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A Comparison of the Economic Well-Being of Canadians and Americans

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Paper presented at the CSLS Conference on the State of Living Standards and Quality of Life in Canada, October 30-31, 1998, Ottawa, Ontario

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A Comparison of the Economic Well-being of Canadians and Americans

The objective of this paper is to compare trends and levels of the economic well-being of Canadians and Americans using a new framework for measuring economic well-being. This framework, conceptualized by Osberg (1985) and developed and estimated for Canada in Osberg and Sharpe (1998), identifies four components or dimensions of economic well-being: consumption flows, stocks of wealth, inequality, and economic security. This paper provides preliminary estimates for these components of economic well-being in the United States over the 1960-97 period and compares trends over the 1971-97 period and levels in 1997 between Canada and the United States. A key finding of the paper is that while the United States enjoyed greater increases in economic well-being that Canada over the 1971-97 period and particularly in the 1990s, the level of economic well-being in 1997 appears higher in Canada when importance is given inequality and economic security aspects of economic well-being.

I Trends in the Components of Economic Well-being in the United States[1]

Consumption flows

The consumption flow component consists of three sub-components: personal consumption; government spending on current goods and services including defense, but excluding interest payments; and unpaid labour. All sub-components are measured in real terms (1992 dollars) and on a per capita basis to control for population growth.

Personal consumption

The starting point for personal consumption flows is the estimate of this category from the national accounts. The methodology then allows for adjustment for a number of factors: underestimation of consumption due to growth of the underground economy; the impact of increased life expectancy on consumption; the impact of reduced family size of household economies of scale in consumption; and expenditures on regrettables.

In Canada, the estimate of consumption not captured by official statistics due to the underground economy is based on a Statistics Canada benchmark estimate for 1992 and the trend in the share of the self-employed, considered a proxy for growth in the underground economy given the greater opportunities for

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[1] See Mishel, Bernstein and Schmitt (1999) for comprehensive data and discussion of indicators of economic well-being in the United States, including family income, taxes, wages, jobs, wealth, and poverty.

the self-employed to shield transactions from the government compared to paid workers. The overall upward adjustment to consumption was quite small (4.1 per cent in 1997). The share of the self-employed in total employment has been falling over the 1971-97 period, in contrast to a rise in Canada. In addition, the Bureau of Economic Analysis has not provided a benchmark estimate of the size of the underground economy in the United States. For these two reasons, at this time no adjustment has been made to personal consumption for underestimation of consumption.

Life expectancy for both sexes in the United States has increased from an average 71.1 years in 1971 to 76.1 years in 1997, a 7.0 per cent increase or 0.26 per cent per year. Personal consumption has been adjusted upward to reflect this development (see Table 1).

Average family size in the United States has fallen from 3.57 in 1971 to 3.19 in 1997, a 10.6 per cent drop. Smaller family size means that fixed household expenses are spread over a smaller number of persons reducing equivalent income, although not at the same rate as the fall in family size. We have assumed that one half the change in family size translates into reduced equivalent income, so the index of equivalent income is down 5.3 per cent between 1971 and 1997 (see Table 1).

Certain consumption expenditures are defensive in nature or regrettable and to not add to consumer utility or economic well-being. While the list of such expenditures is somewhat arbitrary, we have included commuting costs, costs of auto accidents, cost of home pollution abatement equipment, and costs of crime. In 1997, these costs totaled $1,391 per capita (1992 dollars), or 7.6 per cent of total personal consumption (see Table 1). There was little change in the relative importance of these regrettables over the 1971-97 period (8.3 per cent in 1971). These expenditures are subtracted from personal consumption to obtain adjusted personal consumption.

Between 1971 and 1997, personal consumption increased 65.6 per cent, while adjusted personal consumption was up 69.2 per cent. The slightly greater increase in the latter is explained by the positive impact of increased life expectancy and the small fall in the relative expenditures on regrettables. These two developments more than offset the fall in equivalent income from declining family size.

Government spending

In contrast to personal consumption, growth in per capita government spending on current goods and services including defense but excluding interest payments has been very slow over the 1971-97 period, up only 11.2 per cent (see Table 2). In relative importance, this category of total consumption flows in 1997 represented less than one quarter the size of personal consumption.

Unpaid Work

Unfortunately, neither US statistical agencies (unlike Statistics Canada) nor private researchers at this time produce estimates of the value of unpaid household and volunteer work. Consequently, no estimates of this category of consumption flows are now included in the paper.

Total consumption flows

Adding together personal adjusted consumption and government spending on goods and services gives total consumption flows. Over the 1971-97 period, this variable rose 54.0 per cent (see Table 2 and Chart 1).

Stocks of Wealth

Stocks of wealth are defined to include stocks of physical capital, stocks of research and development capital, the value of natural resources, and stocks of human capital, with deductions for the net international investment position and the social cost of environmental degradation.

Table 3 shows the following developments in the above stocks:

- the per capita net capital stock, including residential and non-residential, increased 52.7 per cent over the 1971-97 period from $52,170 ($1992) in 1971 to $79,648 in 1997, according to statistics produced by the Bureau of Economic Analysis (BEA);

- the per capita real stock of R&D rose 58.5 per cent from $3,459 to $5,481 over the same period; according to experimental estimates produced by the BEA and extrapolated by the CSLS;

- the per capita real stock of natural resources fell 39.5 per cent from $3,713 in 1971 to $2,247 in 1997, according to experimental estimates produced by the BEA and extrapolated by the CSLS;

- the per capita real stock of human capital rose 47.1 per cent from $35,283 in 1971 to $51,887 in 1997, according to estimates compiled by the CSLS based on a crude cost of education methodology;

-the real net international investment position of the United States declined from a creditor position of $683 per capita in 1971 to a debtor position of 4,389 per capita in 1997 according to BEA statistics;

- the real social costs of CO_2 emissions, measured on a world scale with country allocations based on GDP shares, rose 7.8 per cent from $379 per

capita in 1971 to $409 per capita in 1997 according to CSLS estimates based on the widely used figure for CO_2 social costs of $20 US per ton..

-the total stock of capital rose 41.7 per cent from $94,930 ($1992) in 1971 to $134,465 in 1997 (Chart 1).

Inequality

The inequality component used in the construction of the index of economic well-being is in principle based on the Gini coefficient for after-tax income of all persons and a measure of poverty intensity (poverty rate x average percentage poverty gap), with the former given a weight of one quarter and the latter three quarters. Because of the lack of availability of the necessary data on the poverty gap at this time, the poverty rate has been used instead of poverty intensity. The poverty rate used is the official poverty rate produced by the US government (Weinberg, 1996).

The Gini coefficient for household income in the United States rose 14.9 per cent between 1971 and 1997 (see Table 4). The poverty rate for all persons rose 9.6 per cent from 12.5 per cent to 13.7 per cent over the period. Based on the weights mentioned above, the overall index of inequality rose 10.9 per cent over the period (Chart 1).

Economic Security

The economic security component of the index of economic well-being is composed of four sub-components: the risk of unemployment, the risk of illness, the risk of single-parent poverty, and the rise of poverty in old age. These sub-components are weighted by the relative shares of the populations concerned by the risks to calculate the overall index of economic security.

The risk of unemployment is determined by the employment rate or employment -population ratio, the proportion of the unemployed covered by unemployment insurance (UI), and the ratio of UI benefits to the average industrial wage. Between 1971 and 1997, the employment rate rose 12.7 per cent from 56.6 per cent to 63.8 per cent, the UI coverage rate fell 32.4 per cent from 52.0 per cent to 35.2 per cent, and the UI benefits ratio rose 7.1 per cent from 42.3 per cent to 45.4 per cent (see Table 5). The net effect of these developments, calculated by multiplying the indexes of the three variables, is that the risk of unemployment increased 18.4 per cent over the period.

Trends in the risk imposed by illness is defined by developments in the share of disposable income that goes to medical care. This share rose 30.5 per cent from 10.5 per cent in 1971 to 13.6 per cent in 1997, indicating an important increase in insecurity in the case of illness (see Table 6).

The risk of single-parent poverty is determined by the probability of family breakup, that is the divorce rate, and the poverty rate of single female parents. The divorce rate rose 29.7 per cent over the 1971-97 period (see Table 7). The official poverty rate for families headed by lone females actually fell 3.2 percent from 33.9 per cent to 32.8 per cent. These two trends are multiplied to obtain the overall risk of single parent poverty, which rose 25.5 per cent.

The risk of poverty in old age is determined by the official elderly poverty rate, which fell 50 per cent from 21,6 per cent in 1971 to 10.8 per cent in 1997 (see Table 8).

The overall index of economic security is calculated by weighting the four sub-components by the relative importance of the population concerned. These weights in 1997 are (see Table A13): risk of unemployment (0.3440); risk of illness (0.4537); risk of single parent poverty (0.1083); and risk of elderly poverty (0.0939). It is important to note that the constant 2 has been added to the indexes for risk of illness, risk of single parent poverty, and risk of elderly poverty to normalize these indices with that for the risk of unemployment where increases in the index indicate an increase in economic security. The overall index of economic security fell 18.2 per cent between 1971 and 1997, reflecting the declines in security in the areas of unemployment, health, and single parent poverty (see Table 9 and Chart 1).

Index of Economic Well-being

The index of economic well-being is calculated as a weighted average of the indexes of consumption flows, stocks of wealth, equality (the inequality index plus 2), and economic security where the weights reflect the importance accorded each component by the compiler, in turn based on the values of the compiler. We have assigned the following weights for our base case index: consumption flows (0.4); stocks of wealth (0.1); equality (0.25); and economic security (0.25).

Over the 1971-97 period, the index of economic well-being rose 18.5 per cent (see Table 10 and Chart 1). The increase was relatively steady over the period: from 1971 to 1980 it was up 4.4 per cent, from 1980 to 1989 9.8 per cent, and from 1989 to 1997 3.4 per cent. Over the 1971-97, real GDP per capita rose 58.8 per cent, more than three times the rate of advance of the index of economic well-being (Chart 2).

The rate of change in the index of economic well-being is very sensitive to the weights given the four components. If greater weight is given to consumption and less to equality and economic security, the index shows a larger increase. For example, with weights of 0.7 for consumption and 0.1 for equality, economic security and wealth, the index advanced nearly 40 per cent over the 1971-97 period, double the rate of increase with the weights used above (Chart 3).

Table 1: Components of Personal Consumption in the United States

Year	Personal Consumption per capita, (1992 $) (A)	% of Self Employed in Total Employment (B)	Index of Share of Self Employed Workers 1971=1.00 (C)	Index of Life Expectancy 1971=1.00 (D)	Average Family Size, Persons (E)	Index of Equivalent Income 1971=1.00 (F)	Real Personal Consumption per capita, (1992 $) G=A*D*F	Total Regrettable Cost Per Capita, (1992 $) (H)	Adjusted Personal Consumption, (1992$) (G-H)	Index of Adjusted Personal Consumption 1971=1.00
1960	7,929	13.83	1.551	0.955	3.67	1.014	7,682	659	7,024	0.698
1961	7,956	13.76	1.542	0.957	3.70	1.018	7,752	645	7,108	0.706
1962	8,222	13.20	1.479	0.958	3.67	1.014	7,991	668	7,323	0.728
1963	8,437	12.60	1.413	0.960	3.68	1.015	8,224	687	7,537	0.749
1964	8,819	12.32	1.381	0.961	3.70	1.018	8,634	708	7,925	0.788
1965	9,259	11.81	1.324	0.963	3.70	1.018	9,079	748	8,330	0.828
1966	9,676	11.15	1.250	0.964	3.69	1.017	9,489	765	8,724	0.867
1967	9,856	9.64	1.081	0.966	3.67	1.014	9,655	770	8,885	0.883
1968	10,315	9.33	1.047	0.967	3.63	1.008	10,063	810	9,253	0.920
1969	10,596	9.18	1.029	0.969	3.60	1.004	10,310	854	9,457	0.940
1970	10,718	8.94	1.002	0.971	3.58	1.001	10,417	877	9,540	0.948
1971	10,977	8.92	1.000	1.000	3.57	1.000	10,977	914	10,063	1.000
1972	11,510	8.71	0.977	1.001	3.53	0.994	11,462	974	10,488	1.042
1973	11,951	8.53	0.956	1.004	3.48	0.987	11,851	1,002	10,849	1.078
1974	11,759	8.59	0.963	1.013	3.44	0.982	11,691	959	10,732	1.067
1975	11,900	8.65	0.970	1.021	3.42	0.979	11,895	988	10,908	1.084
1976	12,449	8.37	0.938	1.025	3.39	0.975	12,442	1,052	11,390	1.132
1977	12,849	8.36	0.937	1.031	3.37	0.972	12,875	1,111	11,764	1.169
1978	13,261	8.38	0.939	1.034	3.33	0.966	13,247	1,149	12,098	1.202
1979	13,420	8.48	0.951	1.039	3.31	0.964	13,440	1,146	12,295	1.222
1980	13,216	8.70	0.976	1.037	3.29	0.961	13,162	1,094	12,068	1.199
1981	13,247	8.70	0.975	1.042	3.27	0.958	13,226	1,077	12,149	1.207
1982	13,272	8.94	1.002	1.048	3.25	0.955	13,283	1,044	12,239	1.216
1983	13,831	9.06	1.016	1.049	3.26	0.957	13,881	1,085	12,797	1.272
1984	14,418	8.89	0.997	1.051	3.24	0.954	14,448	1,145	13,303	1.322
1985	14,956	8.65	0.970	1.051	3.23	0.952	14,965	1,198	13,767	1.368
1986	15,411	8.51	0.954	1.051	3.21	0.950	15,375	1,195	14,180	1.409
1987	15,742	8.56	0.960	1.053	3.19	0.947	15,701	1,185	14,516	1.442
1988	16,214	8.63	0.967	1.053	3.17	0.944	16,123	1,215	14,908	1.481
1989	16,433	8.53	0.956	1.056	3.16	0.943	16,361	1,213	15,147	1.505
1990	16,532	8.50	0.953	1.060	3.17	0.944	16,550	1,250	15,300	1.520
1991	16,252	8.73	0.978	1.062	3.18	0.945	16,315	1,212	15,103	1.501
1992	16,523	8.41	0.942	1.066	3.17	0.944	16,629	1,240	15,389	1.529
1993	16,830	8.55	0.958	1.062	3.16	0.943	16,845	1,270	15,575	1.548
1994	17,214	8.65	0.970	1.065	3.20	0.948	17,378	1,302	16,076	1.598
1995	17,470	8.39	0.941	1.066	3.19	0.947	17,634	1,331	16,303	1.620
1996	17,759	8.28	0.928	1.070	3.20	0.948	18,023	1,361	16,662	1.656
1997	18,177	8.11	0.910	1.070	3.19	0.947	18,420	1,391	17,029	1.692

Sources: Self Employed Workers: Bureau of Labor Statistics, http://stats.bls.gov/webapps/legacy/cpsatab4.htm;
Average Family Size: Census Data, http://www.census.gov/population/socdemo/hh-fam/htabHH-6.txt;
Personal consumption: Appendix Table A1; Index of Life Expectancy: Appendix Table A4;
Total Regrettable Cost Per Capita: Appendix Table A3.
Note: Index of Equivalent Income was calculated on the basis of one half rate of change of family size.

Table 2: Components of Total Consumption in the United States

Year	Adjusted Personal Consumption per capita (1992 $)	Total Gov't Real Current Expenditure Per Capita (1992 $)	Total Consumption Flows Per Capita (1992 $)	Index 1971=1.01
1960	7,024	2,821	9,845	0.7214
1961	7,108	2,860	9,968	0.7304
1962	7,323	2,998	10,321	0.7563
1963	7,537	3,053	10,590	0.7760
1964	7,925	3,068	10,993	0.8055
1965	8,330	3,139	11,469	0.8404
1966	8,724	3,383	12,107	0.8872
1967	8,885	3,631	12,516	0.9171
1968	9,253	3,765	13,018	0.9539
1969	9,457	3,755	13,212	0.9681
1970	9,540	3,652	13,192	0.9666
1971	10,063	3,584	13,647	1.0000
1972	10,488	3,546	14,034	1.0283
1973	10,849	3,481	14,330	1.0500
1974	10,732	3,510	14,242	1.0436
1975	10,908	3,528	14,435	1.0578
1976	11,390	3,496	14,886	1.0908
1977	11,764	3,518	15,282	1.1198
1978	12,098	3,553	15,651	1.1469
1979	12,295	3,548	15,843	1.1609
1980	12,068	3,564	15,633	1.1455
1981	12,149	3,586	15,734	1.1530
1982	12,239	3,617	15,856	1.1619
1983	12,797	3,659	16,456	1.2058
1984	13,303	3,687	16,990	1.2450
1985	13,767	3,830	17,597	1.2894
1986	14,180	3,968	18,148	1.3298
1987	14,516	4,019	18,535	1.3581
1988	14,908	4,063	18,971	1.3901
1989	15,147	4,132	19,279	1.4127
1990	15,300	4,184	19,484	1.4277
1991	15,103	4,180	19,283	1.4130
1992	15,389	4,130	19,518	1.4302
1993	15,575	4,075	19,650	1.4399
1994	16,076	4,052	20,128	1.4749
1995	16,303	4,009	20,312	1.4884
1996	16,662	3,972	20,634	1.5120
1997	17,029	3,985	21,014	1.5398

Sources: Adjusted Personal consumption: Table 1;
Total Government Current Real Expenditures per capita: Appendix Table A2.

Table 3: Stocks of Wealth in the United States

Year	Total Per Capita Net Capital Stock (1992 $)	Per Capita Depreciated Accumulated Stock GERD (1992 $)	Total Real Per Capita Value of Nat. Res. (1992 $)	Human Capital per capita (1992 $)	Per Capita Real Net Int'l Investment Position (1992 $)	Per Capita Greenhouse Gas Emission Cost (1992 $)	Total Real Per Capita Wealth (1992 $)	Index 1971=1.00
1960	40,093	1,840	3,722	33,902	-	384.9	79,171	0.8340
1961	40,698	2,001	3,698	33,345	-	384.5	79,357	0.8360
1962	41,499	2,155	3,678	33,409	-	392.2	80,348	0.8464
1963	42,417	2,306	3,642	33,512	-	394.4	81,483	0.8583
1964	43,499	2,471	3,643	33,652	-	390.9	82,874	0.8730
1965	44,797	2,643	3,661	33,842	-	396.9	84,547	0.8906
1966	46,200	2,811	3,654	33,940	-	402.7	86,202	0.9081
1967	47,471	2,981	3,641	34,110	-	402.4	87,801	0.9249
1968	48,859	3,140	3,571	34,408	-	403.4	89,575	0.9436
1969	50,216	3,281	3,442	34,642	-	397.1	91,184	0.9605
1970	51,175	3,394	3,827	34,856	935.6	379.5	93,808	0.9882
1971	52,170	3,459	3,713	35,283	683.8	378.8	94,930	1.0000
1972	53,619	3,501	3,567	36,116	528.0	385.5	96,945	1.0212
1973	55,164	3,536	3,438	36,911	640.3	385.1	99,304	1.0461
1974	56,280	3,565	3,340	37,747	714.1	378.0	101,267	1.0668
1975	56,964	3,578	3,218	38,591	794.7	372.1	102,772	1.0826
1976	57,899	3,573	3,089	39,219	860.4	368.8	104,272	1.0984
1977	59,098	3,572	3,083	39,867	1,824.5	383.8	107,060	1.1278
1978	60,507	3,574	2,997	40,531	2,016.9	388.3	109,237	1.1507
1979	61,864	3,584	2,983	41,218	2,614.6	388.2	111,876	1.1785
1980	62,688	3,606	2,983	41,893	2,856.8	381.3	113,645	1.1971
1981	63,555	3,648	2,926	42,695	2,465.4	385.8	114,904	1.2104
1982	64,051	3,708	2,845	43,553	1,626.2	376.3	115,406	1.2157
1983	64,873	3,783	2,781	44,424	1,489.7	381.2	116,970	1.2322
1984	66,285	3,876	2,764	45,314	736.3	389.8	118,585	1.2492
1985	67,850	3,998	2,754	46,186	506.5	389.4	120,904	1.2736
1986	69,410	4,145	2,697	46,832	508.3	387.3	123,206	1.2979
1987	70,842	4,290	2,677	47,446	241.6	386.4	125,109	1.3179
1988	71,088	4,429	2,598	48,009	41.2	383.9	125,781	1.3250
1989	73,542	4,563	2,566	48,536	-221.4	382.8	128,602	1.3547
1990	74,361	4,682	2,554	48,983	-712.9	379.3	129,488	1.3640
1991	74,745	4,801	2,477	49,351	-1,070.1	373.3	129,929	1.3687
1992	75,230	4,918	2,442	49,685	-1,780.1	376.3	130,119	1.3707
1993	75,980	5,030	2,400	49,995	-680.9	388.8	132,336	1.3940
1994	76,976	5,145	2,360	50,343	-850.6	405.0	133,569	1.4070
1995	78,159	5,259	2,321	50,963	-1,894.7	406.2	134,401	1.4158
1996	78,790	5,372	2,284	51,445	-2,541.7	407.4	134,942	1.4215
1997	79,648	5,481	2,247	51,887	-4,389.4	408.5	134,465	1.4165

Sources: Total per Capita Net Capital Stock: Appendix Table A5;

Per Capita Depreciated Accumulated Stock GERD: Appendix Table A6;

Total Real per Capita Value of Natural Resources: Appendix Table A9;

Human Capital Per Capita: Appendix Table A8;

Real Net International Net Investment Position per Capita: Appendix Table A10.

Table 4: Index of Economic Equality for the United States

Year	Poverty Rate	Gini Coefficient	Overall index of Equality
1960	-1.776	-1.048	-1.594
1961	-1.752	-1.071	-1.582
1962	-1.680	-1.043	-1.521
1963	-1.560	-1.035	-1.429
1964	-1.520	-1.038	-1.399
1965	-1.384	-1.030	-1.296
1966	-1.176	-1.028	-1.139
1967	-1.136	-1.008	-1.104
1968	-1.024	-0.980	-1.013
1969	-0.968	-0.987	-0.973
1970	-1.008	-0.995	-1.005
1971	-1.000	-1.000	-1.000
1972	-0.952	-1.013	-0.967
1973	-0.888	-1.003	-0.917
1974	-0.896	-0.997	-0.921
1975	-0.984	-1.003	-0.989
1976	-0.944	-1.005	-0.959
1977	-0.928	-1.015	-0.950
1978	-0.912	-1.015	-0.938
1979	-0.936	-1.020	-0.957
1980	-1.040	-1.018	-1.034
1981	-1.120	-1.025	-1.096
1982	-1.200	-1.040	-1.160
1983	-1.216	-1.045	-1.173
1984	-1.152	-1.048	-1.126
1985	-1.120	-1.058	-1.105
1986	-1.088	-1.073	-1.084
1987	-1.072	-1.076	-1.073
1988	-1.040	-1.078	-1.050
1989	-1.024	-1.088	-1.040
1990	-1.080	-1.081	-1.080
1991	-1.136	-1.081	-1.122
1992	-1.184	-1.096	-1.162
1993	-1.208	-1.146	-1.193
1994	-1.160	-1.152	-1.158
1995	-1.104	-1.136	-1.112
1996	-1.096	-1.149	-1.109
1997	-1.096	-1.149	-1.109

Sources: Poverty Rate: Appendix Table A11; GINI Coefficient: Appendix Table A10.
Note: Weights are 0.75 for Poverty Rate, 0.25 for Gini Coefficient.

Table 5: Risk imposed by unemployment in the United States

Year	Employment rate	Insured Unemployment weekly, Average, Thous.	Unemployed, Thousands	% of the unemployed claiming regular benefits	Average weekly benefits paid, Current dollars	Average weekly earnings, total, Current dollars	Average weekly benefits/ average earnings (%)	ER Index	UI coverage	UI benefits	multiplicative
1960	56.1	2,071	3,852	53.8	32.87	80.67	40.75	0.9912	1.0341	0.9603	0.9842
1961	55.4	2,994	4,714	63.5	33.80	82.60	40.92	0.9788	1.2216	0.9644	1.1531
1962	55.5	1,946	3,911	49.8	34.56	85.91	40.23	0.9806	0.9570	0.9481	0.8897
1963	55.4	1,973	4,070	48.5	35.27	88.46	39.87	0.9788	0.9324	0.9396	0.8575
1964	55.7	1,753	3,786	46.3	35.92	91.33	39.33	0.9841	0.8905	0.9269	0.8123
1965	56.2	1,450	3,366	43.1	37.19	95.45	38.96	0.9929	0.8285	0.9182	0.7554
1966	56.9	1,129	2,875	39.3	39.75	98.82	40.22	1.0053	0.7553	0.9480	0.7198
1967	57.3	1,270	2,975	42.7	41.25	101.84	40.50	1.0124	0.8210	0.9546	0.7934
1968	57.5	1,187	2,817	42.1	43.43	107.73	40.31	1.0159	0.8104	0.9501	0.7822
1969	58.0	1,177	2,832	41.6	46.17	114.61	40.28	1.0247	0.7993	0.9494	0.7777
1970	57.4	2,070	4,093	50.6	50.34	119.83	42.01	1.0141	0.9727	0.9900	0.9766
1971	56.6	2,608	5,016	52.0	54.02	127.31	42.43	1.0000	1.0000	1.0000	1.0000
1972	57.0	2,192	4,882	44.9	56.76	136.90	41.46	1.0071	0.8636	0.9771	0.8498
1973	57.8	1,793	4,365	41.1	59.00	145.39	40.58	1.0212	0.7900	0.9564	0.7716
1974	57.8	2,558	5,156	49.6	64.25	154.76	41.52	1.0212	0.9542	0.9784	0.9534
1975	56.1	4,937	7,929	62.3	70.23	163.53	42.95	0.9912	1.1976	1.0121	1.2014
1976	56.8	3,846	7,406	51.9	75.16	175.45	42.84	1.0035	0.9988	1.0096	1.0119
1977	57.9	3,308	6,991	47.3	78.79	189.00	41.69	1.0230	0.9101	0.9825	0.9147
1978	59.3	2,645	6,202	42.6	83.67	203.70	41.08	1.0477	0.8202	0.9680	0.8319
1979	59.9	2,592	6,137	42.2	89.67	219.91	40.78	1.0583	0.8123	0.9610	0.8261
1980	59.2	3,837	7,637	50.2	98.95	235.10	42.09	1.0459	0.9663	0.9919	1.0025
1981	59.0	3,410	8,273	41.2	106.70	255.20	41.81	1.0424	0.7928	0.9854	0.8143
1982	57.8	4,592	10,678	43.0	119.34	267.26	44.65	1.0212	0.8271	1.0523	0.8889
1983	57.9	3,774	10,717	35.2	123.59	280.70	44.03	1.0230	0.6773	1.0376	0.7189
1984	59.5	2,560	8,539	30.0	123.47	292.86	42.16	1.0512	0.5766	0.9936	0.6023
1985	60.1	2,699	8,312	32.5	128.14	299.09	42.84	1.0618	0.6245	1.0097	0.6696
1986	60.7	2,739	8,237	33.3	135.65	304.85	44.50	1.0724	0.6395	1.0487	0.7193
1987	61.5	2,369	7,425	31.9	140.55	312.50	44.98	1.0866	0.6136	1.0600	0.7067
1988	62.3	2,135	6,701	31.9	144.97	322.02	45.02	1.1007	0.6128	1.0610	0.7156
1989	63.0	2,205	6,528	33.8	151.73	334.24	45.40	1.1131	0.6496	1.0698	0.7736
1990	62.8	2,575	7,047	36.5	161.56	345.35	46.78	1.1095	0.7028	1.1025	0.8597
1991	61.7	3,406	8,628	39.5	169.88	353.98	47.99	1.0901	0.7592	1.1310	0.9361
1992	61.5	3,348	9,613	34.8	173.64	363.61	47.75	1.0866	0.6698	1.1254	0.8191
1993	61.7	2,845	8,940	31.8	179.62	373.64	48.07	1.0901	0.6121	1.1329	0.7559
1994	62.5	2,746	7,996	34.3	182.16	385.86	47.21	1.1042	0.6605	1.1126	0.8115
1995	62.9	2,639	7,404	35.6	187.29	394.34	47.49	1.1113	0.6855	1.1193	0.8527
1996	63.2	2,656	7,236	36.7	189.51	406.26	46.65	1.1166	0.7060	1.0993	0.8666
1997	63.8	2,369	6,739	35.2	192.73	424.20	45.43	1.1272	0.6761	1.0707	0.8160

Table 6: Risk imposed by Illness in the United States

Year	Personal Disposable Income (Billions of 1992$)	Personal Medical Care Expenditures (Billions of 1992$)	% of Disposable income	Index
1960	1,565.4	136.7	8.73	-0.836
1961	1,615.8	141.7	8.77	-0.839
1962	1,693.7	153.3	9.05	-0.866
1963	1,755.5	162.7	9.27	-0.887
1964	1,881.9	180.5	9.59	-0.918
1965	2,000.2	188.9	9.44	-0.904
1966	2,106.6	197.6	9.38	-0.898
1967	2,198.4	204.8	9.32	-0.892
1968	2,298.2	220.8	9.61	-0.920
1969	2,373.6	237.2	9.99	-0.957
1970	2,465.6	250.8	10.17	-0.974
1971	2,568.3	268.3	10.45	-1.000
1972	2,685.7	286.4	10.66	-1.021
1973	2,875.2	307.6	10.70	-1.024
1974	2,854.2	320.2	11.22	-1.074
1975	2,903.6	337.3	11.62	-1.112
1976	3,017.6	353.5	11.71	-1.121
1977	3,115.4	371.2	11.92	-1.141
1978	3,276.0	385.7	11.77	-1.127
1979	3,365.5	401.1	11.92	-1.141
1980	3,385.7	415.5	12.27	-1.175
1981	3,464.9	436.4	12.59	-1.206
1982	3,495.6	442.2	12.65	-1.211
1983	3,592.8	459.7	12.80	-1.225
1984	3,855.4	472.4	12.25	-1.173
1985	3,972.0	490.7	12.35	-1.183
1986	4,101.0	510.3	12.44	-1.191
1987	4,168.2	537.3	12.89	-1.234
1988	4,332.1	561.3	12.96	-1.240
1989	4,416.8	575.8	13.04	-1.248
1990	4,498.2	602.8	13.40	-1.283
1991	4,500.0	621.6	13.81	-1.322
1992	4,626.7	646.6	13.98	-1.338
1993	4,703.9	655.3	13.93	-1.334
1994	4,805.1	662.1	13.78	-1.319
1995	4,964.2	674.9	13.60	-1.301
1996	5,076.9	688.1	13.55	-1.297
1997P	5,222.7	711.8	13.63	-1.305

Table 7: Risk imposed by "widowhood" in the United States

Year	Divorce rate (% of legally married couples) (A)	Poverty rate (%) for single women with children under 18 (B)	Index of A (A')	Index of B (B')	Multiplicative index A'*B'*-1 (1)
1960	0.92	42.4	0.582	1.251	-0.7283
1961	0.96	42.1	0.608	1.242	-0.7546
1962	0.94	42.9	0.595	1.265	-0.7529
1963	0.96	40.4	0.608	1.192	-0.7241
1964	1.00	36.4	0.633	1.074	-0.6796
1965	1.06	38.4	0.671	1.133	-0.7599
1966	1.09	33.1	0.690	0.976	-0.6736
1967	1.12	33.3	0.709	0.982	-0.6963
1968	1.25	32.3	0.791	0.953	-0.7538
1969	1.34	32.7	0.848	0.965	-0.8181
1970	1.49	32.5	0.943	0.959	-0.9041
1971	1.58	33.9	1.000	1.000	-1.0000
1972	1.70	32.7	1.076	0.965	-1.0379
1973	1.82	32.2	1.152	0.950	-1.0941
1974	1.93	32.1	1.222	0.947	-1.1567
1975	2.03	32.5	1.285	0.959	-1.2318
1976	2.11	33.0	1.335	0.973	-1.3000
1977	2.11	31.7	1.335	0.935	-1.2488
1978	2.19	31.4	1.386	0.926	-1.2839
1979	2.28	30.4	1.443	0.897	-1.2941
1980	2.26	32.7	1.430	0.965	-1.3797
1981	2.26	34.6	1.430	1.021	-1.4599
1982	2.17	36.3	1.373	1.071	-1.4707
1983	2.13	36.0	1.348	1.062	-1.4316
1984	2.15	34.5	1.361	1.018	-1.3848
1985	2.17	34.0	1.373	1.003	-1.3775
1986	2.12	34.6	1.342	1.021	-1.3695
1987	2.08	34.2	1.316	1.009	-1.3281
1988	2.07	33.4	1.310	0.985	-1.2908
1989	2.04	32.2	1.291	0.950	-1.2264
1990	2.09	33.4	1.323	0.985	-1.3033
1991	2.09	35.6	1.323	1.050	-1.3891
1992	2.12	35.4	1.342	1.044	-1.4011
1993	2.05	35.6	1.297	1.050	-1.3625
1994	2.05	34.6	1.297	1.021	-1.3243
1995	2.05	32.4	1.297	0.956	-1.2401
1996	2.05	32.6	1.297	0.962	-1.2477
1997	2.05	32.8	1.297	0.968	-1.2554

Sources: Data on Poverty rate for single women for 1978-1997 are from Economic Report of the President 1998, Statistical Table B-33 (http://www.gpo.ucop.edu/catalog/erp98_appen_b.html).
Data for 1960-1977 are from Economic Report of the President 1986, Statistical Table B-29.
Divorce rate for 1960-1990 are from the National Center for Health Statistics:
http://www.cdc.gov/nchswww/fastats/PDF/43-9s-t1.pdf
Divorce rate for 1991-1994 are Census Data:http://www.census.gov/prod/2/gen/96statab/vitlstat.pdf
Data for 1995, 1996, 1997 assumed to be equal to 1994 data.

Table 8: Risk imposed by Old Age in the United States

Year	Elderly poverty rate (2)	Poverty Rate (2) *Index*
1959	35.2	-1.630
1960	34.2	-1.581
1961	33.1	-1.534
1962	32.2	-1.489
1963	31.2	-1.444
1964	30.3	-1.401
1965	29.4	-1.360
1966	28.5	-1.319
1967	29.5	-1.366
1968	25.0	-1.157
1969	25.3	-1.171
1970	24.6	-1.139
1971	21.6	-1.000
1972	18.6	-0.861
1973	16.3	-0.755
1974	14.6	-0.676
1975	15.3	-0.708
1976	15.0	-0.694
1977	14.1	-0.653
1978	14.0	-0.648
1979	15.2	-0.704
1980	15.7	-0.727
1981	15.3	-0.708
1982	14.6	-0.676
1983	13.8	-0.639
1984	12.4	-0.574
1985	12.6	-0.583
1986	12.4	-0.574
1987	12.5	-0.579
1988	12.0	-0.556
1989	11.4	-0.528
1990	12.2	-0.565
1991	12.4	-0.574
1992	12.9	-0.597
1993	12.2	-0.565
1994	11.7	-0.542
1995	10.5	-0.486
1996	10.8	-0.500
1997	10.8	-0.500

Source: Elderly Poverty Rate are Census data: http://www.census.gov/hhes/poverty/histpov/hstpov3.html
Note: Elderly Poverty rate for 1997 assumed to be equal to 1996 data.

Table 9: Index of Economic Security for the United States

Year	Index 1 Women	Index 2 Old Age	Index 3 Health	Index 4 Unemployment	Weighted Index 1 Women	Weighted Index 2 Old Age	Weighted Index 3 Health	Weighted Index 4 Unemployment	Average Weighted Index
1960	1.2717	0.4188	1.1641	0.9842	0.2131	0.0378	0.5240	0.2875	1.0624
1961	1.2454	0.4658	1.1605	1.1531	0.2101	0.0419	0.5225	0.3356	1.1101
1962	1.2471	0.5114	1.1336	0.8897	0.2129	0.0459	0.5098	0.2577	1.0264
1963	1.2759	0.5556	1.1128	0.8575	0.2220	0.0496	0.4978	0.2481	1.0175
1964	1.3204	0.5985	1.0819	0.8123	0.2310	0.0534	0.4829	0.2352	1.0024
1965	1.2401	0.6402	1.0960	0.7554	0.2172	0.0571	0.4883	0.2191	0.9817
1966	1.3264	0.6806	1.1021	0.7198	0.2265	0.0613	0.4933	0.2099	0.9910
1967	1.3037	0.6343	1.1082	0.7934	0.2206	0.0574	0.4961	0.2321	1.0063
1968	1.2462	0.8426	1.0803	0.7822	0.2081	0.0767	0.4835	0.2303	0.9986
1969	1.1819	0.8287	1.0434	0.7777	0.1946	0.0758	0.4668	0.2306	0.9678
1970	1.0959	0.8611	1.0263	0.9766	0.1779	0.0789	0.4589	0.2919	1.0076
1971	1.0000	1.0000	1.0000	1.0000	0.1617	0.0912	0.4460	0.3011	1.0000
1972	0.9621	1.1389	0.9792	0.8498	0.1523	0.1036	0.4358	0.2597	0.9515
1973	0.9059	1.2454	0.9759	0.7716	0.1389	0.1133	0.4353	0.2389	0.9264
1974	0.8433	1.3241	0.9261	0.9534	0.1286	0.1199	0.4119	0.2977	0.9580
1975	0.7682	1.2917	0.8880	1.2014	0.1137	0.1167	0.3957	0.3796	1.0058
1976	0.7000	1.3056	0.8786	1.0119	0.0942	0.1189	0.3964	0.3270	0.9365
1977	0.7512	1.3472	0.8594	0.9147	0.1015	0.1215	0.3866	0.2971	0.9067
1978	0.7161	1.3519	0.8730	0.8319	0.0940	0.1213	0.3937	0.2729	0.8819
1979	0.7059	1.2963	0.8592	0.8261	0.0913	0.1154	0.3877	0.2731	0.8673
1980	0.6203	1.2731	0.8252	1.0025	0.0773	0.1127	0.3739	0.3346	0.8985
1981	0.5401	1.2917	0.7944	0.8143	0.0685	0.1129	0.3588	0.2721	0.8122
1982	0.5293	1.3241	0.7891	0.8889	0.0641	0.1152	0.3587	0.2998	0.8378
1983	0.5684	1.3611	0.7752	0.7189	0.0664	0.1180	0.3541	0.2442	0.7827
1984	0.6152	1.4259	0.8271	0.6023	0.0722	0.1226	0.3773	0.2050	0.7772
1985	0.6225	1.4167	0.8174	0.6696	0.0730	0.1209	0.3730	0.2284	0.7953
1986	0.6305	1.4259	0.8089	0.7193	0.0726	0.1210	0.3697	0.2467	0.8099
1987	0.6719	1.4213	0.7661	0.7067	0.0781	0.1198	0.3495	0.2427	0.7900
1988	0.7092	1.4444	0.7597	0.7156	0.0816	0.1223	0.3467	0.2461	0.7967
1989	0.7736	1.4722	0.7521	0.7736	0.0899	0.1245	0.3428	0.2657	0.8229
1990	0.6967	1.4352	0.7172	0.8597	0.0782	0.1215	0.3279	0.2974	0.8250
1991	0.6109	1.4259	0.6777	0.9361	0.0676	0.1210	0.3106	0.3242	0.8233
1992	0.5989	1.4028	0.6622	0.8191	0.0658	0.1216	0.3032	0.2831	0.7737
1993	0.6375	1.4352	0.6665	0.7559	0.0693	0.1262	0.3051	0.2612	0.7618
1994	0.6757	1.4583	0.6810	0.8115	0.0739	0.1301	0.3110	0.2798	0.7948
1995	0.7599	1.5139	0.6986	0.8527	0.0828	0.1372	0.3186	0.2936	0.8322
1996	0.7523	1.5000	0.7026	0.8666	0.0802	0.1385	0.3205	0.2988	0.8381
1997	0.7446	1.5000	0.6954	0.8160	0.0807	0.1409	0.3155	0.2807	0.8178

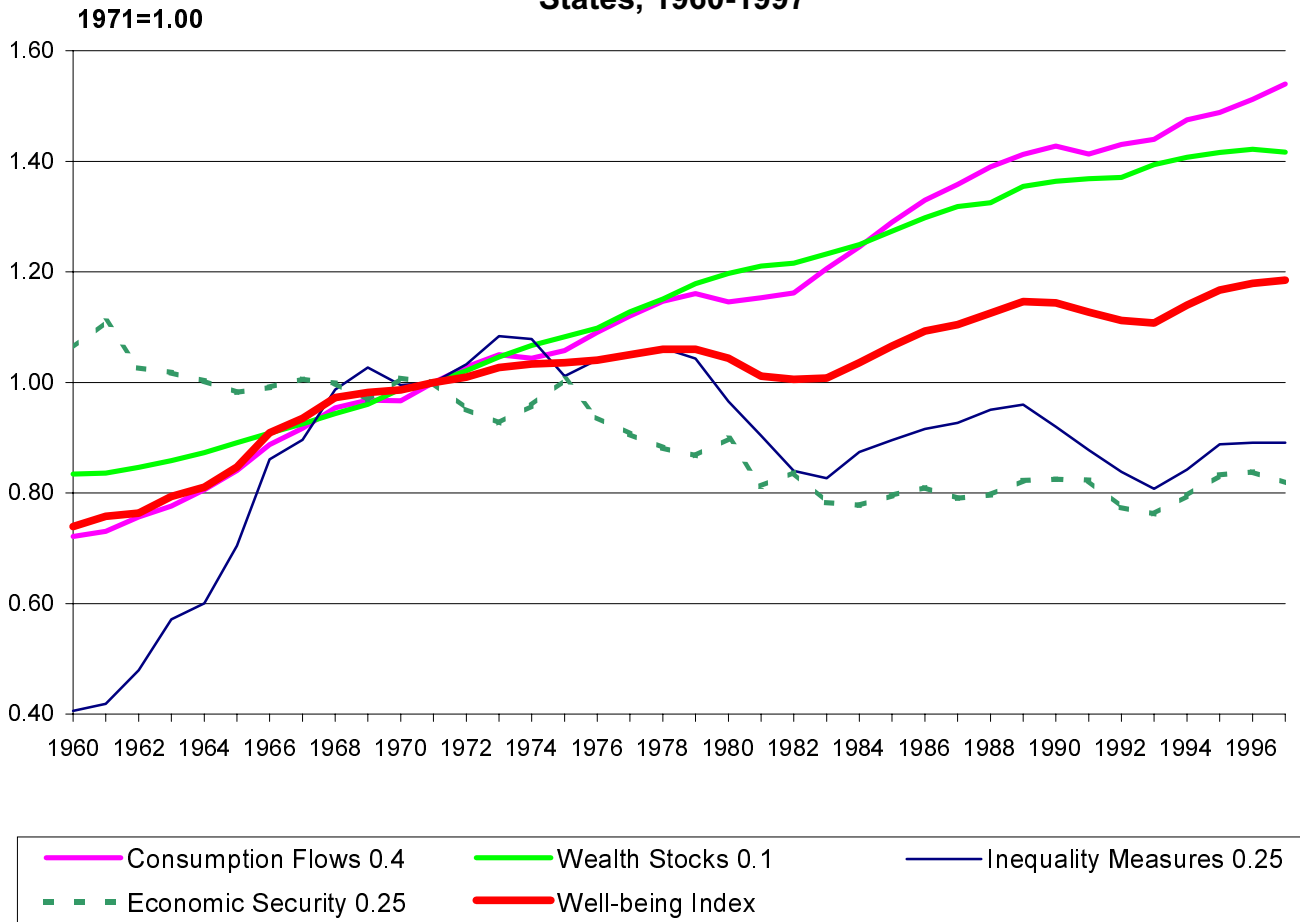*Sources*: Indexes: Tables 5,6,7,8; Weights: Table A13.

Table 10: Overall Economic Well being Index for the United States, 1960-1997

Year	Consumption Flows 0.4	Wealth Stocks 0.1	Inequality Measures 0.25	Economic Security 0.25	Well-being Index
1960	0.7214	0.8340	0.4060	1.0624	0.7390
1961	0.7304	0.8360	0.4183	1.1101	0.7579
1962	0.7563	0.8464	0.4793	1.0264	0.7636
1963	0.7760	0.8583	0.5712	1.0175	0.7934
1964	0.8055	0.8730	0.6005	1.0024	0.8103
1965	0.8404	0.8906	0.7044	0.9817	0.8468
1966	0.8872	0.9081	0.8611	0.9910	0.9087
1967	0.9171	0.9249	0.8961	1.0063	0.9349
1968	0.9539	0.9436	0.9871	0.9986	0.9723
1969	0.9681	0.9605	1.0272	0.9678	0.9820
1970	0.9666	0.9882	0.9953	1.0076	0.9862
1971	1.0000	1.0000	1.0000	1.0000	1.0000
1972	1.0283	1.0212	1.0328	0.9515	1.0095
1973	1.0500	1.0461	1.0834	0.9264	1.0271
1974	1.0436	1.0668	1.0786	0.9580	1.0333
1975	1.0578	1.0826	1.0114	1.0058	1.0357
1976	1.0908	1.0984	1.0407	0.9365	1.0405
1977	1.1198	1.1278	1.0502	0.9067	1.0499
1978	1.1469	1.1507	1.0622	0.8819	1.0598
1979	1.1609	1.1785	1.0429	0.8673	1.0598
1980	1.1455	1.1971	0.9656	0.8985	1.0439
1981	1.1530	1.2104	0.9037	0.8122	1.0112
1982	1.1619	1.2157	0.8399	0.8378	1.0058
1983	1.2058	1.2322	0.8266	0.7827	1.0079
1984	1.2450	1.2492	0.8740	0.7772	1.0357
1985	1.2894	1.2736	0.8955	0.7953	1.0658
1986	1.3298	1.2979	0.9157	0.8099	1.0931
1987	1.3581	1.3179	0.9271	0.7900	1.1043
1988	1.3901	1.3250	0.9504	0.7967	1.1253
1989	1.4127	1.3547	0.9599	0.8229	1.1462
1990	1.4277	1.3640	0.9198	0.8250	1.1437
1991	1.4130	1.3687	0.8778	0.8233	1.1273
1992	1.4302	1.3707	0.8380	0.7737	1.1121
1993	1.4399	1.3940	0.8074	0.7618	1.1077
1994	1.4749	1.4070	0.8421	0.7948	1.1399
1995	1.4884	1.4158	0.8879	0.8322	1.1670
1996	1.5120	1.4215	0.8908	0.8381	1.1791
1997	1.5398	1.4165	0.8908	0.8178	1.1847

Sources: Tables 2,3,4,9.

Chart 1: Economic Well-being Index and Components for the United States, 1960-1997

1971=1.00

Legend:
- Consumption Flows 0.4
- Wealth Stocks 0.1
- Inequality Measures 0.25
- Economic Security 0.25
- Well-being Index

Chart 2: Economic Well-Being Index and GDP per Capita Index, United States

Legend: Well-being Index | GDP per Capita Index
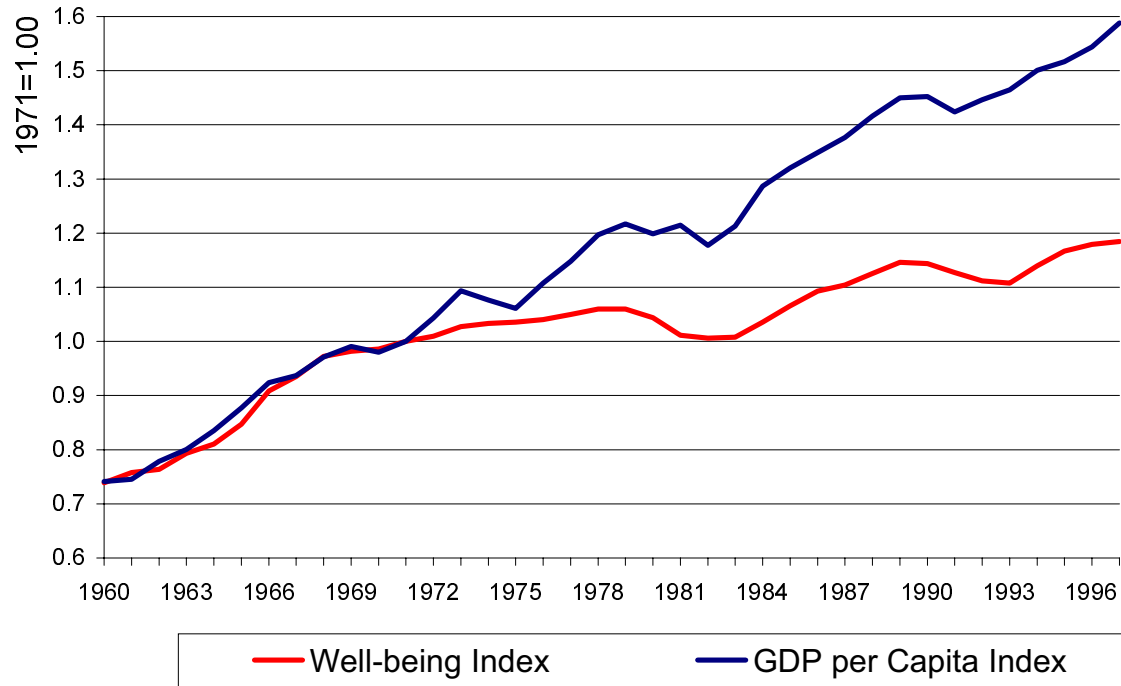
Chart 3: Economic Well Being Index, United States

1971=1.00
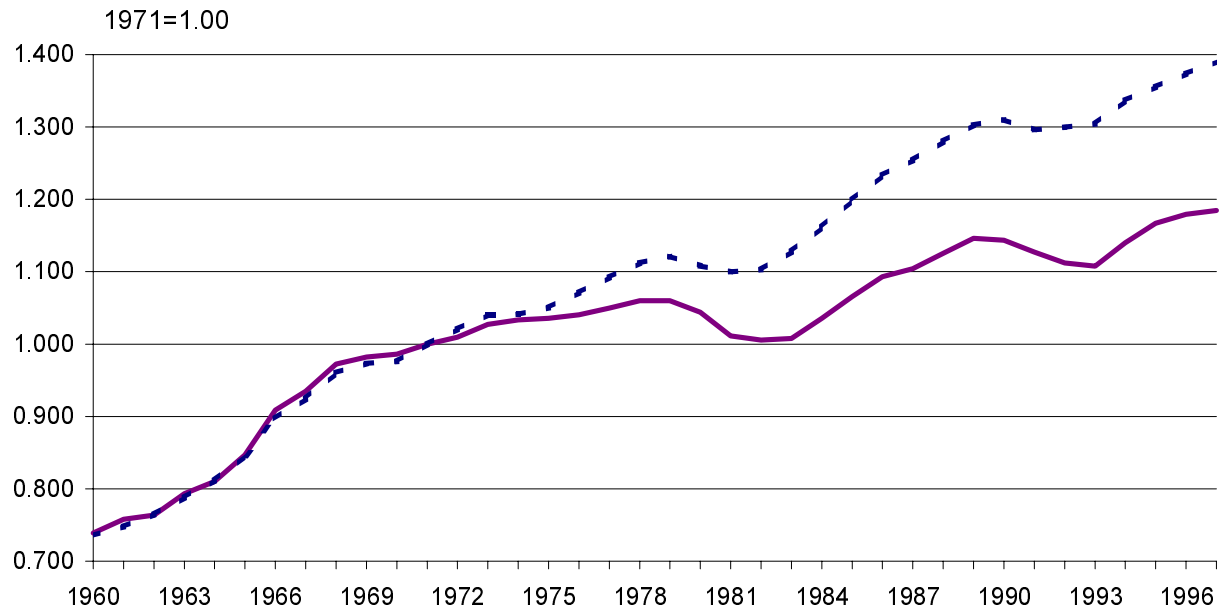
———	Well Being Index =0.4*Consumption+0.1*Wealth+025*Inequality+0.25*Security
- - -	Well Being Index =0.7*Consumption+0.1*Wealth+0.1*Inequality+0.1*Security

II Comparisons of Trends in Economic Well-being in Canada and the United States

Table 11 provides a comparison of the growth rate of the index of economic well-being and its components for Canada and the United States over the 1971-97 period and in the 1971-80, 1980-89, and 1989-97 sub-periods. The value of unpaid labour has been removed from the total consumption series for Canada to ensure consistency across countries. Overall the 26 year period covered economic well-being by this measure increased 18.5 per cent in the United States versus 9.9 per cent in Canada (Chart 4). The rate of progress was somewhat greater in Canada in both the 1970s and 1980s, but diverged sharply in the 1990s. Between 1989 and 1997, the index fell 9.6 per cent in Canada, but continued to advance in the United States, albeit at a slower pace (3.4 per cent).

Over the 1971-97 period, the United States outperformed Canada in three of the four components of economic well-being (Charts 5-8): consumption (54 per cent versus 45.9 per cent); stocks of wealth (41.7 per cent versus 36.7 per cent); and economic security (-18.2 per cent versus -49.1 per cent). Only for the equality component did Canada outperform the United States, with equality rising 4.3 per cent compared to a 10.9 decline in the United States.

The growing gap in the growth rates of economic well-being in the 1990s between the two countries is largely explained by the massive deterioration in economic security in Canada (-44.9 per cent). This variable was more or less stable in the United States (-0.6 per cent).

Table 11

Trend in Economic Well-being in Canada and the United States, 1971-97
(per cent change)

	Canada	United States
Overall Index of Economic Well-being		
1971-97	9.9	18.5
1971-80	8.4	4.4
1980-89	12.2	9.8
1989-97	-9.6	3.4
Consumption Flows		
1971-97	45.9	54.0
1971-80	28.0	15.3
1980-89	14.9	23.3
1989-97	-0.7	9.0
Stocks of Wealth		
1971-97	34.3	41.7
1971-80	26.1	19.7
1980-89	-0.4	13.2
1989-97	6.9	4.6
Equality		
1971-97	4.3	-10.9
1971-80	-4.6	-3.4
1980-89	16.8	-0.6
1989-97	-6.3	-7.2
Economic Security		
1971-97	-49.1	-18.2
1971-80	-21.6	-10.1
1980-89	12.7	-8.4
1989-97	-41.0	-0.6

Source: Canadian data from Osberg and Sharpe (1998)
Note: The data on consumption and overall well-being for Canada differ from
those in Osberg and Sharpe (1998) because the value of unpaid labour has been
omitted to ensure consistency with the US data.

III Level Comparisons of Economic Well-being between Canada and the United States

In addition to comparisons of the trends in various components of economic well-being between Canada and the United States, the index of economic well-being developed in this paper permits comparisons in the actual level of well-being. This section develops these level comparisons. Changes in relative levels over time in principle reflect differential movements in the indexes in the two countries. But caution should be exercised in this regard with the data in this paper because for data comparability reasons, different series have been used for US poverty rates. We hope this problem will be rectified in a revised version of this paper.

Table 12

Canada-US Level Comparisons of Per Capita Consumption and Wealth, 1997

	Canada PPP=84.7		US	Can/US
	$Can	$US		
Total Consumption	18,840	15,957	21,014	75.9
personal adj. cons.	13,450	11,392	17,029	66.9
gov. curr. spending	5,390	4,565	3,985	114.6
Stocks of Wealth	115,679	97,980	134,873	72.6
capital stock	41,795	35,400	79,648	44.4
R&D stock	1,856	1,572	5,481	28.7
natural res. stock	9,159	7,758	2,247	345.3
human capital	73,964	62,647	51,887	120.7
net inter'l invest.	-10,573	-8,955	-4,389	-204.0
CO_2 emissions (tons per capita)		16	20	80.0

Note: All figures are expressed in 1992 dollars.

Consumption Flows

Table 1 shows that in 1997 total per capita consumption flows, expressed in US dollars at Statistics's Canada purchasing power parity estimate of 84.7 US per Canadian dollar, in Canada were 75.9 per cent of those in the United States. As estimates for the value of unpaid labour were not available for the United

States, this component of consumption has been excluded. Relative adjusted personal consumption is even lower in Canada at 66.9 per cent of the US level while government current spending was higher at 114.6 per cent of the US level. This in part reflects the greater government provision of health and education in Canada.

Stocks of Wealth

Per capita stocks of wealth were also lower in Canada than in the United States in 1997, at 72.6 per cent. Again there were large differences among the wealth sub-components. Canada's capital stock was relatively much smaller than the US stock at 44.4 per cent of the US level. Canada's human capital stock was higher than the US level (120.7 per cent), despite the historical higher proportion of persons who have attended university in the United States. Measurement comparability problems may explain this difference.

Canada's R&D stock in 1997 was 28.7 per cent of that in the United States, Canada's level of foreign debt was 204.0 that of the United States, and Canada's per capita stock of natural resources was over three times that of the United States (345.3 per cent). CO_2 emissions in Canada were 80 per cent of the per capita US level.

Table 13

A Comparison of Inequality Between Canada and the United States, 1994

	Canada	US	adj. CAN/US
Gini coefficient	0.287	0.371	1.23
Poverty intensity	0.054	0.125	1.41
Overall inequality index			1.37

NOTE: Both Gini coefficient and poverty intensity are for equivalent income for all persons. The poverty measure is one half median income. The adjusted CAN/US ratio is calculated as (1-(Can/US))+1

Source: Osberg, Journal of Human Resources, forthcoming.

Inequality

Table 2 compares inequality levels in Canada and the United States in 1994 (the latest year for which data are available) using comparable definitions of the Gini coefficient and poverty (one half median income) . The Gini coefficient is much lower in Canada, indicating greater income equality. The poverty rate is also much lower in Canada.

In order that inequality relatives are consistent in interpretation with the consumption and wealth relatives, Canada's lower inequality relative to the United States must indicate Canada is doing relatively better. (A Canada/US ratio below 1 indicates lower inequality and greater economic well-being in Canada while a lower ratio for consumption indicates lower per capita consumption and lower economic well-being in Canada). To achieve consistency, the Canada/US ratio is transformed or normalized by being subtracted from unity and then adding unity to it [(1-Can/US)+1].

In 1994, inequality as measured by the Gini coefficient for all persons, was 23 per cent less in Canada than in the United States. The poverty rate was 41 per cent less. The weights given poverty rate in the construction of the overall equality index is 0.75 and that given the Gini coefficient 0.25. This means that the level of the overall equality index was 37 per cent higher in Canada than in the US in 1994.

Economic Security

The economic security index consists of four sub-components, the risk of unemployment, the risk of single parent poverty, the risk of illness, and the risk of poverty in old age. The first two of the risks are determined by more than one variable: the employment/population ratio, the UI coverage ratio, and the UI benefits ratio for the risk of unemployment; and the divorce rate and the rate of poverty for female lone-parents for the risk of "widowhood".

In 1997, the employment/population ratio was lower in Canada than in the United Stars- 58.9 per cent versus 63.0 per cent or 93.5 per cent the US level. Equally, the UI benefits ratio has also lower in Canada at 41.7 per cent versus 45.0 per cent or 92.9 per cent of the US level. On the other hand, the UI coverage ratio has higher in Canada: 42.3 per cent versus 35.0 per cent or 120.9 per cent of the US level. The overall risk of unemployment is a probability function and is calculated by multiplying the ratios of the three probabilities for the two countries, giving a ratio of 1.051. (An alternative way is to calculate the overall probability of the risk of unemployment for each country and then take the Canadian figure as a proportion of the US figure).

In 1997, the divorce rate was higher in the United States than in Canada: 1.23 per cent versus 2.05 per cent, or 166.7 per cent of the Canadian level. The poverty rate for families headed by a lone female was also higher in the United States Canada, based on comparable definition of poverty (percentage of families below one half median income): 60.7 per cent versus 42.5 per cent. (Data are for 1994, the most recent available.) As noted with the inequality index, the Canada-US relatives are normalized by subtracted the Can-US ratio from unity and then adding unity in order to make them consistent with Canada-US relatives where a higher ratio indicates better economic well-being in Canada. The overall risk of single parent poverty is a probability function and it is calculated by multiplying

Table 14

A Comparison of Economic Security in Canada and the United States, 1997

	Canada	US	Canada/US
Employment/Pop ratio	0.589	0.630	93.5
UI/EI coverage ratio	0.423	0.350	120.9
UI/EI benefits ratio	0.417	0.450	92.9
Risk of unemployment	**0.104**	**0.099**	**1.051**
Divorce Rate	0.0123	0.0205	1.40
Poverty Rate for female lone-parents (1994)	0.425	0.607	1.30
Risk of Single Parent Poverty	**0.0052**	**0.0124**	**1.58**
Risk of Illness	**4.66**	**13.63**	**1.66**
Risk of Poverty In old-Age (1991)	**8.6**	**26.1**	**1.67**
Overall Economic Security			**1.478**

Source: L. Osberg and A. Sharpe, "An Index of Economic Well-being for Canada" for all series except single parent poverty and elderly poverty. Elderly poverty intensity from K. Vandenbosch and I. Marx (1996) "Trends in Family Poverty in OECD Countries", Luxembourg Income Study, Working Paper 148, December.   Single female poverty rate from Shelly Phipps, "Best Mix", mimeo, Department of Economics, Dalhousie University.

the ratios of the two probabilities for the two countries, giving a ratio of 1.58 (1.3*1.4).

In 1997, the risk of illness, defined as the proportion of disposable income doing to medical expenses, was almost three times (2.92) greater in the United States than in Canada (13.63 per cent versus 4.66 per cent). The Canada-US relative is 1.66, calculated by the (1-(4.66/13.63)+1).

The risk of poverty in old age was much greater in the United States than in Canada, again according to comparable poverty measures based on one half median income: 26.1 per cent versus 8.6 per cent. (Data are for 1991). The Canada-US relative is 1.67, calculated as (1-(8.6/26.1)+1).

The overall index of economic security is calculated by combining the four sub-components where the weights are the relative importance of the populations affected by each risk. These weights in 1997 were 0.4085 for illness, 0.2729 for unemployment, 0.2119 for single parent poverty, and 0.1068 for elderly poverty. This procedure shows that the average level of economic security was greater in Canada than in the United States (1.478 per cent).

Table 15

A Comparison of the Index of Economic Well-being in Canada and the United States, 1997

|	Relative Canada/US	Weights	Weights
Consumption Flows	75.9	0.4	0.7
Stocks of Wealth	72.6	0.1	0.1
Inequality	137.0	0.25	0.1
Economic Security	147.8	0.25	0.1
Index of Economic Well-being		108.8	88.9

Overall Index of Economic Well-being

The Canada/US relative index of economic well-being is a weighted average of the ratios for the four index sub-components where the weights are based on one's judgements concerning the relative importance of the sub-components. Based on a weighting scheme of 0.4 for consumption flows, 0.1 for stocks of wealth, and 0.25 for inequality and economic security, the index shows that in 1997 economic well-being was 8.8 per cent higher in Canada. A second weighting scheme that gives greater weight to consumption (0.7) flows and less to inequality and insecurity (0.1) shows that Canada has a lower level of economic well-being than the United States (88.9 per cent). Again the importance of the weights given the four components of economic well-being comes through.
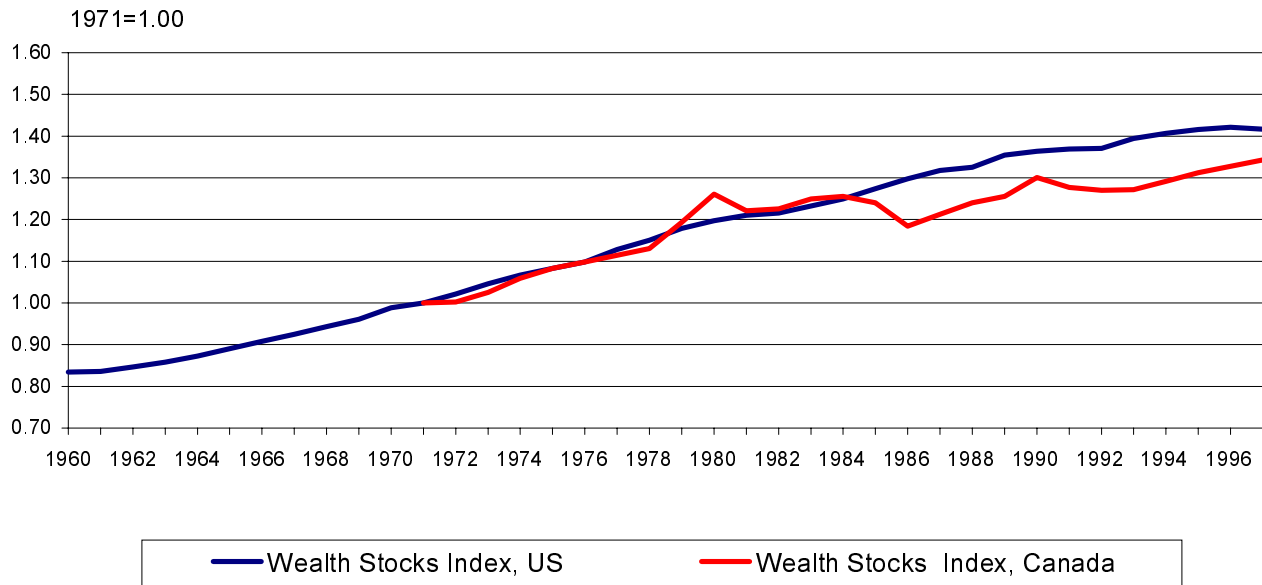
**Chart 4: Economic Well-being Index for the United States and Canada, 1960-1997**
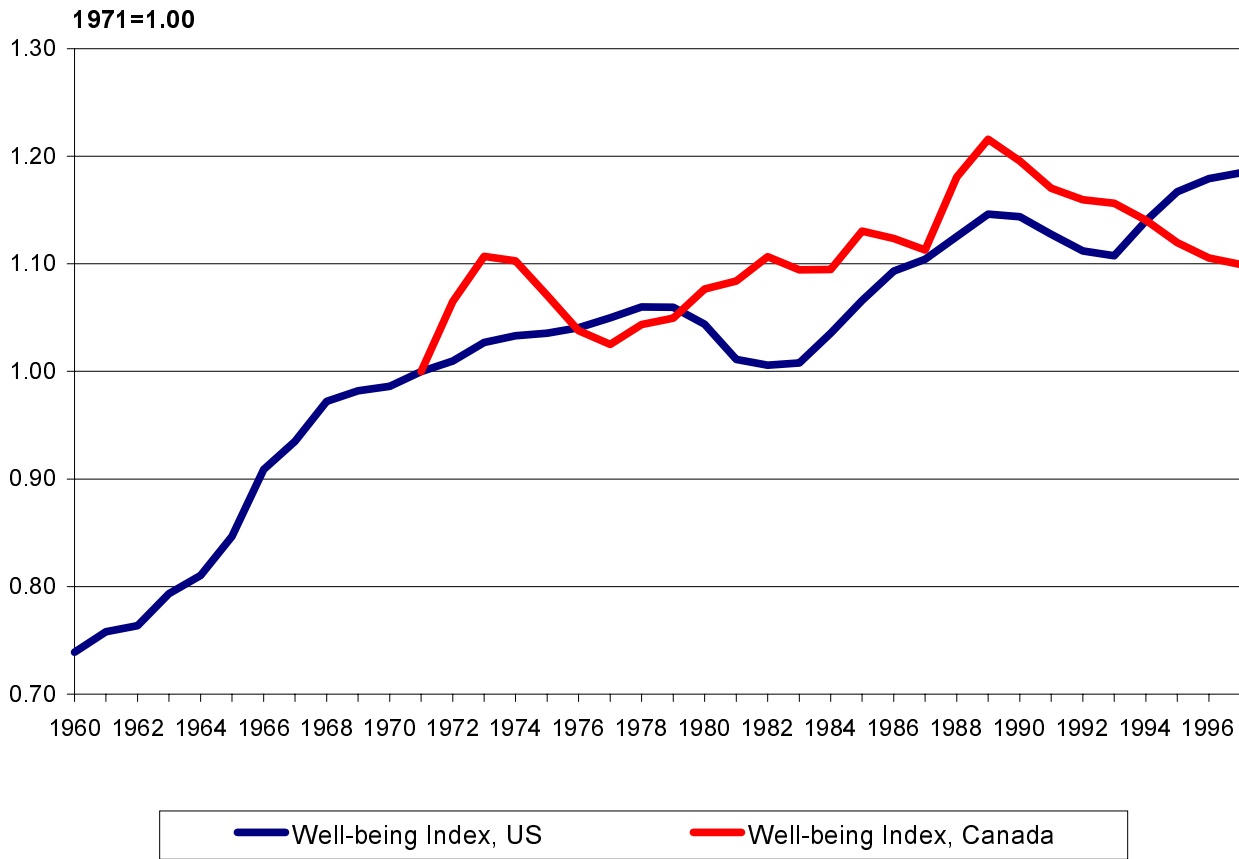
# Chart 5: Consumption Indexes in the United States and Canada, 1960-1997

1971=1.00

- Consumption Index, US
- Consumption Index, Canada
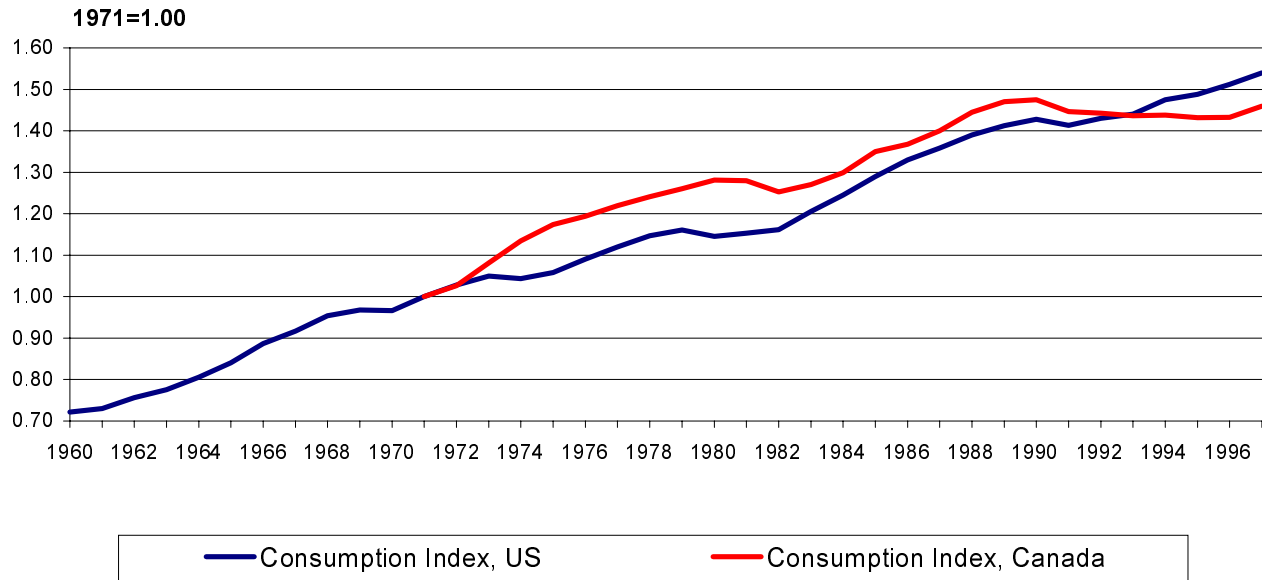
Chart 6: Wealth Stocks Indexes in the United States and Canada, 1960-1997

1971=1.00

- Wealth Stocks Index, US
- Wealth Stocks Index, Canada

Chart 7: Equality Indexes in the United States and Canada, 1960-1997

1971=1.00

| ─── Equality Index, US | ─── Equality Index, Canada |
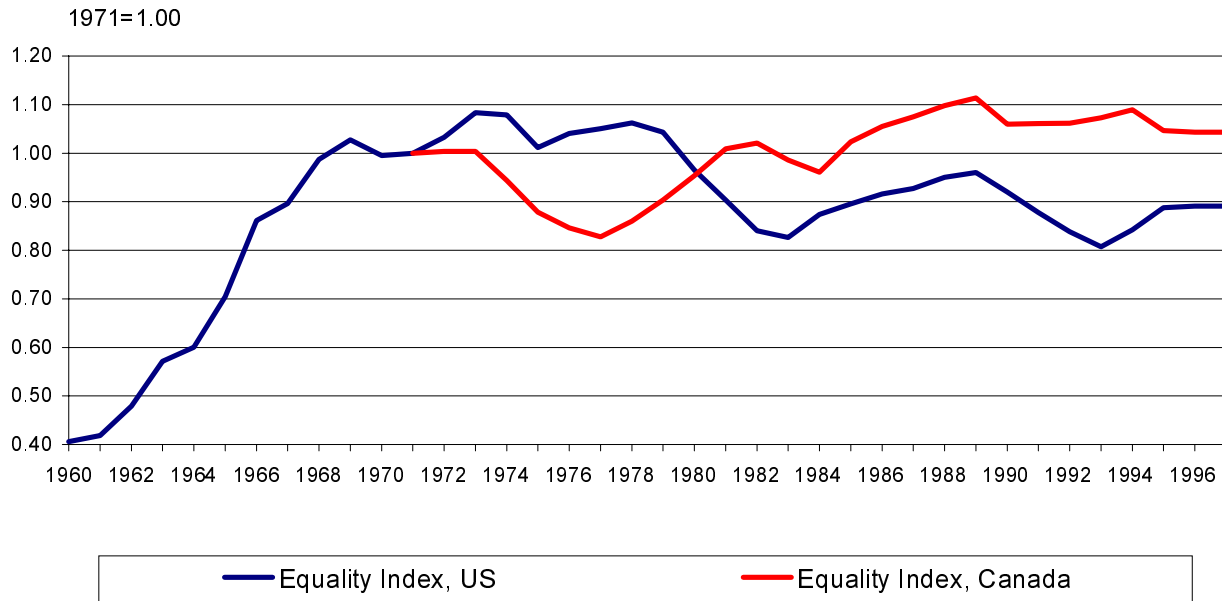
Chart 8: Economic Security Indexes in the United States and Canada, 1960-1997

1971=1.00

| ─── Economic Security Index, US | ─── Economic Security Index, Canada |
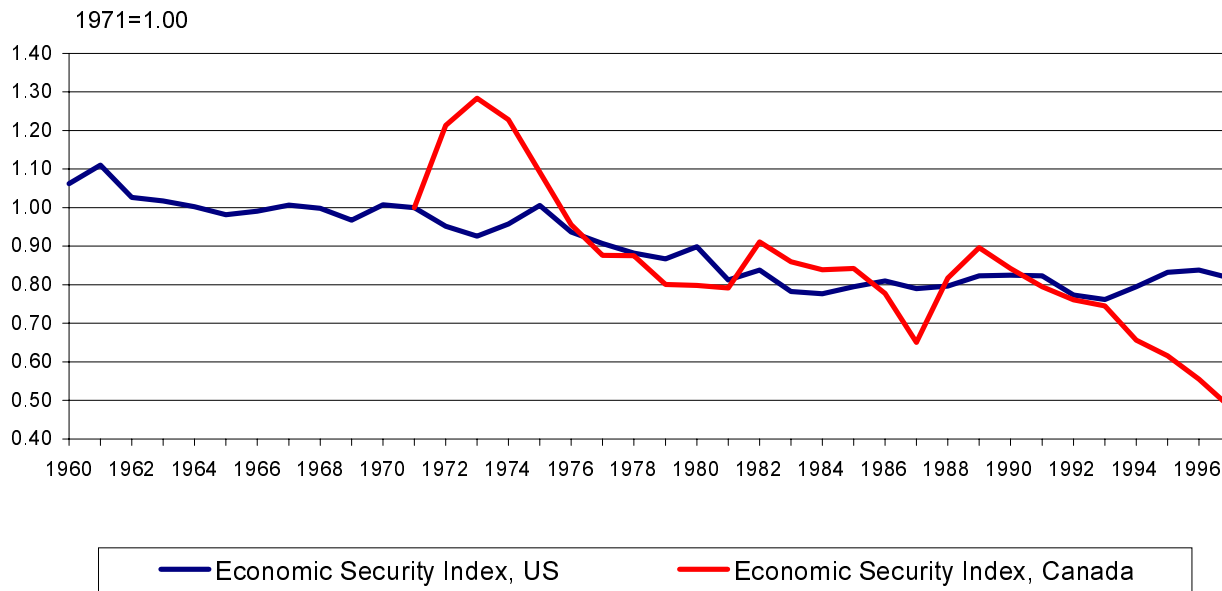
Conclusion

The data presented in this paper indicate Canadians live in a more egalitarian and secure society than Americans. In total, they enjoy lower levels on material well-being, but Canada's more equal distribution of income means that the bottom one third of Canadians are better off than their American counterparts Murphy and Wolfson (1998).

In the 1970s and 1980s Canadians were increasing their economic well-being at a rate somewhat superior to that of Americans. In the 1990s, this situation was reversed, largely because of increased economic security due to slower economic growth and higher unemployment.

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