

## Preliminary results of the Pension Satellite Account, 1990 to 2007

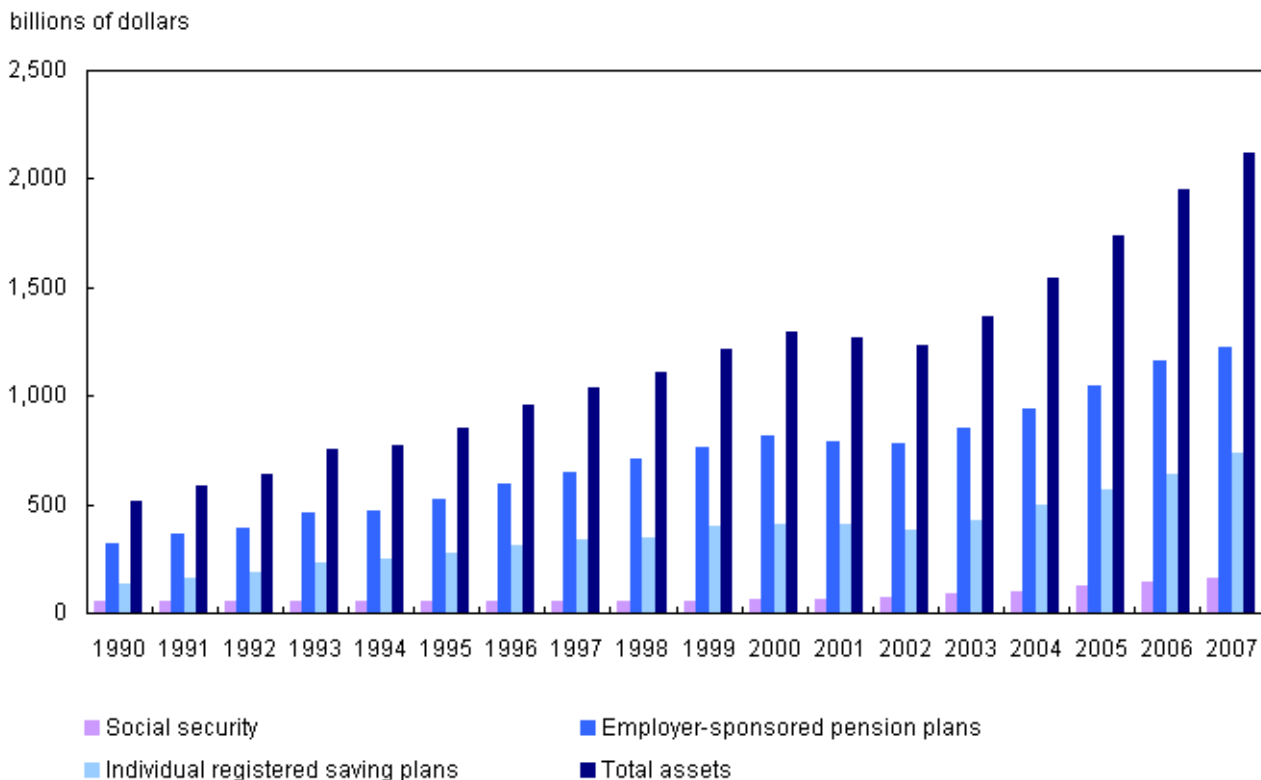
### Introduction

In this first release, a time series of pension assets by type are made available as an extension to the National Balance Sheet Accounts. The pension asset table covers the entire universe of the retirement regime in Canada which includes government-sponsored social security, employer-sponsored pension plans (ESPP)<sup>1</sup>, and individual registered saving plans (IRSP). Estimates of pension assets are taken from the National Balance Sheet Accounts (NBSA) to a large extent. Details of pension assets not explicitly shown in the NBSA were developed using other Statistics Canada data sources such as Trusteed Pension Fund surveys, the Survey of Financial Security in Canada and the Quarterly Survey of Financial Statements. In addition, survey data from the Canadian Life and Health Insurance Association and results from the *Canadian Financial Monitor* survey from Ipsos-Reid were used.

### Pension assets by type of plan

Total assets of the pension programs account for \$2.1 trillion at year-end 2007 (Chart 1), or 38% of National Net Worth. This figure includes assets of the personal sector, both group and individual plans, in addition to a smaller portion of accumulated pension assets in the government sector (for the Canada and Quebec Pension Plans).

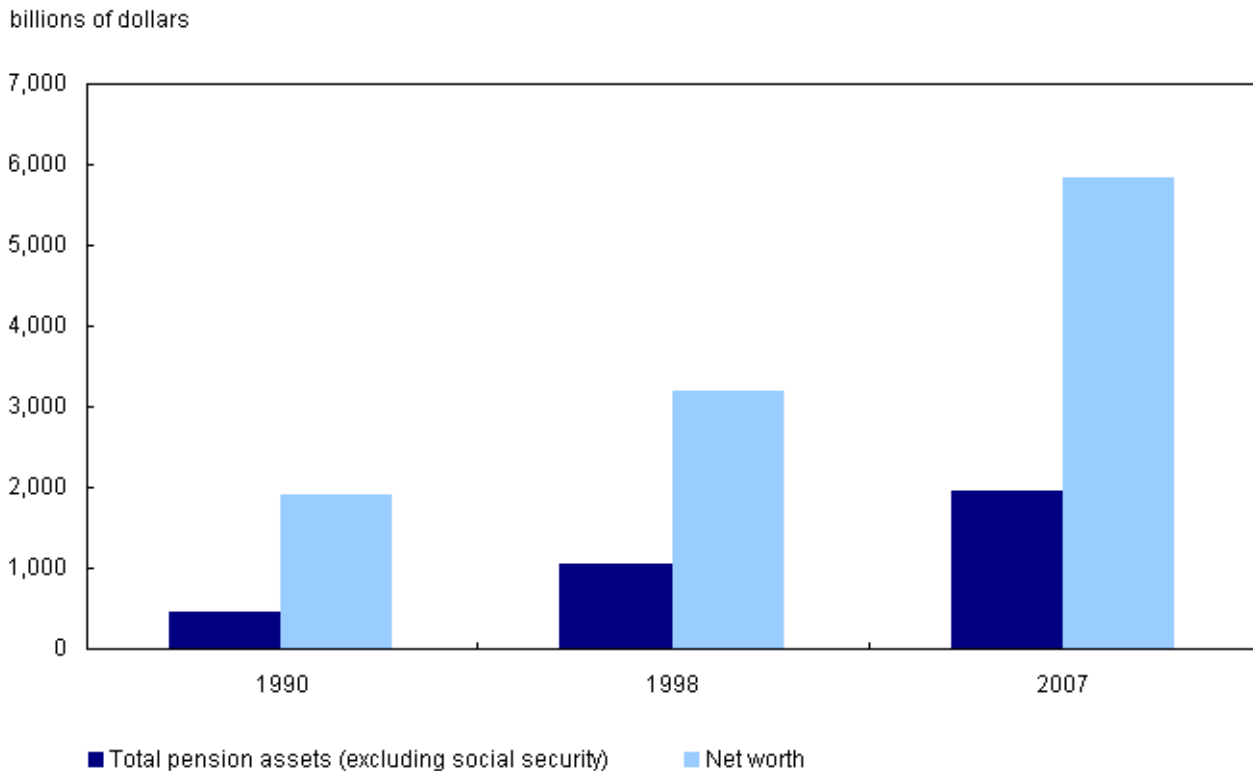
**Chart 1 Assets of Canada's pension system, at market value**



The bulk of the Canadian pension system assets constitute part of personal sector net worth, and this amount has quadrupled since 1990. In 2007, pension assets excluding social security represent a third of the net worth of the persons and unincorporated business sector (Chart 2).

1. Employer-sponsored plans include some plans that are co-sponsored by employees associations.

**Chart 2 Comparison between pension assets and net worth of persons and unincorporated business, at market value**



### The three tiers of the pension system

In Canada, there are a range of social programs and saving schemes designed to provide sources of funds for retirement. These include social security, employer-sponsored pension plans, and individual registered saving plans which are tax-sheltered to encourage individuals to accumulate assets for use as a source of funds for retirement.

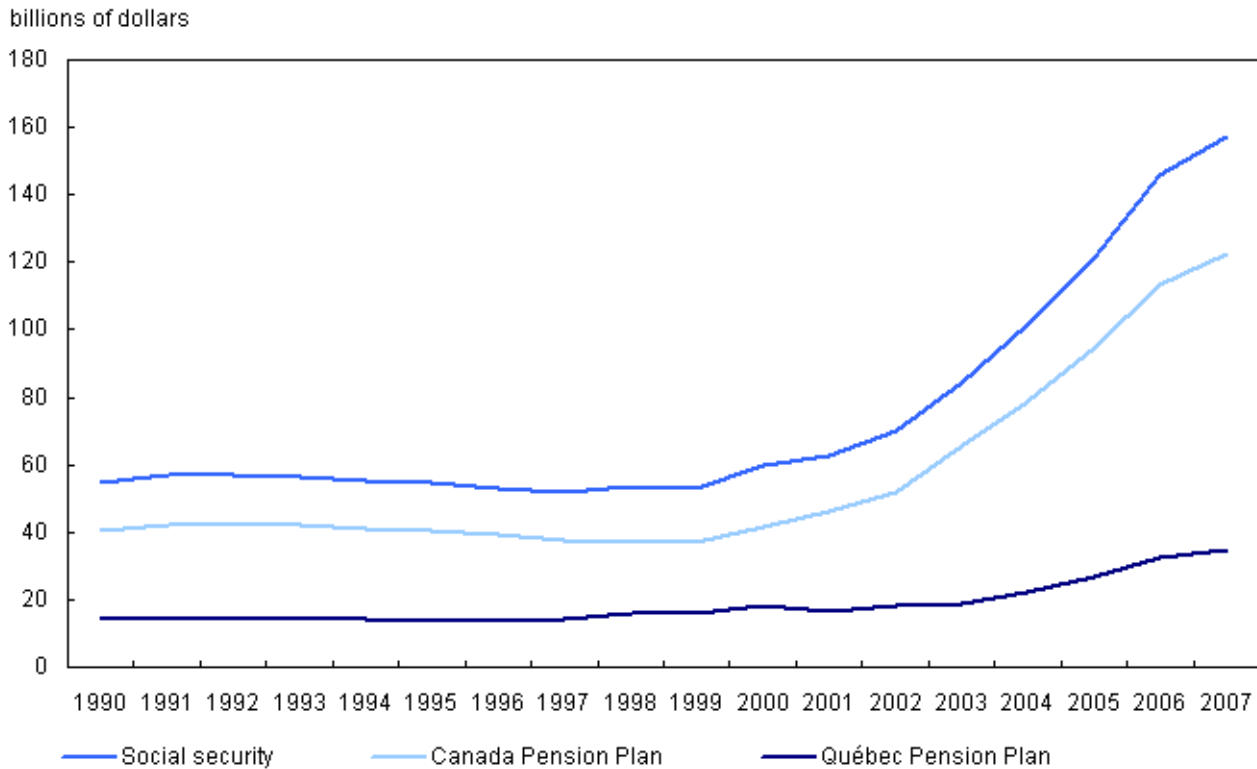
#### Social security

Social security in the System of National Accounts is differentiated from employer-sponsored plans because with social security plans there is a relationship with the government rather than the employer. For the Canada Pension Plan (CPP) and the Quebec Pension Plan, the assets are recorded in the government sector<sup>2</sup>. There is no government liability recognised as an asset in the personal sector for these social programs. The benefit payments to individuals are recorded as inflows to personal sector income through transfers from the government sector.

In December 1997, amendments were brought to the CPP. This included a new schedule of contribution rates and the creation of the Canada Pension Plan Investment Board, whose purpose is to maximise returns on investments without undue risk in order to keep the plan sustainable in the long term while minimising the burden on future generations. The upswing in market value of CPP assets after 1999 (Chart 3) reflects both the increased contribution rates and the market return on the investments that have been made by CPPIB since March 1999.

2. Although the Old Age Security program is included in the social security category of pensions, there are no assets associated to this program.

**Chart 3 Pension assets in social security by type, at market value**

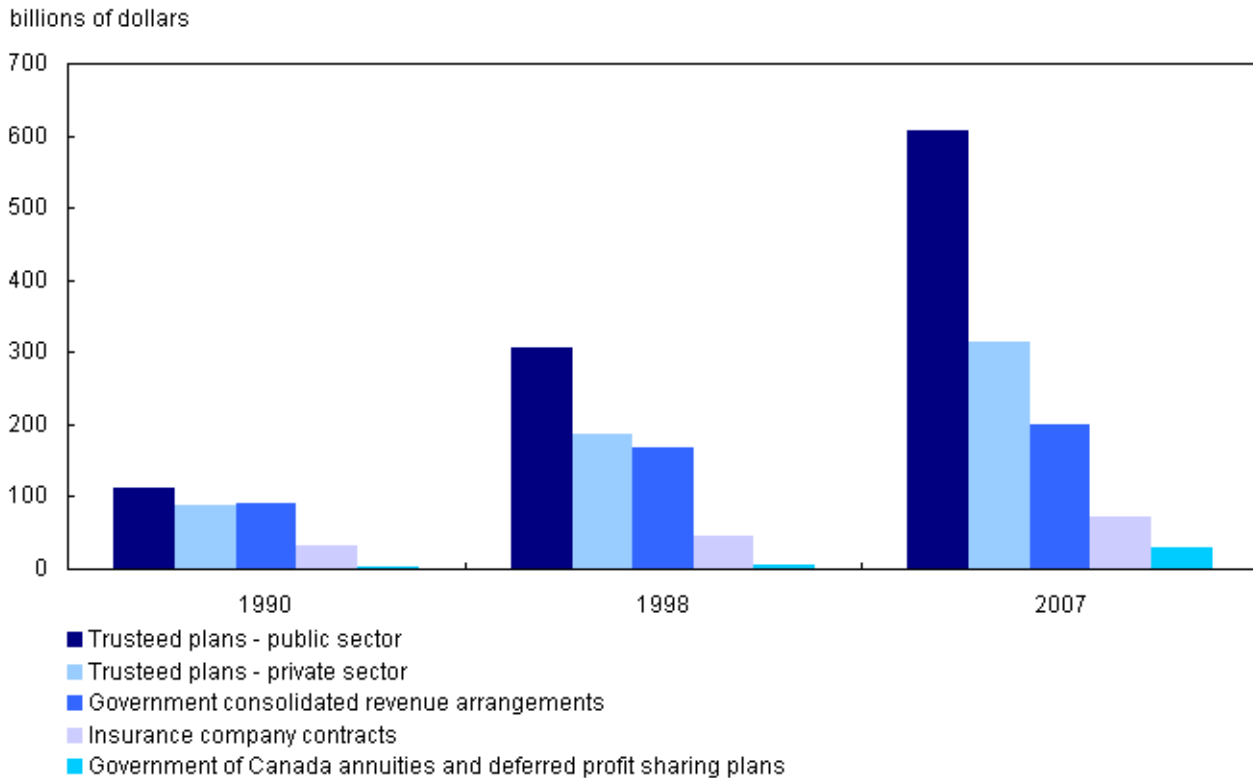


**Employer-sponsored plans**

Employer-sponsored plans or registered pension plans are dominated by trustee pension plans, which make up three quarters of all employer-sponsored pension assets. Registered pension plans can also be administered through insurance company contracts which operate in much the same manner as trustee pension plans.

Most of the remaining assets are obligations (liabilities) under government consolidated revenue arrangements administered by the federal government and some provincial governments. Deferred profit arrangements and other retirement arrangements such as the now-terminated government annuities program make up the balance of the registered pension plans (Chart 4). Each of these types of plans represents assets of the personal sector.

**Chart 4 Pension assets in employer-sponsored plans by type, at market value**



Public sector pensions make up over 65% all employer-sponsored pension assets. This includes both public sector trusteed plans with invested assets as well as the government consolidated revenue arrangements (non-autonomous plans). Consolidated revenue plans have no separately invested assets. Consolidated revenue plans have increasingly become funded over time<sup>3</sup>.

Deferred profit sharing plans (DPSP) are arrangements whereby the employer contributions to the plan are calculated by reference to the employer's profits. Contributions are paid to a trustee, usually a Canadian trust or life insurance company, who holds and invests the contributions for employees.

### Individual registered saving plans

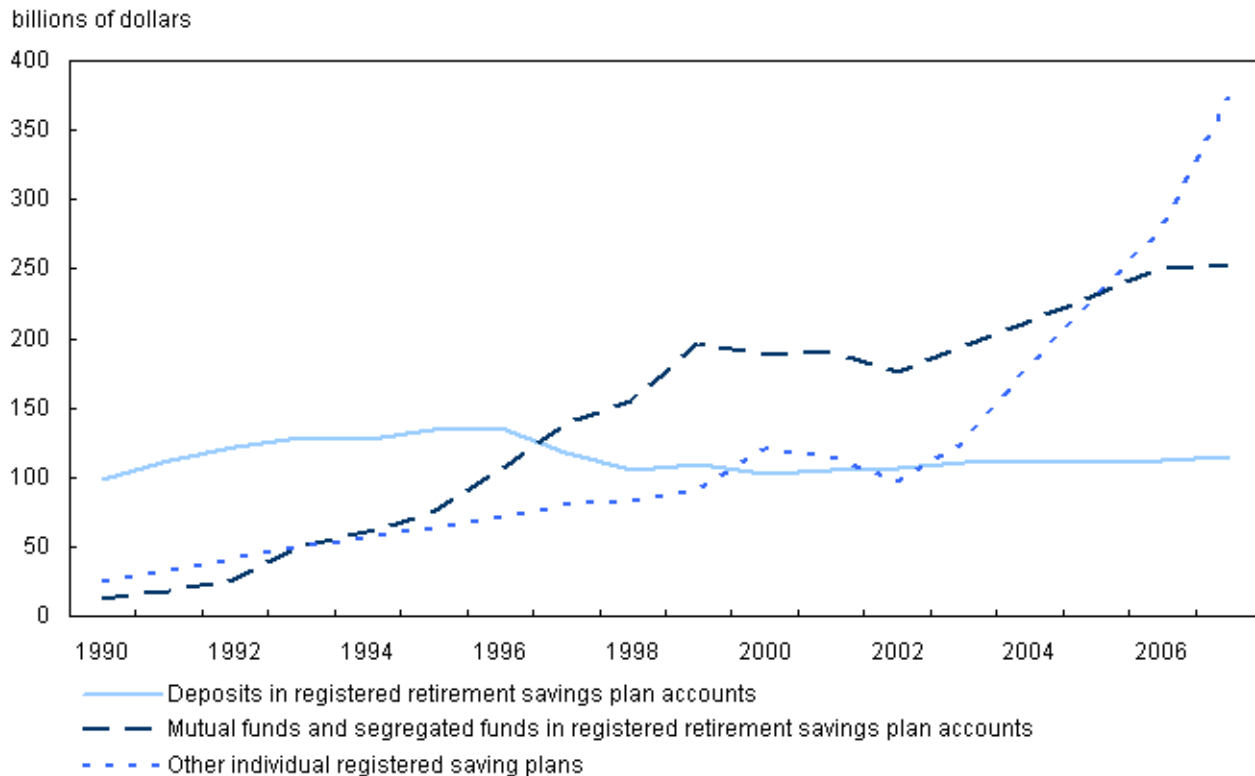
Individual registered saving plans (IRSP) were introduced in 1957. Contributions to Registered Retirement Savings Plans (RRSPs) are voluntary and are tax-sheltered with the maximum contribution depending on income as well as contributions to other registered pension plans. Withdrawals are allowed but subject to income tax at the time of withdrawal. The accumulated amount must be converted to payout vehicles such as registered retirement income funds (RRIF) or an annuity prior to the end of the year in which taxpayer's 71st birthday is reached.

Assets for IRSPs are recorded as assets in the personal sector. These are also reflected as liabilities of the corporate sector, governments or non-residents, depending on what type of instrument the assets are invested. Assets under IRSPs have grown rapidly, particularly since the 1991 changes to the Income Tax Act that increased contribution limits. There has been a marked shift from RRSP interest-bearing deposits to other types of

3. For example, after April 2000, the net amount of contributions less benefits and payments related to the Federal Public Service, Canadian Forces and Royal Canadian Mounted Police (RCMP) pension plans were transferred to the Public Sector Pension Investment Board.

investments which rely more on asset-appreciation as a source of growth. From 2002 onwards, the share of IRSPs invested in other types of plans, including self-directed RRSPs offering more diversified investment options, has grown significantly (Chart 5).

**Chart 5 Pension assets in individual registered saving plans by type, at market value**



### Summary and future work

This first release of pension assets has described the size and composition of pension assets in Canada. Such wealth measures have become increasingly relevant indicators of the evolution of personal net worth, as well as of the pension system as a whole.

Although pension flows and stocks are accounted for within the Canadian System of National Accounts (CSNA), they are sometimes embedded in the various aggregates of the macro-economic accounting system and are not fully articulated.

The Pension Satellite Account (PSA) is an articulation and extension of the stock-flow dimension of the core accounts. The PSA basic framework, in condensed form, is shown in Figure 1 below, with opening and closing wealth positions along with inflows and outflows which highlight the key components of wealth change. The PSA is a detailed three-dimensional matrix, with the third dimension being time series.

**Figure 1 Stock-flow matrix presentation of the pension satellite account**

	Opening wealth position	Inflows: contributions, investment income	Outflows: withdrawals	Revaluations and other volume changes	Closing wealth position
Social security					
Employer-sponsored plans					
Individual registered saving plans					
Total					

Following this first release of a time series of pension assets, or wealth positions in Figure 1 by type, subsequent releases of the PSA will link pension stocks and flows, integrated into a complete and coherent framework. The PSA project is largely analytical in nature. As development of these provisional estimates progresses, the estimates may be revised and broadened in scope.

**References:**

1. *National Balance Sheet Accounts*, Statistics Canada catalogue no. 13-214.
2. *Morneau Sobeco Handbook of Canadian Pension and Benefit Plans (2005)*, edited by Matthew Tierney and Anny Vexler, revised by the professionals at Morneau Sobeco, 13th edition, CCH Canadian Limited, Toronto.

**Pension assets by type of plan, at market value**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	millions of dollars																	
<b>Social security</b>	<b>54,900</b>	<b>56,699</b>	<b>56,848</b>	<b>56,635</b>	<b>55,030</b>	<b>54,491</b>	<b>53,206</b>	<b>51,842</b>	<b>53,357</b>	<b>52,805</b>	<b>60,010</b>	<b>62,456</b>	<b>70,244</b>	<b>84,470</b>	<b>101,181</b>	<b>121,444</b>	<b>145,820</b>	<b>157,432</b>
Canada Pension Plan	40,577	41,915	42,360	42,039	40,995	40,611	39,336	37,554	37,153	36,805	41,660	46,004	52,119	65,716	78,760	94,471	113,581	122,729
Quebec Pension Plan	14,323	14,784	14,488	14,596	14,035	13,880	13,870	14,288	16,204	16,000	18,350	16,452	18,125	18,754	22,421	26,973	32,239	34,703
<b>Employer-sponsored pension plans</b>	<b>322,263</b>	<b>361,372</b>	<b>389,888</b>	<b>462,963</b>	<b>470,290</b>	<b>523,093</b>	<b>592,975</b>	<b>650,151</b>	<b>709,467</b>	<b>763,672</b>	<b>818,781</b>	<b>792,713</b>	<b>778,691</b>	<b>850,547</b>	<b>940,752</b>	<b>1,048,170</b>	<b>1,162,236</b>	<b>1,222,789</b>
Trusteed plans <sup>1</sup>	199,408	227,904	250,207	306,544	304,722	349,984	409,000	455,253	492,461	531,878	577,155	566,916	543,341	603,228	679,421	773,923	873,639	921,086
Public sector	111,142	132,873	151,001	190,061	190,720	212,572	248,551	279,862	305,133	334,247	361,003	362,416	344,891	382,720	432,197	498,481	568,172	606,445
Private sector	88,266	95,031	99,206	116,483	114,002	137,412	160,449	175,391	187,328	197,631	216,152	204,500	198,450	220,508	247,224	275,442	305,467	314,641
Government consolidated revenue arrangements <sup>2</sup>	89,170	97,354	101,570	114,400	122,943	131,909	140,884	149,161	166,966	174,171	180,082	165,576	177,055	180,197	184,194	188,241	193,738	199,089
Other	33,685	36,114	38,111	42,019	42,625	41,200	43,091	45,737	50,040	57,623	61,544	60,221	58,295	67,122	77,137	86,006	94,859	102,614
Insurance company contracts <sup>3</sup>	30,968	33,595	35,553	39,385	39,905	38,411	39,641	41,442	45,093	50,133	53,389	49,538	51,552	57,802	61,441	66,667	70,986	73,118
Government of Canada annuities <sup>4</sup>	829	790	742	708	667	628	583	545	562	527	495	505	427	395	369	344	331	319
Deferred profit sharing plans <sup>5</sup>	1,887	1,729	1,816	1,926	2,053	2,162	2,867	3,751	4,385	6,963	7,661	10,179	6,316	8,924	15,326	18,995	23,542	29,177
<b>Individual registered saving plans<sup>6</sup></b>	<b>135,263</b>	<b>162,612</b>	<b>189,249</b>	<b>231,133</b>	<b>243,984</b>	<b>273,281</b>	<b>310,216</b>	<b>335,681</b>	<b>344,736</b>	<b>397,115</b>	<b>411,464</b>	<b>409,829</b>	<b>378,932</b>	<b>428,348</b>	<b>500,475</b>	<b>570,776</b>	<b>641,003</b>	<b>739,295</b>
Deposits in RRSP accounts <sup>7</sup>	97,588	112,117	121,731	129,163	126,705	134,760	135,141	117,293	105,773	109,146	102,504	104,531	106,346	110,305	110,634	110,243	111,836	114,472
Mutual funds and segregated funds in RRSP accounts <sup>8</sup>	12,748	17,762	26,437	51,578	60,964	74,364	104,548	138,528	155,403	196,674	188,581	190,056	175,348	193,697	211,255	231,458	250,301	251,454
Other individual registered saving plans <sup>9</sup>	24,927	32,734	41,081	50,392	56,316	64,157	70,526	79,860	83,560	91,295	120,379	115,242	97,238	124,346	178,586	229,075	278,866	373,369
<b>Total assets<sup>10</sup></b>	<b>512,426</b>	<b>580,683</b>	<b>635,984</b>	<b>750,731</b>	<b>769,304</b>	<b>850,865</b>	<b>956,397</b>	<b>1,037,674</b>	<b>1,107,560</b>	<b>1,213,592</b>	<b>1,290,255</b>	<b>1,264,998</b>	<b>1,227,867</b>	<b>1,363,365</b>	<b>1,542,408</b>	<b>1,740,390</b>	<b>1,949,059</b>	<b>2,119,516</b>

1. Trusteed pension plan estimates by sector are derived by applying asset ratios for the public/private sector split from the Quarterly Trusteed Pension Fund survey to the National Balance Sheet Accounts total trusteed pension plan estimate.

2. Includes public sector retirement compensation arrangements. These supplementary employee retirement plans were set up to provide pension benefits to senior employees beyond the maximum permitted registered pension plan benefits as set out in the Income Tax Act.

3. Estimates for insurance company contracts are taken from the Canadian Health and Life Insurance Association. Estimates for 2007 were derived using the growth rate of the private sector trusteed pension plans.

4. Data for Government of Canada annuities come from the Public Accounts of Canada.

5. Estimates for deferred profit sharing plans are derived from the Survey of Financial Security and Canadian Life and Health Insurance Association survey data.

6. Estimates for individual registered saving plans are derived from the Survey of Financial Security in Canada, Canadian Life and Health Insurance Association survey data, Quarterly Survey of Financial Statements, and the Ipsos-Reid Canadian Financial Monitor.

7. Estimates for deposits are taken from the Quarterly Survey of Financial Statements and the Canadian Health and Life Insurance Association.

8. Estimates for mutual funds and segregated funds in Registered Retirement Savings Plan (RRSP) accounts are taken from the National Balance Sheet Accounts and the Canadian Health and Life Insurance Association, respectively.

9. Includes Registered Retirement Income Fund (RRIFs), Life income fund (LIFs), Locked-in Retirement Income Fund (LRIFs), and self-directed RRSPs not captured elsewhere.

10. Excludes retirement compensation arrangements for the private sector (see note 2). Research in this area is continuing.