



Catalogue no. 13-595-XIE

The Assets and Debts of Canadians

An overview of the results of the
Survey of Financial Security



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 ((613) 951-7355; (888) 297-7355; 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

All prices exclude sales tax

Catalogue no.13-595-XIE, is available on internet for free. Users can obtain single issues at: <http://www.statcan.ca/cgi-bin/downpub/research.cgi>.

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

The Assets and Debts of Canadians: An overview of the results of the Survey of Financial Security

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2001

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 2001

Catalogue no. 13-595-XIE

Frequency: Irregular

Ottawa

La version française de cette publication est disponible sur demande

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.

Symbols

The following standard symbols are used in Statistics Canada publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- x confidential to meet secrecy requirements of the Statistics Act.

Acronyms

- DPSP - Deferred Profit Sharing Plan
- LIRA - Locked-In Retirement Account
- LOC - Line of credit
- RESP - Registered Education Savings Plan
- RRIF - Registered Retirement Income Fund
- RRSP - Registered Retirement Savings Plan
- SFS - Survey of Financial Security

Table of Contents

	Page
1. Introduction	5
2. Highlights	7
3. Assets, debts and net worth in 1999	9
3.1 The distribution of net worth	9
3.2 Income	10
3.3 Type of family	10
3.4 Age	13
3.5 Employment	15
3.6 Education	17
3.7 Occupation	18
3.8 Immigration status	19
3.9 Provinces	20
3.10 Composition of assets and debts	21
4. Comparison of net worth in 1984 and 1999	29
4.1 Historical perspective	29
4.2 Distribution of net worth among family units	29
4.3 Change in net worth by family type and age	30
4.4 Changes in the composition of assets and debts	32
5. Conclusion	35
Appendix A - Sources and Methods	37
A.1 The survey universe	37
A.2 Survey content and reference period	37
A.3 The sample	38
A.4 Data collection	38
A.5 Data processing and quality control	38
A.6 Data quality	40
Appendix B - Concepts and Definitions	45
B.1 Net worth	45
B.2 Assets	45
B.3 Debts	48
B.4 Family type	49
B.5 Other concepts	50
B.6 Comparability of 1984 and 1999 asset and debt data	52

ELECTRONIC PUBLICATIONS AVAILABLE AT
www.statcan.ca



1. Introduction

This overview report is the first of a series intended to present the results of the Survey of Financial Security (SFS). The SFS collected information on the assets and debts of families and unattached individuals. Data collection took place from May to July 1999, in all provinces. Although this is the seventh time that an asset and debt survey has been conducted by Statistics Canada, over fifteen years have passed since the last survey, in 1984. Significant changes have taken place since that time, in the economy, the structure of families, investment options and strategies and the tax system.

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 in this report 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 debts.

TOTAL ASSETS	less:	TOTAL DEBTS	equals	NET WORTH
Financial assets - RRSPs, RRIFs, RESPs, DPSPs - Deposits - Stocks, bonds, mutual funds - Other financial assets Non-financial assets - Principal residence - Other real estate - Vehicles - Contents of residence, valuables Equity in business		Mortgages on: - principal residence - other real estate Credit card debt Line of credit debt Vehicle loans Student loans Other loans and debts		

For this first overview report, one important item is excluded from the calculation of net worth. That item is the value of pensions, for those that belong to - or once belonged to - a pension plan provided by their employer. A methodology for estimating that value is being developed; consultation on the approach is currently underway. A consultation paper, entitled *Survey of Financial Security: Estimating the value of employer pension plan benefits*, A discussion paper can be found on the Statistics Canada website (www.statcan.ca) under Products and Services. A more complete picture of the net worth of Canadians, which includes the estimated value of pensions, will be produced in the fall of 2001. This will be the first time an estimate of the value of employer pension plan benefits will be included in the results of an asset and debt survey conducted by Statistics Canada.

The input and financial support of Human Resources Development Canada, Canada Mortgage and Housing Corporation and Industry Canada to the development of this survey is very gratefully acknowledged. The collection and processing of this information was financed by the Policy Research Initiative.

NOTE

In this report the focus is on **median** net worth rather than **average** net worth. Both measures can be used to describe net worth, but each provides a different picture. Median net worth is determined by ranking all family units from highest to lowest net worth. The net worth of the family unit in the middle of the range is the median net worth. Average (or mean) net worth on the other hand is determined by dividing the total net worth of all family units by the number of family units. The more the average exceeds the median, the more the wealthiest family units in the country contribute to the increase in the average.

Information on assets and debts was collected for the family unit and not for each individual in the family. The term **family unit** includes both families of two or more and unattached individuals. Families of two or more are referred to as economic families, 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.

All dollar amounts in this document have been rounded to the nearest \$100. All asset, debt and net worth amounts in this report are expressed in **constant 1999 dollars**. Amounts related to income, however, are expressed in current 1998 dollars.

2. Highlights

The median net worth of Canada's estimated 12.2 million "family units" was about \$81,000. This means that half of all family units had net worth more than this, and the other half had less. Net worth is the amount an individual or family would clear after selling all assets and paying off all debts. The term family unit includes both unattached individuals and families of two or more people who live in the same dwelling and are related to each other.

Net worth: Substantial differences in distribution

There were substantial differences in the distribution of net worth among family units in 1999. Overall, the 10% of family units with the highest net worth held just over half (53%) of all personal wealth in the country in 1999. The 10% at the low end of the net worth scale actually had negative net worth; they owed more than they owned. In comparison, the top 10% of families in the United States hold about two-thirds of all personal net worth, according to 1998 data from the United States.

Families in which a senior was the major income recipient had the highest net worth of any type of family unit, \$202,000. The net worth of couples with children under 18 was about half that, \$100,500. Much lower net worth was recorded by lone-parent families (\$14,600) and unattached individuals (\$21,700).

Among the provinces, median net worth was highest in 1999 for family units in Ontario, at \$101,400. Newfoundland families had the lowest net median worth at about \$53,000.

Net worth increases with income, age and education

Survey results showed that net worth increases with income as well as with the number of earners in a family, age, level of education and type of occupation.

Education was one of the more important determinants of net worth. Someone with a bachelor's degree had a median net worth 70% higher than someone with a high school diploma. An individual with a master's degree had a median net worth 2.7 times higher, and someone with a doctorate, 3.5 times higher.

Principal residence the largest asset, mortgages the largest debt

Total assets, everything from stocks and bonds to principal residences, amounted to almost \$2.9 trillion. The single most important non-financial asset for Canadians was their principal residence, which accounted for about 38% of total assets. The most important financial asset was their registered retirement savings plans, which represented 12% of all assets.

Canadians had debts estimated at \$458 billion, three-quarters of which took the form of mortgages. Loans on owned vehicles amounted to about \$29 billion, or 6% of the total, while student loans (3%) and credit card debts (3%) each exceeded \$14 billion.

The survey found that in 1999, Canadians overall had on average an estimated \$16 in debts for every \$100 in assets. However, the debt burden was much higher for some types of families such as lone-parents families, most of which are headed by women.

Changes since 1984 - increased use of RRSPs

After making the data comparable, median net worth for all family units increased about 11% between 1984 and 1999, in constant 1999 dollars. Net worth increased considerably for family units headed by a senior during this period, but remained virtually unchanged for younger couples with children under 18.

The number of family units with student loan debt increased almost three-fold between 1984 and 1999, to 1.4 million. Student loans comprised a significant debt load for younger families.

The most significant change in the composition of assets since the 1984 survey occurred in the amount invested in registered retirement savings plans. In 1999, about 55% of family units held RRSPs, up from 28% in 1984. The biggest increase occurred in the group aged 25 to 34, where the proportion of family units with RRSPs more than doubled from 23% to 59% during this period.

3. Assets, debts and net worth in 1999

3.1 The distribution of net worth

In 1999, the median net worth of Canada's approximately 12.2 million family units was approximately \$81,000.¹ However, when family units are ranked from highest net worth to lowest, the median net worth of the 10% at the top (the top decile) was about \$703,500, compared with a negative net worth of \$-2,100 for the 10% at the bottom.

The wealthiest 10% of family units held over half (53%) of all personal wealth. By comparison, in the United States in 1998, the 10% of families and unattached individuals at the top of the wealth distribution held approximately two-thirds of the total net worth².

The fact that a relatively large proportion of net worth is held by those in the highest net worth decile has an impact on the average net worth. It was \$199,700 in 1999, 2.5 times the median net worth. This report will focus on the median because it better reflects the net worth of those in the middle of the wealth distribution and is less affected by either very high or low values.

Table 3.1
Distribution of net worth by decile

Deciles (family units ranked by net worth)	Total net worth	Median net worth
	%	\$
All family units:	100	81,000
Lowest 10%	--	-2,100
Second 10%	--	3,100
Third 10%	1	14,300
Fourth 10%	2	35,500
Fifth 10%	3	64,700
Sixth 10%	5	101,500
Seventh 10%	8	152,600
Eighth 10%	11	220,800
Ninth 10%	17	338,100
Highest 10%	53	703,500

¹ This means that half the family units had higher net worth; for the other half it was lower.

² *An examination of Changes in the Distribution of Wealth from 1989 to 1998: Evidence from the Survey of Consumer Finances*, Arthur B. Kennickell, Federal Reserve Board, June 2000.

3.2 Income

The survey showed that there was generally a very direct relationship between income and net worth. Family units who reported after-tax income of \$75,000 or more in 1998 had a median net worth of \$314,200. On the other hand, family units whose after-tax income was less than \$10,000 had a median net worth of \$1,700.

Chart 3.2
Median net worth increases with income

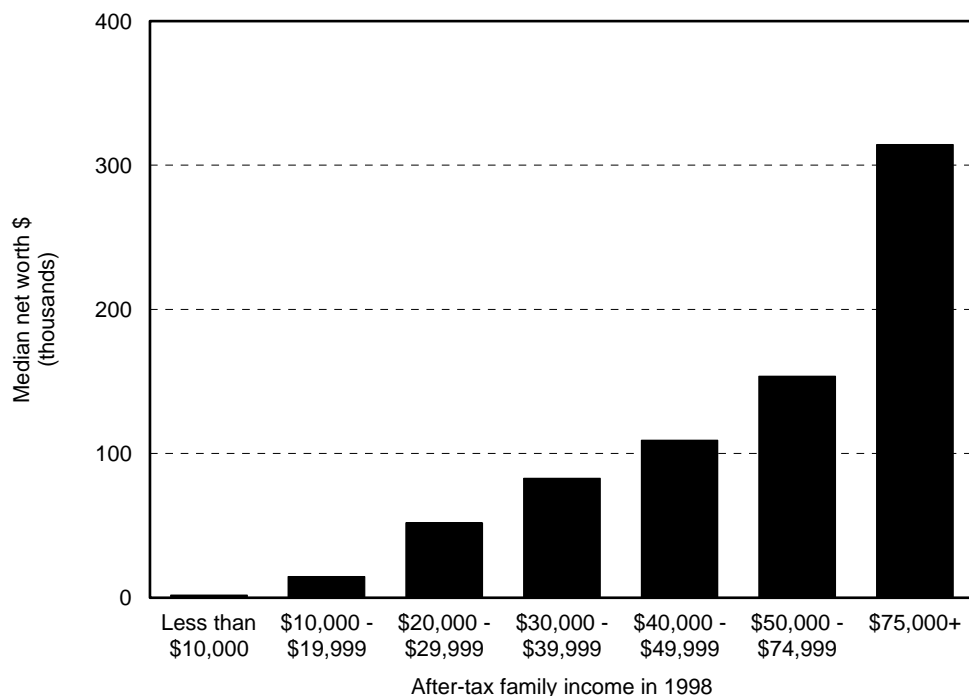


Table 3.2
Median net worth by income

After-tax income in 1998 (total for the family unit)	Family units	Median net worth
	%	\$
All family units	100	81,000
Less than \$10,000	8	1,700
\$10,000 - \$19,999	18	14,600
\$20,000 - \$29,999	18	52,000
\$30,000 - \$39,999	16	82,800
\$40,000 - \$49,999	12	109,200
\$50,000 - \$74,999	18	153,500
\$75,000 or more	10	314,200

3.3 Type of family

In this report family units are divided into two broad categories:

- families of two or more (referred to as economic families), which accounted for approximately 68% of all family units in 1999;

- unattached individuals, who represented the other 32% of family units.

Families are classified based on the characteristics of the major income recipient.

Table 3.3a
Distribution of family types showing median net worth and median income

Family type	Family units	Economic families	Unattached individuals	Median net worth	Median after-tax 1998 income
	%	%	%	\$	\$
All family units	100			81,000	33,400
Economic families of two or more	68	100		119,300	43,000
Elderly families		14		202,000	32,000
Non-elderly families		86		105,500	45,800
Couples only ¹		22		125,800	44,800
Couples with children under 18		38		100,500	48,400
Lone-parent families		7		14,600	21,800
Other non-elderly families		18		151,000	52,300
Unattached individuals	32		100	21,700	16,700
Elderly men			7	111,100	17,700
Elderly women			20	76,600	15,300
Non-elderly men			42	11,200	19,800
Non-elderly women			32	12,000	15,600

¹ no children at home

The median net worth of all families of two or more was \$119,300. There were large differences, however, in the net worth of the two types of families with children under 18 years of age and living at home. Lone-parent families³ had the lowest median net worth (\$14,600); the median net worth of couples with children under 18 was a good deal higher (\$100,500). Income appears to explain some of these differences. Lone-parent families had a median after-tax income in 1998 of \$21,800, compared with \$48,400 for two-parent families with children under 18.

Elderly families (in which the major income recipient was 65 and older) had the highest estimated net worth of any type of family unit (\$202,000), in part because many live in their own mortgage-free home. This should not be interpreted to mean that all elderly families have relatively high net worth; this will be further discussed in the section on age. The relationship between income and net worth does not hold for those over 65. The median after-tax income of elderly families was in fact lower than for most other families of two or more. Their net worth is a reflection of previous income and purchases rather than of current income.

³ By definition lone-parent families have children under eighteen living at home.

Chart 3.3a

Lone-parent families had the lowest net worth of families of two or more

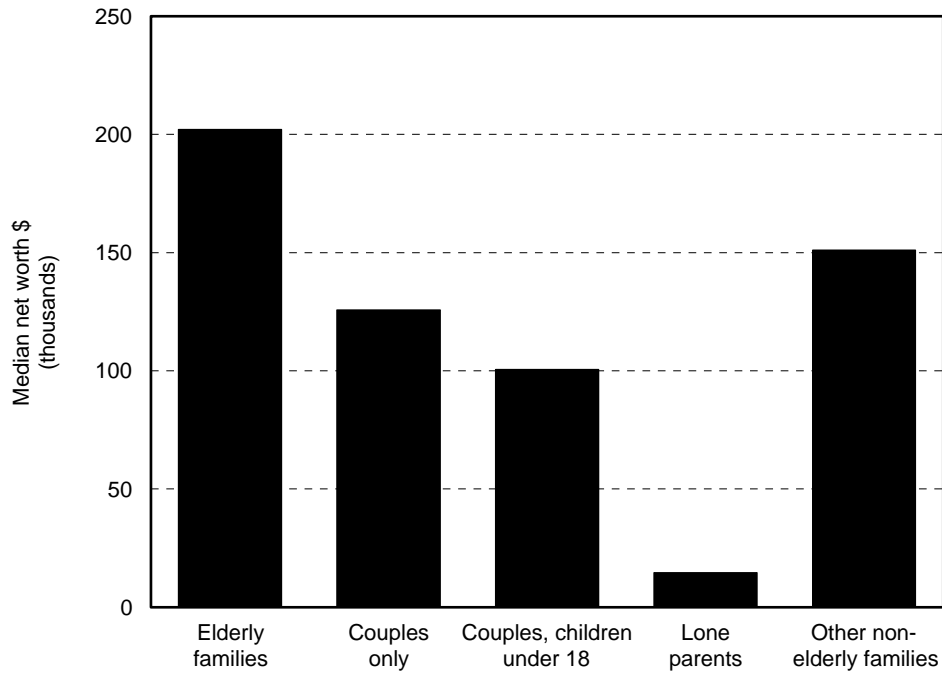
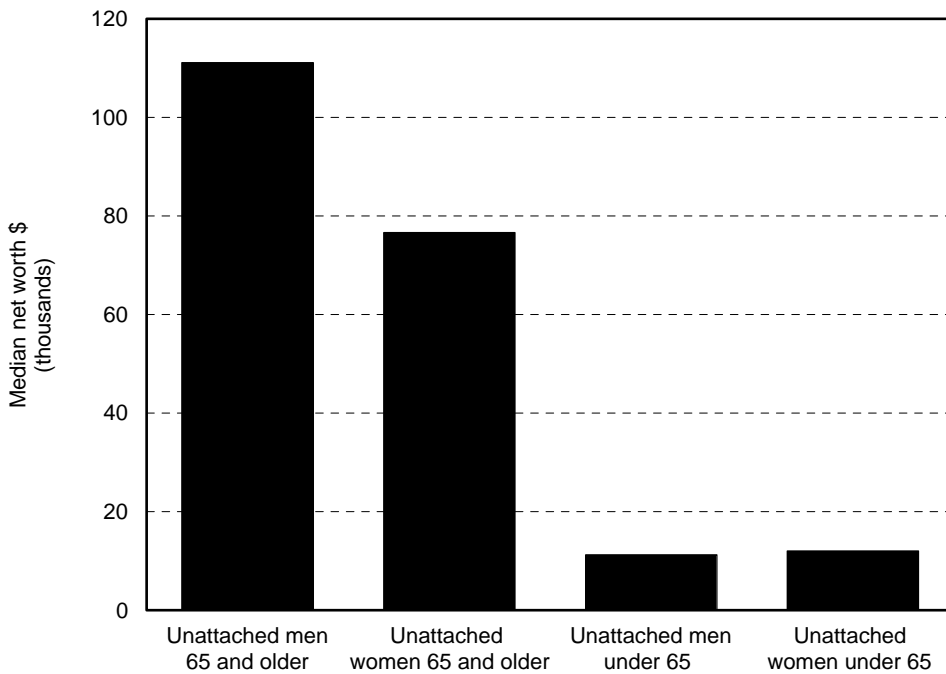


Chart 3.3b

Men 65 and older had the highest net worth of the unattached



The median net worth of unattached individuals (\$21,700) was considerably lower than that of families of two or more. The unattached can be separated into two very different groups. The unattached elderly (those 65 years of age and older) were much better off than the younger unattached. Elderly men had the highest median net worth of the unattached (\$111,100) and unattached men under 65 the lowest (\$11,200).

A similar picture emerges when looking at the distribution of each type of family by net worth quintile. In this case quintiles were established by ranking all family units (both families of two or more and unattached individuals) by net worth and dividing them into five groups of equal size. If net worth were distributed within a particular type of family in the same way it is distributed among all family units, there would be 20% in each quintile. However, over 42% of lone-parent families were in the lowest quintile. On the other hand, 38% of the elderly families were in the highest quintile.

Table 3.3b - Distribution of family types by net worth quintile

Family type	Percent in each quintile (family units ranked by net worth)				
	Lowest 20%	Second 20%	Middle 20%	Fourth 20%	Highest 20%
	%	%	%	%	%
All family units	20	20	20	20	20
Economic families of two or more	12	18	22	24	25
Elderly families	4	9	17	31	38
Non-elderly families	13	19	22	22	23
Couples only ¹	11	18	21	23	27
Couples, children under 18	10	21	25	23	20
Lone-parent families	42	28	16	9	5
Other non-elderly families	9	14	20	26	30
Unattached individuals	38	24	16	12	9
Elderly	19	21	20	22	18
Non-elderly	44	26	15	9	6

¹ no children at home

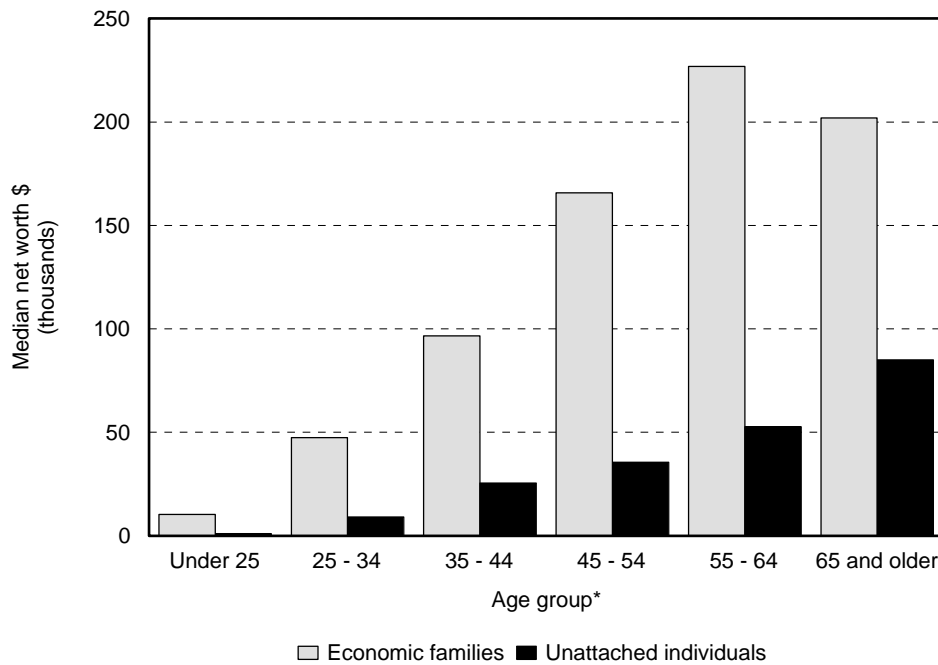
The lower net worth of the non-elderly unattached in relation to that of non-elderly families can be explained in several ways. Income is one important reason. Twenty percent of the unattached under 65 had no earnings in 1998; this was the case for just 7% of non-elderly families. Also, many (71%) non-elderly families benefited from having two or more incomes from employment. Age also is a factor. A large proportion (44%) of non-elderly unattached were under 35; just 26% of non-elderly families had a major income recipient under 35. The net worth of the young tends to be lower, as will be seen in the next section.

3.4 Age

Results from the Survey of Financial Security show that net worth increases with age. In the case of families of two or more, overall, elderly families had a higher net worth than non-elderly families. However, a rather different picture emerges if the age of the major income recipient is also considered. Median net worth was highest for those families in which the major income recipient was 55 to 64 years of age (\$226,900). This is to be expected, as elderly families in many cases may be required to use some of their assets to supplement their income.

Chart 3.4

Median net worth highest for economic families with major income recipient 55-64



* for families, relates to major income recipient

The net worth of unattached individuals was well below that of economic families, for every age group. Although there was an increase in net worth with age for the unattached, the median net worth of all age groups under 65 was substantially lower than for those 65 years and older. Many of the unattached 65 years and older may have spent a large part of their lives as part of a family; their higher net worth may be a reflection of this.

Although the median net worth of those 65 years of age and older is relatively high, it is important to note that this was not true for all family units in this group. Over 19% of the unattached 65 years and older were in the lowest net worth quintile, as were 4% of economic families whose major income recipient was 65 and older.

Those under 25, who had less time to accumulate savings and purchase assets, had the lowest median net worth. Unattached persons under 25 had a median net worth of \$1,000. Families in which the major income recipient was under 25 had a median net worth of \$10,300.

Table 3.4
Median net worth by age

Age (of major income recipient for families)	Economic families	Unattached individuals	Median net worth	Median after-tax 1998 income
	%	%	\$	\$
Economic families of two or more	100		119,300	43,000
Under 25	3		10,300	26,000
25-34	19		47,500	40,500
35-44	28		96,600	45,900
45-54	23		165,800	53,200
55-64	12		226,900	46,400
65 and older	14		202,000	32,000
Unattached individuals		100	21,700	16,700
Under 25		12	1,000	8,800
25-34		21	9,100	21,200
35-44		17	25,500	22,500
45-54		13	35,600	21,900
55-64		11	52,700	14,400
65 and older		27	85,000	15,700

3.5 Employment

3.5.1 Number of earners

The number of people in the family unit with income from employment can make a significant difference to the ability of that unit to save and therefore to purchase assets. Economic families with two or more earners⁴ had a median net worth almost 50% higher than those with one earner (\$129,100 compared with \$87,300).

Non-elderly family units with no earners were the least well off financially. The median net worth of non-elderly families of two or more without employment earnings was \$9,400; for unattached persons without income from employment this figure was even lower, \$1,600. In many cases the family unit had no earners because the unattached individual or the major income recipient was 65 years and older and no longer working. These family units had relatively high net worth. Many would be retired persons who previously had income from employment, and whose net worth would have been accumulated over many years.

⁴ The number of earners was determined using income for the calendar year 1998.

Table 3.5a
Median net worth by number of earners in family unit

Number of earners	Economic families	Unattached individuals	Median net worth
	%	%	\$
Economic families of two or more	100		119,300
No earner			
- Elderly	9		183,300
- Non-elderly	6		9,400
One earner	22		87,300
Two or more earners	63		129,100
Unattached individuals		100	21,700
No earner			
- Elderly		24	75,300
- Non-elderly		14	1,600
One earner		61	17,500

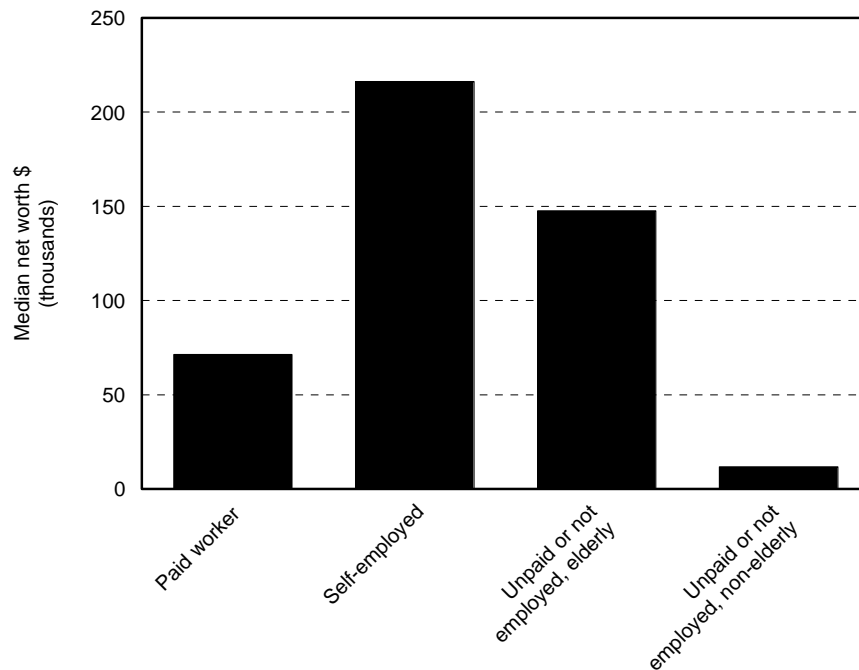
3.5.2 Type of earnings

The median net worth of family units in which the major income recipient was self-employed was three times greater than if that person was a paid worker (\$216,200 compared with \$71,300). This was not related as much to income as to the fact that business equity was a much more important asset for the self-employed than for paid workers; for the self-employed business equity represented 33% of total assets, compared with 8% for paid workers. It is important to note that the value of employer pension plan benefits is not included in this estimate of net worth. Including this value will change the overall distribution of net worth; it will increase the net worth of paid workers but will not affect the net worth of the self-employed.

Table 3.5b
Median net worth by type of employment

Type of employment (of major income recipient for families)	Family units	Median net worth	Median after-tax 1998 income
	%	\$	\$
Paid worker	58	71,300	41,700
Self-employed	10	216,200	37,200
Unpaid or not employed			
- Elderly	17	147,600	23,600
- Non-elderly	15	11,800	15,800

Chart 3.5
Self-employed* had higher net worth



* for families, relates to major income recipient

3.6 Education

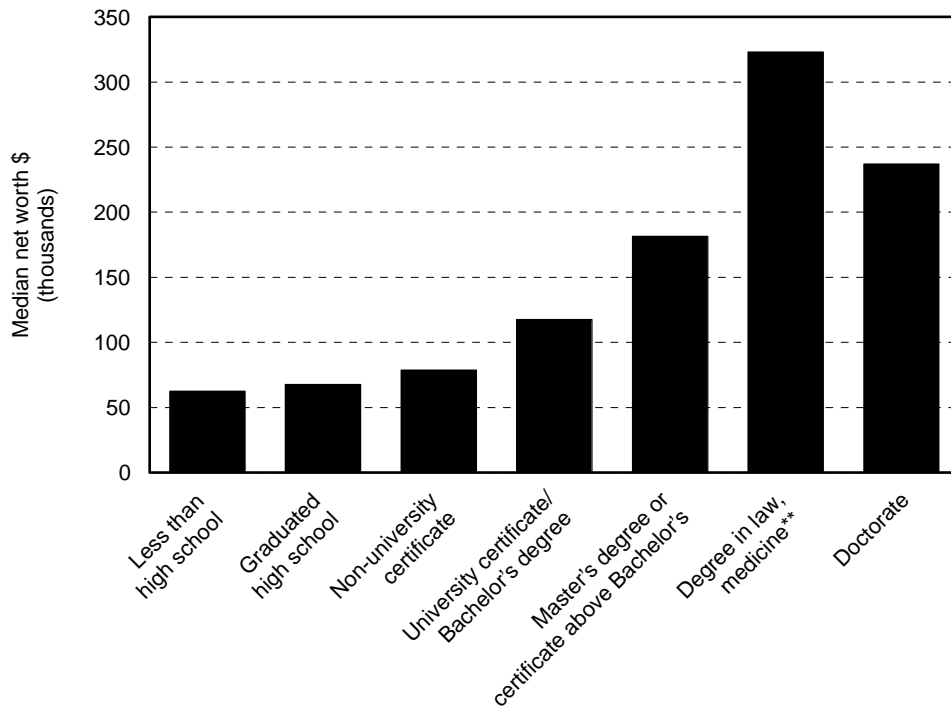
The highest level of education of the individual, or the major income recipient in the case of families, makes a significant difference to the financial situation of the family unit. It is one of the most important determinants of net worth, as it has an impact on both income and occupation. Median net worth rose from \$62,500 for family units in which the individual or major income recipient in the family had not graduated from high school to \$323,000 if that person had a professional degree in law, medicine, dentistry, veterinary medicine or optometry. Relative to those whose highest level of education was high school graduation, the median net worth of those with a Bachelor's degree was 1.7 times higher, with a Master's degree 2.7 times higher and with a Doctorate 3.5 times higher.

Table 3.6
Median net worth by education

Education (of major income recipient for families)	Family units	Median net worth	In highest net worth quintile
	%	\$	%
Less than high school	27	62,500	15
Graduated high school	23	67,700	18
Non-university certificate	28	78,700	17
University certificate/Bachelor's degree	15	117,500	28
Master's or certificate above Bachelor's	5	181,500	40
Degree in law, medicine, dentistry ¹	1	323,000	55
Doctorate	1	237,000	47

¹ also includes degrees in veterinary medicine and optometry

Chart 3.6
Education* makes a difference



* for families, relates to major income recipient

** also includes degrees in dentistry, veterinary medicine and optometry

Approximately 55% of those with degrees in law, medicine, dentistry, veterinary medicine or optometry were in the highest net worth quintile, compared with 15% for those with less than high school graduation.

3.7 Occupation

Occupation, like education, is a key determinant of net worth. Ranked by occupation, family units in which the occupation of the unattached individual or major income recipient was classified as management had the highest net worth. Those with the lowest net worth worked in sales and service. This included childcare workers, retail salespersons, cashiers, chefs, cooks and persons providing food and beverage services, protective services and travel and accommodation services. Again, a relationship can be seen between income and net worth. For the most part, family units in which the major income recipient was in an occupation associated with higher (after-tax) income also had higher net worth. This was not true for occupations related to primary industry (which includes agriculture, fishing and forestry, other than labourers). Their net worth is related less to recent income than to their business equity, that is, the value of the property and equipment required to conduct their business.

Table 3.7
Median net worth by occupation

Occupation (of major income recipient for families) ¹	Family units	Median net worth	Median after-tax 1998 income
	%	\$	\$
Total Population	100	81,000	33,400
Management	8	192,800	56,100
Primary industry	2	155,000	35,800
Social science, education, government and religion	5	112,200	49,600
Health	4	111,600	46,000
Natural and applied sciences	6	90,500	47,500
Trades, transportation and equipment operators	12	79,000	41,800
Business, finance and administration	10	77,900	39,700
No occupation	32	76,500	20,700
Processing, manufacturing and utilities	6	66,900	41,700
Art, culture, recreation and sport	2	65,000	35,400
Sales and service	13	40,000	28,400

¹ for a detailed description of the occupation categories, see the Statistics Canada website (www.statcan.ca) under Concepts, definitions and methods.

3.8 Immigration status

Overall, the median net worth of unattached individuals and families in which the major income recipient is an immigrant was over 40% higher than if that person were born in Canada. However, dividing family units into those 45 years and older and those less than 45, it becomes apparent that the median net worth of immigrants was higher only for those over 45.⁵ For those under 45, family units in which the unattached individual or major income recipient was Canadian born had the higher net worth.

Among immigrants, net worth was strongly related to period of immigration. For family units in which the major income recipient was 45 years and over, median net worth was \$242,500 for those who immigrated prior to 1970, compared to \$175,000 for those who arrived between 1970 and 1984 and \$59,400 for the more recent immigrants who arrived after 1984. In comparison, the median net worth of the comparable Canadian born population was \$141,300.

Some of the differences are due to the changing occupation mix of immigrants. Among those who immigrated after 1984, 37% were in the three occupations with the lowest net worth (see Table 3.7) compared with 26% of those who immigrated between 1970 and 1984 and 20% of the Canadian-born population⁶.

⁵ Close to 58% of the major income recipients in immigrant families were 45 years and older, compared with 48% for Canadian-born families.

⁶ Comparison with those who immigrated before 1970 is difficult as over 50% had no occupation at the time of the survey, most likely because they were retired.

Table 3.8
Median net worth by immigration status

	All family units		45 and older ²		Under 45 ²	
Immigration status ¹ (of major income recipient for families)	Family units	Median net worth	Family units	Median net worth	Family units	Median net worth
	%	\$	%	\$	%	\$
All family units	100	81,000	100	151,100	100	41,000
Canadian born	79	77,000	76	141,300	82	42,500
Immigrants, total	20	109,700	23	190,000	16	36,200
- Immigrated before 1970	7	223,000	13	242,500	2	128,800
- Immigrated 1970 to 1984	6	125,500	6	175,000	5	65,200
- Immigrated 1985 or later	7	24,200	4	59,400	10	14,100

¹ for 1% of family units immigration status is not known

² for families, relates to major income recipient

3.9 Provinces

The median net worth in Ontario and the western provinces was higher than in the provinces east of Ontario. Family units in Ontario had the highest median net worth (\$101,400) and those in Newfoundland the lowest (\$53,000). Income again helps to explain this. In Newfoundland, 31% of family units had after-tax income in 1998 of less than \$20,000, compared with 21% in Ontario.

Although Newfoundland had the highest proportion of family units that owned their principal residence (73% compared with 60% for all provinces), the median value of the homes in Newfoundland was less than half the median for all provinces (\$60,000 compared with \$125,000). This has an impact, as principal residence, as will be seen in the next section, is the largest contributor to the net worth of most family units.

Chart 3.9
Median net worth highest in Ontario and the western provinces

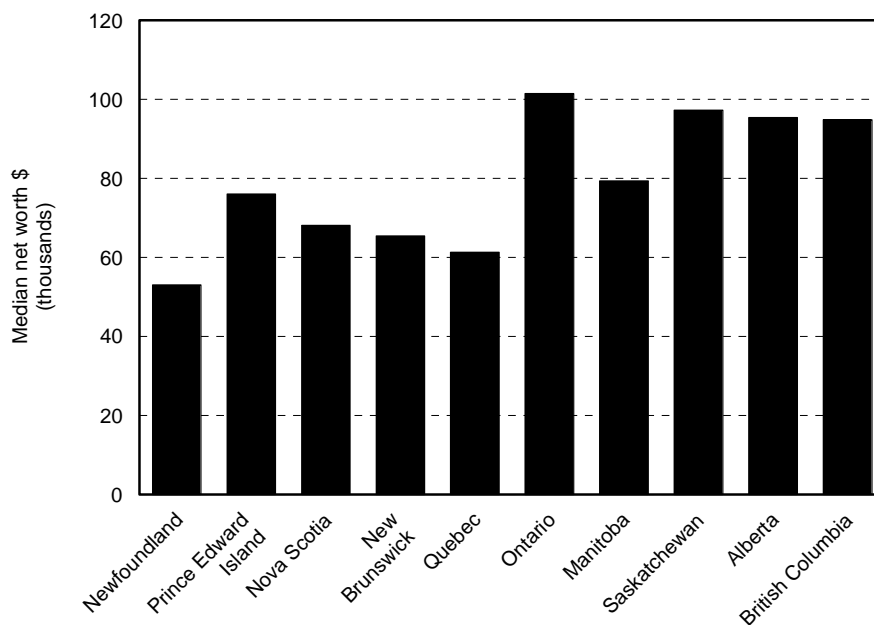


Table 3.9
Median net worth by province

	Family units	Own principal residence	Income under \$20,000 ¹	Median net worth
	%	%	%	\$
All provinces	100	60	26	81,000
Newfoundland	2	73	31	53,000
Prince Edward Island	--	67	30	76,100
Nova Scotia	3	64	32	68,100
New Brunswick	2	70	31	65,400
Quebec	26	55	31	61,300
Ontario	37	60	21	101,400
Manitoba	4	64	28	79,300
Saskatchewan	3	69	30	97,300
Alberta	9	66	24	95,400
British Columbia	14	58	28	94,800

¹ after-tax family income in 1998

3.10 Composition of assets and debts

3.10.1 Assets

Assets can be subdivided into three main categories: financial assets, non-financial assets and equity in business (see further detail in Table 3.10a). Non-financial assets accounted for the largest proportion of the total, 58%, financial assets 29% and business equity the remaining 12% .

Chart 3.10a
Principal residence the largest asset

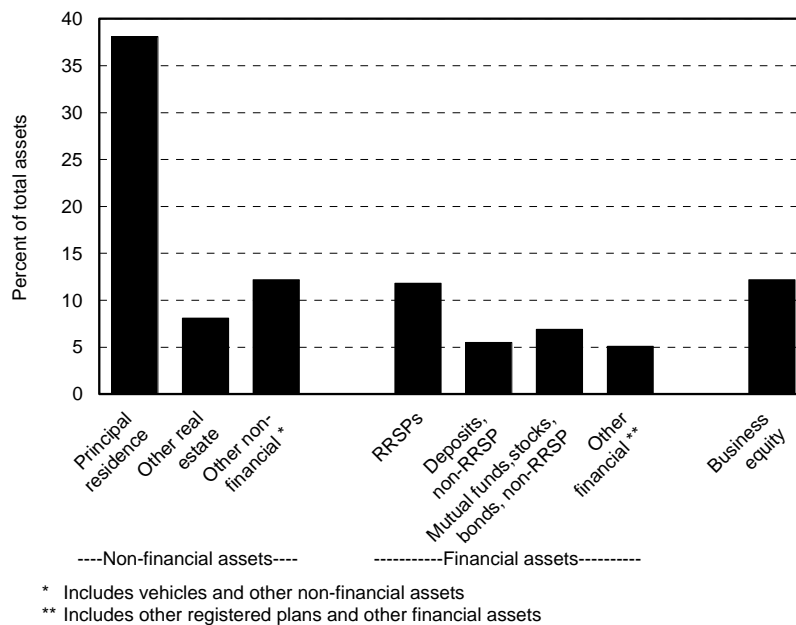


Table 3.10a
Composition, incidence, median and average amount of assets and debts

	Assets		Median	Average	Have
	\$billion	%	amount ¹	amount ¹	asset or debt
			\$	\$	%
ASSETS	2,897	100	136,600	237,200	100
Financial assets	850	29	16,500	74,800	93
Within registered plans:	420	15	20,000	56,400	61
- RRSPs/LIRAs	343	12	20,000	51,200	55
- Other registered plans	77	3	10,000	43,000	15
Outside registered plans:	429	15	4,400	39,000	90
- Deposits in financial institutions	161	6	2,700	15,000	88
- Mutual/investment funds	80	3	13,000	46,200	14
- Stocks	92	3	8,700	74,700	10
- Bonds (savings and other)	25	1	2,500	14,500	14
- Other financial assets	70	2	8,000	64,900	9
Non-financial assets	1,693	58	103,000	138,600	100
Principal residence	1,104	38	125,000	149,700	60
Other real estate	235	8	65,000	117,000	16
Vehicles	126	4	9,000	13,300	77
Other non-financial assets	228	8	10,000	18,700	100
Equity in business	355	12	10,000	155,600	19
		%			
DEBTS	458	100	29,000	55,200	68
Mortgages	355	78	69,000	82,800	35
Principal residence	304	66	67,000	76,100	33
Other real estate	51	11	60,000	88,600	5
Line of credit	26	6	5,000	13,500	16
Credit card and instalment debt	14	3	1,800	3,000	38
Student loans	15	3	7,300	10,400	12
Vehicle loans	29	6	9,000	11,200	21
Other debt	18	4	4,000	9,300	16
NET WORTH	2,439				

¹ for those family units with asset or debt

Non-financial assets

The most important of the non-financial assets was the principal residence; it accounted for 38% of total assets. Overall, 60% of family units owned their home. This proportion was lowest for family units less than 35 (36%) increasing to 75% for those 55 to 64 years of age. The median value of the principal residence, for homeowners, was \$125,000.

The median net worth of those family units who did not own their principal residence was \$8,200, very much lower than for those who owned with a mortgage (\$111,800) and without a mortgage (\$259,200).

Table 3.10b
Incidence of ownership of principal residence, proportion with mortgages

	Own principal residence	Median value¹	Owners with mortgage
	%	\$	%
Total	60	125,000	54
Under 35	36	120,000	85
35-44	63	125,000	77
45-54	73	138,500	59
55-64	75	130,000	35
65 and older	67	120,000	10

¹ for those who owned their principal residence

The "other" non-financial assets included other real estate, owned vehicles, contents of the principal residence, collectibles and valuables. Other real estate (most commonly vacation or second homes or rental property) was owned by 16% of family units; over three-quarters owned at least one vehicle. Leased vehicles were not considered assets for purposes of this survey.

The value of the contents of the principal residence was first collected in the 1999 survey. Because this amount is difficult to estimate, respondents were asked to select a range, rather than report a specific value, as was the case with other assets and debts. For purposes of estimating net worth, the low point of the range was used. This asset was estimated to represent 6% of total assets.

Financial assets

The single most important financial asset for Canadians in 1999 was the amount held in Registered Retirement Savings Plans (RRSPs). They accounted for 12% of total assets. This is a very important change from 1984, when they represented 4% of total assets. Although RRSPs have been available since 1957, the past decade has seen very active promotion of their use as a retirement savings vehicle. A much more complete picture of the amount Canadians have accumulated in retirement savings programs will be available when the value of employer pension plan benefits is included in the estimate of net worth. This estimate will be available in the fall of 2001.

Fully 55% of family units had RRSPs. This proportion reached 71% for those family units where the unattached individual or the major income recipient was 45 to 54 years of age. The amount many held in RRSPs, however, was still relatively modest. The median amount of the RRSP held by family units, for those having them, was \$20,000; family units 55 to 64 had the highest median savings in RRSPs: \$50,000. The average amount held in RRSPs was much higher than the median: \$51,200 for all family units and \$96,900, for those 55 to 64 years of age. The difference between the average and the median indicates that some family units had significant savings in RRSPs. Included in the value of RRSPs is the amount that former members of employer pension plans have removed from their plans and converted to a locked-in RRSP (called a Locked-in Retirement Account or LIRA).

Chart 3.10b
Percent having RRSPs and median amount by age*

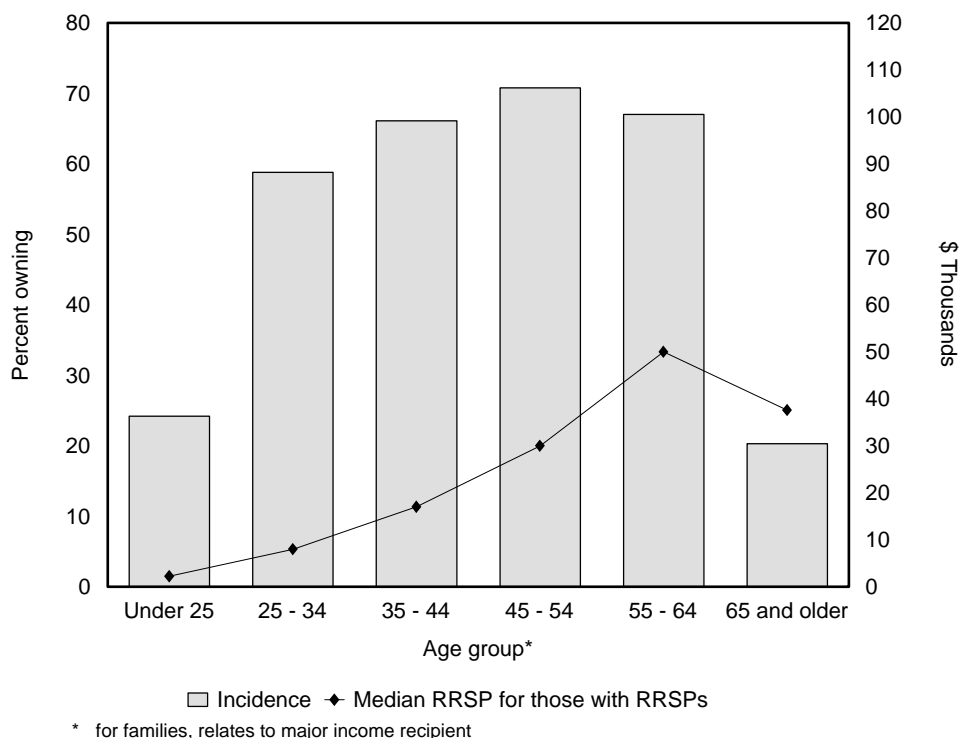


Table 3.10c
Average and median RRSP by age¹

	RRSP ownership	Median value ²	Average value ²
	%	\$	\$
Total	55	20,000	51,200
Under 25	24	2,200	9,000
25-34	59	8,000	19,100
35-44	66	17,000	35,800
45-54	71	30,000	65,200
55-64	67	50,000	97,000
65 and older	20	37,600	83,500

¹ for families, relates to major income recipient

² of those with RRSPs

Investments in mutual funds, stocks and bonds (other than those in an RRSP) represented 7% of total assets. They accounted for the largest proportion of the assets for those 65 and older (10%). The family units whose major income recipient was 55 to 64 years of age were the most likely to own these investments however (19% had mutual funds, 13% had stocks and 17% had bonds (either savings bonds or other types of bonds)).

Almost all family units reported having deposits in financial institutions (88%), including term deposits. However, they accounted for just 6% of all assets. Most family units with available savings appear to opt for investments with an opportunity for greater return.

Table 3.10d
Percent of family units with asset and debt by age¹

	Under 25	25-34	35-44	45-54	55-64	65 and older
	%	%	%	%	%	%
ASSETS	100	100	100	100	100	100
Financial assets	86	92	93	94	93	95
Within registered plans:	26	61	68	72	69	46
- RRSPs/LIRAs	24	59	66	71	67	20
- Other registered plans	3	11	14	11	8	31
Outside registered plans:	84	89	89	90	91	94
- Deposits in financial institutions	83	86	86	88	89	93
- Mutual/investment funds	7	13	14	16	19	14
- Stocks	3	9	10	14	13	9
- Bonds (savings and other)	8	9	15	16	17	18
- Other financial assets	7	8	9	10	8	9
Non-financial assets	100	100	100	100	100	100
Principal residence	12	43	63	73	75	67
Other real estate	6	9	15	22	26	17
Vehicles	48	76	82	84	83	71
Other non-financial assets	100	100	100	100	100	100
Equity in business	7	16	24	27	21	7
DEBTS	67	84	81	77	62	27
Mortgages	9	40	51	47	30	8
Principal residence	7	38	49	43	26	7
Other real estate	2	4	6	7	6	2
Line of credit	6	17	20	23	15	5
Credit card and instalment debt	36	50	47	42	33	15
Student loans	31	23	9	13	4	1
Vehicle loans	19	29	26	25	17	6
Other debt	19	22	21	17	12	5

¹ for families, relates to major income recipient

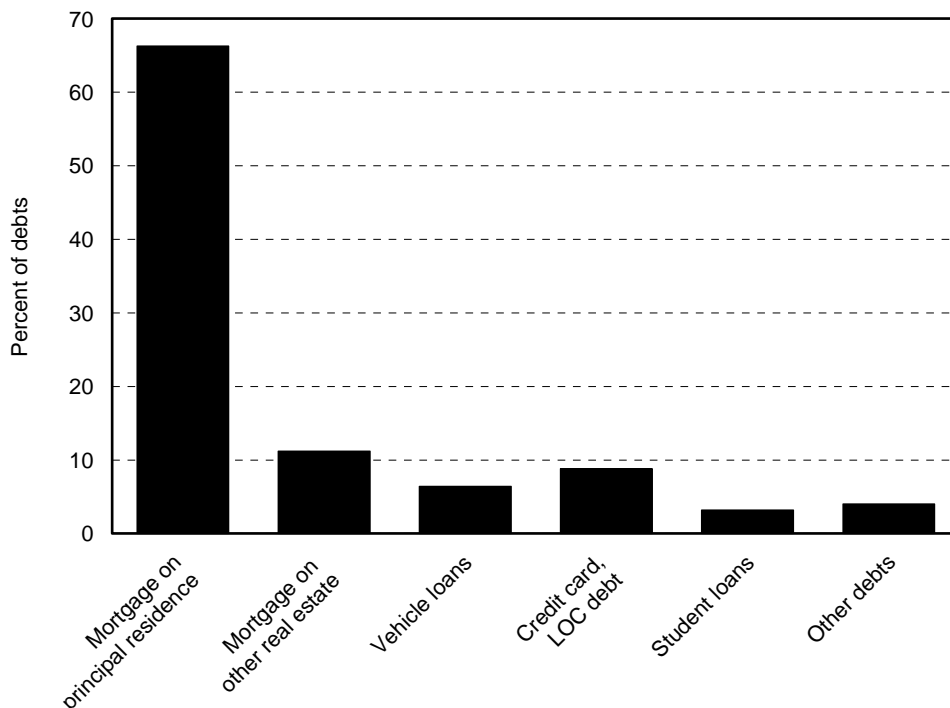
Business equity

Just under 19% of family units reported having equity in a business. In many cases the amounts were very small as the business often involved the provision of a service. Business equity represented 12% of total assets.

3.10.2 Debts

Again, as can be seen from Table 3.10.a, mortgages, on both the principal residence and other real estate, accounted for over three-quarters (78%) of the debt of family units. The remaining debt was in the form of student loans (3%) and consumer credit (3%). The latter included credit card and line of credit debt (9%), vehicle loans (6%) and other debts (4%).

Chart 3.10c
Mortgages the largest debt



Student loans were reported by 12% of family units, and by as much as 31% of family units where the major income recipient was under 25 years of age. The median student loan owed by family units reporting them was \$7,300. Student loans represented 52% of the debt of those under 25 who did not own their principal residence (88% of that age group).

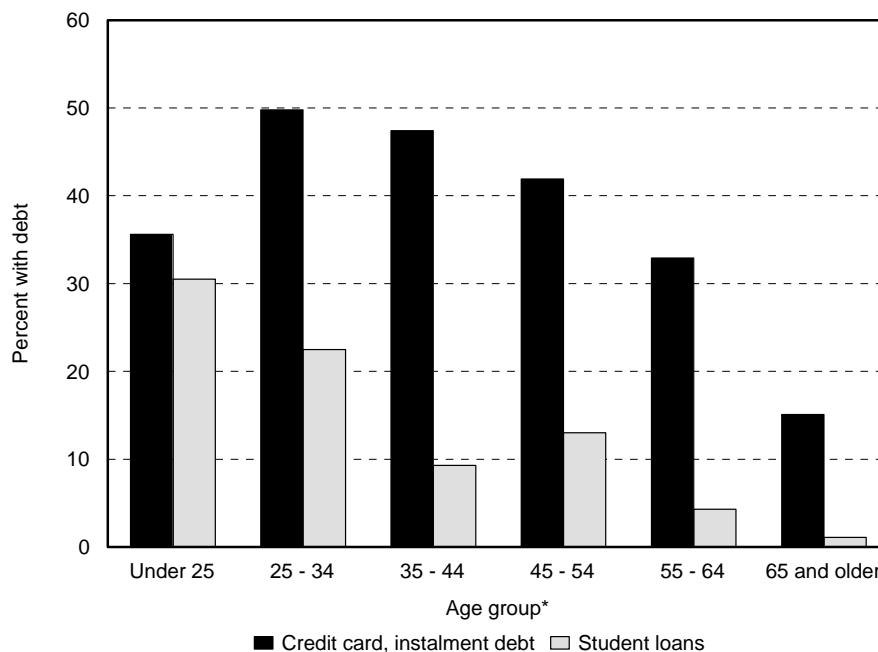
With respect to credit card debt, the survey asked how much was owed after the last bill was paid. Therefore, those who regularly paid off the amount owing on their credit card would have reported that they had no debt of this type.⁷ Credit card and instalment debt was reported by 50% of unattached individuals or major income recipients who were 25 to 34 years of age. The older age groups were much less likely to carry such debt; only 15% percent of individuals or families 65 and older reported credit card or instalment debt.

Overall, for every \$100 of assets, Canadian family units had \$16 in debts. This amount was much higher for some types of families. Lone-parent families owed \$29 for every \$100 owned and two-parent families with children owed \$23. Elderly family units owed the least: unattached elderly men owed \$2 for every \$100 of assets, elderly females \$1 and elderly families \$3.

⁷ This could potentially result in an underestimate of total outstanding credit card debt at a given point in time, including purchases made since the last bill was paid.

Chart 3.10d

Half of those 25 to 34 have credit card or instalment debt; 30% under 25 have student loan debt



* for families, relates to major income recipient

Lone-parent families and the unattached under 65 were also the most likely to have either no net worth or negative net worth. The definition of assets used for this survey includes items such as furniture, in addition to financial assets; many of these assets could not be used to pay debts.

Table 3.10e
Debt per \$100 of assets by family type

Family type	Debt per \$100 of assets	\$0 or negative net worth
	\$	% with
All family units	16	7
Economic families of two or more	16	4
Elderly families	3	1
Non-elderly families		
Couples only, no children at home	15	5
Couples with children under 18	23	4
Couples with other relatives	15	2
Lone-parent families	29	14
Other non-elderly families	14	5
Unattached individuals	13	11
Elderly male	2	3
Elderly female	1	1
Non-elderly male	22	16
Non-elderly female	19	13

The largest debt burden was carried by younger people. Family units under 25 overall owed \$31 for every \$100 of assets. The majority of the family units in this group did not own their principal residence. They owed \$53 for every \$100 in assets, largely because of student loans. Among the 25-to-34 year olds, those with a mortgage faced the heaviest debt burden; they owed about \$46 for every \$100 of assets.

4. Comparison of net worth in 1984 and 1999

4.1 Historical perspective

Because of differences in the content and method of collection of the information for the 1984 and 1999 household asset and debt surveys, comparison over time must be done with caution. To begin, it is necessary to adjust the 1999 estimate of net worth to make it comparable to the definition and measure of net worth used in 1984. This means removing the value of the following items from the 1999 estimate, because they were not included in the 1984 definition:

- contents of the home;
- collectibles and valuables;
- annuities and registered retirement income funds.

Further description of the differences between the 1984 and 1999 data can be found in Appendix B, Concepts and Definitions.

On a basis comparable to 1984⁸, survey results indicate that median net worth for 1999 was \$64,600, about 11% higher than in 1984. Over the same period, median after-tax income of family units was virtually unchanged.⁹

4.2 Distribution of net worth among family units

Although the overall change in median net worth from 1984 to 1999 was about 11%, this change was not shared equally by all family units. The median net worth of the wealthiest 20% of family units (the top quintile) increased 39%, a growth of \$112,300 (in 1999 dollars). There was little change in the net worth of the family units in the two lowest quintiles (the 40% with the lowest net worth).

⁸ All amounts are stated in constant 1999 dollars.

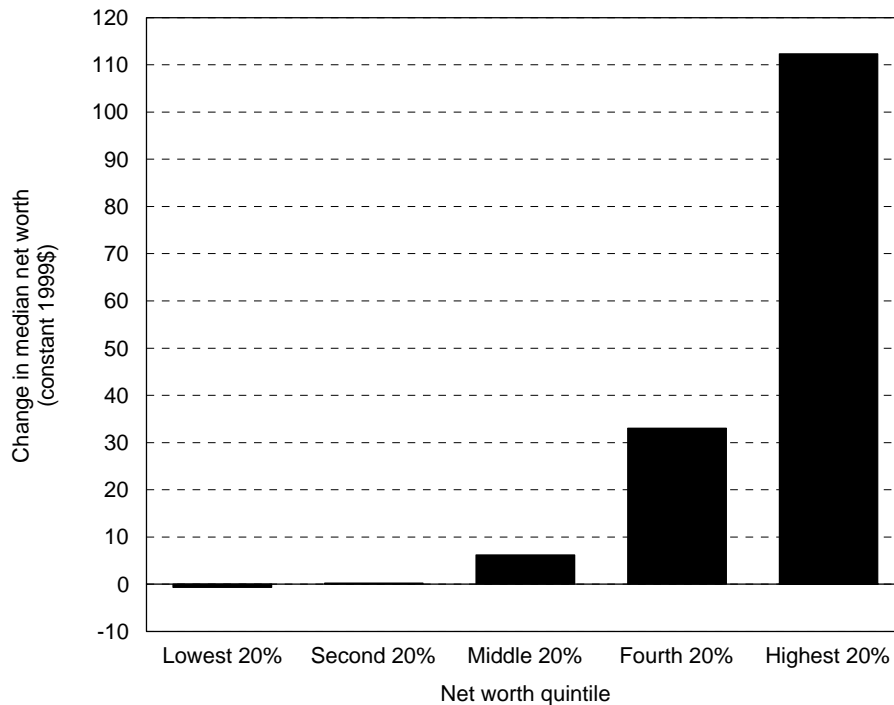
⁹ Median income for 1983 and 1998, from *Survey of Labour and Income Dynamics, Statistics Canada*.

Table 4.2
Change in median net worth from 1984 to 1999, by net worth quintile

	Median net worth (constant 1999\$)		Change from 1984 to 1999	
	1984	1999 ¹	(constant 1999\$)	%
	\$	\$	\$	%
All family units	58,400	64,600	6,200	11
Lowest 20%	0	-600	-600	--
Second 20%	12,300	12,500	300	2
Third 20%	58,400	64,600	6,200	11
Fourth 20%	124,400	157,500	33,000	27
Highest 20%	291,200	403,500	112,300	39

¹ comparable to 1984

Chart 4.2
Comparison of median net worth for 1984 and 1999 shows little change for lower quintiles



4.3 Change in net worth by family type and age

Between 1984 and 1999, couples with children fared less well than any other type of family; their net worth decreased, although slightly, over this period. Elderly family units and couples with no children at home fared the best. Unattached elderly recorded a 69% increase from 1984 and elderly families and couples with no children at home a growth of 42%.

It is not possible to consider change in net worth without also considering the actual amount of the change. Although lone-parent families gained between 1984 and 1999, relatively speaking they were, in both years, significantly less well off financially than any other type of family unit. The situation of the unattached non-elderly changed little from 1984 to 1999, in either relative or absolute terms.

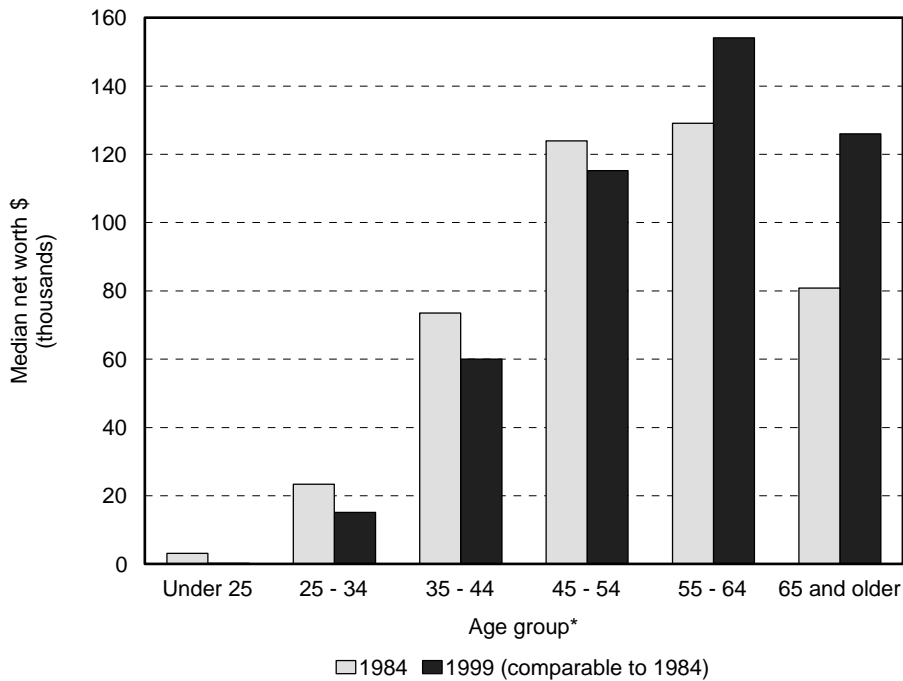
Only those family units in which the major income recipient was 55 years and older recorded an increase in median net worth from 1984 to 1999; for all younger age groups median net worth was down. The median net worth of those family units in which the unattached individual or major income recipient was 65 and older increased most significantly: 56%.

Table 4.3
Change in median net worth from 1984 to 1999 by type of family and age

	Median net worth (constant 1999\$)		Change from 1984 to 1999	
	1984	1999 ¹	(constant 1999\$)	%
	\$	\$	\$	%
All family units	58,400	64,600	6,200	11
Economic family	83,000	97,600	14,600	18
Elderly families	121,300	171,600	50,400	42
Non-elderly families	76,500	84,500	8,000	11
Couples only, no children at home	71,600	101,600	30,100	42
Couples with children under 18	77,900	77,800	-100	--
Lone parent families	1,900	3,700	1,800	96
Other non-elderly families	122,800	133,000	10,200	8
Unattached individuals	9,300	12,600	3,300	35
Elderly	41,400	70,000	28,600	69
Non-elderly	5,800	6,000	200	4
Age (for families, relates to major income recipient)				
Under 25	3,100	200	-2,900	-95
25-34	23,400	15,100	-8,300	-35
35-44	73,500	60,000	-13,500	-18
45-54	124,000	115,200	-8,800	-7
55-64	129,100	154,100	25,000	19
65 and older	80,800	126,000	45,200	56

¹ comparable to 1984

Chart 4.3
Median net worth increased for those 55 and older



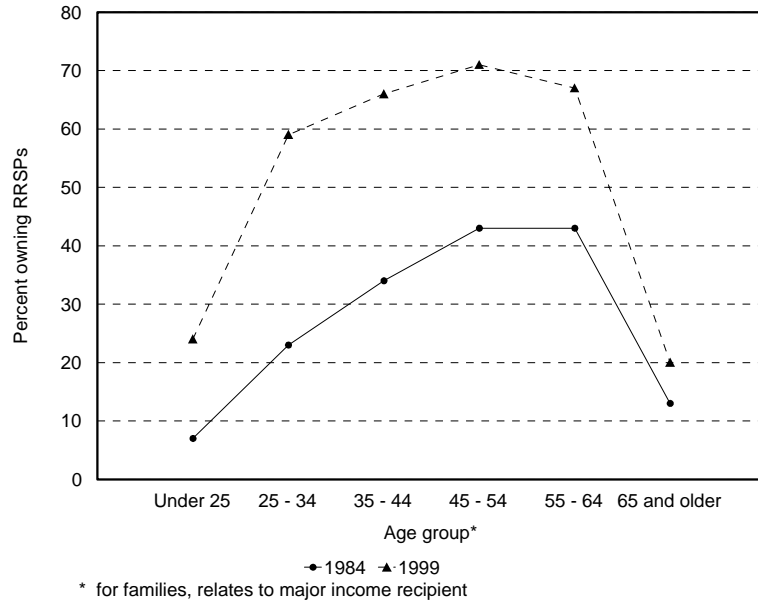
* for families, relates to major income recipient

4.4 Changes in the composition of assets and debts

4.4.1 Growth in RRSPs

The most significant change in the composition of assets from 1984 to 1999 was the growth in the amount invested in RRSPs. The aggregate amount in RRSPs was 6.4 times larger in 1999 than in 1984 (in constant 1999 dollars), the largest growth by far of any single asset. In comparison, total assets were 1.8 times larger in 1999 than in 1984. In addition to increased use of RRSPs, amendments made in the late 1980s to legislation regulating employer pension plans made it possible for many employees leaving their job to take their pension accumulations with them and put them in a locked-in RRSP. Those amounts are included in the RRSP amount for 1999. In 1984 those amounts were most often left in the pension plan. Employer pension plan assets are not included in this estimate of net worth.

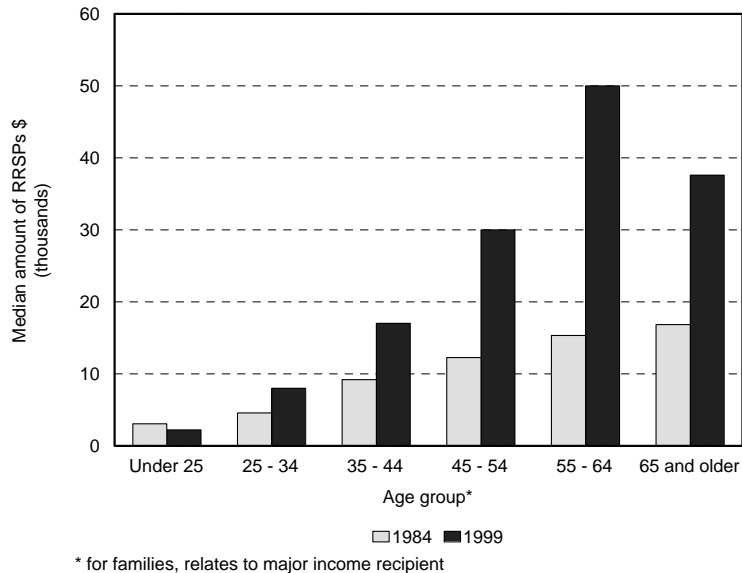
Chart 4.4a
Ownership of RRSPs increased dramatically from 1984 to 1999



In 1999, fifty-five percent of family units held RRSPs, up from 28% in 1984. Young people are now much more likely to be investing in RRSPs; the 25-to-34 year-old age group recorded the biggest jump; 59% of the family units in that age group had RRSPs, more than double the 23% in 1984.

In terms of the amount held in RRSPs, the median value of RRSPs held by family units with them was almost \$20,000 in 1999, 2.1 times higher than in 1984. The increase was largest for unattached individuals or family units in which the major income recipient was 55 to 64 years of age. The median RRSP of those with them in that age group in 1999 was about \$50,000, 3.3 times the 1984 median.

Chart 4.4b
Growth in median RRSPs (for those having them) highest for those 55 to 64



4.4.2 Growth in student loan debt

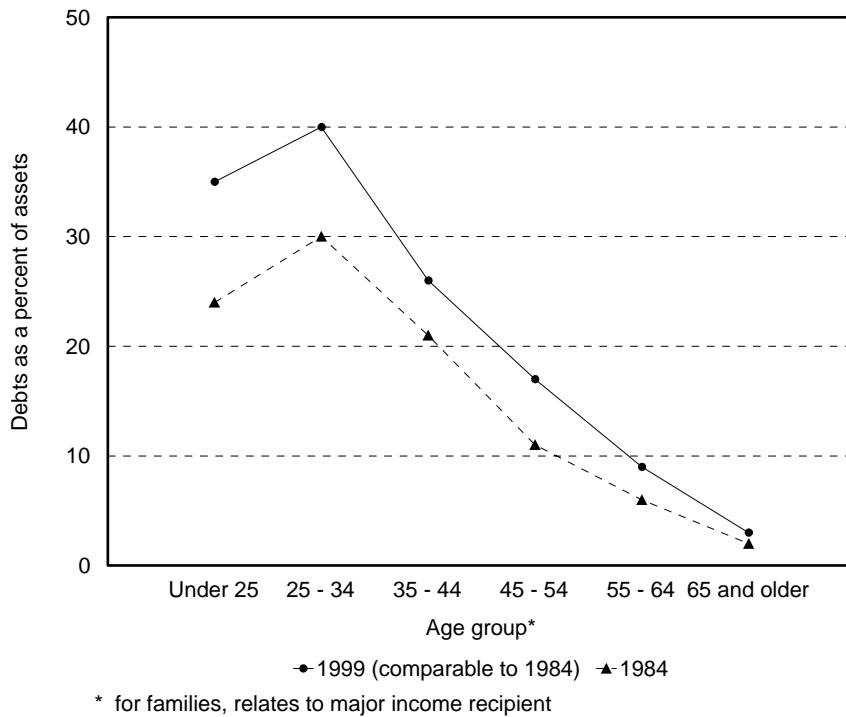
The other notable change from 1984 to 1999 was the growth in student loan debt. The aggregate amount of outstanding student loans was 6.2 times higher in 1999 than 1984. Over 1.4 million family units reported this type of debt in 1999, up from about 490,000 in 1984. The median debt rose from \$3,400 to \$7,300.

4.4.3 Debt load

Overall, debts, per \$100 of assets, increased from \$14 to \$18 between 1984 and 1999. The debt of the younger age groups increased most significantly; for family units under 25 it was up from \$24 per \$100 of assets in 1984 to \$35 in 1999. The 25-to-34 year olds owed \$40 per \$100 of assets in 1999, an increase of \$10 from 1984.

Chart 4.4c

Increase from 1984 to 1999 in debts as a percent of assets greatest for the young



5. Conclusion

This report has presented a first look at the results of the 1999 Survey of Financial Security. Further analysis of the information from this survey will be done over the next months. Work currently underway includes:

- an analysis of the changes in the distribution of wealth from 1984 to 1999;
- a comparison of the information from SFS with the Financial and Wealth Accounts of the System of National Accounts;
- a study of the characteristics of those families in a financially precarious situation by virtue of their debt load.

In the fall of 2001 the more complete estimate of net worth will be published, incorporating the value of employer pension plan benefits.

ELECTRONIC PUBLICATIONS AVAILABLE AT
www.statcan.ca



Appendix A - Sources and Methods

A.1 The Survey Universe

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.

A.2 Survey Content and 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.

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.

A detailed list of the asset and debt items can be found in Concepts and definitions.

A.3 The Sample

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.¹

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.

A.4 Data Collection

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.

A.5 Data Processing and Quality Control

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.

¹ A detailed description of the Labour Force Survey sampling frame can be found in "Methodology of the Canadian Labour Force Survey", Statistics Canada, catalogue No. 71-526-XPB.

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	Imputed¹
	%	%
ASSETS	100	8
Financial assets	29	14
Within registered plans:	15	10
- RRSPs/LIRAs	12	10
- Other registered plans	3	13
Outside registered plans:	15	17
- Deposits in financial institutions	6	14
- Mutual/investment funds	3	13
- Stocks	3	25
- Bonds (savings and other)	1	17
- Other financial assets	2	18
Non-financial assets	58	4
Principal residence	38	4
Other real estate	8	6
Vehicles	4	5
Other non-financial assets	8	4
Equity in business	12	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
NET WORTH		8

¹ This means, for example, that RRSPs/LIRAs represented 12 % of total assets and that 10% of the total amount for RRSP/LIRAs was imputed.

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

A.6 Data 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 $Y \pm 2SE$ confidence interval 95 times out of 100 and within the narrower confidence interval defined by $Y \pm SE$, 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. $100 \times SE / Y$).

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 \pm \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 than 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.

Impact of sampling and non-sampling errors on SFS estimates

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.

ELECTRONIC PUBLICATIONS AVAILABLE AT
www.statcan.ca



Appendix B - Concepts and Definitions

B.1 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 indebtedness².

Respondents were asked to provide the value of the asset or the amount of the debt at a time as close as possible to the date of the interview. Assets and debts were reported for the family unit as a whole and not for each person in the family. The assets and debts included in the survey are identified below.

B.2 Assets

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. This is in itself prone to error. In the case of vehicles, respondents were asked to provide the make, model and year in addition to the estimated value. This information was used to impute for non-response and also to identify potential reporting errors. Values provided by respondents were not adjusted unless they were judged to be an error, resulting, for example, from data entry. If the respondent either over or underestimated the value of an asset by a relatively small proportion, this would not be readily apparent. However, extreme values were reviewed and adjusted if necessary.

² Excluded from the concept of net worth in this report is the value of work-related pension plans and/or entitlements to future social security provided by the government in the form of Canada or Quebec Pension Plan or Old Age Security payments. Also excluded is the family's human capital measured in terms of the value of the discounted flow of future earnings for all family members.

The assets included in this report are categorized as follows::

Assets
Financial assets
Within registered plans:
- RRSPs/LIRAs
- Other registered plans
Outside registered plans:
- 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

The value of all invested assets was to include accrued earnings or interest. Respondents were asked to estimate the actual value, at the time of the survey. In one case, for the value of the contents of the principal residence, the respondent was able to select one of 16 ranges.

The assets items identified above include:

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: Total value of all deposits and invested assets.

Financial assets, other: Includes less commonly held financial assets such as treasury bills, mortgage-backed securities, money held in trust, annuities, money owed to the respondent and other miscellaneous financial assets. It also includes shares of privately held companies. Excludes any other financial assets held within registered plans.

Locked-in Retirement Account (LIRA): An RRSP in which the money is locked-in until the person reaches a specified age. 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.

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 plans: Total value, including investment earnings, of all plans registered with Canada Customs and Revenue Agency, generally because of tax incentives. These include: Registered Retirement Savings Plans (RRSPs), Registered Retirement Income Funds (RRIFs), Deferred Profit Sharing Plans (DPSPs) and Registered Education Savings Plans (RESPs).

Registered plans, other: The value of all plans other than RRSPs, i.e., RRIFs, DPSPs and RESPs.

Registered Retirement Savings Plans (RRSP): The value of all amounts held in RRSPs. This would also include the amount in self-directed plans. The RRSP could be held in deposits, mutual funds, stocks or bonds. A breakdown of the investments within the RRSP was not requested for SFS.

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.

B.3 Debts

Debts are categorized as follows in this report:

Debts
Mortgages
Principal residence
Other real estate
Line of credit
Credit card and instalment debt
Student loans
Vehicle loans
Other debt

The amount reported for debts is not intended to include interest owing, as this would most often not be known.

Debt items listed above include:

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.

B.4 Family type

In this report, family types are categorized as follows:

All family units
Economic families of two or more
Elderly families
Non-elderly families
Couples only, no children at home
Couples with children under 18
Couples with other relatives
Lone-parent families, female parent
Lone-parent families, male parent
Other non-elderly families
Unattached individuals
Elderly male
Elderly female
Non-elderly male
Non-elderly female

Within this classification, the following definitions apply:

Couples: Couples include legally married, common-law and same-sex relationships.

Couples with children: Couples living with a child or children (by birth, adopted, step, or foster) under age 18. Children aged 18 or over are considered to be "other relatives". Other relatives may also be in the family.

Couples with other relatives: Couples (including the major income recipient, with no children under 18 living at home) who are living with a child or children over 18 or with other persons to whom the major income recipient is related by blood, marriage, adoption or common-law.

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.

Elderly/elderly families: Person aged 65 and over. In the case of elderly families, the major income recipient is aged 65 and over.

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

Lone-parent families: One parent living with at least one child under age 18. Families where the parent is 65 years and older are excluded.

Other non-elderly families: Other related persons living together (e.g., siblings, cousins).

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.

In some tables in this report some of the above categories are grouped together, for example, non-elderly couples with other relatives and other non-elderly couples.

B.5 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.

Current dollars versus constant dollars

"Current dollars" are what we usually mean when we refer to a currency in the current time period. The term "constant dollars" refers to dollars of several years expressed in terms of their value ("purchasing power") in a single year, called the base year. This type of adjustment is done to eliminate the impact of widespread price changes. Current dollars are converted to constant dollars using an index of price movements. The most widely used index for household or family incomes, provided that no specific uses of the income are identified, is the Consumer Price Index (CPI), which reflects average spending patterns by consumers in Canada.

To convert current dollars of any year to constant dollars, divide them by the index of that year and multiply them by the index of the base year you have chosen. (The numerator must contain the index value of the year you want to move to.)

For this report, it was necessary to convert current 1984 dollars to constant 1999 dollars. Using the CPI, \$10,000 in 1984 would be \$15,326 in 1999 constant dollars ($\$10,000 \times 110.5/72.1 = \$15,326$).

Consumer Price Index, annual rates, 1992=100

1984	72.1
1999	110.5

Debt/asset ratio

Relationship between total debts and total assets, calculated by dividing total debts by total assets. If debts are lower than assets, the number will be less than one; if they are higher the number will be greater than one. For example if a family has debt of \$2,000 and assets of \$20,000 the debt-to-asset ratio will be $\$2,000/\$20,000$ or 0.1.

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.

Since net worth distributions are typically skewed to the left - that is, concentrated at the low end of the scale - median net worth is usually lower than average net worth.

Quintiles and deciles

Net worth quintiles are a convenient way of categorizing units of a given population from lowest net worth to highest net worth for the purposes of drawing conclusions about the *relative* situation of people at either end or in the middle of the scale. Rather than using fixed ranges, as in a typical distribution, it is the size of each population group that is fixed.

First, all the units of the population, whether unattached individuals or families, are ranked from lowest to highest by the value of their net worth. Then the ranked population is divided into five groups each containing an equal numbers of units; each group is called a quintile. Analogously, dividing the population ranked by net worth into ten groups, each comprising the same number of units, produces deciles.

Quintiles and deciles can also be calculated for other values, such as income. In this case, the unattached individuals or families are ranked from lowest to highest by the value of their income.

B.6 Comparability of 1984 and 1999 asset and debt data

In order to compare the 1999 asset and debt information with information from the 1984 survey it was necessary to remove the items specified below from 1999 assets. These amounts were not requested in 1984. No adjustments were needed to debts.

Assets	Adjustments needed to make 1999 information comparable to 1984
Financial assets	
Within registered plans:	
- RRSPs/LIRAs	No adjustment made; for 1984 would not include LIRAs (see definition)
- Other registered plans	Value of Registered Retirement Income Funds removed
Outside registered plans:	
- Deposits in financial instit.	No adjustment needed
- Mutual/investment funds	No adjustment needed
- Stocks	No adjustment needed
- Bonds (savings and other)	No adjustment needed
- Other financial assets	Value of annuities removed
Non-financial assets	
Principal residence	No adjustment needed
Other real estate	No adjustment needed
Vehicles	No adjustment needed
Other non-financial assets	Value of contents of principal residence and collectibles and valuables removed.
Equity in business	No adjustment needed

As well, different methods were used to collect, process and impute data in 1984 and 1999. Although many of these differences would not have a significant impact on the results, several points should be noted:

- In 1984, information on assets and debts was collected for each family member, although the results were published at the family level. In 1999, the asset and debt detail was collected at the family level.
- In 1999, there was a supplementary "high-income" sample, to improve the quality of the estimates of those at the high end of the net worth scale. There was no such supplementary sample in 1984.