



Income Statistics Division

13F0026MIE

Towards a New Canadian Asset and Debt Survey

A Content Discussion Paper

Prepared by:
Myles Zyblock
Maryanne Webber
Margot Shields
Karen Maser

Prepared in partnership with:
Applied Research Branch
Human Resources Development Canada

February 1997



Statistics
Canada

Statistique
Canada

Canada

Data in many forms

Statistics Canada disseminates data in a variety of forms. In addition to publications, both standard and special tabulations are offered. Data are available on the Internet, compact disc, diskette, computer printouts, microfiche and microfilm, and magnetic tape. Maps and other geographic reference materials are available for some types of data. Direct online access to aggregated information is possible through CANSIM, Statistics Canada's machine-readable database and retrieval system.

How to obtain more information

Inquiries about this product and related statistics or services should be directed to: Client Services, Income Statistics Division, Statistics Canada, Ottawa, Ontario, K1A 0T6 (telephone: (613) 951-7355 or 1 888 297-7355 or by internet: Income@statcan.ca or to the Statistics Canada Regional Reference Centre in:

Halifax	(902) 426-5331	Regina	(306) 780-5405
Montréal	(514) 283-5725	Edmonton	(403) 495-3027
Ottawa	(613) 951-8116	Calgary	(403) 292-6717
Toronto	(416) 973-6586	Vancouver	(604) 666-3691
Winnipeg	(204) 983-4020		

You can also visit our World Wide Web site: <http://www.statcan.ca>

Toll-free access is provided **for all users who reside outside the local dialing area** of any of the Regional Reference Centres.

National enquiries line 1 800 263-1136

National telecommunications device for the hearing impaired 1 800 363-7629

Order-only line (Canada and United States) 1 800 267-6677

Ordering/Subscription information

Catalogue no. 13F0026MIE, is available on Internet free.

The paper version can be ordered through Client Services, Income Statistics Division.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact your nearest Statistics Canada Regional Reference Centre.



Statistics Canada
Income Statistics Division

Towards a New Canadian Asset and Debt Survey

A Content Discussion Paper

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 1999

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

March 1999

Catalogue no. 13F0026MIE

Ottawa

La version française de cette publication est disponible sur demande (n° 13F0026MIF au catalogue).

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 cooperation and goodwill.

Table of Contents

1.	Introduction	4
2.	Survey objectives	6
3.	Conceptual framework for a new asset and debt survey	8
3.1	Unit of observation	8
3.2	General measurement issues	9
3.2.1	How wealth is defined	10
3.2.2	Problems with surveying wealth	10
3.2.3	A potential asset and debt accounting framework	11
4.	Proposed variables	13
4.1	Assets and debts	15
4.2	Pensions / retirement savings programs	20
4.3	Demographic and labour market characteristics	24
4.4	Income	27
4.5	Inheritances	29
	References	30

1. Introduction

Statistics Canada has conducted several asset and debt surveys, to capture the holdings and liabilities of Canadian families. However, the last survey occurred in 1984, and the results are clearly dated. Not only is a new reading needed; the world has changed enough since 1984 that the survey's content needs to be considered in the light of today's issues.

This document is a discussion paper on the content of an asset and debt survey. The development of content is still at a very early stage; the document is intended as a vehicle to elicit a first round of comments from persons interested in this topic. Revisions to the proposed content will be made based on feedback received and will be incorporated into a feasibility study which will define, in addition to the content, the methodology, time frame and cost of the survey. A consortium approach will be used to fund the survey. Statistics Canada will provide a portion of this funding; the balance will be sought from other interested government departments and private sector organizations. The feasibility study will be used in seeking that additional funding.

This document poses a number of questions and makes a number of suggestions. The following are some of the major issues that must be resolved:

- For most families, pension entitlements are the largest or second largest asset. As a source of future revenue it is of critical importance. The survey will capture pension information, but there are many uncertainties about exactly what information is needed. For example, would it be sufficient to put a dollar value on the entitlements accumulated to date? Or is it important to factor in growth in this asset likely to accrue through future employment? There are many other issues outlined in the pension section, and readers are encouraged to communicate their views.
- How should leasing (for example, of the family car) be handled?
- Some asset and debt surveys include questions on attitudes towards saving and indebtedness. Would this type of information be useful and, if so, in what way?
- Inheritances are a possible new content area, but there are limits to what can be accomplished in a household survey. Is the content proposed in this discussion paper of value and, if so, in what way?

Your response to the questions and issues raised in this discussion paper are most welcome, as is your feedback with respect to anything you feel has been omitted from the proposed content. Please direct your comments, **by March 31**, 1997 to:

Karen Maser
Statistics Canada
Ottawa, Ontario
K1A 0T6
Phone: 613-951-0793
Fax: 613-951-3253
E-mail: maserk@statcan.ca

2. Survey Objectives

The last Canadian survey capturing detailed information on family and individual asset and debt holdings was the 1984 Survey of Consumer Finances (SCF).¹ Given the dated nature of wealth information in Canada, an important objective of a new wealth survey would simply be to update wealth information on Canadian families and individuals.² Making a new survey as consistent as possible with the older survey would extend the micro-data time series on detailed wealth categories and wealth composition now available for 1977 and 1984. There are numerous problems associated with measuring wealth that create potential avenues for the introduction of bias in measurement. For example, families and individuals located near the top of the wealth distribution hold a disproportionate amount of wealth. Survey data for these families and individuals are difficult to collect using standard survey methodology. It is important to learn from past experience, and from wealth surveys conducted in other countries, how these and other problems can be resolved.

Updating and improving on the 1984 survey are important objectives, but of course these are not the sole objectives for creating a new asset and debt survey (ADS). Many changes have taken place in Canada since 1984. Some of these changes include:

- an increase in the proportion of lone parent families (from 1984 to 1994, the number of non-elderly lone parent families increased nearly 30 percent, compared with 19 percent for all non-elderly families);
- a severe recession in the early 1990s;
- a flattening out in the number of dual-earner families;
- an expansion in the proportion of households now owning mutual funds (some industry experts estimate that over one-third of all households are involved in the ownership of stock, or possess mutual funds);
- nominal interest rates, and inflation, at their lowest levels in decades;
- an aging population.

These events or developments, taken together, signal that the distribution and composition of wealth in Canada must have changed and perhaps quite dramatically since 1984. And, because of the changes listed above, many issues important to policy need to be addressed. Data from 1984 can no longer be used for this purpose.

Many groups are expected to have a keen interest in the development of a new asset and debt survey for the information it can provide. The three broad collectives expected to take advantage of this information are governments, business and communities.

¹ From 1955 to 1984, Statistics Canada collected asset and debt data for families and individuals through the Survey of Consumer Finances on six separate occasions. Over time, the surveys have broadened their coverage from non-farm private households to all private households in Canada. Also, categories of assets covered by these surveys have gradually broadened over time. The 1955 survey focused mainly on liquid asset holdings; by 1984 coverage had expanded to include holdings of fixed and longer term assets.

² Throughout this document, the term wealth is used interchangeably with net worth. What we mean by wealth, or net worth, in the context of this document is the difference between total assets and total debts, unless otherwise stated.

1. As part of the public policy process, income and wealth distribution data can be used:
 - C to design and implement new policies;
 - C to conduct analysis on a range of issues relating to equity and efficiency in the areas of taxation and income maintenance.
2. As part of the business decision-making process, income and wealth statistics can be used:
 - C to analyse markets;
 - C to forecast the demand for goods and services;
 - C to understand the internal operations of the economy better.
3. As part of the community information process, income and wealth statistics have been used by the government, media and community organizations:
 - C to help keep the public informed on social and economic conditions;
 - C to provide individuals and organizations with the opportunity to undertake research and keep governments accountable for their actions.

What types of important information can be extracted from the statistics of a wealth survey? Outlined here are five broad themes. Below each theme, a few possibilities are briefly describe.

Expected Future Consumption - net worth (i.e. assets less debts) is a better indicator of future consumption possibilities than current income. Thus, asset and debt data can provide an indication of the ability of families and individuals to adjust to unanticipated events including for example job loss, extended periods of illness, or the economic consequences of marital dissolution. Moreover, net worth of the income-poor can be explicitly examined from the aspect of hardship and lifestyle implications.

Savings Behaviour - net worth is a stock, while savings is a flow concept. However, aggregate savings may be estimated by taking the change in net worth over time. To do this, it may be important to model the asset and debt survey with other surveys such as the Survey of Labour and Income Dynamics. Or, using income data from the wealth survey and consumption data from the Family Expenditure Survey (FAMEX), one could calculate savings as income less expenditures.

Intergenerational Transfers - estimates of assets and debts from current age cohorts could be used to assess the level and composition of net worth potentially available to be transferred to a future generation, making the exploration of intergenerational equity a possibility.

Wealth Distribution - estimates of the level (e.g., median) and dispersion (e.g., gini coefficient) of the distribution, frequently related to income distribution studies in Canada, could be constructed to describe the distribution of Canadian net worth. Using data from both the last detailed wealth survey in Canada and a new ADS, one could determine how the distribution of net worth has changed over time.

Policy Simulations - without asset and debt data, it becomes difficult to estimate the potential impact of tax changes or the distributional implications of these taxes.

In summary, the main objectives of a new Canadian survey measuring asset and debt holding of families and individuals would be:

1. to update wealth information that is over one decade old;

2. to improve on the reliability of the wealth estimates by carefully considering past experience measuring wealth in Canada, and learning from the experience of other countries that have successfully carried out wealth surveys;
3. to provide a primary tool for analysing many important policy issues related to the distribution of assets and debts, future consumption possibilities, and savings behaviour that is of interest to governments, business and communities.

3. Conceptual Framework for a new Asset and Debt Survey

The conceptual model that guides the thinking for a new asset and debt survey is based upon the expectation that the proposed asset and debt survey will not stray far from the content and design of its 1984 predecessor. However, new possibilities for the use of data from the asset and debt survey have surfaced as a result of the introduction of new surveys (e.g. Survey of Labour and Income Dynamics) or existing surveys that are taking on a new form (e.g. the “piggybacking” of the Household Facilities and Equipment Survey onto the Family Expenditure Survey). These other data sources can potentially be used to extend the analysis that can be done using asset and debt data.

The conceptual framework will be comprised of two primary sections:

- (i) an examination of the unit at issue, whether it will be the Census Family, Economic Family, or Household;
- (ii) general measurement issues, including the proposed breakdown of assets and debts into component parts and pension valuation.

3.1 Unit of Observation

The 1984 Assets and Debt Survey used the economic family as the central unit of analysis. Should this family unit be the centre of all wealth data collection? Are there other family definitions which may prove useful? This section outlines different family concepts and the benefits or costs of employing each.

An **Economic Family** refers to persons who live in the same dwelling and are related by blood, marriage, common-law union or adoption. This is a broad definition of the family and is useful because it captures the ideas of an extended family; that is, the inclusion of relatives outside the traditional “nuclear family”. Most studies of “well-being” would use this definition of the family because it defines a unit of shared resources. However, the primary shortcoming of this definition is its weak link to federal government programs and policy. Most programs are not based on the analysis of an economic family. So, we turn next to a practical, at least in the eyes of policy, definition of the family.

The **Census Family** refers to a now-married couple (with or without never-married children of either or both spouses), a couple living common-law (again, with or without never-married children of either or both spouses), or a lone parent family of any marital status with at least one never-married child living in the same dwelling. This definition of the family parallels the idea of a “nuclear family” and is more practical from a policy standpoint. For example, spouses can share income for reported tax purposes, but two brothers living under the same roof (counted as an economic family, but not a census family) cannot. Policy makers are concerned more with what is happening within the census family than, for example, the economic family.

Finally, the **Household**, refers to a person or group of persons who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada. A household may consist of one person living alone, a group of people who are not related but who share the same dwelling, or one or more families. Of the three concepts discussed so far, households are by far the broadest definition of a collective unit of individuals.

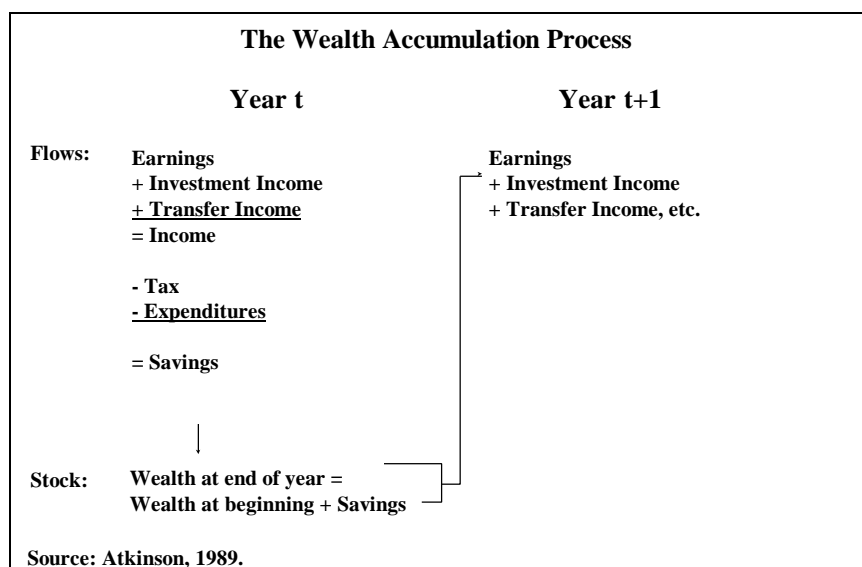
None of these family definitions have addressed how to capture economic links with related persons in other dwellings. For example, should a child living in an apartment in Kingston, Ontario, attending Queen's University and financially dependent on parents in Winnipeg be considered a separate individual or part of the Winnipeg family?

Which definition should be incorporated into a survey of assets and debts? As outlined previously, the economic family definition is useful from a welfare perspective, the census family definition is important from a policy perspective, while the household definition is the broadest concept of a common unit and provides an important bridge to expenditure data. All three definitions are important for their own reasons and to accommodate this, the database should include identifiers flagging households, economic and census families to allow an analyst the flexibility to choose the family concept most relevant to the particular question being addressed.

3.2 General Measurement Issues

Income (e.g. total income, disposable income, etc.) does not measure long-term, sustainable resources that can be considered the logical point of departure for assessing future income or consumption possibilities. One definition of income is "the amount a person could have spent while maintaining the value of his wealth intact" (Atkinson, p.39). Or, more specifically, income can be defined as benefits that flow from the utilization of resources, which contribute to well being. Net worth, on the other hand, does capture the idea of future consumption possibilities by providing a money link between different periods of the wealth holder's life. It is important to understand the relationships between income and net worth; the former is a stock, the latter is a flow, and they are interconnected through the function of savings.

To describe the idea of access to economic resources, the following simple framework may be useful. First, it is helpful to distinguish between income, expenditure and wealth. In any given year, a person receives resources from many different sources: earnings, investment income, and transfers from government. After allowing for taxes, a person can dispose of these resources in three main ways: pass them on to others as a transfer, spend them, or augment the existing stock of assets adding to wealth (i.e., through savings). In the latter case, a person's investment income in the following year would be correspondingly larger. From the diagram shown below, we see how annual decisions about resource flows affects the stock of assets a person holds. This stock, in turn, provides a link in money terms, between different periods in a person's life.



3.2.1. How Wealth is Defined

Wealth, commonly referred to as net worth, is a stock concept and is defined as the net asset position (total assets less total debts) of a family or individual on a particular date. It is based on the following accounting identity:

$$\text{“Wealth” (Net Worth) = Assets - Debts}$$

Assets are the resources that a family can use to fulfil its economic functions (including the generation of income and cash flow). *Debts* are the obligations of a family at a particular date used to acquire the assets. These are probable future sacrifices of economic benefits arising from present obligations of a family to transfer assets to other families or entities in the future as a result of past transactions or events. Although conceptually simple to measure, there are serious practical issues in the measurement of wealth.

3.2.2 Problems with Surveying Wealth

There are two major problems with surveying wealth. The first is related to the ability to procure an adequate response. The second issue ties in with the appropriate valuation of wealth. Both of these issues will be discussed in turn.³

First, with any survey there is the problem of non-response bias. Issues surrounding non-response bias will be treated more fully in the feasibility study which will follow and expand upon this discussion paper.

A second source of bias is due to under reporting of assets. An understatement of assets is very likely even if the problem of non-response bias is completely eliminated. Estimates of wealth from past consumer surveys in the U.S. have historically been substantially lower than aggregate estimates, such as those produced in the Flow of Funds Accounts (FOF).⁴ The greatest risk of under reporting comes from the wealthiest few, who by all indications hold a very large and disproportionate share of wealth in most developed nations. By most accounts, the methodology employed in the 1983 U.S. survey to combat under reporting of those in the top tail of the distribution significantly reduced under reporting of net worth. The U.S. over sampled the top one-half percent of the income distribution at a rate of fifteen times greater than a simple random cross-section of households. Avery and Elliehausen (1986), argue that the inclusion of the high income sample, appropriately weighted, significantly reduces differences between survey based and flow-of-funds account estimates of many wealth aggregates.

There are two generally accepted principles to value wealth. The first is grounded on the **realization principle**. It suggests that the realization value of wealth is based on the amount obtained if assets were sold on the open market. The second, tied to the **going concern principle**, says that what assets are worth is based on their value of remaining in the hands of the asset holder (i.e., replacement cost valuation).

One would expect that net worth estimates based on the going concern principle would greatly exceed those elicited using the realization principle. For example, the going concern value of equity ownership in a family business is likely in many cases to exceed the value perceived by the market. In certain cases, (for example, the valuation of pension rights) an asset may have no realization value but would be worth something on a going concern basis.

³These issues will be more fully dealt with in the feasibility study, but are noted here because they are in fact conceptual issues relating to the determination and valuation of wealth.

⁴For detailed examinations of this issue refer to Avery et al (1988) and Juster and Kuester (1991).

There would be problems obtaining accurate responses, regardless of the valuation principle employed. These problems would be particularly severe for assets whose value, using the going concern principle, involves complex calculations of life expectancies, etc. However, even using market valuation some assets, like houses and unquoted shares, do not have a ready market price. Most wealth surveys tend to push respondents towards employing the realization principle wherever possible.

3.2.3. A Potential Asset and Debt Accounting Framework

One way to understand the categories of assets and debts would be to follow the conventional financial statement accounting framework of the balance sheet for an enterprise since one can, at least in theory, view a family unit in a similar fashion to a business enterprise. To do this one must decompose total assets into a current portion and fixed portion, and total liabilities into a current portion and a long term portion.

Current assets (e.g. mutual fund holdings) are defined as those assets easily convertible into cash. **Fixed assets** (e.g. house) are those assets which are not easily convertible into cash because there is no readily available market for their acquisition or disposition. **Current debt** is the portion of total debt expected to be paid within one year (e.g. charge card accounts). **Long term debt** is that portion of total debt outstanding for greater than one year (e.g. principal mortgage amount, less the current portion, on a house).

Breaking debts into a current and long term portion is useful for analysts, but may not be possible in a survey setting. For example, many respondents may know the total principal amount of a mortgage outstanding, but may not know the value of the current portion of that liability (i.e., how much of the total outstanding mortgage is due within the year). However, the advantage of disaggregating assets and debts into current and long-term components is to provide information necessary to infer the liquidity or solvency positions of families and individuals (i.e., are they one pay check away from the inability to cover obligations due within the next few months?).

Wealth (or, net worth) can be narrowly defined, or broadly defined. For policy issues such as access to public goods and services, or access to collective assets and ownership of collective obligations, a wide conceptual framework for the definition of wealth is desirable. However, as the conceptual framework is widened, evaluation becomes more difficult since the economic valuation of non-market transactions or “intangibles” arises. The classification of wealth at its broadest level is presented in the following graphic.

Classification of Wealth at a Broad Level	
A.	Financial Cash, Deposits and Claims (shares, loans, etc.)
B.	Non-financial other than human
1.	Tangible
i.	Natural: Environment, land, mineral resources, fossil fuels, etc.
ii.	Manufactured: Durable structures, machinery, equipment, etc.
2.	Intangibles
i.	Natural: Scenic beauty, etc.
ii.	Other: Legal rights, language, cultural traditions, etc.
C.	Human
1.	Labour: Labour power
2.	Skills: Function of education and health
Source: New Zealand Department of Statistics, 1991.	

This broad framework is useful to highlight because it places the idea of economic well-being in a broader context of social welfare. It demonstrates how far most of the family definitions of wealth are from the concept of “well-being”. For purposes of understanding family and individual wealth holdings another, more practical framework, may be useful to outline. The family wealth framework presented in the graphic below, although considerably narrower in scope to that shown in the above graphic, provides a reasonable framework for wealth data collection primarily because it relies less on the valuation of intangibles and the valuation of “collective wealth” (e.g. art).

The treatment of contributions to social security schemes in income also has implications for the measurement of wealth.⁵ When the contributions are included as income they enter savings, accumulating as families’ equity holdings in pension funds. These holdings are therefore part of wealth. However, these families do not have access to these forms of wealth until retirement or death and cannot exchange them for other forms of wealth. Thus, it may be best to treat these holdings as assets of pension funds and that the pension payout be treated as income, not the original contribution. Similarly, life assurance policies are not accessible at their full value before maturity. Therefore the suggestion is to include the policy at its surrender value in the measurement of individual and family wealth.

Classification of Family and Individual Wealth	
I.	<p>Marketable Wealth:</p> <p>1. Assets</p> <ul style="list-style-type: none"> - residential real estate - other assets (e.g. art, collectibles) - copyrights and patents - cash - financial investments (including equity ownership in unincorporated enterprises) <p>less</p> <p>2. Debts</p>
II.	<p>Semi-marketable wealth:</p> <ul style="list-style-type: none"> - life assurance surrender values
III.	<p>Non-marketable wealth:</p> <ul style="list-style-type: none"> - other life assurance and pension assets (funded and unfunded)
<p>Source: New Zealand Department of Statistics, 1991.</p>	

On pension entitlements in general, Rushbrook and Wells have argued that “while the entitlement to a future stream of income may affect an individual’s behaviour as regards savings, that entitlement is not part of a currently marketable financial portfolio that can be used for current consumption or alternative investment: it is an asset over which there is no control, yet to which a part of income is committed” (p.23).

⁵The remaining part of this section draws considerably from the New Zealand experience as reported in *Income and Wealth Statistics*, 1991.

Therefore, depending on the purpose of the wealth information, it may be useful to employ different definitions of family and individual wealth:

- marketable net worth;
- marketable net worth plus semi-marketable and non-marketable forms of wealth (where most non-marketable forms of wealth should be treated as “Off-Balance Sheet” items).

4. Proposed variables

The following section outlines the variables proposed for inclusion in a new asset and debt survey. In developing these variables, consideration was given both to comparability with the information from Statistics Canada’s 1984 survey and the U.S. Survey of Consumer Finances conducted by the Federal Reserve Board.

The “balance sheet” on the next page summarizes the items that would be included in an asset and debt survey. These items are also included in the list of variables on the following pages, but with additional detail to provide an indication of the manner in which this information would be collected from respondents. The actual questions will be formulated at a later stage in the development of this survey, following agreement on the content.

The Family Balance Sheet

Cash on hand
 Deposits in bank accounts
 Term deposits, savings, investment certificates
 Canada Savings Bonds
 Marketable securities (e.g. publicly traded stocks, bonds, warrants, etc.)
 Other financial assets (e.g. assets held in trust, mortgages held on other property, etc.)
 Miscellaneous current assets (e.g. royalties, patents, etc.)

Total Current Assets*

Equity in real estate other than own home
 Market value of primary home
 Market value of other homes or property
 Market value of vehicles
 Equity in business, farm, profession

Total Assets

Credit card debt
 Other charge account and instalment debt
 Secured bank loans
 Other collateralized bank loans
 Student loans
 All other current debts (e.g. current portion of long term debt)

Total Current Debt*

Mortgage debt on primary home
 Mortgage debt on vacation home
 All other long term debt (e.g. loans for other property, long term debt from student loans, bank loans, etc.)

Total debt

Net Worth (= Total Assets - Total Debt)

* Assets are classified as current to the extent that they are easily convertible into cash or near cash instruments. Debts are classified as current if they are to be paid within one year. This includes the current portion of long term debt outstanding.

Off Balance Sheet Items**

Pensions
 Life Assurance
 Rent and Leases

** Although accounted for, these items will not be included on the family balance sheet. They will be segregated from the net worth calculation so that analysts can include them where they deem most appropriate.

4.1 Assets and debts

The collection of asset and debt data is by no means simple or straightforward. There are two prevalent and opposing forces that must be considered at the questionnaire design stage: data quality versus burden to the respondent due to the length of the interview.

In the 1984 Survey of Consumer Finances conducted by Statistics Canada, the approach used was to ask fairly aggregate questions about assets and debts held by individuals within the family. However, recall at this level may pose problems, particularly for families with a complex financial situation. For example, suppose that a family uses five different credit cards. Rather than ask the respondent to arrive at one aggregate amount for all cards, from a data quality point of view it would be preferable to have the respondent consider each individual card, report the outstanding balance and do the summation later. In general this more detailed approach is being proposed for the new upcoming survey in the interest of data quality.

A similar approach is anticipated for the asset and liability associated with home ownership. For many Canadian households these are not trivial amounts and represent a significant proportion of net worth. At the same time, these amounts may be difficult for the respondent to estimate. For this reason a fairly detailed series of questions may be required to obtain accurate data. For example, the respondent will be asked to estimate the current market value of the dwelling. A series of follow-up questions about the purchase price, date of purchase, and amounts spent on additions and renovations may also be needed. Such information can be used to validate the market value estimated by the respondent or to impute a value if the respondent cannot estimate one. On the debt side, in addition to the current amount owed, a series of questions about the mortgage may be appropriate to aid in estimating the outstanding debt, should the respondent be uncertain of the amount.

Finally it should be noted that a few items have been included with the asset and debt data content proposed in the table that follows that do not link directly to the measurement of net worth, but nevertheless do fit into the broad objectives of the survey.

A few questions have been proposed to measure the cash value of insurance policies. One of the objectives of the survey is to provide an indication of financial vulnerability, i.e. the ability of families to adjust to unanticipated events. In order to make this type of assessment it is important to estimate assets that may be passed on to dependents in the event of a death.

Again, to help assess financial vulnerability, questions are proposed to measure monthly rent and leasing. Although rent is not a liability in the same sense as a mortgage liability, a family must have the funds available to cover shelter costs in order to carry on with their current standard of living. If an unexpected event such as the loss of a job means that a family would be unable to make a rental payment (due to lack of other assets), this family could be considered vulnerable.

The issue of leasing (for example leasing of vehicles) is important to consider since it has become a fairly common phenomenon. Some schools of thought consider a leased vehicle to be an asset (i.e. a capitalized expense) while others believe that it is an expense. It is proposed that the issue of leasing be addressed in order to understand vulnerability as described above.

Variable	Level of detail	Need for information/questions/comments
Credit / credit cards		
Credit cards, also including: - gasoline cards - retail store cards - airline, car rental	For each card: - type of card - amount owed after last payment - credit limit - type of institution card is with	The intent is to establish the total amount owed on credit cards. A series of questions about each card will be used to elicit the most accurate response. For confidentiality reasons, data cannot be released on particular types of cards. The information will be used to: - measure current debt load; - measure extent to which respondent is over-extended on credit cards; - assess the potential for debt / vulnerability.
Other charge accounts, e.g. instalment or "no money down", deferred payment plans	Total amount owed after the last payment made for all such accounts - type of institution account is with	To measure current debt load
Lines of credit, includes home equity lines of credit or any other line of credit	For each line of credit held with a bank or other financial institution: - maximum amount that could be borrowed - amount currently owed - type of institution holding line of credit	To measure debt potential and help assess vulnerability
Housing / property / dwelling		
Assets associated with home ownership (owner occupied home)	For owner occupied homes - current value of home and land - degree to which the respondent feels the estimate is accurate - date purchased - original purchase price - date, nature and approximate cost of major additions and renovations	Used to validate current value or to impute it if not known. Questions about the type, size, location and features of the house may be an alternative approach to validating value.
Debts associated with home ownership (owner occupied home)	For each mortgage: - outstanding amount owed - reference date - type of institution holding mortgage	Series of questions about the mortgage may be needed if balance owing not known. Used to measure total outstanding debt due to mortgages on owner-occupied homes.
Rent	Amount of monthly payment - some or all utilities included - furnished or unfurnished	Not an asset, however information to be used in assessment of vulnerability as this is a basic expense that must be met.
Assets and debts associated with ownership of other property	Includes other real estate such as a lot, vacation home, timeshare, apartment building, commercial property, or other investment property, including properties owned in partnership with other people - does not include real estate owned by a business (dealt with elsewhere). For each such property :	

Variable	Level of detail	Need for information/questions/comments
	<ul style="list-style-type: none"> - type of property -ownership (owned by respondent, owned jointly, partnership, timeshare, other) - % owned by respondent - re: respondent's share of the property: <ul style="list-style-type: none"> - current value - date purchased - original total purchase price - outstanding loans / mortgages 	<p>Series of questions may be needed to value property or loans on property if not known.</p>
Vehicles		
<p>Assets and debts associated with cars / vans / trucks</p>	<p>(Excluding motorcycles, tractors, snow blowers, vehicles owned by a business.) For each vehicle owned:</p> <ul style="list-style-type: none"> - make, model, year - year purchased - current value - amount owed (excluding loans already mentioned) - type of institution amount owed to 	<p>Make, model and year to be used for imputation if value is not known. Series of questions will be used if amount owed not known.</p>
<p>Assets and debts associated with other vehicles</p>	<p>Includes vehicles owned by a business but also used regularly for personal purposes, motor homes, RVs, motorcycles, boats and airplanes.</p> <p>For each vehicle:</p> <ul style="list-style-type: none"> - type and age - current value - same loan questions as for cars / vans / trucks 	
Leasing		
<p>Leased vehicles</p>	<p>For each vehicle leased:</p> <ul style="list-style-type: none"> - make, model, year - type of lease - monthly payment - year / month of original lease 	<p>Although not an asset, information to be used in assessment of vulnerability as it is a basic expense that must still be met in the event of unanticipated circumstances.</p>
<p>Other leased items</p>	<p>Type of item and lease Monthly payment</p>	<p>For major items only.</p>
Loans		
<p>Student Loans</p>	<p>Money owed for educational expenses, not counting credit cards or any loans already mentioned</p> <p>For each loan:</p> <ul style="list-style-type: none"> - month and year loan taken out - amount borrowed not counting financing charges - type of institution loan is with - amount still owed 	

Variable	Level of detail	Need for information/questions/comments
All Other Loans	Include: - loans made for the purchase of a property / house such as loans from a relative or the seller (not counted as loans mentioned in the mortgage section); - loans made to make any major additions or extensive remodelling to the home; - loans for household appliances, furniture, medical bills; - personal loans from friends or relatives. For each loan: - amount still owed - type of institution holding loan	Series of questions about payment schedule may be needed if amount not known.
Mortgages held		
Mortgage holdings held by respondent	Real-estate for which respondent loaned money to the buyer - includes accepting a note, land contract or mortgage from the buyer - does not include property owned by a business which respondent owns or has interest in For each such loan you are owed money: - month and year mortgage taken out - amount loaned - amount still owed	
Businesses		
Business assets	Includes farm, business or professional practice in the form of a sole proprietorship, partnership or private corporation. For each such business: - legal status: partnership, sole proprietorship, private corporation, other - percentage owned - financed using personal assets as collateral or were loans co-signed or guaranteed - amount business owes you - amount you owe the business - net worth of your share - amount business could be sold for	To measure equity, i.e., estimated net investment (market value of assets minus liabilities) in business, farm or professional practice. Unless previously mentioned
Financial assets		
Checking and savings accounts	For each account (main and other): - type of account (e.g. checking, savings) - type of institution account is with - current balance	

Variable	Level of detail	Need for information/questions/comments
Accounts in foreign currency	For each account (not already mentioned) - current balance - type of currency	
Cash on hand	Includes uncashed checks or money orders - total value	
Term deposits, savings / investment certificates	For each: - type of institution account is with - current value (i.e., principal plus accrued interest)	
Canada Savings Bonds	Face value of issues being paid for by instalment. - amount owed on instalment For fully paid issues, total value of uncashed coupons and accumulated interest.	
Other bonds	Includes other federal, provincial and municipal government bonds, corporate bonds and debentures and t-bills. The value of foreign bonds and debentures to be identified separately. Excludes bonds or bills held in pension / RRSP accounts or trust, or in accounts already mentioned. Total face value Total market value	
Publicly traded stocks	Excludes stock held through mutual funds, pension / RRSP accounts or trusts, or in accounts or businesses already recorded. Number of companies in which stock held. Total market value of stock. - of this amount, total market value of stock in a company where you work or worked.	To measure a component of labour market fringe benefits not available elsewhere.
Mutual or investment funds	Excludes those in pension / RRSP accounts. For each fund: - type (stock fund, bond fund, money market fund, other) - current market value	
Life insurance		
Assets and debts associated with life insurance	Type of life insurance held: term, non-term For term life policies: - face value (the face value is the amount the policy would pay in the event of death) For policies that build up a cash value or on which you can borrow (whole-life,	Non-term includes whole life, universal life, current assumption whole life. Cash value can be considered an asset. The face value aids in evaluating financial

Variable	Level of detail	Need for information/questions/comments
	universal-life, or current-assumption whole life): - cash value (cash value is amount received if policy surrendered before death) - current face value of all these policies - amount of loans against the policy (confirm if previously reported and if included in above value)	vulnerability; it is the amount other members of the family (generally) would receive in the event of the death of the individual. Amounts borrowed are part of the current debt load
Other		
Brokerage accounts	"Cash" or "call money" accounts with a stock broker, mutual fund company or investment firm; these accounts hold money received from the sale of stock, mutual funds, etc. until the money is reinvested. Total dollar value of such accounts Current balance on margin loans with a stock broker not previously mentioned	Not including any accounts already mentioned
Trust or annuity accounts	Excludes pension-type accounts or any assets already recorded. For each: - type (legal trusts, annuities, managed investment accounts, other); - total dollar amount of equity interest, if applicable.	
Other assets	Value of registered education savings plan Other assets, e.g. artwork, precious metals, antiques, futures contracts, royalties, etc.. For each individual asset worth \$5,000 or more: - kind of asset; - total dollar value.	
Other money owed to the respondent	(By friends, relatives outside the family) - total amount owed to respondent	

4.2 Pension / retirement savings programs

The monies that individuals have accumulated in retirement savings programs constitute one of the most important components of their wealth profile, in some cases the single most important. Valuing the assets in certain of these programs, however, presents one of the biggest challenges in the collection and analysis of asset and debt data.

A number of different vehicles / programs exist in which retirement savings can be held:

- registered retirement savings plans (RRSPs);
- annuities;
- registered retirement income funds (RRIFs), life income funds (LIFs), locked-in retirement income funds (LRIFs);

- deferred profit sharing plans (DPSPs);
- registered employer-sponsored pensions plans (RPPs).

Except for RPPs, the current value of savings in these programs is known, and can be established from statements received from the financial institution where the money is held. These amounts could then be included with the individual's assets, even though in some cases the money may be locked-in until it is turned into a stream of income at retirement. A value cannot as easily be attributed to the amount held in RPPs. Attempting to include this value with the other assets of the individual may be inappropriate, as these amounts cannot be converted to a lump sum cash amount; they must be used to provide a stream of retirement income. In addition, after the death of the recipient, although the spouse often receives an ongoing benefit, the entire amount does not become part of the individual's estate.

Due to the inherent difficulties in valuing pensions, many wealth surveys do not include contingent rights of people to public or private pensions. Of course, the rights to a pension represent significant value to a person since in its absence, other assets would have to be accumulated (e.g. stocks, bonds) to generate the equivalent expected income stream.

Approximately 45% of the workforce currently belong to RPPs; in total the assets now in these plans is in the order of half a trillion dollars. A wealth survey would provide us with the means, not previously available, of determining how these assets are distributed throughout the population. That being said, estimating those assets, for individuals, is not a straightforward task. A brief description of the two main types of RPPs will help to highlight why. The two types are:

Defined contribution plans: In these plans, the employer and, if the plan is contributory, the employee contribute a specified amount to the plan, for example, 4% of earnings. The contributions plus investment earnings accumulate and at retirement are used to purchase an annuity or some other retirement income vehicle. At any point in time the value of the pension is the accumulated contributions plus investment earnings. This amount may be known by the individual as the employer is required to provide him / her with an annual plan statement containing this information. If not, the approximate value can be calculated if the identity of the plan can be determined, and a link made to the information on Statistics Canada's Pension Plans in Canada (PPIC) database. Only about 10% of the members of RPPs belong to this type of plan.

Defined benefit plans: Members of these plans (90% of all RPP members) are promised a certain pension at retirement. A typical benefit, for example, would be 2% of the average of their highest years of earnings while working with the employer times their number of years of service. Therefore a 40 year-old person who has belonged to a plan for five years and has an average salary of \$30,000 would expect to receive an annual pension of \$3,000 at age 65 (the normal retirement age specified in most plans). The value of this asset is generally thought to be the present discounted value of the future stream of pension payments (\$3,000 each year in this example). Estimating this value requires knowledge of the provisions of the plan; it is also necessary to make assumptions about things such as interest rates and life expectancy. It is recommended that for this type of plan the value of the pension be calculated assuming that:

- possible future service not be considered;
- retirement takes place at the normal retirement date specified in the plan.

An illustrative list of the items required for the valuation of pension assets follows.

Information Needed to Value Pension Benefits					
	Defined Contribution Plan		Defined Benefit Plan		
	Money Purchase	Profit Sharing	Final Pay	Career Average	Flat-Benefit
Items Needed to Calculate Value of Benefit	- contribution rate - assumed investment earnings - years of service - earnings	- same as money purchase except we need to know company profits. Perhaps not worth doing, as there are only about 10000 members	- employee contrib. rate - benefit rate - years of service - earnings - current & retirement age - assumed investment earnings and life expectancy - indexing of benefits	- similar to final pay	- similar to final pay

Because users of this information may wish to apply their own assumptions to generate a value for RPP benefits, it is suggested that a micro data file produced from this survey contain both the estimated value as well as the component pieces of information (see items after “value of RPP from current job” in the following list) used to make the estimation.

One of the most significant problems in attempting to value pension benefits through a household survey is that individuals are unlikely to know enough about their RPP to make the estimation of this value easily possible. Indeed they may not know if they belong to a plan at all. The hope is that using the registration number of the pension plan (provided on the individual’s T4) that a link can be made to Statistics Canada’s Pension Plans in Canada (PPIC) database, which contains the major provisions of all RPPs in the country. Other options for valuing the pension, in the absence of other information will also be explored, e.g. the use of the pension adjustment.

There are some issues that must be resolved regarding the process of valuing RPP benefits, however. These are:

- 1) The value associated with the C/QPP - Most defined benefit RPPs are integrated with the C/QPP, which means that part of the specified benefit comes from those government plans. The value of the C/QPP portion of the benefit should be excluded from the value of the RPP benefit, otherwise individuals in integrated and non-integrated plans would be treated inconsistently. Should an attempt be made to attribute a value to expected benefits from the C/QPP? This would significantly increase costs associated with the survey, which may not be warranted.
- 2) Valuing pensions associated with prior employment - Memory may play a role in our ability to appropriately value these benefits. (This is not an issue if the individual transferred the money to a locked in RRSP.) Establishing a value would require information on the individual’s years of service, salary and the identification of the plan, in order to link to the PPIC database. This cost would be warranted only if the individual had lengthy service with a prior employer.
- 3) Credit splitting on divorce - It is possible that divorced persons belonging to pension plans may have transferred a portion of the value of their pension to their former spouse. If the receiving spouse had this amount in an RRSP, the value should be relatively easy to acquire. Removing that value from the pension of the spouse belonging to the plan would require a lengthy series of questions about the nature of the credit splitting. This is deemed to be more costly than warranted.

- 4) Valuing pensions in pay - Given that the intention of calculating the value of the pension is, in part, to help researchers predict the future stream of income it will generate, is it important to determine the value of pensions currently in pay (providing income)? An argument for doing this would be to treat all pensions similarly. Questions of this type will require further consideration. Input on this point would be welcome.

If the valuing of RPP benefits is not a perfect science and if this value cannot appropriately be included with the other assets of the individual, how is this information to be used? The value of the pension itself, or an “adequacy of expected benefit” scale based on the plan’s contribution and / or benefit rates and the length of membership, can be used to “add-value” to the individual’s / household’s net worth picture. For example, someone with low net worth who has the expectation of a relatively generous pension is clearly in a different situation than someone with no pension expectations other than the C/QPP.

Variable	Level of detail	Need for information/questions/comments
Balance sheet items (to be included with assets)		
Registered retirement savings plans (RRSP)	Current value of amount held in: - deposits and GICs - mutual funds - stocks and bonds - other	
Is any of this amount in group RRSPs?	Yes / No	To provide information not currently available on the types of RRSPs held
Is any of this amount in self-directed RRSPs?	Yes / No	
Annuity, RRIF, LIF, LRIF from which benefits are being paid	Current value	Should determine whether any of this amount originated from an RPP. If not, we would be treating that amount differently than the value of the RPP, which may not be included with other assets.
Annuity from which benefits will be paid	Current value	
Deferred profit sharing plans	Current value	
Off-balance sheet items (not to be included with assets)		
Value of RPP from current job		For defined contribution plans, accumulated contributions plus interest. For defined benefit plans, present value of promised benefit based on service to date. If not known to be derived from following variables. To exclude value of C/QPP for integrated plans.
Name / number of pension plan		Available on T4; allows link to PPIC database containing plan characteristics

Employee contribution rate		This information will likely not be available from the individual; it can be obtained from Statistics Canada's Pension Plans in Canada (PPIC) database. It can be used, together with information on the individual's age, length of service and salary, to derive the value of the benefits. These variables could be added to the database, in addition to the value of the benefit, to allow researchers to develop different retirement income scenarios based on different assumptions with respect to future service, interest rates, etc.
Employer contribution rate		
Benefit rate		
Earnings base on which pension based		
Normal retirement date of plan		
Integration with C/QPP		
Indexing of benefits		
Subsidized spouse's benefit		
Pension adjustment (PA)		Could aid in valuing benefit if other information not available.
Value of RPP from previous job		Only for those who indicate they had pension from previous employment and left pension money in plan or transferred it to a new plan.

4.3 Demographic and labour market characteristics

Demographic and job information is required to allow comparisons of wealth holdings, indebtedness and vulnerability among various types of families and sub-populations. Because of the length and complexity of the main content areas of the survey, every effort must be made to avoid increasing response burden by adding questions that are of secondary importance. In reviewing this proposed content, the reader should therefore suggest trade-offs. If a particular variable is missing from the list, what variable on the list could be dropped?

Variable	Need for information / questions / comments
Demographics	
Year of birth	Determine stage of life cycle; family circumstances.
Sex	
Legal marital status	
Common-law status	Kept distinct from legal status to ensure clearer reporting.
Number of previous marriages	To assess if person has pension assets from former marriage.
Number of children born or raised	To use in modelling wealth redistribution through inheritances.
Immigrant status & year of immigration	Assumed to be the most relevant of the ethno cultural variables.
Country of birth	

Geography	
Province of residence	
Size of area of residence	To determine relevant low income cutoff.
Family and household information	
Relationship to other household members	Will allow enough detail to construct step families and 3-generation families.
Household size	
Household type	Distinguishes between family and non-family households.
Economic family size	
Economic family composition	
Living arrangements	
Educational attainment	
Total years of schooling	Explanatory variables for analysing wealth differences.
Graduated high school	
Highest university degree or certificate	
Major field of study of highest degree	
Most recent post-secondary non-university diploma	
Major field of study	
Current educational activity	
Currently attending school	To allow proper interpretation of asset and debt results of younger persons.
Full-time or part-time?	
Type of institution	
Main activity in 1997	
Self-assigned main activity	To supplement job information, which focuses specifically on information needed for pension valuation.
Self-assigned secondary activity	
1997 employment (aged 16+)	Assuming survey is conducted in 1998
Employer name	(For persons with more than 1 job in 1997: collect information on all employers.)

Place of work	
Industry of employer	
Date job began (current spell)	
(If ended) Date job ended	
Any previous spells with this employer?	May be needed to estimate value of pension.
Date first worked for this employer	
Total months / years with this employer	
Class of worker	
Occupation	
Usual weekly hours	Used to derive full-time / part-time.
Total earnings from job in 1997	Need to include commissions, tips, bonuses. Information may be needed to calculate pension assets.
Pension plan member	
Union coverage	
Previous work history	To identify prior pension plan participation. Work backwards from 1997. May be restricted to those jobs lasting at least two years and providing a pension plan.
1st previous employer:	
Name of previous employer	
Industry	
Class of worker	
Start and end dates	
Full-time / part-time / some of each?	
Total months / years worked for this employer	
Covered by pension plan?	
(If so) was pension money left in plan, cashed in or transferred to later plan?	
2nd previous employer: same questions as above.	Repeat question sequence until 5th previous employer OR start date = age 15, whichever comes first.

Year first worked, not counting jobs before leaving school (for first time)	
Number of years mostly full-time since then	Used to derive total years of work experience in full-time / full-year equivalents; allow comparisons of pension entitlements of various worker sub-populations with comparable work experience.
Number of years mostly part-time	
Number of years mostly not working	
Number of full and part-time jobs held in past ten years	

4.4 Income

Income data for the calendar year preceding the survey will form an important component of an asset and debt survey. As in the Survey of Labour and Income Dynamics, the intention is to offer respondents the choice of completing the income questions or indicating that they prefer to provide the information via their tax return. Either way, the information will allow studies of the relationship between income and wealth that have not been possible with other current data sources.

The income variables include information on the family's status with regard to low income cutoffs (LICOs) and low income measures (LIMs) to allow studies of wealth and indebtedness in relation to income adequacy.

Variable	Need for information / questions / comments
Individual income	
Wages and salaries	
Net self-employment income (farm)	
Net self-employment income (non-farm)	
Earnings	Sum of previous 3 categories.
Taxable investment income	
Taxable capital gains	
Child Tax Benefit	
Old Age Security / Guaranteed Income Supplement	
C/QPP	
Employment Insurance Benefit	
Worker's Compensation	
Social assistance	

GST credits	
Government transfers	Sum of previous 7 categories.
Pension income	
Other taxable income	
Total money income	
Federal tax payable	
Provincial tax payable	
Total tax payable	Sum of previous 2 categories.
After-tax income	
Largest source of income	
Census family income	
Repeat of previous variables summing over all persons in same Census family	Definition of Census family may be modified version of one currently used in Census.
Economic family income	
Repeat of previous variables summing over all persons in same economic family	Standard definition, i.e., all persons living in same dwelling and related by blood, marriage, adoption or common-law relationship.
Before-tax low income cutoff (LICO)	Based on person's family size and size of area of residence (big city, rural area, etc.)
Ratio of family income to before-tax LICO	
After-tax LICO	
Ratio of family income to after-tax LICO	
Low income measure (LIM)	
Ratio of family income to LIM	
Household income	
Repeat of income variables (sources) summing over all individuals in households	Household includes all persons usually residing in selected dwelling, or with no usual residence elsewhere.

4.5 Inheritances

Inheritances would form an independent component of an asset and debt survey. Such information will aid our ability to characterize those receiving inheritances and to assess the impact such inheritances have had on net worth.

Assets received through an inheritance would also, if still owned, be also reported as an existing asset.

Variable	Use of information / question / comments
Ever received any inheritances?	
(If yes) How many?	
Latest inheritance	
Date of (latest) inheritance	Need to consider how to handle cases where estate is not yet settled.
Received from	
Cash, non-cash or both	
(If applicable) cash amount	
(If applicable) value of non-cash assets at time of inheritance	May need a fall-back: list the assets.
Previous inheritances	
Same variables for each previous inheritance	

References

- Atkinson, A.B.(1989). *The Economics of Inequality*, 2nd ed., Oxford University Press, New York.
- Avery, Robert B., and Gregory E. Elliehausen, and Arthur B. Kennicke (1988). "Measuring wealth with Survey Data: An Evaluation of the 1983 Survey of Consumer Finances", *Review of Income and Wealth*, 34(4).
- Avery, Robert B. and Gregory E. Elliehausen (1986). "Financial Characteristics of High-Income Families", *Federal Reserve Bulletin*, pp.163-177.
- Department of Statistics (1991). *Income and Wealth Statistics*, Wellington, New Zealand.
- Heeringa, Steve G. And F. Thomas Juster and R. Louise Woodburn (1989). "The 1989 Survey of Consumer Finances: A Survey Design for Wealth Estimation", presented at the International Association for Research in Income and Wealth, Lahnstein, West Germany, August.
- Juster, F. Thomas and Kathleen A. Kuester (1991). "Differences in the Measurement of Wealth, Wealth Inequality and Wealth Composition Obtained from Alternative U.S. Wealth Surveys", *Review of Income and Wealth*, 37(1).
- Rushbrook, T. And J. Wells (1987). "National and Sector Balance Sheets in Concept and Practice", *Review of Income and Wealth*, 33(1).
- Statistics Canada. *The Distribution of Wealth in Canada, 1984*, Cat.#13-580 (occasional).
- Statistics Canada. *Census Dictionary*, Cat.#92-301E.