transactions cost, such as taxes and fees due at sale, means that no owner would choose to sell a real estate asset in a market until they were ready to exit that market entirely. The lock-in effect described above will be especially acute for investors in real estate who want to retain assets in real estate in a given market: selling one asset in the market and buying another will only reduce their expected return.

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7 The construction of a subway station might increase the values of properties close to the stop relative to others in the market. As a neighbourhood becomes more or less popular relative to others as consumer tastes or demographics change

8 Idiosyncratic property specific risk and differences across real estate classes in the effect of economic shocks means that returns will not be equal for all properties and investors would still benefit from holding a portfolio of properties within one market.
There are two types of negative externalities that can occur from the failure of investors to sell real estate assets. Both depend on the inability or reluctance of existing landowners to redevelop their properties. This may occur because they lack the ability, willingness, or capital to do so or the property is too small to be effectively redeveloped on its own, and would more profitably be assembled with adjacent parcels or doing so triggers a capital gains / depreciation recapture tax incidence they wish to avoid. The first is that the property has a negative effect on its neighbours because it is older and rundown, or as a corollary does not bring as many shoppers to the location as a newer larger structure would. The second is that if urban neighbourhoods are more difficult to redevelop, both blight and sprawl increase (see Bruckner and Helsley 2011), with the extremely well documented costs of each.

Smaller, core urban properties are particularly subject to these negative externalities from the reluctance of landowners to sell properties to developers. First, redevelopment requires the assembly of multiple lots to transform small lots into a site of an economically efficient size to develop. One property owner who is reluctant to sell can stop an entire development.9 As this is primarily a problem in core urban areas, the effect is to force development further out of the urban core, contributing to sprawl.

It is the correlated nature of the land market described above that removes the pressure on the landowner to sell. Since the land retains its attractiveness for future development, the failure to sell to a developer at one point in time need does not lead to the loss of the land’s value. From the landowner’s perspective, selling just incurs the tax incidence, and if the proceeds would just be re-invested in real estate in the same market, it is preferable to not sell and retain the land until the

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9 The theoretical issues and problems of land assembly is studied in Eckart (1985), Strange (1995), and O’Flaherty (1994). Fu, McMillen, and Somerville (2006) demonstrate the empirical validity of these models.
landowner is ready to exit the real estate market in that city. The consequence is that parcels remain underdeveloped and sprawl increases.

The second factor is that older urban parcels are more likely to be rundown and under-developed. This creates a higher probability of a negative amenity externality on adjacent properties. If the properties are ripe for redevelopment, and the landowner expects them to be redeveloped upon sale, this reduces the incentive for the property owner to maintain, improve, or renovate the property. The subsequent developer buyer values the land alone, not the improvements, effectively reducing the return to maintaining the property.

These conditions suggest that tax provisions which encourage the lock-in effect for real estate investors increase urban sprawl and blight by reducing the incentives to sell to developers for redevelopment or to maintain the property. Under these conditions, the appropriate tax policy for increased economic efficiency and improved social welfare would be to grant preferential treatment that removes the lock-in effect. Allowing real estate investors to roll their tax liability upon the sale of one property to another subsequent purchased property would ease the ability of developers to acquire urban properties and redevelop them, rather than forcing them out larger single owner suburban sites or limiting redevelopment all together. The effect of the latter is to increase the price of developed properties and weaken affordability.
Bibliography


