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COMMENTARY

SOCIAL POLICY

Building Affordable Rental Housing in Unaffordable Cities:

A Canadian Low-Income Housing Tax Credit

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In this issue...

A new way to build social housing by using the tax system to leverage for-profit and nonprofit expertise in siting, building, ownership, and management.

The Study in Brief

Canadian cities have seen the impact of government built and operated social housing on the fabric of communities. Further, waiting lists for social housing have increased dramatically. There is an alternative.

In this study, the authors propose an alternative means of using federal funding to build social housing that leverages private-sector expertise in ownership, management and building low-income rental housing where the demand exists for it. The authors propose a made-in-Canada Low-Income Housing Tax Credit (LIHTC) that can build on the lessons learnt by the equivalent U.S. program introduced in the 1980s. The LIHTC would provide tax credits to for-profit or nonprofit owners of rental housing that is used for long-term low-income housing.

The LIHTC encourages better location and maintenance of low-income housing by enabling competition between developers for tax credits and creating a market test for the viability and need for low-income housing. This tax credit can be used to complement other government programs that aid renters, such as Rent Supplements, co-operative housing programs, housing allowances, and local government programs.

The LIHTC is a better way for Canadian Mortgage and Housing Corporation (CMHC) to disburse money to lower levels of government for the purpose of building social housing. Such an LIHTC is an ideal way to leverage some of the $2 billion in short-term stimulus funding for the construction of social housing into a sustainable long-term investment.

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INDEPENDENT • REASONED • RELEVANT

Many renters in large Canadian cities have difficulty finding affordable housing. Indeed, for some time, there has been a near absence in these cities of new housing intended for the rental market.

In part, this is the result of income tax reforms in the 1980s that reduced the attractiveness of this type of investment (Fallis and Smith 1989). More important, however, are the effects of the housing price boom of the 2000s. Observing rising house prices and expecting large, tax-favoured capital gains, investors (and homeowners) have been willing to pay more for condominiums than for units in multi-unit rental buildings. Developers have responded by leaving the conventional rental market and building condominiums instead.

The problem of housing affordability is manifest in long waiting lists – 135,000 households in Ontario – for social housing (Peters 2004). For cities such as Toronto and Vancouver that are magnets for thousands of immigrants each year, the affordable housing squeeze is a particularly pressing issue – in 2006, 40 percent of renters in Toronto had affordability problems, and the percentage for other large cities is not greatly less.[1] Construction of condominiums for rent and other small properties, which has crowded out multi-unit rental construction, has filled the overall housing demand gap, but new condominiums usually cannot be categorized as affordable housing and the filtering mechanism – through which ageing housing shifts into lower income occupancy – cannot be depended on to make them so (Somerville and Holmes 2001; Skaburskis 2006);[2] moreover, this kind of housing has characteristics that make it unsuitable for many households.

Should Canada's booming cities simply accept the possible eventual demise of the multi-unit, purpose-built rental apartment building in the private sector? We do not think so, for reasons we set out below. Furthermore, an admirable vehicle, one that has been tried and tested in the United States over two decades, is available to remedy the decline. This vehicle is the Low-Income Housing Tax Credit (LIHTC), the premier US affordable housing program, which is targeted at low- and moderate-income households likely to experience housing market problems. An important feature of the program, which has attracted attention in Canada for some time (see Lampert and Pomeroy 2002), is that it is open to both for-profit and nonprofit housing developers. Moreover, unlike most tax expenditure programs, its expenditures are limited and funds are competitively allocated.[3]

The way this US program runs is particularly suited to the Canadian Constitution's division of powers, under which the federal government has direct taxation power. As a tax program, it is run through the US Internal Revenue Service (IRS) with supporting information provided by the Department of Housing and Urban Development (HUD), entities whose Canadian equivalents are the Canada Revenue Agency (CRA) and the Canada Mortgage and Housing Corporation (CMHC), respectively. At the same time, the program could satisfy a great range of preferences among the provinces, which would control the allocation process as US states do. Furthermore, it suits the trend towards increasing decentralization and the

Our thanks go to three anonymous referees and Ben Dachis of the C.D. Howe Institute for comments and suggestions; Steve Pomeroy of Focus Consulting for help of various kinds, especially in understanding aspects of some current housing programs; David Crowe, Senior Staff Vice President of the National Association of Home Builders (NAHB), Washington, DC, for explanations and answers to queries over several years; Robert Dietz of the NAHB for sharing his tax expertise; and Keith Banting for answering some questions on the Canadian Constitution. We alone are responsible for any errors of fact or interpretation.

1 Authors' calculations using data from Canada Mortgage and Housing Corporation, *Housing in Canada Online*. The data refer to Census Metropolitan Areas and are taken from the 2006 census.

2 Some investigations, however, support the view that filtering works; see, for example, Malpezzi and Green (1996).

3 In this aspect, it differs from the Multiple Unit Residential Building (MURB) program, an income tax provision from the 1970s and 1980s that gave investors in new MURBs the right to deduct from other income, such as employment income, a net rental loss created or increased by a set depreciation amount of the Capital Cost Allowance. Investors in MURBs thus potentially sheltered large amounts of employment income from tax for many years.

devolution of social housing programs to the provinces. Finally, as budgetary expenditures for old social housing programs fall, mortgages are paid off, and long-term CMHC commitments expire, these savings would more than make up for gradually increasing expenditures under such a program.

As we show below, the LIHTC rolls into one program social housing and private sector housing. It is targeted, with both rent limits and tenant income limits. It is a tax expenditure with a set limit on total expenditure, and a transparent and competitive project-selection process. It offers the chance to select for-profit and nonprofit developers that offer the most benefit per tax expenditure dollar, and it brings the oversight of syndicators and investors to bear on the management of nonprofits as well as for-profits. Because it works through the income tax system, a Canadian version would exploit the enforcement capabilities of the CRA to ensure compliance with its maximum rent and income requirements. Constraints on the provinces would be minimal so long as a few basic requirements are met; such flexibility is a major reason for the popularity of the LIHTC in the United States.

Big-City Rental Housing Markets and Multi-Unit Rental Housing

Are there signs that, in Canada's four largest cities – Toronto, Montreal, Vancouver, and Calgary – there is a need for additional multi-unit housing? As Figure 1 shows, rents in all these cities have risen since an extended building boom ended in 1991. Except in Toronto, most of the increase has occurred since the mid-1990s, when the federal government stopped funding social housing development and when unemployment was high.[4] This suggests a deterioration in overall affordability of the rental market in these cities over this period, although the deterioration was slight in Montreal.[5] Vacancy rates, on average, have fallen since the early 1990s (see Figure 2) and are now at a moderate level, except in Vancouver, where the market remains tight. It is evident that vacancy rates are volatile, as one might expect from the role they play in market adjustment – the recent rise in vacancy rates in Calgary, for example, is associated with a steep rise in rents there in the mid-2000s. Low vacancy rates make finding housing difficult for low-income households, which tend to be less profitable to landlords because they are relatively costly to serve (Benjamin, Chinloy, and Sirmans 2000), and a tight housing market makes it easier for landlords to select higher-income tenants.

The Unique Role of Multi-Unit Rental Buildings

A more fundamental reason than high rent levels and low vacancy rates for introducing a housing program such as the LIHTC, however, is the great decline in the construction of multi-unit rental buildings. In Toronto, since 2000, the number of rental construction starts has amounted to less than one-half of 1 percent per year of the stock of apartments in multi-unit buildings. In Vancouver and Calgary, the number of rental starts has been so low, relative to demolitions and conversions, that the multi-unit stock actually declined between 2000 and 2008.[6]

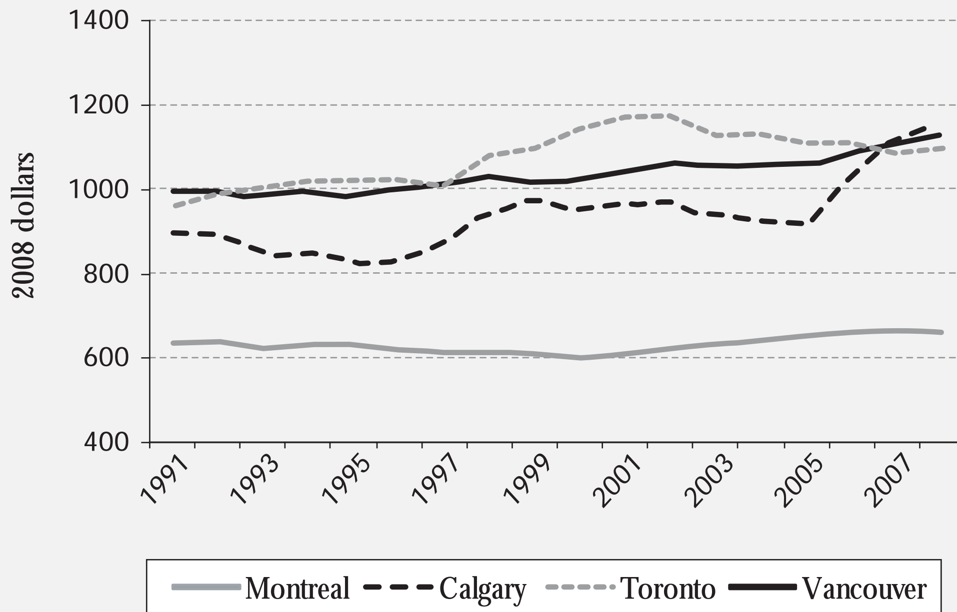
Why should it matter that a continuing segment of the rental supply be in multi-unit buildings? Why not rely on condominiums, single detached houses, and other small rental properties? The answer is multifaceted. First, such accommodations provide little security of tenure, because even a renter who is a model tenant might be forced to

4 In Toronto, rents increased considerably following a change in Ontario law in 1998 that allowed rents to be boosted without regulatory constraint when units turned over. Although rents in that city later gradually declined, they remain well above the level of 1991.

5 A reviewer suggests that, in Toronto and Vancouver, since CMHC data show higher vacancy rates for the lowest-rent units, low-income renters in those cities do not have an affordable rent problem. But if these units are far from public transportation, they might be inaccessible to low-income households that cannot afford a car.

6 Authors' calculations based on CMHC, Canadian Housing Observer and Rental Market Reports for Toronto, Vancouver, and Calgary (available at web site: https://www03.cmhc-schl.gc.ca/b2c/b2c/init.do?language=en); and *Canadian Housing Statistics, 2000*.

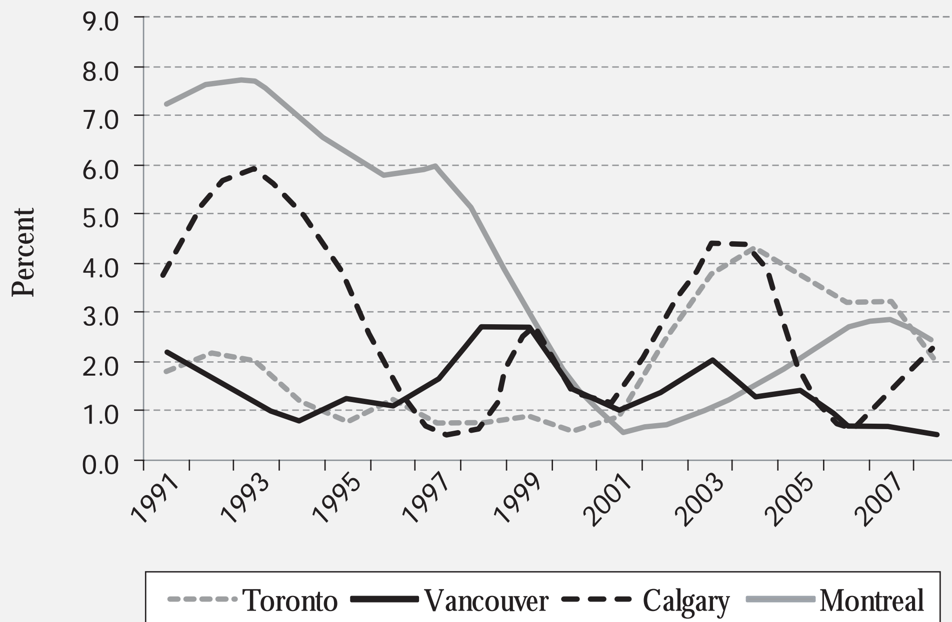
Figure 1: Rents, 1991 to 2009 – Estimated Quality-Constant, for 2-Bed Units, Multi-Unit Rental Buildings



Note: Rents shown for two-bedroom units in multi-unit rental buildings are average rents divided by theconsumer price index for the Census Metropolitan Area, multiplied by a factor to allow for depreciation of 0.25 percent per year (for Montreal, this factor is omitted because of substantial new building of conventional stock over the period). The rationale for this factor is that, when there is little addition to the stock, account should be taken of the deterioration of quality because of wear and tear and obsolescence.

Sources: CMHC, Canadian Housing Observer and Rental Market Reports, various issues.

Figure 2: Rental Vacancy Rates, 1991 to 2008, Multi-Unit Rental Buildings



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Sources: CMHC, Canadian Housing Observer and Rental Market Reports, various issues.

move if the owner or purchaser wishes to occupy the unit. In principle, tenants in multi-unit buildings face the same possibility, but the difficulty of conversion to condominium use makes this much less likely. The possible extent of the problem is indicated by the fact that, in Toronto, the number of rental condominiums fell by 15 percent between 1996 and 2001 (CMHC 2008a); in many cases, this means a tenancy was terminated. Being forced to search for new housing might impose only a trivial cost on young singles but a much larger cost on a family or elderly widow.

Second, small rental properties, referred to in the multi-unit industry as "mom-and-pops," often do not have professional management – indeed, by their very nature, single detached houses cannot have a superintendent on site. Thus, owners of such properties have an incentive to rent to resourceful tenants who cost little to serve, and would-be tenants perceived not to fall into that category might have difficultly finding accommodation.

Finally, for low-income tenants, the most important reason to maintain the private, multi-unit housing stock could be that, under current practice, only such buildings regularly accommodate tenants who receive Rent Supplements (RS). Since social housing agencies and landlords wish to take advantage of economies of scale in entering into RS agreements, this precludes contracts with landlords of small properties.

Alternative Housing Programs

In addition to Rent Supplements, other kinds of housing assistance are available to low-income households in Canada, including the housing allowances that some provinces offer and the federal government's Affordable Housing Initiative.

Housing Allowances

Housing allowances are a monthly cash payment to low-income households. Most European countries provide such allowances, as do Australia and New Zealand (Kemp 2007). In Canada, they are offered on a continuing basis by provincial governments in Quebec, British Columbia, Manitoba, Saskatchewan (Steele 2007b), and Alberta[7] sometimes only to households in a narrow category, but there are compelling reasons for providing them to households in all demographic categories and across the country. Many low-income households with a housing affordability problem wish to stay in their current accommodation and only need additional cash to help them pay their rent or mortgage. Typically, this help is needed only for short periods (CMHC 2008b), and it is much cheaper to help in this way than to move them into targeted new housing or buildings that can accommodate tenants who receive RS (Finkel et al. 2006; Steele 2007b). Furthermore, it is egregiously inequitable that some low-income households – most of those in social housing – should receive a deep subsidy while others receive no housing help whatsoever (Quigley 2008).

Housing allowances, however, are no substitute for new low- and moderate-income housing: demand-side policy needs to be complemented with a supply response. In part, this is because some households have problematic accommodation that does not provide enough security of tenure, a large enough number of bedrooms, or enough support. For example, a major problem in Vancouver, Calagary, and elsewhere is the number of homeless, and housing allowances are not rich enough to move them off the street. More generally, housing allowances are no remedy for the decline or stagnation of the stock of multi-unit rental housing.

The Affordable Housing Initiative

In 2001, the federal government returned to social housing programs by introducing the Affordable Housing Initiative (AHI) to provide capital grants for affordable housing.[8] The AHI provides that federal funding must be matched by the provinces, which are responsible for designing their own

7 Information on the Alberta program is available at http://www.housing.alberta.ca/direct_to_tenant_rent_supplement_program.cfm .

8 Earlier, a Supporting Communities Partnership Initiative (replaced in late 2006 by the Homeless Partnering Strategy) was introduced under Human Resources and Social Development Canada, but this program funds only housing intended to be transitional.

programs, though constrained by a number of federal conditions.[9] Is this program sufficient? The answer is no, for a number of reasons. One is its limited duration, although the promise to renew it contained in the 2009 budget has for the present saved it from extinction. Another reason is the cumbersome nature of a grants system in a confederation: agreements need to be signed with each province separately, which takes time and incurs considerable administrative cost because of the need to accommodate both federal and provincial preferences – for example, the first agreement was reached with Ontario only in 2003, two years after the program was introduced.

Canada would obtain a greater overall housing benefit if programs and needs were matched region by region with only minimal federal constraints. An LIHTC not only would provide the framework to allow better matches, but also would be more flexible: if a province's needs changed from year to year, it could easily change its criteria for projects from year to year, rather than be locked into a multiyear federal-provincial agreement. Moreover, the provinces are well placed to make tradeoffs. The AHI provides for a maximum federal grant of $75,000 per housing unit, but since construction and land costs vary immensely from place to place, this amount might be more than enough in some provinces but too little in others. Under an LIHTC, in contrast, each province would be able to make its own tradeoff: more housing units with low funding per unit or fewer units with higher funding per unit. Further, if a province decided it needed mixed-income projects – that is, moderately low and very low income households in the same building – an LIHTC easily would enable this approach.

An LIHTC also would be more suited to the Canadian Constitution than are the AHI and programs like it. The federal government can fund housing programs through grants only because of the residual powers given to it by the Constitution, and its use of these powers is the source of continuing friction with some provinces, particularly Quebec. An LIHTC, however, would be a program under the tax system and, unlike the AHI, would not require that provinces match federal contributions. Provinces might decide they need additional funds for the kinds of housing on which they place priority, but adding a subsidy would be their choice, not one forced on them as a condition of a federal-provincial agreement.

An important further advantage of an LIHTC over the AHI is that it would provide a way for nonprofits to benefit from a tax expenditure[10] that for-profit real estate investors already enjoy – namely, the excess depreciation incorporated in the Capital Cost Allowance (CCA). Putting nonprofits and for-profits on the same footing in this respect would provide transparency, making it easier to compare the true cost of housing.

Finally, an ongoing but modest LIHTC, which we describe below, would allow the AHI to exist alongside the LIHTC. There is now an opportunity to introduce a LIHTC because its annual cash costs would start at a very low level – in our proposal, approximately $47 million – and would increase in a regular and highly predictable way. Moreover, this increase would be offset by the decline in annual budgetary expenditures on housing, as commitments entered into in the 1960s and later wind down. Currently total federal budgetary expenditures on social housing, mainly due to these old agreements, are close to $2 billion, to which the 2009 federal budget has added temporary spending of another $2 billion over two years. The old 50- and 35-year commitments will soon start expiring at a high rate, resulting in a dramatic drop in expenditures over many years, which would provide room for both the current AHI and a modest, complementary LIHTC, even under a fiscally conservative regime.

9 Federal-provincial agreements under the AHI are called Affordable Housing Programs (AHPs).

10 That part of a depreciation deduction in excess of economic depreciation is a tax subsidy, and its cost in terms of revenue forgone is a tax expenditure.

How the LIHTC Works

In the United States, the LIHTC provides tax credits to investors in low- and moderate-income housing projects each year for ten years. This period is far shorter than that of the Canadian government's funding commitments for social housing programs in earlier decades but longer than those under the AHI. Projects must be kept in low-income use for 30 years, long enough to provide substantial security of tenure to tenants but short enough to be attractive to investors looking for a profitable use of the property.

The size of the subsidy – that is, the present value of the ten years' worth of credits – for a new or substantially rehabilitated building is 70 percent of the cost of construction of the LIHTC units, except in certain high-cost cities such as Boston, where the rate is 91 percent. Using similar criteria to those in the United States, Toronto, Vancouver, Calgary, and some other Canadian cities would qualify for 91 percent credits. The credits are allocated by the states (in Canada, they would be allocated by the provinces), which must choose among developers competing for a slice of the limited total.

Owners of a share in a project are able to save on taxes by deducting their portion of the project's tax credits against their tax payable. An additional, although much smaller, benefit to investors is the positive cash flow resulting from the depreciation deduction. There is also the possibility of a return on the ultimate sale of the property. The US tax system makes credits more attractive to corporations than they would be in Canada, but less attractive to individual investors. Specifically, in the United States, a typical corporate investor – but not the typical individual investor – can deduct a tax loss stemming from depreciation from other income. In Canada, neither type of investor typically can do this,[11] but, overall, the Canadian tax system is more generous than the US system to individual rental investors. Thus, individuals likely would be a major market for credits in Canada.[12] In the United States, corporations have been the major purchasers of credits. While any switch of the major market from corporations to individuals would tend to make marketing expenses somewhat higher, it also might make the credits less vulnerable to events that affect a particular corporate sector, such as banks.

Under the US LIHTC, maximum rent and income requirements ensure that projects are not aimed at the luxury market. If, over the first 15 years of the project's life, these are not complied with, the onerous penalty is full payback of the tax credits to the IRS. Specifically, at least 40 percent of the units must have rents that are deemed affordable to those with an income that is 60 percent of the median for that area, as adjusted by HUD.[13] Entering tenants must have this income or less, and the maximum rent is 30 percent of this income.

The credits that are awarded depend on the number of units in a building that meet rent and income requirements. For example, if 80 percent of units do so, then the value of the credits going to the project normally would be 80 percent of 70 percent – that is, 56 percent – of the building costs. In fact, 90 percent or more of units in US projects qualify as credit units in most cases (Abt Associates 2006) – evidence of scale economies both in administering the subsidy and in producing a given quality of unit; for example, it is impracticable to provide a utilitarian lobby for subsidized tenants along with a more up-market lobby for other tenants.

The limit on LIHTC tax expenditures means a method is required to allocate credits. In the United States, allocation is a two-stage process: credits are

11 A restricted group of investors in Canada would be able to deduct a depreciation (CCA) loss – namely, corporations with real estate as their principal business and individuals holding other, profit-making, real estate. Individuals in the latter position would likely be those, often near retirement, who have held rental real estate for many years. This is an implication of the fact that the CCA deduction applies to the investor's total rental income, not to rental income on a property-by-property basis.

12 In Canada, an individual investor who makes a rental loss before factoring in the CCA may deduct this loss from employment income. In the United States, investors with employment income over US$150,000 may not do so, because of the so-called passive loss restriction. Thus, in the United States, rental losses because of high interest expenses, high vacancies, rent declines, or maintenance expenses are not fully tax deductible for individuals, while in Canada they are.

13 In Canada, a similar task could be undertaken by the CMHC. An alternative requirement is that at least 20 percent of the units in the project have rents affordable to a family with an income of 50 percent of the area median income, but few developers choose this alternative.

first allocated to the states according to population, and then the states allocate among applicant developers, with any unallocated credits going into a general pot for the following year. The awarding of credits to developers by the states is governed by federal legislation. The most important requirement is a 30-year minimum for low-income occupancy – indeed, the longer the period the more effective the LIHTC becomes in providing affordable housing. Short periods not only remove affordable housing from the stock but also might force tenants to move, damaging security of tenure. At the same time, however, short periods increase the rate of return to the investment – because of the opportunity to sell the project at the end of the commitment period – and encourage developer participation, so there is a tradeoff.

The US federal legislation includes a number of other general rules constraining awards. In general, in tune with our view that the provinces should be allowed to choose, subject only to the constraint on rents and tenant incomes, we do not believe these rules should be imposed in Canada. However, rules promoting transparency in the allocation process should be retained. In the United States, each state must publish its allocation plan and points system, which has meant that, as competition among developers has intensified and other housing subsidy programs have ended, there has been an increasing trend toward awarding points for a variety of special needs, from categories of the elderly to the disabled. In Canada, provincial housing agencies could give points for projects targeted at, say, the formerly homeless or recent immigrants.

The Role of Economic Agents in the LIHTC Market

There are three types of economic agent in the LIHTC market: developers, investors and syndicators – intermediaries for the first two. Credits usually are "sold"[14] by a syndicator to many investors, because of both the desire for diversification and the limited amount of income tax any single investor owes and which the credits could offset.[15] The payments received from investors then flow, net of fees, from the syndicator to the developer as equity. The higher the credit "price"[16] for the project and the lower the syndicator's fees, the greater the equity going into the project and the smaller the mortgage needed. Thus, the greater the equity, the lower the interest expense and the higher net rental income. There is some uncertainty about the amount of debt funding needed until shares in the project are actually sold, because of variations in the credit price over time and from project to project.

Only investors who are confident of being liable for a substantial amount of tax in every year of the ten-year period of the credits would find the purchase worthwhile. In the United States, credits have been purchased largely by corporations, especially in the financial sector, but the recent financial crisis has caused problems in this area. In Canada, certain utilities, financial institutions, professionals such as medical doctors with stable incomes, and high-income retirees – especially those holding profit-making real estate – would find it beneficial to buy the credits. Some people might switch part of their portfolio from units in Real Estate Investment Trusts (REITs) to the credits.

As intermediaries, syndicators play an important role as sources of information, expert advice, and discipline – which is especially important for inexperienced developers. In many respects, syndicators play the same role as do government managers in a grants system. They typically package the credits from many developments into funds that they then sell to several investors. To some extent, syndicators perform an insurance function, because their ability to sell funds depends on their reputation with investors for sponsoring viable developments.[17] Although state housing agencies visit projects to ensure compliance with low income requirements, syndicators also usually have their own compliance teams. If Canada were to impose

14 This is the terminology used in the industry, but it is not the credits that are sold, but, rather, a share in the project.

15 The legal structure usually is one in which the developer (usually acting also as property manager) is the risk-bearing general partner and investors are limited partners.

16 The industry uses this term to mean the price of a share of the project.

17 This implies that credits marketed by the best-performing syndicators tend to sell for the highest price.

less severe penalties for infractions, resources allocated to compliance would be lower than in the United States.[18]

The LIHTC Development Process

The way the LIHTC works might be easier to understand through a step-by-step outline of the process.

First, the developer (whether for-profit or nonprofit) determines if a project is feasible. The developer must find a site, estimate the cost of new construction or substantial rehabilitation, and determine whether:

- there is sufficient demand at the proposed rents, perhaps through a contract with a government housing authority to provide some units for RS tenants;
- a syndicator is willing to sell the credits the developer hopes to receive, and the price the credits are expected to fetch is high enough (the syndicator's fees and the credit price will determine the net equity in the project);
- a lender, typically a bank, will approve the size of mortgage required after taking into account the funds expected from investors who buy the credits; and
- additional subsidies can be obtained, if needed to make the project feasible.

Second, the developer applies to the agency that allocates the credits. In a Canadian program, the agency in BC, for example, would likely be BC Housing. The application sets out income maximums (which vary by household size), rents, the size of units, the tenants to be targeted – for example, families, seniors, previously homeless, the disabled – costs, and any information relevant to, in Canada, the province's priorities as set out in the allocation criteria.

Third, the housing agency conducts a competition, chooses the winners, and awards the credits received from the federal government. In Canada, a province might top up the federal credit with one of its own – as California, for example, has done – or it could provide grants to successful applicants. Unlike the case with the AHI, however, the decision about whether or not to match federal funding, or to provide any subsidy at all, would rest wholly with the province.

Fourth, developers who are awarded credits firm up the mortgage and project financing and build the project. If financing falls through, the credits are returned to the housing agency, which passes them through to the IRS (in Canada, the CRA) into the general pool for the following year.

Fifth, completed projects start receiving the stream of credits, which are sold to investors through the syndicator. Investors may pay up front or in instalments.

Finally, projects generate the stream of ten annual credits, which are distributed to investors. Other components of return might also flow to investors. Projects are monitored for compliance with rent and income requirements for 15 years. In addition to being part-owner, the developer usually manages the project and ensures compliance.

US Experience with the LIHTC

At its genesis, the credit received wide support from organizations such as the National Association of Home Builders and the National Council of State Housing Agencies. The LIHTC, in fact, owes its existence to the US tax reform of the mid-1980s, when, in the drafting of the *Tax Reform Act* of 1986, it was realized at the last minute that the proposed drastic cut in tax shelters for real estate would sharply reduce the construction of rental housing and particularly hurt low-income renters. The LIHTC was hurriedly added to soften the blow (Case 1991).[19] At first, the program was intended to be temporary, but Congress made it permanent in 1993, and enacted legislation establishing inflation indexing in 2001. Currently, the allocation to the states is $2.40 per capita with

18 Penalties for noncompliance are believed to have greatly reduced demand for the credits, especially by corporations, in the early years of the US program (Olsen 2003).

19 While the program started in 1986, the first developments were not in service until the following year. In Canada, the 1988 tax reform legislation featured more moderate cuts in tax shelters, but included no program to offset effects on low-income renters.

proposals to increase it to $3.70 (Desai, Dharmapala, and Singheal 2008).[20]

In its early years, the program drew sharp criticism because of high transaction costs, excess developer profits, a perception that it was highly risky, and a still-developing syndication industry. Credits often were not all used, and competition for credits – which is important for efficiency – did not take place. A large chunk of the credit value went into syndication fees, other transaction costs, and developers' profits (Case 1991; Stegman 1991). Over time, however, transaction costs have fallen, the erosion of equity by market imperfections has declined, and some former critics have become supporters (compare Stegman 1991, 1999).[21] Indeed, public finance specialists Desai, Dharmapala, and Singheal (2008) have suggested that, under certain conditions, what they call "investable tax credits" such as the LIHTC might be the most effective mechanism for delivering a production subsidy.

The Issue of Crowding Out

An important issue has been the extent to which the LIHTC crowds out unsubsidized building that would have occurred if the program did not exist (see Glaeser and Gyourko 2008). If crowding out is 75 percent – that is, if every 100 additional LIHTC housing units results in a reduction of 75 in the construction of non-LIHTC units – the net number of units of housing generated per dollar of subsidy is dramatically cut; in fact, Eriksen and Rosenthal (2008) estimate the extent of crowding out to be even higher than this.

For Canada, this issue seems not to be highly relevant, since most apartment construction in large, growing cities is for the condominium market. (Quebec's relatively greater rental building is aimed substantially at the seniors' market.) If an LIHTC program were to crowd out rental condominiums, that might well be a desirable outcome from the point of view of the provision of suitable low-income housing, for reasons discussed earlier. Furthermore, rental condominiums are likely to be costly to the tax system (see Steele forthcoming).

Mortgage and Other Funding

LIHTC projects cannot go forward unless they are able to secure funding to make up the difference between total development costs and the equity infused by the credit purchasers. A major attraction of the program, when lenders are risk averse and concerned about high leverage, is that funding through an LIHTC enables a lower loan-to-value ratio of mortgages. The more efficient the program, the greater the share of equity funding. Cummings and DiPasquale (1999) report that, in their sample – which includes the early, inefficient years of the US program – first mortgages accounted for 38 percent of total development costs and the remaining or "gap" funding, such as other mortgages and loans, 16 percent; this finding is corroborated by McClure (2000). More recently – but prior to the current credit crunch – the share of mortgage funding must have been lower because of the high price of credits.

The sources of mortgages indicate the market perception of the degree of risk in credit projects. Slightly more than half of first-mortgage funding of for-profits, but distinctly less in the case of nonprofits, was provided by private banks in the US sample of Cummings and DiPasquale (1999). State and local governments provided a large share, often at subsidized interest rates. Many of the nonmarket mortgages, however, funded projects in risky locations, such as distressed inner-city areas; in Canada, such subsidies would be less needed.

Increasing Grant Efficiency and Credit-Price Volatility

The credit price is an indicator, albeit a flawed one, of the grant efficiency of the program. The "price" of a tax credit is the amount paid for a

20 This standard way of stating the funding formula is highly misleading, however, and suggests much lower funding than the actual amount. In fact, "$2.00 per capita" refers to $2.00 per capita per year for ten years. Once the program reaches a steady state, funding will be $20.00 per capita per year.

21 However, Olsen (2003), a long-time critic of supply-side housing, continues to oppose the LIHTC, as do Glaeser and Gyourko (2008).

stream of credits divided by the simple arithmetic sum of the ten annual credits. For example, suppose a share in a project costs $7,500 today and gives the purchaser $1,000 in credits per year over the next ten years, totalling $10,000; the price of the credit is then $0.75.

The average price of a credit increased from around $0.45 in 1987, when the first projects were put in service, to about $0.84 in 2000; it fell until mid-2001, then peaked in 2006 at $0.96.[22] The rise in average credit prices until the early 2000s – in part due to falling interest rates – mainly reflects the increasing understanding and reduced perceived risk of the LIHTC. There is a wide price range, with "higher-quality" projects (presumably those with higher expected positive cash flow and residual value) rewarded with higher prices; Eriksen (2008) finds that higher gross permitted rents increase the credit price.

The Nature of the Projects and Tenants Assisted

About a third of all LIHTC projects have been nonprofit, quite consistently over the whole period since the program was introduced (Cummings and DiPasquale 1999; Abt Associates 2006; and NCSHA 2008) and far more than the minimum required by many states.

Buildings under the program tend to be large, with more than three-quarters of credit units built between 1995 and 2003 being in properties of more than 50 units;[23] in contrast, only 20 percent of all rental apartment units in the United States are in this size of property. Large buildings are more common in for-profit projects than for nonprofits, perhaps because only large, well-established developers have the expertise to enter the credit competition.

A large proportion of these units are suitable for families: recently, almost a quarter of all credit units had three or more bedrooms, compared with just 11 percent of all rental units. A far higher proportion of projects – 63 percent in 2003 – has been targeted at families than has been true of social housing in Canada, while 13 percent and 5 percent of projects have been aimed at the disabled and formerly homeless, respectively. Other data suggest that developers might be targeting families to enhance resale value.[24] Rents for these units are, on average, close to market rents, which might seem surprising given the deep subsidy, but this is a sign that market rents are too low to generate unsubsidized developments.

How the LIHTC Is Able to Serve Low-Income Renters

Because the typical tenant has an income of about 60 percent of the area median, credit units targeted at households with incomes between 51 and 60 percent of median income (of all renters plus owners in a city) are aimed at the typical, rather than the very low income, tenant. Unless rents are set below the maximum or tenants receive additional subsidy, rents will be too high for very needy renters. For this reason, the US program, by itself, might be described most accurately as a moderate- and low-income housing tax credit, if it were not for the fact that, in actuality, tenants have often incomes much lower than the target range.[25]

The dominance of low-income households in LIHTC projects occurs for several reasons. First, many very low income renters in the United States

22 The 1987 price is from the US General Accounting Office (United States 1997), based on information from major syndicators. Other prices are from various issues of the trade journal *Affordable Housing Finance* and are usually the views of syndicators. The 2006 number is the median given in a table of results from a survey of syndicators carried out in May 2006 and published in the June 2006 issue.

23 All data in this and the next paragraph are from Abt Associates (2006) unless otherwise noted; dates refer to the year in which a project was placed in service. For more recent data for some indicators, see NCSHA (2008).

24 Family projects (unlike those for the elderly, disabled, and formerly homeless) are predominantly funded by 30 percent credits – that is, credits with a value equal to 30 percent of construction costs. These credits may be claimed, as a right, by projects funded by tax-exempt bonds. Thus, many of the family projects likely did not have to go through the competitive process that is required to get the 70 percent credits.

25 One cannot be categorical about this, however, since only actual incomes, not target income groups, are given for units in sampled properties. Properties included both for-profit and nonprofit projects, but median household incomes differed very little between the two groups: $16,800 in nonprofit projects and $15,600 in for-profit projects (Abt Associates 2006). Developers have an incentive to set the income target high, because that allows them maximum freedom to set rents and select tenants.

currently pay more than 50 percent of their income on rent (United States 2007). For these renters, moving into an LIHTC unit and paying a rent equal to 40 percent of their income would be a big improvement, although their new rent would be declared unaffordable by standard criteria. Second, LIHTC funding serves as a federally funded base on which to stack state, municipal, or private funding and donations, both financial and in-kind, such as land donated by municipalities. This allows lower rents. Third, projects are required to accept low-income households that receive housing choice vouchers (a subsidy similar to Canada's Rent Supplement, but with more choice). Because voucher recipients in tight markets have difficulty finding landlords willing to take them (Newman 2007), LIHTC projects should house a disproportionate number;[26] in fact, Abt Associates (2006) found at least one voucher holder present in 47 percent of their sample projects.

A Canadian analogue to the US voucher provision would be a Rent Supplement quota, to be put into effect on request of the social housing agency. For example, the legislation could specify that a project be willing to enter into an RS contract for, say, up to one-quarter of its units. The number of these units in private market buildings is currently subject to the vagaries of the market. When markets are loose, landlords have an incentive to fill their vacancies with subsidized tenants, but the opposite incentive operates when markets tighten. Contracts between social housing agencies and landlords, typically for a maximum of five years, sometimes end in a period of tightness, reducing total social housing units in a locality just when they are most needed. This interrelationship between the LIHTC and vouchers in the United States makes both programs more effective.

How a Canadian Funding and Allocation System Would Work

The version of the US LIHTC program that we propose for Canada should be quite modest, because the demand for credits by developers and the market for credits among investors would be small early on while market participants gain experience. Moreover, a modest initial commitment would make it easier for Ottawa to enact legislation to make the program permanent, which is important to provide the incentive for syndicators and others to invest in putting in place the knowledge and institutional infrastructure necessary to use the funds efficiently. Capital market participants with the capacity to become syndicators have the advantage of being able to draw on US experience – indeed, some US syndicators might decide it would be profitable to set up a Canadian operation – although the Canadian capital market has grown in depth and sophistication since syndicators marketed MURBs.

We propose that, in the first year, cash funding should amount to just $47.42 million (one-tenth of the amount shown Table 1, column 3), which is just 2.5 percent of the CMHC's budgetary expenditure in fiscal year 2006/07 for social housing (column 4), and almost certainly less than the decline per year in CMHC budgetary expenditures as old commitments expire. This amount is very low because only the first credits of the ten annual ones committed would be set against taxes. In the second year, $47.42 million in credits for newly awarded projects would be added to the $47.42 million in second-year credits for the initial project; thus, total cash funding in the second year would be $94.84 million. By year ten, cash funding would reach its permanent plateau of $474.2 million.[27] To make clearer the full tax expenditure of the initial projects for all Canada, we show (in Table 1, column 2, last row) the discounted value of all ten credits, which is the cost

26 In tight markets, landlords are able to be selective, maximizing profit by choosing tenants who are low cost to serve, rather than those who are costly, as voucher recipients tend to be (Benjamin, Chinloy, and Sirmans 2000).

27 Compare this figure with a total estimated tax expenditure for the LIHTC and multi-family tax-exempt bonds in the United States of US$4.6 billion in 2007 and an estimated US$5.1 billion for 2009 (Quigley 2008, table 9-4). The LIHTC accounts for over 90 percent of this total.

Table 1: Tax Credit Allocation and CMHC Social Housing Expenditures, by Province

		Annual Cash Funding			Ratio to Current CMHC Social Housing Expenditure	
Province	Population, 2006 Census (1)	Present Value of Credits (2)	10th Year of LIHTC (10 times 1st year funding (3)	Current CMHC Social Housing Expenditure (4)	Per Capita Based LIHTC (5)=(3)/(4)	Core Need Based LIHTC (6)
			($ millions)		*(%)*	
Newfoundland	505,469	6.5	7.6	62.1	12.2	9.9
Prince Edward Island	135,851	1.8	2.0	13.5	15.1	13.2
Nova Scotia	913,462	11.8	13.7	64.7	21.2	23.0
New Brunswick	729,997	9.4	11.0	52.4	20.9	15.6
Quebec	7,546,131	97.4	113.2	332.5	34.0	39.2
Ontario	12,160,282	157.0	182.4	689.0	26.5	27.1
Manitoba	1,148,401	14.8	17.2	95.9	18.0	14.6
Saskatchewan	968,157	12.5	14.5	135.7	10.7	7.9
Alberta	3,290,350	42.5	49.4	139.9	35.3	22.8
British Columbia	4,113,487	53.1	61.7	214.8	28.7	31.5
Yukon	30,372	0.4	0.5	7.3	6.2	5.8
Northwest Territories	41,464	0.5	0.6	32.9	1.9	1.9
Nunavut	29,474	0.4	0.4	58.2	0.8	1.8
Canada	**31,612,897**	**408.2**	**474.2**	**1,898.9**	**25.0**	**25.0**

Note and sources: Funding is at the rate of $2 per capita for the initial year of credits ($20 per capita nominal total commitment). The present value ofthe full ten years of credits is computed using 3.5 percent as the discount rate, giving the cost of the commitments to the federal government; cash flows are received at the beginning of each period. Annual cash funding in the tenth year of the LIHTC is the budgetary expenditure in the tenth year of the program. CMHC social housing expenditures are the CMHC budgetary expenditures by province and territory after deductions for research and information transfers, on-reserve, and "other" expenditures (CMHC 2007, table 51). The core need-based LIHTC used to compute the ratios in column (6) is estimated from the 2001 renter core need estimates given in CMHC, Canadian Housing Observer, provincial tables; available at website: http://www.cmhc-schl.gc.ca/en/corp/about/cahoob/data/data_013.cfm

of the commitment to these initial LIHTC projects – namely, $408 million.[28]

The total of $47.42 million would be reached through awarding each province $2 per capita (in terms of first-year credits), compared with the 2008 per capita allocation in the United States of US$2.40.[29] To put the allocations in context, current federal housing budgetary expenditures (Table 1, column 4) are 40 times the proposed first-year LIHTC amount and four times the tenth-year amount.[30] The distribution of LIHTC funding would be quite different from current CMHC social housing expenditure, as can be seen from column 5. Although the overall LIHTC amount would be 25 percent of the CMHC amount, the ratios for Alberta and Quebec would be 35 percent and 34 percent, respectively.[31] These provinces would receive a far greater share of housing subsidies than they do currently, while some smaller entities – notably Saskatchewan and the territories – would receive less.

An alternative method of allocating funds would be according to the number of low-income renters who are in core housing need – as measured by

28 The stream of ten credits is discounted at 3.5 percent, the assumed long-term Government of Canada nominal bond yield, which is slightly more than the yield in January 2009.

29 Unlike the state minimum in the United States, there would be no provincial minimum in Canada under our proposal. For Prince Edward Island and the territories, the amounts would be very small: with a subsidy of $60,000 per unit, for example, only 30 units would be provided in that province. For this reason, it would be desirable if all credits in the Atlantic provinces were allocated by a single agency, and similarly for the territories.

30 In 2007, the AHI accounted for only $130 million of the nearly $2 billion total (CMHC 2007, table 51).

31 This is related to the decisions of various provinces about whether and when to sign the federal-provincial transfer agreements the federal government sought in the mid-1990s.

CMHC. As Table 1, column 6 shows, the effect would be quite similar to that of the proposed system. For example, Quebec would do much better under both allocation methods than it does under the current arrangements. Alberta would be a striking exception, however, probably largely because, in such a fast-growing province, detailed calculations of renters in core housing need lag census dates by many years. It thus seems wise to keep to the simple per capita system used in the United States. The importance of avoiding constitutional disagreements with the provinces strengthens this point.

One desirable change from the US system, however, would be to allow unused allocations to be kept for a future year – a kind of carry-forward provision – instead of putting them into the general pot for the next year. Under this system, a province might choose to suspend competition when costs are high or rental markets are predicted to be loose, and use the held-over allocation in a later year when conditions are better. This would be especially useful for small entities such as Prince Edward Island.

How an LIHTC Would Work for Corporate and Individual Investors

Investors will purchase shares in a LIHTC only if they can obtain a satisfactory post-tax rate of return. As noted earlier, that rate depends critically on having sufficient taxable income over a stretch of time. Moreover, the tax credits would be nonrefundable – that is, they would be valuable only if the investor has a tax liability against which to deduct them. The return would also depend, as in the case of any rental investment (see Fallis and Smith 1989), on whether the investor is a corporation or an individual, on whether the investor already holds profit-making rental properties (such as an office building or duplex), and on the value of the property at the end of the period of affordable housing restrictions. In the case of a nonprofit project, the property normally would be owned by the nonprofit entity at the end of the restrictive period, so its value to investors would be zero. Thus, for a plausible example, the rate of return on a for-profit property would be slightly over 12 percent,[32] but under 11 percent for a nonprofit.[33]

DEPRECIATION RULES: Since, in Canada, a rental loss created or increased by the CCA is not deductible against non-real estate income, an LIHTC investment would be somewhat less appealing to corporations than it is in the United States.[34] The effect of different tax treatment might be especially important for nonprofits, since these projects tend to have very low net operating income after financing, reducing the benefit of the CCA.

Since rental income tax provisions, overall, are more generous for high-income individuals in Canada than in the United States, an LIHTC investment would be more appealing to individuals than in the United States. This, along with the lesser appeal of the LIHTC investment to corporations in Canada, raises concerns about transactions costs. The advantage of sales to corporations is that it fosters marketing economies of scale that minimize syndicator fees and increase efficiency. There is a risk that transactions costs would be quite high if corporations were not the dominant investors. One way to increase the return of corporate investors in nonprofit LIHTCs would be to lift the CCA deduction constraint for these investments.

32 This is the after-tax rate of return for an individual investor with employment income only. For details see supporting material at http://www.uoguelph.ca/~msteele1/msteele.htm.

33 The tax credits would be worth nothing to the nonprofit directly, because it typically pays no tax and so would have no tax against which to deduct the credits. For this reason, while a for-profit developer typically would retain 1 percent of a project, a nonprofit would sell almost all of its project to investors. It is common in the United States for a nonprofit to retain only 0.01 percent of a project, except that it gets the property at the end of the 30-year LIHTC period. Thus, its financial return is its tiny share of any pre-tax positive cash flow plus the mortgage-free property at the end of the 30 years. In the example development, positive cash flow would occur for many years only because the CCA would reduce taxable income to zero; thus, for tax purposes, for many years there would be no positive rental income. In addition, the property the nonprofit would get at the end of the investment holding period would be used for nonprofit purposes, and no net income would be received from it.

34 This tax situation might be less important than regulations under the *US Community Reinvestment Act* in bringing about the dominance of corporations over individuals as purchasers of credits. The Act is targeted at a peculiarly US problem: the distressed centre of many cities. How much less the appeal would be to corporations in Canada depends on the how soon in its life, if ever, the project is expected to have positive net rental income.

SUBSIDISATION OF CONSTRUCTION COSTS: Since the beginning of the LIHTC in the United States, the subsidy rule has remained the same: 70 percent of construction costs for new (or substantially rehabilitated) buildings in general and 91 percent in high-cost cities.[35] For Canada, this subsidy might be too high. The tradeoff is that the lower the tax credits as a percentage of construction costs the more units could be built per dollar of tax expenditure, but also the greater the chance of less than 100 percent take-up and little efficiency-abetting competition for the credits. A made-in-Canada LIHTC could have a variable ratio, depending on the profit-seeking status of the project: in high-cost-cities, say, 80 percent in the case of for-profit developers and 90 percent for nonprofits, and for other cities, 60 percent and 75 percent, respectively. Or high ratios might apply when the program starts, but be lowered when the program is well established. The trigger might be the success of the program as indicated by the percentage of total project financing that is equity, rather than mortgage or other debt, as roughly indicated by the credit "price."

An LIHTC in the Context of Existing Housing Tax Expenditures

An LIHTC would be a large tax expenditure, but it would go only a small way towards offsetting the large bias in favour of homeownership in the current tax system. One form of tax expenditure occurs because, although owners of a rental building pay tax on net rent – that is, effective gross rents minus operating expenses and interest – owner-occupiers pay no tax on the analogous item for them, net imputed rent.[36] There is no estimate of this in the Department of Finance's tax expenditure accounts, but the comparable US expenditure is estimated at close to US$30 billion in 2006 (Dietz 2008). Thus, a plausible estimate for Canada is $2-$3 billion, because of the tax incentive in Canada (but not in the United States) to pay off a mortgage quickly. Another tax expenditure for owner-occupiers, the nontaxation of capital gains on a principal residence, is estimated to have been $2.6 billion for 2004 and is projected to be $4.3 billion for 2007.[37] A third, much smaller tax expenditure is for the Home Buyers' Plan (Steele 2007a). Together, these three tax expenditures amount, conservatively, to more than $6 billion for 2007. There is also some tax expenditure on multi-unit rental buildings, such as part of the CCA deduction, which is 4 percent, much higher than the true depreciation rate – Fallis and Smith (1989) implicitly assume 2 percent.[38] Offsetting this in part, when a property is sold, tax must be paid on the recaptured CCA; net, the amount of CCA-related tax expenditure seems unlikely to be more than $1 billion. Thus, a crude but conservative estimate is that the tax expenditure for home ownership is about six times that for multi-unit rental. Adding the proposed LIHTC would bring this down only to about four times.

An LIHTC in the Context of the Current Credit Crunch

The current credit crunch has not left the US LIHTC market unscathed. Fannie Mae and Freddie Mac, which together held about a quarter of all credits issued, wrote off more than US$30 billion of credits shortly after their takeover by the US government in fall 2008, on the grounds that they did not expect to be able to use the credits for several years because of their lack of taxable income.[39] This demonstrates the problem in

35 In the United States, so-called qualified census tracts also qualify for the high ratio. These are distressed neighbourhoods of a kind that rarely exist in Canadian cities, perhaps because of our more inclusive social safety net; there seems no good reason to replicate this aspect of the US LIHTC.

36 That is, net imputed rent is the rent the home would command on the market, net of owner expenses, including interest. Net imputed rent would often be negative in the early years of home ownership because of large mortgage interest expense, but would be large and positive when the mortgage is paid off, typically when the owner is about age 50.

37 This is on a partial exclusion basis – that is, it is assumed that the tax expenditure is compared to the taxation of capital gains on stocks and other property, which are taken into income with half the capital gain excluded (Canada 2008, table 1).

38 This is derived from their assumption that operating costs increase at the rate of 5 percent per year – presumably the rate of inflation at the time of their study – and building value increases by 3 percent per year; the difference is 2 percent.

marketing the credits to a narrow range of corporations.

As this is written, in 2009, US commercial (including multi-unit rental residential) construction is close to moribund. In part, this is because of the general liquidity crisis, with funds for project financing either expensive or unavailable. This has been exacerbated by the use of commercial mortgage-backed securities, rather than direct bank lending, to fund commercial mortgages; the market for such securities has suffered badly, so that mortgages are difficult to obtain. In this environment, any proposed LIHTC project is obviously problematic, but there are still investors in the US market[40] and some deals are going through.

In Canada, the credit and profit situation is much better. While major banks in the United States have suffered huge losses, Canadian banks posted large profits in the first quarter of 2009 – down, in most cases, from a year earlier but still healthy. They have large tax liabilities now and expect to have them in the future, so they are a potential source of equity for LIHTC projects. Furthermore, high-income individual investors are better prospects as potential buyers in Canada than in the United States, not only because of Canada's different tax system, but also because of its less severe recession and more secure high professional incomes. For example, the incomes of highly paid physicians are protected by Canada's health care system, and these individuals have good reason to expect high income tax liabilities for the ten or more years needed to make LIHTC credit purchases justifiable. In addition, mortgages are more easily available in Canada than in the United States. Thus, with respect to the two main components of finance for LIHTC projects – equity from purchasers of credits and mortgages – Canada is better off than is the United States.

Concluding Remarks

Canada now has a widely recognized housing affordability problem in its high-cost cities, the fruit, in part, of federal government decisions made over the past three decades. Ottawa first reduced incentives to private rental housing investment, especially in multi-unit buildings, in the 1980s and then shut down social housing development in the 1990s. There has been a revival of subsidies in the 2000s, but these have been short term and, until the two-year stimulus boost in 2009, small. The result has been that additions to the rental supply have come from small properties such as condominiums, with expected capital gains often the main investment incentive. In many cities, multi-unit rental construction is dormant.

A US-style Low-Income Housing Tax Credit would be an attractive way to build affordable housing and more generally to revive multi-unit rental construction. An important advantage of an LIHTC is that it would give nonprofits access to the tax expenditure involved in the Capital Cost Allowance. Nonprofits and for-profits would be placed on the same footing in this respect because the LIHTC would be delivered via the tax system. Furthermore, any expansion of the Rent Supplement program would complement the LIHTC.

A program with our proposed funding formula would require $47.4 million of cash in its first year, reaching a plateau after ten years of $474 million. This amount would be more than offset by declining budgetary expenditures for programs still on the CMHC's books, as long-term commitments run down. Further, this tax expenditure for affordable rental housing would be dwarfed by annual tax expenditures in the order of $6 billion for owner-occupied housing.

An LIHTC program would fit in well with the devolution of programs to the provinces. Within guidelines, including rent and income limits, set by tax legislation, such a program would allow each province to allocate the tax expenditure to developers according to its preferences. If a province wished to give heavy weight to nonprofit developers or to nonprofits in partnership with for-profit developers, it could do so; if it wished to favour for-profits, it could also do so.

39 The credits, in fact, can be carried forward for 20 years, so that there presumably will be a large positive special item on Fannie Mae's and Freddie Mac's books in a few years' time. They could have sold their credits instead, but that would have destabilized the active credit market.

40 Among them is J.P. Morgan, purchasing on its own account, rather than as a syndicator or through a syndicator; see http://www.housingfinance.com/ahf/articles/2009/feb/0209-equity-buyersmarket.htm.

The most problematic aspect of the program would be the need for the economic agents involved – syndicators, investors, and developers – to learn how the program would work and to understand the risks that would be involved. For this reason, the program should be permanent, in order to justify their investment. The oversight of syndicators and private investors would replace much of the usual government administrative apparatus, releasing government money for housing.

The $2 billion in stimulus money to social housing in the 2009 federal budget shows that the government is returning to building social housing. There is a better way to use federal funds to build social housing. The $47.4 million in spending proposed for a LIHTC's first year and the $94.8 million spent in the second year could leverage the short-term stimulus into long-term, sustainable funding. These expenditures could be followed by others, but putting the first two years under the stimulus umbrella would provide a convenient bridge. The broad targeting of an LIHTC program, within the constraints of income and rent maximums, would be in sharp contrast to the narrow targeting of the main housing stimulus package. Moreover, an LIHTC could deliver quickly – in the United States, the first LIHTC projects were complete in the year following introduction of the program.

An LIHTC has all the hallmarks of an optimal answer to the question of how the federal government should respond to the need to revive multi-unit rental housing in general, and social housing beyond that provided by the AHI and the stimulus, in particular. It would be flexible, allowing provinces the freedom to use the funds provided under the program to suit local conditions and preferences. It would offer the federal government the advantage of costing a fixed current amount and a highly predictable future amount over the medium term. It would put nonprofits on the same footing as for-profits, in many respects. And it promises efficiency if established as a permanent program.

Appendix 1: The Credit Price and Its Impact on Required Mortgage Financing

The “price” of a tax credit is the term commonly used in the US housing industry for the amount paid for a share in a property that yields a stream of ten annual credits, divided by the arithmetic sum of the credits. This concept, however, is faulty, since it has a numerator that is a present value but a denominator that is not. When interest rates fall, the price of a credit will rise for this reason alone, since the credits are being discounted at a lower rate. In contrast, a rise in the price when interest rates are constant reflects increased investor equity per dollar of tax expenditure.

The way an LIHTC works is shown by the three examples in Table A-1, which are all based on a unit costing $180,000 (row 1), of which 80 percent is construction costs. Because it is assumed to be in a high-cost city (as defined by the program), the project is awarded a stream of credits worth $131,040 (row 3), which is 91 percent of construction costs, per credit dwelling unit. In Example 1, we assume that investors pay only $111,384 (row 7), and the syndicator’s fees (row 8) are 10 percent; thus, net equity going into the project is $100,246 (row 9). This leaves $79,754 – that is, 44 percent of total development costs, which the developer needs to raise. This might be provided fully by a first mortgage, as in this example. The award to the project is ten annual credits, which has a present value, using a 4.5 percent discount rate, of $131,040; each credit thus is calculated to be $15,848 (row 5).[41] The credit price – that is, the gross amount investors pay ($111,384) as a ratio of the simple sum of the ten credits, $158,475[42] – is $0.70 (row 12).

Because the credit price is conceptually faulty, we calculate a better measure of the efficiency of the program: the “grant” value of the credit (net equity as a ratio of the present value of the credits (see Wallace 1998)). Here, it is $0.77 (row 13); in other words, 77 cents of private funds goes into the project for every dollar of foregone government revenue.[43]

A second example (column 2) shows a much more efficient, but still realistic situation in the United States before the current credit crunch. Investors are willing to pay $151,000 (row 7) for credits costing the government $131,040. The grant value of the credit is now $1.08 (row 13). Thus, the credit raises more for the project than a grant costing the government the same amount.[44] How can this be?

First, some US corporations bid up credits to fulfill *Community Reinvestment Act* obligations. Second, when investors “buy credits,” they are actually buying an ownership share – which gives them not only the credits but also a share of depreciation allowances, plus, possibly, a share of any other positive cash flow, including the market value of the development at the end of the 30-year commitment to affordability. Low interest rates along with high credit prices confer a double benefit: they reduce the loan-to-value ratio of a mortgage – down to 21.7 percent (row 11) in Example 2 – and reduce interest expenses for a given mortgage amount.

Third, the calculation here assumes that investors pay for the credits fully up front, whereas often they do not. If the latter is true, the amount paid by investors – for instance, the $151,000 in Example 2 – has a present value less than the amount shown. One possibility is that, in the mid-2000s, developers became increasingly willing to accept a stretched-out pay-in from investors as the tradeoff for keeping the increasingly rich cash flow and residual value.

Example 3 illustrates a more efficient situation than Example 1, because the grant value is $0.83 (row 13). However, because the government bond yield is 9 percent, a rate prevailing in the United States in the late 1980s, the credit price is just $0.65, less than the price in Example 1. This underlines the importance of different interest-rate environments for the credit price.

41 We assume that the legislation specifies that the discount rate is the government long-term bond yield. Putting an amount in present-value terms makes it possible to compare amounts received in the future with amounts received today, in order to compare apples with apples. The present value of an amount due in the future is the amount that, invested today at a set interest rate, yields the given future amount. For example, a promised amount of $104.50 to be received after one year at an interest rate of 4.5 percent has a present value of $100.

42 This is ten times the annual credit; the difference between $154,875 and ten times $15,488 is rounding error.

43 This understates efficiency if the syndication function contributes value to projects in the form of oversight and technical expertise, or if development costs are less because the government’s contribution comes in the form of credits rather than a grant.

44 This ignores the cost to the government of the tax expenditure involved in excess depreciation writeoff. This writeoff applies to all rental property – including, for example, strip malls – so it is not a cost relative to other rental property.

Table A1: The Interaction of the Credit Price, Interest Rates, Syndicators' Fees and Mortgage Planning

	Row	Example 1	Example 2	Example 3
Development costs ($)	(1)	180,000	180,000	180,000
Construction costs ($)	(2)	144,000	144,000	144,000
Cost to government of credits (legislatively determined as 91% of construction costs = 0.91 x row (2)) ($)	(3)	131,040	131,040	131,040
Long-term government bond interest rate (%)	(4)	4.50	4.50	9.00
Annual credit (see note) ($)	(5)	15,848	15,848	18,733
Total credits (ten times annual credit) ($)	(6)	158,475	158,475	187,327
Investor expenditure for credits (gross equity) ($)	(7)	111,384	151,000	121,000
Syndication costs ($)	(8)	11,138	10,000	12,100
Net equity (gross equity net of syndication costs) (7) – (8) ($)	(9)	100,246	141,000	108,900
First mortgage (1) – (9) ($)	(10)	79,754	39,000	71,100
Loan-to-value ratio of mortgage (10) / (1) (%)	(11)	44.31	21.67	39.50
Credit price (gross equity / arithmetic sum of credits) (7) / (6) ($)	(12)	0.70	0.95	0.65
Grant value of credit (net equity / PV of credits) (9) / (3) ($)	(13)	0.77	1.08	0.83

Note: "Annual credit" equals the amount that, when received annually for ten years, has a present value of 1.3 times 70 percent (equals 91 percent) of construction costs; this assumes the city is one where development costs are high relative to rents. The discount rate is the long-term government bond rate; it is assumed that the first credit is received at the beginning of the first year the building is put in service. Investor expenditure for the credits is the amount investors pay to "buy" the credits or, more correctly, their share in the value of the property; net equity is net of syndication costs. It is assumed that investors make all payments up front. Value of credits in row 13 is taken as value to government – that is, the present value is computed at the government interest rate.

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