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A Guide to Statistics Canada Pension and Wealth Surveys

by Pensions and Wealth Surveys Section

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Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

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Introduction

This guide will be of assistance in understanding the concepts, methodology and data quality of the surveys conducted and the data analyzed by the Pensions and Wealth Surveys Section of the Income Statistics Division. It covers the following surveys/programs:

- Pension Plans in Canada;
- Trusteed Pension Funds (Census and Quarterly);
- Survey of Financial Security; and
- Pension adjustment/RRSP data file provided by Canada Customs and Revenue Agency.

The guide also includes a list of definitions.

For further information, please contact Client Services (1-888-297-7355; 613-951-7355; fax: 613-051-3012; income@statcan.ca) Income Statistics Division.

CHAPTER I

Pension Adjustment/ Registered Retirement Saving Plans (PA/RRSP) file

1. Objective of survey / Overview

The Pension Adjustment / Registered Retirement Saving Plans (PA/RRSP) file provides information on the number of Canadians participating in registered pension plans (RPPs) and contributing to registered retirement savings plans (RRSPs) for the taxation year. The PA/RRSP file is a longitudinal and cross-sectional file constructed from the information provided annually to the Canada Customs and Revenue Agency (CCRA) in individual tax returns (T1 forms).

The longitudinal data from the PA/RRSP file can be used to determine the characteristics of those who saved through either an RPP or an RRSP and how frequently they saved. This information can be produced because of changes to the *Income Tax Act* in 1991 that require the calculation of a pension adjustment (PA) for each employee belonging to (accruing benefits in) an RPP. The cross-sectional data can be used to generate a profile of those who do and do not participate in these programs, and to see how much RRSP room is being used and by whom.

Annual data on the PA/RRSP file have been produced since 1991 and released on a biennial basis.

2. General methodology

A. Universe and target population

The target population is the universe of individuals that filed a T1 return.

B. Data collection and sources

The PA/RRSP file contains administrative data that was created from information provided to Statistics Canada by the Canada Customs and Revenue Agency. The main data come from the T1 returns.

C. Sampling

The data are produced from a 2% sample of all taxfilers. The sample is selected by choosing the last two digits of the Social Insurance Number (SIN). Once the sample selection is completed the SIN is dropped from the file. Each record is then weighted by 50.

D. Processing and estimation methodology

The main processing of the data is done by the Canada Customs and Revenue Agency. However, Statistics Canada proceed with some adjustment when the sample is selected. Specifically for the following cases:

- when the pension adjustment amount is very large,
- when the date of death of a taxfiler is not known,
- when the birth date of a taxfiler is 0, the record is excluded.

For the output tables, the following conditions are observed:

- for the longitudinal tables, the taxfilers who submitted a tax return in each of the years covered in the longitudinal period are selected,
- for the cross-sectional tables, the actual numbers of taxfilers in the tax year is selected,
- a conversion with the consumer price index (CPI) is applied to current dollars amounts to derive the amount in constant dollars.

3. Reference period

The reference period is the taxation year. The demographic variables such as the age and sex are at December 31.

4. Revisions and adjustments

Each year, the PA/RRSP file is updated by adding, to the information on each taxfiler, the preliminary data for the most recent tax year and updated data for the previous tax year. Late taxfilers represented about 4% of 1997 total returns.

Starting with 1999 tax year, there will be no revision as the data will reflect the most up-to-date information.

5. Concepts and variables measured

The PA/RRSP file is a multi-year data file that contains for each taxfiler, information on their retirement savings behaviour for the year 1991 to 1999. For example, it specifies the individual's RRSP contribution, RRSP contribution room, pension adjustment (PA), past service pension adjustment (PSPA) and pension adjustment reversal (PAR). A list of the data items is presented in the appendix A.

These data are in conformity with the provisions of the *Statistics Act*, available only at the aggregate level in order to ensure confidentiality of information about individual taxfilers.

In multi-year tables, the dollars amounts are converted in constant dollars with the CPI index.

In calculating RRSP contribution room for a given year, the Canada Customs and Revenue Agency uses the PA from the previous year. To provide a more accurate picture of the "savings" taking place in one year, the relevant tabulations use the RRSP contributions and the PA from the same year.

The PA is a measure of the value of the pension accrued by an RPP member for the year and can be used, with some limitations, as a proxy for RPP savings. Because the PA identifies everyone accruing benefits in an RPP in a particular year, it can be combined with information on RRSP contributors to determine the extent to which Canadians are saving for retirement, through participation in at least one of these programs.

The PA/RRSP file is based on individual tax returns and does not provide any information on family income. An individual's ability or decision to contribute to an RRSP can depend on both the husband's and wife's combined income. Contributions to a spouse's RRSP are also not identifiable as such, as they cannot be distinguished from contributions to one's own RRSP.

6. Data accuracy / quality

To provide data users with an indication of the reliability of the data produced from a 2% sample file, differences in the 1991 to 1993 data using a 100% file and a 2% sample were calculated for various levels of disaggregation.

As expected, the reliability of the data increased with the number of taxfilers in a particular level of aggregation. When the number of taxfilers was less than 10,000 data were accurate within 20% two-thirds of the time; they could be off by 50%. When the number of taxfilers was between 10,000 and 50,000, data were accurate within 5% two-thirds of the time; they could be off by 10%. For aggregations of 50,000 to 1000,000 taxfilers, data were accurate within 5% and for those of more than 100,000 taxfilers, they were almost always accurate within 1%.

7. Comparability of data and related sources

The Small Area and Administrative Data Division (SAAD) at Statistics Canada produce annual information on RRSP contributions from the personal tax returns (Survey number 4106). This data is used to compare at aggregate level for trends.

8. Definitions

Canada/Quebec Pension Plan (C/QPP) benefits: Retirement and disability pensions paid to participants as well as survivor benefits paid to the participants' spouses and dependent children.

Cash withdrawals from RRSPs: Amounts withdrawn from RRSP accounts normally in cash, but could be in other forms such as shares. It excludes funds withdrawn under the Home Buyers Plan or Lifelong Learning Plan.

Constant dollars: Dollars expressed in terms of the value of the dollar in a particular year. For example, all values might be expressed in 1999 dollars.

Deducted RRSP contributions: The amount allowed as a deduction on line 208 of the income tax return. It is the sum of normal contributions to the taxfiler's own or spouse's RRSP that reduce contribution room, plus any transfers which may not reduce room.

Deferred profit sharing plan (DPSP): An employer-sponsored savings plan registered with the Canada Customs and Revenue Agency. Contributions to these plans by the employer (employees cannot contribute) are based on profits. The amount accumulated in these plans can be paid out as a lump sum at retirement or termination of employment transferred to an RRSP, received in installments over a period not to exceed ten years or used to purchase an annuity.

Earned income: The income that is used to determine the RRSP deduction limit. It includes such items as: employment income (less union, professional and like dues and expenses), net business and rental income, disability payments and alimony received. Alimony paid, current year business and rental losses are deducted from this amount. Most investment income (other than rents) is not considered earned income. In calculating the RRSP deduction limit, earned income from the previous year is used.

Home Buyers Plan (HBP): Program introduced by the federal government in its 1992 budget allowing individuals to borrow up to $20,000 from their RRSPs to buy or build a home. Commencing in 1999, the HBP has been revised to eliminate the rule that the plan can only be used once in a taxpayer's lifetime: the plan can be used again by a taxpayer commencing in the year after all repayments from the previous withdrawal have been made. However, the Plan may only be used again if the taxpayer has not owned a home in the past five years. The five-year rule will be waived in the case of a disabled person moving to a new home. As well, there are technical changes which benefit a surviving spouse when a HBP user dies. Yearly repayments are not tax-deductible. Amounts not repaid are considered to be RRSP income and are taxed; they are referred to as the HBP shortfall.

HBP Withdrawals: Amount withdrawn from an RRSP under the HBP rules.

Lifelong Learning Plan (LLP): The Lifelong Learning Plan permits, commencing in 1999, tax-free "borrowing" from an RRSP to fund the full-time education of the taxpayer or the taxpayer's spouse. The taxpayer can borrow up to $10,000 in one year to a maximum of $20,000 over four years. They must commence repayments after the end of the fifth year following the first withdrawal and repay the entire amount over ten years. Yearly repayments are not tax-deductible. Amounts not repaid are considered to be RRSP income and are taxed; they are referred to as the LLP shortfall.

LLP Withdrawals: Amount withdrawn from an RRSP under the LLP rules.

Marital status: As of December 31 and as reported on the income tax return. Categories are: married, common-law, widowed, divorced, separated, single, not stated.

Net income: As reported on line 236 of the income tax return. It is equal to total income less allowable deductions and adjustments for social benefits (Old Age Security/Employment-Insurance) repayment. Examples of allowable deductions are RPP, RRSP and SPP contributions, child and attendant care expenses, business investment loss, moving expenses, alimony or maintenance payments, carrying charges and interest expenses, exploration and development expenses.

Net PSPA: Total of exempt PSPAs and certified PSPAs for the year minus the RRSP qualifying withdrawals. The net PSPA reduces the RRSP deduction limit. A qualifying withdrawal is an amount withdrawn from an RRSP; it is considered as income and taxed. Such a withdrawal can be made when a PSPA cannot be granted certification because the PSPA amount is more than the RRSP deduction limit.

Old Age Security (OAS): Federal program that provides, among other benefits, a pension to Canadians 65 or older who meet the residency requirements. Benefits are taxable and, on a quarterly basis, fully indexed to the CPI. Some or all of the benefit is not paid if net income exceeds a certain level.

Other pension income: Includes RPP payments, amounts from general annuities, income-averaging annuity contracts, DPSPs or RRIFs paid to annuitants 65 or older or to annuitants' spouse of any age, as well as pensions from a foreign country.

Past Service Pension Adjustment (PSPA): Applies only to members of defined benefit RPPs. A PSPA occurs when the pension benefit is upgraded, or additional credits purchased, for service in past years. In the first case, it is called an exempt (from certification) PSPA; in the second case, a certifiable PSPA. Only service after 1989 is considered.

Pension Adjustment (PA): Calculated value of the pension accrued in the year in an RPP or a DPSP. The PA decreases the RRSP deduction limit. To calculate this limit, the PA from the previous year is used.

Pension Adjustment Reversal (PAR): The PAR increases a taxpayer's RRSP deduction limit. This usually occurs when a taxpayer leaves an RPP or DPSP before retirement and the termination benefit received is less than the total PA or PSPA reported previously. The difference between the termination benefit and the total PA or PSPA is the PAR.

Province or territory of residence: The province or territory where the individual lived as of December 31 and as reported on the income tax return.

Registered Pension Plan (RPP): An employer-sponsored plan registered with Canada Customs and Revenue Agency and most commonly also with one of the pension regulatory authorities. The purpose of such plans is to provide employees with a regular income at retirement.

Registered Retirement Income Fund (RRIF): A fund into which RRSP monies may be transferred. Payments from an RRIF may be varied, but a minimum amount must be withdrawn annually.

Registered Retirement Savings Plans (RRSP): A capital accumulation program designed to encourage saving for retirement. Contributions are tax-deductible within prescribed limits. Investment income earned in the RRSP is tax-exempt, but benefits are taxable.

RPP deduction: The employee contributions to an RPP that are deducted on line 207 of the income tax return. This does not include amounts contributed to the Canada or Quebec Pension Plans.

RPP savings/contributions: This is equivalent to the amount of the PA. For defined contribution plans, this is the total contributions made to the RPP in the year. For defined benefit plans, it is an estimate of the value of the benefit accrued in the year.

RRSP normal contributions: The amount deducted for contributions to the RRSP of the taxfiler or the taxfiler's spouse that is within the deduction limit of the contributor and that reduces his/her RRSP room.

RRSP deduction limit: The maximum amount that can be deducted from income (for income tax purposes) for an RRSP contribution in any year, including unused room from previous years. The annual new room is either a dollar amount or 18% of earned income, whichever is lower. For those who belong to an RPP or DPSP, the RRSP deduction limit is reduced by the amount of the pension adjustment.

RRSP income: Income originating from RRSPs in the form of lump-sum withdrawals or annuities; also included are the amounts not repaid to the HBP or the LLP (i.e. HBP/LLP shortfall).

RRSP room: See RRSP deduction limit.

Saskatchewan Pension Plan (SPP) deductions: The amount contributed to the SPP by members of the plan. The maximum deduction amount for each eligible taxfiler is $600.00. This amount reduces RRSP room.

Spousal RRSP: Plan set up for the benefit of a spouse. Contributions are claimed as a deduction by one spouse, but credited to the partner's RRSP.

Total income: As reported on line 150 of the income tax return. Generally, includes income from employment (including self-employment), Old Age Security, Canada or Quebec Pension Plan, pensions, investments, rents, alimony payments, withdrawals from Registered Retirement Savings Plans, payments from Workers' Compensation and from social assistance programs. Losses from rental property and self-employment have been deducted; employment expenses and other deductions have not.

Transfers: Transfer of eligible income into an RRSP. The money that is transferred is not taxable until later withdrawn from the RRSP.

Unused (undeducted) RRSP contributions: Contributions made to RRSPs since 1991 that were not claimed as an RRSP deduction on any tax return. Some of this would include amounts contributed to an RRSP in excess of the permitted entitlement. Prior to 1995, an individual could contribute a cumulative amount of up to $8,000 over and above their normal contributions, without penalty. The 1995 federal budget reduced this amount to $2,000.

Unused RRSP room: The amount of the RRSP deduction limit that is not claimed by the taxfiler. Unused room may be carried forward, indefinitely.

Appendix A

Selected variables of PA/RRSP File

The 1991 to 1999 file contains the following information on each taxfiler, in addition to their sex and age:

Item	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada and Quebec Pension Plans (C/QPP) benefits				x	x	x	x	x	x	x	
Deducted RRSP contributions		x	x	x	x	x	x	x	x	x	
Earned income	x	x	x	x	x	x	x	x	x	x	
Home Buyer's Plan (HBP) shortfall						x	x	x	x	x	
Home Buyers' Plan (HBP) repayments						x	x	x	x	x	
Home Buyers' Plan (HBP) withdrawal			x	x	x	x	x	x	x	x	
Lifelong Learning Plan (LLP) repayment										x	
Lifelong Learning Plan (LLP) shortfall										x	
Lifelong Learning Plan (LLP) withdrawal										x	
Marital status		x	x	x	x	x	x	x	x	x	
Net income				x	x	x	x	x	x	x	
Net past service pension adjustment (PSPA)			x	x	x	x	x	x	x	x	
Old Age Security (OAS) benefits				x	x	x	x	x	x	x	
Other pension income				x	x	x	x	x	x	x	
Pension Adjustment (PA)	x	x	x	x	x	x	x	x	x	x	
Pension Adjustment reversal (PAR)										x	x
Province/territory of residence	x	x	x	x	x	x	x	x	x	x	
Registered Pension Plan (RPP) deductions		x	x	x	x	x	x	x	x	x	
Transfers to RRSP	x	x	x	x	x	x	x	x	x	x	
RRSP income		x	x	x	x	x	x	x	x	x	
RRSP normal contributions		x	x	x	x	x	x	x	x	x	
RRSP room		x	x	x	x	x	x	x	x	x	x
Saskatchewan Pension Plan (SPP) deductions		x	x	x	x	x	x	x	x	x	
Total income	x	x	x	x	x	x	x	x	x	x	
Transfers to spousal RRSPs	x	x	x	x	x						
Unused RRSP contributions (cumulative)					x	x	x	x	x	x	
Unused RRSP room		x	x	x	x	x	x	x	x	x	

CHAPTER II

Pension Plans in Canada Survey

1. Objective of survey / Overview

The Pension Plans in Canada Survey is an annual census of all registered pension plans (RPPs) in Canada. It provides information on the terms and conditions of RPPs, membership in them and contributions made by and on behalf of the members.

Data on RPPs were produced on an occasional basis in 1960, 1965 and 1970. It became annual since the survey reference date of January 1, 1972.

Registered pension plans are plans established by either employers or unions to provide retirement income to employees. These plans are registered with the Canada Customs and Revenue Agency for tax purposes and, in most cases, also with the federal or a provincial pension regulatory authority.

The primary users of the Pension Plans in Canada Survey are the federal and provincial government pension authorities. Other main users include the Income and Expenditures Accounts Division (Statistics Canada), the federal government (Human Resources and Development Canada), private consultant firms, insurance companies and academics. The data from Pension Plans in Canada Survey is also used to generate the estimate of the value of benefits accrued in registered pension plans for the Survey of Financial Security.

2. General methodology

A. Universe and target population

The target population is all RPPs in Canada. The survey frame is drawn from information on plans registered with federal and provincial government pension authorities and, for plans not subject to their legislation, from the Canada Customs and Revenue Agency. Data are reported to Statistics Canada only when the pension authorities have registered the plan; some existing plans may not have completed this registration process and therefore are not including in Statistics Canada database.

B. Data collection and sources

Data on the Pension Plans in Canada Survey for 1960 and 1965 were based on direct surveys conducted by Statistics Canada. Since 1970, administrative data have gradually replaced the survey as the data source. Therefore, the program is now derived largely from administrative data provided by ten pension supervisory authorities (nine provincials, one federal). The provision of these data is governed by a co-operative statistical program established by these authorities and by Statistics Canada (see appendix A).

All plans registered with one of the pension supervisory authorities must submit an Annual Information Return (AIR) to the appropriate authority. This document must be submitted no later than June 30 of each year. It provides information on plan membership and on contributions made to the plan for the year in question. In addition, all new plans and amendments to existing plans, as well as plan transfers and terminations must be reported to the pension authority. This information is used to supply the data required for the Pension Plans in Canada Survey. The survey content is agreed upon jointly by Statistics Canada and the pension authorities. Data can be reported to Statistics Canada up to 13 months after the reference period. Some of the jurisdictions provide the information electronically, others report it on paper.

For those plans that are not registered with one of the pension authorities, a brief questionnaire is sent directly to the sponsoring employer/union once every two years requesting the necessary information. If possible this information is taken from annual reports.

C. Sampling

Not applicable

D. Processing and estimation methodology

All the information received from the respondent is processed by Statistics Canada. The edit procedures make it possible to compare, for each plan, current information on members and contributions with that last reported. Whenever a large change is detected or the data for a given plan appear inconsistent, the plan is identified by a computer edit and is subject to correction or acceptance, as required.

If not reported, data on plan members and contributions are imputed by using the same figures that were most recently reported to Statistics Canada.

3. Reference period

January 1st was selected as the reference date since it is the date the most often used for new plans and amendments to existing plans to take effect. However, information on contributions and membership is generally provided as of the plan's year-end, which is most often December 31.

For analysis purposes only, (see the chapter "Terms and conditions of registered pension plans" in *Canada's Retirement Income Programs: A statistical Overview*

(1990-2000)[1]), the reference period used is December 31, because frequent references are made to members.

4. Revisions and adjustments

Not applicable

5. Concepts and variables measured

Registered pension plans are frequently referred to as private pension plans to differentiate them from the public Canada and Quebec Pension Plans. They are employee retirement benefit programs provided in essence largely voluntarily by employers or unions in both the public and private sectors of the economy.

The data can be produced for a large number of variables related to the plans:
- number of members by sex, area of employment, or jurisdiction of plan registration,
- contributions
- membership-size group,
- industry,
- type of organization of employer (private or public sectors),
- funding instrument,
- class of employees eligible for the plan,
- compulsory and voluntary participation for new employees,
- conditions of eligibility of membership,
- type of plan,
- employee contribution rate,
- employer contribution rate,
- benefit rate,
- earnings base on which benefit is based (defined benefit plans only),
- bridging supplement on retirement,
- provision of disability benefit,
- normal retirement age,
- automatic adjustment of pension (defined benefit only),
- death benefit (after retirement).

6. Data accuracy / quality

Errors can arise in a number of ways: non-response, coverage and classification errors, differences in the interpretation of questions, incorrect information from respondents and mistakes in recording, coding and processing the data. Efforts to reduce these errors include careful design of the questionnaire, editing of the data, follow-up, imputation for non-response and thorough control of processing operations.

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[1] Statistics Canada, catalogue No. 74-507-XIE.

Quality controls exist at the data capture and editing stages to minimize errors. These controls monitor the completeness, accuracy and consistency of the reported data. Procedures are in place to follow-up for non-response and to impute when data are not available.

In addition, coverage errors can occur because the establishment or termination of a pension plan may not be reported to Statistics Canada when it becomes effective, but only when the administrative procedures undertaken by the pension authority are complete.

The response rate is determined by calculating, for those pension plans in the known universe, the percentage for which we have up-to-date membership and contribution data.

For the January 1, 2001 file, up-to-date information was obtained for 74% of plans, covering 94% of the members. Most of the non-respondents, therefore, were small plans. The response rates vary considerably from one jurisdiction to another. For another 13% of plans (covering also 3% of the members), imputation was performed using 1998 or 1999 data.). Once again, these percentages vary considerably from one jurisdiction to another (see table 1).

Table 1. Response rate in terms of number of members, January 1, 2001

Jurisdiction[1]	Response rate (%)
Newfoundland and Labrador	93.5
Nova Scotia	98.4
New Brunswick	97.5
Quebec	98.6
Ontario	92.9
Manitoba	93.5
Saskatchewan	99.0
Alberta	94.4
British Columbia	79.5
Federal[2]	94.2
Total	93.9

[1]A plan registered with a particular jurisdiction can cover members working in different provinces. For each jurisdiction, the members referred to, belong to plans registered with that particular jurisdiction, regardless of where they work.
[2]Office of the Superintendent of Financial Institutions (OSFI).

7. Comparability of data and related sources

With the exception of the following, the data available from the pension plans in Canada survey are comparable over time.

The classification of plans by sector has changed. A new definition of public sector was adopted for the January 1, 1992 file, one that corresponds more closely to that used by the Standards Division and the Public Institutions Division of Statistics Canada. The changes to sector classification have not been made retroactively. Most notably, the majority of the plans for universities, previously coded to the private sector, are now considered to be public sector plans.

Starting January 1, 1999, the North American Industry Classification System (NAICS) replaced the Standard Industrial Classification (SIC). This new classification affects only one Table and changes have not been made prior to January 1, 1999.

8. Definitions

Registered Pension Plans (RPPs): An employer-sponsored plan registered with Canada Customs and Revenue Agency and most commonly also with one of the pension regulatory authorities. The purpose of such plans is to provide employees with a regular income at retirement.

Defined benefit (DB) plan: An RPP that defines the benefits by a formula stipulated in the plan text. The employer contributions are not predetermined but are a function of the cost of providing the promised pension, taking into consideration employee contributions, if any. DB plans can be subdivided into unit benefit and flat benefit plans:

Unit benefit plan: A type of RPP in which members earn a unit of pension, often expressed as a fixed percentage of earnings, for each year of credited service/participation. Includes career and final average earnings plans.

Career average earnings plan: A defined benefit RPP that bases the pension on average earnings over the entire period of membership in the plan. In some cases, earnings, earnings before a specific time are excluded; in others the earnings are indexed.

Final earnings plan: Final average and average best earnings plans:

Final average earnings plan: A defined benefit RPP that defines the benefit formula using average earnings for a specified number of years immediately prior to retirement.

Average best earnings plan: A defined benefit RPP that defines the benefit formula using the highest average earnings for a specified number of years (e.g. best five years).

Flat benefit plan: A defined benefit RPP that provides a fixed benefit; not related to earnings. It is usually a dollar amount of monthly pension for each year of service with a single employer, or with participating employers under a multi-employer plan.

Defined contribution (DC) plan: An RPP that specifies the employee's (if the plan is contributory) and the employer's contributions. Members' benefits are provided from accumulated contributions plus the return on the investment of these monies.

Private Sector: Type of organization that includes incorporated and unincorporated businesses, religious, charitable and other non-profit organizations, co-operatives, trade or employee associations, and private educational and health institutions.

Public Sector: Type of organization that includes municipal, provincial and federal governments and enterprises, crown corporations, government boards, commissions and agencies, and public educational and health institutions.

Contributory plan: An RPP under which employees are required to contribute a portion of the cost of the benefits.

Non Contributory plan: An RPP under which the entire cost of the benefits is borne by the employer.

Vesting: The right of a plan member to the employer's contribution to an RPP or a Deferred profit sharing plan as a result of achieving a specified length of service or plan membership.

Year's Maximum Pensionable Earnings (YMPE): Maximum earnings on which contributions to and benefits from the Canada/ Quebec Pension Plans are determined.

Appendix A

As of January 1, 2001, nine provinces plus the government of Canada have implemented legislation to protect the rights of pension plan members. The ten jurisdictions having pension regulatory legislation in effect as of January 1, 2001 and the date when the original legislation took effect are:

Ontario	-	January 1, 1965
Quebec	-	January 1, 1966
Alberta	-	January 1, 1967
Federal	-	October 1, 1967
Saskatchewan	-	January 1, 1969
Manitoba	-	July 1, 1976
Nova Scotia	-	January 1, 1977
Newfoundland	-	January 1, 1985
New Brunswick	-	December 31, 1991
British Columbia	-	January 1, 1993

Significant changes to the original legislation had taken effect as of the reference date for these data. The different pieces of legislation are similar and govern the terms of the pension plan, the funding and the investments of the pension fund.

There are some exclusions under these acts. Certain plans for federal and provincial government public servants are not subject to this legislation but have their own acts regulating their operations. Furthermore, as of January 1, 2001, no regulatory legislation was in effect in Prince Edward Island.

CHAPTER III

Trusteed Pension Funds

1. Objective of survey / overview

The Quarterly Survey of Trusteed Pension Funds and the biennial Census of Trusteed Pension Funds provide information on the assets, revenues, and expenditures of trusteed pension plans in Canada. Approximately 73% of the monies in employer-sponsored registered pension plans (RPPs) are held in trusteed pension funds. RPPs, together with the public pension plans – OAS/GIS and C/QPP – and RRSPs constitute the main programs in Canada's retirement income system.

The amount held in trusteed pension funds is second in size only to the amount held by the chartered banks and is therefore a very important source of investment capital. The data from the trusteed pension fund surveys are used as input to the Canadian System of National Accounts. They are also used to provide information on the manner in which the assets in these funds are invested.

2. General Methodology

A. Universe and target population

A registered pension plan (RPP) is an employer-sponsored plan registered with the Canada Customs and Revenue Agency and most commonly also with one of the pension regulatory authorities. The purpose of such plans is to provide employees with a regular income at retirement. According to the provisions of the *Income Tax Act*, an RPP must be funded according to the terms of one of the following funding arrangements: a trust agreement, an insurance company contract or an arrangement administered by the federal or a provincial government. Some of the latter are referred to as consolidated revenue arrangements.

The funding instrument is the legal document that defines the obligation of the funding agency (trust company, insurance company, pension fund society,...) with respect to the pension plan. It is defined as the agreement or contractual arrangements under which contributions are held, accumulated and invested.

The Pensions and Wealth Surveys Section of Statistics Canada surveys funds established by pension plans in both the public and private sectors that operate according to the terms of a trust agreement. A trust is a fiduciary relationship in which individuals (at least three) or a trust company hold title to the assets of the fund in accordance with the trust agreement, for the benefit of the plan members. In many cases, the individual fund may be split amongst different investment managers through contractual arrangements with any number of trust companies, insurance companies or investment counsellors. All funds operating under a trust agreement for at least a portion of their assets are included in this survey. Pension plans administered by a pension fund society are considered to operate like trusteed plans, and are included in this report.

Pension funds that are deposited in total with an insurance company under an insurance company contract are not considered for purposes of this study. However, if a portion of the assets of a trusteed pension fund is deposited with an insurance company under segregated fund or deposit administration contracts, this amount is included in this survey.

Pension plans funded through consolidated revenue arrangements of the federal and provincial governments are excluded. Monies contributed to these plans were not invested in the financial markets; rather they were consolidated with other revenue items of the government and used for general expenditure purposes. Pension benefits are also paid out of these consolidated revenue funds. Consequently, the pension plans for the federal public service, the Canadian Forces, the RCMP and certain provincial government employees are excluded.[2] However, this survey does include public sector pension plans which are funded according to the terms of a trust agreement, or which operate like a trusteed fund. Most provincial government employees are covered by such funds.

Only part of the Caisse de dépôt et placement du Québec is included in this study, that part held on behalf of trusteed RPPs.

The survey is not a survey of plans, but a survey of funds. Many large corporations have separate pension plans for various parts of their operations, such as different geographic units, subsidiary or affiliated companies or different classes of employees. In many cases the contributions generated by these separate plans are consolidated in one fund. Consequently, there is a considerable difference in the number of plans and funds.

Dormant funds, that is, residual assets remaining in funds that have no active members and to which contributions are no longer payable, are included in this survey until all assets have been liquidated and distributed and the fund has been completely closed out.

B. Data collection and sources

The census of trusteed pension funds was conducted annually between 1957 and 1994, except for 1991. This census now takes place every two years. A questionnaire is mailed to all employers in Canada sponsoring trusteed pension

[2] As of April 2000 the pension plans for the federal public service, the Canadian Forces, and the RCMP began to invest in the financial and capital markets, as do trusteed pension funds. These federal government plans will form part of the trusteed pension fund universe, although this will not take effect until the 2002 data year.

plans. In some cases, the questionnaire is mailed to a trust company or fund manager who is better able to provide the required information. The existence of trusteed pension funds is determined from information received from the Canada Customs and Revenue Agency, federal and provincial government pension authorities and from employers.

The Pensions and Wealth Section also conducts a quarterly survey of the largest funds.

For the census, the questionnaires are mailed within three to six weeks following the end of the reference year to all employers sponsoring pension plans operating under a trust agreement. For the quarterly sample survey, the questionnaire is mailed three weeks after the end of the reference quarter. In some cases, the questionnaire is mailed to the trust company or the fund manager who is better able to provide the required information. When the completed questionnaire is received, an initial manual verification of the data takes place prior to data capture.

C. Sampling

The quarterly survey collects information from a subset of the universe of trusteed pension funds. The funds in the universe are listed in descending order – based on the book value of the assets – and those funds accounting for 85% of the total assets are selected for inclusion in the quarterly survey. In 2001, this meant funds with at least $400 million in book- valued assets.

D. Processing and estimation

Trusteed pension funds are classified by type of investment decision-maker, type of organization of the employer, sector (public and private) and type of plan (defined benefit vs defined contribution).

The employers or fund managers classify the fund by type of investment decision-maker and the type of plan. This information is verified by the staff of the Pensions and Wealth Section who correct any inconsistencies and compare the information with that contained in a database developed from a survey of all pension plans in Canada. This source is used to classify the fund by sector and type of organization. If more than one pension plan participates in a pension fund, the classification is based on the plan covering the majority of members.

Data are verified manually and by computer. The staff verify manually the coding (as described above) and also the reasonableness of the data provided by each fund relative to that reported in previous years. If there are large differences which cannot be explained by the current economic situation or by an examination of the historical data, a follow-up call will be made to the respondent. Once these verification and correction processes are complete, the data are entered into the computer. The data capture and processing system is designed to minimize data capture and coding errors and to verify that totals provided are correct. A further check against the prior year's data is done by the computer, and any errors corrected before the data are tabulated.

Data for non-respondents are estimated using the information for the same fund from the previous reference period. Certain income and expenditure data (i.e. contributions, investment income, pension payments) are carried forward; profit and loss information is calculated by assuming it constitutes the same proportion of other income and expenditure items as it does for the reporting funds. A new asset total (at book value) is then calculated by adding the new net income figure to the asset total from the previous reference period. The assets are then distributed across the various investment categories using the most recent available distribution that was reported. This estimation process is fully automated. For funds reporting only book or market value, the non-reported value is imputed automatically by assuming that the ratio between the market and book values is the same for the incomplete returns and for the returns providing both values.

In the quarterly survey, the funds surveyed represent 85% of the total value of the industry. The remaining 15% is estimated. The value of assets, revenues and expenditures, and the items within these categories, is estimated from the returns of these same funds in the last census. These funds are divided into two groups : funds under $ 10 million in assets, and funds with assets greater than $10 million but less than $400 million. Detailed estimates of all asset, revenue and expenditure items are produced only for the latter group of funds – those with assets greater than $10 million but less than $400 million. Only totals (for assets, revenues, and expenditures) are estimated for the funds under $10 million.

3. Reference period

The reference period covered by the census is the financial year ending anywhere from April 1, to March 31, of the following year. The date used to identify the data year for purposes of analysis and presentation is the year in which April 1 falls, e.g., if the reference period is April 1, 1998 to March 31, 1999, then the data year is 1998.

The reference period covered by the quarterly survey is the three-month period ending March 31, June 30, September 30 and December 31.

4. Revisions and adjustments

The quarterly survey data are revised or finalized for late returns and missing data, if any, once a year. This revision takes place with the release of the third quarter data. The previous two quarters are revised, and the four quarters of the previous calendar year are finalized. The census data are not subject to revision.

5. Concepts and variables measured

Both the census and the quarterly survey gather detailed information on revenues and expenditures of trusteed pension funds and on the assets of these funds, at book and market value. The method of calculating the book and market values is determined by the trustees; consequently it may vary from one fund to another. The book value of a security is generally its purchase price; however, for practical reasons, fund administrators may adjust the book values periodically to reflect unrealized gains or losses in particular securities. Market values may be even more difficult to establish; ideally, a market value can be determined only at the time of the sale of the security. Therefore, the market value assigned to a security is based on the assumption that this current value could be realized.

The value of assets held outside of the country is also measured.

The census also gathers information on the characteristics of the funds such as the number of members, contributory status, the type of plan (defined benefit or defined contribution) and the sector in which the fund operates (public or private).

6. Data accuracy / quality

For both the census and quarterly surveys, completed returns are submitted by funds holding about 95% of the total assets. The information for those funds holding the remaining 5% of the assets is estimated, using the respondent's return for the previous reference period.

The total value of assets of the quarterly survey is within 1 % of the total value of assets as measured by the census.

7. Comparability of data and related sources

Data are compared to independent sources of information on trusteed pension funds. One source is the trade publication *Benefits Canada* which publishes information on the assets held by the top 100 pension funds, on a fund-by-fund basis. This allows for direct comparison of the information. Any discrepancies with independent sources are investigated and resolved.

With the exception of the following, the data available from the trusteed pension fund survey are comparable over time.

A new definition of public sector was adopted for the 1992 reference year, one that corresponds more closely to that used by the Standards Division and the Public Institutions Division of Statistics Canada. The changes to sector classification have not been made retroactively. Therefore, some of the changes observed between 1992 and earlier years with respect to data by sector are due to this reclassification. Most notably, the majority of the funds for universities, previously coded to the private sector, are now considered to be public sector funds.

The type of organization classification changed for the 1993 reference year and is no longer directly comparable to that used in previous years.

8. Definitions

Book value: Generally the purchase price of a security; this value may be periodically adjusted to reflect unrealized gains or losses in the particular security.

Government consolidated revenue arrangement: Funding arrangement used by some public sector RPPs. The contributions are paid into the consolidated revenues of the applicable government and are used for general government expenditures. Similarly, benefits are paid from the consolidated revenues.

Gross assets: Total assets before deducting debts and payables.

Individual trustee: A group of individuals responsible for holding and investing the assets of a pension fund, at least three of whom must reside in Canada and one of whom must be independent of the participating employer (i.e. someone who is neither connected with nor an employee of the employer).

Market value: Value of a particular investment or asset on a specified date, assuming that the investment or asset could be sold at current prices.

Net assets: Total assets after deducting debts and payables.

Net income/net cash flow: Revenue minus expenditures.

Pension fund society: A society or company established under either a federal or provincial statute, whose sole purpose is to administer a pension fund in the same manner as a trust fund.

Pooled fund: A fund generally managed by a trust company or investment counselling firm containing all or a portion of the assets of two or more pension funds. Participating pension funds own units of the pooled fund. Various types of pooled funds are available such as equity funds, bond funds, mortgage funds, diversified funds, etc., allowing the employer to choose the asset mix.

Pooled vehicles: Includes pooled funds of trust companies and investment counsellors as well as segregated funds of insurance companies and mutual and investment funds.

Private Sector: Includes incorporated and unincorporated businesses, religious, charitable and other non-profit organizations, cooperatives, trade or employee associations, and private educational and health institutions.

Public Sector: Includes municipal, provincial and federal governments and enterprises, crown corporations, government boards, commissions and agencies, and public educational and health institutions.

Registered Pension Plan (RPP): An employer-sponsored plan registered with Canada Customs and Revenue Agency and most commonly also with one of the pension regulatory authorities. The purpose of such plans is to provide employees with a regular income at retirement.

Segregated fund contract: An insurance company contract under which the assets of the pension plan(s) are segregated from the other monies of the insurance company. The fund may be for a single pension plan or may contain monies from more than one pension plan. There are no investment guarantees; the employer assumes responsibility for the adequacy of the fund to provide the promised benefits. This type of contract gives the employer more control over the asset mix.

Trust agreement: Contract between an employer (or plan sponsor) and an individual or corporate trustee, which sets out in writing the terms and conditions for the administration of a pension fund and/or for the investment of the monies.

Trust company : A company which is responsible for holding and investing the assets of a pension plan under the terms of a trust agreement between the employer (or plan sponsor) and the trust company.

Trusteed pension fund: A fund established according to the terms of a trust agreement between the employer (or plan sponsor) and an individual or corporate trustee. The trustee is responsible for the administration of the fund and/or the investment of the monies. The employer is responsible for the adequacy of the fund to pay the promised benefits

CHAPTER IV

Survey of Financial Security (SFS)

1. Objectives of Survey / Overview

The 1999 SFS provides a comprehensive picture of the net worth of Canadians. Information was collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts. The value of these assets less the debts is referred to as net worth. A family's net worth can be thought of as the amount of money they would be left with if they sold all of their assets and paid off all of their debt.

One important component of net worth is the value of employer pension plan (EPP) benefits. Although not an asset in the sense that it can be sold or used for another purpose, it is nonetheless a very important part of the wealth of Canadians, as it will provide many with at least a portion of the income needed in retirement. Estimating the value of EPPs is a complex process that had not been previously been done by an asset and debt survey.

2. General Methodology

A. Universe and target population

The 1999 Survey of Financial Security was carried out in all ten provinces, the territories were not included. Those living on Indian reserves and crown lands and official representatives of foreign countries living in Canada and their families were also excluded from the survey. Members of religious and other communal colonies, members of the Canadian Forces living in military camps and people living in residences for senior citizens were excluded, as were people living full time in institutions, for example, inmates of penal institutions and chronic care patients living in hospitals and nursing homes. The survey covers about 98% of the population in the ten provinces. Information was not gathered from persons temporarily living away from their families (for example, students at university) because it would be gathered from their families if selected. In this way, double counting of such individuals was avoided.

Some of the information was collected for each person in the family 15 years of age and over. The assets and debts, however, were collected for the family as a whole, because they often cannot easily be assigned to one person in the family. Specifically, the following information was collected:

From each family member 15 years of age and over:

- demographics (age, sex, marital status);
- ethno-cultural characteristics;

- education;
- current employment;
- income, for the calendar year 1998.

For the family unit as a whole:

- financial and non-financial assets;
- equity in business;
- debt in the form of mortgages, vehicle loans, credit card and line of credit debt, student loans and other debt.

B. Data collection and sources

The 1999 Survey of Financial Security was conducted from May to July 1999. Data were collected during a personal interview using a paper questionnaire. A copy of this questionnaire can be found in a research paper entitled Survey of Financial Security, Interview questionnaire on the Statistics Canada website (www.statcan.ca).

For families, the interview was held with the family member with most knowledge of the family's financial situation. If necessary, follow-up was done with other family members. Proxy response was accepted. This allowed one family member to answer questions on behalf of any or all other members of the family, provided he or she was willing and able to do so.

To reduce response burden, for the questions on 1998 income, respondents could give Statistics Canada permission to use the income information from their T1 tax return. Close to 85% of survey respondents gave their consent to use these administrative records.

C. Sampling

The total sample for the 1999 Survey of Financial Security was approximately 23,000 dwellings; it was drawn from two sources.

The main sample, drawn from an area frame, consisted of approximately 21,000 dwellings. This area sample was a stratified, multi-stage sample selected from the Labour Force Survey (LFS) sampling frame. Dwellings selected for this survey had not previously participated in a labour force or financial survey conducted by Statistics Canada. Sample selection comprised three steps: the selection of clusters (small geographic areas) from the LFS frame, field listing of all addresses within each selected cluster, and the selection of dwellings within these selected clusters. At the time that the SFS sample was selected the LFS frame was using 1991 Census geography.

The second portion of the sample, approximately 2,000 households, was drawn from geographic areas in which a large proportion of households had what was defined as "high-income". This sample was included to improve the quality of the estimates of net worth, as a disproportionate share of net worth is held by higher-income family units. For purposes of this sample the income cutoff was total family income of at least $200,000 or investment income of at least $50,000. The latter was used to take into account those family units that may not have high income from employment but have substantial assets that generate investment income.

D. Processing and estimation methodology

Data entry and automated editing for the 1999 Survey of Financial Security took place in Statistics Canada. Quality control tests were done at the time of data entry and, if necessary, information re-entered. Then, data passed through an automated edit system to identify inconsistencies and potential errors in the data.

Imputation of Missing Data

Missing responses were imputed for all key fields in the questionnaire. Where possible, information was imputed deterministically, using other information reported by the respondent. For example, when the respondent could not estimate the value of their vehicle, the reported make, model and year was used to impute a value. This value was determined by consulting a reference book. When deterministic imputation was not possible, hotdeck imputation methods were used in most cases, and for all components of income and net worth, nearest neighbour techniques were employed. These methods involve identifying another individual or family with similar characteristics to become the "donor" and provide the imputed value. Income data obtained from tax returns are considered complete and thus do not require imputation

The following table indicates the percentage of the value of each asset and debt item that was determined through imputation.

Assets or debts (after imputation)[1]		Imputed[1]
ASSETS	100	24
Pension assets	29	63
RRSPs RRIFs	12	10
Employer pension plans	17	100[2]
Other pension assets	-	20
Financial assets, non-pension	12	17
Deposits in financial institutions	5	14
Mutual/investment funds	2	13
Stocks	3	25
Bonds (saving and other)	1	17
Other financial assets	2	17
Non-financial assets	48	4
Principal residence	32	4
Other real estate	7	6
Vehicles	4	5
Other non-financial assets	7	4
Equity in business	10	9
DEBTS	100	4
Mortgages	78	4
Principal residence	66	4
Other real estate	11	5
Line of credit	6	5
Credit card and instalment debt	3	3
Student loans	3	3
Vehicle loans	6	4
Other debt	4	3

[1] *This means, for example, that the principal residence (the home) constituted 32 % of total assets and that 4% of the total amount for principal residence was imputed.*

[2] *The percent imputed is 100% because all values for employer pension plans were estimated. This affects the imputation rate for total assets and for net worth.*

Weighting

The estimation of population characteristics from a survey is based on the premise that each sampled unit represents, in addition to itself, a certain number of unsampled units in the population. A basic survey weight is attached to each sample record to indicate the number of units in the population that it represents. Two types of adjustment are then applied to the basic survey weights in order to improve the reliability of the estimates. The basic weights are first inflated to compensate for non-response. This adjustment was applied within groups of sample units that are geographically close and the two samples were adjusted separately. The non-response adjusted weights are then further adjusted to ensure that estimates of relevant population characteristics would respect known population totals from sources external to the survey. The population totals used for the SFS were based on Statistics Canada's Demography Division population counts for different province - age - sex groups. The weights were also adjusted to ensure that the number of 1-person and 2-person households, and the number of 1-person and 2-person family units agreed with known totals by province.

Response rates

The overall response rate for the 1999 Survey of Financial Security was 75.7%. The following table gives a breakdown by province for the area sample and the high-income sample.

	Area sample response rate	**High-income Sample response rate**	**Overall response rate**
All provinces	77.3	59.9	75.7
Newfoundland	84.3	57.8	82.9
Prince Edward Island	84.1	66.7	83.1
Nova Scotia	81.0	63.2	79.8
New Brunswick	75.7	68.3	75.3
Quebec	77.5	59.6	75.9
Ontario	70.5	58.1	69.1
Manitoba	86.7	66.7	85.4
Saskatchewan	81.8	80.9	81.8
Alberta	81.3	64.9	79.7
British Columbia	75.0	52.0	72.3

3. Reference period

With a few exceptions, the reference period for the information was the time of data collection (May to July 1999). For the asset and debt information respondents were asked to provide an estimate of the value or amount as close to the survey date as possible, recognizing that their most recent statement may have been as of the end of the previous calendar year, or for the last financial quarter.

4. Revisions and adjustments

Not applicable

5. Concepts and variables measured

Assets
Total value of all financial assets, non-financial assets and equity in business.Respondents were asked to report the market value of the asset, that, is the amount they would receive if they had sold the asset at the time of the survey. If available, respondents were encouraged to consult financial records. When the value could not be determined through an independent source, the respondent was asked to estimate the value. The assets included are categorized as follows:

- Private pension assets
  - RRSPs and RRIFs
  - Employer pension plans
  - Other private pension assets
- Financial assets, non-pension
  - Deposits in financial institutions
  - Mutual/investment funds
  - Stocks
  - Bonds (savings and other)
  - Other financial assets
- Non-financial assets
  - Principal residence
  - Other real estate
  - Vehicles
  - Other non-financial assets
- Equity in business

Debts
Debts are categorized as follows:

- Mortgage
  - Principal residence
  - Other real estate
- Line of credit
- Credit card and installment debt
- Student loans
- Vehicle loans
- Other debt

Net worth
The net worth (sometimes referred to as wealth) of a family unit is defined as the difference between the value of its total asset holdings and the amount of total indebtedness.

Family units: Includes economic families of two or more and unattached individuals.

Economic family: An economic family is defined as a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption.

Unattached individual: An unattached individual is a person living either alone or with others to whom he or she is unrelated, such as roommates or a lodger.

6. Data accuracy/quality

Sampling Error

Sampling errors are important because inferences about the entire population are based on information obtained from only a sample of the population. Sample estimates usually differ from those that would be obtained if information were collected from the whole population. Errors due to the extension of conclusions based on the sample to the entire population are known as sampling errors. The sample design, the variability of the population characteristics measured by the survey, and the sample size determine the magnitude of the sampling error. In addition, for a given sample design, different methods of estimation will affect the levels of sampling error.

Standard Error and Coefficient of Variation

A common measure of sampling error is the standard error (SE). The standard error measures the degree of variation introduced in estimates by selecting one particular sample rather than another of the same size and design. The standard error may also be used to calculate confidence intervals associated with an estimate *(Y)*. Confidence intervals are used to express the precision of the estimate. It has been demonstrated mathematically that, if the sampling were repeated many times, the true population value would lie within the *Y* +/- *2SE* confidence interval 95 times out of 100 and within the narrower confidence interval defined by *Y* +/- *SE,* 68 times out of 100. Another important measure of sampling error is given by the coefficient of variation, which is computed as the estimated standard error as a percentage of the estimate *Y* (i.e. 100 x SE / Y).

To illustrate the relationship between the standard error, the confidence intervals and the coefficient of variation, let us take the following example. Suppose that the estimated median net worth from a given source is $10,000, and that its corresponding standard error is $200. The coefficient of variation is therefore equal to 2%. The 95% confidence interval estimated from this sample ranges from $9,600 to $10,400, i.e. $10,000 +/- $400. This means that with a 95% degree of confidence, it can be asserted that the median net worth of the target population is between $9,600 and $10,400.

The bootstrap approach, a pseudo-replication technique, is used for the calculation of the standard errors of the estimates presented in this publication.

For more information on standard errors and coefficients of variation, refer to the Statistics Canada publication (Catalogue 71-526-XPB), *Methodology of the Canadian Labour Force Survey*.

Standard errors and coefficients of variation of the estimates presented in this publication are available on request.

Data Suppression

Data reliability of the survey estimates has been assessed based on the calculated coefficients of variation. Estimates with a coefficient of variation less than 33% are considered reliable for general use. Estimates with coefficients of variation greater than 33% are deemed to be unreliable. For estimates of net worth in this survey, CVs greater then 33% generally occur when the sample size contributing to an estimate is less than 100. Consequently, data are suppressed based on these limits. This affects the level of detail in published tables and, in particular, limits the availability of provincial statistics.

Non-Sampling Errors

Non-sampling errors occur because certain factors make it difficult to obtain accurate responses or responses that retain their accuracy throughout processing. Unlike sampling error, non-sampling error is not readily quantified. Four sources of non-sampling error can be identified: coverage error, response error, non-response error, and processing error.

A. Coverage Errors

Coverage errors results from inadequate representation of the intended population. Such errors may occur during sample design or selection, or during data collection and processing.

B. Response Errors

Response errors may be due to many factors, such as faulty questionnaire design, interviewers' or respondents' misinterpretation of questions, or respondents' faulty reporting. Great effort is invested in the SFS to reduce the occurrence of response error. Measures undertaken to minimize response errors include the use of highly-skilled and well-trained interviewers, and supervision of interviewers to detect misinterpretation of instructions or problems with the questionnaire design. Response error can also be brought about by respondents who, willingly or not, provide inaccurate responses.

Questions about the value of assets and the amount of debt can be particularly prone to misreporting, as they are very sensitive questions and the respondents may not be able or willing to provide an answer. As well, because proxy response was accepted, one family member may have provided information for another family member, believing that information to be accurate; that may not always have been the case. When providing information for the survey, respondents were encouraged to consult financial records, or other family members, as often as required.

C. Non-Response Errors

Non-response error occurs in sample surveys because not all potential respondents cooperate fully. The extent of non-response varies from partial non-response to total non-response.

Total non-response occurs when the interviewer was either unable to contact the respondent, no member of the economic family was able to provide information, or the respondent refused to participate in the survey. Total non-response is handled by adjusting the basic survey weights for responding economic families to compensate for non-responding economic families. For the 1999 Survey of Financial Security the overall response rate was 75.7%.

In most cases, partial non-response occurred when the respondent did not understand or misinterpreted a question, refused to answer a question, or could not recall the requested information. Imputing missing values compensates for this partial non-response.

The importance of the non-response error is unknown but in general this error is significant when non-respondents differ significantly from respondents with respect to particular characteristics that are important determinants of survey results.

D. Processing Errors

Processing errors may occur in any of the data processing stages, for example, during data entry, coding, editing, imputation, weighting, and tabulation. To minimize errors, diagnostic tests are carried out periodically to ensure that expected results have been obtained.

Treatment of Large Values

For any sample, estimates can be affected disproportionately by the presence or absence of extreme values from the population. In an asset and debt survey, a few extreme values are expected in the sample, as valid extreme values do exist in the population. Values outside defined bounds were identified and reviewed in relation to other information reported for that respondent. If the value was judged to be the result of a reporting or processing error, it was adjusted. Otherwise, it was retained.

<u>Impact of sampling and non-sampling errors on SFS estimates</u>

Due to the combined effect of these errors, the quality of net worth data is judged to be lower than the quality of income data. This is largely because records of the current value of assets and the outstanding amount of debt are not as readily available as records of income. For example, respondents with numerous bank accounts and investments may receive several different statements, with different reference periods. Compiling this information can be difficult; most income information, on the other hand, would be available in one document, if the respondent had completed an income tax return for the year in question.

Direct comparisons with outside sources, such as the Financial and Wealth Accounts of the System of National Accounts, are difficult to make due to definitional, coverage and treatment differences. However, based on rough comparisons the following general conclusions can be drawn:

(a) SFS appears to underestimate some net worth components, particularly financial assets and consumer debt.
(b) The quality of estimates of real assets (e.g., owner-occupied homes, vehicles) is much better than that of financial assets.

7. Comparability of data and related sources

It is important to realise that there are no other sources for much of the data collected by SFS. Of the variables that do have sources, comparison is often difficult because of differences in defining concepts, grouping of items, and how these items are valued.

Comparison with data from the System of National Accounts (SNA) data does yield certain differences.

In theory – given similar valuation procedures and groupings – SNA data should be the same as that collected by an asset and debt survey. The SNA collects individual wealth data from institutional sources such as banks and insurance companies, net of corporations and governments. One major problem has been the SNA categorisation of individuals and unincorporated business. Because the individual data and the unincorporated business can not be separated out, these estimates will always be higher than the survey estimates alone.

The Census and other surveys are important sources for ensuring that the SFS sample is representative of the Canadian population. Despite conceptual differences with the SNA estimates, ensuring a representative sample is extremely important to the validity of the data. It was determined that with respect to characteristics such as sex, age, marital status, education that the 1999 SFS data was very comparable to data from the 1996 Census. SFS estimates for pension variables such as membership and contributions were found to be very close to data produced by Statistics Canada's Pension and Wealth Surveys section.

8. Definitions

Assets: Total value of all financial assets, non-financial assets and equity in business.

Bonds: Total value, including earnings, of federal and provincial savings bonds and other bonds issued by governments and corporations. Includes investment in foreign bonds but excludes the amount held within registered plans.

Deposits: The total amount, including interest, of all chequing and savings accounts with a non-zero balance and of other deposits such as term deposits and Guaranteed Investment Certificates. These amounts would generally be held in financial institutions such as chartered banks, trust companies, co-ops and caisses populaires. This item includes only the amount held outside of registered plans.

Equity in business: The estimated amount the respondent would receive if the business were sold, after deducting any outstanding debts to be paid.

Financial assets, non-pension: Includes deposits in financial institutions and other invested assets that are not held in a pension program such as an RRSP or RRIF.

Financial assets, other: Includes less commonly held financial assets such as treasury bills, mortgage-backed securities, money held in trust, annuities, money owed to then respondent and other miscellaneous financial assets. It also includes shares of privately held companies and financial assets held in registered plans other than RRSPs and RRIFs (e.g. RESPs).

Locked-in Retirement Account (LIRA): An RRSP in which the money is locked-in until the person reaches a specified age. Included in the category RRSPs and RRIFs. This money would have been transferred from an employer pension plan after the individual terminated employment. For the most part, LIRAs came into use in the late 1980s, when revisions to pension regulatory legislation provided for enhanced portability of pension accruals on termination of employment.

Mutual/investment funds: The total value, including investment earnings, of all holdings in mutual and investment funds. Excludes the amount held within registered plans.

Non-financial assets: Total value of the respondent's principal residence (home), other real estate, vehicles and other non-financial assets.

Non-financial assets, other: Includes the value of the contents of the respondent's principal residence (e.g., major appliances, furniture, electronic equipment), valuables and collectibles (e.g. antiques, jewellery, coin collections), copyrights, patents, etc.. The contents of the respondent's home was the only item for which a specific value was not requested. Because of the difficulty in estimating this value, respondents were asked to select from 16 ranges. The low point in that range is used in the estimate of net worth.

Principal residence (home): Market value, as estimated by the respondent, of the residence where the respondent lives. If the respondent has two residences, this would be the one where they most often live. If the respondent shares ownership of the home with someone outside the family, only the family's share is included. If the property is a farm, the estimated value of the farmhouse is included; the value of the farmland would be included either with business equity or with other real estate, if no business were reported.

Private pension assets: Includes money invested in RRSPs and RRIFs, the value of employer pension plan benefits and other pension generating assets such as deferred profit sharing plans and annuities.

Private pension assets, other: Includes money held in other pension-generating assets such as deferred profit sharing plans and annuities.

Real estate, other: Estimated market value of real estate other than the respondent's home. Included would be second homes, vacation homes, timeshares, rental property (residential or non-residential) or vacant lots. Includes property in Canada or outside.

Registered retirement income funds (RRIFs): A fund intended to provide a regular income in retirement. Monies in RRSPs must be transferred to a RRIF before the end of the year in which the owner of the RRSP turns 69. Payments from an RRIF may be varied, but a minimum amount must be withdrawn annually. Also includes monies in locked-in retirement income funds (LRIFs) and life income funds (LIFs); these plans are intended to receive amounts transferred from an employer pension plan.

Stock: Total value, including earnings, of all publicly-traded common and preferred shares. Includes foreign stock but excludes the amount held within registered plans.

Vehicles: Estimated value of cars, trucks, vans, sport utility vehicles as well as motorcycles, mobile homes, boats and snowmobiles. Excludes vehicles owned by the respondent's business and vehicles that are leased.

Debts

Credit card and instalment debt: For credit cards, the amount owing on the last bill, excluding any new purchases. Includes major credit cards (VISA, Mastercard, American Express, Diners Club/en Route) and retail store cards, gasoline station cards, etc.. Instalment debt is the total amount owing on deferred payment or instalment plans where the purchased item is to be paid for over a period of time.

Debt other: Includes the amount owing on other loans from financial institutions, unpaid bills, etc..

Line of credit (LOC): Total amount owing on both a home equity line of credit and a regular line of credit. This does not refer to the credit limit on the LOC.

Mortgage, on principal residence: Outstanding amount owing on the respondent's principal residence. If the respondent shares ownership of the home with someone outside the family, only the family's share of the mortgage is included. If the property is a farm, the mortgage owing on the farmhouse is included; the mortgage on the remainder of the farm would implicitly be included with business equity or would be included with mortgage owing on other real estate, if no business were reported.

Mortgages, on other real estate: Respondent's share of the mortgage owing on second homes, vacation homes, timeshares, rental property (residential or non-residential) or vacant lots.

Mortgages: Total amount owing on all mortgages, both for the respondent's principal residence and any other real estate they may own.

Student loans: Amount owing on loans taken out to attend a post secondary education program. These loans are most often taken through the Canada Student Loan Program or one of the provincial student loan programs. This item also includes amounts owing on loans taken directly from a financial institution to attend school.

Vehicle loans: Amount owing on loans for those vehicles listed under assets.

Other concepts

Average (mean)
The average or mean is computed as the total or "aggregate" divided by the number of units in the population. The drawback to the use of the average is that because everyone's value is counted, the mean is sensitive to extreme values: unusually high values will have a large impact on the estimate of the average, while unusually low ones, i.e. highly negative values, will drive it down.

Major income recipient
For each family, the major income recipient is the person with the highest income before tax. For persons with negative total income before tax, the absolute value of their income is used, to reflect the fact that negative incomes generally arise from losses "earned" in the market-place and are not meant to be sustained. In the rare situations where two persons have exactly the same income, the older person is the major income recipient.

Median
The median is the value at which half of the units in the population have lower values and half have higher. In this report median is most often used as a measure of net worth; it can be used with other values as well, for example, income. To derive the median value of net worth, units are ranked from lowest to highest according to their net worth and then separated into two equal-sized groups. The value that separates these groups is the median net worth. It corresponds to the 50th percentile. Because the median corresponds exactly to the mid-point of the net worth distribution, it is not, contrary to the mean, affected by extreme net worth values.