

Measuring housing affordability

Jacqueline Luffman

Shelter is a major cost in most family budgets. The amount a household is able or willing to pay for housing determines not only the quality of the dwelling but also the choice of community or neighbourhood. Indeed, housing costs affect disposable income, access to jobs, health status, and general inclusion in society (Carter and Polevychok 2004). However, housing costs are not uniform, with owners and renters differing sharply. A little over 20% of the household budget goes to shelter costs among renters but only 13% among homeowners.¹

Determining housing affordability is complex. For example, some households may choose to spend more on housing because they feel they can afford to, while others may not have a choice. Traditionally, affordability has been based on a ratio of housing costs to total household income. A household paying 30% or more of its pre-tax income for housing is considered to have affordability problems. However, many researchers are beginning to use detailed spending data to assess affordability since this reflects all household spending priorities (Pendakur 2001; Miron 1984). This article proposes an alternative measure of housing affordability based on household expenditure, which highlights the attributes of the Survey of Household Spending (SHS) (see *Data source and definitions*).

While rental and housing prices doubtless affect affordability, their impact will be tempered by many other factors. These are the focus of the analysis here. Affordability problems are subdivided into moderate and severe (see *Methodology*), and differences between the two are examined. Multivariate analysis was used to assess the significant factors associated with housing affordability problems. Although both the income and expenditures measures of housing affordability are presented, the focus is on the expenditure approach.

Core housing need and housing affordability

According to Canada Mortgage and Housing Corporation (CMHC), acceptable housing is in adequate condition (does not require major repairs), of suitable size, and affordable (costs less than 30% of before-tax household income).⁴ A household is said to be in core housing need if its housing fails to meet one of these standards and if it is unable to pay the median rent for alternative local housing meeting all standards without spending 30% or more of its before-tax income. This paper focuses strictly on households that spend 30% or more of their budget on housing and does not look at the concept of core housing need.⁵

Housing that is not affordable is more common than housing that is overcrowded or needs repair. In 2001, 20.2% of households did not meet the classic affordability standard (less than 30% of before-tax household income spent on shelter). Of these households, 7.9% were deemed to have access to acceptable housing because they had enough income to pay the median rent in their local area, leaving 12.3% in core housing need (CMHC 2005).

Most families live in affordable, adequate and suitable housing

Ninety-five percent of households lived in suitable housing and 93% lived in adequate housing in 2004, according to the Survey of Household Spending and the CMHC definition. Renters, however, were more likely than owners to live in overcrowded dwellings (8% versus 3%). Owners and renters were equally likely (about 7%) to live in housing in need of repair.

Affordability is generally a greater challenge. About 14% (or 1.7 million) of households spent 30% or more of their budget on shelter costs in 2004. Of these, 12% spent between 30% and 50%, and 2% spent 50% or

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Data source and definitions

The **Survey of Household Spending (SHS)** has been conducted annually since 1997. It gathers detailed information about household spending during the previous calendar year. The survey covers about 98% of the population in the 10 provinces. People living in residences for senior citizens (such as nursing homes) as well as those in all types of institutions (including hospitals and prisons) are excluded. Data for the territories were collected for the years 1997 to 1999, but sampling variability precludes release.

The SHS samples over 20,000 households. The analysis here focuses exclusively on full-year households. Households that both rented and owned during the year (mixed tenure) are excluded.

A **full-year household** is a person or group of persons occupying one dwelling unit. The number of households, therefore, equals the number of occupied dwellings. A full-year household has at least one full-year member.

Total household income before taxes includes income from earnings, investments, government transfers, and other sources. Households reporting zero or negative income are excluded.

Investment income includes dividends, interest, net rental income, and interest from loans or mortgages.

Government transfers are the Child Tax Benefit, Old Age Security, Guaranteed Income Supplement, the Allowance, Canada or Quebec Pension Plan benefits, Employment Insurance benefits, the GST credit, provincial tax credits, social assistance, provincial income supplements, workers' compensation benefits, veterans' pensions, Civilian War Pensions and Allowances, and other income from government sources.

Other income covers pensions, annuities, RRIF withdrawals, and other money income such as alimony, separation allowance, child support, retirement allowance, severance

pay, income maintenance plan payments, scholarships, bursaries, and income from outside Canada.

Other money receipts include money gifts received from persons outside the household, cash inheritances, life insurance settlements, and net winnings from games of chance.

Total household expenditures are expenses incurred during the year for food, shelter, household operations, household furnishings and equipment, clothing, transportation, health care, personal care, recreation, reading materials, education, tobacco products and alcoholic beverages, games of chance, and miscellaneous items. Also included are personal taxes, personal insurance payments and pension contributions, and gifts of money and contributions to persons outside the household.

Shelter costs consist of rent, regular mortgage payments (principal and interest), property taxes, condominium fees, as well as electricity, fuel, water, and other municipal services.

Severely shelter-cost burdened households spend 50% or more of their income or expenditures on shelter. **Moderately burdened households** spend 30% to 49.9%.

A **census metropolitan area (CMA)** has a population of at least 100,000 and consists of one or more adjacent municipalities situated around a major urban core. A large CMA is defined here as having a population of at least 500,000, and a small CMA as 100,000 to 499,999. **Towns** are defined as urban centres having a population less than 100,000. **Rural areas** include all territory lying outside urban areas.

Based on the **low-income measure**, a family is deemed to be in low income if its income is less than 50% of median family income adjusted for family composition.

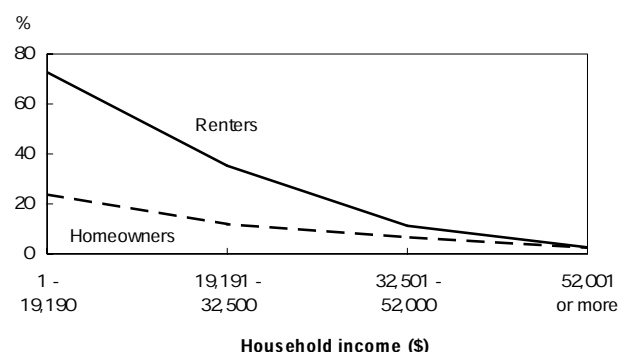
more. Households spending 50% of their income can be considered severely cost-burdened and those spending 30% to 50% moderately cost-burdened (Pomeroy 2001).

Renters more likely to experience affordability problems

About one-third of households in 2004 were renters, many of whom lived alone. Compared with owners, they are more likely to be in large census metropolitan areas and to be living in low income.⁶ Renters and owners differ considerably, with owners having at least twice the income of renters and substantially more

wealth (Hulchanski and Shapcott 2004, 5). As a result, renters are more likely to experience housing affordability problems. In fact, 31% of renters spent 30% or more of their budget on shelter compared with only 6% of owners (Chart A). The gap was particularly evident in the lowest quarter of the income distribution. Here almost three-quarters of renters did not meet the affordability standard compared with only a quarter of owners. In the top income quarter, the difference between the two disappeared, with neither renters nor owners in this position. The majority of renters are non-subsidized and are the focus of this article (for a discussion of subsidized renters, see *Subsidized housing not necessarily synonymous with affordability*).

Chart A Renters spending 30% or more of their budget for housing decreases sharply as income increases



Source: Statistics Canada, Survey of Household Spending, 2004

Shelter costs eat up most of the budget for renters, less so for owners

Generally speaking, average and median household expenditures for renters are considerably lower than for owners (with or without a mortgage). This was true for all categories in the SHS, including food, shelter, clothing, and recreation. Although those in subsidized housing had lower shelter costs, they also had lower expenditures in all categories. Since renters and those in subsidized housing tend to have lower incomes, they spend mainly on necessities. The former spent just under 40% of their budget on food, shelter and clothing while the latter spent 49% (Chart B). Owners without a mortgage spent the smallest portion of their household budget on basic necessities (24%).

Québec has lowest shelter costs, Toronto the highest

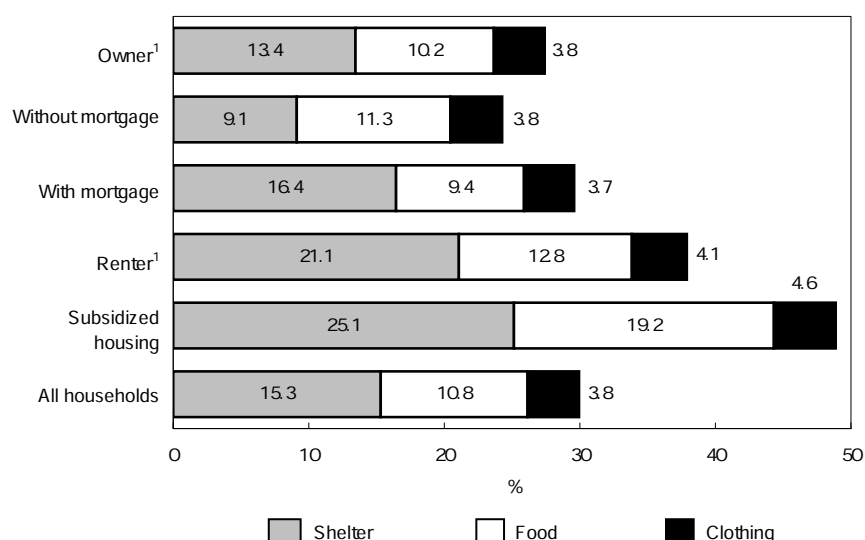
According to CMHC, basic shelter costs consist of rent or regular mortgage payments, condominium fees, utilities (water, fuel, and electricity), and property taxes (Table 1). The average shelter cost in 2004 was \$9,400, about 15% of the average household budget. Large metropolitan areas, particularly Toronto and Vancouver, had the highest spending on rents. About one-third of Toronto renters spent 30% or more of their budget on shelter (Table 2). Montréal had the highest proportion of renters (46%), but they were slightly less likely than average to have shelter affordability problems (28%). Québec had the lowest annual mortgage payments, but also a lower proportion of owners than the national average (55% versus 65%). Toronto posted the highest average spending on utilities (\$3,200 annually) and the highest property taxes (\$3,200). Households in Atlantic region CMAs spent the least on property taxes, particularly Saint John (\$1,400).

Table 1 Average annual expenditures on shelter components in select CMAs

	Rent	Mortgage	Water, fuel, electricity	Property taxes	Annual shelter costs	Proportion of renters ¹
			\$			%
Toronto	9,370	12,080	3,210	3,170	12,730	28.1
Calgary	7,820	10,190	2,680	1,880	11,640	24.3
Vancouver	8,790	12,180	1,970	2,230	11,520	33.3
Ottawa	F	9,460	2,510	3,060	10,950	F
Victoria	7,740	12,130	1,320	2,030	10,880	33.9
Edmonton	7,430	8,320	2,680	1,930	9,790	24.0
Canada	7,040	8,680	2,330	2,190	9,390	28.1
Saskatoon	5,950	7,210	2,620	2,450	9,280	26.3
Halifax	6,930	7,640	2,230	1,780	8,930	29.7
St. John's	5,280	7,700	2,580	1,470	8,540	20.9
Regina	5,470	5,960	2,520	2,310	8,470	23.9
Montréal	6,430	6,850	1,670	2,750	8,310	45.5
Saint John	5,410 [†]	7,560	2,470	1,430	7,970	28.0 [†]
Winnipeg	5,810	5,610	2,350	2,300	7,940	24.9
Québec	6,770	5,250	1,520	2,190	7,530	40.8
Towns (under 100,000)	5,620	7,110	2,220	1,700	7,750	19.2
Rural areas	5,260	6,820	2,370	1,360	6,870	4.7

¹ Excludes those in subsidized housing.

Source: Statistics Canada, Survey of Household Spending, 2004

Chart B Mortgage-free owners spent proportionately the least on basics

1 Excludes those in subsidized housing.

Note: Based on average costs and expenditures, after adjusting for household size.

Source: Statistics Canada, Survey of Household Spending, 2004

ent on government transfers as their main source of income (81%), and were highly likely to be in the bottom quarter for income and expenditure (80% and 82% respectively). About 44% had a physical disability compared with only 16% of households without an affordability problem. Households with a severe shelter-cost burden also had very little employment earnings (\$1,300 annually) compared with households with no affordability problem (\$40,200 annually on average).

One-person renter households were the most common household type among those with a moderate cost burden, but many families were also found in this category. About 8% of renters with a moderate shelter-cost burden were lone-parent families, 17% were non-senior families, and 10% were senior families. While those with a severe shelter-cost burden were for the most part in the bottom quarter for household income (up to \$19,190 per year), those with a moderate burden showed a more even distribution by income. The latter tended to be slightly larger households (1.7 persons) than their counterparts with a severe burden (1.4).

Table 2 Households spending 30% or more of their budget on shelter

	Expenditures	Owners only
	%	
Canada	30.7	5.6
Toronto	31.7	8.7 ^F
Calgary	31.6	9.1 ^E
Vancouver	30.4	11.5
Victoria	32.2 ^F	F
Edmonton	32.7 ^F	5.1 ^E
Montréal	28.5	5.9 ^F
All other CMAs		
100,000 and over	36.2	6.9 ^F
Towns (under 100,000)	31.3	3.4 ^F
Rural areas	18.7	2.9

Note: Excludes those in subsidized housing.

Source: Statistics Canada, Survey of Household Spending, 2004

Renters with a severe shelter-cost burden earn substantially less

The 30% threshold of housing affordability is a rather arbitrary measure (CRA 1997; Miron 1984; Hulchanski 2005). This section examines differences between renters with moderate (30% to 49%) and severe (50% or more) shelter-to-expenditure ratios. Renters with a severe shelter-cost burden are a diverse group, although one-person households have a greater tendency to fall into this category. About 40% were non-seniors living alone, and 33% were seniors living alone (Table 3). Renters with a severe shelter-cost burden also tended to be depend-

Renters with a severe shelter-cost burden have little room for discretionary spending

Renters in the severe burden category spent 53% of their total budget on basic necessities compared with 28% among renters with no affordability problem (Chart C). The proportion of the budget going toward food was similar for all groups. Clothing expenses were also fairly similar. However, although severely

Table 3 Renter households by shelter-cost burden

	Severe		Moderate		None	
	Expenditures	Income	Expenditures	Income	Expenditures	Income
			%			
Renters	7.3	12.2	23.3	23.1	69.4	64.8
Household type						
Senior living alone	33.4	24.9	22.5	21.0	5.5	5.8
Other senior	9.4	4.6	10.3	10.0	16.0	13.3
Non-senior living alone	40.0	41.6	38.0	34.3	29.7	28.9
Non-senior couple	7.9 ^f	15.0	15.1	18.7	42.5	42.9
Other non-senior	F	F	2.2 ^e	1.9 ^e	3.0	3.2
Lone-parent family	F	8.0 ^f	7.9	8.6	6.6	6.2
Disability						
Yes	44.1	37.1	32.5	30.0	15.5	16.0
No	55.9	62.9	67.5	70.0	84.5	84.0
Major source of income						
Wages and salaries	F	19.8	30.7	36.5	77.1	78.6
Self-employment	3.2	4.3 ^f	4.8	5.9	6.0	5.5
Investments	F	F	1.8 ^e	F	1.2	0.9
Government transfers	80.8	67.9	54.6	47.8	10.6	10.1
Other	F	6.3 ^f	7.0	7.5	4.9	5.0
Household income						
Up to \$19,190	80.1	83.4	53.7	44.6	10.0	5.1
\$19,191 to \$32,500	16.9	15.1	32.5	42.8	23.3	21.2
\$32,501 to \$52,000	3.0	1.5	11.1	10.4	31.8	35.2
Over \$52,000	F	F	2.8	2.2	34.9	38.5
Total expenditure						
Up to \$22,135	81.9	65.3	57.6	47.9	7.7	8.7
\$22,136 to \$34,409	15.1	21.7	31.4	30.9	24.0	22.7
\$34,410 to \$52,361	3.0	9.1	8.9	15.9	32.9	32.0
Over \$52,361	0.0	4.0	2.2	5.4	35.4	36.6
Average household size	1.4	1.6	1.7	1.8	2.2	2.2
			\$			
Shelter costs	9,440	8,980	8,280	8,340	8,340	8,280
Total expenses	15,860	22,960	22,640	26,490	49,530	49,710
Income before taxes	15,050	14,030	21,390	22,560	47,990	51,050
Earnings	1,280	3,050	8,520	10,190	40,160	43,010
Government transfers	11,160	9,350	9,570	9,090	4,640	4,810
Other money receipts	580	3,730	1,070	770	1,350	570

Note: Excludes those in subsidized housing.

Source: Statistics Canada, Survey of Household Spending, 2004

Table 4 Odds ratios of logistic regression models

	Renters spending 30% or more on shelter	
	Expenditures	Income
Household type		
Senior living alone	1.41	0.56
Senior couple	1.10	0.30*
Other senior	0.88	0.27
Non-senior living alone	1.25	0.65
Couple with or without children (ref)	1.00	1.00
Lone-parent family	1.38	1.18
Other non-senior	2.42	1.21
Place of residence		
Toronto	4.13*	3.08*
Vancouver	3.16*	2.43*
Montréal	1.23	0.90
Calgary	4.07*	3.01*
Edmonton	2.28	1.91
Victoria	1.29	1.96
CMA 100,000 to 499,999 other than above	1.42	1.24
Town (under 100,000)	0.91	0.80
Rural area (ref)	1.00	1.00
Major source of income		
Self-employment	1.63	2.44*
Government transfers	5.52*	6.38*
Investments	2.09*	7.28*
Other	3.46*	3.32*
Wages and salaries (ref)	1.00	1.00
Number of earners		
One	0.73	0.69
Two or more	0.41*	0.34*
None (ref)	1.00	1.00
Disability		
Yes	1.41	1.06
No (ref)	1.00	1.00
Other money receipts		
Yes	0.86	2.63*
No (ref)	1.00	1.00
Total household income		
Up to \$19,190	18.42*	...
\$19,191 to \$32,500	4.79*	...
Over \$32,500 (ref)	1.00	...
Total expenditure		
Up to \$22,135	...	14.08*
\$22,136 to \$34,409	...	3.76*
Over \$34,409 (ref)	...	1.00

* Significant difference from the reference group (ref) at the .05 level.

Notes: Full-year households only, subsidized households excluded.

Source: Statistics Canada, Survey of Household Spending, 2004

burdened households managed to find the money to cover their basic needs, they had little left for discretionary spending.

Renters in Toronto, Vancouver and Calgary have higher odds of affordability problems

Many factors combine to explain why some renter households have a higher shelter-cost burden than others. Logistic regression was used to single out the factors most affecting housing affordability. The model tested the effects of each variable on the probability of spending 30% or more on shelter while holding all other variables constant.

Rents vary considerably across the country, and for the most part, the larger the city, the higher the costs. In the largest cities, just under a third of renters spent 30% or more of their household budget on shelter, compared with just 19% in rural areas. Even after taking into account income levels and other household characteristics, Toronto and Calgary renters had four times the odds of spending 30% or more on shelter than renters in rural areas (Table 4). Those in Vancouver also had higher odds.

Household income is key

Some households simply may not have the capacity to reduce their housing expenditures. Others may spend a large proportion of their income on housing because they have chosen to live in a larger home or a particular neighbourhood. Nonetheless, renters with income up to \$19,190 per year had 18 times the odds of being cost-burdened compared with those in the top half of the income distribution. The odds were 5 times for those with income between \$19,190 and \$32,500. No matter whether the household consisted of an individual living alone, a lone-parent family, or a senior family, being in low income was a highly significant factor in being shelter-cost burdened.

The main source of household income was also important. Renters with housing affordability problems who had government transfers as their main source of income had almost 6 times the odds of being cost-burdened compared with wage and salary earners. Having two earners in the household compared with no earners reduced the odds significantly.

Methodology

Because of differences in methodology, the proportion of those with housing affordability problems varies with different sources. The census is the most common source for determining housing affordability ratios. However, the Survey of Household Spending (SHS), in addition to being annual, has other advantages.

First, unlike the census, the SHS collects information on income and shelter expenditures for the same reference period. Second, in the SHS, households moving between rental and owned accommodation during the reference year are asked about both rent and mortgage payments. In the census, those who are renting on the day of the census are asked about their rent while owners are asked about their mortgage and other payments. Third, the SHS collects more detailed housing information—for example, utility expenses, vacation home expenses, insurance premiums, maintenance and repairs, and deductions from expenses for owning a business or farm (see *Data source and definitions*).

When it comes to calculating the shelter-to-income ratio, the SHS provides a choice of denominators: income or expenditure. Income may not always represent the full range of resources a household has at its disposal. For example, it does not consider asset liquidations, other money receipts, or expected future changes in income (Miron 1984, 147). Some households have investment losses that reduce income even though their cash flow remains steady. Similarly, households with a self-employed principal earner may have incomes that fluctuate from year to year. Such households may compensate by using savings, cashing in investments, or borrowing—none of which are income. However, these strategies even out cash flow to pay for daily expenses.

Comparing shelter costs with expenditures instead of income may represent a more realistic picture of a household's standard of living. Even with zero or negative income, a household may still have the necessary money to meet their needs. On the other hand, a household with high income may spend very little because of large debts or the anticipation of a drop in income. In 2004, 92,000 full-

year households (0.8% of all households) had shelter costs that exceeded their income. Of these, 50% received money gifts from persons outside the household, cash inheritances, life insurance settlements, or winnings from games of chance. Another 9% relied on self-employment income.

Using the traditional income-based approach, about 163,000 households are eliminated from the sample because their income is either zero or negative.² Using the expenditure base, only 59,000 households are eliminated because of unreported expenditures or shelter costs exceeding total expenditures.

	Income based	Expenditure based
		'000
All full-year households	11,790	11,893
Households excluded	163	59
		%
Housing affordability ratios		
Less than 30%	83.1	86.0
30% or more	17.0	14.0
30% to less than 50%	12.4	11.6
50% or more	4.6	2.4

Source: Statistics Canada, Survey of Household Spending, 2004

The income-based affordability ratio is slightly higher (3.0 percentage points) than the expenditure measure for those spending 30% or more on shelter costs.³ The main difference lies with households spending 50% or more, likely because the expenditure denominator eliminates a number of income outliers. That is, the expenditure method gives a more realistic picture of standard of living. The differences between the two methods are much less pronounced for those who spent 30% to less than 50% (a difference of only 0.8 percentage points).

The logistic regression points out differences between the income and expenditure approach. For example, using the income measure, self-employment as the main source of income and receiving money from gifts and inheritances significantly affected affordability. This was not so using the expenditure measure, suggesting that the income-based measure may exaggerate the degree to which self-employed households incur a burden. Many self-employed individuals do not have steady income every month. The income

Homeowners and shelter affordability

The number of homeowners spending 30% or more of their income on shelter was relatively small compared with renters (6% versus 31%) (Table 2). For these owners, the situation may have been temporary or a matter of life-style choice—for example, in the case of young families who are likely to have large mortgage payments or debts. In fact, according to the CMHC definition of core housing need, about half of owners who spent 30% or more of their income on shelter in 2001 had sufficient income to rent affordable housing in their area (CMHC 2005).

Table 5 Distribution of select characteristics by household tenure type

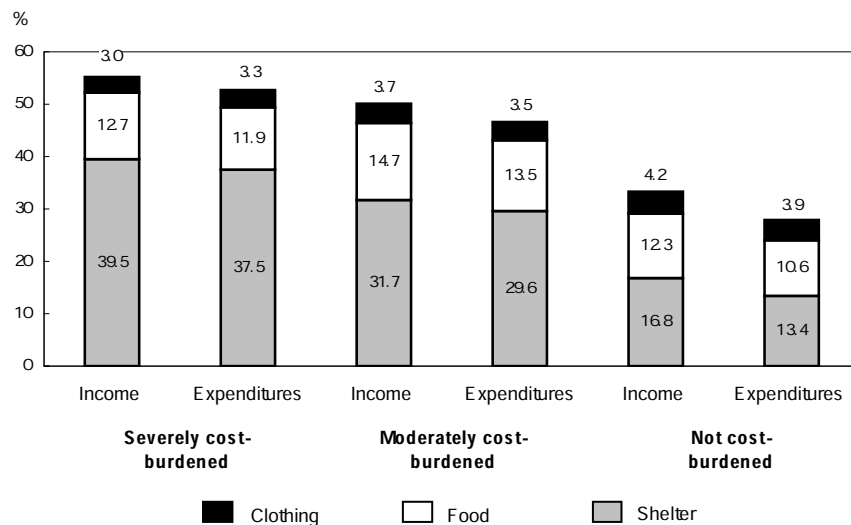
	Total households	Subsidized housing	Renters ¹	Mixed ²	Owners	
					With mortgage	No mortgage
			</			

¹ Minus those in subsidized housing.

² Refers to households that both rented and owned in the same year.

Source: Statistics Canada, Survey of Household Spending, 2004

Chart C Regardless of their shelter costs, renters spent similar proportions on food and clothing



Note: Based on average costs and expenditures, adjusted for household size.
Source: Statistics Canada, Survey of Household Spending, 2004

measure may therefore not reflect their management of regular expenses whereas their total expenditure information would.

Summary

Measuring housing affordability is difficult. In some households, a high shelter-cost ratio stems from a choice based on spending priorities; in others, it is a valid indicator of housing affordability problems. Using the expenditure-based methodology, renters were found to be more susceptible to affordability problems. Although the majority live in affordable housing, 31% spent 30% or more of their budget on shelter. These households consist mostly of individuals living alone, those relying on government assistance, and those in low income. Somewhat surprisingly, food and clothing expenses took up a similar

proportion of the budget for all groups, regardless of their ability to afford housing.

Although shelter costs vary considerably across Canada, income is the major factor affecting affordability. Non-subsidized renter households in the bottom quarter of the income distribution had 18 times the odds of having an affordability problem, even taking into account the age structure of the household and place of residence. A number of factors may be at play, including the major source of household income. Reliance on government transfers was significantly associated with having an affordability problem. Having two earners reduced the odds significantly.

Housing policy has long used one single indicator of affordability based on the census. Using the Survey of Household Spending, the

Subsidized housing not necessarily synonymous with affordability

The vast majority of households living in government-subsidized housing (about 470,000 households in 2004) are renters. Social or subsidized housing generally refers to housing that receives ongoing public subsidies to reduce rents to 25% to 30% of household income (Chisholm 2003). Households were asked whether they lived in government-subsidized housing, but not the amount or type of subsidy they received. These households made up about 6% of all renters in 2004. Many different types of households were involved, although most were individuals living alone (the likelihood of being a senior or a non-senior living alone and in subsidized housing is the same at about 30%). Two-thirds relied on government transfers as their main source of income (Table 5).

Although renters in subsidized housing had considerably lower average shelter costs than others (\$5,200 versus \$8,300), they also had lower household income and expenses. As a result, many were still paying 30% or more of their income or expenses on shelter costs. (About 18% were spending 30% to 34.9% of their budget on shelter costs, and 12% were spending 35% or more.)

expenditure ratio can provide a timelier and richer understanding of the concept of housing affordability.

Perspectives

Notes

- 1 Excludes those in subsidized housing.
- 2 CHMC relies mostly on census data for affordability calculations. As a result, they exclude farms and on-reserve housing.

3 Using the 2001 Census, CMHC's calculation of those spending 30% or more on shelter was 20.2%.

4 Affordability was originally set at 25%, its origin dating back to the 19th century when the accepted underwriting standard was one week's wages in four going for housing.

5 The core-need approach is useful because it considers affordability in the context of adequacy and suitability by eliminating households that could afford to pay the median rent in the same local area (Miron 1984, 121). In other words, it separates out those over-consuming or under-consuming housing. Although this paper does not look at core housing need, of the 14% of households spending 30% or more of their budget on shelter, about 7% lived in inadequate dwellings and 5% in unsuitable dwellings.

6 Based on the low-income measure. See *Data source and definitions*.

■ References

Canada Mortgage and Housing Corporation (CMHC). 2005. *2001 Census Housing Series: Issue 8 Revised: Households Spending at least 50% of their Income on Shelter*. Socio-economic series: 05-004. Ottawa. CMHC. 12 p.

Carter, Tom and Chesya Polevychok. 2004. *Housing is Good Social Policy*. Research Report F|50. Ottawa. Canadian Policy Research Networks. 63 p.

Chisholm, Sharon. 2003. *Affordable Housing in Canada's Urban Communities: A Literature Review*. Research report. Ottawa. Canada Mortgage and Housing Corporation. 60 p.

Clayton Research Associates (CRA). 1997. *Research on an Improved Measure of Affordability for Estimating Housing Need in Canada*. Ottawa. Canada Mortgage and Housing Corporation. 52 p.

Hulchanski, J. David. 2005. *Rethinking Canada's Housing Affordability Challenge*. Discussion paper. University of Toronto. Centre for Urban and Community Studies. 14 p.

Hulchanski, J. David and Michael Shapcott. 2004. "Introduction: Finding room in Canada's housing system for all Canadians." Ch. 1. In *Finding Room: Options for a Canadian Rental Housing Strategy*. J. David Hulchanski and Michael Shapcott (eds). University of Toronto. Centre for Urban and Community Studies.

Miron, John R. 1984. *Housing Affordability and Willingness to Pay*. University of Toronto. Centre for Urban and Community Studies. 153 p.

Pendakur, Krishna. "Consumption poverty in Canada, 1969 to 1998." 2001. *Canadian Public Policy*. Vol. 27, no. 2: 125–149.

Pomeroy, Steve. 2001. *Toward a Comprehensive Affordable Housing Strategy for Canada*. Ottawa. Caledon Institute of Social Policy. 30 p.