

Household sharing

This appendix describes the pattern of spending and sharing in typical Canadian two-parent and single-parent or two-person households. It also describes the discount rates applied to lost support.

When a household member is killed, her or his survivors together tend to lose that person's earnings net of her or his taxes and personal consumption. The survivors lose their consumption that the deceased supported from her or his income, while they save what the deceased consumed from their income. This appendix helps to estimate what the deceased household member would have consumed personally and thus what the survivors have lost.

Expenditure statistics

Table B–A sums up a special tabulation by Statistics Canada of its *Survey of Household Spending* for two-parent households with or without children. Besides the indicated levels of total pretax incomes, the number of persons in the household, and the average pretax income per person, it shows the aftertax figures for various categories of household expenditure. This broad-based set of statistics tends to represent a couple's household operation over several years or a lifetime better than the records usually available for a few years.

| Income range | ~ \$35,000 | ~ \$45,000 | ~ \$55,000 | ~ \$65,000 | ~ \$75,000 | ~ \$85,000 | > \$85,000 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Household income | 32,383 | 42,486 | 52,479 | 62,210 | 72,308 | 82,157 | 97,255 |
| <i>Number of persons</i> | 2.62 | 2.71 | 3.08 | 3.08 | 3.27 | 3.36 | 3.52 |
| Income per person | 12,360 | 15,677 | 17,039 | 20,198 | 22,113 | 24,451 | 27,629 |
| Common outlays | | | | | | | |
| Shelter (Mortgage payments, rent, etc.) | 8,329 | 9,751 | 11,234 | 12,978 | 13,644 | 15,458 | 16,445 |
| Furniture and equipment | 1,358 | 1,421 | 1,618 | 1,766 | 2,256 | 2,539 | 2,465 |
| Household operation | 621 | 726 | 852 | 952 | 980 | 1,255 | 1,131 |
| Half of transport, recreation, reading, etc | 4,618 | 6,324 | 7,458 | 9,333 | 11,345 | 11,458 | 13,543 |
| | 14,926 | 18,222 | 21,162 | 25,029 | 28,225 | 30,710 | 33,584 |
| Divisible outlays | | | | | | | |
| Food | 5,731 | 6,401 | 6,915 | 7,671 | 8,864 | 8,747 | 9,834 |
| Clothing | 1,431 | 1,796 | 2,119 | 2,625 | 3,079 | 3,379 | 3,608 |
| Personal care | 623 | 727 | 765 | 979 | 1,052 | 1,205 | 1,195 |
| Education | 493 | 533 | 765 | 783 | 1,078 | 1,598 | 1,921 |
| Alcohol, tobacco, games of chance | 1,333 | 1,843 | 1,610 | 2,009 | 1,892 | 1,769 | 1,874 |
| Half of transport, recreation, reading, etc | 4,618 | 6,324 | 7,458 | 9,333 | 11,345 | 11,458 | 13,543 |
| | 14,229 | 17,624 | 19,632 | 23,400 | 27,310 | 28,156 | 31,975 |
| After-tax expenditure | 29,154 | 35,846 | 40,794 | 48,429 | 55,534 | 58,865 | 65,558 |
| Percentages of aftertax household expenditure | | | | | | | |
| Common outlays | 51.2% | 50.8% | 51.9% | 51.7% | 50.8% | 52.2% | 51.2% |
| Divisible outlays | 48.8% | 49.2% | 48.1% | 48.3% | 49.2% | 47.8% | 48.8% |
| Divisible outlays per person | 18.6% | 18.1% | 15.6% | 15.7% | 15.0% | 14.2% | 13.9% |
| Benefiting any one household member | 69.8% | 69.0% | 67.5% | 67.4% | 65.9% | 66.4% | 65.1% |

[Source: Statistics Canada, *Survey of Household Spending, 2004, special tabulation by household composition and income*]

Appendix B
Household sharing

The benefit of sharing a household is that a member enjoys a higher level of support or standard of living than she or he could afford just from her or his own income. Not only do lower-income members share in the higher incomes of other members, but also all members benefit from sharing such common assets and outlays as the home.

The table thus analyzes the outlays into *personal or divisible* outlays, which the partners would have divided among themselves and the children, and *common or indivisible* outlays, which each household member could consume or enjoy without materially affecting the others:

Personal or divisible — Food, clothing, health care, personal care, and education, plus half of transportation, recreation, reading materials, miscellany, and gifts. These make up about half of total after-tax income, as Table B–A shows, and they tend to divide equally among the household members.

Common or indivisible — Housing, utilities, maintenance, and other household operation, furnishings and equipment, and the balance of transportation, recreation, reading materials, miscellany, insurance, pension contributions, and gifts. These approximate the other half of total after-tax income, as Table B–A also shows.

Table B–B shows the comparable analysis for single-parent households.

| Income range | Average | ~ \$15,000 | ~ \$20,000 | ~ \$25,000 | ~ \$35,000 | ~ \$45,000 | > \$45,000 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Household income | 45,253 | 11,303 | 17,622 | 22,273 | 30,117 | 39,024 | 74,855 |
| Number of persons | 2.60 | 2.33 | 2.49 | 2.59 | 2.45 | 2.76 | 2.71 |
| Income per person | 17,405 | 4,851 | 7,077 | 8,600 | 12,293 | 14,139 | 27,622 |
| Common outlays | | | | | | | |
| Shelter (Mortgage payments, rent, etc.) | 10,665 | 7,112 | 6,782 | 7,627 | 9,125 | 9,809 | 14,185 |
| Furniture and equipment | 1,168 | 563 | 514 | 705 | 1,022 | 1,293 | 1,620 |
| Household operation | 819 | 677 | 516 | 607 | 556 | 777 | 1,107 |
| Half of transport, recreation, reading, etc | 6,532 | 2,147 | 1,963 | 2,632 | 4,205 | 5,285 | 11,092 |
| | <u>19,184</u> | <u>10,499</u> | <u>9,775</u> | <u>11,571</u> | <u>14,908</u> | <u>17,164</u> | <u>28,004</u> |
| Divisible outlays | | | | | | | |
| Food | 6,328 | 4,630 | 4,441 | 5,214 | 5,503 | 6,285 | 7,882 |
| Clothing | 2,192 | 1,058 | 1,078 | 1,321 | 1,612 | 2,237 | 3,206 |
| Personal care | 836 | 432 | 507 | 576 | 546 | 856 | 1,206 |
| Education | 1,233 | 1,114 | 443 | 650 | 669 | 791 | 1,967 |
| Alcohol, tobacco, games of chance | 1,364 | 804 | 927 | 988 | 1,130 | 1,391 | 1,801 |
| Half of transport, recreation, reading, etc | 6,532 | 2,147 | 1,963 | 2,632 | 4,205 | 5,285 | 11,092 |
| | <u>18,485</u> | <u>10,185</u> | <u>9,359</u> | <u>11,381</u> | <u>13,665</u> | <u>16,845</u> | <u>27,154</u> |
| After-tax expenditure | 37,669 | 20,683 | 19,133 | 22,952 | 28,573 | 34,009 | 55,157 |
| Percentages of aftertax household expenditure | | | | | | | |
| Common outlays | 50.9% | 50.8% | 51.1% | 50.4% | 52.2% | 50.5% | 50.8% |
| Divisible outlays | 49.1% | 49.2% | 48.9% | 49.6% | 47.8% | 49.5% | 49.2% |
| Divisible outlays per person | 18.9% | 21.1% | 19.6% | 19.1% | 19.5% | 17.9% | 18.2% |
| Benefiting any one household member | 69.8% | 71.9% | 70.7% | 69.6% | 71.7% | 68.4% | 68.9% |

[Source: Statistics Canada, Survey of Household Spending, 2004, special tabulation by household composition and income]

Survivors' shares

As noted and as Tables B–A and B–B show, common or indivisible outlays tend to make up at least half of all aftertax outlays. This holds for two-parent households and single-parent households, and for all income levels. Each household member can use or enjoy this common support without affecting another's share. To avoid double-counting, however, I assign the common share to the survivor who is likeliest to reside longest in the household, usually the spouse. The divisible outlays, except for such known, material amounts as school tuition and fees, tend to divide equally among the survivors.

Savings, gifts to nonmembers, and other outlays not consumed in the household tend to divide similarly between common and divisible outlays. Typically, a surviving spouse in a formerly two-parent family would have enjoyed the common half of the deceased person's aftertax earnings, plus the survivor's *pro-rata* share of the divisible half. Table B–C shows typical survivors' shares.

| Preaccident household size | Survivors' shares of lost aftertax income | | | |
|----------------------------|---|-----------|-------|------------------------------|
| | Principal or spouse | | | Other members — Divisible |
| | Common | Divisible | Total | |
| 2 | 1/2 | 1/4 | 3/4 | 1/4 |
| 3 | 1/2 | 1/6 | 2/3 | 1/6 |
| 4 | 1/2 | 1/8 | 5/8 | 1/8 |
| 5 | 1/2 | 1/10 | 3/5 | 1/10 |

The deceased person would similarly have shared any survivors' incomes. Thus a lower-income survivor, one who earned less than the deceased, tends to have a greater loss than someone who earned more than the deceased and thus helped to support the deceased. Unless a child would eventually have contributed to the parents support, the loss of a child tends not to create a loss of support.

Discount rate

Future support and losses are discounted, as in Appendix A. The joint survival probabilities apply, or the chances that the deceased and each survivor would both have reached each year [§A.2]. The discount rate depends upon the source of the lost household income [§A.1]:

Employment or self-employment — The discount rate that applies to lost support from the deceased person's employment earnings is the 2½% per year for items arising from employment and employment earnings. That rate allows for the time value of money and for future wage- and price-level changes.

Indexed pension — If the deceased person received an indexed pension, like the Canada Pension Plan [CPP] or a public employee's pension, future amounts are discounted at 3½% per year, which allows for the time value of money and for future price-level changes. Pensions can be adjusted by formula, like the CPP or a public employee's pension, or periodically even if not by formula.

Nonindexed pension — The purchasing power or value of a pension that is not usually adjusted for inflation would tend to erode as the price level rose. Such a pension would be discounted at about 6% per year, which allows for the time value of money as well as typical price inflation of nearly 2½% per year.