Income Prospects, Housing Affordability, and Housing Policy; the Canadian Experience

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Introduction

Origin
In 1991, National Housing Research Committee (a national umbrella group of federal and provincial housing agencies, advocacy groups, and housing industry associations) asked the Centre for Urban and Community Studies to develop a prototype "State of the Nation's Housing" Report akin to its American namesake.

Publ.
That Report is to be published later this year.

Purpose
The present paper discusses findings from the Report in regard to the affordability of housing and access to home ownership, and to the coping strategies employed by consumers.

Affordability of Accommodation

Rising spending overall
Over the past two decades, Canadians have spent a growing share of their household budget on accommodation. See Table 1. Overall, spending on accommodation increased as a proportion of Personal Consumer Expenditure: from 19 percent in 1971 to 22 percent by 1990.

By type of spending unit
For many kinds of renters and owners, housing became less affordable in the 1980s. Among renter households living in metropolitan areas of at least 100,000 persons and led by persons under the age of 35, average total income before taxes was about $15,800 in 1978 of which $2,600 on average was spent on shelter (including water, fuel, and electricity). By 1986, average income for this group had risen to about $28,100, but the typical shelter expense surged even faster to $5,100. Chart 1 shows that, among renters across Canada, housing became less affordable between 1978 and 1986.

Change over time
For owners, the pattern over time is different. For every category of owner shown in Chart 1, shelter costs decreased as a proportion of income from 1978 to 1986. The bulge in interest expense in 1982 reflects high mortgage interest rates at the time. Among young home owners, where interest expense is typically large, operating expense fell as a proportion of household income from 1978 to 1982.

Coping with high interest rates
In other words, young home owners coped with high interest rates in part by cutting other kinds of shelter expense.

Access to Home Ownership

The 1970s
Home ownership was spurred in the 1970s by growing real incomes; the maturing of the baby boom generation; relatively low interest rates; the inflation of house prices; reform of the federal Income Tax Act in 1971 that left principal residences among the few assets not subject to capital gains taxation; and housing policies aimed to increase home ownership among modest-income Canadians.
Things changed in the 1980s. As illustrated in Chart 2, the incidence of home ownership at every age among young married men and women fell between 1981 and 1986. On the one hand, the decline was modest and the gap between 1981 and 1986 does narrow with age suggesting that many couples will eventually achieve home ownership. On the other hand, this is the first decrease in the incidence of home ownership nationally in the last two decades. The message behind this dip is not yet clear; did owned homes simply become less affordable, or did lifestyle changes make home ownership less attractive to young adults?

A trend toward upscale and move-up housing was evidenced from the late 1970s to mid 1980s. The average real investment in a new home increased markedly. See Chart 3. By 1985, real investment per new home was half again as large as it had been in 1976. However, in the recession of 1982, and again at the end of the 1980s, average investment leveled off. This indicates a shift toward larger or better-appointed homes up through 1985. This increased average real investment per home, combined with an overheated land market in some cities and cyclical high interest rates, helps to explain the ballooning imputed rents of home owners, as mentioned earlier. Although increased average real investment might explain the rising budget share spent by consumers on housing up to 1985, it does not explain the continued rise in spending since then.

Access to home ownership by first-time home buyers depends on the income of the home buyers, the mortgage interest rate, the terms and conditions of financing, the downpayment, and the purchase price of the dwelling. One way of measuring affordability is to look at the percentage of young renter households who could afford to buy a "starter home". CMHC has recently developed an affordability measure of this type for each Census Metropolitan Area (CMA).

CMHC's affordability measure covers all renter private households in a CMA that have an earnings income and are led by a person aged 20 through 44. The starter house price is the average selling price of an NHA-insured home (including mortgage insurance premium). It is assumed that buyers will not spend more than 32 percent of their income on monthly carrying costs. Monthly mortgage carrying costs are also based on a 10 percent downpayment and a closed 3-year term mortgage amortized over 25 years. Included in the monthly carrying costs are mortgage cost, property taxes, and average monthly heating cost.

By this measure, home ownership is more affordable in the smaller CMAs; with the notable exception of Victoria, B.C. See Chart 4. Further, affordability improved dramatically in 1991, after dropping from 1989 to 1990: a result of stable or falling house prices combined with the lowest interest rates in eighteen years.
Cost of Housing Supply

Labour, building materials

In part, changes in the price of new housing stock are driven by the unit cost of construction. The four categories of inputs into the construction of new stock are building materials, labour, capital, and land. Of these, labour and building materials prices merely kept pace with consumer prices generally over the last two decades.

Interest rates

Of more importance were volatile interest rates. The average annual rate on a new conventional first mortgage increased from around 7 percent in 1963 to about 19 percent in 1982, then fell below 10 percent by 1991. After adjusting for inflation, the real rate of interest was even more volatile.

Coping with interest

As shown in Chart 1, young households—those that had large mortgages and high interest expense—coped with the 1982 interest rate peak in part by deferring other housing expenditure.

Land prices

The price of a standard unit of residential land differs from one local land market to the next, and has changed in different ways among these markets over time. See Chart 5. In general, land prices leveled out or fell during the recessions of 1982 and 1990-91, and rose at other times. Vancouver and Victoria experienced demand-driven markets for land in 1980 and 1981 and again from 1985 to 1989. Calgary, Edmonton, and Windsor exhibited a similar but flatter "bump" around 1982. The late 1980s increase in land prices, while evident everywhere in Chart 5, ranged from a modest increase in Atlantic Canada to the boom through 1989 in hot markets such as Toronto. These changes in land prices paralleled the price of new housing (see Chart 6).

Coping with land prices

How did consumers and the industry cope with these surges in land prices in Canada's metropolitan areas? In part, the response by builders was to reduce lot sizes. Backyards shrank. In inner city areas, infill and additions further increased the density of land use, as did development on irregular, previously-vacant lots. Municipal governments offered density bonuses to developers for inner city, affordable, or rental housing.

Financing of New and Existing Housing

Typical mortgage

In many cases, the purchase of a new home or an existing unit is financed by one or more mortgages. The standard instrument employed today is a level-payment fixed-rate mortgage typically with a term of from 1 to 5 years, and amortized over a longer period; the borrower assumes the risk of interest rate change upon renewal.

Other devices

There has been some use of alternative mortgage instruments. These include experimentation in the 1970s with graduated payment mortgages whose attraction was lower initial monthly payments. More recently, use has been made of index-linked and other variable-rate mortgages, and CMHC has introduced insured mortgage-backed securities that offer a flexible and liquid repackaging of mortgages attractive to risk-averse lenders.
Coping with risk

Over the past two decades, prospective home owners have periodically had to cope with high interest rates in part by accepting mortgage conditions that were more risky for them. If inflation and interest rates drop over the medium term, a short-term, variable-rate, or index-linked mortgage may well result in lower interest payments overall to the consumer. At the same time, there is an increased risk that the opposite may happen instead.

The Price of Housing

Although the prices of owned and rented accommodation did increase substantially over the 1970s and 1980s, at times they fell behind other consumer prices. The price of rented accommodation fell by about one-third in relative terms between 1971 and 1982, and has since just kept pace with other consumer prices.

Nationally, the New House Price Index fell by almost 40 percent from 1976 to 1986, but since then has risen somewhat faster than other consumer prices. Chart 6 illustrates local variations in Canadian house prices over the last two decades. In large cities in Alberta and British Columbia, a hot market from 1976 to 1981, was followed by a sudden and deep slump that lasted until the mid 1980s. In Manitoba and Saskatchewan, prices have increased only modestly since 1976, with no substantial drop during or after the recession of 1982; the pattern is similar in Ontario (outside Toronto) and Québec except that the increase in price has been larger overall. Toronto experienced a modest slump in the early 1980s followed by a surge that lasted until 1989, and then a sudden slump.

Individual and Family Income

The average incomes of individuals surged in the past two decades. However, so too did consumer prices in general and the cost of housing in particular. During the first half of the 1970s, the average incomes of men and women increased faster than consumer prices generally; hence, real incomes rose. See Chart 7. From 1976 to 1984, their average incomes failed to keep pace with inflation, and since then they have regained only part of what had been lost. In contrast, women and unattached men continued to experience modest gains in real income after 1976. However, in 1990, female incomes still averaged only about two-thirds of male incomes.

The story is different if we look at families, rather than individuals. In Chart 7, the real incomes of male-led families increased by 40 percent between 1971 and 1990. From 1976 to 1984 however, the incomes of male family heads stagnated; it was the rising workforce participation of wives that fueled the increase in family income. Although participation rates increased generally among women, the increase was most rapid among women with children at home under the age of six. The participation rate increased nationally from about 35 percent in 1976 to 62 percent in 1988.
Implications

These trends are disturbing. Many individuals, especially men, suffered substantial losses in real income. Women overall did somewhat better if only because of increased labour force participation. Further, with the marriage bust, nonfamily persons and lone-parent families, with their relatively low incomes, have proliferated. These data show a growing disparity between two-earner couples and other families and nonfamily persons. Whatever the cause, the sustained growth in real incomes that many Canadians had experienced in the 1960s and early 1970s was halted, and with it the means to effect housing progress.

Affordability and Home Leaving

How do young adults cope when housing is less affordable? Are they more likely to live away from a parent's home in markets where housing is relatively less expensive? Interesting evidence on these questions is presented in the scatter diagrams in Chart 8. Outside the province of Québec, the cities in this sample show that young singles do cope with affordability problems in part by adjusting their living arrangements. Young men were almost twice as likely to live in a parent's home in less-affordable markets like Halifax, Ottawa, and Toronto than they were in more-affordable markets like Calgary and Edmonton. Montréal and Québec City differ in that many young singles continue to live in a parent's home even though rents are among the most affordable in the sample.

The Changing Demand for Housing

Projected household formation

CMHC estimates that net formation will average 196 thousand households annually during 1991-1996, before subsiding to 184 thousand households annually during 1996-2001. The projections assume a continued vigorous flow of immigrants from abroad; in the absence of that, the aging of the baby boom would have substantially slowed net household formation over the next decade. The projections also assume that household formation is demographically driven. However, household formation slowed considerably in the early 1980s, even though demographic trends would suggest a continuation of the rapid pace of the 1970s.

Potential households

To see this point, it is helpful to define two concepts. First, let us refer to "potential" households as the set of households that would be formed if every husband-wife couple, and all other persons aged 20 or older, were each to occupy a separate dwelling. Table 2 presents estimates of the number of potential households for Canada's population at census dates since 1971. Second, define the "Formation Rate" to be the ratio of total households to potential households at a particular date. Chart 9 displays Formation Rates at census dates over the 1970s and 1980s. A low Formation Rate indicates that there are fewer households in total relative to the number that might have formed. The Formation Rate surged from 1971 to 1976, more modestly from 1976 to 1981, and then fell from 1981 to 1986.
What caused the Formation Rate to change over time? There has been a close correspondence between the Formation Rate and the affordability of housing. Chart 10 presents an overall index of the affordability of housing. A drop in the value of the index indicates that housing became less expensive relative to income; a rise indicates the opposite. By this index, housing became much more affordable between 1971 and 1976. There was a further, small improvement overall between 1976 and 1981, but a worsening from 1981 to 1986. In other words, as housing became less affordable, fewer households formed.

Chart 9 and Chart 10 suggest that consumers coped extensively in the early 1980s by foregoing the formation of new households. Compared with the last half of the 1970s, net formation was down almost one-quarter million households between 1981 and 1986. Put differently, the slump in Formation Rate represented a pent-up demand that would be released if and when affordability improved.

Conclusions

Casual observation suggests that Canadians are better housed than people in many other parts of the world. At the same time, there is reason to believe that some Canadians are not as well housed now as their peers were in the mid 1970s. This is not to fault the quality of construction of the new stock; rather, it is a comment on the sluggish growth of income that has prevented some Canadians from continuing to enjoy improvement in their housing. In the last decade, there has been evidence of a growing divergence between housing haves and housing have-nots. The have-nots include many of Canada's poorest households: e.g., natives, elderly renters, lone parents, and the disabled. The demarcation also shifts over time; during a recession more people fall into the have-not category. The divergence is symbolized on the one hand by rising real investment per home (Chart 3), and on the other by declining affordability (Chart 10). Why did imputed rents and average investment in new construction surge during the period from 1981 to 1986 even as life expectancy as an owner declined? In light of sluggish income growth among young men, is this indicative of a growing dichotomy between older housing-haves and younger housing-havenots, or is there another explanation?

In spite of a plethora of data, housing policy is bedeviled by the lack of basic information. For example, there are no accurate counts of the homeless, the total size of the private housing stock, the dollar value of all residential land, or the total dollar value of residential mortgage lending. There are surprisingly few data about the changing nature of home life, about the adequacy of the housing stock, or patterns of financial support among households. In this report, a variety of coping strategies have been identified. However, aside from indicators of doubling up, a lack of data makes it difficult to measure the extent of their use.
CHART 1  Shelter expense as percentage of household income before taxes by city size, Canada, 1978-1986.

NOTE  Rent and homeowner operating expense include water, fuel, and electricity. Data are for spending units.

SOURCE  Calculations by Centre for Urban and Community Studies. Computed from Statistics Canada (various years), Survey of Family Expenditures public use sample.
CHART 2  Percentage home owners among young married adults living in private households by sex and age, Canada, 1981 and 1986.

NOTE  Includes persons living common-law.

SOURCE  Calculation by Centre for Urban and Community Studies using the 1981 and 1986 Census public use samples (individual file).
CHART 3  Average real investment (in thousands of 1976 dollars) per new dwelling completed, Canada, 1976-1990.

SOURCE  Computed each year as investment in new residential construction (i.e., excluding land) divided by the number of completions, and deflated by the structure component of the New House Price Index (1976=1.0).
CHART 4 Percentage of renter households able to afford home ownership by family status, selected CMAs, Canada, 1989-1991.

(a) Families in large CMAs

(b) Nonfamily persons in large CMAs

(c) Families in mid-sized CMAs

(d) Nonfamily persons in mid-sized CMAs

(e) Families in small CMAs

(f) Nonfamily persons in small CMAs
SOURCE: Canadian Housing Markets. July-December percentages shown.
CHART 5  Land component of New House Price Index (1986=100), selected urban areas, Canada, 1976-1990.

NOTE: Calg (Calgary), Edm (Edmonton), Hal (Halifax) unavailable prior to 1985, Ham (Hamilton), K-W (Kitchener-Waterloo after 1985, Kitchener alone prior to that), Lon (London), Monc (Moncton & St John) unavailable prior to 1981, Mont (Montréal), Ott (Ottawa-Hull), Qué (Québec City), Reg (Regina), Sask (Saskatoon), St Jn’s (St John’s), StC (St Catharines & Niagara), Thun (Thunder Bay & Sudbury) unavailable prior to 1988, Tor (Toronto), Vanc (Vancouver), Vict (Victoria), Wind (Windsor), Winn (Winnipeg).
SOURCE Calculated from Statistics Canada (various years), New House Price Index. Series are linked at 1981 and 1986.
CHART 6  New House Price Index (1986=100), selected urban areas, Canada, 1976-1990.

NOTE: See note to Chart 5.

SOURCE  Calculated from Statistics Canada, New House Price Index (various years). Series are linked at 1981 and 1986.

NOTE  Average incomes for individuals exclude individuals without income. Family includes any two or more individuals related by blood, marriage, or adoption. Other persons are “unattached”. Where present, husband is assumed to be head of family. Incomes adjusted by Consumer Price Index.

SOURCE  Statistics Canada’s Income Distribution by Size in Canada (various years).
CHART 8  Affordability and household formation, selected Canadian CMAs, 1986.

(a) Single (i.e., never-married) women aged 20-34

Standard rent as percent of average income of single women aged 20-34

(b) Single (i.e., never-married) men aged 20-34

Standard rent as percent of average income of single men aged 20-34

NOTE  Standard rents calculated as twelve times rent shown in Table 8 for 1986. Although average city rents are the same in panels (a) and (b), the average incomes of men and women differ, and hence the position of the city with respect to the horizontal axis.

SOURCE  Calculations by Centre for Urban and Community Studies using the 1986 Census public use sample (individual file).
CHART 9  Ratio of actual households to "potential" households, Canada, 1971-1986.

SOURCE  Ratios calculated at census dates. Calculations by Centre for Urban and Community Studies using published reports of the Census of Canada (various years).


NOTE  Index is ratio of housing component of Consumer Price Index to average personal disposable income per potential household, standardized to 1971=100.

SOURCE  Calculation by Centre for Urban and Community Studies.
TABLE 1  Consumer income and expenditure, housing investment, and the value of the housing stock (billions of current dollars), Canada, selected years.

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<td>(a) Personal income and consumer expenditure</td>
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<td>Personal income</td>
<td>75</td>
<td>158</td>
<td>293</td>
<td>427</td>
<td>590</td>
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<td>Personal disposable income</td>
<td>61</td>
<td>128</td>
<td>238</td>
<td>338</td>
<td>455</td>
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<td>Personal consumer expenditure</td>
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<td>112</td>
<td>196</td>
<td>298</td>
<td>399</td>
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<td>Accommodation</td>
<td>11</td>
<td>21</td>
<td>41</td>
<td>64</td>
<td>90</td>
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<td>Imputed rent of home owners</td>
<td>6</td>
<td>12</td>
<td>24</td>
<td>38</td>
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<td>Gross rent paid by tenants</td>
<td>3</td>
<td>5</td>
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<td>14</td>
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<td>Other lodging</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>Electricity, gas, and other fuel</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>13</td>
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<td>(b) Investment</td>
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<tr>
<td>Total investment</td>
<td>22</td>
<td>47</td>
<td>86</td>
<td>102</td>
<td>143</td>
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<td>Residential investment</td>
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<td>New construction</td>
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<td>Alterations and improvements</td>
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<td>Transfer costs</td>
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<td>3</td>
<td>6</td>
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<td>(c) National balance sheet assets and liabilities at year-end</td>
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<tr>
<td>Total assets</td>
<td>729</td>
<td>1,456</td>
<td>2,861</td>
<td>4,124</td>
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<td>Nonfinancial assets</td>
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<td>704</td>
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<td>1,718</td>
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<td>Residential structures</td>
<td>75</td>
<td>167</td>
<td>290</td>
<td>428</td>
<td>607</td>
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<td>Land 52</td>
<td>121</td>
<td>248</td>
<td>321</td>
<td>438</td>
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<tr>
<td>Total liabilities</td>
<td>430</td>
<td>813</td>
<td>1,690</td>
<td>2,600</td>
<td>3,619</td>
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<tr>
<td>Mortgages</td>
<td>37</td>
<td>82</td>
<td>145</td>
<td>207</td>
<td>343</td>
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</table>

SOURCE  Panel (a) from Statistics Canada’s National Income and Expenditure Accounts: Annual Estimates (various years), panel (b) from National Income and Expenditure Accounts: Quarterly Estimates (various years), and panel (c) from Statistics Canada’s National Balance Sheet Accounts: Annual 1990.


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<td>Persons, aged 20 or older, not living with spouse</td>
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<tr>
<td>Never married</td>
<td>2,271,860</td>
<td>2,549,540</td>
<td>3,034,240</td>
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<tr>
<td>Separated / spouse absent</td>
<td>566,635</td>
<td>636,785</td>
<td>727,235</td>
<td>788,540</td>
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<td>Widowed</td>
<td>941,125</td>
<td>1,042,335</td>
<td>1,156,750</td>
<td>1,249,475</td>
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<tr>
<td>Divorced</td>
<td>174,145</td>
<td>301,765</td>
<td>499,515</td>
<td>689,715</td>
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<td>Husband-wife families</td>
<td>4,605,485</td>
<td>5,168,560</td>
<td>5,610,965</td>
<td>5,881,330</td>
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<tr>
<td>Potential households (total of above)</td>
<td>8,559,250</td>
<td>9,698,985</td>
<td>11,028,705</td>
<td>12,166,035</td>
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</table>

NOTE  Since 1981, Census includes common-law couples in counts of husband-wife families. Potential households are the column sum.

SOURCE  Published reports of the Census of Canada (various years).