



**Report**

**Report on  
Canadian Economic Statistics  
1924–2020**

**July 2021**

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# **REPORT ON CANADIAN ECONOMIC STATISTICS**

## **1924–2020**

**– FINAL RELEASE –**

### **HIGHLIGHTS OF THE REPORT**

The Canadian S&P/TSX Total Return Index posted a gain of 5.60% in 2020, after increasing by 22.88% in 2019 (see Table 1A).

The Government of Canada bond curve sharply decreased and steepened in 2020. Yields decreased 147 basis points at the two-year maturity, decreased 91 basis points at the 10-year maturity, and decreased 43 basis points for long-term bonds (see Table 10).

In U.S. dollars, the S&P 500 returned 18.40% in 2020 after seeing an increase of 31.49% in 2019. In Canadian dollars, the S&P 500 Total Return Index posted a gain of 16.07% in 2020 (see Table 5). The MSCI World, MCSI World ex. U.S., European, and Pacific Basin indices saw changes of 14.20%, 5.96%, 3.84%, and 10.04%, respectively, measured in Canadian dollars (see Table 6).

In 2020 the U.S. dollar depreciated against the Canadian dollar, decreasing 2.56 cents based on the average exchange rate for the last business day of December (see Table 5).

Inflation in 2020 was 0.73%, down from 2.25% in 2019 (See Table 1A).

In 2020, the total return on Government of Canada long bonds was 10.04%, after an increase of 8.80% in 2019 (see Table 1A). After adjusting for inflation, the 91-day T-bill posted a real return of negative 0.19% for 2020, compared to a negative 0.57% real return for 2019 (see Table 1B). The total real rate of return for Government of Canada long bonds was 9.24%, compared to 6.41% in 2019 (see Table 3C).

**REPORT ON CANADIAN ECONOMIC STATISTICS**  
**JANUARY 1, 1924, TO DECEMBER 31, 2020**  
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## **INTRODUCTION**

This is the forty-fifth Report on Canadian Economic Statistics issued by the Canadian Institute of Actuaries' Committee on Investment Practice. Reports have been published annually since 1977.

This report was prepared by Nexus Risk Management and approved by the Committee on Investment Practice.

The committee welcomes comments and suggestions about this report and the tables within.

## **DESCRIPTION OF DATA**

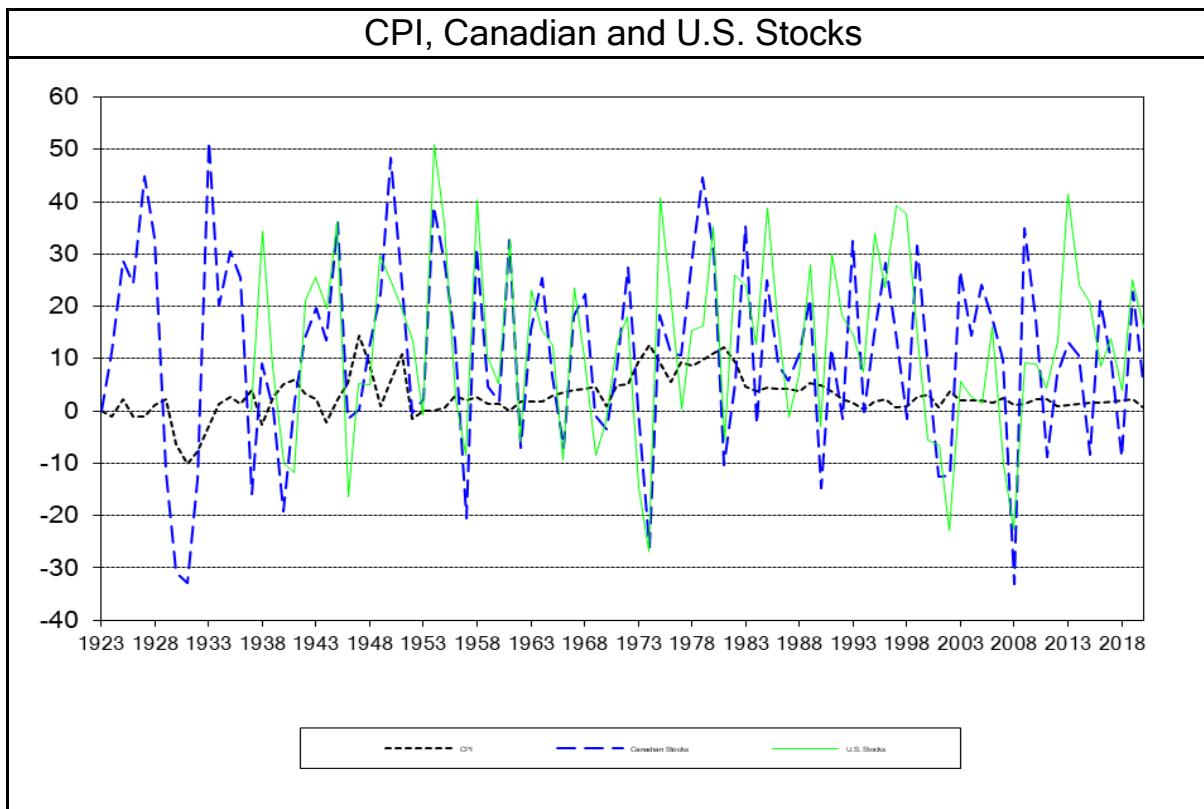
The primary source of data is the data tables maintained by Statistics Canada. Some statistics, such as the GDP and the wage and salary index, are subject to re-estimation by Statistics Canada over a period of months or years. This report includes revisions to the numbers presented last year, and it is likely that the next issue of these economic tables will contain revisions of some of the figures given here. Appendix B is a list of the data table vectors used, together with the concordance of CANSIM I series to data table vectors. Most Statistics Canada data tables did not start until well after January 1, 1924, the commencement date of the attached tables. For years not covered by Statistics Canada data tables, a variety of data sources was used. The data sources are indicated in the notes to the tables, in Appendix C, and in the Bibliography (Appendix E). In some cases, a lack of data required that approximations be used.

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Other data have been provided by: S&P Dow Jones Indices; RBC Investor and Treasury Services; MSCI; Bloomberg L.P.; TSX Inc., the Bank of Canada, and the U.S. Federal Reserve. The committee is grateful to these providers for the data used in producing this report. The committee cannot assume responsibility for the quality or accuracy of the data.



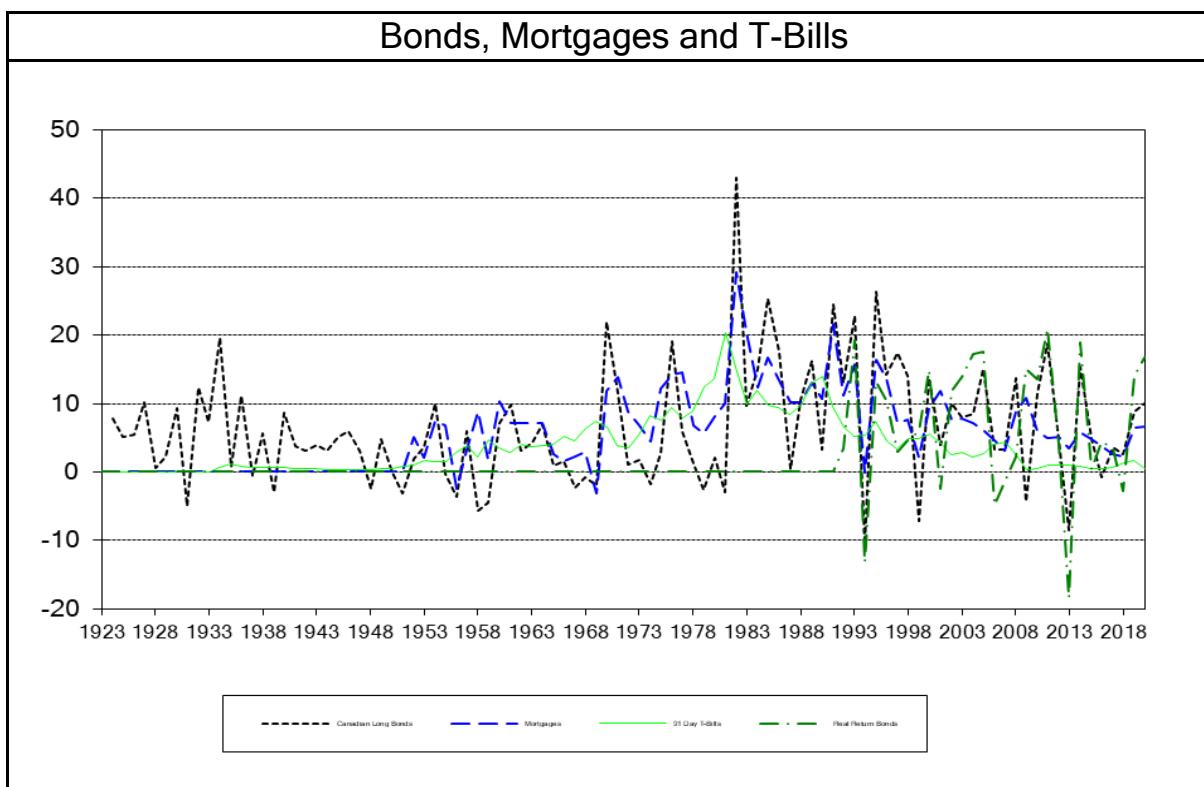
FIGURE 1A : NOMINAL RATES



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TABLE 1B: REAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN

YEAR	CONSUMER PRICE INDEX	REAL VALUES (NET OF CPI INCREASES)							WAGE AND SALARY INDEX
		CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	
1923	0,00	.	.	.	.	.	.	.	.
1924	-1,09	12,47	9,03	.	.	.	.	2,98	1,21
1925	2,20	25,97	2,91	.	.	.	.	2,12	-2,36
1926	-1,08	25,77	6,53	.	.	.	.	4,93	2,51
1927	-1,09	46,52	11,39	.	.	.	.	6,01	2,84
1928	1,10	31,47	-0,54	.	.	.	.	1,77	0,37
1929	2,17	-13,48	0,16	.	.	.	.	-3,46	-1,01
1930	-6,38	-26,19	16,71	.	.	.	.	-4,37	5,38
1931	-10,23	-25,32	5,86	.	.	.	.	-6,21	5,53
1932	-7,59	-5,77	21,61	.	.	.	.	-3,71	1,60
1933	-2,74	55,90	10,40	.	.	.	.	1,48	0,68
1934	1,41	18,59	17,99	.	-0,75	.	.	4,58	0,49
1935	2,78	27,10	-1,90	.	-1,56	.	.	2,56	-0,41
1936	1,35	23,68	9,64	.	-0,45	.	.	4,35	3,24
1937	4,00	-19,07	-4,40	.	-3,16	.	.	0,38	1,16
1938	-2,56	12,01	8,41	.	3,27	.	37,95	6,22	4,35
1939	2,63	-2,38	-5,46	.	-1,88	.	5,68	8,39	-0,49
1940	5,13	-23,08	3,39	.	-4,19	.	-14,37	13,40	1,43
1941	6,10	-3,93	-2,17	.	-5,19	.	-16,78	13,22	0,97
1942	3,45	10,19	-0,35	.	-2,81	.	17,04	8,90	3,90
1943	2,22	17,07	1,63	.	-1,70	.	22,86	4,50	3,20
1944	-2,17	15,99	5,45	.	2,62	.	22,26	6,42	4,28
1945	2,22	33,09	2,89	.	-1,82	.	33,13	-4,67	-1,21
1946	5,43	-6,58	0,55	.	-4,79	.	-20,76	-3,33	0,80
1947	14,43	-12,31	-9,84	.	-12,26	.	-8,01	-2,38	-2,95
1948	9,01	2,86	-10,45	.	-7,89	.	-3,60	4,10	-0,05
1949	0,83	21,61	3,99	.	-0,34	.	28,71	3,39	5,21
1950	5,74	40,38	-5,54	.	-4,92	.	17,87	7,17	2,07
1951	10,85	11,90	-12,61	.	-9,09	.	8,01	-1,87	-0,89
1952	-1,40	0,99	3,44	6,67	2,48	.	15,06	14,44	8,74
1953	0,00	2,15	3,64	2,08	1,66	.	-0,66	5,18	4,17
1954	0,00	39,05	9,99	7,48	1,53	.	50,94	0,34	3,01
1955	0,71	26,90	-1,04	5,98	0,74	.	34,92	6,84	3,74
1956	2,82	10,12	-6,27	-5,09	0,09	.	-0,42	5,68	2,59
1957	2,05	-22,18	3,76	1,15	1,76	.	-10,35	-1,53	2,40
1958	2,68	27,82	-8,16	6,02	-0,51	.	36,68	2,77	1,25
1959	1,31	3,24	-5,67	0,44	3,43	.	9,08	1,41	2,43
1960	1,29	0,48	5,74	8,91	2,20	.	3,81	0,20	1,93
1961	0,00	32,75	9,78	7,12	2,89	.	32,76	3,19	3,11
1962	1,91	-8,84	1,12	5,11	2,10	.	-7,54	4,91	-0,37
1963	1,88	13,47	2,34	5,15	1,76	.	20,80	2,24	2,17
1964	1,84	23,17	5,04	5,19	1,92	.	13,50	2,62	2,88
1965	3,01	3,56	-1,99	-0,41	0,99	.	9,21	4,28	3,37
1966	3,51	-10,22	-1,89	-1,86	1,58	.	-12,38	3,16	1,90
1967	3,95	13,60	-5,92	-1,68	0,64	.	18,84	1,04	2,72
1968	4,35	17,34	-4,94	-1,32	2,03	.	5,60	3,07	2,82
1969	4,69	-5,25	-6,39	-7,48	2,62	.	-12,52	2,81	1,56
1970	1,00	-4,52	20,78	10,77	5,52	.	-2,98	3,98	7,82
1971	4,93	2,94	6,32	8,55	-1,08	.	7,92	2,76	5,48
1972	5,16	21,13	-3,85	3,57	-1,50	.	12,26	3,83	2,45
1973	9,38	-8,32	-7,01	-2,29	-3,58	.	-21,99	4,04	-2,28
1974	12,65	-34,25	-12,73	-7,24	-3,93	.	-34,99	0,53	0,62
1975	9,42	8,28	-6,03	2,54	-1,70	.	28,60	1,48	4,57
1976	5,63	5,11	12,68	8,12	3,60	.	16,17	4,41	5,27
1977	9,40	1,19	-3,14	4,76	-1,41	.	-8,20	-0,03	-1,24
1978	8,60	19,45	-6,73	-1,62	0,31	.	6,23	-1,41	-2,01
1979	9,76	31,89	-11,29	-3,74	2,53	.	5,98	0,28	-1,06
1980	11,06	17,18	-8,10	-2,66	2,39	.	21,91	-1,16	0,35
1981	12,12	-19,95	-13,50	-1,91	7,37	.	-15,84	-1,28	-0,63
1982	9,27	-3,41	30,85	18,20	5,47	.	15,24	-0,24	0,25
1983	4,59	29,54	4,79	15,17	5,04	.	18,52	2,28	2,96
1984	3,72	-5,89	10,97	8,33	7,94	.	8,68	2,59	-0,59
1985	4,40	19,80	19,99	11,81	5,14	.	32,98	-0,03	-0,44
1986	4,21	4,55	12,78	8,76	5,05	.	12,65	-2,30	-1,42
1987	4,19	1,62	-3,59	5,82	4,09	.	-5,05	2,82	0,39
1988	3,88	6,93	6,32	6,01	5,67	.	3,03	1,92	0,30
1989	5,26	15,31	10,49	7,42	7,27	.	21,55	-1,18	-0,24
1990	4,99	-18,85	-1,57	5,37	8,56	.	-7,60	-1,59	-0,30
1991	3,75	7,96	19,92	17,16	5,60	.	25,27	-1,29	0,56
1992	2,17	-3,53	10,67	8,89	4,23	1,26	15,85	1,43	1,12
1993	1,65	30,39	20,88	13,78	3,56	17,39	12,62	1,62	-0,80
1994	0,23	-0,41	-10,67	-0,38	5,09	-13,44	7,21	3,41	1,60
1995	1,74	12,57	24,12	14,48	5,60	11,28	31,58	1,07	-0,33
1996	2,16	25,63	11,87	11,39	2,27	8,25	20,94	1,36	0,48
1997	0,78	14,09	16,54	6,36	2,50	2,20	38,11	1,38	0,09
1998	1,00	-2,55	13,01	6,66	3,78	3,52	36,46	-0,16	0,70
1999	2,63	28,34	-9,53	-0,52	2,14	3,23	11,02	3,38	-0,98

2000	3,20	4,08	10,11	5,97	2,36	11,34	-8,49	3,27	-1,00
2001	0,72	-13,20	3,18	11,13	3,38	-3,08	-7,08	-0,70	-0,70
2002	3,80	-15,64	6,06	3,66	-1,20	7,75	-25,67	0,30	-0,02
2003	2,08	24,15	5,86	5,63	0,84	11,54	3,60	-0,23	-0,15
2004	2,13	12,09	6,20	4,91	0,12	14,79	0,65	3,77	0,86
2005	2,09	21,59	12,70	3,91	0,57	15,18	-0,57	3,89	1,28
2006	1,67	15,33	1,52	2,97	2,34	-6,43	14,12	-0,65	2,12
2007	2,38	7,28	0,90	0,71	1,91	-3,69	-12,35	1,27	0,94
2008	1,16	-33,77	12,35	7,59	1,56	1,15	-23,48	-0,39	0,70
2009	1,32	33,29	-5,51	9,48	-0,90	13,58	7,70	-0,78	1,08
2010	2,35	14,90	8,88	3,59	-1,77	10,96	6,39	1,29	1,60
2011	2,30	-10,76	16,12	2,68	-1,32	18,32	2,07	2,93	-0,59
2012	0,83	6,30	3,69	4,27	0,15	3,11	12,55	-0,90	1,72
2013	1,24	11,61	-9,68	2,10	-0,26	-19,38	39,80	2,78	1,03
2014	1,47	8,96	13,80	4,34	-0,54	17,18	22,21	2,05	0,21
2015	1,61	-9,77	3,16	3,16	-1,07	-1,18	19,04	-3,49	-0,06
2016	1,50	19,29	-2,25	2,28	-0,98	2,91	7,01	1,09	<b>-0,09</b>
2017	1,87	7,09	1,64	0,75	-1,18	1,62	11,74	<b>1,31</b>	<b>0,57</b>
2018	1,99	-10,66	0,59	0,33	-0,57	-4,67	1,95	<b>-0,79</b>	-0,24
2019	2,25	20,17	6,41	4,08	-0,57	11,47	22,43	<b>1,07</b>	<b>1,23</b>
2020	0,73	4,83	9,24	5,95	-0,19	15,88	15,22	0,75	5,68

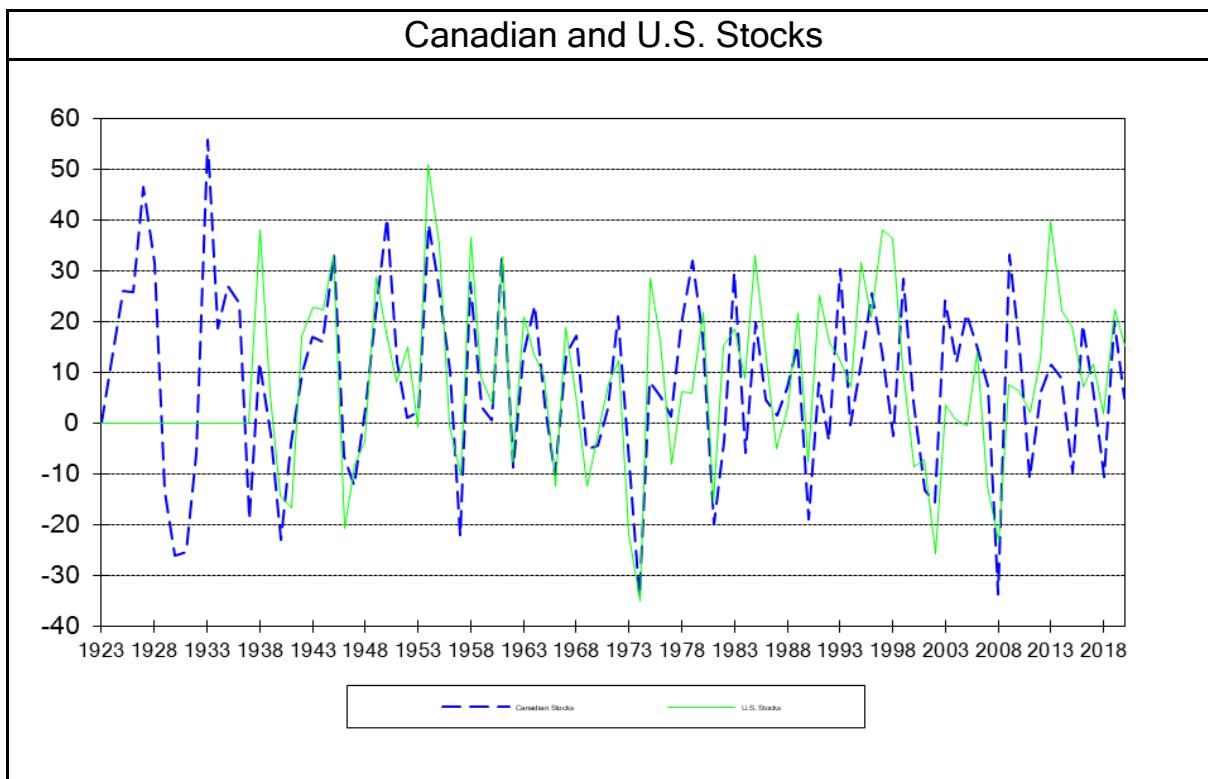
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This table contains the values of Table 1A after the CPI is removed geometrically. Values in bold are revised estimates.

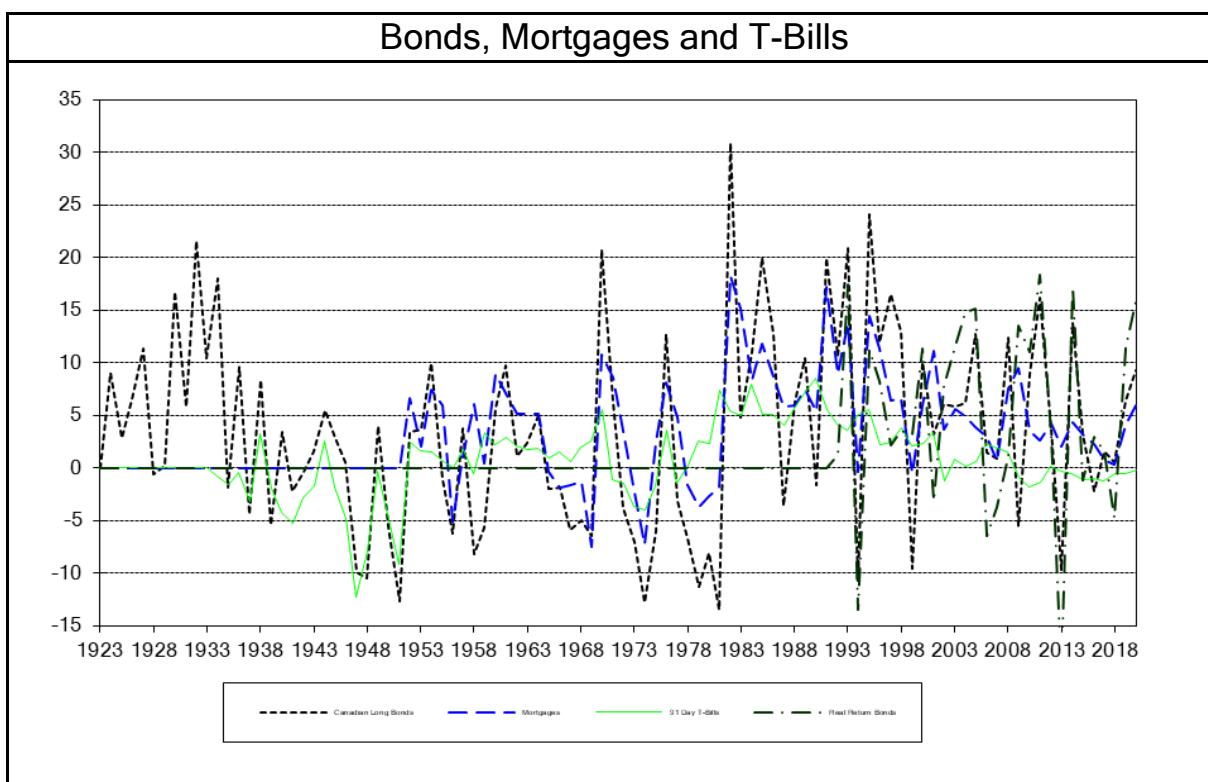
FIGURE 1B: REAL RATES



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TABLE 1C: ACCUMULATION FACTORS

DEC. 31	CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
1923	66,96	0,14	3,21	.	.	.	.	10,67	18,61
1924	66,23	0,16	3,46	.	.	.	.	10,86	18,63
1925	67,69	0,21	3,64	.	.	.	.	11,34	18,59
1926	66,96	0,26	3,84	.	.	.	.	11,77	18,85
1927	66,23	0,37	4,23	.	.	.	.	12,34	19,18
1928	66,96	0,49	4,25	.	.	.	.	12,70	19,46
1929	68,41	0,43	4,35	.	.	.	.	12,52	19,68
1930	64,05	0,30	4,75	.	.	.	.	11,21	19,42
1931	57,50	0,20	4,52	.	.	.	.	9,44	18,39
1932	53,13	0,18	5,07	.	.	.	.	8,40	17,27
1933	51,67	0,27	5,45	.	26,38	.	.	8,29	16,91
1934	52,40	0,32	6,52	.	26,55	.	.	8,79	17,23
1935	53,86	0,42	6,57	.	26,86	.	.	9,27	17,64
1936	54,59	0,52	7,30	.	27,10	.	.	9,80	18,46
1937	56,77	0,44	7,26	.	27,30	.	0,11	10,23	19,42
1938	55,31	0,48	7,67	.	27,47	.	0,15	10,59	19,74
1939	56,77	0,48	7,44	.	27,66	.	0,17	11,78	20,16
1940	59,68	0,39	8,09	.	27,86	.	0,15	14,04	21,50
1941	63,32	0,40	8,40	.	28,03	.	0,13	16,87	23,03
1942	65,50	0,45	8,66	.	28,18	.	0,16	19,01	24,76
1943	66,96	0,54	8,99	.	28,31	.	0,20	20,30	26,12
1944	65,50	0,61	9,28	.	28,42	.	0,24	21,14	26,64
1945	66,96	0,84	9,76	.	28,53	.	0,33	20,60	26,90
1946	70,60	0,82	10,34	.	28,64	.	0,27	20,99	28,59
1947	80,79	0,83	10,67	.	28,76	.	0,29	23,45	31,75
1948	88,06	0,93	10,42	.	28,87	.	0,30	26,61	34,60
1949	88,79	1,14	10,92	.	29,01	.	0,39	27,74	36,70
1950	93,89	1,69	10,91	.	29,17	.	0,49	31,44	39,61
1951	104,08	2,09	10,57	5,15	29,40	.	0,59	34,20	43,52
1952	102,62	2,08	10,78	5,41	29,70	.	0,67	38,59	46,66
1953	102,62	2,13	11,17	5,53	30,20	.	0,66	40,59	48,60
1954	102,62	2,96	12,29	5,94	30,66	.	1,00	40,73	50,07
1955	103,35	3,78	12,24	6,34	31,10	.	1,36	43,82	52,31
1956	106,26	4,28	11,80	6,19	32,01	.	1,39	47,62	55,18
1957	108,44	3,40	12,49	6,39	33,24	.	1,28	47,85	57,66
1958	111,35	4,46	11,78	6,95	33,96	.	1,79	50,50	59,95
1959	112,81	4,67	11,26	7,07	35,58	.	1,98	51,88	62,22
1960	114,26	4,75	12,06	7,80	36,83	.	2,08	52,66	64,24
1961	114,26	6,31	13,24	8,36	37,90	.	2,76	54,34	66,23
1962	116,45	5,86	13,64	8,95	39,43	.	2,60	58,10	67,24
1963	118,63	6,77	14,22	9,59	40,88	.	3,20	60,51	69,99
1964	120,82	8,50	15,22	10,27	42,43	.	3,70	63,24	73,33
1965	124,45	9,06	15,36	10,54	44,14	.	4,16	67,93	78,08
1966	128,82	8,42	15,60	10,71	46,41	.	3,78	72,54	82,35
1967	133,92	9,95	15,26	10,94	48,55	.	4,66	76,19	87,94
1968	139,74	12,18	15,14	11,27	51,69	.	5,14	81,95	94,35
1969	146,29	12,08	14,83	10,91	55,53	.	4,71	88,20	100,31
1970	147,74	11,65	18,09	12,21	59,18	.	4,61	92,62	109,23
1971	155,02	12,58	20,18	13,91	61,42	.	5,22	99,87	120,90
1972	163,03	16,03	20,41	15,15	63,63	.	6,17	109,05	130,25
1973	178,31	16,07	20,75	16,19	67,10	.	5,26	124,10	139,21
1974	200,87	11,91	20,40	16,92	72,62	.	3,85	140,54	157,80
1975	219,80	14,11	20,98	18,98	78,11	.	5,42	156,06	180,55
1976	232,17	15,66	24,97	21,68	85,48	.	6,65	172,12	200,77
1977	254,00	17,34	26,46	24,84	92,20	.	6,68	188,25	216,92
1978	275,84	22,49	26,80	26,54	100,43	.	7,71	201,54	230,83
1979	302,77	32,56	26,10	28,05	113,03	.	8,96	221,84	250,68
1980	336,24	42,38	26,63	30,32	128,53	.	12,14	243,51	279,38
1981	377,00	38,03	25,83	33,34	154,72	.	11,45	269,52	311,26
1982	411,94	40,14	36,93	43,06	178,32	.	14,42	293,78	340,94
1983	430,86	54,39	40,48	51,87	195,90	.	17,88	314,28	367,17
1984	446,87	53,08	46,59	58,28	219,30	.	20,15	334,40	378,55
1985	466,52	66,39	58,36	68,03	240,73	.	27,98	349,00	393,44
1986	486,17	72,34	68,59	77,11	263,53	.	32,85	355,35	404,18
1987	506,55	76,59	68,90	85,01	285,82	.	32,49	380,69	422,78
1988	526,20	85,07	76,09	93,62	313,74	.	34,78	403,04	440,48
1989	553,86	103,26	88,49	105,85	354,25	.	44,49	419,20	462,50
1990	581,51	87,98	91,45	117,10	403,76	.	43,16	433,14	484,16
1991	603,35	98,55	113,79	142,35	442,40	154,27	56,10	443,59	505,17
1992	616,45	97,14	128,67	158,37	471,12	159,60	66,40	459,70	521,93
1993	626,64	128,75	158,11	183,16	495,95	190,45	76,02	474,85	526,32
1994	628,09	128,52	141,57	182,88	522,40	165,23	81,69	492,18	535,98
1995	639,01	147,20	178,77	213,00	561,23	187,07	109,36	506,09	543,49

1996	652,84	188,92	204,32	242,39	586,39	206,88	135,11	524,09	557,90
1997	657,93	217,22	239,98	259,83	605,75	213,09	188,07	535,46	562,76
1998	664,48	213,78	273,89	279,91	634,89	222,79	259,19	539,92	572,31
1999	681,95	281,57	254,31	285,78	665,54	236,02	295,32	572,87	581,58
2000	703,78	302,44	289,00	312,53	703,04	273,19	278,88	610,54	594,18
2001	708,88	264,41	300,34	349,84	732,06	264,75	261,02	610,67	594,30
2002	735,81	231,53	330,65	376,41	750,73	296,11	201,40	635,76	616,78
2003	751,09	293,40	357,31	405,85	772,73	337,13	212,99	647,49	628,62
2004	767,10	335,88	387,54	434,86	790,11	395,25	218,95	686,25	647,53
2005	783,11	416,92	445,87	461,29	811,22	464,75	222,25	727,83	669,49
2006	796,22	488,89	460,24	482,95	844,07	442,16	257,89	735,16	695,15
2007	815,14	536,95	475,41	497,96	880,59	435,98	231,41	762,19	718,38
2008	824,60	359,74	540,31	541,96	904,72	446,10	179,14	768,06	731,79
2009	835,52	485,85	517,32	601,20	908,43	513,39	195,48	772,13	749,50
2010	855,17	571,38	576,52	637,46	913,32	583,04	212,86	800,49	779,37
2011	874,82	521,61	684,85	669,56	921,96	705,71	222,25	842,88	792,59
2012	882,10	559,11	716,03	703,95	930,99	733,74	252,21	842,27	812,94
2013	893,01	631,74	654,76	727,64	940,01	598,87	356,96	876,43	831,52
2014	906,11	698,42	756,05	770,33	948,65	712,08	442,64	907,53	845,52
2015	920,67	640,32	792,50	807,47	953,54	715,02	535,38	889,92	858,60
2016	934,50	775,31	786,34	838,32	958,40	746,90	581,52	913,13	870,71
2017	951,97	845,83	814,14	860,41	964,76	773,16	661,94	942,36	892,06
2018	970,89	770,66	835,22	880,44	978,34	751,67	688,26	953,46	907,58
2019	992,72	946,97	908,74	936,97	994,65	856,70	861,59	985,30	939,41
2020	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00

This table contains the values of Table 1A accumulated to \$1000.00 at the end of 2020.

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TABLE 1D: ACCUMULATION FACTORS NET OF CPI

DEC. 31	CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL-RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
1923	66,96	2,14	47,92	.	.	.	.	159,29	277,93
1924	66,23	2,41	52,25	.	.	.	.	164,03	281,29
1925	67,69	3,03	53,77	.	.	.	.	167,50	274,65
1926	66,96	3,81	57,28	.	.	.	.	175,77	281,55
1927	66,23	5,59	63,81	.	.	.	.	186,33	289,54
1928	66,96	7,34	63,46	.	.	.	.	189,62	290,61
1929	68,41	6,35	63,56	.	.	.	.	183,06	287,69
1930	64,05	4,69	74,18	.	.	.	.	175,06	303,16
1931	57,50	3,50	78,53	.	.	.	.	164,18	319,93
1932	53,13	3,30	95,50	.	.	.	.	158,10	325,04
1933	51,67	5,15	105,43	.	510,58	.	.	160,43	327,26
1934	52,40	6,10	124,40	.	506,74	.	.	167,78	328,86
1935	53,86	7,76	122,04	.	498,82	.	.	172,08	327,50
1936	54,59	9,59	133,80	.	496,56	.	.	179,57	338,12
1937	56,77	7,76	127,91	.	480,87	.	2,02	180,25	342,04
1938	55,31	8,70	138,67	.	496,59	.	2,79	191,46	356,93
1939	56,77	8,49	131,09	.	487,25	.	2,95	207,52	355,20
1940	59,68	6,53	135,54	.	466,86	.	2,52	235,34	360,26
1941	63,32	6,27	132,60	.	442,61	.	2,10	266,44	363,75
1942	65,50	6,91	132,14	.	430,18	.	2,46	290,16	377,95
1943	66,96	8,09	134,28	.	422,88	.	3,02	303,22	390,04
1944	65,50	9,39	141,60	.	433,95	.	3,69	322,70	406,72
1945	66,96	12,49	145,69	.	426,07	.	4,91	307,62	401,79
1946	70,60	11,67	146,49	.	405,67	.	3,89	297,37	405,01
1947	80,79	10,23	132,07	.	355,95	.	3,58	290,30	393,06
1948	88,06	10,53	118,27	.	327,88	.	3,45	302,20	392,86
1949	88,79	12,80	122,99	.	326,76	.	4,44	312,45	413,33
1950	93,89	17,97	116,18	.	310,69	.	5,24	334,85	421,89
1951	104,08	20,11	101,53	49,45	282,44	.	5,66	328,60	418,12
1952	102,62	20,30	105,02	52,75	289,45	.	6,51	376,04	454,68
1953	102,62	20,74	108,84	53,85	294,24	.	6,47	395,53	473,63
1954	102,62	28,84	119,72	57,87	298,74	.	9,76	396,88	487,90
1955	103,35	36,60	118,47	61,34	300,96	.	13,17	424,04	506,14
1956	106,26	40,30	111,05	58,21	301,22	.	13,12	448,11	519,27
1957	108,44	31,36	115,22	58,88	306,53	.	11,76	441,25	531,75
1958	111,35	40,09	105,82	62,42	304,96	.	16,07	453,49	538,41
1959	112,81	41,38	99,83	62,70	315,41	.	17,53	459,89	551,52
1960	114,26	41,58	105,55	68,29	322,36	.	18,20	460,82	562,16
1961	114,26	55,20	115,87	73,15	331,68	.	24,16	475,54	579,63
1962	116,45	50,32	117,17	76,89	338,64	.	22,34	498,91	577,45
1963	118,63	57,10	119,91	80,85	344,59	.	26,98	510,09	589,97
1964	120,82	70,33	125,95	85,04	351,21	.	30,63	523,46	606,93
1965	124,45	72,84	123,44	84,69	354,67	.	33,45	545,85	627,38

1966	128,82	65,40	121,10	83,11	360,26	.	29,31	563,07	639,28
1967	133,92	74,29	113,93	81,72	362,56	.	34,83	568,95	656,67
1968	139,74	87,17	108,31	80,64	369,92	.	36,78	586,43	675,18
1969	146,29	82,59	101,39	74,61	379,62	.	32,17	602,91	685,71
1970	147,74	78,86	122,45	82,64	400,56	.	31,21	626,88	739,35
1971	155,02	81,18	130,18	89,70	396,23	.	33,69	644,21	779,86
1972	163,03	98,33	125,16	92,91	390,29	.	37,82	668,91	798,93
1973	178,31	90,15	116,39	90,78	376,30	.	29,50	695,95	780,69
1974	200,87	59,28	101,57	84,21	361,52	.	19,18	699,66	785,56
1975	219,80	64,19	95,44	86,35	355,36	.	24,66	710,03	821,46
1976	232,17	67,46	107,55	93,36	368,17	.	28,65	741,37	864,75
1977	254,00	68,26	104,17	97,81	362,98	.	26,30	741,14	853,99
1978	275,84	81,54	97,16	96,23	364,11	.	27,94	730,66	836,82
1979	302,77	107,55	86,20	92,63	373,31	.	29,61	732,72	827,97
1980	336,24	126,03	79,21	90,17	382,24	.	36,10	724,20	830,89
1981	377,00	100,88	68,52	88,44	410,41	.	30,38	714,91	825,61
1982	411,94	97,44	89,66	104,54	432,88	.	35,01	713,16	827,66
1983	430,86	126,23	93,95	120,39	454,67	.	41,50	729,42	852,18
1984	446,87	118,79	104,25	130,42	490,76	.	45,10	748,33	847,12
1985	466,52	142,31	125,09	145,82	516,00	.	59,97	748,08	843,35
1986	486,17	148,79	141,08	158,60	542,06	.	67,56	730,91	831,35
1987	506,55	151,19	136,01	167,83	564,25	.	64,15	751,54	834,62
1988	526,20	161,68	144,61	177,91	596,23	.	66,09	765,94	837,10
1989	553,86	186,43	159,78	191,11	639,60	.	80,33	756,88	835,06
1990	581,51	151,29	157,27	201,37	694,33	.	74,23	744,85	832,58
1991	603,35	163,34	188,60	235,93	733,24	255,68	92,98	735,22	837,28
1992	616,45	157,57	208,72	256,91	764,25	258,91	107,72	745,73	846,68
1993	626,64	205,46	252,31	292,30	791,45	303,93	121,31	757,77	839,92
1994	628,09	204,62	225,39	291,17	831,72	263,07	130,06	783,61	853,34
1995	639,01	230,35	279,76	333,34	878,28	292,74	171,13	791,99	850,52
1996	652,84	289,39	312,97	371,29	898,21	316,90	206,96	802,78	854,58
1997	657,93	330,15	364,75	394,92	920,68	323,88	285,85	813,86	855,35
1998	664,48	321,72	412,19	421,24	955,47	335,28	390,07	812,54	861,29
1999	681,95	412,90	372,92	419,07	975,93	346,10	433,05	840,04	852,82
2000	703,78	429,73	410,63	444,07	998,94	385,34	396,26	867,50	844,27
2001	708,88	373,00	423,68	493,51	1032,70	373,47	368,22	861,45	838,37
2002	735,81	314,65	449,37	511,56	1020,28	402,43	273,71	864,03	838,24
2003	751,09	390,63	475,72	540,34	1028,81	448,85	283,57	862,07	836,95
2004	767,10	437,86	505,20	566,88	1029,99	515,25	285,42	894,59	844,13
2005	783,11	532,39	569,35	589,04	1035,89	593,47	283,81	929,41	854,91
2006	796,22	614,01	578,03	606,56	1060,10	555,33	323,89	923,32	873,07
2007	815,14	658,73	583,23	610,89	1080,30	534,85	283,89	935,04	881,30
2008	824,60	436,26	655,23	657,24	1097,16	540,99	217,24	931,43	887,44
2009	835,52	581,49	619,16	719,56	1087,27	614,46	233,97	924,14	897,05
2010	855,17	668,15	674,17	745,42	1068,00	681,78	248,91	936,07	911,36
2011	874,82	596,25	782,85	765,37	1053,89	806,69	254,05	963,49	906,00
2012	882,10	633,84	811,74	798,04	1055,43	831,81	285,93	954,85	921,61
2013	893,01	707,43	733,20	814,82	1052,63	670,62	399,72	981,43	931,14
2014	906,11	770,78	834,39	850,15	1046,95	785,86	488,50	1001,56	933,13
2015	920,67	695,49	860,79	877,05	1035,71	776,63	581,51	966,60	932,58
2016	934,50	829,65	841,45	897,08	1025,58	799,25	622,28	977,13	931,74
2017	951,97	888,50	855,22	903,83	1013,44	812,17	695,34	989,91	937,07
2018	970,89	793,77	860,27	906,84	1007,67	774,21	708,90	982,05	934,79
2019	992,72	953,91	915,40	943,84	1001,94	862,98	867,90	992,53	946,30
2020	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00	1000,00

This table contains the values of Table 1A net of CPI accumulated to \$1000.00 at the end of 2020.

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**TABLES 2A, 2B**  
**BASIC VARIABLES - CHANGES FOR SELECTED INTERVALS**  
**YEAR-END TO YEAR-END**

TABLE 2A  
 AVERAGE NOMINAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN

		CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
5 YRS	1926 - 1930	-1,10	7,92	5,48	.	.	.	.	-0,22	0,87
	1931 - 1935	-3,41	6,82	6,71	.	.	.	.	-3,74	-1,90
	1936 - 1940	2,07	-1,38	4,24	.	0,73	.	.	8,67	4,04
	1941 - 1945	2,33	16,50	3,82	.	0,47	.	16,92	7,96	4,59
	1946 - 1950	6,99	15,06	2,26	.	0,45	.	8,37	8,82	8,04
	1951 - 1955	1,94	17,53	2,34	.	1,29	.	22,58	6,87	5,72
	1956 - 1960	2,03	4,67	-0,30	4,24	3,44	.	8,84	3,74	4,19
	1961 - 1965	1,72	13,79	4,96	6,20	3,69	.	14,89	5,23	3,98
	1966 - 1970	3,49	5,15	3,32	2,98	6,04	.	2,07	6,40	6,95
	1971 - 1975	8,27	3,90	3,01	9,22	5,71	.	3,29	11,00	10,57
	1976 - 1980	8,87	24,60	4,89	9,82	10,47	.	17,49	9,31	9,12
	1981 - 1985	6,77	9,40	16,98	17,54	13,37	.	18,18	7,46	7,09
	1986 - 1990	4,51	5,79	9,40	11,47	10,90	.	9,06	4,41	4,24
	1991 - 1995	1,90	10,84	14,35	12,71	6,81	.	20,43	3,16	2,34
	1996 - 2000	1,95	15,49	10,08	7,97	4,61	7,71	20,59	3,82	1,80
	2001 - 2005	2,16	6,63	9,06	8,10	2,90	11,38	-4,44	3,58	2,42
	2006 - 2010	1,78	6,51	5,27	6,68	2,40	4,64	-0,86	1,92	3,09
	2011 - 2015	1,49	2,30	6,57	4,84	0,87	4,17	20,26	2,14	1,96
	2016 - 2020	1,67	9,33	4,76	4,37	0,96	6,94	13,31	2,36	3,10
MEAN	1956 - 2020	3,55	8,96	7,01	8,10	5,48	.	10,69	4,93	4,64
S.DEV.	1956 - 2020	2,67	6,05	4,77	4,05	3,92	.	8,70	2,83	2,85
10 YRS	1931 - 1940	-0,70	2,64	5,47	.	.	.	.	2,28	1,02
	1941 - 1950	4,64	15,78	3,03	.	0,46	.	12,57	8,39	6,30
	1951 - 1960	1,98	10,91	1,01	.	2,36	.	15,51	5,29	4,95
	1961 - 1970	2,60	9,38	4,14	4,58	4,86	.	8,29	5,81	5,45
	1971 - 1980	8,57	13,78	3,94	9,52	8,06	.	10,16	10,15	9,85
	1981 - 1990	5,63	7,58	13,13	14,47	12,13	.	13,53	5,93	5,65
	1991 - 2000	1,93	13,14	12,19	10,31	5,70	.	20,51	3,49	2,07
	2001 - 2010	1,97	6,57	7,15	7,39	2,65	7,95	-2,67	2,75	2,75
	2011 - 2020	1,58	5,76	5,66	4,61	0,91	5,54	16,73	2,25	2,52
MEAN	1961 - 2020	3,68	9,32	7,64	8,42	5,66	.	10,84	5,03	4,68
S.DEV.	1961 - 2020	2,80	3,40	4,02	3,79	4,00	.	8,06	2,93	2,95
15 YRS	1931 - 1945	0,30	7,06	4,91	.	.	.	.	4,14	2,20
	1946 - 1960	3,63	12,28	1,42	.	1,72	.	13,08	6,46	5,97
	1961 - 1975	4,46	7,52	3,76	6,11	5,14	.	6,60	7,51	7,13
	1976 - 1990	6,70	12,98	10,31	12,90	11,57	.	14,83	7,04	6,80
	1991 - 2005	2,00	10,93	11,14	9,57	4,76	.	11,54	3,52	2,18
	2006 - 2020	1,64	6,01	5,53	5,29	1,40	5,24	10,55	2,14	2,71
25 YRS	1946 - 1970	3,22	11,11	2,50	.	2,96	.	11,14	6,20	5,77
	1971 - 1995	6,03	10,68	9,60	12,12	9,42	.	13,50	7,03	6,63
	1996 - 2020	1,81	7,97	7,13	6,38	2,34	6,94	9,26	2,76	2,47
50 YRS	1971 - 2020	3,90	9,31	8,36	9,21	5,82	.	11,36	4,87	4,53
75 YRS	1946 - 2020	3,67	9,91	6,37	.	4,86	.	11,28	5,31	4,94
ALL YRS	- 2020	2,80	9,55	6,10	7,94	4,27	6,66	11,55	4,79	4,19

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Table 2A contains geometric averages of annual values from Table 1A over various periods. The mean and standard deviation for the 5- and 10-year averages are calculated over the period for which all series exist. This is done to allow comparability over all series. On the following page are corresponding standard deviations of the same values as well as correlation coefficients. The correlations are calculated only over the last 10-year period and over all years for which data of both correlated series exist.

TABLE 2A (Cont'd)

STANDARD DEVIATIONS OF NOMINAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN										
		CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
5 YRS		3,30	31,91	4,20	.	.	.	.	6,28	1,26
1926 - 1930		5,61	34,01	9,62	.	.	.	.	9,79	3,93

1936 - 1940	2,97	18,32	6,01	.	0,10	.	.	6,54	2,10
1941 - 1945	2,99	12,44	0,84	.	0,10	.	17,88	8,61	2,97
1946 - 1950	5,03	20,38	3,49	.	0,06	.	18,38	5,45	2,05
1951 - 1955	4,99	17,06	4,93	.	0,37	.	20,03	4,62	2,77
1956 - 1960	0,73	18,81	6,13	5,24	0,99	.	18,34	3,31	0,85
1961 - 1965	1,08	15,66	3,44	2,03	0,47	.	14,29	1,83	1,85
1966 - 1970	1,47	13,46	10,32	5,46	1,14	.	13,97	1,30	1,28
1971 - 1975	3,26	20,42	5,01	3,83	2,12	.	26,94	2,56	3,33
1976 - 1980	2,03	14,48	8,34	4,23	2,50	.	12,68	1,31	2,15
1981 - 1985	3,69	19,09	17,30	7,55	4,47	.	16,68	2,43	3,57
1986 - 1990	0,59	13,25	7,61	1,58	2,39	.	13,00	2,10	0,89
1991 - 1995	1,26	13,75	15,25	8,19	1,78	.	10,94	0,54	1,44
1996 - 2000	1,04	13,99	9,97	4,21	0,85	4,88	18,53	2,48	0,66
2001 - 2005	1,09	19,32	4,02	2,24	0,73	8,19	11,54	2,64	1,51
2006 - 2010	0,57	25,42	7,19	3,16	1,87	8,95	16,08	1,60	0,92
2011 - 2015	0,54	10,48	10,76	0,92	0,20	15,96	13,80	3,05	0,45
2016 - 2020	0,59	12,90	4,50	2,08	0,54	8,02	8,03	0,99	2,03
10 YRS	1931 - 1940	5,10	26,44	7,69	.	.	.	10,13	4,30
	1941 - 1950	4,63	15,92	2,53	.	0,08	.	17,67	6,80
	1951 - 1960	3,36	18,17	5,42	.	1,33	.	19,53	4,14
	1961 - 1970	1,53	14,54	7,29	4,21	1,49	.	14,94	1,62
	1971 - 1980	2,58	19,64	6,57	3,81	3,33	.	20,82	2,12
	1981 - 1990	2,77	15,65	13,35	6,11	3,63	.	14,96	2,68
	1991 - 2000	1,09	13,31	12,40	6,67	1,75	.	14,35	1,73
	2001 - 2010	0,84	21,30	5,82	2,68	1,36	8,82	13,37	2,24
	2011 - 2020	0,54	11,71	7,86	1,53	0,39	11,96	11,33	2,14
15 YRS	1931 - 1945	4,62	22,90	6,25	.	.	.	9,71	4,16
	1946 - 1960	4,54	18,30	4,76	.	1,42	.	18,82	4,75
	1961 - 1975	3,50	16,13	6,46	4,55	1,70	.	18,79	3,16
	1976 - 1990	2,93	16,84	12,34	5,86	3,31	.	13,89	3,09
	1991 - 2005	1,06	15,12	10,33	5,60	2,00	.	17,92	1,98
	2006 - 2020	0,54	16,58	7,39	2,33	1,28	10,73	15,00	1,92
25 YRS	1946 - 1970	3,63	16,66	5,93	.	2,12	.	17,24	3,78
	1971 - 1995	3,46	16,67	12,16	6,00	3,86	.	16,65	3,48
	1996 - 2020	0,77	16,37	7,44	2,97	1,68	9,37	16,75	2,23
50 YRS	1971 - 2020	3,29	16,40	10,08	5,54	4,66	.	16,67	3,62
75 YRS	1946 - 2020	3,40	16,40	9,34	.	4,21	.	16,74	3,70
ALL YRS	- 2020	3,86	18,16	8,61	5,54	4,18	9,86	16,81	5,25
									3,56

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#### CORRELATIONS OF NOMINAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN

	CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
CPI		-0,17	0,29	-0,24	0,49	0,19	-0,27	0,41	-0,46
STOCKS	0,09	-0,30	0,21	0,11	-0,02	0,44	0,33	0,19	
LONG BONDS	-0,06	-0,01	0,61	0,08	0,94	-0,40	0,21	0,14	
MORTGAGES	0,27	0,14	0,72	0,03	0,69	0,18	-0,03	0,56	
91-DAY T-BILLS	0,49	-0,06	0,25	0,49	0,00	0,09	0,26	-0,06	
REAL RETURNS	0,40	0,31	0,65	0,45	-0,09	-0,43	0,23	0,29	
U.S. STOCKS	-0,20	0,65	0,17	0,29	-0,01	-0,13	0,11	0,12	
GDP PER EMP	0,72	0,17	-0,11	0,05	0,13	0,32	-0,23	-0,05	
WAGE & SALARY	0,83	0,06	-0,08	0,18	0,36	0,19	-0,08	0,75	
ALL YEARS	/								

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#### TABLE 2B AVERAGE REAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN

PERIOD	CONSUMER PRICE INDEX	REAL VALUES (NET OF CPI INCREASES)						WAGE AND SALARY INDEX	
		CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$		
5 YRS 1926 - 1930	-1,10	9,12	6,65	.	.	.	.	0,89	2,00

1931 - 1935	-3,41	10,58	10,47	.	.	.	.	-0,34	1,56	
1936 - 1940	2,07	-3,38	2,12	.	-1,32	.	.	6,46	1,93	
1941 - 1945	2,33	13,85	1,45	.	-1,81	.	14,26	5,50	2,21	
1946 - 1950	6,99	7,54	-4,43	.	-6,12	.	1,29	1,71	0,98	
1951 - 1955	1,94	15,29	0,39	.	-0,63	.	20,25	4,84	3,71	
1956 - 1960	2,03	2,59	-2,28	2,17	1,38	.	6,68	1,68	2,12	
1961 - 1965	1,72	11,86	3,18	4,40	1,93	.	12,95	3,44	2,22	
1966 - 1970	3,49	1,60	-0,16	-0,49	2,46	.	-1,37	2,81	3,34	
1971 - 1975	8,27	-4,04	-4,86	0,88	-2,37	.	-4,60	2,52	2,13	
1976 - 1980	8,87	14,45	-3,66	0,87	1,47	.	7,92	0,40	0,23	
1981 - 1985	6,77	2,46	9,57	10,09	6,18	.	10,69	0,65	0,30	
1986 - 1990	4,51	1,23	4,68	6,67	6,12	.	4,36	-0,09	-0,26	
1991 - 1995	1,90	8,77	12,21	10,61	4,81	.	18,18	1,23	0,43	
1996 - 2000	1,95	13,28	7,98	5,90	2,61	5,65	18,28	1,84	-0,15	
2001 - 2005	2,16	4,38	6,75	5,81	0,73	9,02	-6,46	1,39	0,25	
2006 - 2010	1,78	4,65	3,44	4,82	0,61	2,81	-2,59	0,14	1,29	
2011 - 2015	1,49	0,81	5,01	3,31	-0,61	2,64	18,50	0,64	0,46	
2016 - 2020	1,67	7,53	3,04	2,66	-0,70	5,19	11,45	0,68	1,41	
MEAN	1956 - 2020	3,55	5,22	3,34	4,39	1,86	.	6,89	1,33	1,05
S.DEV.	1956 - 2020	2,67	5,49	5,13	3,40	2,59	.	8,84	1,08	1,11
10 YRS	1931 - 1940	-0,70	3,36	6,21	.	.	.	3,00	1,74	
	1941 - 1950	4,64	10,65	-1,53	.	-3,99	.	7,58	3,59	1,59
	1951 - 1960	1,98	8,75	-0,95	.	0,37	.	13,26	3,24	2,91
	1961 - 1970	2,60	6,61	1,50	1,93	2,20	.	5,54	3,13	2,78
	1971 - 1980	8,57	4,80	-4,26	0,88	-0,47	.	1,46	1,45	1,17
	1981 - 1990	5,63	1,84	7,10	8,37	6,15	.	7,47	0,28	0,02
	1991 - 2000	1,93	11,00	10,07	8,23	3,70	.	18,23	1,54	0,14
	2001 - 2010	1,97	4,51	5,08	5,32	0,67	5,87	-4,54	0,76	0,77
	2011 - 2020	1,58	4,11	4,02	2,98	-0,66	3,90	14,92	0,66	0,93
MEAN	1961 - 2020	3,68	5,44	3,82	4,58	1,90	.	6,91	1,30	0,96
S.DEV.	1961 - 2020	2,80	3,11	4,94	3,21	2,65	.	8,43	1,01	0,99
15 YRS	1931 - 1945	0,30	6,75	4,60	.	.	.	3,83	1,90	
	1946 - 1960	3,63	8,35	-2,13	.	-1,84	.	9,12	2,73	2,26
	1961 - 1975	4,46	2,94	-0,67	1,58	0,65	.	2,05	2,92	2,56
	1976 - 1990	6,70	5,88	3,39	5,81	4,57	.	7,62	0,32	0,09
	1991 - 2005	2,00	8,75	8,96	7,42	2,70	.	9,35	1,49	0,18
	2006 - 2020	1,64	4,29	3,83	3,59	-0,23	3,54	8,76	0,49	1,05
25 YRS	1946 - 1970	3,22	7,65	-0,69	.	-0,25	.	7,67	2,89	2,47
	1971 - 1995	6,03	4,38	3,36	5,74	3,19	.	7,04	0,94	0,56
	1996 - 2020	1,81	6,05	5,23	4,49	0,52	5,04	7,32	0,94	0,65
50 YRS	1971 - 2020	3,90	5,21	4,29	5,11	1,85	.	7,18	0,94	0,61
75 YRS	1946 - 2020	3,67	6,02	2,60	.	1,14	.	7,34	1,58	1,22
ALL YRS	- 2020	2,80	6,54	3,18	4,45	0,78	4,82	7,76	1,91	1,33

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Table 2B contains values similar to those of Table 2A except that they are based on the real rates of return of Table 1B.

TABLE 2B (Cont'd)

STANDARD DEVIATIONS OF REAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN									
PERIOD	CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL-RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
5 YRS	1926 - 1930	3,30	31,08	7,37	.	.	.	4,74	2,45
	1931 - 1935	5,61	31,17	9,41	.	.	.	4,52	2,32
	1936 - 1940	2,97	19,95	7,03	.	2,90	.	4,83	1,89
	1941 - 1945	2,99	13,35	2,93	.	2,83	.	6,64	2,31
	1946 - 1950	5,03	21,67	6,37	.	4,40	.	4,48	2,98
	1951 - 1955	4,99	16,46	8,41	.	4,82	.	6,35	3,44
	1956 - 1960	0,73	18,05	6,37	5,41	1,60	.	2,73	0,55
	1961 - 1965	1,08	16,27	4,43	2,84	0,68	.	14,87	1,12
	1966 - 1970	1,47	12,39	11,56	6,70	1,85	.	13,25	1,08
	1971 - 1975	3,26	20,89	6,96	6,01	1,30	.	26,10	1,51
	1976 - 1980	2,03	12,23	9,41	5,19	2,01	.	11,50	2,35
	1981 - 1985	3,69	20,17	16,68	7,77	1,36	.	17,88	1,69
	1986 - 1990	0,59	12,68	7,24	1,39	1,78	.	12,21	0,72
	1991 - 1995	1,26	13,38	14,14	6,92	0,90	.	9,82	1,68
	1996 - 2000	1,04	13,35	10,29	4,24	0,67	3,92	19,31	1,49
	2001 - 2005	1,09	19,01	3,53	3,06	1,67	7,51	11,77	2,24
	2006 - 2010	0,57	24,92	7,05	3,58	1,84	8,83	15,75	1,04
	2011 - 2015	0,54	10,70	10,26	0,98	0,60	15,43	13,89	2,80

	2016 - 2020	0,59	12,60	4,63	2,35	0,39	8,19	7,82	0,85	2,44
10 YRS	1931 - 1940	5,10	26,05	9,02	.	.	.	.	5,69	2,01
	1941 - 1950	4,63	17,19	5,57	.	4,15	.	19,66	5,72	2,60
	1951 - 1960	3,36	17,53	7,19	.	3,54	.	19,70	4,92	2,47
	1961 - 1970	1,53	14,74	8,40	5,46	1,34	.	15,31	1,09	2,07
	1971 - 1980	2,58	18,46	7,83	5,29	2,58	.	19,74	2,17	3,02
	1981 - 1990	2,77	15,92	12,49	5,60	1,49	.	14,90	1,93	1,16
	1991 - 2000	1,09	12,83	11,91	5,98	1,38	.	14,46	1,53	0,90
	2001 - 2010	0,84	20,92	5,52	3,18	1,66	8,38	13,30	1,78	0,85
	2011 - 2020	0,54	11,60	7,60	1,73	0,48	11,69	11,33	1,95	1,81
15 YRS	1931 - 1945	4,62	22,44	7,80	.	.	.	.	5,91	2,04
	1946 - 1960	4,54	18,22	6,91	.	4,85	.	19,95	4,68	2,71
	1961 - 1975	3,50	16,91	8,31	5,45	2,57	.	19,00	1,23	2,37
	1976 - 1990	2,93	15,49	12,44	6,43	2,79	.	13,44	1,99	1,83
	1991 - 2005	1,06	14,74	9,91	5,21	2,03	.	17,92	1,72	0,84
	2006 - 2020	0,54	16,30	7,17	2,53	1,23	10,52	14,88	1,68	1,49
25 YRS	1946 - 1970	3,63	16,62	7,60	.	4,27	.	18,01	3,64	2,44
	1971 - 1995	3,46	16,09	12,81	6,93	3,63	.	16,65	1,99	2,10
	1996 - 2020	0,77	16,01	7,29	3,10	1,64	8,98	16,85	1,79	1,34
50 YRS	1971 - 2020	3,29	15,91	10,34	5,36	3,11	.	16,58	1,87	1,74
75 YRS	1946 - 2020	3,40	16,08	9,78	.	3,64	.	16,95	2,74	2,18
ALL YRS	- 2020	3,86	17,84	9,28	5,32	3,61	9,42	17,23	3,55	2,18

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#### CORRELATIONS OF REAL ANNUAL PERCENTAGE RATES OF CHANGE/RETURN

	CONSUMER PRICE INDEX	CANADA COMMON STOCKS	CANADA LONG BONDS	CONVENTIONAL MORTGAGE INDEX	91-DAY T-BILLS	REAL- RETURN BONDS	U.S. COMMON STOCKS IN CANADIAN \$	GDP PER EMPLOYED	WAGE AND SALARY INDEX
LAST 10 YEARS /									
CPI		-0,21	0,22	-0,53	-0,72	0,14	-0,32	0,16	-0,68
STOCKS	-0,12		-0,30	0,26	0,30	-0,02	0,45	0,39	0,23
LONG BONDS	-0,46	0,05		0,49	-0,20	0,94	-0,40	0,14	0,08
MORTGAGES	-0,29	0,19	0,78		0,49	0,57	0,26	-0,02	0,68
91-DAY T-BILLS	-0,33	0,03	0,43	0,43		-0,17	0,40	-0,07	0,60
REAL RETURNS	0,33	0,30	0,63	0,39	-0,22		-0,42	0,19	0,22
U.S. STOCKS	-0,39	0,68	0,29	0,39	0,22	-0,12		0,19	0,21
GDP PER EMP	-0,01	0,17	-0,09	-0,09	-0,13	0,18	-0,03		0,01
WAGE & SALARY	-0,44	0,02	0,15	0,06	0,11	-0,02	0,26	0,35	
ALL YEARS /									

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**TABLES 3A, 3B, 3C**  
**FIXED-INTEREST SECURITIES**

TABLE 3A  
ANALYSIS OF INTEREST RATES BY CLASS OF SECURITY  
MEDIUM- AND LONG-TERM SECURITIES  
NOMINAL YIELDS TO MATURITY COMPOUNDED SEMI-ANNUALLY

YEAR	FEDERAL BONDS V122487	CONVENTIONAL MORTGAGES V733833	5-YEAR GICS V80691341	SAVINGS ACCOUNTS V80691338	REAL-RETURN BONDS V122553	CORPORATE BONDS C28720Y
1948	2,93	.	.	.	.	.
1949	2,87	.	.	.	.	.
1950	2,86	.	.	.	.	.
1951	3,23	5,46	.	.	.	.
1952	3,56	5,77	.	.	.	.
1953	3,71	5,97	.	.	.	.
1954	3,18	6,01	.	.	.	.
1955	3,14	5,88	.	.	.	.
1956	3,63	6,23	.	.	.	.
1957	4,11	6,85	.	.	.	.
1958	4,15	6,80	.	.	.	.
1959	5,08	6,98	.	.	.	.
1960	5,19	7,18	.	.	.	.
1961	5,05	7,00	.	.	.	.
1962	5,11	6,97	.	.	.	.
1963	5,09	6,97	.	.	.	.
1964	5,18	6,97	5,26	.	.	.
1965	5,21	7,02	5,52	.	.	.
1966	5,69	7,66	6,06	.	.	.
1967	5,94	8,07	6,34	4,50	.	.
1968	6,75	9,06	7,01	4,92	.	.
1969	7,58	9,84	8,03	5,96	.	.
1970	7,91	10,45	8,52	6,17	.	.
1971	6,95	9,43	7,75	4,54	.	.
1972	7,23	9,21	7,61	4,00	.	.
1973	7,56	9,59	8,19	5,48	.	.
1974	8,90	11,24	9,68	8,50	.	.
1975	9,04	11,43	9,57	7,00	.	.
1976	9,18	11,78	10,11	7,83	.	.
1977	8,70	10,36	8,96	6,00	.	.
1978	9,27	10,59	9,25	7,04	.	.
1979	10,21	11,98	10,40	10,13	.	.
1980	12,48	14,32	12,32	11,15	.	.
1981	15,22	18,15	15,40	15,42	.	.
1982	14,26	17,89	13,65	11,50	.	.
1983	11,79	13,29	11,25	6,85	.	.
1984	12,75	13,61	11,90	7,69	.	.
1985	11,04	12,18	10,50	6,08	.	.
1986	9,52	11,22	9,56	6,02	.	.
1987	9,95	11,14	9,42	4,81	.	.
1988	10,22	11,60	10,00	5,69	.	.
1989	9,92	12,05	10,17	8,08	.	.
1990	10,85	13,24	10,98	8,77	.	.
1991	9,76	11,16	8,94	4,48	4,41	.
1992	8,77	9,52	7,33	2,27	4,62	.
1993	7,85	8,70	6,20	0,77	4,28	8,86
1994	8,63	9,34	7,34	0,50	4,41	9,42
1995	8,28	9,22	7,06	0,50	4,68	9,07
1996	7,50	7,94	5,64	0,50	4,60	8,30
1997	6,42	7,07	4,71	0,50	4,13	7,15
1998	5,47	6,90	4,38	0,24	4,02	6,33
1999	5,69	7,39	4,81	0,10	4,07	6,74
2000	5,89	8,20	5,34	0,10	3,69	7,00
2001	5,78	7,18	4,05	0,10	3,58	7,04
2002	5,66	6,70	3,91	0,05	3,50	6,87
2003	5,28	6,04	3,13	0,05	3,05	6,44
2004	5,08	5,80	2,92	0,05	2,34	5,99
2005	4,39	5,48	2,71	0,05	1,83	5,55
2006	4,30	5,98	3,16	0,05	1,69	5,62
2007	4,34	6,36	3,31	0,08	1,98	5,53
2008	4,04	6,41	3,01	0,10	1,90	5,96
2009	3,89	5,05	1,95	0,05	1,91	6,22
2010	3,66	4,82	1,97	0,05	1,40	5,30
2011	3,21	4,57	1,87	0,05	0,95	4,91
2012	2,33	4,24	1,65	0,05	0,42	4,16
2013	2,72	4,17	1,63	0,05	0,87	4,44
2014	2,60	4,08	1,92	0,05	0,77	4,13
2015	2,02	3,77	1,47	0,03	0,52	3,81
2016	1,80	3,70	1,42	0,05	0,41	3,67
2017	2,18	3,79	1,39	0,05	0,65	3,69
2018	2,33	4,36	1,69	0,05	0,64	3,73
2019	1,73	4,25	2,08	0,05	0,41	3,20
2020	1,08	3,71	1,28	0,02	-0,01	2,74

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Source: Bloomberg L.P.

The above values are arithmetic averages of the 12 monthly yields to maturity of medium- and long-term securities. Selected monthly values are shown in Appendix A.

TABLE 3A (Cont'd)

ARITHMETIC AVERAGES OVER SELECTED INTERVALS						
	FEDERAL BONDS V122487	CONVENTIONAL MORTGAGES V733833	5-YEAR GICS V80691341	SAVINGS ACCOUNTS V80691338	REAL-RETURN BONDS V122553	CORPORATE BONDS C28720Y
5 YRS	1951 - 1955	3,36	5,82	.	.	.
	1956 - 1960	4,43	6,81	.	.	.
	1961 - 1965	5,13	6,99	.	.	.
	1966 - 1970	6,77	9,01	7,19	.	.
	1971 - 1975	7,94	10,18	8,56	5,90	.
	1976 - 1980	9,97	11,80	10,21	8,43	.
	1981 - 1985	13,01	15,02	12,54	9,51	.
	1986 - 1990	10,09	11,85	10,03	6,68	.
	1991 - 1995	8,66	9,59	7,37	1,70	4,48
	1996 - 2000	6,19	7,50	4,98	0,29	4,10
	2001 - 2005	5,24	6,24	3,34	0,06	2,86
	2006 - 2010	4,04	5,72	2,68	0,07	1,78
	2011 - 2015	2,58	4,16	1,71	0,05	0,71
	2016 - 2020	1,82	3,96	1,57	0,04	0,42
MEAN	1971 - 2020	6,95	8,60	6,30	3,27	.
S.DEV.	1971 - 2020	3,61	3,68	3,96	3,90	.
10 YRS	1951 - 1960	3,90	6,31	.	.	.
	1961 - 1970	5,95	8,00	.	.	.
	1971 - 1980	8,95	10,99	9,38	7,17	.
	1981 - 1990	11,55	13,44	11,28	8,09	.
	1991 - 2000	7,43	8,54	6,17	1,00	4,29
	2001 - 2010	4,64	5,98	3,01	0,06	2,32
	2011 - 2020	2,20	4,06	1,64	0,05	0,56
MEAN	1971 - 2020	6,95	8,60	6,30	3,27	.
S.DEV.	1971 - 2020	3,65	3,76	4,09	4,01	.
15 YRS	1961 - 1975	6,61	8,73	.	.	.
	1976 - 1990	11,02	12,89	10,92	8,20	.
	1991 - 2005	6,70	7,78	5,23	0,68	3,81
	2006 - 2020	2,81	4,62	1,98	0,05	0,97
25 YRS	1971 - 1995	9,93	11,69	9,74	6,44	.
	1996 - 2020	3,98	5,52	2,85	0,10	1,97
50 YRS	1971 - 2020	6,95	8,60	6,30	3,27	.
ALL YRS	- 2020	6,23	8,19	6,34	3,43	2,39
						5,78

STANDARD DEVIATIONS OVER SELECTED INTERVALS						
	FEDERAL BONDS V122487	CONVENTIONAL MORTGAGES V733833	5-YEAR GICS V80691341	SAVINGS ACCOUNTS V80691338	REAL-RETURN BONDS V122553	CORPORATE BONDS C28720Y
5 YRS	1951 - 1955	0,26	0,22	.	.	.
	1956 - 1960	0,67	0,36	.	.	.
	1961 - 1965	0,07	0,02	.	.	.
	1966 - 1970	0,98	1,17	1,06	.	.
	1971 - 1975	0,97	1,06	1,00	1,84	.
	1976 - 1980	1,51	1,57	1,32	2,15	.
	1981 - 1985	1,72	2,79	1,98	3,90	.
	1986 - 1990	0,49	0,86	0,62	1,68	.
	1991 - 1995	0,71	0,93	0,99	1,72	0,17
	1996 - 2000	0,81	0,55	0,51	0,20	0,32
	2001 - 2005	0,55	0,69	0,60	0,02	0,76
	2006 - 2010	0,28	0,74	0,67	0,02	0,24
	2011 - 2015	0,45	0,29	0,19	0,01	0,23
	2016 - 2020	0,49	0,32	0,32	0,01	0,43
10 YRS	1951 - 1960	0,74	0,59	.	.	.
	1961 - 1970	1,09	1,32	.	.	.
	1971 - 1980	1,61	1,53	1,40	2,31	.
	1981 - 1990	1,95	2,56	1,91	3,20	.
	1991 - 2000	1,49	1,32	1,46	1,37	0,31
	2001 - 2010	0,75	0,73	0,69	0,02	0,78
	2011 - 2020	0,59	0,30	0,26	0,01	0,28
15 YRS	1961 - 1975	1,40	1,61	.	.	.
	1976 - 1990	1,92	2,36	1,77	2,82	.
	1991 - 2005	1,63	1,59	1,84	1,19	0,85
	2006 - 2020	1,03	0,93	0,65	0,02	0,64
25 YRS	1971 - 1995	2,08	2,42	2,12	3,52	.
	1996 - 2020	1,73	1,44	1,35	0,13	1,45
50 YRS	1971 - 2020	3,55	3,69	3,90	4,04	.
ALL YRS	- 2020	3,23	3,25	3,67	3,93	1,62
						1,82

CORRELATIONS OF NOMINAL YIELDS TO MATURITY						
	FEDERAL BONDS V122487	CONVENTIONAL MORTGAGES V733833	5-YEAR GICS V80691341	SAVINGS ACCOUNTS V80691338	REAL-RETURN BONDS V122553	CORPORATE BONDS C28720Y
					LAST 10 YEARS	/
FEDERAL BONDS		0,70	0,49	0,61	0,95	0,97
MORTGAGES	0,98		0,77	0,56	0,58	0,60
5-YEAR GICS	0,97	0,99		0,53	0,47	0,37
SAVINGS ACCOUNTS	0,86	0,91	0,92		0,63	0,54
REAL RETURNS	0,95	0,93	0,91	0,47		0,88
CORPORATES	0,99	0,96	0,94	0,76	0,95	
ALL YEARS						

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Source: Bloomberg L.P.

**TABLE 3B**  
**ANALYSIS OF INTEREST RATES BY CLASS OF SECURITY**  
**MEDIUM- AND LONG-TERM SECURITIES**  
**EFFECTIVE ANNUAL NOMINAL RATES OF TOTAL RETURN**

YEAR	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
1948	9,01	-2,38	.	.	.	.	.
1949	0,83	4,85	.	.	.	.	.
1950	5,74	-0,12	.	.	.	.	.
1951	10,85	-3,13	.	.	.	.	.
1952	-1,40	1,99	5,18	.	.	.	.
1953	0,00	3,64	2,08	.	.	.	.
1954	0,00	9,99	7,48	.	.	.	.
1955	0,71	-0,34	6,73	.	.	.	.
1956	2,82	-3,63	-2,42	.	.	.	.
1957	2,05	5,89	3,23	.	.	.	.
1958	2,68	-5,69	8,86	.	.	.	.
1959	1,31	-4,43	1,75	.	.	.	.
1960	1,29	7,10	10,32	.	.	.	.
1961	0,00	9,78	7,12	.	.	.	.
1962	1,91	3,05	7,12	.	.	.	.
1963	1,88	4,26	7,12	.	.	.	.
1964	1,84	6,97	7,12	.	.	.	.
1965	3,01	0,96	2,59	3,12	.	.	.
1966	3,51	1,55	1,58	5,17	.	.	.
1967	3,95	-2,20	2,21	4,84	.	.	.
1968	4,35	-0,80	2,97	4,84	4,99	.	.
1969	4,69	-2,01	-3,15	2,62	6,06	.	.
1970	1,00	21,98	11,87	10,03	6,28	.	.
1971	4,93	11,55	13,90	11,80	4,60	.	.
1972	5,16	1,11	8,92	6,15	4,05	.	.
1973	9,38	1,71	6,87	4,27	5,57	.	.
1974	12,65	-1,69	4,50	4,04	8,71	.	.
1975	9,42	2,82	12,20	10,23	7,14	.	.
1976	5,63	19,02	14,21	11,51	8,01	.	.
1977	9,40	5,97	14,62	12,95	6,11	.	.
1978	8,60	1,29	6,84	5,24	7,19	.	.
1979	9,76	-2,62	5,66	5,72	10,43	.	.
1980	11,06	2,06	8,10	5,72	11,51	.	.
1981	12,12	-3,02	9,98	9,88	16,12	.	.
1982	9,27	42,98	29,15	28,26	11,89	.	.
1983	4,59	9,60	20,46	10,78	6,99	.	.
1984	3,72	15,09	12,36	9,96	7,86	.	.
1985	4,40	25,26	16,72	14,37	6,19	.	.
1986	4,21	17,54	13,34	11,67	6,13	.	.
1987	4,19	0,45	10,26	6,18	4,88	.	.
1988	3,88	10,45	10,12	9,69	5,78	.	.
1989	5,26	16,29	13,06	12,43	8,28	.	.
1990	4,99	3,34	10,63	10,25	9,00	.	.
1991	3,75	24,43	21,56	17,14	4,54	.	.
1992	2,17	13,07	11,25	12,56	2,29	3,46	.
1993	1,65	22,88	15,66	13,24	0,77	19,33	21,67
1994	0,23	-10,46	-0,15	-6,36	0,50	-13,24	-5,53
1995	1,74	26,28	16,47	15,66	0,50	13,21	26,43
1996	2,16	14,29	13,80	13,86	0,50	10,59	16,18
1997	0,78	17,45	7,19	3,51	0,50	3,00	17,93
1998	1,00	14,13	7,73	7,09	0,24	4,55	10,21
1999	2,63	-7,15	2,10	-1,35	0,10	5,94	-5,31
2000	3,20	13,64	9,36	8,30	0,10	14,90	11,60
2001	0,72	3,92	11,94	9,28	0,10	-2,38	6,08
2002	3,80	10,09	7,60	2,08	0,05	11,85	10,48
2003	2,08	8,06	7,82	7,75	0,05	13,85	14,86
2004	2,13	8,46	7,15	3,52	0,05	17,24	8,37
2005	2,09	15,05	6,08	2,80	0,05	17,58	10,65
2006	1,67	3,22	4,70	2,23	0,05	-4,86	4,22
2007	2,38	3,30	3,11	1,83	0,08	-1,40	6,55
2008	1,16	13,65	8,84	6,12	0,10	2,32	-13,03
2009	1,32	-4,26	10,93	4,81	0,05	15,08	22,56
2010	2,35	11,45	6,03	1,50	0,05	13,57	15,10
2011	2,30	18,79	5,04	2,49	0,05	21,04	15,89
2012	0,83	4,55	5,14	2,71	0,05	3,97	7,67
2013	1,24	-8,56	3,37	1,64	0,05	-18,38	-5,02
2014	1,47	15,47	5,87	0,22	0,05	18,90	17,55
2015	1,61	4,82	4,82	3,95	0,03	0,41	1,17
2016	1,50	-0,78	3,82	1,70	0,05	4,46	6,63
2017	1,87	3,54	2,64	0,87	0,05	3,52	7,90
2018	1,99	2,59	2,33	-0,69	0,05	-2,78	0,13
2019	2,25	8,80	6,42	2,98	0,05	13,97	15,09
2020	0,73	10,04	6,73	6,75	0,02	16,73	10,63

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Source: Bloomberg L.P.

This table provides values of total return rates on 18-year federal bonds, 28-year real-return bonds, 20-year corporate bonds, 5-year mortgages, 5-year GIC, and non-chequable savings accounts. These values, derived from the basic monthly series, assume purchase on Dec. 31 of the previous year and sale on Dec. 31 of the current year, with all income reinvested. See also Appendices C and D.

TABLE 3B (Cont'd)

GEOMETRIC AVERAGES OVER SELECTED INTERVALS								
	PERIOD	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
5 YRS	1951 - 1955	1,94	2,34	.	.	.	.	.
	1956 - 1960	2,03	-0,30	4,24	.	.	.	.
	1961 - 1965	1,72	4,96	6,20	.	.	.	.
	1966 - 1970	3,49	3,32	2,98	5,47	.	.	.
	1971 - 1975	8,27	3,01	9,22	7,25	6,00	.	.
	1976 - 1980	8,87	4,89	9,82	8,18	8,63	.	.
	1981 - 1985	6,77	16,98	17,54	14,45	9,75	.	.
	1986 - 1990	4,51	9,40	11,47	10,02	6,80	.	.
	1991 - 1995	1,90	14,35	12,71	10,09	1,71	.	.
	1996 - 2000	1,95	10,08	7,97	6,16	0,29	7,71	9,80
	2001 - 2005	2,16	9,06	8,10	5,05	0,06	11,38	10,05
	2006 - 2010	1,78	5,27	6,68	3,28	0,07	4,64	6,38
	2011 - 2015	1,49	6,57	4,84	2,19	0,05	4,17	7,11
	2016 - 2020	1,67	4,76	4,37	2,29	0,04	6,94	7,96
MEAN	1971 - 2020	3,90	8,36	9,21	6,83	3,27	.	.
S.DEV.	1971 - 2020	2,95	4,49	3,93	3,93	3,99	.	.
10 YRS	1951 - 1960	1,98	1,01	.	.	.	.	.
	1961 - 1970	2,60	4,14	4,58	.	.	.	.
	1971 - 1980	8,57	3,94	9,52	7,71	7,31	.	.
	1981 - 1990	5,63	13,13	14,47	12,21	8,26	.	.
	1991 - 2000	1,93	12,19	10,31	8,11	1,00	.	.
	2001 - 2010	1,97	7,15	7,39	4,16	0,06	7,95	8,20
	2011 - 2020	1,58	5,66	4,61	2,24	0,05	5,54	7,53
MEAN	1971 - 2020	3,90	8,36	9,21	6,83	3,27	.	.
S.DEV.	1971 - 2020	3,08	4,05	3,66	3,86	4,10	.	.
15 YRS	1961 - 1975	4,46	3,76	6,11	.	.	.	.
	1976 - 1990	6,70	10,31	12,90	10,85	8,39	.	.
	1991 - 2005	2,00	11,14	9,57	7,08	0,68	.	.
	2006 - 2020	1,64	5,53	5,29	2,59	0,05	5,24	7,15
25 YRS	1971 - 1995	6,03	9,60	12,12	9,97	6,54	.	.
	1996 - 2020	1,81	7,13	6,38	3,78	0,10	6,94	8,25
50 YRS	1971 - 2020	3,90	8,36	9,21	6,83	3,27	.	.
ALL YRS	- 2020	3,51	6,42	7,94	6,64	3,41	6,66	8,78

STANDARD DEVIATIONS OVER SELECTED INTERVALS								
	PERIOD	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
5 YRS	1951 - 1955	4,99	4,93	.	.	.	.	.
	1956 - 1960	0,73	6,13	5,24	.	.	.	.
	1961 - 1965	1,08	3,44	2,03	.	.	.	.
	1966 - 1970	1,47	10,32	5,46	2,73	.	.	.
	1971 - 1975	3,26	5,01	3,83	3,53	1,91	.	.
	1976 - 1980	2,03	8,34	4,23	3,69	2,26	.	.
	1981 - 1985	3,69	17,30	7,55	7,83	4,15	.	.
	1986 - 1990	0,59	7,61	1,58	2,42	1,74	.	.
	1991 - 1995	1,26	15,25	8,19	9,58	1,74	.	.
	1996 - 2000	1,04	9,97	4,21	5,66	0,20	4,88	9,19
	2001 - 2005	1,09	4,02	2,24	3,22	0,02	8,19	3,25
	2006 - 2010	0,57	7,19	3,16	2,05	0,02	8,95	13,39
	2011 - 2015	0,54	10,76	0,92	1,39	0,01	15,96	9,60
	2016 - 2020	0,59	4,50	2,08	2,81	0,01	8,02	5,50
10 YRS	1951 - 1960	3,36	5,42	.	.	.	.	.
	1961 - 1970	1,53	7,29	4,21	.	.	.	.
	1971 - 1980	2,58	6,57	3,81	3,44	2,41	.	.
	1981 - 1990	2,77	13,35	6,11	5,98	3,39	.	.
	1991 - 2000	1,09	12,40	6,67	7,73	1,39	.	.
	2001 - 2010	0,84	5,82	2,68	2,71	0,02	8,82	9,32
	2011 - 2020	0,54	7,86	1,53	2,09	0,01	11,96	7,38
15 YRS	1961 - 1975	3,50	6,46	4,55	.	.	.	.
	1976 - 1990	2,93	12,34	5,86	5,56	2,98	.	.
	1991 - 2005	1,06	10,33	5,60	6,63	1,21	.	.
	2006 - 2020	0,54	7,39	2,33	2,06	0,02	10,73	9,29
25 YRS	1971 - 1995	3,46	12,16	6,00	6,13	3,66	.	.
	1996 - 2020	0,77	7,44	2,97	3,47	0,13	9,37	8,24
50 YRS	1971 - 2020	3,29	10,08	5,54	5,87	4,17	.	.
ALL YRS	- 2020	3,20	9,45	5,54	5,62	4,09	9,86	9,25

CORRELATIONS OF RATES OF CHANGE/RETURN							
	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
CPI	0,29	-0,24	-0,45	0,47	0,19	0,24	
FEDERAL BONDS	-0,09	0,61	0,19	-0,17	0,94	0,87	
MORTGAGES	0,27	0,72	0,68	-0,48	0,69	0,66	
5-YEAR GICS	0,31	0,71	0,91	-0,79	0,29	0,14	
SAVINGS ACCOUNTS	0,85	0,06	0,39	0,49	-0,79	-0,20	0,03
REAL RETURNS	0,40	0,65	0,45	0,35	-0,06	0,70	0,95
CORPORATES	0,17	0,62	0,62	0,53	0,31	0,70	
	/						
	ALL YEARS						

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Source: Bloomberg L.P.

**TABLE 3C**  
**ANALYSIS OF INTEREST RATES BY CLASS OF SECURITY**  
**MEDIUM- AND LONG-TERM SECURITIES**  
**EFFECTIVE ANNUAL REAL RATES OF TOTAL RETURN**

YEAR	CONSUMER PRICE INDEX	REAL VALUES (NET OF CPI INCREASES)					
		FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
1948	9,01	-10,45	.	.	.	.	.
1949	0,83	3,99	.	.	.	.	.
1950	5,74	-5,54	.	.	.	.	.
1951	10,85	-12,61	.	.	.	.	.
1952	-1,40	3,44	6,67	.	.	.	.
1953	0,00	3,64	2,08	.	.	.	.
1954	0,00	9,99	7,48	.	.	.	.
1955	0,71	-1,04	5,98	.	.	.	.
1956	2,82	-6,27	-5,09	.	.	.	.
1957	2,05	3,76	1,15	.	.	.	.
1958	2,68	-8,16	6,02	.	.	.	.
1959	1,31	-5,67	0,44	.	.	.	.
1960	1,29	5,74	8,91	.	.	.	.
1961	0,00	9,78	7,12	.	.	.	.
1962	1,91	1,12	5,11	.	.	.	.
1963	1,88	2,34	5,15	.	.	.	.
1964	1,84	5,04	5,19	.	.	.	.
1965	3,01	-1,99	-0,41	0,11	.	.	.
1966	3,51	-1,89	-1,86	1,61	.	.	.
1967	3,95	-5,92	-1,68	0,85	.	.	.
1968	4,35	-4,94	-1,32	0,47	0,61	.	.
1969	4,69	-6,39	-7,48	-1,98	1,31	.	.
1970	1,00	20,78	10,77	8,95	5,23	.	.
1971	4,93	6,32	8,55	6,55	-0,31	.	.
1972	5,16	-3,85	3,57	0,94	-1,06	.	.
1973	9,38	-7,01	-2,29	-4,67	-3,48	.	.
1974	12,65	-12,73	-7,24	-7,65	-3,50	.	.
1975	9,42	-6,03	2,54	0,74	-2,08	.	.
1976	5,63	12,68	8,12	5,57	2,26	.	.
1977	9,40	-3,14	4,76	3,24	-3,02	.	.
1978	8,60	-6,73	-1,62	-3,09	-1,30	.	.
1979	9,76	-11,29	-3,74	-3,68	0,60	.	.
1980	11,06	-8,10	-2,66	-4,80	0,41	.	.
1981	12,12	-13,50	-1,91	-2,00	3,56	.	.
1982	9,27	30,85	18,20	17,38	2,40	.	.
1983	4,59	4,79	15,17	5,91	2,29	.	.
1984	3,72	10,97	8,33	6,02	4,00	.	.
1985	4,40	19,99	11,81	9,55	1,72	.	.
1986	4,21	12,78	8,76	7,15	1,84	.	.
1987	4,19	-3,59	5,82	1,91	0,66	.	.
1988	3,88	6,32	6,01	5,60	1,83	.	.
1989	5,26	10,49	7,42	6,82	2,87	.	.
1990	4,99	-1,57	5,37	5,01	3,81	.	.
1991	3,75	19,92	17,16	12,90	0,75	.	.
1992	2,17	10,67	8,89	10,17	0,11	1,26	.
1993	1,65	20,88	13,78	11,40	-0,87	17,39	19,69
1994	0,23	-10,67	-0,38	-6,58	0,27	-13,44	-5,75
1995	1,74	24,12	14,48	13,68	-1,22	11,28	24,27
1996	2,16	11,87	11,39	11,45	-1,63	8,25	13,72
1997	0,78	16,54	6,36	2,71	-0,28	2,20	17,02
1998	1,00	13,01	6,66	6,04	-0,75	3,52	9,12
1999	2,63	-9,53	-0,52	-3,88	-2,46	3,23	-7,73
2000	3,20	10,11	5,97	4,94	-3,01	11,34	8,13
2001	0,72	3,18	11,13	8,49	-0,62	-3,08	5,31
2002	3,80	6,06	3,66	-1,65	-3,61	7,75	6,44
2003	2,08	5,86	5,63	5,56	-1,99	11,54	12,53
2004	2,13	6,20	4,91	1,36	-2,04	14,79	6,11
2005	2,09	12,70	3,91	0,70	-2,00	15,18	8,39
2006	1,67	1,52	2,97	0,55	-1,60	-6,43	2,51
2007	2,38	0,90	0,71	-0,54	-2,24	-3,69	4,07
2008	1,16	12,35	7,59	4,90	-1,05	1,15	-14,03
2009	1,32	-5,51	9,48	3,44	-1,26	13,58	20,96
2010	2,35	8,88	3,59	-0,83	-2,25	10,96	12,46
2011	2,30	16,12	2,68	0,19	-2,20	18,32	13,29
2012	0,83	3,69	4,27	1,86	-0,78	3,11	6,78
2013	1,24	-9,68	2,10	0,39	-1,17	-19,38	-6,18
2014	1,47	13,80	4,34	-1,23	-1,40	17,18	15,85
2015	1,61	3,16	3,16	2,31	-1,55	-1,18	-0,42
2016	1,50	-2,25	2,28	0,20	-1,43	2,91	5,05
2017	1,87	1,64	0,75	-0,98	-1,79	1,62	5,92
2018	1,99	0,59	0,33	-2,62	-1,90	-4,67	-1,82
2019	2,25	6,41	4,08	0,72	-2,15	11,47	12,55
2020	0,73	9,24	5,95	5,97	-0,70	15,88	9,83

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Source: Bloomberg L.P.

This table is based on Table 3B, adjusted for changes in the CPI.

TABLE 3C (Cont'd)

GEOMETRIC AVERAGES OVER SELECTED INTERVALS								
	PERIOD	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
5 YRS	1951 - 1955	1,94	0,39	.	.	.	.	.
	1956 - 1960	2,03	-2,28	2,17	.	.	.	.
	1961 - 1965	1,72	3,18	4,40	.	.	.	.
	1966 - 1970	3,49	-0,16	-0,49	1,91	.	.	.
	1971 - 1975	8,27	-4,86	0,88	-0,94	-2,09	.	.
	1976 - 1980	8,87	-3,66	0,87	-0,64	-0,22	.	.
	1981 - 1985	6,77	9,57	10,09	7,19	2,79	.	.
	1986 - 1990	4,51	4,68	6,67	5,28	2,20	.	.
	1991 - 1995	1,90	12,21	10,61	8,03	-0,19	.	.
	1996 - 2000	1,95	7,98	5,90	4,13	-1,63	5,65	7,70
	2001 - 2005	2,16	6,75	5,81	2,83	-2,05	9,02	7,73
	2006 - 2010	1,78	3,44	4,82	1,48	-1,68	2,81	4,52
	2011 - 2015	1,49	5,01	3,31	0,70	-1,42	2,64	5,54
	2016 - 2020	1,67	3,04	2,66	0,62	-1,60	5,19	6,19
MEAN	1971 - 2020	3,90	4,29	5,11	2,82	-0,60	.	.
S.DEV.	1971 - 2020	2,95	5,37	3,40	3,18	1,76	.	.
10 YRS	1951 - 1960	1,98	-0,95	.	.	.	.	.
	1961 - 1970	2,60	1,50	1,93	.	.	.	.
	1971 - 1980	8,57	-4,26	0,88	-0,79	-1,16	.	.
	1981 - 1990	5,63	7,10	8,37	6,23	2,49	.	.
	1991 - 2000	1,93	10,07	8,23	6,06	-0,91	.	.
	2001 - 2010	1,97	5,08	5,32	2,15	-1,87	5,87	6,11
	2011 - 2020	1,58	4,02	2,98	0,66	-1,51	3,90	5,86
MEAN	1971 - 2020	3,90	4,29	5,11	2,82	-0,60	.	.
S.DEV.	1971 - 2020	3,08	5,36	3,27	3,17	1,76	.	.
15 YRS	1961 - 1975	4,46	-0,67	1,58	.	.	.	.
	1976 - 1990	6,70	3,39	5,81	3,89	1,58	.	.
	1991 - 2005	2,00	8,96	7,42	4,97	-1,30	.	.
	2006 - 2020	1,64	3,83	3,59	0,93	-1,57	3,54	5,42
25 YRS	1971 - 1995	6,03	3,36	5,74	3,71	0,48	.	.
	1996 - 2020	1,81	5,23	4,49	1,94	-1,68	5,04	6,33
50 YRS	1971 - 2020	3,90	4,29	5,11	2,82	-0,60	.	.
ALL YRS	- 2020	3,43	3,01	4,45	2,69	-0,44	4,82	6,91

STANDARD DEVIATIONS OVER SELECTED INTERVALS								
	PERIOD	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
5 YRS	1951 - 1955	4,99	8,41	.	.	.	.	.
	1956 - 1960	0,73	6,37	5,41	.	.	.	.
	1961 - 1965	1,08	4,43	2,84	.	.	.	.
	1966 - 1970	1,47	11,56	6,70	4,12	.	.	.
	1971 - 1975	3,26	6,96	6,01	5,50	1,43	.	.
	1976 - 1980	2,03	9,41	5,19	4,64	2,01	.	.
	1981 - 1985	3,69	16,68	7,77	7,01	0,95	.	.
	1986 - 1990	0,59	7,24	1,39	2,09	1,19	.	.
	1991 - 1995	1,26	14,14	6,92	8,44	0,82	.	.
	1996 - 2000	1,04	10,29	4,24	5,57	1,14	3,92	9,53
	2001 - 2005	1,09	3,53	3,06	4,07	1,06	7,51	2,90
	2006 - 2010	0,57	7,05	3,58	2,54	0,55	8,83	13,03
	2011 - 2015	0,54	10,26	0,98	1,42	0,52	15,43	9,23
	2016 - 2020	0,59	4,63	2,35	3,24	0,56	8,19	5,46
10 YRS	1951 - 1960	3,36	7,19	.	.	.	.	.
	1961 - 1970	1,53	8,40	5,46	.	.	.	.
	1971 - 1980	2,58	7,83	5,29	4,80	1,92	.	.
	1981 - 1990	2,77	12,49	5,60	5,00	1,06	.	.
	1991 - 2000	1,09	11,91	5,98	7,07	1,20	.	.
	2001 - 2010	0,84	5,52	3,18	3,28	0,82	8,38	9,00
	2011 - 2020	0,54	7,60	1,73	2,36	0,52	11,69	7,15
15 YRS	1961 - 1975	3,50	8,31	5,45	.	.	.	.
	1976 - 1990	2,93	12,44	6,43	5,79	1,90	.	.
	1991 - 2005	1,06	9,91	5,21	6,29	1,25	.	.
	2006 - 2020	0,54	7,17	2,53	2,36	0,52	10,52	9,03
25 YRS	1971 - 1995	3,46	12,81	6,93	6,72	2,19	.	.
	1996 - 2020	0,77	7,29	3,10	3,62	0,77	8,98	8,08
50 YRS	1971 - 2020	3,29	10,34	5,36	5,43	1,96	.	.
ALL YRS	- 2020	3,15	9,72	5,32	5,26	2,09	9,42	9,00

CORRELATIONS OF RATES OF CHANGE/RETURN								
	PERIOD	CONSUMER PRICE INDEX	FEDERAL BONDS	CONVENTIONAL MORTGAGES	5-YEAR GICS	SAVINGS ACCOUNTS	REAL-RETURN BONDS	CORPORATE BONDS
							LAST 10 YEARS	
CPI		0,22	-0,53	-0,62	-1,00	0,14	0,16	
FEDERAL BONDS		-0,39	0,49	0,15	-0,22	0,94	0,87	
MORTGAGES		-0,29	0,78	0,77	0,53	0,57	0,56	
5-YEAR GICS		-0,25	0,79	0,91	0,61	0,25	0,12	
SAVINGS ACCOUNTS		0,12	0,21	0,32	0,39	-0,15	-0,16	
REAL RETURNS		0,33	0,63	0,39	0,31	-0,32	0,95	
CORPORATES		0,08	0,61	0,60	0,52	0,00	0,69	
		/						
		ALL YEARS						

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Source: Bloomberg L.P.

**TABLES 4A, 4B, 4C**  
**GOVERNMENT OF CANADA BONDS BY TERM**

YEAR	TABLE 4A ANALYSIS OF INTEREST RATES BY TERM OF SECURITY GOVERNMENT OF CANADA SECURITIES NOMINAL YIELDS TO MATURITY COMPOUNDED SEMI-ANNUALLY				
	91-DAY V122541	1-3 YEAR V122558	3-5 YEAR V122485	5-10 YEAR V122486	10+ YEAR V122487
1936	0,85	.	.	.	2,97
1937	0,72	.	.	.	3,17
1938	0,60	.	.	.	3,09
1939	0,71	.	.	.	3,16
1940	0,71	.	.	.	3,28
1941	0,58	.	.	.	3,10
1942	0,54	.	.	.	3,06
1943	0,48	.	.	.	3,01
1944	0,39	.	.	.	3,00
1945	0,36	.	.	.	2,93
1946	0,39	.	.	.	2,61
1947	0,41	.	.	.	2,57
1948	0,41	.	.	.	2,93
1949	0,49	1,65	.	.	2,87
1950	0,55	1,80	.	.	2,86
1951	0,79	2,42	2,61	3,08	3,23
1952	1,07	2,81	3,24	3,56	3,56
1953	1,72	3,21	3,45	3,63	3,71
1954	1,43	2,18	2,67	2,90	3,18
1955	1,63	2,19	2,79	2,87	3,14
1956	2,96	3,60	3,76	3,75	3,63
1957	3,81	4,46	4,57	4,39	4,11
1958	2,28	3,28	3,47	3,69	4,15
1959	4,90	5,03	4,94	5,10	5,08
1960	3,24	3,96	4,52	4,85	5,19
1961	2,84	3,59	4,38	4,61	5,05
1962	4,12	4,28	4,60	4,76	5,11
1963	3,61	4,21	4,48	4,77	5,09
1964	3,80	4,41	4,72	4,92	5,18
1965	4,04	4,52	4,90	5,09	5,21
1966	5,09	5,38	5,55	5,74	5,69
1967	4,72	5,29	5,64	5,94	5,94
1968	6,42	6,37	6,68	6,85	6,75
1969	7,39	7,49	7,66	7,76	7,58
1970	6,13	6,57	7,11	7,58	7,91
1971	3,61	4,93	5,56	6,15	6,95
1972	3,61	5,54	6,26	6,74	7,23
1973	5,59	6,54	6,98	7,17	7,56
1974	8,06	8,03	8,12	8,27	8,90
1975	7,61	7,56	7,72	8,06	9,04
1976	9,17	8,27	8,35	8,73	9,18
1977	7,54	7,46	7,90	8,14	8,70
1978	8,97	8,77	9,00	9,08	9,27
1979	12,23	10,77	10,42	10,16	10,21
1980	13,45	12,44	12,37	12,30	12,48
1981	18,99	15,97	15,68	15,29	15,22
1982	14,41	13,95	14,00	14,03	14,26
1983	9,65	10,18	10,61	11,11	11,79
1984	11,54	11,67	11,91	12,42	12,75
1985	9,78	10,12	10,39	10,78	11,04
1986	9,29	9,09	9,21	9,37	9,52
1987	8,40	9,19	9,42	9,55	9,95
1988	9,83	9,67	9,77	9,76	10,22
1989	12,62	10,71	10,20	9,83	9,92
1990	13,45	11,65	11,19	10,82	10,85
1991	9,02	8,99	9,16	9,36	9,76
1992	6,76	7,03	7,43	8,16	8,77
1993	4,94	5,89	6,46	7,24	7,85
1994	5,66	7,14	7,79	8,26	8,63
1995	7,08	7,26	7,64	7,93	8,28
1996	4,28	5,35	6,21	6,86	7,50
1997	3,30	4,68	5,33	5,87	6,42
1998	4,82	5,09	5,16	5,26	5,47
1999	4,80	5,36	5,50	5,56	5,69
2000	5,61	5,91	5,99	5,96	5,89
2001	3,83	4,25	4,88	5,32	5,78
2002	2,61	3,55	4,44	5,08	5,66
2003	2,90	3,24	3,88	4,54	5,28
2004	2,24	2,92	3,67	4,34	5,08
2005	2,75	3,18	3,50	3,89	4,39
2006	4,10	4,07	4,10	4,18	4,30
2007	4,22	4,22	4,21	4,25	4,34
2008	2,41	2,66	2,96	3,36	4,04
2009	0,35	1,21	2,15	2,84	3,89
2010	0,60	1,48	2,21	2,88	3,66
2011	0,92	1,38	1,85	2,47	3,21
2012	0,98	1,12	1,30	1,63	2,33
2013	0,97	1,12	1,48	1,99	2,72
2014	0,91	1,05	1,38	1,87	2,60
2015	0,50	0,53	0,66	1,19	2,02
2016	0,50	0,58	0,68	1,02	1,80
2017	0,71	1,10	1,31	1,61	2,18
2018	1,41	1,96	2,11	2,22	2,33
2019	1,67	1,60	1,52	1,53	1,73
2020	0,42	0,48	0,53	0,65	1,08

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This table gives the 12-month arithmetic average of the yields to maturity on government bonds of various durations. The given annual rate is that compounded semi-annually. Averages, standard deviations and correlations are given on the next page.

TABLE 4A (Cont'd)

ARITHMETIC AVERAGES OVER SELECTED INTERVALS						
	PERIOD	91-DAY	1-3 YEAR	3-5 YEAR	5-10 YEAR	10+ YEAR
5 YRS	1936 - 1940	0,72	.	.	.	3,13
	1941 - 1945	0,47	.	.	.	3,02
	1946 - 1950	0,45	.	.	.	2,77
	1951 - 1955	1,33	2,56	2,95	3,21	3,36
	1956 - 1960	3,44	4,07	4,25	4,36	4,43
	1961 - 1965	3,68	4,20	4,62	4,83	5,13
	1966 - 1970	5,95	6,22	6,53	6,77	6,77
	1971 - 1975	5,70	6,52	6,93	7,28	7,94
	1976 - 1980	10,27	9,54	9,61	9,68	9,97
	1981 - 1985	12,87	12,38	12,52	12,73	13,01
	1986 - 1990	10,72	10,06	9,96	9,87	10,09
	1991 - 1995	6,69	7,26	7,70	8,19	8,66
	1996 - 2000	4,56	5,28	5,64	5,90	6,19
	2001 - 2005	2,87	3,43	4,07	4,63	5,24
	2006 - 2010	2,33	2,73	3,13	3,50	4,04
	2011 - 2015	0,86	1,04	1,34	1,83	2,58
	2016 - 2020	0,94	1,14	1,23	1,41	1,82
MEAN	1956 - 2020	5,45	5,68	5,96	6,23	6,61
S.DEV.	1956 - 2020	3,80	3,46	3,38	3,30	3,23
10 YRS	1941 - 1950	0,46	.	.	.	2,89
	1951 - 1960	2,38	3,31	3,60	3,78	3,90
	1961 - 1970	4,82	5,21	5,57	5,80	5,95
	1971 - 1980	7,98	8,03	8,27	8,48	8,95
	1981 - 1990	11,80	11,22	11,24	11,30	11,55
	1991 - 2000	5,63	6,27	6,67	7,05	7,43
	2001 - 2010	2,60	3,08	3,60	4,07	4,64
	2011 - 2020	0,90	1,09	1,28	1,62	2,20
MEAN	1961 - 2020	5,62	5,82	6,10	6,38	6,79
S.DEV.	1961 - 2020	3,89	3,59	3,50	3,39	3,29
15 YRS	1946 - 1960	1,74	.	.	.	3,52
	1961 - 1975	5,11	5,65	6,02	6,29	6,61
	1976 - 1990	11,29	10,66	10,69	10,76	11,02
	1991 - 2005	4,71	5,32	5,80	6,24	6,70
	2006 - 2020	1,38	1,64	1,90	2,25	2,81
25 YRS	1946 - 1970	2,97	.	.	.	4,49
	1971 - 1995	9,25	9,15	9,34	9,55	9,93
	1996 - 2020	2,31	2,72	3,08	3,45	3,98
50 YRS	1971 - 2020	5,78	5,94	6,21	6,50	6,95
ALL YRS	- 2020	4,34	5,36	5,75	6,01	5,77

STANDARD DEVIATIONS OVER SELECTED INTERVALS						
	PERIOD	91-DAY	1-3 YEAR	3-5 YEAR	5-10 YEAR	10+ YEAR
5 YRS	1936 - 1940	0,09	.	.	.	0,12
	1941 - 1945	0,09	.	.	.	0,06
	1946 - 1950	0,07	.	.	.	0,16
	1951 - 1955	0,39	0,44	0,37	0,37	0,26
	1956 - 1960	0,99	0,69	0,61	0,63	0,67
	1961 - 1965	0,51	0,36	0,20	0,19	0,07
	1966 - 1970	1,07	0,91	0,92	0,92	0,98
	1971 - 1975	2,12	1,31	1,05	0,89	0,97
	1976 - 1980	2,47	2,03	1,81	1,64	1,51
	1981 - 1985	3,92	2,54	2,28	1,92	1,72
	1986 - 1990	2,20	1,10	0,79	0,56	0,49
	1991 - 1995	1,56	1,11	0,97	0,76	0,71
	1996 - 2000	0,85	0,45	0,45	0,60	0,81
	2001 - 2005	0,59	0,51	0,57	0,57	0,55
	2006 - 2010	1,84	1,40	0,99	0,69	0,28
	2011 - 2015	0,20	0,31	0,43	0,47	0,45
	2016 - 2020	0,56	0,64	0,64	0,60	0,49
10 YRS	1941 - 1950	0,08	.	.	.	0,18
	1951 - 1960	1,32	0,96	0,83	0,78	0,74
	1961 - 1970	1,43	1,25	1,19	1,20	1,09
	1971 - 1980	3,24	2,26	1,99	1,77	1,61
	1981 - 1990	3,20	2,21	2,10	2,01	1,95
	1991 - 2000	1,63	1,32	1,30	1,37	1,49
	2001 - 2010	1,32	1,06	0,91	0,84	0,75
	2011 - 2020	0,40	0,48	0,52	0,55	0,59
15 YRS	1946 - 1960	1,42	.	.	.	0,81
	1961 - 1975	1,67	1,38	1,29	1,29	1,40
	1976 - 1990	2,98	2,23	2,10	2,00	1,92
	1991 - 2005	1,90	1,76	1,67	1,64	1,63
	2006 - 2020	1,25	1,16	1,12	1,09	1,03
25 YRS	1946 - 1970	2,08	.	.	.	1,52
	1971 - 1995	3,60	2,65	2,41	2,22	2,08
	1996 - 2020	1,66	1,75	1,81	1,80	1,73
50 YRS	1971 - 2020	4,47	3,93	3,80	3,67	3,55
ALL YRS	- 2020	4,04	3,49	3,37	3,28	3,20

CORRELATIONS OF YIELDS BY TIME TO MATURITY					
	91-DAY	1-3 YEAR	3-5 YEAR	5-10 YEAR	10+ YEAR
91-DAY		0,91	0,79	0,58	0,26
1-3 YEAR	0,99		0,95	0,78	0,45
3-5 YEAR	0,97	1,00		0,93	0,69
5-10 YEAR	0,96	0,99	1,00		0,90
10+ YEAR	0,96	0,98	0,99	1,00	
	/				
		ALL YEARS			

TABLE 4B  
ANALYSIS OF INTEREST RATES BY TERM OF SECURITY  
GOVERNMENT OF CANADA SECURITIES  
EFFECTIVE ANNUAL NOMINAL RATES OF TOTAL RETURN

YEAR	CPI	91-DAY	1-3 YEAR	3-5 YEAR	5-10 YEAR	10+ YEAR
1936	1,35	0,89	.	.	.	.
1937	4,00	0,71	.	.	.	-0,58
1938	-2,56	0,62	.	.	.	5,63
1939	2,63	0,70	.	.	.	-2,98
1940	5,13	0,73	.	.	.	8,69
1941	6,10	0,59	.	.	.	3,80
1942	3,45	0,54	.	.	.	3,08
1943	2,22	0,49	.	.	.	3,88
1944	-2,17	0,39	.	.	.	3,16
1945	2,22	0,37	.	.	.	5,18
1946	5,43	0,39	.	.	.	6,02
1947	14,43	0,41	.	.	.	3,17
1948	9,01	0,41	.	.	.	-2,38
1949	0,83	0,48	.	.	.	4,85
1950	5,74	0,54	1,28	.	.	-0,12
1951	10,85	0,77	1,94	.	.	-3,13
1952	-1,40	1,05	1,50	1,68	1,16	1,99
1953	0,00	1,66	3,15	3,06	4,21	3,64
1954	0,00	1,53	4,75	6,91	8,67	9,99
1955	0,71	1,46	0,37	-0,40	-0,80	-0,34
1956	2,82	2,91	2,02	0,30	-2,31	-3,63
1957	2,05	3,86	5,28	6,43	7,94	5,89
1958	2,68	2,16	3,21	2,55	0,31	-5,69
1959	1,31	4,78	4,14	2,36	-1,80	-4,43
1960	1,29	3,53	5,97	6,14	10,47	7,10
1961	0,00	2,89	4,62	7,30	7,38	9,78
1962	1,91	4,05	2,70	3,02	2,24	3,05
1963	1,88	3,66	4,01	3,91	3,97	4,26
1964	1,84	3,80	4,39	4,49	4,95	6,97
1965	3,01	4,03	3,38	3,02	1,71	0,96
1966	3,51	5,14	4,86	4,33	3,53	1,55
1967	3,95	4,62	4,80	3,21	1,31	-2,20
1968	4,35	6,47	5,72	5,02	3,16	-0,80
1969	4,69	7,43	5,52	3,92	1,41	-2,01
1970	1,00	6,57	11,36	16,47	20,87	21,98
1971	4,93	3,79	5,41	6,41	9,14	11,55
1972	5,16	3,59	3,76	2,66	1,66	1,11
1973	9,38	5,46	3,51	2,73	2,47	1,71
1974	12,65	8,23	7,29	8,17	7,03	-1,69
1975	9,42	7,56	5,15	3,24	0,42	2,82
1976	5,63	9,44	9,36	10,47	14,27	19,02
1977	9,40	7,86	7,55	6,82	5,88	5,97
1978	8,60	8,93	5,32	3,55	1,32	1,29
1979	9,76	12,54	8,43	5,72	3,21	-2,62
1980	11,06	13,72	11,95	9,77	5,63	2,06
1981	12,12	20,38	11,28	6,74	2,00	-3,02
1982	9,27	15,25	20,58	27,53	35,98	42,98
1983	4,59	9,86	10,36	10,41	9,58	9,60
1984	3,72	11,94	10,61	11,34	12,53	15,09
1985	4,40	9,77	12,00	14,81	19,20	25,26
1986	4,21	9,47	9,76	10,92	13,78	17,54
1987	4,19	8,46	7,81	6,05	3,58	0,45
1988	3,88	9,76	9,08	9,04	9,67	10,45
1989	5,26	12,91	10,61	11,21	12,81	16,29
1990	4,99	13,98	11,20	9,65	7,06	3,34
1991	3,75	9,57	14,08	17,63	20,20	24,43
1992	2,17	6,49	8,23	9,73	10,28	13,07
1993	1,65	5,27	9,92	12,71	17,31	22,88
1994	0,23	5,33	0,56	-3,68	-7,10	-10,46
1995	1,74	7,43	11,87	16,04	20,75	26,28
1996	2,16	4,48	7,78	10,27	11,90	14,29
1997	0,78	3,30	3,33	4,80	8,74	17,45
1998	1,00	4,81	5,66	7,01	9,30	14,13
1999	2,63	4,83	3,91	1,23	-2,07	-7,15
2000	3,20	5,63	6,50	8,51	10,92	13,64
2001	0,72	4,13	7,35	7,58	5,97	3,92
2002	3,80	2,55	3,36	6,32	8,98	10,09
2003	2,08	2,93	3,46	4,48	5,67	8,06
2004	2,13	2,25	3,00	4,27	5,95	8,46
2005	2,09	2,67	2,36	2,85	5,76	15,05
2006	1,67	4,05	3,66	3,63	3,24	3,22
2007	2,38	4,33	4,09	3,92	3,88	3,30
2008	1,16	2,74	6,75	10,92	14,63	13,65
2009	1,32	0,41	0,82	-0,89	-3,41	-4,26
2010	2,35	0,53	1,15	3,22	5,56	11,45
2011	2,30	0,93	2,41	5,35	10,59	18,79
2012	0,83	0,97	0,77	0,77	1,91	4,55
2013	1,24	0,96	1,16	0,45	-2,71	-8,56
2014	1,47	0,91	1,20	2,84	7,12	15,47
2015	1,61	0,51	1,52	2,94	4,27	4,82
2016	1,50	0,50	0,20	-0,64	-1,08	-0,78
2017	1,87	0,65	-0,11	-1,01	-1,06	3,54
2018	1,99	1,39	1,39	1,31	1,69	2,59
2019	2,25	1,64	2,12	2,79	4,01	8,80
2020	0,73	0,54	3,19	5,51	8,22	10,04

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This table gives annual rates of return of federal government bonds assuming purchase on Dec. 31 of the previous year and sale on Dec. 31 of the current year, with all income reinvested.







**TABLE 5**  
**RETURNS ON U.S. COMMON STOCKS IN CANADIAN DOLLARS**

YEAR	ANNUAL PERCENTAGE RATES OF TOTAL RETURN		
	RETURN ON S&P 500 (NOMINAL VALUES)	YEAR-END EXCHANGE RATE U.S. IN CANADIAN DOLLARS	RETURN IN CANADIAN DOLLARS (NOMINAL VALUES)
1938	33,23	1,0097	34,42
1939	-0,89	1,1050	8,46
1940	-9,98	1,1050	-9,98
1941	-11,70	1,1050	-11,70
1942	21,08	1,1050	21,08
1943	25,59	1,1050	25,59
1944	19,60	1,1050	19,60
1945	36,39	1,1025	36,09
1946	-8,12	1,0025	-16,45
1947	5,27	1,0025	5,27
1948	5,08	1,0025	5,08
1949	18,00	1,1025	29,78
1950	30,47	1,0531	24,63
1951	24,61	1,0119	19,73
1952	18,31	0,9703	13,45
1953	-1,01	0,9738	-0,66
1954	52,16	0,9659	50,94
1955	31,37	0,9991	35,87
1956	6,59	0,9597	2,39
1957	-10,77	0,9841	-8,51
1958	43,21	0,9644	40,34
1959	11,92	0,9522	10,50
1960	0,46	0,9966	5,15
1961	26,79	1,0434	32,76
1962	-8,72	1,0772	-5,77
1963	22,67	1,0806	23,06
1964	16,33	1,0738	15,59
1965	12,37	1,0750	12,50
1966	-10,04	1,0837	-9,31
1967	23,89	1,0806	23,54
1968	10,99	1,0728	10,19
1969	-8,42	1,0728	-8,42
1970	3,95	1,0113	-2,01
1971	14,26	1,0022	13,24
1972	18,91	0,9950	18,06
1973	-14,76	0,9960	-14,68
1974	-26,37	0,9906	-26,77
1975	37,19	1,0160	40,71
1976	23,59	1,0088	22,71
1977	-7,39	1,0940	0,43
1978	6,43	1,1858	15,36
1979	18,24	1,1666	16,32
1980	32,31	1,1938	35,39
1981	-4,98	1,1855	-5,64
1982	21,49	1,2288	25,92
1983	22,41	1,2444	23,97
1984	6,13	1,3217	12,72
1985	31,22	1,3983	38,83
1986	18,91	1,3805	17,40
1987	5,11	1,2993	-1,07
1988	16,61	1,1925	7,02
1989	31,69	1,1585	27,94
1990	-3,10	1,1599	-2,99
1991	30,47	1,1555	29,97
1992	7,62	1,2709	18,37
1993	10,08	1,3217	14,48
1994	1,32	1,4018	7,46
1995	37,58	1,3640	33,87
1996	22,96	1,3706	23,56
1997	33,36	1,4305	39,19
1998	28,58	1,5333	37,82
1999	21,04	1,4433	13,94
2000	-9,10	1,4995	-5,57
2001	-11,89	1,5928	-6,40
2002	-22,10	1,5776	-22,84
2003	28,68	1,2965	5,76
2004	10,88	1,2020	2,80
2005	4,91	1,1630	1,51
2006	15,79	1,1654	16,03
2007	5,49	0,9913	-10,27
2008	-37,00	1,2180	-22,59
2009	26,46	1,0510	9,12
2010	15,06	0,9946	8,89
2011	2,11	1,0170	4,41
2012	16,00	0,9949	13,48
2013	32,39	1,0636	41,53
2014	13,69	1,1601	24,00
2015	1,38	1,3840	20,95
2016	11,96	1,3427	8,62
2017	21,83	1,2545	13,83
2018	-4,38	1,3642	3,98
2019	31,49	1,2988	25,18
2020	18,40	1,2732	16,07

Source: Standard & Poor's, a division of The McGraw-Hill Companies, Inc. © Copyright 2021. All Rights Reserved.

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This table converts S&P 500 Common Stock Index values and reinvested dividends to Canadian dollars and gives total return rates in Canadian dollars. The values in the last column are used in Tables 1A-1D and 2A-2B.



CPI	-0,17	0,29	0,49	-0,27	-0,35	-0,33	-0,28	-0,39	-0,32
STOCKS	0,03	-0,30	0,11	0,44	0,47	0,44	0,39	0,32	
LONG BONDS	-0,11	-0,04	0,08	-0,40	-0,50	-0,58	-0,57	-0,56	
91-DAY T-BILLS	0,70	0,01	0,18	0,09	0,03	-0,01	0,05	-0,17	
U.S. STOCKS	-0,10	0,55	0,26	0,08	0,96	0,84	0,83	0,80	
WORLD	-0,04	0,64	0,13	0,06	0,88	0,95	0,93	0,92	
WORLD EXC. U.S.A.	0,07	0,62	0,00	0,07	0,63	0,91	0,99	0,96	
EUROPE	0,01	0,58	0,14	0,08	0,74	0,89	0,88	0,93	
PACIFIC BASIN	0,11	0,48	-0,10	0,06	0,39	0,71	0,86	0,56	
/									
ALL YEARS (1970+)									

Source: Morgan Stanley Capital International Inc. © Copyright 2021. All Rights Reserved.

All rates of return are gross of tax and include both market value changes and dividends.

**TABLE 7**  
**REAL ESTATE RETURNS**

NOMINAL ANNUAL PERCENTAGE RATE OF RETURN		
YEAR	RETURN	
1973	35,5	
1974	19,4	
1975	14,1	
1976	10,2	
1977	14,9	
1978	12,0	
1979	13,0	
1980	23,1	
1981	26,4	
1982	1,2	
1983	6,7	
1984	12,4	
1985	11,5	
1986	12,9	
1987	14,6	
1988	16,4	
1989	16,8	
1990	4,3	
1991	0,2	
1992	-5,5	
1993	-6,4	
1994	1,9	
1995	5,0	
1996	7,0	
1997	18,5	
1998	16,0	
1999	10,6	
2000	12,0	
2001	9,2	
2002	8,8	
2003	8,4	
2004	13,0	
2005	18,7	
2006	18,6	
2007	16,1	
2008	3,7	
2009	-0,3	
2010	11,1	
2011	15,9	
2012	14,1	
2013	10,7	
2014	7,3	
2015	8,0	
2016	5,7	
2017	7,2	
2018	7,7	
2019	6,7	
2020	-3,8	

GEOMETRIC AVERAGES OVER SELECTED INTERVALS		
5 YRS	### - 1980	14,55
	### - 1985	11,33
	### - 1990	12,92
	### - 1995	-1,06
	### - 2000	12,76
	### - 2005	11,55
	### - 2010	9,60
	### - 2015	11,15
	### - 2020	4,61
10 YRS	### - 1990	12,12
	### - 2000	5,62
	### - 2010	10,57
	### - 2020	7,83
15 YRS	### - 1990	12,92
	### - 2005	7,56
	### - 2020	8,42
20 YRS	### - 2000	8,82
	### - 2020	9,19
25 YRS	### - 2020	9,90
ALL YRS	- 2020	10,38

STANDARD DEVIATIONS OVER SELECTED INTERVALS		
5 YRS	### - 1980	5,03
	### - 1985	9,38
	### - 1990	5,09
	### - 1995	4,91
	### - 2000	4,52
	### - 2005	4,36
	### - 2010	8,03
	### - 2015	3,75
	### - 2020	4,81
10 YRS	### - 1990	7,15
	### - 2000	8,52
	### - 2010	6,17
	### - 2020	5,32
15 YRS	### - 1990	6,43
	### - 2005	7,74
	### - 2020	6,12
20 YRS	### - 2000	8,33
	### - 2020	5,78
25 YRS	### - 2020	5,65
ALL YRS	- 2020	7,88

Source: MSCI REALPAC Canada Annual Property Index (unfrozen) Published Quarterly © Copyright 2021. All Rights Reserved.

Tracks the unlevered returns of income-producing, investment-grade properties held

or managed by pension funds, life insurance companies, and real estate managers.

1973-1985: the total return was provided by Morguard Investments Limited

1985-1999: based on the Russell Canadian Property Index™ (RCPI)

2000-2017: based on REALpac/IPD Canada Property Index

2018 onwards: based on MSCI REALPAC Canada Annual Property Index (unfrozen) Published Quarterly, which can be downloaded from: [www.msci.com/public-private-real-estate-indexes](http://www.msci.com/public-private-real-estate-indexes)

**TABLE 8A**  
**PENSION PLAN ASSET MEDIAN RETURNS**

MEDIAN INVESTMENT RESULTS ANNUAL RATES OF RETURN						
YEAR	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	TOTAL FIXED INCOME
1960	9,5	4,1	7,6	-	-	11,4
1961	13,3	30,1	16,9	-	-	8,8
1962	2,0	-5,1	-7,4	4,9	-	5,1
1963	8,1	13,8	25,9	5,5	-	5,6
1964	11,1	23,6	13,7	6,3	-	6,5
1965	3,5	5,5	7,1	1,3	-	1,2
1966	-2,3	-7,7	-2,8	0,0	-	0,0
1967	7,6	15,8	29,9	0,3	-	0,6
1968	9,4	22,1	4,0	1,9	-	2,4
1969	-3,2	-1,8	-14,4	-2,0	-	-5,4
1970	1,3	-4,4	-13,3	16,3	-	9,9
1971	12,5	11,6	17,3	15,6	-	12,0
1972	18,4	28,9	15,7	7,6	-	8,3
1973	-2,1	-4,3	-22,0	3,2	-	3,5
1974	-12,7	-25,7	-30,1	-0,1	-	2,7
1975	13,2	18,0	31,6	9,2	-	9,8
1976	12,4	8,0	17,2	18,5	-	15,5
1977	8,7	7,9	1,0	9,2	-	10,0
1978	13,5	29,4	15,8	4,9	-	6,9
1979	15,0	38,3	19,7	0,5	-	6,6
1980	18,0	33,4	38,0	6,0	-	8,8
1981	1,6	-9,1	-7,6	3,3	-	8,9
1982	22,6	9,2	25,7	33,7	-	26,1
1983	20,0	34,8	22,8	11,2	-	11,9
1984	9,2	0,8	7,0	15,8	-	14,7
1985	23,6	26,6	38,5	21,9	14,2	19,1
1986	13,4	11,6	16,4	13,6	11,9	13,2
1987	3,8	3,8	-1,7	3,9	8,9	5,1
1988	10,5	13,3	8,2	9,2	9,7	9,5
1989	15,9	20,1	23,5	12,8	12,8	12,6
1990	-0,8	-13,7	-7,0	7,9	11,0	5,5
1991	17,4	12,7	28,8	21,9	16,7	-0,4
1992	5,9	-2,5	16,5	10,3	10,0	10,0
1993	21,4	29,4	15,4	18,4	10,6	-6,5
1994	-0,7	1,3	5,3	-4,3	1,3	-3,0
1995	17,4	15,0	20,8	21,0	12,3	-0,1
1996	18,8	29,0	16,4	11,9	9,9	2,4
1997	14,9	19,3	22,2	9,7	5,3	11,8
1998	8,0	-1,8	26,4	9,4	7,0	11,6
1999	11,4	24,1	17,0	-1,3	4,2	9,7
2000	9,8	18,6	-6,3	10,5	9,0	9,4
2001	0,6	-0,8	-9,7	8,1	8,3	9,1
2002	-3,9	-7,3	-19,7	9,3	7,6	8,8
2003	13,5	26,7	8,1	7,0	7,0	9,1
2004	10,1	15,7	6,5	7,2	7,4	11,2
2005	11,8	24,1	6,0	6,5	5,9	16,2
2006	12,3	18,0	20,4	4,1	6,0	18,0
2007	1,5	9,0	-10,0	3,5	5,8	18,9
2008	-15,9	-31,3	-24,7	4,9	6,7	4,8
2009	16,2	33,9	13,6	7,4	5,4	-8,0
2010	10,4	16,8	6,0	7,7	8,2	10,5
2011	0,5	-8,7	-4,1	9,6	7,6	13,7
2012	9,4	10,5	14,9	4,6	3,7	11,3
2013	14,2	21,2	35,0	-0,8	2,6	8,8
2014	11,9	10,3	11,7	9,1	6,5	6,3
2015	5,4	-7,5	16,2	3,5	3,9	6,2
2016	6,8	21,0	5,0	2,3	2,4	8,7
2017	9,7	9,2	15,0	2,7	0,8	11,0
2018	-0,7	-9,1	-0,5	1,3	4,2	12,8
2019	14,0	20,8	20,4	7,1	4,4	8,7
2020	9,2	4,8	10,6	9,9	6,3	-0,1

Source: RBC Investor & Treasury Services © Copyright 2021. All Rights Reserved.

1960-1999: the data was provided by SEI Financial Services

2000: the data was provided by Royal Trust Investment Services

2001-2004: based on RBC Global Services - Benchmark

2005 onwards: based on RBC Investor & Treasury Services – Benchmark



**TABLE 8B**  
**PENSION PLAN 1st QUARTILE ASSET RETURNS**

1st QUARTILE INVESTMENT RESULTS ANNUAL RATES OF RETURN							
YEAR	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
1960	.	.	.	.	.	.	.
1961	.	.	.	.	.	.	.
1962	.	.	.	.	.	.	.
1963	.	.	.	.	.	.	.
1964	.	.	.	.	.	.	.
1965	.	.	.	.	.	.	.
1966	.	.	.	.	.	.	.
1967	.	.	.	.	.	.	.
1968	.	.	.	.	.	.	.
1969	.	.	.	.	.	.	.
1970	.	.	.	.	.	.	.
1971	.	.	.	.	.	.	.
1972	.	.	.	.	.	.	.
1973	.	.	.	.	.	.	.
1974	.	.	.	.	.	.	.
1975	.	.	.	.	.	.	.
1976	.	.	.	.	.	.	.
1977	.	.	.	.	.	.	.
1978	.	.	.	.	.	.	.
1979	.	.	.	.	.	.	.
1980	.	.	.	.	.	.	.
1981	.	.	.	.	.	.	.
1982	.	.	.	.	.	.	.
1983	.	.	.	.	.	.	.
1984	.	.	.	.	.	.	.
1985	.	.	.	.	.	.	.
1986	.	.	.	.	.	.	.
1987	5,6	6,3	.	5,4	.	.	6,5
1988	11,4	16,0	12,9	10,2	11,3	17,0	10,3
1989	16,8	22,3	30,2	13,6	13,3	16,2	13,2
1990	0,4	-12,1	-1,2	8,9	12,2	6,5	10,2
1991	19,0	15,0	33,1	23,0	18,5	2,0	21,4
1992	7,8	1,5	21,3	11,0	10,3	-2,7	10,6
1993	23,9	32,3	24,3	19,2	14,4	-1,9	18,1
1994	0,9	3,5	8,3	-3,5	5,0	1,3	-2,2
1995	18,7	17,2	25,1	22,0	15,9	5,6	20,4
1996	20,0	33,6	19,5	12,5	11,8	5,1	11,7
1997	16,4	23,0	29,5	10,1	7,4	15,4	9,5
1998	9,9	0,6	35,7	9,7	8,2	15,9	9,1
1999	15,7	31,7	28,4	-1,0	6,1	14,4	-0,4
2000	13,7	26,3	3,6	11,2	11,5	11,7	10,3
2001	4,6	5,9	-3,7	8,6	9,6	11,7	8,3
2002	-1,0	-2,6	-16,1	10,3	9,4	11,7	9,3
2003	15,5	29,7	9,9	7,5	7,6	10,4	7,1
2004	11,3	18,0	8,2	7,9	8,1	17,6	7,5
2005	13,1	28,0	7,7	7,4	7,0	19,4	6,4
2006	13,5	20,2	22,8	4,4	7,0	26,8	4,4
2007	2,7	11,7	-7,4	4,1	7,3	20,9	3,7
2008	-12,7	-28,7	-22,4	6,6	8,3	8,4	5,9
2009	18,2	38,9	16,1	9,5	6,5	-5,9	9,0
2010	11,4	18,2	7,2	9,5	9,6	11,8	7,9
2011	2,6	-5,8	-2,4	11,9	9,0	20,5	9,4
2012	10,1	13,3	16,6	5,4	5,9	16,4	4,9
2013	18,4	24,7	38,5	0,6	3,1	11,2	0,8
2014	13,5	12,9	14,4	13,0	9,3	8,0	8,6
2015	7,3	-3,1	20,6	3,8	4,7	10,8	3,5
2016	9,8	27,6	9,4	3,0	3,1	10,2	2,4
2017	10,8	10,7	18,2	4,2	1,4	13,8	3,9
2018	0,0	-7,0	0,3	1,9	4,8	14,5	1,9
2019	15,7	22,9	21,2	9,9	5,1	11,0	6,7
2020	11,6	6,4	12,4	11,6	7,0	3,1	10,9

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TABLE 8B (Cont'd)

GEOMETRIC AVERAGES OVER SELECTED INTERVALS							
	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
5 YRS	1971 - 1975	.	.	.	.	.	.
	1976 - 1980	.	.	.	.	.	.
	1981 - 1985	.	.	.	.	.	.
	1986 - 1990	.	.	.	.	.	.
	1991 - 1995	13,74	13,38	22,15	13,89	12,72	0,82
	1996 - 2000	15,09	22,42	22,81	8,39	8,98	12,43
	2001 - 2005	8,53	15,11	0,69	8,33	8,34	14,10
	2006 - 2010	6,03	9,46	1,89	6,79	7,73	11,82
	2011 - 2015	10,26	7,78	16,82	6,83	6,37	13,29
	2016 - 2020	9,45	11,41	12,05	6,03	4,26	10,42
MEAN	1991 - 2020	10,47	13,16	12,38	8,35	8,03	10,39
S.DEV.	1991 - 2020	3,37	5,20	9,70	2,86	2,83	4,90
10 YRS	1971 - 1980	.	.	.	.	.	.
	1981 - 1990	.	.	.	.	.	.
	1991 - 2000	14,41	17,81	22,48	11,10	10,83	6,46
	2001 - 2010	7,27	12,25	1,29	7,56	8,03	12,96
	2011 - 2020	9,85	9,58	14,41	6,43	5,31	11,85
MEAN	1991 - 2020	10,47	13,16	12,38	8,35	8,03	10,39
S.DEV.	1991 - 2020	3,62	4,20	10,70	2,44	2,76	3,47
15 YRS	1976 - 1990	.	.	.	.	.	.
	1991 - 2005	12,42	16,90	14,73	10,17	9,99	8,95
	2006 - 2020	8,56	9,54	10,08	6,55	6,11	11,84
25 YRS	1996 - 2020	9,83	13,12	10,52	7,27	7,12	12,41
ALL YRS	- 2020	10,22	12,46	12,46	8,48	8,41	10,63
							7,85

STANDARD DEVIATIONS OVER SELECTED INTERVALS							
	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
5 YRS	1971 - 1975	.	.	.	.	.	.
	1976 - 1980	.	.	.	.	.	.
	1981 - 1985	.	.	.	.	.	.
	1986 - 1990	.	.	.	.	.	.
	1991 - 1995	9,42	12,38	9,02	11,03	5,29	3,33
	1996 - 2000	3,71	13,24	12,46	5,42	2,53	4,44
	2001 - 2005	6,77	14,00	11,07	1,19	1,13	4,05
	2006 - 2010	12,17	24,93	18,26	2,63	1,23	12,56
	2011 - 2015	5,99	12,70	14,64	5,32	2,68	5,02
	2016 - 2020	5,82	13,72	8,16	4,35	2,11	4,53
10 YRS	1971 - 1980	.	.	.	.	.	.
	1981 - 1990	.	.	.	.	.	.
	1991 - 2000	6,77	13,00	10,26	8,75	4,40	7,16
	2001 - 2010	9,35	19,16	14,28	2,09	1,16	8,85
	2011 - 2020	5,59	12,62	11,51	4,60	2,54	4,76
15 YRS	1976 - 1990	.	.	.	.	.	.
	1991 - 2005	7,13	12,90	14,65	7,21	3,79	7,14
	2006 - 2020	8,07	16,75	14,59	3,95	2,44	7,72
25 YRS	1996 - 2020	7,39	15,79	14,90	3,88	2,53	6,44
ALL YRS	- 2020	7,59	14,98	14,41	5,75	3,74	7,29
							5,23

CORRELATIONS OF RATES OF RETURN							
	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
TOTAL FUND		0,82	0,85	0,06	-0,20	-0,51	-0,01
CANADIAN STOCKS	0,87		0,61	-0,15	-0,38	-0,34	-0,24
FOREIGN STOCKS	0,79	0,53		-0,34	-0,45	-0,34	-0,38
BONDS	0,42	0,13	0,19		0,82	-0,18	0,97
MORTGAGES	0,25	0,03	0,08	0,85		0,01	0,78
REAL ESTATE	-0,17	-0,06	-0,11	-0,33	-0,28		-0,21
TOTAL FIXED INCOME	0,41	0,12	0,20	0,98	0,89	-0,36	
	/						
	ALL YEARS						

**TABLE 8C**  
**PENSION PLAN 3rd QUARTILE ASSET RETURNS**

3rd QUARTILE INVESTMENT RESULTS ANNUAL RATES OF RETURN						
YEAR	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	TOTAL FIXED INCOME
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	.	.	.	.	.	.
1965	.	.	.	.	.	.
1966	.	.	.	.	.	.
1967	.	.	.	.	.	.
1968	.	.	.	.	.	.
1969	.	.	.	.	.	.
1970	.	.	.	.	.	.
1971	.	.	.	.	.	.
1972	.	.	.	.	.	.
1973	.	.	.	.	.	.
1974	.	.	.	.	.	.
1975	.	.	.	.	.	.
1976	.	.	.	.	.	.
1977	.	.	.	.	.	.
1978	.	.	.	.	.	.
1979	.	.	.	.	.	.
1980	.	.	.	.	.	.
1981	.	.	.	.	.	.
1982	.	.	.	.	.	.
1983	.	.	.	.	.	.
1984	.	.	.	.	.	.
1985	.	.	.	.	.	.
1986	.	.	.	.	.	.
1987	2,1	0,5	.	2,3	.	3,8
1988	9,2	10,6	3,1	8,2	9,1	8,3
1989	15,4	17,8	18,6	12,1	11,9	12,0
1990	-2,0	-15,9	-11,6	7,0	9,9	1,6
1991	15,6	9,6	21,0	20,2	12,3	-4,1
1992	4,9	-4,4	13,7	9,4	9,2	-11,0
1993	19,7	24,9	8,2	17,4	9,2	-12,7
1994	-1,4	-2,6	2,8	-5,5	0,2	-5,6
1995	16,5	11,6	13,3	20,1	10,2	-4,3
1996	17,9	25,9	12,3	11,2	9,4	-1,7
1997	13,0	12,7	15,9	8,8	4,8	6,9
1998	5,7	-5,1	18,5	9,2	6,4	4,5
1999	7,1	12,9	12,5	-2,0	3,5	6,6
2000	7,6	10,5	-10,6	10,3	7,4	8,4
2001	-1,9	-8,2	-11,9	7,7	7,4	6,5
2002	-5,7	-13,1	-21,9	8,8	7,0	6,5
2003	12,4	24,7	6,5	6,6	6,1	5,5
2004	8,5	13,8	3,5	6,9	6,4	8,1
2005	10,0	20,2	2,3	5,6	5,0	11,6
2006	11,2	15,4	19,1	4,0	4,8	13,1
2007	0,5	6,4	-11,8	2,9	4,7	16,6
2008	-19,2	-34,8	-27,0	2,7	6,0	3,0
2009	14,9	27,9	10,6	5,4	4,4	-10,2
2010	9,5	14,2	4,6	6,9	5,6	4,0
2011	-1,6	-11,1	-6,4	8,4	6,1	10,7
2012	8,6	8,0	12,7	3,6	3,0	9,3
2013	11,0	16,6	32,4	-3,6	0,9	7,2
2014	9,9	8,1	9,9	7,9	5,1	5,2
2015	4,3	-9,3	13,3	3,0	3,5	5,8
2016	5,1	17,4	2,0	1,7	1,9	5,7
2017	7,8	6,5	14,1	1,3	0,1	7,6
2018	-2,1	-11,6	-3,8	0,5	2,6	10,5
2019	12,0	15,7	17,5	5,2	3,6	6,9
2020	7,8	-1,5	7,6	8,8	5,7	-1,9

TABLE 8C (Cont'd)

GEOMETRIC AVERAGES OVER SELECTED INTERVALS							
PERIOD	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
5 YRS 1971 - 1975	.	.	.	.	.	.	.
1976 - 1980	.	.	.	.	.	.	.
1981 - 1985	.	.	.	.	.	.	.
1986 - 1990	.	.	.	.	.	.	.
1991 - 1995	10,77	7,30	11,63	11,87	8,14	-7,61	11,43
1996 - 2000	10,17	10,93	9,18	7,39	6,28	4,88	7,02
2001 - 2005	4,41	6,35	-4,95	7,11	6,38	7,62	6,65
2006 - 2010	2,58	3,18	-2,37	4,37	5,10	4,87	4,51
2011 - 2015	6,34	1,89	11,71	3,78	3,70	7,63	3,93
2016 - 2020	6,03	4,72	7,19	3,47	2,77	5,68	3,16
MEAN	1991 - 2020	6,68	5,69	5,19	6,29	5,38	3,70
S.DEV.	1991 - 2020	3,20	3,23	7,26	3,19	1,95	5,75
10 YRS 1971 - 1980	.	.	.	.	.	.	.
1981 - 1990	.	.	.	.	.	.	.
1991 - 2000	10,47	9,10	10,40	9,61	7,20	-1,56	9,20
2001 - 2010	3,49	4,75	-3,67	5,73	5,74	6,24	5,58
2011 - 2020	6,18	3,30	9,43	3,63	3,24	6,65	3,54
MEAN	1991 - 2020	6,68	5,69	5,19	6,29	5,38	3,70
S.DEV.	1991 - 2020	3,52	3,02	7,86	3,03	2,01	4,63
15 YRS 1976 - 1990	.	.	.	.	.	.	.
1991 - 2005	8,41	8,18	5,03	8,77	6,93	1,41	8,35
2006 - 2020	4,97	3,26	5,35	3,87	3,85	6,05	3,86
25 YRS 1996 - 2020	5,88	5,37	3,94	5,21	4,84	6,13	5,04
ALL YRS	- 2020	6,59	5,30	4,95	6,42	5,82	4,02
							6,32

STANDARD DEVIATIONS OVER SELECTED INTERVALS							
PERIOD	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
5 YRS 1971 - 1975	.	.	.	.	.	.	.
1976 - 1980	.	.	.	.	.	.	.
1981 - 1985	.	.	.	.	.	.	.
1986 - 1990	.	.	.	.	.	.	.
1991 - 1995	8,92	11,91	6,79	10,89	4,66	4,02	9,61
1996 - 2000	5,09	11,04	11,65	5,39	2,29	3,96	4,61
2001 - 2005	7,96	17,09	12,13	1,20	0,92	2,40	1,21
2006 - 2010	13,69	23,98	18,46	1,77	0,67	10,44	1,62
2011 - 2015	5,16	12,10	13,79	4,81	1,99	2,32	3,40
2016 - 2020	5,22	12,12	8,68	3,49	2,07	4,63	2,43
10 YRS 1971 - 1980	.	.	.	.	.	.	.
1981 - 1990	.	.	.	.	.	.	.
1991 - 2000	6,86	10,98	9,05	8,49	3,60	7,58	7,52
2001 - 2010	10,58	19,65	14,83	2,03	1,02	7,25	1,75
2011 - 2020	4,89	11,51	11,17	3,97	1,97	3,59	2,82
15 YRS 1976 - 1990	.	.	.	.	.	.	.
1991 - 2005	7,54	12,73	12,20	6,97	2,96	7,59	6,21
2006 - 2020	8,42	15,82	14,33	3,34	1,86	6,32	2,46
25 YRS 1996 - 2020	7,79	14,92	13,81	3,80	2,13	5,25	3,09
ALL YRS	- 2020	7,89	14,14	13,03	5,72	3,12	7,09
							5,02

CORRELATIONS OF RATES OF RETURN							
	TOTAL FUND	CANADIAN COMMON STOCKS	FOREIGN COMMON STOCKS	BONDS	MORTGAGES	REAL ESTATE	TOTAL FIXED INCOME
TOTAL FUND	/						
CANADIAN STOCKS	0,89	0,80	0,82	-0,07	-0,22	-0,43	-0,11
FOREIGN STOCKS	0,77	0,59	0,62	-0,31	-0,46	-0,16	-0,36
BONDS	0,46	0,19	0,08	-0,48	-0,48	-0,19	-0,46
MORTGAGES	0,24	0,02	-0,08	0,86	0,89	-0,37	0,98
REAL ESTATE	-0,24	-0,08	-0,16	-0,37	-0,28	-0,29	0,90
TOTAL FIXED INCOME	0,44	0,17	0,08	0,99	0,88	-0,39	-0,27
	/						
	ALL YEARS						

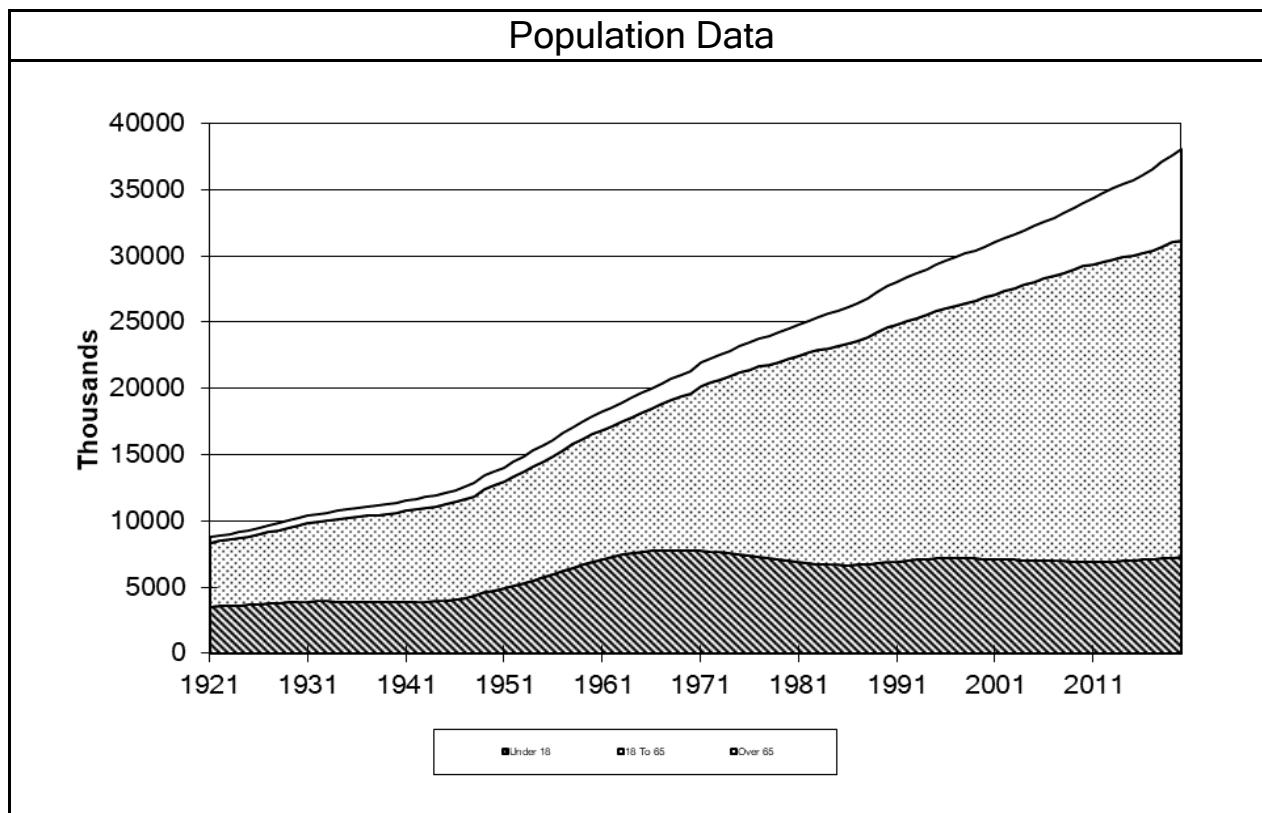
**TABLE 9**  
**HISTORICAL CANADIAN POPULATION AND**  
**DEPENDENCY RATIOS**

YEAR	TOTAL POPULATION V466668			YEAR	TOTAL POPULATION V466668		
	POP<18/ POP 18-65	POP>65/ POP 18-65	POP<18/ POP 18-65		POP<18/ POP 18-65	POP>65/ POP 18-65	POP<18/ POP 18-65
1921	8 788 000	72,6	8,7	1971	21 961 999	62,5	14,2
1922	8 919 000	72,0	8,8	1972	22 218 475	60,6	14,2
1923	9 010 000	71,6	8,8	1973	22 491 757	58,5	14,2
1924	9 143 000	71,1	9,0	1974	22 807 918	56,4	14,3
1925	9 294 000	70,6	9,1	1975	23 143 192	54,6	14,3
1926	9 451 000	70,3	9,2	1976	23 449 791	52,8	14,4
1927	9 637 000	69,3	9,3	1977	23 725 921	51,1	14,6
1928	9 835 000	68,4	9,4	1978	23 963 370	49,4	14,8
1929	10 029 000	67,7	9,5	1979	24 201 801	47,6	15,0
1930	10 208 000	67,1	9,7	1980	24 516 071	46,1	15,2
1931	10 376 700	66,6	9,8	1981	24 820 393	44,5	15,3
1932	10 510 000	65,5	9,9	1982	25 117 442	43,1	15,4
1933	10 633 000	64,3	10,0	1983	25 366 969	41,8	15,5
1934	10 741 000	63,2	10,1	1984	25 607 651	41,0	15,7
1935	10 845 000	62,0	10,3	1985	25 842 736	40,4	16,0
1936	10 950 000	61,0	10,5	1986	26 101 155	39,9	16,4
1937	11 045 000	59,9	10,6	1987	26 448 855	39,6	16,8
1938	11 152 000	58,9	10,7	1988	26 795 383	39,2	17,1
1939	11 267 000	58,0	10,8	1989	27 281 795	38,8	17,3
1940	11 381 000	57,1	11,0	1990	27 697 530	38,8	17,6
1941	11 506 700	56,5	11,2	1991	28 031 394	38,8	18,0
1942	11 654 000	55,7	11,3	1992	28 366 737	38,9	18,3
1943	11 795 000	55,3	11,5	1993	28 681 676	38,8	18,5
1944	11 946 000	55,1	11,7	1994	28 999 006	38,6	18,6
1945	12 072 000	55,1	11,8	1995	29 302 091	38,4	18,8
1946	12 292 000	55,3	12,0	1996	29 610 218	38,2	19,0
1947	12 551 000	56,0	12,3	1997	29 905 948	37,8	19,2
1948	12 823 000	57,1	12,7	1998	30 155 173	37,4	19,4
1949	13 447 000	58,5	13,0	1999	30 401 286	36,8	19,5
1950	13 712 000	59,3	13,2	2000	30 685 730	36,2	19,6
1951	14 009 400	60,6	13,5	2001	31 020 902	35,6	19,6
1952	14 459 000	61,9	13,6	2002	31 360 079	35,0	19,7
1953	14 845 000	62,9	13,7	2003	31 644 028	34,3	19,8
1954	15 287 000	64,2	13,8	2004	31 940 655	33,8	19,9
1955	15 698 000	65,5	13,9	2005	32 243 753	33,3	20,0
1956	16 080 800	66,7	14,0	2006	32 571 174	32,9	20,3
1957	16 610 000	68,0	13,9	2007	32 889 025	32,4	20,6
1958	17 080 000	69,5	13,9	2008	33 247 118	32,0	20,9
1959	17 483 000	70,5	14,0	2009	33 628 895	31,5	21,2
1960	17 870 000	71,7	14,1	2010	34 004 889	31,2	21,6
1961	18 238 200	72,8	14,3	2011	34 339 328	30,9	22,1
1962	18 583 000	73,4	14,3	2012	34 714 222	30,7	22,8
1963	18 931 000	73,9	14,4	2013	35 082 954	30,5	23,5
1964	19 291 000	73,8	14,4	2014	35 437 435	30,4	24,2
1965	19 644 000	73,2	14,4	2015	35 702 908	30,5	24,9
1966	20 014 900	72,0	14,3	2016	36 109 487	30,6	25,6
1967	20 378 000	70,3	14,3	2017	<b>36 545 295</b>	30,6	26,3
1968	20 701 100	68,5	14,2	2018	<b>37 065 178</b>	30,5	27,0
1969	21 001 000	66,7	14,2	2019	<b>37 593 384</b>	<b>30,3</b>	27,7
1970	21 297 000	64,9	14,3	2020	38 005 238	30,3	28,6

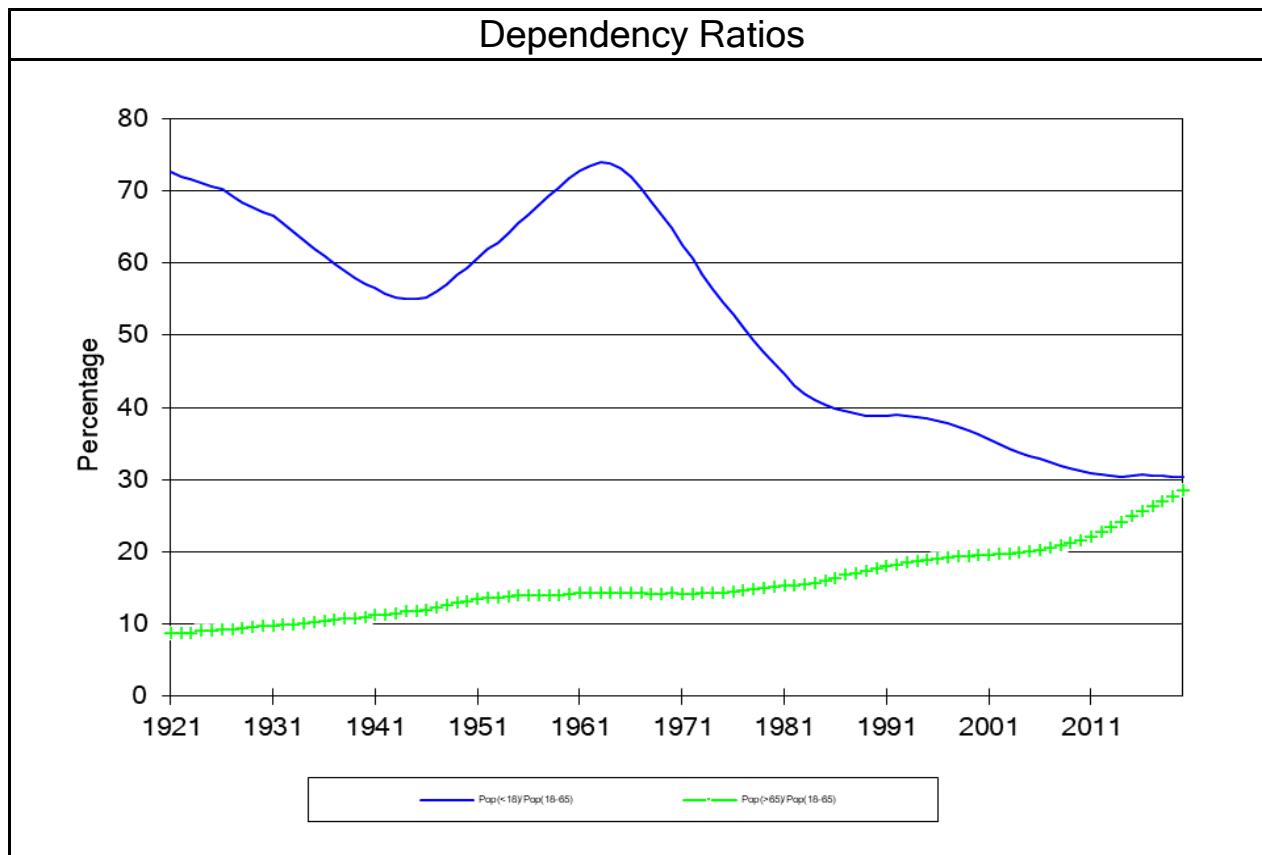
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**POP (<18)/POP (18-65):** This is the ratio, as a percentage, of the number of people under age 18 to the number of people aged 18 to 65.

**POP (>65)/POP (18-65):** This is the ratio, as a percentage, of the number of people over age 65 to the number of people aged 18 to 65.



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**TABLE 10**  
**GOVERNMENT OF CANADA SECURITIES BY TERM**

TABLE 10 ANALYSIS OF INTEREST RATES BY TERM OF SECURITY GOVERNMENT OF CANADA SECURITIES NOMINAL YIELDS TO MATURITY COMPOUNDED SEMI-ANNUALLY								
YEAR	3-MONTH V122541	6-MONTH V122552	2-YEAR V122538	3-YEAR V122539	5-YEAR V122540	7-YEAR V122542	10-YEAR V122543	LONG-TERM V122544
1936	0,75	.	.	.	.	.	.	.
1937	0,76	.	.	.	.	.	.	.
1938	0,68	.	.	.	.	.	.	.
1939	0,81	.	.	.	.	.	.	.
1940	0,64	.	.	.	.	.	.	.
1941	0,55	.	.	.	.	.	.	.
1942	0,52	.	.	.	.	.	.	.
1943	0,41	.	.	.	.	.	.	.
1944	0,37	.	.	.	.	.	.	.
1945	0,36	.	.	.	.	.	.	.
1946	0,40	.	.	.	.	.	.	.
1947	0,41	.	.	.	.	.	.	.
1948	0,41	.	.	.	.	.	.	.
1949	0,51	.	.	.	.	.	.	.
1950	0,63	.	.	.	.	.	.	.
1951	0,90	.	.	.	.	.	.	.
1952	1,30	.	.	.	.	.	.	.
1953	1,89	.	.	.	.	.	.	.
1954	1,06	.	.	.	.	.	.	.
1955	2,56	.	.	.	.	.	.	.
1956	3,67	.	.	.	.	.	.	.
1957	3,62	.	.	.	.	.	.	.
1958	3,49	.	.	.	.	.	.	.
1959	5,12	5,47	.	.	.	.	.	.
1960	3,25	3,54	.	.	.	.	.	.
1961	2,99	3,14	.	.	.	.	.	.
1962	3,91	4,01	.	.	.	.	.	.
1963	3,78	3,99	.	.	.	.	.	.
1964	3,82	3,96	.	.	.	.	.	.
1965	4,54	4,77	.	.	.	.	.	.
1966	4,96	5,03	.	.	.	.	.	.
1967	5,95	6,13	.	.	.	.	.	.
1968	6,24	6,47	.	.	.	.	.	.
1969	7,81	7,88	.	.	.	.	.	.
1970	4,44	4,52	.	.	.	.	.	.
1971	3,21	3,31	.	.	.	.	.	.
1972	3,65	3,87	.	.	.	.	.	.
1973	6,35	6,51	.	.	.	.	.	.
1974	7,12	6,97	.	.	.	.	.	.
1975	8,64	8,83	.	.	.	.	.	.
1976	8,14	7,93	.	.	.	.	8,85	.
1977	7,17	7,36	.	.	.	.	9,22	.
1978	10,46	10,71	.	.	.	.	.	9,95
1979	13,66	13,60	.	.	.	.	.	11,60
1980	17,01	15,30	.	.	12,53	.	.	13,04
1981	14,41	14,51	.	.	15,24	.	.	15,52
1982	9,80	9,39	10,03	10,14	10,42	.	11,31	11,92
1983	9,71	9,86	10,33	10,48	10,98	.	11,72	12,29
1984	9,84	10,16	10,18	10,53	10,90	.	11,52	11,99
1985	9,24	9,26	8,98	9,06	9,20	9,43	9,63	9,99
1986	8,24	8,48	8,55	8,49	8,63	8,65	8,74	8,90
1987	8,41	9,01	9,62	9,71	9,78	9,93	10,02	10,29
1988	10,94	11,40	10,56	10,27	10,27	10,26	10,17	10,00
1989	12,22	12,04	10,92	10,38	9,77	9,72	9,56	9,37
1990	11,47	11,40	10,46	10,41	10,27	10,38	10,34	10,40
1991	7,42	7,37	7,31	7,69	7,87	8,18	8,32	9,00
1992	7,11	7,17	6,93	7,08	7,34	7,84	7,86	8,36
1993	3,86	4,02	4,61	4,91	5,73	6,34	6,57	7,28
1994	7,18	8,11	8,84	9,00	8,99	9,08	9,07	9,13
1995	5,54	5,65	5,89	6,16	6,64	6,99	7,11	7,63
1996	2,80	3,18	4,03	4,85	5,44	6,02	6,37	7,09
1997	4,46	4,88	5,04	5,32	5,34	5,48	5,61	5,95
1998	4,70	4,76	4,72	4,83	4,76	4,82	4,89	5,23
1999	4,93	5,29	5,85	6,01	6,11	6,18	6,18	6,23
2000	5,56	5,58	5,27	5,30	5,30	5,34	5,35	5,56
2001	2,00	2,06	3,21	3,79	4,69	5,13	5,44	5,69
2002	2,67	2,79	3,18	3,55	4,06	4,47	4,88	5,42
2003	2,59	2,59	2,96	3,26	3,91	4,30	4,66	5,20
2004	2,48	2,58	3,05	3,26	3,74	4,08	4,39	4,92
2005	3,40	3,65	3,80	3,83	3,87	3,87	3,93	4,02
2006	4,16	4,17	3,98	3,95	3,95	3,98	4,05	4,10
2007	3,86	4,00	3,87	3,94	3,98	4,02	4,09	4,18
2008	0,95	0,98	1,09	1,32	1,69	2,13	2,69	3,45
2009	0,20	0,30	1,43	1,88	2,74	3,08	3,60	4,07
2010	1,00	1,14	1,69	1,90	2,45	2,73	3,16	3,54
2011	0,83	0,89	0,93	0,99	1,28	1,52	1,96	2,50
2012	0,98	1,04	1,12	1,20	1,37	1,55	1,82	2,37
2013	0,89	0,94	1,13	1,20	1,90	2,17	2,72	3,20
2014	0,91	0,94	1,01	1,06	1,34	1,46	1,79	2,33
2015	0,50	0,50	0,48	0,50	0,74	1,04	1,40	2,16
2016	0,47	0,56	0,78	0,87	1,16	1,43	1,73	2,34
2017	1,05	1,20	1,66	1,71	1,82	1,90	1,98	2,20
2018	1,67	1,81	1,91	1,92	1,93	1,94	1,98	2,15
2019	1,67	1,75	1,67	1,66	1,64	1,63	1,61	1,67
2020	0,12	0,15	0,20	0,25	0,41	0,48	0,70	1,24

Source: Bank of Canada, Department of Monetary and Financial Analysis.

This table gives the actual mid-market closing yields of selected Canada bond issues that mature approximately in the indicated term areas. The given annual rate is that compounded semi-annually. At times, some of the change in the yield occurring over a reporting period may reflect a switch to a more topical issue.





V62305783 - GDP AT MARKET PRICES (IN MILLIONS OF DOLLARS)				
YEAR	MONTH	3	6	9
		2 205 120	2 232 188	2 255 156
2018		2 270 664	2 308 236	2 320 440
2019		2 276 016	2 001 316	2 231 540
2020				2 307 372

Source: Statistics Canada © Copyright 2021. All Rights Reserved.

ESTIMATES OF POPULATION				
YEAR	ALL AGES	AGES 0-17	AGES 18-65	AGES >65
	V466668	V466965	V466674	V466686
2018	37 065 178	7 169 865	23 539 752	6 355 561
2019	37 593 384	7 215 115	23 783 199	6 595 070
2020	38 005 238	7 250 351	23 919 021	6 835 866

Source: Statistics Canada © Copyright 2021. All Rights Reserved.

S&P 500 - COMMON STOCK INDEX	
YEAR	DEC. 31
2018	2 506,85
2019	3 230,78
2020	3 756,07

Source: Standard & Poor's, a division of The McGraw-Hill Companies, Inc. © Copyright 2021. All Rights Reserved.

MORGAN STANLEY CAPITAL INTERNATIONAL GROSS INDICES IN \$U.S.	
YEAR	DEC. 31
	WORLD
2018	7 771,71
2019	9 979,03
2020	11 625,20
	WORLD EXCLUDING U.S.A.
2018	7 081,51
2019	8 721,86
2020	9 427,51
	EUROPE
2018	8 626,03
2019	10 746,98
2020	11 383,80
	PACIFIC BASIN
2018	6 712,12
2019	8 028,32
2020	9 012,06

Source: Morgan Stanley Capital International Inc. © Copyright 2021. All Rights Reserved.

## APPENDIX B

### TITLES AND PERIODICITIES OF CANSIM SERIES USED

<u>CANSIM I</u>	<u>Vector</u>	<u>TITLE</u>
B14007	V122541	Treasury Bill auction average yields (3-month)
–	V122552	Treasury Bill auction average yields (6-month)
–	V122538	Selected Government of Canada benchmark bond yields (2-year)
–	V122539	Selected Government of Canada benchmark bond yields (3-year)
–	V122540	Selected Government of Canada benchmark bond yields (5-year)
–	V122542	Selected Government of Canada benchmark bond yields (7-year)
–	V122543	Selected Government of Canada benchmark bond yields (10-year)
–	V122544	Selected Government of Canada benchmark bond yields (long-term)
B14009	V122558	Government of Canada marketable bonds, average yield (1–3 years)
B14010	V122485	Government of Canada marketable bonds, average yield (3–5 years)
B14011	V122486	Government of Canada marketable bonds, average yield (5–10 years)
B14013	V122487	Government of Canada marketable bonds, average yield (10+ years)
B14019	V80691338	Chartered Bank deposit rates for non-chequable savings deposits
B14045	V80691336	Chartered Bank – five-year Personal fixed-term deposit rate
B14056	V80691341	Chartered Bank – five-year Guaranteed Investment Certificate
–	V111666248	Daily average foreign exchange rates in Canadian dollars–U.S. dollars
C892268 <sup>(1)</sup>	V466668 <sup>(1)</sup>	Estimates of Population, both sexes, all ages
C892547 <sup>(1)</sup>	V466965 <sup>(1)</sup>	Estimates of Population, both sexes, 0–17 years
C892565 <sup>(1)</sup>	V466674 <sup>(1)</sup>	Estimates of Population, both sexes, 18–64 years
C892577 <sup>(1)</sup>	V466686 <sup>(1)</sup>	Estimates of Population, both sexes, 65 years and over
–	V41690973	Consumer Price Index, 2005 basket; All-items
–	V79311153	Employment and average weekly earnings: Industrial aggregate, seasonally adjusted
–	V2062811	Labour Force Survey estimates: both sexes, 15 years and over, seasonally adjusted
–	V122553	Government of Canada real-return bonds, long-term
–	V733833	Canada Mortgage and Housing Corporation, conventional mortgage lending rate, 5-year term
–	V62305783 <sup>(2)</sup>	GDP, expenditure-based, market prices at current prices, in millions of dollars, seasonally adjusted

Notes:

Unless indicated, data series are reported monthly.

(1) reported annually

(2) reported quarterly

## APPENDIX C

### SOURCES AND METHODS FOR EACH TABLE

#### **TABLES 1A–1D AND TABLES 2A–2B**

##### **CONSUMER PRICE INDEX:**

Statistics Canada V41690973 December 1923 to December 2020

**Method:** Change in December–December period.

##### **COMMON STOCK INDEX:**

###### **Prices:**

Urquhart & Buckley H641 December 1923 to December 1946  
(Corporate Composite)

B4202 (TSE Corporates) December 1946 to December 1956

S&P/TSX Total Return Index December 1956 to December 2020

##### **Method:**

###### *1956 and earlier:*

December purchase–December sale, plus dividends. The dividend yield used is a 12-month average. For the period January 1926 to December 1933, Standard and Poor's U.S. dividend yields were used (Ibbotson and Sinquefield, 1977). The values were adjusted by subtracting the average difference, .17%, between the Standard and Poor's dividend yield index and the S&P/TSX dividend yield index over the period January 1956 to December 1965. For the period January 1924 to December 1925, the average Standard and Poor's yield over the period January 1926 to December 1928 was used, 5.05%, reduced by the .17% correction.

###### *1957 and later:*

December to December ratio of the S&P/TSX Total Return Index.

##### **GOVERNMENT OF CANADA LONG BOND INDEX (OVER 10-YEAR TERM):**

Bank of Canada (1979) December 1923 to December 1936

CANSIM B14013/V122487 December 1936 to December 2020

##### **Method:**

Assume purchase of a bond with 18 years to maturity in December, sell after one year.

##### **CONVENTIONAL MORTGAGE INDEX:**

CANSIM B14024/V122497 December 1951 to November 2017

Statistics Canada V733833 December 2017 to December 2020

##### **Method:**

Assume a 25-year mortgage with interest rate fixed for five years (25 years for calendar year 1969 and earlier) is bought on December 31 and sold on the subsequent December 31 at then current yields. No allowance is made for administration expenses.

**91-DAY TREASURY BILLS:**

CANSIM B14007/V122541

January 1934 to December 2020

**Method:**

Assume purchase on January 1, rolled over quarterly until December 31.

**GOVERNMENT OF CANADA REAL-RETURN BOND INDEX (LONG-TERM):**

Statistics Canada V122553

November 1991 to December 2020

**Method:**

Assume purchase of a real-return bond with 28 years to maturity in December, sell after one year.

**PER CAPITA PRODUCTIVITY INDEX:****GNP; GDP:**

Firestone	1923–1927	(GNP)
CANSIM D31295	1926–1947	(GNP)
CANSIM D20031	Q4 1947 to Q4 1960	(GDP)
CANSIM D14840/V498086	Q4 1960 to Q4 1981	(GDP)
CANSIM Table 380-0064	Q4 1981 to Q4 2017	(GDP)
Statistics Canada V62305783	Q4 2017 to Q4 2020	(GDP, expenditure-based; Canada; seasonally adjusted at annual rates)

**EMPLOYED:**

Urquhart & Buckley C51	1923–1953
CANSIM D755002	December 1953 to December 1965
CANSIM D767286	December 1966 to December 1975
Statistics Canada V2062811	December 1976 to December 2020

**Method:**

Change in ratio of fourth-quarter GNP or GDP to December employed. For 1923–1953, the year-end number of employed was estimated as the geometric mean of the current and following year values; for 1966–1975, it was ratioed up by 3.31% to give continuity from 1975 to 1976. For 1923–1947, the year-end GNP was calculated as the geometric mean of the current and following year values.

**WAGE AND SALARY INDEX:**

Urquhart and Buckley D1	1923–1940
Canadian Statistical Review	1939–1962
CANSIM D1439	December 1961 to January 1983
CANSIM L57711	January 1983 to January 1991
CANSIM L186863/V1597104	January 1991 to December 2000
Statistics Canada V79311153	January 2001 to December 2020

**Method:**

Change in December–December period. For 1923–1961, the year-end index was estimated as the geometric mean of the current and following year values. CANSIM D1439 and CANSIM L57711 were linked as at January 1983. CANSIM I L186863 continued as CANSIM II V1597104; hence, CANSIM I L57711 and CANSIM II V1597104 were linked as at January 1991. CANSIM V1597104 and Statistics Canada V79311153 were linked as at January 2001.

NOTES:

1. The S&P/TSX Total Return Index and the S&P 500 Index are applicable to the last business day in December, while other series in this report are based on monthly, quarterly, or annual averages. All values are given as an effective rate (i.e., compounded annually).
2. Table 2A, headed “Average Nominal Annual Percentage Rates of Change/Return”, contains means and standard deviations. These refer to the annualized returns over five- and 10-year periods. The mean is a geometric mean of the applicable five- and 10-year annualized returns for the period. The standard deviation is the sample standard deviation of the non-overlapping annualized observations and is based on the arithmetic mean.
3. The table headed “Standard Deviations of Nominal Annual Percentages Rates of Change/Return” consists of standard deviations of one-year returns during the period indicated, again using the arithmetic mean.

**TABLES 3A–3C**

**FEDERAL BONDS (OVER 10-YEAR TERM):**

CANSIM B14013/V122487	January 1936 to December 2020
<b>Method:</b>	TABLE 3A      12-month average of yields to maturity
	TABLE 3B      Assume purchase of a bond with 18 years to maturity in December, sell after one year. Rate is effective.
	TABLE 3C      As for TABLE 3B, but adjusted for CPI.

**CONVENTIONAL MORTGAGES:**

CANSIM B14024/V122497	January 1951 to November 2017
Statistics Canada V733833	December 2017 to December 2020
<b>Method:</b>	TABLE 3A      12-month average of current mortgage rates
	TABLE 3B      Assume purchase of a 25-year mortgage, sell after one year. The interest rate is assumed fixed for five years (25 years if 1969 or earlier). Rate is effective.
	TABLE 3C      As for TABLE 3B, but adjusted for CPI.

**FIVE-YEAR GUARANTEED INVESTMENT CERTIFICATES:**

CANSIM B14023	January 1964 to October 1980
CANSIM B14056/V122526	November 1980 to September 2019
Statistics Canada V80691341	October 2019 to December 2020
<b>Method:</b>	TABLE 3A      12-month average of GIC current rates
	TABLE 3B      Assume purchase of a 5-year GIC in December, sell after one year. Rate is effective.
	TABLE 3C      As for TABLE 3B, but adjusted for CPI.

**NON-CHEQUABLE SAVINGS DEPOSITS:**

CANSIM B14019/V122493	January 1968 to September 2019
Statistics Canada V80691338	October 2019 to December 2020
<b>Method:</b>	TABLE 3A      12-month average of non-chequable savings deposit rates
	TABLE 3B      Use exp (12-monthly average of rates convertible monthly) – 1.
	TABLE 3C      As for TABLE 3B, but adjusted for CPI.

**REAL-RETURN BOND INDEX (LONG-TERM):**

Statistics Canada V122553	November 1991 to December 2020
<b>Method:</b>	12-month average of (real) yields to maturity
TABLE 3A	
TABLE 3B	Assume purchase of a bond with 28 years to maturity in December, sell after one year. Rate is effective, real.

TABLE 3C As for TABLE 3B, but adjusted for CPI.

**CORPORATE BONDS ("A" CURVE, 20-YEAR TERM):**

BLOOMBERG C28720Y Index	January 1993 – December 2020
<b>Method:</b>	12-month average of (real) yields to maturity
TABLE 3A	
TABLE 3B	Assume purchase of a bond with 20 years to maturity in December, sell after one year. Rate is effective.

TABLE 3C As for TABLE 3B, but adjusted for CPI.

**TABLES 4A–4C****91-DAY TREASURY BILLS:**

CANSIM B14007/V122541	January 1936 to December 2020
<b>Method:</b>	Average of 12-monthly values on semi-annual basis
TABLE 4A	
TABLE 4B	Assume January 1 purchase, quarterly rollover until December 31

TABLE 4C As for TABLE 4B, but adjusted for CPI.

**1- TO 3-YEAR CANADA BONDS:**

CANSIM B14009/V122558	January 1949 to December 2020
<b>Method:</b>	Average of 12-monthly values
TABLE 4A	
TABLE 4B	Assume a bond is bought in December with two years to maturity, sell after one year. Rate is effective.

TABLE 4C As for TABLE 4B, but adjusted for CPI.

**3- TO 5-YEAR CANADA BONDS:**

CANSIM B14010/V122485	January 1951 to December 2020
<b>Method:</b>	Average of 12-monthly values
TABLE 4A	
TABLE 4B	Assume a bond is bought in December with four years to maturity, sell after one year. Rate is effective.

TABLE 4C As for TABLE 4B, but adjusted for CPI.

**5- TO 10-YEAR CANADA BONDS:**

CANSIM B14011/V122486	January 1951 to December 2020
<b>Method:</b>	Average of 12-monthly values
TABLE 4A	
TABLE 4B	Assume a bond is bought in December with seven and a half years to maturity, sell after one year. Rate is effective.

TABLE 4C As for TABLE 4B, but adjusted for CPI.

**10-PLUS-YEAR CANADA BONDS:**

CANSIM B14013/V122487	January 1936 to December 2020
<b>Method:</b>	Average of 12-monthly values
TABLE 4A	
TABLE 4B	Assume a bond is bought in December with 18 years to maturity, sell after one year. Rate is effective.

TABLE 4C As for TABLE 4B, but adjusted for CPI.

**TABLE 5****EXCHANGE RATES:**

CANSIM V37432

January 1951 to April 2017

Statistics Canada V111666248

May 2017 to December 2020

**Method:**

Closing spot exchange rates were used up to April 2017. From May 2017, daily average exchange rates on the last business day were used instead, following the changes Bank of Canada made to its number, frequency, and calculation methodology of its published FX rates ([www.bankofcanada.ca/2016/12/bank-canada-announces-details-forthcoming-changes/](http://www.bankofcanada.ca/2016/12/bank-canada-announces-details-forthcoming-changes/)). Only end of December rates are shown in Table 5.

Monthly rates can be found in Appendix A.

## APPENDIX D

### DESCRIPTION OF METHODOLOGIES

In the case of the Consumer Price Index (CPI), the tabulated annual change is the ratio of indices in successive Decembers, expressed as a percentage. The indices for January to November inclusive are ignored. For some series, such as the GNP, the CANSIM series is quarterly, and the ratio of fourth-quarter indices is used.

For federal long-term bonds, it is assumed that a purchase is made in December of a newly issued 18-year bond with a redemption yield corresponding to then current yield rates. The coupon is collected semi-annually, and the bond is sold in the following December, just after the second coupon payment, at a price corresponding to then current yield rates. The total yield (capital gain plus coupon) is tabulated in these economic tables. The formula used is an extension of the one derived in Appendix II of Boyle, Brooks-Hill, and Paterson (1974). The formula for the bond value index,  $B_n$ , assuming the coupon is reinvested at the average rate for the year, is:

$$B_n = B_{n-1} \left[ v^{34} + .5r_{n-1} \left\{ \ddot{a}_{\overline{35}} + v^{35} + .25(r_{n-1} + r_n) \ddot{a}_{\overline{36}} \right\} \right]$$

where  $r_{n-1}$  is the coupon rate on new 18-year bonds in December of year  $n-1$ ,  $r_n$  is the coupon rate on new 18-year bonds in December of year  $n$  and  $v^{34}$ ,  $v^{35}$ ,  $\ddot{a}_{\overline{35}}$ ,  $\ddot{a}_{\overline{36}}$  and are calculated at the six-monthly coupon rate  $.5r_n$ . The mid-year coupon is assumed to be reinvested in an 18-year bond at the rate  $.5(r_{n-1} + r_n)$ . For instance, for the year 2006 one can obtain from Appendix A the values for B14013/V122487,  $r_{n-1} = 4.04\%$  and  $r_n = 4.11\%$ . Hence, the formula produces  $B_n / B_{n-1} = 1.0322$  in agreement with the return presented in Table 1A, 3.22%.

For real-return bonds, the formula used is analogous to that above for long-term bonds. It assumes purchase is made in December of a newly issued real-return bond with 28 years to maturity, at current yields. The coupon is collected semi-annually, and the bond is sold in the following December, just after the second coupon payment, at a price corresponding to then current yields for real-return bonds. Inflation adjustments to both principal and coupon interest are assumed, using a reference CPI from the second month prior to the assumed purchase, sale, or coupon payment.

For corporate bonds, the formula used is analogous to that above for long-term bonds. It assumes purchase is made in December of a newly issued corporate bond with 20 years to maturity, at the current yield. The coupon is collected semi-annually, and the bond is sold in the following December, just after the second coupon payment, at a price corresponding to the then current yield for corporate bonds.

Mortgage yields up to and including calendar year 1969 are calculated assuming a 25-year period for both amortization and the period for which interest is fixed.

For calendar years 1970 and later, mortgages are assumed to be amortized over 25 years, and to have an interest rate fixed for five years. This leads to a formula for the mortgage value index:

$$M_n = M_{n-1} \left\{ \left( \ddot{a}_{\overline{9}} + v^8 a'_{\overline{40}} \right) + \left( \ddot{a}_{\overline{10}} + v^9 a''_{\overline{40}} \right) / a''_{\overline{50}} \right\} / a'_{\overline{50}}$$

where  $v^8$ ,  $v^9$ ,  $\ddot{a}_{\overline{10}}$ , and  $\ddot{a}_{\overline{10}}$  are calculated at  $.5r_n$ ;  $a'_{\overline{40}}$  and  $a'_{\overline{50}}$  are calculated at  $0.5r_{n-1}$ ; and  $a''_{\overline{40}}$  and  $a''_{\overline{50}}$  are calculated at  $0.25(r_{n-1} + r_n)$ . For 2006, Appendix A gives for B14024/V122497 the values  $r_{n-1} = 5.60\%$  and  $r_n = 5.89\%$ . Hence, the formula gives the result  $M_n / M_{n-1} = 1.0470$  in agreement with Table 1A. In this formula, it is assumed that semi-annual payments are reinvested at mid-year at the rate  $0.25(r_{n-1} + r_n)$ . This convenient approximation introduces minimal errors. This formula is consistent with the formula for bonds taking into account the balance outstanding at the end of the term period.

Tables 1B and 2B present rates of return, rates of change, and interest rates net of increases in the CPI. The net rates for each year were calculated as  $\{(1 + i_n)/(1 + P_n)\} - 1$ , where  $i_n$  is the nominal rate for year  $n$  (on a year-end to year-end basis) and  $P_n$  is the change in the Price Index for the 12 months to the end of year  $n$ .

As indicated in the title pages to the tables, it was frequently necessary to combine several series so that statistics could be presented for the full period. Generally, the new series were used from the first year  $n$  at which figures were available. The annual percentage change for the last year of the older series is based on the quotient of the older series year-end  $n$  and year-end  $n - 1$  values. The annual percentage change for the new series is based on the quotient of the new series year-end  $n + 1$  and year-end  $n$  values.

Tables 3A and 4A present the yields to maturity for the various bonds and other fixed-income investments. For GICs, savings deposits, and mortgages the current rates for new investments are used. Tables 3A and 4A present for each calendar year the average of the rates for each of the 12 months during that year. Tables 3B and 4B present the rates of return, including capital changes, calculated as in Table 1A. Tables 3C and 4C give the rates of return adjusted for inflation.

## APPENDIX E

### REFERENCES AND BIBLIOGRAPHY

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