CHAPTER TWO

Demographic and Economic Factors in Housing Demand

John R. Miron

How did post-war housing market outcomes differ from pre-war experience? One difference was in terms of living arrangements. In 1941, 11.5 million people in Canada were housed in 2.6 million "usual" residences (that is, households or, equivalently, occupied private dwellings), excluding seasonal and secondary homes. By 1986 the population had burgeoned to 25.2 million, but the number of usual residences surged even faster to 9.0 million units. The average number of persons in a usual residence fell by one-third (from 4.5 to 2.8 persons) between 1941 and 1986, and the proportion of households consisting of one person living alone trebled. When secondary and seasonal dwellings are added in, the growth of the housing stock is even more remarkable.1

A second difference was the surge in housing expenditures. Canadians spent $67.5 billion for rent (including imputed rents on owner-occupied housing), fuel, and power in 1986 - up from just $1.2 billion in 1946 (Table 2.1). Even after allowing for inflation, total real expenditure increased sevenfold, and per capita real expenditure threefold. At least through the 1960s, housing expenditure had just kept pace with the growth of income. As a percentage of total consumer expenditures, housing costs began to rise in the 1970s and 1980s.

How housing is produced in Canada, its price, its allocation among consumers, and its consumption are largely outcomes of the marketplace. Did these changed post-war outcomes simply reflect the changing preferences or incomes of consumers? Or, were the choices of consumers altered, broadened, or narrowed by supply factors?

Concepts, Definitions, and Data
The term "living arrangement" is not easily defined or measured. To minimize omissions and double-counting, census-takers survey all known places of residence and enumerate anyone usually resident there, including persons temporarily absent. Since everyone is assigned to their usual place of residence, census-takers tend to ignore dwellings at which no one is usually resident, for example, seasonal and vacant dwellings. In so doing, the amount of housing consumption and the size of the stock are underestimated.
Table 2.1
Gross domestic product and selected expenditure components:
Canada, 1946-1986
(billions of current dollars; unadjusted for inflation)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross domestic product</th>
<th>Total gross rent, fuel, and power</th>
<th>Gross imputed rent</th>
<th>Gross rent paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>12.2</td>
<td>1.2</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>1956</td>
<td>32.9</td>
<td>3.4</td>
<td>1.7</td>
<td>0.8</td>
</tr>
<tr>
<td>1966</td>
<td>64.3</td>
<td>6.8</td>
<td>3.7</td>
<td>1.7</td>
</tr>
<tr>
<td>1976</td>
<td>197.9</td>
<td>20.9</td>
<td>11.8</td>
<td>5.0</td>
</tr>
<tr>
<td>1986</td>
<td>509.9</td>
<td>67.5</td>
<td>40.1</td>
<td>15.4</td>
</tr>
</tbody>
</table>


Another problem with census data lies in the definition of a household. In Census terms, a household is the individual or group of individuals living in a dwelling. In turn, a dwelling is a structurally separate set of living quarters with a private entrance. Being "structurally separate" means that the occupants of a dwelling do not have to pass through the living quarters of others to get to their own dwelling. With whom one shares a "usual place of residence" depends on how the dwelling is defined. Since 1945 many persons have switched from lodging within a larger household to living on one's own. Some switched from sharing a house with others to living alone in an apartment. In part, households used their growing affluence to separate themselves from lodging tenants and relatives. Basement and upstairs flats were walled off, private entrances constructed, and separate kitchens and washrooms added, thereby creating two or more households where previously there had been only one. Sometimes, such changes have important implications for living arrangements; at other times, the carpentry and its impacts on daily life may be minor.

In a similar way, looking at expenditures on rent, fuel, and power as an indicator of housing consumption can also be misleading. Economists like to think that a dwelling provides "services" that are consumed by the residents. A larger, better equipped, or higher quality dwelling is seen to provide more services, and hence greater consumption. The problem here is to clarify what constitutes housing consumption, how it is to be measured, and how its price is to be calculated.

Post-war Changes in Living Arrangements

In the early post-war years, the trend was to younger and more prevalent marriage, earlier first child births, and larger completed family size. The 1960s and 1970s marked a shift to later marriage, more bachelorhood, more divorces, fewer children, and postponed child birth. Changing family formation, in turn,
translated into new patterns of living arrangements that shaped, and were in turn shaped by, the kinds of housing being built.

All of this occurred against a backdrop of sustained population growth. The pace was especially quick up to about 1961. Growth continued thereafter but at a reduced rate. Overall, changes in fertility, survivorship, and migration contributed to a doubling of Canada's population from 1945 to 1985.

- **Fertility:** From the onset of modern vital statistics record-keeping in the 1920s through 1939, the number of births hovered near 230,000 to 250,000 annually. After the start of World War II, the level of births rose steadily. Continuing to rise after the War, it reached a plateau in the late 1950s at just under 480,000 annually. The Period Total Fertility Rate (PTFR) rose from 2,654 in 1939 to a peak of 3,935 in 1959. The period roughly from 1946 to the early 1960s is commonly called the post-war “baby boom.” By 1968, however, the birth rate had fallen to just 364,000. It continued to fall, stabilizing in the 1970s at about 340,000 to 360,000 births annually. By 1980 the PTFR had fallen to 1,746, well below replacement level. The period since the early 1960s has been dubbed the “baby bust.”

- **Mortality:** The post-war period also saw increased longevity. From 1945 to 1980-2, life expectancy at birth increased by 7.2 years to 71.9 years for men and by 11.0 years to 79.0 years for women. This increasing longevity itself was a source of population growth. The longer people live, the more likely they are to complete their child bearing years and to be alive still when their grandchildren or subsequent generations are born. Improved longevity could account for up to one tenth of Canadian post-war population growth (Miron 1988, Chapter 3). Improved longevity came about principally via two sources: reduced infant mortality and reduced mortality among the middle aged and elderly.

- **Immigration and Migration:** The 1950s saw much immigration associated with European resettlement. A second wave, principally from Asia and the Caribbean, began about 1965 and subsided in 1974 with the introduction of more restrictive immigration controls. Since 1960 the annual volume has varied from 70,000 to 214,000. Because of this ebb and flow, the importance of immigration in Canada's population growth has varied. Immigration was an especially important source of growth for Canada's metropolitan areas. Internal migration was also important in this regard. Overall, migrants streamed out of rural areas and smaller towns into the major conurbations. In 1986, 31% of Canadians lived in the three largest metropolitan areas: up from just 19% in 1941. With the exception of the late 1970s energy boom that saw much migration into Alberta, the typical post-war patterns of migration were from the Atlantic provinces, Quebec, Saskatchewan, and Manitoba, into Ontario and British Columbia.
Taken together, these demographic forces created sustained population growth that accounts for part of the rapid post-war growth in number of households. At the same time, other factors also contributed to a reshaping of the size and composition of households.

One factor was the marriage rush from 1945 to about 1960, during which adults became more likely to ever marry and to marry young. Median age at first marriage dropped from 23 years for women in the pre-war period to just 21 during the marriage rush. In the subsequent marriage bust, the incidence of divorce and of bachelorhood rose, and the median age at first marriage for women, increased by about 0.5 years. A surge in the number of individuals living in families characterized the baby boom, fuelled both by a marriage boom and a high birth rate. In contrast, the post-1960 period saw relatively fewer children, fewer married, more single, separated or divorced adults, and more lone parents (Table 2.2). The number of persons living in families increased by 60% between 1941 and 1961, but by only 25% in the next two decades. In spite of the declining propensity to marry, the total number of persons living with a spouse continued to rise as the baby boom cohorts reached adulthood. At the same time, the number of lone mothers under 35 more than quadrupled from 1961 to 1986.

Also important were shifts in the number and spacing of children. Throughout the post-war period, childbirth among women over 35 years of age became less common, as did the incidence of fourth or higher-order births. During the baby boom, other patterns developed. Women tended to have their first and second child at younger ages; they became more likely to have a third child; and fewer women remained childless. These patterns were reversed in the subsequent baby bust. Overall, the baby bust period was characterized by fewer, more closely spaced births. In the baby bust, couples spent more years together before the first birth, and again later after the children had left home. In earlier decades, when births were spread out over a longer period, couples spent more of their lives with at least one child at home. Census counts of families by size reflect fertility and spacing decisions; they also reflect home-leaving among young adults. During the 1960s and 1970s, children became more likely to leave the parental home early in adulthood, a trend that was reversed in the 1980s.

Finally, another important factor was the growing gender differential in mortality. Women have traditionally outlived men in Canada. In conjunction with the marriage boom, increased longevity relative to their spouses meant that it became more common for women to experience widowhood at some point in their lives, and for greater lengths of time. Often, widowhood translated into living alone.

Coinciding with these shifts in family composition and size were important changes in living arrangement. For much of Canada’s modern history, families have commonly maintained their own dwellings. What was surprising was the extent to which it became virtually universal. While the doubling-up of nuclear families (as in extended family households) was never commonplace, it became even rarer after 1945. Furthermore, it became even more common for
Table 2.2
Population and families by living arrangement:
Canada, 1941-1986

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(thousands of persons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population (usual residents) [1]</td>
<td>11,490</td>
<td>13,984</td>
<td>18,238</td>
<td>21,568</td>
<td>24,203</td>
<td>25,207</td>
</tr>
<tr>
<td>In private dwellings, Family members Living with spouse [2]</td>
<td>4,432</td>
<td>5,923</td>
<td>7,600</td>
<td>9,184</td>
<td>11,222</td>
<td>11,763</td>
</tr>
<tr>
<td>Lone parent</td>
<td>309</td>
<td>326</td>
<td>347</td>
<td>479</td>
<td>714</td>
<td>854</td>
</tr>
<tr>
<td>Child</td>
<td>5,144</td>
<td>5,967</td>
<td>8,149</td>
<td>9,189</td>
<td>8,667</td>
<td>8,579</td>
</tr>
<tr>
<td>Non-family individuals [3]</td>
<td>1,237</td>
<td>1,384</td>
<td>1,659</td>
<td>2,323</td>
<td>3,195</td>
<td>3,578</td>
</tr>
<tr>
<td>In collective dwellings</td>
<td>368</td>
<td>384</td>
<td>484</td>
<td>393</td>
<td>406</td>
<td>434</td>
</tr>
<tr>
<td>All families [4]</td>
<td>2,525</td>
<td>3,287</td>
<td>4,147</td>
<td>5,076</td>
<td>6,325</td>
<td>6,735</td>
</tr>
<tr>
<td>Maintaining a dwelling [5]</td>
<td>2,333</td>
<td>2,967</td>
<td>3,912</td>
<td>4,915</td>
<td>6,133</td>
<td>6,534</td>
</tr>
<tr>
<td>Living alone</td>
<td>–</td>
<td>–</td>
<td>3,263</td>
<td>4,286</td>
<td>5,556</td>
<td>5,939</td>
</tr>
<tr>
<td>Others present</td>
<td>–</td>
<td>–</td>
<td>649</td>
<td>629</td>
<td>577</td>
<td>596</td>
</tr>
<tr>
<td>Not maintaining a dwelling [6]</td>
<td>192</td>
<td>321</td>
<td>235</td>
<td>161</td>
<td>192</td>
<td>201</td>
</tr>
</tbody>
</table>

**Source:** Census of Canada, various years. – Indicates data not available.

[1] Columns may not total due to rounding.
[2] Since 1981 common-law couples have been enumerated as married. In earlier censuses, where such couples chose not to list themselves as married, they were counted as either non-family individuals (if no children present) or lone parent families (if children present). Thus, censuses since 1981 estimate more husband-wife families and fewer lone parents and non-family individuals than would have been the case previously.
[3] Includes individuals whose family status could not be ascertained.
[4] Census counts have excluded families in collective dwellings since 1981. Families in collective dwellings are included in earlier counts.
[5] Under the 1941 census definition of a household as a housekeeping unit, there could be two or more households per dwelling. Compared with the subsequently-used definition that assigns only one household per dwelling, the number of primary families was overstated, and the number of secondary families understated, in 1941.
[6] Since the 1981 census, maintainer status depended on whether the “household maintainer,” (that is, the person chiefly responsible for financial maintenance of the dwelling) was a resident family member. In some cases, such as a family living alone that is financially supported from outside, there was no maintaining family. Prior to 1981 a family living alone was always enumerated as a maintainer. Thus, censuses since 1981 tend to overcount maintaining families relative to earlier censuses.
Table 2.3
Non-family individuals by age group: Canada, 1961 to 1986
(’000 of persons)

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Under 35</td>
<td>673</td>
<td>937</td>
<td>1,429</td>
<td>1,501</td>
</tr>
<tr>
<td>35-44</td>
<td>205</td>
<td>220</td>
<td>266</td>
<td>399</td>
</tr>
<tr>
<td>45-54</td>
<td>240</td>
<td>267</td>
<td>264</td>
<td>294</td>
</tr>
<tr>
<td>55 or older</td>
<td>883</td>
<td>1,151</td>
<td>1,236</td>
<td>1,385</td>
</tr>
<tr>
<td>Total</td>
<td>2,002</td>
<td>2,575</td>
<td>3,195</td>
<td>3,578</td>
</tr>
</tbody>
</table>

Source: Census of Canada, various years. Columns may not total due to rounding.
1981 and 1986 data include only non-family individuals in private dwellings. Earlier data also includes non-family persons in collective dwellings.

nuclear families to live alone, that is, without any other persons present in the dwelling. This stripping away of non-family individuals constituted a second form of undoubling. The data presented at the bottom of Table 2.2 indicate that both forms of undoubling were important, although at different points in time. The percentage of families maintaining their own dwellings rose from 90% in 1951 to about 96% by the mid 1960s, thereafter remaining roughly constant. In 1986, 88% of all families lived alone, up from under 80% in 1961.

The growth of the one-person household has been a post-war phenomenon. As recently as 1951, individuals living alone were rare enough for the Census to make the following comment:

The highest percentages of one-person households were found in rural nonfarm areas, and, as in the 1941 Census, one-person households were much more common in the provinces west of the Great Lakes than elsewhere in Canada. Judging from the geographical distribution of these households, it is probable that a fair percentage of them consisted of hunters, trappers, west coast fishermen, fire rangers, guides, and persons in similar occupations (Census of Canada 1951, 10: 368).

In the ensuing decades, living alone became predominantly an urban phenomenon, and it became commonplace. Where did these households come from? In part, they reflect the swelling number of non-family persons (Table 2.3). Overall, the number of non-family persons increased by almost 80 percent, and the number under 35 years of age more than doubled from 1961 to 1986. This reflected rising incidences of bachelorhood and divorce. Also, although the longevity gap between the sexes had begun to attenuate in the late 1970s, the post-war period, on the whole, was marked by a growing number of elderly widows. At the same time, the percentage of non-family persons who live alone rose sharply. As a result, the number of one-person households more than quadrupled.
Table 2.4
Persons living alone by age group: Canada, 1961 to 1986
('000s of persons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>17</td>
<td>70</td>
<td>201</td>
<td>154</td>
</tr>
<tr>
<td>25-34</td>
<td>40</td>
<td>96</td>
<td>347</td>
<td>395</td>
</tr>
<tr>
<td>35-44</td>
<td>45</td>
<td>73</td>
<td>159</td>
<td>241</td>
</tr>
<tr>
<td>45-54</td>
<td>64</td>
<td>99</td>
<td>162</td>
<td>185</td>
</tr>
<tr>
<td>55-64</td>
<td>86</td>
<td>154</td>
<td>247</td>
<td>280</td>
</tr>
<tr>
<td>65 or older</td>
<td>172</td>
<td>320</td>
<td>566</td>
<td>680</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>425</td>
<td>811</td>
<td>1,681</td>
<td>1,935</td>
</tr>
</tbody>
</table>

Source: Census of Canada, various years. Columns may not total due to rounding.

Overall and increased almost tenfold among the under 35 year-olds between 1961 and 1986 (Table 2.4).

Post-War Changes in Housing Consumption

Because every household occupies exactly one usual dwelling, the above description of changing living arrangements also largely describes the aggregate increase in number of housing units. However, this does not tell the entire story of post-war growth in the housing stock. The stock changed significantly in a qualitative sense—in terms of dwelling type, quality of construction, design, amenities, tenure, and state of repair. Also, although a lack of data prevents further examination of the issue, the consumption of secondary housing apparently has increased.

Chapter 1 identifies important changes. Since 1945 the amount of residential space per household and per capita has surged; while the number of rooms in a typical dwelling rose slightly, the number of persons per room fell sharply. The incidence of dwellings in need of major repair or without toilet facilities, central heating, or a refrigerator also dropped. In addition, the type of housing consumed by Canadians changed after 1945. As a percentage of the total private occupied housing stock, single detached units declined in importance after 1941. Particularly noteworthy was the great boom in apartment construction from the mid 1960s to mid 1970s and the ensuing boom in row housing (Figure 9.2).

In terms of the dollar value of housing consumption, post-war change is even more dramatic. The aggregate current dollar value of Canada's housing stock per household rose more than eighteenfold (Table 2.5). Even after adjusting for inflation in consumer prices generally, it rose fourfold. In current dollars, the value of the stock rose much faster than personal disposable income per household, especially during the late 1940s. In part, this reflected various post-war housing price booms. In part, it also reflects the volatility of new residential
Table 2.5
Current dollar value of housing stock, investment in housing, housing consumption, and annual personal disposable income per household:
Canada, 1946-1986
($ per household)

<table>
<thead>
<tr>
<th>Year</th>
<th>Housing stock</th>
<th>Residential investment</th>
<th>Personal disposable income</th>
<th>Housing consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>2,517</td>
<td>138</td>
<td>4,309</td>
<td>414</td>
</tr>
<tr>
<td>1951</td>
<td>4,412</td>
<td>235</td>
<td>4,585</td>
<td>441</td>
</tr>
<tr>
<td>1956</td>
<td>5,179</td>
<td>462</td>
<td>5,513</td>
<td>846</td>
</tr>
<tr>
<td>1961</td>
<td>6,022</td>
<td>391</td>
<td>5,950</td>
<td>1,043</td>
</tr>
<tr>
<td>1966</td>
<td>8,346</td>
<td>500</td>
<td>7,906</td>
<td>1,269</td>
</tr>
<tr>
<td>1971</td>
<td>11,930</td>
<td>928</td>
<td>10,132</td>
<td>1,823</td>
</tr>
<tr>
<td>1976</td>
<td>22,607</td>
<td>1,982</td>
<td>17,895</td>
<td>2,917</td>
</tr>
<tr>
<td>1981</td>
<td>34,291</td>
<td>2,487</td>
<td>28,699</td>
<td>4,902</td>
</tr>
<tr>
<td>1986</td>
<td>46,567</td>
<td>3,428</td>
<td>37,601</td>
<td>7,153</td>
</tr>
</tbody>
</table>

Sources: Up to 1961, value of the housing stock is estimated from Statistics Canada (1984e, 284). After 1961, housing stock is estimated from total non-financial assets in residential structures. See Statistics Canada (1986a). The current dollar value of housing consumption (imputed rents, gross rents paid, fuel, and electricity), residential investment (gross fixed capital formation), and personal disposable income is taken from Statistics Canada (1988).

Why Did Living Arrangements Change?
Why did average household size decline so abruptly? The overall growth of population in Canada and important coincident demographic shifts have already been noted. The marriage bust was one. The decline of marriage and the rise of divorce meant more non-family individuals and lone parents. The closer spacing of child births (later first births and earlier last births), especially in combination with earlier home leaving among young adults and generally increasing longevity, increased the time that parents spent without children at home. Also important was the increasing gender differential in longevity that sharply increased the number of elderly widows.

Such arguments help explain why there were more non-family individuals and why families were typically smaller. Given a fixed propensity for families and non-family persons to live alone, in conjunction with the baby boom and with net immigration, these demographic changes might account for about
FIGURE 2.1 Real income of individuals and economic families: Canada, 1951-1986.

(a) Males and male-led families

(b) Females and female-led families


NOTE: Individuals without income are excluded. Family here includes any two or more individuals related by blood, marriage, or adoption; all other persons are "unattached". Where present, husband is head of family. 1951 and 1961 data exclude farm spending units. Incomes deflated by CPI (1981=1.0). Data on "Wives" are for wives of spending unit heads.
Demographic and Economic Factors in Housing Demand

two-thirds of net post-war household formation (Miron 1988, Chapter 5). They do not, however, explain the sharp rise in the propensity to live alone among both families and non-family individuals.

One possible explanation has to do with the subsiding of immigration into Canada. Immigrants from abroad have been considerably more likely to live in shared accommodation. The post-war decline in shared accommodation might partly be attributable to post-war changes in the importance or composition of immigration. What caused immigrants to share their housing? Was it a cultural norm carried from their homelands, or a rational strategy for coping with housing in a new, different, and costly housing market? If the latter, another explanation is suggested.

That explanation is post-war affluence. The average incomes of Canadians more than doubled (after discounting for inflation) from 1945 to 1981. In part, the affluence was augmented by the rise of the two-earner household that pushed up family incomes. In part, it reflected a relative improvement in the incomes of non-family individuals. (See Figure 2.1 which also show the effects of the recession of 1982 and the deteriorating real incomes of Canadians through the first half of the 1980s.) Important too were the redistributive effects of new, post-war income transfers and other social programs that were of particular benefit to low-income individuals and households. At the federal level, Unemployment Insurance began in 1941, Family Allowances in 1945, Old Age Security in 1952, and the Canada Pension Plan and Guaranteed Income Supplement in 1966. Government transfer payments to individuals rose from $1.1 billion (or 11% of total personal income) in 1946 to $62.0 billion (or 14% of total personal income) in 1986 (Statistics Canada 1988, 16-7).

Canadians used this growing affluence to purchase better clothing, food, health care, transportation, education, and household appliances. They also improved and upgraded their housing. In addition to purchasing dwellings that were larger, had more bathrooms, or were better appointed, they purchased a better quality of living arrangement. As noted earlier, this did not necessarily mean jettisoning those with whom one might otherwise have shared space; by walling them off and providing separate entrances, cooking and toilet facilities, these sharers may have been "externalized" into separate households and dwellings. Whatever the mechanism, rising affluence may have reduced the propensity for families and non-family individuals to share living quarters.

At the same time, the cost of shelter may have increased less rapidly than did other consumer prices. Since the mid 1950s rental housing has lagged behind other components of the overall Consumer Price Index (see Table 3.4). The home ownership price component increased more rapidly but, as it does not consider the capital gains benefit, it overstates the increase in user cost of owned homes over the post-war period. If housing became more affordable relative to other consumer goods, consumers may have substituted consumption of other, more expensive, goods in favour of now relatively cheaper housing.

Rising real incomes reshaped living arrangements. Evidence from cross
section studies suggests that the propensity for non-family individuals to maintain a dwelling increases with income. However, cross section studies using 1970s and 1980s data suggest that the propensity for families to maintain a dwelling was less sensitive to income. Put differently, high-income families were only marginally more likely to maintain a dwelling (or live alone) than were their poorer counterparts. This suggests a novel interpretation. The contemporary division of family and non-family individuals into separate households may have been instigated not by families seeking privacy but by non-family individuals purchasing their way out of shared accommodation.

This may not have always been true. In the 1970s and 1980s, "commercial" lodging was uncommon. Where the decision to share space is an affair of the heart or of familial responsibility, it is not surprising that the family's income is unimportant. In earlier times, however, the taking in of unrelated lodgers may have been more widely used to supplement family incomes.

To understand better the decline of shared accommodation, it is helpful to think in terms of the costs and benefits of the arrangement to the person or family maintaining the dwelling (that is, the host) and to the lodger or partner.

**THE HOST AND THE SUPPLY OF SHARED ACCOMMODATION**

One precondition for a family or individual to share is sufficient space within the dwelling, usually at least a spare bedroom. Another is that the host be able to provide housekeeping as needed. The level of housekeeping can vary from a full room and board service where the host provides cooking, room cleaning, and laundry cleaning to the case where a single seeks a room-mate to share costs and housekeeping.

Between 1941 and 1961 the typical size (number of rooms) of an owned home remained constant. At the same time, families became larger with the onset of the baby boom. The resulting space squeeze made sharing less feasible for many families. This was reversed in the late 1960s and 1970s by a trend to larger dwellings in conjunction with the baby bust. At the same time, however, the rapid increase in paid work outside the home by married women meant that less labour was available in the home to undertake the housekeeping associated with many forms of sharing.

Regulation provided another disincentive to sharing. The effect of building and property maintenance codes, zoning by-laws, and restrictive covenants is often to limit housing to single families or lone occupants. Lodgers and households of unrelated individuals are often banned, whether explicitly or implicitly. Thus, even where the host so desires, regulation can constrain sharing.

Sharing provides certain benefits to the host. In the case of commercial lodging, this includes a steady source of income that helps support the host in the event of illness, injury, or layoff. However, the attraction of this benefit declined with the introduction of Unemployment Insurance, Workman's Compensation, Old Age Security, and publicly-financed health care. Another benefit is the labour provided by lodgers in activities such as food preparation, laundry, house
cleaning or maintenance, child care, or snow removal. In the case of ill or disabled relatives or friends, the benefit to the host may be primarily in terms of low cost, or easy access, in providing assistance or care.

Sharing requires trust among the co-residents. Because they occupy the same set of living quarters, it is easy to invade one another's privacy or misuse another's property. It is not surprising, therefore, to find that often the sharers are related. However, the post-war period was marked by extensive interregional migration. In many cases, these migrants left behind their parents and other close relatives. In part, the post-war decline in sharing may simply have reflected a paucity of relatives in the local community.8

The host may also consider congestion around the home as a cost of sharing. Bathrooms come specifically to mind. Most of us have experienced the morning congestion around family bathrooms. Over the post-war period, Canadians used their increasing wealth to purchase more, and better appointed, bathrooms. However, bathrooms are expensive to install or upgrade. For some families, getting rid of sharers may have been the least costly way of solving this congestion problem.

There is a related consideration here. Families may not have subsidized sharers simply because they were relatives. Rather, it may have had to do with transactions costs for home owners. Typically, it can be expensive for an owner to move if one considers both monetary and psychic costs. Furthermore, imperfect information in the real estate market adds an element of risk to the costs of moving. As a result, families move less frequently than might be expected given changes in their housing needs. A family that is planning to move now and expects to need a still larger house in a few years might well buy the larger house immediately and avoid the transaction cost of moving again in a few years. The marginal cost of making space available to a lodger, at least until the space is needed by the expanding family, can thus be small. Although adequate data are lacking, the level of residential mobility likely increased in post-war Canada. The higher mobility, in part, reflected a better organized real estate market (particularly in the larger urban areas); the flow of information improved (through means such as multiple listing services), and monetary transactions costs declined in relative terms. Where it became less expensive to move and adjust one's housing consumption, one's willingness to take in lodgers, and to discount their rents, declined. In part, the higher mobility arose for other reasons, such as job changes or transfers. Whatever the reason, it afforded some families (particularly those in metropolitan Canada) more opportunities to bring their housing consumption into line with their space needs, reducing the extent of short-term "overconsumption," and hence the space available to accommodate sharers.

THE LODGER OR PARTNER AND
THE DEMAND FOR SHARED ACCOMMODATION

The demand for shared accommodation by non-family individuals depends on the availability of alternatives (for example, living alone, living in a collective
dwelling, or sharing with a family or with a partner or partners), the utility attached to the alternative, and its cost. Unfortunately, data on post-war changes in the cost, utility, or availability of sharing versus other forms of accommodation is lacking. However, alternatives to sharing became more widespread and relatively less expensive, especially with increasing urbanization. Cities, by virtue of their size, can sustain varied and profitable markets for rental housing – something not always possible in smaller towns and rural areas. Another reason pertains to changes in construction technology, of which post-war apartment buildings exemplify the breakthroughs. For the first time in history, multi-unit buildings could be constructed that provided many of the amenities of detached housing without the traditional drawbacks of tenement structures: noise, smells, lack of security, and fire hazard, for instance. At the same time, improvements in homemaking technology – including appliances that made it easier to do housekeeping – reduced the need for lodging and its associated housekeeping services. Effectively, these trends either raised the utility of living alone or reduced its cost, relative to lodging. Either way, they served to reduce the propensity to share.

In addition, social policy initiatives had a significant impact on the demand for shared accommodation. One was the concerted efforts by governments to reduce the size of Canada's institutionalized population that led to the development of group homes and other forms of shared "special needs" housing. Also important here were programs aimed at better housing the elderly (especially widows) and low-income families. From 1964 to 1980 NHA loans were provided for the construction of 142,345 new public housing units. The construction of 126,158 new private dwellings and 42,034 hostel beds in new collective dwellings for the elderly were also assisted by NHA during this period. This was subsidized housing, much of it on a rent geared to income basis. One impact of these policies was to drain off many potential sharers, that is, individuals and families whose low incomes would have prevented them from maintaining their own dwellings.

Why Did the Demand for Housing Change?
The preceding discussion of the causes of aggregate household formation is equivalent to analyzing the aggregate demand for usual residences since each household corresponds to an occupied private dwelling. It is also necessary to consider changes in demand for "housing services" (that is, in terms of the quality or quantity of housing consumed) by a typical household. Possible causes include changes in consumer preferences, incomes, or the price of housing.

Changes in Consumer Preferences
In light of the post-war changes in household formation already described, it is not surprising that the type, quality, and size of dwelling demanded also changed. After all, even ignoring the obvious impact of differences in income, the housing needs of elderly widows differ – in floor area, layout and use of
rooms, location, and access to education, health care, and other public services—from those of families with children. Different yet again are the needs of young singles and two-earner couples.

Why do different kinds of households have differing demands for housing? One set of reasons has to do with the size of the household. Although some rooms and facilities can be shared, larger households in general need more space. Related are reasons that have to do with the composition of the household. Households with children, for example, often need safe play areas and good access to schools. The presence of children may also make security of tenure more important to the household. As another example, two-earner households often need well-situated housing to balance career, home, and family responsibilities. Changes in overall housing consumption since 1945 thus reflect in part the changes in living arrangements already described.

**Effect of Rising Prosperity and Income Dichotomization**

In addition, housing consumption changed in response to rising incomes. Figure 2.1 suggests that the incomes of many categories of households increased at apace from 1951 to 1981 before slowing down in the 1980s. Some did better than others. Because of the rising incidence of paid work among wives, husband-wife families did especially well on average. So too did the elderly living alone, many of whom benefitted from improvements to OAS and GIS, and the introduction of CPP/QPP. Overall, the trend among many household groups was to higher real incomes over time, at least until the 1980s.

In a sense, if one measures housing consumption using expenditure data, it is not surprising that total consumption kept pace with income. Throughout the post-war period, households of a given type tended to spend about the same proportion of income on housing. In other words, as aggregate income grew, so too did expenditure on housing.\(^\text{11}\)

At the same time, Figure 2.1 obscures an important post-war dichotomization of households on the basis of income. The post-war explosion of non-traditional households (for example, persons living alone and lone-parent families) meant a rapid growth of households with low incomes compared to the more prosperous husband-wife family households. This trend is evidenced in the growing divergence between average per capita and per household income exhibited in Figure 1.2.

**Changes in the Price of Housing**

It is relatively easy to observe how much people spend on their housing. It is something else to estimate how the price for a unit of housing services has changed since 1945 and to what extent consumption has changed as a consequence. For the most part, we must rely on the housing price indexes that form part of the CPI.

Available CPI indexes suggest that the price of housing just kept pace with other consumer prices (or even fell slightly in relative terms) and lagged...
considerably behind the growth of income. Improvements in construction technology and plentiful factor supplies kept down the purchase price of new residential housing, although these were counterbalanced by sharply rising unit labour costs until at least the mid 1970s (see Table 5.3). Important also were changes in income tax provisions that reduced the after-tax cost of producing or consuming housing. In addition, one should note government programs that subsidized the cost of constructing or renovating housing. Provincial governments also played an important role by easing the growth of property taxes, choosing instead to fund local governments from provincial income, sales, corporate, and other tax revenue.

Moreover, these changes in housing prices occurred against a backdrop of increasing urbanization. Most Canadians flocking to the major metropolitan areas were confronted with sharply higher land prices. Part of the increased post-war expenditure on housing is attributable to this. As well, households attempted to compensate for higher land prices by consuming less-extensive forms of housing, for example, apartments, duplex, semi-detached, and row housing, and smaller lots for detached housing.

Current and Emerging Issues

Canadian society has undergone a restructuring of living arrangements and housing demand. Much of the increased propensity to form separate households has been among individuals and families whose ranks include many with low incomes – for example, young singles and newlyweds, elderly widows and couples, the divorced, and lone parents. This trend has several important policy implications.

Affordability

One implication is in terms of the impact on housing affordability. A commonly used goal in housing policy is the provision of adequate, affordable housing for everyone. In defining “affordable” housing, some policy analysts have used a threshold shelter-cost-to-income ratio of 25% or 30%. A household is said to have an “affordability problem” if it would have to spend in excess of the threshold to get adequate housing. Under this definition, many low-income consumers, especially persons living alone, have an affordability problem. However, to a certain extent, people choose their living arrangements. If consumers choose to pay more than 30% of their income to live alone, instead of lodging with others at a rent below the threshold, what is the nature of its “affordability problem”?

Some researchers have suggested using higher threshold percentages for small households: 40% of income for persons living alone, for instance. However, this is a makeshift solution. What we want to know is the extent to which consumers are unable to find adequate housing at a shelter cost at or below the threshold. Thus, we need to know about the alternatives available, whether these are “adequate” housing for the household concerned, and the associated shelter
costs. Unfortunately, we lack information on the alternative living arrangements (lodging versus maintaining a dwelling) open to individuals or families. We do not know the extent to which consumers must lodge in inadequate housing because of the absence of something more suitable. We do not know whether people who spend in excess of the threshold prefer to do so rather than occupy an alternative that others (but perhaps not they) perceive to be adequate and affordable. With the income dichotomization being brought about by ever greater numbers of individuals and low-income families living alone, such data are urgently needed to reassess the nature and extent of the housing affordability problem.

**Cyclical Sensitivity**

Through much of Canada’s modern history, husband-wife families have shown a pronounced tendency to maintain their own dwellings. Except among newlyweds and the elderly where low income is a constraint, almost all such families live in separate accommodation. Couples may adjust the size of their dwelling, or their tenure, in response to economic fluctuations; however, they are remarkably persistent about maintaining a dwelling. If anything, this tendency has been reinforced by the post-war entry of married women into the paid workforce. Effectively, this pushed most families over the income level necessary to sustain this living arrangement. As well, because of the presence of children, families are less likely to lodge with others. Children can create certain externality costs (for example, noise and damage to property) that a host might prefer to discriminate against. In addition, parents may prefer to maintain a dwelling to control better the kinds of people with whom their children reside.

On the other hand, the living arrangements of non-family individuals are less stable. Their incomes are typically low. Only a modest proportion can afford to live alone. However, if and as incomes rise in the future, living alone will become affordable to a larger group. Their demand for living alone is thus income elastic. Not having children, they find fewer drawbacks to lodging. Because of this, they are more more willing to switch between lodging and living alone depending on the relative cost and availability of these alternatives.

There is indirect evidence of this price and income sensitivity. During the 1970s households were being formed in Canada at a net rate of about 200,000 annually. During the recession of 1982-3, net household formation (as indicated by net new dwelling completions) fell as low as about 120,000 units annually. However, the underlying demographic patterns apparently were continuing much as they had in the 1970s. I suspect that the difference was a lower rate of household formation among non-family individuals and low-income families.

In the future, this cyclical sensitivity will become more important. As the baby boom generation passes the prime marrying ages, the growth in husband-wife families will attenuate. At the same time, little further increase can be expected in their propensity to maintain a dwelling; at present, they almost all do. However, if the marriage and baby busts persist and women continue to
outlive men, the number of non-family individuals will continue to rise quickly. Net household formation will come to depend increasingly on the propensity of this group to live alone. The larger price and income elasticities displayed by non-family individuals mean that future household formation and housing consumption will become increasingly dependent on economic conditions.

IMPACTS OF SUBSIDIZATION

A related argument concerns the impacts of housing policies that subsidize household formation. I am thinking here specifically of senior citizen and low-income public rental housing projects. During the 1960s and 1970s, governments invested heavily in such projects. While the public housing stock has never exceeded 5% of all dwellings in Canada, it is largely targeted at two specific groups: the elderly and low-income families. Since much of this construction may simply have displaced existing housing or replaced the construction of unsubsidized units, the net impact of these programs is unknown. However, given the large number of subsidized units built, and the inability of many of the new occupants to afford accommodation in the private sector, the impact was potentially large.

Since 1945 in-home social services have proliferated. Programs like visiting nurses, "meals on wheels," and emergency hailer systems make it possible for some individuals to live alone. Other programs, notably subsidized daycare, help do the same for lone parent families. To the extent that these services were subsidized, they encouraged household formation much as did the subsidized housing programs.

Also important over the post-war period has been the expansion of income maintenance programs. The impacts of programs such as unemployment insurance and old age security on the decisions of hosts to take in lodgers have already been considered. These programs also bolstered the incomes of non-family individuals, making them better able to afford to live alone.

Many of these programs and subsidies were first put into place in the 1960s and 1970s. The 1980s have seen a stabilization in the growth of some programs and the retrenchment or elimination of others. As these programs and subsidies are so pervasive, it is difficult to assess their impact on net household formation and housing demand. The propensity to live alone rose sharply at the same time as these programs were being introduced. It therefore is possible that, if stabilization, retrenchment, or elimination continue in the future, the growth in persons living alone might slow or even be reversed.

HAS NON-FAMILY FORMATION PEAKED?

In part, post-war household formation was driven by an undoubling of non-family individuals and low-income families from shared accommodation, associated with the formation of one-person households. With the aging of the baby boomers, and assuming a continuation of low fertility, differential mortality, and the marriage bust, the demographic conditions are ripe for a continued
explosion in the formation of non-family households over the next few decades. Some demographic forecasts suggest that the number of households in Canada might reach 11.4 to 12.1 million by the year 2001 (see Miron 1983, Table 2). Will it happen? Will the pace be similar to what we have witnessed over the last few decades?

In attempting to answer such questions, one should remember that what has happened so far was pushed and shaped by government policy. While it is not clear just how large a net effect any one policy has had in the last decade, the curtailment of growth in some programs and the scaling back of others makes it unlikely that the rate of growth of household formation that prevailed in the 1960s and early 1970s will return. If there is one lesson to be learned here, it is the danger of attempting to treat household formation as determined by demographics, and housing demand by economics. Household formation has increasingly come to be sensitive to price and income. Any attempt to forecast household formation in ignorance of this is foolhardy at best.

Notes

1 There is a paucity of data on secondary homes in Canada. A 1977 survey found that just under 9% of Canadian spending units with an above-median income owned a vacation home. Among units with a below-median income, the ownership rate was only about 3%. See Statistics Canada 1977, Table 16.
2 Calculated from Dominion Bureau of Statistics (1948, 5-10) and Statistics Canada (1984c, 16-19.
3 In 1931 the probability of death before one's first birthday was 8.7% for males compared with 1.5% in 1976. The probability that a one-year-old male dies before his 60th birthday fell from 28% to 19% over the same period. The improvements for women were even more dramatic.
4 Thus, the decline in Census-reported typical family size in the baby bust reflects both decreased fertility and closer spacing of births. Among young families, average family size peaked about 1961. In the 35-44 age group, the peak occurred closer to 1971, reflecting the changed spacing and the cumulative effects of fertility on family size. Among still-older families, average size remained constant or declined, even during the baby boom.
5 See Steele (1979), Smith (1984) and Harrison (1981). Miron (1988, 142) reports 1971 cross-sectional income elasticities of from 0.1 to 1.4 for the propensity for non-family individuals to head a household and much lower elasticities for the propensity of non-family household heads to live alone.
6 The 1981 Census reports that two-thirds of all non-family persons living in family households were related to the household head.
7 Of course, some of this housing was created surreptitiously and, as a result, may be more widespread than is reported in the Census.
8 However, this is not to say that post-war families provided less housing assistance than previously. Although we lack information about this, post-war families used part of their growing affluence to subsidize separate accommodation for needy relatives. This is
especially true of young adult children and grandparents. In other words, rather than
taking relatives into their own dwelling, families increasingly subsidized the accommo­
dation of kin elsewhere.

9 See CHS 1980 (53). This consists of loans approved under NHA s. 43.

10 See CHS 1980 (55). This consists of loans approved under NHA s. 6, 15, 15.1, 34.18, 40, and 43.

11 Another way of saying the same thing is that the income elasticity of housing consump­
tion was about 1.0. There is a considerable debate about the magnitude of the income
elasticity. Using cross-sectional data from the 1971 Census, Steele (1979) estimates elasti­
cities of from 0.2 to 0.5 for different kinds of households. Miron (1988, Chapter 8) finds
estimates of close to 0.3 using cross-sectional data for 1978. These tend to be lower than
estimates found using longitudinal data. Reasons for such discrepancies are discussed in
Miron (1988, Chapter 8).

12 The principal changes occurred with revisions to the federal Income Tax Act in 1972 that
taxed some capital gains (though not on owned homes) for the first time and reduced the
ability of small investors to claim losses on rental housing for tax purposes. See Miron
(1988, Chapter 9) for more details.

13 Over the years federal housing policy has also provided subsidies, in the form of grants
and forgiveable loans to home owners of modest income to make repairs and other
improvements. These include the CHIP, CHRP, HIP, RNH, RRAP, the HIL Program, and
Farm Improvement Loans. Arguably, these programs helped an unknown number of
individuals and families to remain in separate households, who otherwise would have
found it too costly.