

MEASURING SUSTAINABLE DEVELOPMENT

APPLICATION OF THE GENUINE PROGRESS INDEX TO NOVA SCOTIA

ECONOMIC SECURITY IN NOVA SCOTIA

Prepared by: Lars Osberg and Andrew Sharpe

July, 2008

EXECUTIVE SUMMARY

This report assesses economic security in Nova Scotia. It uses an aggregate index, based on security from the economic risks imposed by four key factors – unemployment, illness, old age, and single parenthood – to examine trends in economic security in both Nova Scotia and Canada from 1981 to 2007. It also examines provincial and national trends in four additional indicators (minimum wage levels, social assistance levels, child benefits, and the adequacy of the minimum wage in relation to the poverty line) of the adequacy of Nova Scotia's social safety net. The basic conclusions:

- Economic security in Nova Scotia decreased during the 1981-2007 period, as it did nationwide. In 2007, the overall index of economic security in Nova Scotia was 0.581, a decline of 12.9 per cent from its level of 0.667 in 1981. Nationwide the economic security index declined from 0.666 to 0.555, a decline of 16.7 per cent.
- The increased economic risks associated with illness, due to sharp increases in direct private health care expenditures as a proportion of disposable income, were the main driving forces behind this development. The index of security from the risks imposed by illness in Nova Scotia declined by 52.9 per cent from 0.915 in 1981 to 0.431 in 2007. Nationwide, the decline was 59.3 per cent from 0.813 in 1981 to 0.331 in 2007.
- Security from unemployment risks largely followed the business cycle, dropping particularly dramatically during the early 1990s, and not recovering to 1981 levels until 1999. The registered improvement of 13.8 per cent between 1981 and 2007 is however particularly sensitive to the relative weights given to the different components of that sub-index. The much stronger weight given to changes in the unemployment rate than to employment insurance benefits (4:1) means that the significant drop in the unemployment rate far outweighs the reduction in Employment Insurance (EI) coverage during this period.
- Improvement in security from the risks of poverty associated with single parenthood is attributable primarily to two factors a decline in Nova Scotia's divorce rate and an increase in labour force participation by single mothers. The improvement in economic security for single mothers must be balanced both against their higher levels of time poverty and reduced time with their children, and against the hidden costs of employment (like higher child care and other expenditures) that are not accounted for in the index of economic security.
- In terms of the overall index of economic security, Nova Scotia ranked third out of ten Canadian provinces in 1981 and fourth out of ten in 2007. This relative decline was driven primarily by a drop in Nova Scotia's ranking of economic security from risks imposed by elderly poverty from second place in 1981 to sixth place in 2007.
- Minimum wages are increasing at a marginally faster rate in Nova Scotia than the average in Canada. This province had the third lowest minimum wages in Canada in

1981, and improved its ranking by one by 2007. Nationally, inflation matched nominal increases, leaving the real hourly minimum wages at about the same level in 2007 as in 1981. In Nova Scotia, there was an increase of 4.0 per cent in real terms over the period.

- Welfare benefits have decreased in real terms in Canada over the period of 1986-2006, but Nova Scotia has seen a substantially sharper decline in welfare benefits than the Canadian average.
- Canadians and Nova Scotians working at minimum wage have to put in more hours than a normal full-time working week just to reach the poverty line, raising serious questions about the adequacy of minimum wages to meet household needs.

ACKNOWLEDGEMENTS

This report was commissioned by GPI Atlantic from the Centre for the Study of Living Standards (CSLS), Ottawa, and was prepared by Andrew Sharpe, Executive Director of CSLS, and Lars Osberg, University Research Professor in Economics at Dalhousie University, with the help of Ronald Colman from GPI Atlantic and Simon Lapointe from the CSLS. The economic security data contained in this report constitute part of CSLS's Index of Economic Wellbeing.

GPI Atlantic gratefully acknowledges funding for this project provided by the Province of Nova Scotia.

©GPIATLANTIC ©CSLS

Written permission from GPI Atlantic or the Centre for the Study of Living Standards is required to reproduce this report in whole or in part. Copies of this report and of other GPI Atlantic publications are available free of charge on the GPI Atlantic web site at www.gpiatlantic.org. Membership information is also available at this web site.

For information on the Centre for the Study of Living Standards and on the full Index of Economic Wellbeing (IEWB), see the CSLS website at www.csls.ca. For an overview of the IEWB, please also see *Reality Check: The Canadian Review of Wellbeing*, volume 3, no. 1, (available online at http://www.gpiatlantic.org/realitycheck/realitycheck5.pdf), which is produced by GPI Atlantic and published by the Atkinson Charitable Foundation.



TABLE OF CONTENTS

Executive Summary	ii
Acknowledgements	iv
List of Tables	vi
List of Figures	viii
Part I: Introduction	1
1. Defining Economic Security	2
2. Measuring Economic Security: Methodology	3
2.1 The CSLS Approach	3
2.2 Four Components of Economic Security	3
2.3 Scaling and Aggregation	6
Part II: The Index of Economic Security	8
3. Trends in Economic Security in Nova Scotia	9
4. Security from Risk Imposed by Unemployment	12
5. Security from Risk Imposed by Illness	16
6. Security from Risk Imposed by Single Parent Poverty	19
7. Security from Risk Imposed by Poverty in Old Age	
8. Overall Economic Security	
Part III: Nova Scotia's Social Safety Net	
9. Minimum Wages	27
10. Social Assistance Benefits	
11. Minimum Wage Relative to the Low Income Cut Off	
12. Child Benefits	
Part IV: Conclusions	
References	
Appendix 1: The CSLS Index of Economic Wellbeing	
Appendix 2: Supplementary Tables	41

۷

LIST OF TABLES

Table 1: Trends in the Index of Economic Security for Nova Scotia and Canada, 1981 vs. 2007.9
Table 2: Trends in the Indicators of Security from Risk Imposed by Unemployment for Nova
Scotia and Canada, 1981 vs. 2007
Table 3: Trends in the Indicators of Security from Risk Imposed by Illness for Nova Scotia and
Canada, 1981 vs. 2007
Table 4: Trends in the Indicators of Security from Risk Imposed by Single-parent Poverty for Nova Scotia and Canada, 1981 vs. 2007
Table 5: Trends in the Indicators of Security from Risk Imposed by Elderly Poverty for NovaScotia and Canada, 1981 vs. 200723
Table 6: Trends in the Indicators of Minimum Wages in Nova Scotia and Canada 28
Table 7: Trends in the Indicators of Social Assistance Benefits for Nova Scotia and Canada
(2007 dollars)
Table 8: Trends in the Indicators of Minimum Wages Relative to the Poverty Line for Nova
Scotia and Canada: Weekly Hours of Work Needed at Minimum Wage to Reach LICO 32
Table 9: Trends in the Indicators of Child Benefits for Nova Scotia and Canada, 2007 Dollars.34
Appendix Table 1: Security from the Risk Imposed by Unemployment, Canada, 1981 - 200741
Appendix Table 2: Security from the Risk Imposed by Unemployment, Nova Scotia, 1981 - 2007
Appendix Table 3: Index of Security from the Risk Imposed by Unemployment, Canada and
Provinces, 2007
Appendix Table 4: Security from the Risk Imposed by Illness, Canada and Nova Scotia, 1981 - 2007
Appendix Table 5: Index of Security from the Risk imposed by Illness, Canada and Provinces, 2007
Appendix Table 6: Security from the Risk Imposed by Single-Parent Poverty, Nova Scotia, 1981 - 2007
Appendix Table 7: Security from the Risk Imposed by Single-Parent Poverty, Canada, 1981 -
2007
Appendix Table 8: Index of Security from the Risk Imposed by Single-Parent Poverty, 200748
Appendix Table 9: Security from the Risk Imposed by Elderly Poverty, Nova Scotia, 1981 -
2007
Appendix Table 10: Security from the Risk Imposed by Elderly Poverty, Canada, 1981 - 2007 50
Appendix Table 11: Index of Security from the Risk Imposed by Poverty in Old Age, Canada
and Provinces, 2007
Appendix Table 12: Overall Index of Economic Security, Nova Scotia, 1981 - 2007
Appendix Table 13: Population Shares of the Four Groups at Risk, Nova Scotia, 1981-200753
Appendix Table 14: Overall Index of Economic Security, Canada, 1981 - 200754
Appendix Table 15: Population Shares of the Four Groups at Risk, Canada, 1981-2007
Appendix Table 16: Overall Index of Economic Security, Canada and Provinces, 2007
Appendix Table 17: Minimum Wage in Canada and the Provinces, 1981- 2007 (Current Dollars)
Appendix Table 18: Minimum Wage in Canada and the Provinces, 1981 - 2007 (2007 Dollars)59
Appendix Table 19: Welfare Benefits by Province (2007 Dollars)

Appendix Table 20: Non-Reimbursed Out-of-Pocket Expenditures on Health Care in Canada	
(Millions of Current Dollars)	.61
Appendix Table 21: Average Weekly Earnings in Current Dollars	
Appendix Table 22: Personal Disposable Income in Canada and the Provinces, 1981-2007	
(Millions of Current Dollars)	. 63
Appendix Table 23: Out-of-Pocket Private Expenditures on Health Care, Millions of Current	
Dollars (1981-2007)	. 64

LIST OF FIGURES

Figure 1: Trends in the Components of the Economic Security Index in Nova Scotia, 1981 - 20	
(1981=100)	. 10
Figure 2: Overall Index of Economic Security in Nova Scotia as a Proportion of the Canadian	
Average (Canada = 100), 1981-2007	.11
Figure 3: Unemployment Rate, by Province, 1981 and 2007	. 12
Figure 4: Unemployment Rate in Canada and Nova Scotia, 1981-2007 (Per Cent)	. 13
Figure 5: Proportion of Average Wages Replaced by Employment Insurance Benefits, Canada	
and Nova Scotia (1981-2007).	.15
Figure 6: Trends in the Proportion of Direct Expenditures on Health Care in Personal Disposal	ble
Income, Canada and Nova Scotia, 1981-2007 (Per Cent)	. 18
Figure 7: Out-of-Pocket Private Expenditures on Health Care as a Share of Personal Disposabl	le
Income, by Province, 1981 and 2007	. 19
Figure 8: Divorce Rate in Canada, by Province, 1981 and 2007	.21
Figure 9: Poverty Rates for Female Single Parent Families in Canada (LIM), by Province, 198	1
and 2007	. 22
Figure 10: Poverty Rates for Elderly Families, by Province, 1981 and 2007	. 24
	. 25
Figure 12: Minimum Wage in 2007 in Canada and the Provinces, 2007 Dollars	.27
Figure 13: Change in Nominal and Real Minimum Wages in Canada and the Provinces, 1981-	
2007	.28
	.40

PART I: INTRODUCTION

1

1. Defining Economic Security

Has economic security in Nova Scotia increased or decreased in recent years? Do Nova Scotians have greater economic security compared to those in other provinces in Canada? This report will attempt to answer these questions by constructing an index of economic security for Nova Scotia. In addition, it will examine three components of Nova Scotians' social safety net – minimum wages, social assistance, and child benefits.

Economic security means that individuals have a sense of certainty about their economic safety both for today and for the future. The economically secure do not worry about finding adequate economic resources to support themselves and their families, especially when encountering the economic losses that may result from being unemployed, ill, separating from an income-earning partner, or growing old. Thus they do not feel anxiety about adverse circumstances that they may encounter in the future.

However, public opinion polling reveals that many Canadians feel themselves to be economically insecure and that such insecurity decreases their subjective state of wellbeing (Smith, 2003:13). Osberg (1998) has argued that economic insecurity is, in a general sense, "the anxiety produced by a lack of economic safety, -- i.e. by an inability to obtain protection against subjectively significant potential economic losses." Since individuals' perceptions of economic insecurity about the future affect their present feelings of wellbeing, economic security can be considered to be an important component in the measurement of individuals' wellbeing. As such, it is a key indicator in the Index of Economic Wellbeing, the Genuine Progress Index (GPI), and other measures that go beyond the narrower GDP-based growth measures.

This report adopts the approach to measuring economic security developed by the Centre for the Study of Living Standards (CSLS) to investigate the trends in economic security in Nova Scotia over the 1981-2007 period. The components of economic security described in this report also match those that are currently being assessed by CSLS in its work on the Living Standards domain of the new Canadian Index of Wellbeing.

Part One describes in detail the construction of the CSLS index of economic security for Canada and provinces, with emphasis on the economic risks associated with unemployment, illness, single-parent poverty, and elderly poverty. Part Two looks at the trends in the overall index of economic security and in the four component indices for Nova Scotia over time, and compares the Nova Scotia results both to the Canadian averages and to trends in economic security in other provinces in order to assess whether Nova Scotia results for four additional indicators of economic security that are also intended for inclusion in the CSLS report for the Canadian Index of Wellbeing, and again compares those results to the rest of the country. These additional indicators are minimum wages, social assistance benefits, minimum wage relative to the poverty line, and child benefits. Part Four summarizes the main conclusions of the report.

In addition to the components examined in detail in this report, there are other key components of economic security that have already been studied in other GPI research. Indicators of labour

market security, such as employment rates, long-term unemployment, job quality and security, overtime work, and wages, are examined in GPI Atlantic's report, *Working Time and the Future of Work in Canada* (April 2004). The impact of unemployment on an individual's life is often drastic and rarely beneficial. Giving people a fair chance to work certainly has a favourable impact on wellbeing. Fully utilizing all potential labour not only improves economic performance, but also contributes to improved living standards and, to a certain degree, to the prevention of social exclusion.

GPI Atlantic's report *Income Distribution in Nova Scotia* (July 2001) examines income levels and income distribution in the province, and GPI Atlantic is releasing a report on debt and assets in Nova Scotia in 2008, which assesses Nova Scotians' financial security. These three reports combined will therefore give a good overview of the different components of income security, financial security, and job security.

2. Measuring Economic Security: Methodology

2.1 The CSLS Approach

Ideally, one would measure trends in economic security with data that included, for example, the percentage of the population who have a credible employer guarantee of long-term job security or who have adequate savings or access to credit to allow them to meet their needs during an economic crisis, such as an illness or unemployment. Employment security can also be seen in a more general way as existing when workers perceive a high probability of re-employment in the case that one is laid off. Factors contributing to security in this view would then include, among others, a perception of having marketable skills and facing strong labour demand. However, consistent data on subjective worker perceptions are not widely available. Hence, the Centre for the Study of Living Standards (CSLS) instead adopts a "named risks" approach that addresses the change over time in four key objective economic risks. This assessment of economic security, along with three other economic components (consumption, wealth, and equality), makes up the CSLS's Index of Economic Wellbeing (IEWB) (see Osberg and Sharpe, 2002a, 2002b, 2005 and 2006). The CSLS approach to economic security, along with four additional indicators in this area, has also been adopted for the economic security component of the Nova Scotia Genuine Progress Index.

2.2 Four Components of Economic Security

Appendix 1 shows the detailed composite indicators of the CSLS's IEWB. The IEWB economic security component includes measures of the economic risks associated with unemployment, illness, single female parenthood, and poverty in old age. In each case, the risk of an economic loss associated with the event is modelled as a conditional probability, which itself is the product of a number of underlying probabilities. The prevalence of economic risk is then weighted by the proportion of the population that it affects. The core hypothesis underlying this proposed

measure of economic security and insecurity is that changes in the subjective level of anxiety about a lack of economic safety are proportionate to changes in objective risk.

The economic risk associated with unemployment can be modelled as a weighted average of the risk of unemployment and the extent to which people are protected from the income losses of unemployment. Changes in the unemployment rate are taken as a proxy for freedom from the risk of unemployment. The extent to which people have been protected by employment insurance (EI) from the financial impacts of unemployment is modelled as the product of: 1) the percentage of the unemployed who claim regular EI benefits, and 2) the percentage of average weekly wages replaced by EI.

The IEWB focuses the economic risk associated with illness on the risk of incurring uncompensated health care costs, assuming that risk is proportional to the share of uninsured private medical care expenses in disposable income. In Canada such data are available from the Survey of Household Spending of Statistics Canada (for Canada and the provinces from 1997 to 2006) and from the Canadian Institute for Health Information (from 1975 to 2007, but only for Canada). The IEWB uses direct health care costs to households¹, or out-of-pocket expenditures, to model the risk associated with illness (e.g. pharmaceuticals, eye care goods and services, dental care). These expenditures were either less prominent at the time public insurance was put in place or consist of medical procedures that have been removed from public insurance coverage over the years. The increase in pharmaceutical costs not covered under Medicare arises partly from the availability and increasing importance of new drugs in medical practice (whose incremental benefits imply an improvement in health outcomes) and partly from price inflation. Either way, higher costs and greater financial insecurity are a result.

The economic risks associated with single parenthood actually focus on single female families for two reasons: 1) males comprise a fairly small (but growing) fraction of the single parent population in Canada², and 2) the income loss experienced by men in the case of divorce is considerably less than that experienced by women.³ To model trends in this aspect of economic insecurity, this subcomponent of the IEWB is calculated as (the probability of divorce) * (the poverty rate among single female parent families) * (the average poverty gap ratio among single female parent families), where the "poverty gap" refers to the percentage of difference between the actual income of low-income single mothers and the low income measure (LIM). The product of these last two variables (poverty rate multiplied by poverty gap) is proportional to the intensity of poverty.

¹ The data used are from the Survey of Household Spending (SHS) between 1997 and 2006, but the provincial growth rates of total private expenditures on health care (which includes out-of-pocket expenditures but also insurance premiums) are used in order to estimate the direct health care costs to households from 1981 to 1996 and for 2007. A comparison of different potential methods to obtain these expenditures is available in Lapointe (2007). ² The proportion of male lone-parent families is increasing at a much faster rate than female lone-parent families. In 2006, data from the Census indicated that around 20 per cent of all lone-parent families were headed by males, up

by 14.6 per cent from 2001.

³ In 2006, according to the Survey of Labour and Income Dynamics from Statistics Canada, 7.2 per cent of male lone-parent families are living in low income, compared to 28.2 per cent of female lone-parent families.

Since income in old age is the result of a lifelong series of events and decisions, the risk of "insecurity in old age" is modelled in a simplified way in the IEWB, namely as the chance that an elderly person will be poor multiplied by the average depth of that poverty (again the percentage difference between the actual income of low-income seniors and the LIM). As with the other poverty and inequality variables examined in the IEWB, it is necessary to calculate the elderly poverty rate and gap from micro-data files.

In order to maintain comparability over time and across provinces, we use a poverty line (the Low Income Measure) which can be calculated for each province and each year, and which has a methodology that is comparable with international measures of poverty.⁴

In 2004, 58.8 per cent of the population of Nova Scotia lived outside cities of 10,000 or more, compared to 31.2 per cent for Canada. Because Nova Scotia has a greater rural population distribution, an additional dimension of deprivation arises – the cost of transportation. The Market Basket Methodology (MBM) of Human Resources and Social Development Canada (HRSDC) for drawing the poverty line tries to account for such costs.⁵ The differences between the MBM and other poverty lines (the Low Income Cut Off – LICO or Low Income Measure – LIM) affect the distribution, as well as the level of poverty. As HRSDC (2007:25) notes: "The share of low income children and adults living in families whose main income recipient worked for pay at least 910 hours is significantly higher using the MBM than using the LICOs-IAT because child care spending and other work-related expenses are deducted from gross family income before comparing it to the low income thresholds. The geographical distribution of the low-income population is also different using the MBM instead of the LICOs-IAT. Using the MBM, a smaller share of the low income population is found in the largest urban centres while a larger share lives in rural areas." In the Nova Scotia context, it is particularly important that the Market Basket Method estimates the cost of living for poor people as 3 per cent <u>higher</u> in rural

⁴ Low Income Cut-Offs (LICOs) are an absolute measure of poverty, defined as the income at which a family or individual would spend too large a share of its income on necessities (defined as expenditure on food, clothing and shelter – but <u>not</u> including the transportation costs incurred in shopping for food or other necessities). Low Income Measures (LIM) are set at 50 per cent of median family after tax income - which is the standard methodology used in international comparisons). Both are available from Statistics Canada sources by family size and for different communities, but the LICO methodology is unique to Canada and cannot be compared internationally. However, although their conceptual origins are quite different, in practice they are fairly similar for a city between 100,000 and 499,000 in size – i.e. the LICO (after tax) for a 4 person family in Halifax in 2007 was \$28,820 while the after tax LIM was \$30,251, a difference of 4.7%.

⁵ The HRSDC Market Basket Methodology (MBM) for costing out the income needed for minimal adequacy in Canada, specifically includes transportation costs, allowing for: "in urban areas served by public transit: 2 monthly transit passes and 12 round-taxi trips per year; in areas not served by public transit: the cost of operating a vehicle and of purchasing a five-year-old car once every five years." As they note, quite apart from poor frequency of service, public transit often does not exist at all in Canada - rural areas have virtually no coverage and less than one-third of all urban areas under 30,000 are served by public transit, though estimates vary from province to province. The HRSDC transportation allowance cannot be said to be generous. [For example, it assumes, quite remarkably, that one can buy a five-year-old car (a Chevrolet Cavalier) and drive it for another five years without any costs for repairs or tire replacement. Where public transit exists, it is assumed that the children *never* use it.] But even so, there is at least some attention to the income needed to attain the capability of getting around, which is essential if one is to obtain food and other necessities and not to be effectively excluded from employment or access to public services.

areas of Nova Scotia than in cities the size of Halifax. Because the LIM method assumes the cost of living to be the same in rural and urban areas and the LICO methodology estimates it to be 29 per cent lower, *the LIM methodology is much closer to the MBM budget-based measure of income adequacy than the LICO, and is therefore much less likely to under-estimate rural poverty in Nova Scotia.*

The Market Basket Methodology enables researchers to perceive issues that are important to the reality of poor people, but often invisible to other statistical methodologies – such as the impact of increased car insurance premiums (particularly in rural areas) or higher energy prices. Nevertheless, a key disadvantage of the MBM is its inability to compare the extent of poverty over time, or in a timely fashion (as of June 2008, the MBM was only available for the years 2000 to 2002). Hence we cannot use it in this study – but the LIM method does come very close, in years for which there are comparable data.

2.3 Scaling and Aggregation

In order to aggregate four components into an overall indicator of economic security, the components must be scaled into comparable measurement units. This is accomplished with the Linear Scaling Technique (LST), whose philosophy is to scale actual differences in any given variable as proportions of the observed feasible range of that variable. Index components⁶ are standardized across all provinces and years considered in order to produce values in the (0,1)range. To do this, an estimate is made for the high and low values which represent the possible range of a variable for all time periods and for all provinces, and denoted Min and Max, respectively. The data are then scaled according to these adjusted values. When an increase in an indicator is desirable, the formula (Value-Min) / (Max-Min) applies; when a decrease in an indicator is desirable by definition, the formula (Max-Value) / (Max-Min) applies. The appropriate LST approach hence ensures that the convention that increases are desirable is reflected in each case. For example, declines in the risk associated with single-parent poverty (which, as noted above, is defined as the multiplication of the divorce rate, the poverty rate and the poverty gap ratio) are desirable. Therefore, to construct the index, we find the minimum and the maximum of that risk across all the years and provinces, and apply the second formula to obtain a value between zero and one.

The four security sub-components can then be aggregated into the overall (scaled) economic security index, using the relative proportions of the four groups facing the risk in the population as objective aggregation weights:

- For unemployment, the proportion of the 15-64 population in the total population (for example, 69.7 per cent in Nova Scotia in 2007).
- For illness, the proportion of the population at risk from illness, which is 100 per cent.

⁶ The variables, which are standardized, are the ones directly involved in calculating the index. For example, in the case of elderly poverty, only the elderly poverty intensity is standardized (which is calculated by multiplying the elderly poverty rate and the elderly poverty gap).

- For single parent poverty, the proportion of the population comprised of married women with children under 18 years and of children under 18 (for example, 34.1 per cent in Nova Scotia in 2007).
- For elderly poverty, the proportion of the population in immediate risk of poverty in old age, defined as the proportion of the 45-64 population in the total population (for example, 29.3 per cent in Nova Scotia in 2007).

The above proportions are normalized for all years to sum to unity. For example, in Nova Scotia, the weights for the four groups at risk in 2007 then became 0.299 (unemployment), 0.429 (illness), 0.146 (single parent poverty), and 0.126 (elderly poverty).

PART II: THE INDEX OF ECONOMIC SECURITY

3. Trends in Economic Security in Nova Scotia

Overall, Nova Scotians (like other Canadians) were considerably less economically secure in 2007 than they were in 1981. In 2007, the overall index of economic security in Nova Scotia was 0.581, a decline of 12.9 per cent from 0.667 in 1981. The increased economic risks due to illness were the main driving force – the index of security from risk imposed by illness declined by 52.9 per cent from 0.915 in 1981 to 0.431 in 2007. At the same time, the economic risks attributable to single-parent poverty, unemployment, and elderly poverty decreased. The sub-indexes of economic security associated with these three components increased by 154.5 per cent, 13.8 per cent and 12.9 per cent respectively over the same period (Table 1).

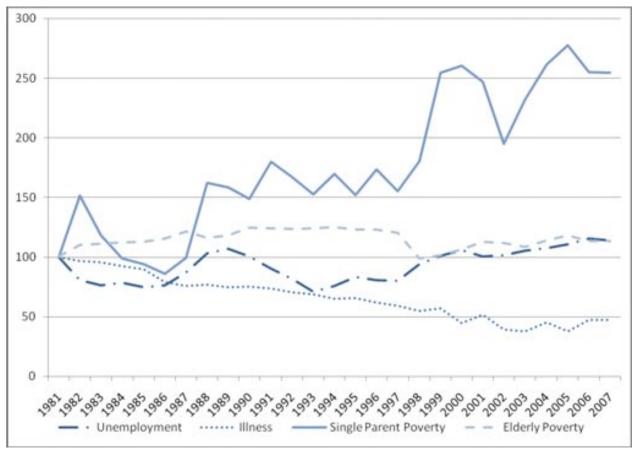
		Nova S	cotia		Car	nada			
	Provincial						Nova Scotia's Index		
	Index of	Economic	Ranking	of Index	Index of Economic Security		of Economic Security as a Proportion of		
	Sec	urity	of Eco	nomic					
			Secu	irity			National Average		
	1981	2007	1981	2007	1981	2007	1981	2007	
Overall Index	0.667	0.581	3	4	0.666	0.555	100.2	104.7	
Index of Security from Risks Imposed by:									
Unemployment	0.551	0.627	6	8	0.625	0.669	88.2	93.7	
Illness	0.915	0.431	2	2	0.813	0.331	112.5	130.2	
Single Parent	0.286	0.728	10	8	0.431	0.739	66.4	98.5	
Poverty	0.280	0.728	10	0	0.431	0.739	00.4	90.3	
Elderly Poverty	0.719	0.812	2	6	0.600	0.847	119.8	95.9	

Table 1. Trends in the Index of Feanemic Securit	ty for Nova Scatia and Canada 1081 vs 2007
Table 1: Trends in the Index of Economic Securit	ty for Nova Scotla and Canada, 1961 vs. 2007

Nova Scotians may feel less anxiety about the economic risks associated with becoming single parents, becoming unemployed, or approaching old age than they did in 1981, though they likely feel correspondingly more economic anxiety about becoming ill (Table 1). However, as Figure 1 below indicates, the changes in each of these components have not been steady or even over time. For example, the index of security from the risk of unemployment in Nova Scotia fell during the recession of the early 1980s, improved in the late 1980s, then fell sharply in the 1990s recession, reaching an all-time low in 1993, not recovering to 1981 levels till 1999, and reaching its highest level in 2006 (see Table 1 in Appendix 2). The internal variations in each component are examined in further detail in the sections below.

Table 1 above shows that the economic security trends in Canada were similar to those in Nova Scotia between 1981 and 2006. However, when compared to the other Canadian provinces, economic security in Nova Scotia became relatively worse between 1981 and 2007, from third to fourth on a ranking of the ten provinces. This decline was driven primarily by a drop in Nova Scotia's ranking of economic security from risks imposed by elderly poverty, from second place in 1981 to sixth place in 2007 (Table 1 above).

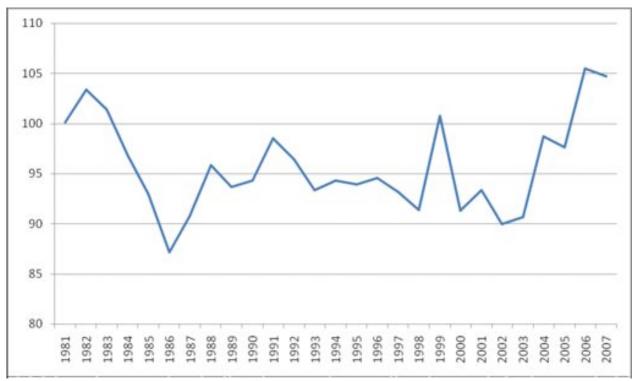
Figure 1: Trends in the Components of the Economic Security Index in Nova Scotia, 1981 - 2007 (1981=100)



Albertans, Newfoundlanders and Ontarians fared better than Nova Scotians in overall economic security in 2007. Economic security levels are lowest in Prince Edward Island, followed by Quebec and British Columbia (Appendix 2, Table 16).

The changing ratio of the index of economic security in Nova Scotia to that in Canada provides a much clearer picture of Nova Scotia's performance in economic security compared to the rest of the country (Figure 2). In 1981, Nova Scotia's index of economic security was 100.2 per cent of Canada's. It decreased until 1986, when it reached an all-time low of 87.2 per cent. In 1991 it was back up to 98.5 per cent, but by 1998 it had fallen to 91.4 per cent. It then increased again, reaching 104.7 per cent of the national index in 2007. Although Nova Scotia slipped in provincial rankings of economic security (see Table 1), trends in the larger provinces (such as Ontario) are particularly important for the national trend in economic security. Compared to the national average – which declined by 12.9 per cent – Nova Scotians were at about the same risk of economic insecurity as the average Canadian in 1981, and in 2007 were marginally (4.7 per cent) higher. However, there were many fluctuations in relative security, around this declining trend, in the intervening years.

Figure 2: Overall Index of Economic Security in Nova Scotia as a Proportion of the Canadian Average (Canada = 100), 1981-2007



For three of the four components of the index of economic security (risks from unemployment, single-parent poverty and elderly poverty), Nova Scotians had less economic security than the national average in 2007. In 1981, economic security from illness and poverty in old age was somewhat greater for Nova Scotians than for the average Canadian. The most remarkable change in relative security took place in the economic security from single-parent poverty, which increased from 66.4 per cent of the national average in 1981 to 98.5 per cent of the national average in 2007 (see Table 1 above).

The large weight given to economic insecurity in risks associated with illness combined with the large drop in this indicator implies that this indicator has been the main driving force in the decrease in economic security for Nova Scotia and at the national level. The variable driving the index of security from the risk imposed by illness is the proportion of private expenditure on health care in personal disposable income. Because this is growing rapidly throughout the country, the index has declined dramatically nationwide. Put another way, an increasing proportion of Canadians may be at risk of financial crisis, including being unable to afford health care costs, when they fall ill. However, relatively speaking, private health care expenditures have risen more steeply in other parts of the country. Thus, the Nova Scotia index of security from risk imposed by 52.9 per cent in Nova Scotia, but by 59.3 per cent nationwide.

4. Security from Risk Imposed by Unemployment

As noted above, the economic security from risk imposed by unemployment in Nova Scotia increased between 1981 and 2007, although there have been considerable internal variations in this trend corresponding largely to business cycles. Both the decreased unemployment rate, particularly since the late 1990s, and the increased proportion of earnings replaced by Employment Insurance benefits have contributed to the overall rise in the index of security from the risk imposed by unemployment. On the other hand, the proportion of the unemployed receiving EI benefits decreased nationally by 33.4 per cent between 1981 and 2007 and fell by 47.0 per cent from its high point in 1989. However, the strong decline in the unemployment rate still drove the index of economic security from the risks imposed by unemployment up slightly, because of the much greater weight given to this indicator (4 to 1).

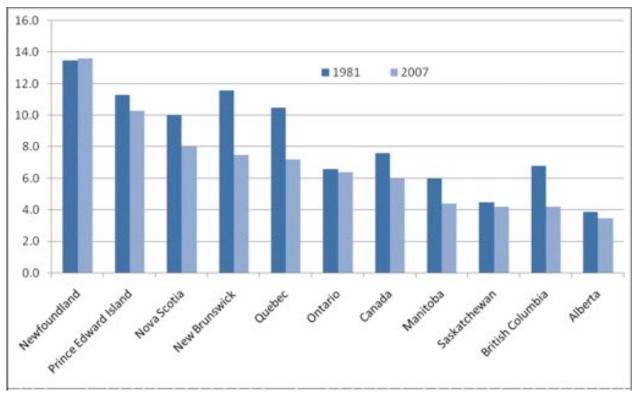
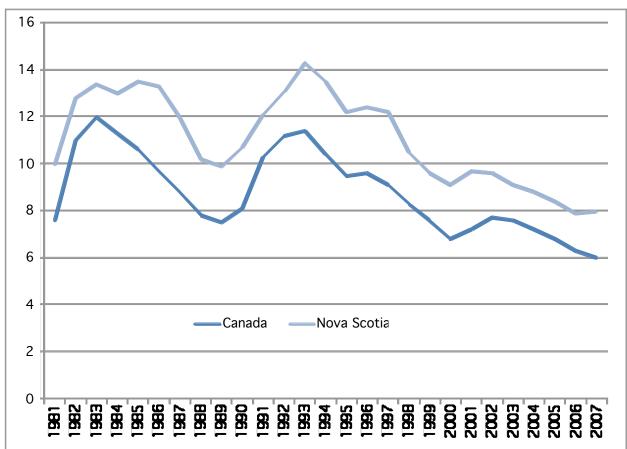
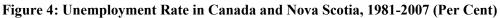


Figure 3: Unemployment Rate, by Province, 1981 and 2007

The 2007 unemployment rate in Nova Scotia (8.0 per cent) was the second lowest recorded in a quarter century (the lowest was in 2006, at 7.9 per cent), and has shown steady improvement since the recession of the early 1990s and since its 1993 high point of 14.3 per cent. However, there was still a 2.0 percentage point gap between the unemployment rate in Nova Scotia and the national average of 6.0 per cent, thus the Nova Scotia unemployment rate remained the third highest in the country (see Figure 3 above and Table 2 below).





It is important to distinguish economic security from affluence. In the same way that somebody with a small insured house is more secure (but less affluent) than their neighbour who lives in an uninsured mansion, Nova Scotia in 2007 had a relatively higher coverage of financial protection for those unemployed than the Canadian average, but lower average wages. The ratio of regular EI beneficiaries to total unemployed individuals was 71.3 per cent, ranking fourth out of ten in Canada (Appendix 2, Tables 2 and 3) – a roughly two thirds higher rate of coverage than the national average (44.4 per cent). Moreover, the percentage of average weekly wages replaced by the EI benefit was 45.3 per cent in Nova Scotia, the second highest level in Canada, lower only than Prince Edward Island (50.4 per cent) and equal to Saskatchewan. When these two factors (percentage receiving benefits and percentage of earnings covered by EI) are multiplied according to this measure, the relative level of financial protection afforded by EI for those unemployed in Nova Scotia is seen to be well above the average of Canada (0.323 versus 0.183) (see third row of Table 2 below).

Table 2: Trends in the Indicators of Security from Risk Imposed by Unemployment for Nova Scotia
and Canada, 1981 vs. 2007

		Nova S	cotia	Canada			
	Indicato	r Values	Absolute Change (percentage points)		r Values	Absolute Change (percentage points)	
	1981	2007	1981 - 2007	1981	2007	1981 - 2007	
Index of Security from Risk Imposed by Unemployment	0.551	0.627	13.8	0.625	0.669	7.0	
Unemployment rate %	10.0	8.0	-2.0	7.6	6.0	-1.6	
Financial protection for unemployed (next two proportions multiplied together)	0.334	0.323	-0.011	0.256	0.183	-0.073	
Proportion of unemployed receiving benefits (per cent)	90.0	71.3	-18.7	66.6	44.4	-22.2	
Proportion of earnings replaced by benefits (per cent)	37.1	45.3	8.2	38.4	41.2	2.8	

The relatively higher proportion of weekly wages replaced by EI in Nova Scotia can be explained by lower average pay levels in the province (average weekly earnings in Nova Scotia were the second lowest in Canada in 2007 – see Appendix 2, Table 21). EI benefits are 55 per cent of the insurable earnings, but earnings are only covered up to Maximum Insurable Earnings – which currently means an annual salary of \$41,100. This cap on EI coverage implies that 55 per cent of earnings below \$41,100 are replaced by EI, but zero per cent of any earnings in excess of that amount. The greater an unemployed person's excess of earnings over Maximum Insurable Earnings, the lower their average replacement rate. (For example, a person who earned twice the maximum insurable earnings (\$82,200) receives the same amount of EI as somebody earning half as much – so the proportion of their wages replaced by EI benefits is 27.5 per cent. As a direct consequence, the replacement rate is lower in regions with higher average salaries.

Second, the percentage of average weekly wages replaced by the EI benefit in Nova Scotia (45.3 per cent in 2007), while somewhat higher than the Canadian average, has been largely stagnant for 15 years and was around the same level in 2007 as in 1990 (Figure 5). Thirdly, as noted, the proportion of unemployed receiving benefits has fallen sharply since the late 1980s. It fell most sharply between 1989 and 1997, and while recovering somewhat since then, in 2007 it stood at two-thirds of its 1989 level.

When the overall index of security from the risk imposed by unemployment is calculated, the unemployment rate is weighted four times greater than financial protection from unemployment (calculated as the proportion of unemployed receiving benefits multiplied by the proportion of earnings replaced by benefits). In determining the overall risk of loss of wellbeing arising from

unemployment, cross-country regressions with life satisfaction data on 271 thousand people indicate that the unemployment rate is considerably more important than the unemployment compensation system as a source of security for the working population⁷. Consequently, it was decided to weight the unemployment rate much more heavily than the financial protection from unemployment variable, at a ratio of 4 to 1, respectively.

Thus the overall index of security from unemployment in Nova Scotia (0.627) remains 6.3 per cent less than the national average (0.669), putting Nova Scotia in the eighth position in this component of the index in 2007. This eighth place ranking is due mostly to the province's higher than average unemployment rate. At the same time, the improvement in the overall index in both Canada and Nova Scotia is also driven mostly by the drop in unemployment, again because this factor has much greater weight than changes in the proportion of unemployed receiving EI benefits, which dropped during this period both nationwide and in Nova Scotia.

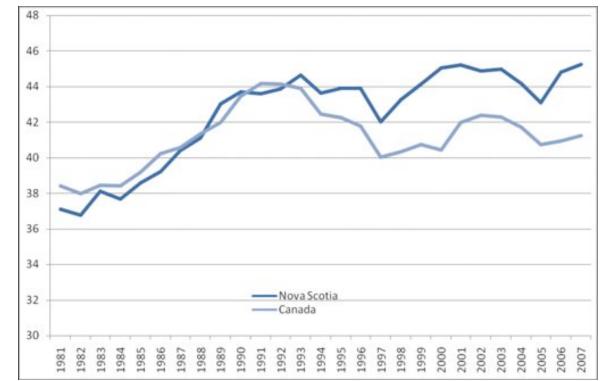


Figure 5: Proportion of Average Wages Replaced by Employment Insurance Benefits, Canada and Nova Scotia (1981-2007)

⁷ See Di Tella, MacCulloch and Oswald (2003:819), where in six different specifications of ordered probit regressions (n=271,224) predicting life satisfaction, the size of the negative coefficient on the unemployment rate was, on average, 2.13 times larger than the size of the positive coefficient on unemployment benefits. Since the range of unemployment benefits observed (0.003 to 0.631) was about three times greater than the range of unemployment rates (0.006 to 0.211). If one rescales regression coefficients to a common range to interpret relative size effects, their results could be read as implying unemployment changes are about six times more important than UI benefit changes in maintaining well-being. Our use of a 4:1 ratio is therefore a compromise.

5. Security from Risk Imposed by Illness

Economic security from the financial risk imposed by illness in Nova Scotia decreased dramatically from 1981 to 2007. This change was driven by the increased share of out-of-pocket expenditures on health care in personal disposable income (Figure 6 and Appendix 2, Table 4), which more than doubled from 0.79 per cent of disposable income in 1981 to 1.69 per cent in 2007 - a 0.90 percentage point increase. Canada experienced the same trends in this indicator. The share of private expenditure on health care in disposable income almost doubled nationwide, with an increase of 0.89 percentage points (Table 3).

Of all four components of the overall Index of Economic Security, the index of security from the risk imposed by illness shows the least variation around its trend, and indicates a fairly steady and unabated decline in security for Nova Scotians over the last quarter century. Since the only component in this particular index is the proportion of private expenditure on health care in personal disposable income, the decline in this particular index (which has been the driver of the overall decline in economic security in Nova Scotia) is entirely attributable to the steady increase in dependence on privately funded health care costs.

		Nova	Scotia	Canada			
	Indicato	r Values	Per Cent Change	Indicator Values		Per Cent Change	
	1981	2007	1981 - 2007	1981	2007	1981 - 2007	
Index of Security from risk imposed by illness	0.915	0.431	52.9	0.813	0.331	59.3	
Private Expenditure on health care, (millions of current dollars)	55	380	590.9	2,342	16,514	605.1	
Personal disposable income (millions of current dollars)	6,920	22,513	225.3	238,606	881,964	269.6	
Proportion of private expenditure on health care in personal disposable income	0.79	1.69	113.9	0.98	1.87	90.8	

Table 3: Trends in the Indicators of Security from Risk Imposed by Illness for Nova Scotia and	
Canada, 1981 vs. 2007	

The Canadian Institute for Health Information (CIHI) provides a breakdown of out-of-pocket expenditures (Appendix 2, Table 20) by type for Canada. Although out-of-pocket expenditures are, in general, increasing, they are concentrated mainly in drugs and health supplies, dental and eye-care professionals, and health care institutions other than hospitals. These categories together accounted for 87.4 per cent of out-of-pocket expenditures in 2004. The largest increases between 1987 and 2004 were in prescribed drugs and health care practitioners other than dentists and eye-care professionals, by 325 and 348 per cent, respectively (in current dollars). A third category, "Other health care services", increased by more than 500 per cent, but from a relatively small

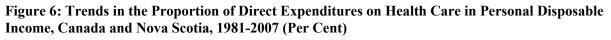
base of \$37.9 million in 1987, and represented only 1.2 per cent of total out-of-pocket expenditures in 2004.

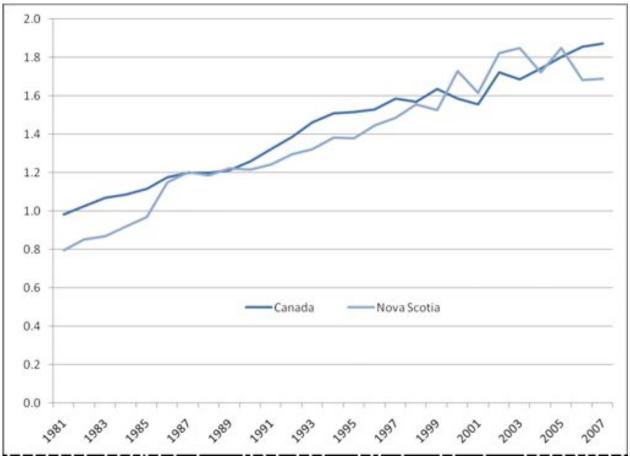
A recent report from the Health Council of Canada (HCC) highlighted the need for a national drug strategy to protect Canadians from financial hardship due to prescription drugs (Health Council of Canada, 2008). The report evaluates the result from the Accord on Health Care Renewal signed in 2003, and concludes that governments have failed to fulfill their promises: "Significant gaps in coverage are still evident across Canada and too many Canadians are vulnerable to personal hardship from needed drugs that cost more than they can afford" (HCC, 2008:35).

In 2007, direct private expenditures on health care in Nova Scotia averaged \$407 per capita, which accounted for 1.69 per cent of personal disposable income in the province, slightly lower than the national average of 1.87 per cent (Appendix 2, Table 5). Thus, the index of security from risk imposed by illness in Nova Scotia was 30.2 per cent higher than the national average, and second best nationwide, with only Newfoundland performing better (Appendix 2, Table 5). However, since the index of security from risk imposed by illness in Nova Scotia declined by 52.9 per cent between 1981 and 2007, this relative ranking is small comfort.

Newfoundlanders saw the smallest share in the country of their personal disposable income going to private spending on health care (Figure 7). Nova Scotia, Alberta, and Ontario performed somewhat worse than Newfoundland, with the three provinces having an almost equal share of disposable income go to health care expenditures (about 1.7 per cent). This fact indicates that provincial policies supporting public health care, as well as higher incomes, are able to reduce financial insecurity and increase security from the risk imposed by illness.

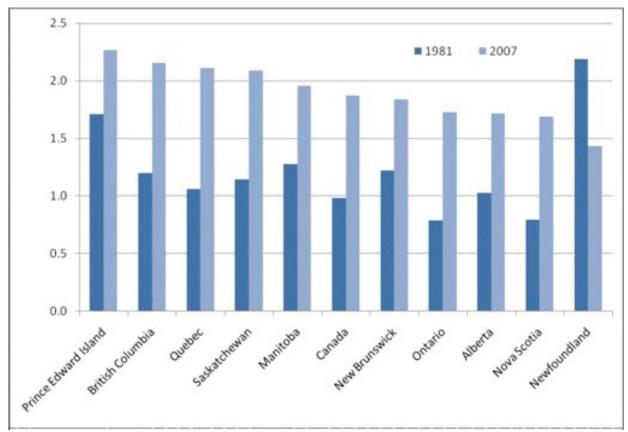
A continuing omission in the sub-index of economic security from illness arises from our lack of data on earning losses associated with illness. Since disability insurance is an employee benefit that often does not exist, or does so with significant limitations and deductibles, severe illnesses can have serious financial implications for workers through loss of income, as well as from the added expenses of medical care. However, we are unable to provide data to quantify this issue.





The large increase in personal disposable income in Newfoundland and Alberta in recent years partly explains their relatively good performance. Between 2004 and 2007, income available to Newfoundlanders and Albertans increased by 36.5 per cent and 32.4 per cent respectively (Appendix 2, Table 22). Both increases were much larger than the national average of 16.3 per cent. Nova Scotians, on the other hand, saw a smaller increase in their personal disposable income (12.2 per cent), but out-of-pocket expenditures on health care increased at a slower pace than all other provinces (Appendix 2, Table 23).

Figure 7: Out-of-Pocket Private Expenditures on Health Care as a Share of Personal Disposable Income, by Province, 1981 and 2007



6. Security from Risk Imposed by Single Parent Poverty

During the 1981-2007 period, Nova Scotian single female parents saw a considerable increase in their economic security from the risks imposed by single parent poverty (Table 4), with poverty rates in that group declining from 67.3 per cent in 1981-1983 to 43.0 per cent in 2003 to 2005⁸ (Appendix 2, Table 6). The trend was similar in Canada, with the poverty rate declining from 62.9 per cent in 1981-1983 (based on LIMs) to 40.3 per cent (Appendix 2, Table 7).

The substantial decline in the divorce rate (in 2007 it was only about two-thirds the mid-1980s rate), as well as the sharp decline in single female parent poverty since 1997, produced a significant increase in the index of security from the risk imposed by single-parent poverty. Moreover, the depth of poverty for female lone parents in Nova Scotia (i.e. the gap between

⁸ Due to small sample size, the data on poverty rate and poverty gap showed large year to year variability. For this reason, we use three-year averages as the start and end points of the period. Also, due to lack of available data on poverty after 2005, the values for 2006 and 2007 are imputed from the average of 2003 to 2005. Because both the poverty rate and poverty gap of single parent families have been falling since 2002 (see Table 6), an extrapolation of recent trends would produce more positive results than those emphasized in the text.

income and the low-income cut-off or LICO) has decreased and, since 2005, has been at close to its lowest level over the 1981-2007 period (Appendix 2, Table 6).

Although Canada also shared similar trends during this same period, the magnitude of the increase in security for Canadian single mothers nationwide was not as great as that in Nova Scotia, largely because the poverty gap ratio nationwide did not decline as dramatically as it did in Nova Scotia (Table 4 and Appendix 2, Tables 6 and 7).

		Nova	Scotia	Canada			
	Indicato	or Values	Absolute Change	Indicator Values		Absolute Change	
	1981	2007	1981 - 2007	1981	2007	1981 - 2007	
Index of Security from Risk Imposed by Single-parent Poverty	0.286	0.728	154.5	0.431	0.739	71.5	
Risk imposed by single-parent poverty	28.2	11.1	-17.1	22.6	10.6	-12.0	
Divorce Rate, %	1.127	0.865	-0.262	1.116	0.866	-0.250	
Poverty rate for lone female families, %	67.3	43.0	-24.3	62.9	40.3	-22.6	
Poverty gap for lone female families	0.339	0.274	-0.065	0.301	0.294	-0.007	

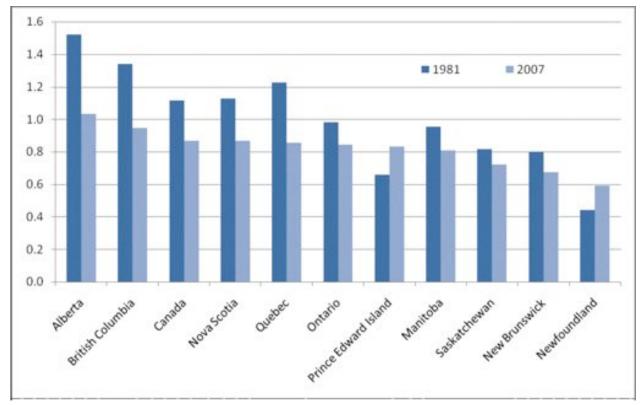
Table 4: Trends in the Indicators of Security from Risk Imposed by Single-parent Poverty for Nova
Scotia and Canada, 1981 vs. 2007 ⁹

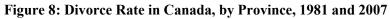
Table 4 shows that Nova Scotia had a divorce rate in 2007 virtually identical to the national average. This indicator, defined as the ratio of the number of divorces over the number of married couples, stood at 0.865 per cent in 2007, virtually equal to the national average of 0.866 per cent (Figure 8). However, the poverty rate for lone female families, defined on a low income measure (LIM) basis, was 43.0 per cent in Nova Scotia – a marked improvement over the 1997 rate of 77.9 per cent, but still higher than the national average of 40.3 per cent (Figure 9). The lowest single female family poverty rate was in Quebec at 34.3 per cent.

Meanwhile, the poverty gap for lone female families in 2003-05 was 0.274 in Nova Scotia, which was lower than all other provinces except Prince Edward Island at 0.191 and Quebec at 0.256. However, the overall risk imposed by single-parent poverty, which is calculated by the product of the divorce rate, the poverty rate, and the poverty gap, was relatively higher in Nova Scotia than nationwide, and the index of security from risk imposed by single parent poverty hence was correspondingly lower in Nova Scotia than nationwide (Table 4).

⁹ As explained earlier, the poverty rate and poverty gap for 1981 are actually the average for 1981 to 1983, and for 2007, the average of 2005 to 2007. Also, the data in 2006 and 2007 are imputed from the average of 2003 to 2005.

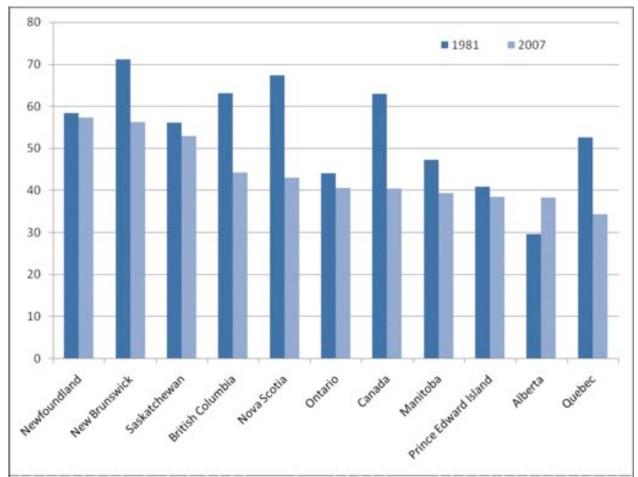
The index of security from risk imposed by single parent poverty for Nova Scotia was 1.5 per cent lower than the national average. Prince Edward Island had the greatest security from risk imposed by single parent poverty in the country, followed by Quebec and Manitoba. Alberta had the least economic security for single mothers, and British Columbia had the second least, which is partly attributable to the fact that those two provinces had the highest divorce rates in the country (Figure 8).





During the 1981 to 2007 period, the divorce rate declined steadily in Nova Scotia, at an average of 1.01 per cent per year. Actually, all provinces in Canada have experienced a decrease in the divorce rate in the last quarter century except Newfoundland and PEI (whose divorce rates are still 32.2 per cent and 23.0 per cent below the national average, respectively). The divorce rate in Newfoundland (0.59 per cent) remains by far the lowest in the country, and considerably less than the Canadian rate (0.87 per cent) (Figure 8).

Figure 9: Poverty Rates for Female Single Parent Families in Canada (LIM), by Province, 1981 and 2007



Based mainly on the nationwide declines in the divorce rate and on the declines in poverty that resulted from the increased labour force participation of single mothers since the mid-1990s, the overall index of security from the risk imposed by single-parent poverty rose considerably in all provinces except Alberta. The greatest relative increase in economic security for single mothers in the country took place in Nova Scotia, with the index showing a 154.5 per cent increase between 1981 and 2007. Consequently, Nova Scotia moved up to eighth place (third last) among the provinces on this indicator in 2007 – a gain from its tenth (last) place ranking in 1981.

7. Security from Risk Imposed by Poverty in Old Age

The index of security from the risk imposed by poverty in old age in Nova Scotia saw steady improvements through the 1980s and early 1990s, reaching its highest level in 1994. This was partly due to federally legislated improvements to Old Age Security and Guaranteed Income Supplement benefits, including higher payments, indexation of benefits, and provision of spousal allowances. However, since 2005, this particular index has been 9.6 per cent lower than its peak in 1994 (Appendix 2, Table 9). The reason this index shows a 12.9 per cent improvement over

the last quarter century is that the 1981 level was the second lowest on record in the period. It was 9.0 per cent lower even than the following year (1982). It is therefore questionable whether the apparent magnitude of improvement in the index indicated on Table 5 provides an accurate characterization of the actual trend during this period.

The poverty gap for elderly families was less between 2003-2005 than in the early 1980s and late 1990s, but higher than in the late 1980s and early 1990s. The elderly poverty rate defined on a LIM basis decreased in Nova Scotia by 4.7 percentage points between 1981 and 2005, but reached a high of 17.5 per cent in 2003 – more than double the rate of the early 1990s (Appendix 2, Table 9). Nationwide, the decline in elderly poverty and in security from the risk imposed by elderly poverty was considerably more impressive than in Nova Scotia (Table 5).

		Nova	a Scotia	Canada			
	Indicator Values		Absolute Change	Indicator Values		Absolute Change	
	1981	2007	1981 - 2007	1981	2007	1981 - 200	
Index of Security from Risk Imposed by Elderly Poverty	0.719	0.812	12.9	0.600	0.847	41.2	
Poverty intensity for elderly families	0.061	0.034	-0.027	0.095	0.024	-0.071	
Poverty rate for elderly families, %	13.8	12.0	-1.8	15.3	7.5	-7.8	
Poverty gap ratio	0.177	0.136	-0.041	0.236	0.169	-0.067	

Table 5: Trends in the Indicators of Security from Risk Imposed by Elderly Poverty for Nova Scotia and Canada, 1981 vs. 2007 $^{\rm 10}$

In 2003-05, the poverty rate for elderly families was 12.0 per cent in Nova Scotia (Figure 10), somewhat higher than the national average of 7.5 per cent and almost five times higher than in Alberta – the province with the lowest elderly poverty rate in the country (2.5 per cent). The poverty gap for elderly families in Nova Scotia (0.136) was smaller than the national average (0.169) (Appendix 2, Table 11). However, Nova Scotia's relatively small elderly poverty gap did not make up for the relatively high poverty rate. The overall index of security from the risk imposed by poverty in old age, defined as the product of the elderly poverty rate and the elderly poverty gap, was relatively low in Nova Scotia. In fact, the Nova Scotia index of security from risk imposed by elderly poverty was the ranked sixth in the country (Appendix 2, Table 11).

for elderly families

¹⁰ As explained earlier, the poverty rate and poverty gap for 1981 are actually the average for 1981 to 1983, and for 2007, the average of 2005 to 2007. Also, the data in 2006 and 2007 are imputed from the average of 2003 to 2005

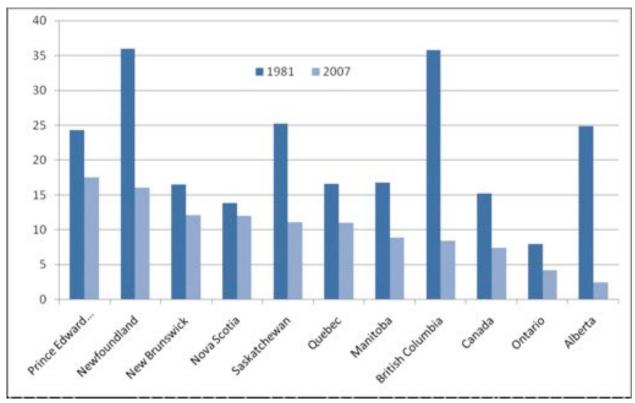


Figure 10: Poverty Rates for Elderly Families, by Province, 1981 and 2007

8. Overall Economic Security

We now aggregate the four components on security from the risks posed by unemployment, illness, old age, and single parenthood into an overall index of economic security by multiplying the scaled values by their population weights, as described in the methodology section above. Figure 11 shows the overall index of economic security for Canada and the provinces in 2007 based on the weighting methodology. Nova Scotia ranked fourth in the country, with an index of 0.581, 4.7 per cent higher than the national average (0.555). The highest level of economic security in the country was in Alberta (0.605).

Nova Scotia's above average overall index of economic security is due primarily to its improvement in the index of security from the risk associated with single parent poverty, and secondarily to the fact that the index of security from the risk of illness did not fall as sharply in percentage terms as in other parts of the country.

The 12.9 per cent decline in overall economic security in Nova Scotia between 1981 and 2007 is explained mostly by the 52.9 per cent drop in economic security from the risks imposed by illness during this period. As noted, security from the risks imposed by illness also declined nationwide during this period, as Canadians spent an increasing proportion of their disposable incomes on private health care expenditures. The nationwide decline in security from illness

risks (59.3 per cent) was somewhat more than the Nova Scotia decline, which therefore also helps explain the relatively better performance of this province.

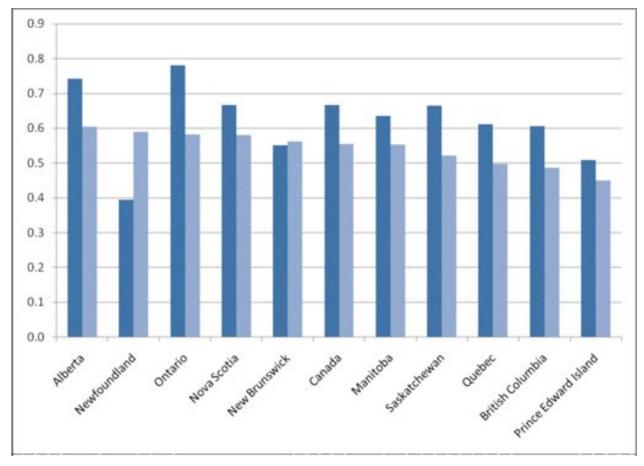


Figure 11: Index of Overall Economic Security, 1981 and 2007

PART III: NOVA SCOTIA'S SOCIAL SAFETY NET

9. Minimum Wages

In Nova Scotia, the nominal hourly minimum wage was \$3.30 in 1981, and it increased to \$7.60 by 2007 (Figure 12), an increase of \$4.30, or 130.3 per cent. This represents the fourth largest increase in nominal minimum wages among Canadian provinces after Ontario, Manitoba and British Columbia. The average for Canada in 1981 was \$3.59, and by 2007 it had increased to \$7.93, an increase of \$4.34 or 120.9 per cent.

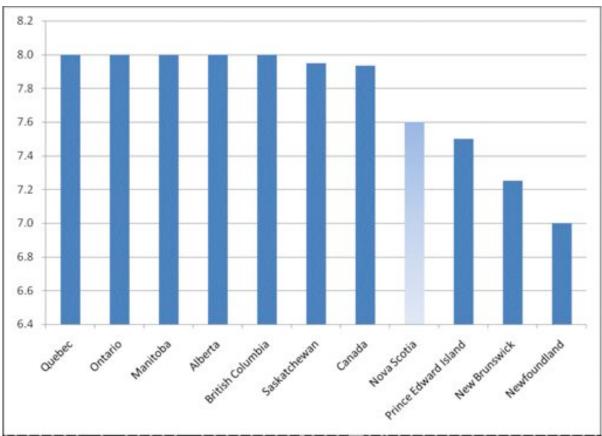
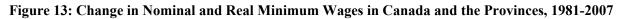


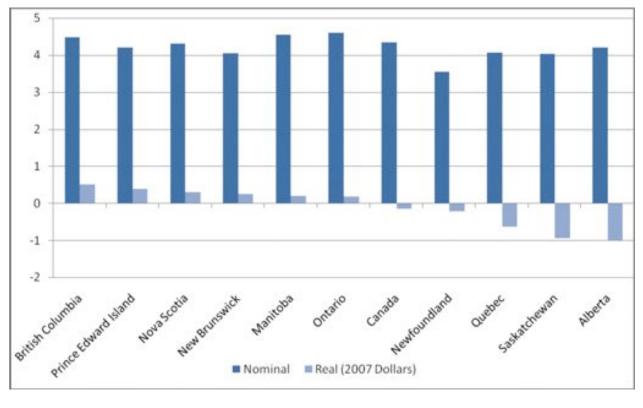
Figure 12: Minimum Wage in 2007 in Canada and the Provinces, 2007 Dollars

Since inflation in prices was of a similar magnitude as the nominal increase in minimum wages, the two almost exactly counter-balanced each other. As such, there has been virtually no change in the real (inflation-adjusted) minimum wage. On average, real minimum wages in Canada were \$8.09 in 1981 (in 2007 dollars), and decreased to \$7.93 by 2007, a decline of \$0.16 (2.0 per cent). Real minimum wages in most provinces were at about the same level in 2007 as in 1981 (Figure 13). In Nova Scotia, they increased marginally by \$0.29, or 4.0 per cent, from \$7.31 in 1981 to \$7.60 in 2007 (both measured in 2007 dollars) (Table 6).

		Nova	Scotia	Canada		
	Indicator Values		Per Cent Change	Indicator values		Per Cent Change
	1981	2007	1981-2007	1981	2007	1981-2007
Nominal hourly minimum wages (current dollars)	\$3.30	\$7.60	130.3	\$3.59	\$7.93	120.9
Real hourly minimum wages (2007 dollars)	7.31	7.60	4.0	8.09	7.93	-2.0

Compared to other provinces, Nova Scotia had the seventh highest (or fourth lowest) nominal minimum wage in Canada in 2007 (Figure 12), faring worse than British Columbia, Quebec, Ontario, Manitoba, Alberta, and Saskatchewan, but better than the other Atlantic Provinces. This was a very marginal improvement over its 1981 ranking when Nova Scotia had the eighth highest (or third lowest) minimum wages (tied with Prince Edward Island). This slight change in ranking (and the comparison in Table 6) indicates that minimum wages in Nova Scotia have increased at a marginally faster rate than in most provinces in Canada.





10. Social Assistance Benefits

Data on social assistance benefits are only available for a shorter timeline than the data for previous indicators. For single persons, single parents with one child, and couples with two children social assistance data are available for 1986 to 2006. For persons with a disability, data are only available from 1989 to 2006.

In real terms, total social assistance benefits in Canada have decreased in general since 1986 – despite the introduction of federal payments under the Canada Child Tax Benefit and GST tax Credit. With the exception of couples with two children, welfare recipients in Nova Scotia have seen a much sharper decline in their incomes since 1986 than the average Canadian welfare recipient.

In 1986, single employable persons eligible for social assistance benefits in Canada received \$7,227 (2007 dollars) in welfare income on average.¹¹ By 2006, this income had decreased by 5.0 per cent in real terms to \$6,868. The decrease for this group was more than four times larger in Nova Scotia — declining from \$7,840 in 1986 to \$6,119 in 2006 — a drop of 21.9 per cent over the period. It should be noted that Nova Scotia welfare benefits for single employable persons in 1986 were 8.5 per cent above the Canadian average, and that they had decreased to 10.9 per cent below the Canadian average by 2006.

In 1989, persons with a disability eligible for social assistance benefits received \$11,466 on average in Canada, whereas Nova Scotian persons with a disability received \$11,615 - 1.3 per cent higher than the national average. But again, there was a much larger decrease in benefits in Nova Scotia than in the rest of Canada. In 2006, welfare income for persons with a disability was \$9,154 in Nova Scotia, a decrease of 21.2 per cent from 1989 - 4.5 times the magnitude of decline in the rest of the country. In Canada, the decline in benefits for persons with a disability was 4.5 per cent, to a benefit amount of \$10,950 in 2006 - 16.4 per cent higher in absolute terms than in Nova Scotia.

In 1986, single parents with one child eligible for social assistance benefits received an average of \$15,378 in welfare income in Nova Scotia and \$16,238 in Canada (expressed in 2007 dollars). In Nova Scotia, this income decreased to \$14,308 by 2006. This represents a decline of 7.0 per cent, while in Canada it declined by 2.6 per cent to \$15,815 in 2006. Welfare income for Nova Scotian single parents with one child was 5.3 per cent below the Canadian average in 1986, but 9.5 per cent below the Canadian average in 2006.

Couples with two children eligible for social assistance benefits in Nova Scotia were the only group of the four to experience a less severe decline in their welfare income than Canada as a whole. The welfare income for this group was \$19,945 in 1986, and it remained relatively stable at \$20,379 in 2006 (a slight increase of 2.2 per cent over the period). In Canada, welfare income

¹¹ The Canadian average was calculated by the Centre for the Study of Living Standards by taking the average of welfare incomes in each province weighted by their respective population.

for this group decreased by 6.6 per cent — the largest relative decrease among the four groups — from \$22,556 in 1986 to \$21,059 in 2006 (Table 7).

		Nova Scoti	a	Canada		
	Welfare Income		Per Cent Change	Welfare Income		Per Cent Change
	1986	2006	1986-2006	1986	2006	1986-2006
Single employable persons	7,840	6,119	-21.9	7,227	6,868	-5.0
Persons with a disability ¹²	11,615	9,154	-21.2	11,466	10,950	-4.5
Single parents with one child	15,378	14,308	-7.0	16,238	15,815	-2.6
Couples with two children	19,945	20,379	2.2	22,556	21,059	-6.6

Table 7: Trends in the Indicators of Social Assistance Benefits for Nova Scotia and
Canada (2007 dollars)

Source: Welfare Incomes 2005, published by the National Council of Welfare and web-only data for Welfare Incomes 2006

Due to the much larger declines in welfare income for most categories of social assistance recipients in Nova Scotia compared to Canada as a whole, it is not surprising that Nova Scotia's provincial ranking in welfare income is lower in 2006 than in 1986 (or 1989 for persons with disabilities). For single employable persons, Nova Scotia ranked fifth in 1986, but seventh in 2006. For persons with disabilities, the province ranked fourth in 1986, but sixth in 2006. For single parents, Nova Scotia fell from sixth place to last place. Only for couples with two children did Nova Scotia's ranking among Canadian provinces improve — from second last place in 1986 to eighth place (third last) in 2006 (see Appendix 2, Table 19).

11. Minimum Wage Relative to the Low Income Cut Off¹³

Another way to look at the adequacy of minimum wages in terms of economic security is by assessing the hours that have to be worked at minimum wage to reach the before-tax Low Income Cut-Off (LICO) of Statistics Canada. The LICO is different for rural and urban areas. For Nova Scotia, this section will first look at the adequacy of minimum wages in Halifax (using the LICO of an urban area of population 100,000 to 499,999) and then in the rural areas (with the

¹² Data for Persons with a disability are for the period 1989-2006.

¹³ Note that, even though Statistics Canada's low-income cut-offs (LICO) are widely used as a "poverty line" (as they are here by the Centre for the Study of Living Standards), Statistics Canada does not make this equation. See Statistics Canada's website for an official statement by the Chief Statistician, Ivan Fellegi at: http://www.statcan.ca/english/research/13F0027XIE/13F0027XIE.htm. Accessed 23 May, 2008.

rural LICO). As noted earlier, the Market Basket Methodology of HRSDC implies that the cost of living of poor people is actually 3 per cent <u>higher</u> in rural Nova Scotia than in Halifax and not (as the LICO presumes) 29 per cent lower. Hence, readers who are convinced by the MBM may wish to disregard the illustrative calculations with the LICO for rural areas presented here.

Since the Canada Child Tax Benefit (CCTB) or HST Tax Credit only came into existence in the 1990s, while Family Allowance was in place in the 1980s, the trend analysis is conducted assuming no receipts from any other transfer program. In a sense, this "earnings-only" calculation serves to illustrate just how important the CCTB and HST transfer systems are since they are all that make it remotely feasible for working families to reach the Low Income Cut Off. To demonstrate this importance, earnings at the minimum wage in 2006 for Nova Scotia are then added to GST/HST credits and for the Canada Child Tax Benefit, and compared to the same poverty lines (before-tax LICO).

In Canada, single employable persons would have had to work 43.6 hours weekly for 52 weeks at minimum wage¹⁴ to reach the urban LICO in 1981 (Table 8). This increased to 45.7 hours in 2006, an increase of 4.8 per cent – i.e. single persons working at minimum wage needed to work more than full-time to reach the LICO in 1981, and slightly more hours in 2006.

Canadians with children experienced the same trends over the 25-year period for this indicator. Yet the number of hours required at minimum wage to reach the urban LICO was even greater. Single parents with one child would have had to work 54.3 hours per week at minimum wage in 1981, or 9 hours daily for 6 days a week, 52 weeks a year, just to reach the LICO, while couples with two children would have had to work 81.0 hours. This means that both would have to work full-time (and still care for their children, somehow). The number of hours that had to be worked at minimum wage by single parents with one child in order to reach the poverty line increased to 56.9 hours in 2006. For couples with two children, it increased to 85.0 hours.

Nova Scotians in all four categories fared slightly worse on this indicator than the average Canadian. This is largely due to the fact that minimum wages in Nova Scotia were slightly lower than for the average Canadian. In 2006, single employable persons in Nova Scotia would have had to work 49.1 hours per week, every week, at minimum wage to reach the urban LICO, slightly more than in 1981 (48.3 hours). Single parents with one child experienced the same trend with an increase of 1.7 per cent in the number of hours that would have had to be worked – i.e. from 60.1 hours in 1981 to 61.1 in 2006. Couples with two children saw an increase of 1.7 per cent from 89.7 hours to 91.2 hours.

Statistics Canada's low-income cut-offs (LICO) — used by many as a proxy for the 'poverty line' — are calculated according to the share of total income spent on food, clothing and shelter. The intention is to reflect costs of living in different sized urban and rural settings. The before tax LICO for a family of four living in a city of 100,000 to half a million people in Canada was \$33,216, while the LICO for the same family in a rural area was \$21,728.¹⁵ For this reason and due to the fact that the minimum wage is the same in rural and urban areas, Canadians and Nova

¹⁴ Deductions for taxes, employment insurance or other reasons were not accounted for. Because the minimum wage calculation is 'before tax', we compare here to the 'before tax' Low Income Cut Off.

Scotians living in rural areas were better off, according to this indicator, than those living in urban centres. [However, according to the Market Basket Methodology, once one takes account of the greater cost of transportation in rural areas, the poverty line should actually be drawn at a <u>higher</u> income in rural areas than in mid-sized cities.]

Single persons in Nova Scotia living in rural areas would have had to work 39.2 hours at minimum wage to reach the rural LICO in 2006, which is somewhat higher than in 1981 (38.6 hours). Single parents with one child living in rural areas would have had to work more than full-time, at 48.9 hours weekly in 2006. Couples with two children were better off, at 72.9 hours of work at minimum wage to reach the rural LICO in 2006. Both experienced slight increases in the number of hours since 1981 (1.9 and 1.7 per cent, respectively).

		Nova Scot	ia		Canada		
	Indicato	r Values	Per Cent Change	Indicato	or values	Per Cent Change	
	1981	2006	1981-2006	1981	2006	1981-2006	
Urban LICO (Population	of 100,000	to 499,999)		•			
Single employable persons	48.3	49.1	1.7	43.6	45.7	4.8	
Persons with a disability	48.3	49.1	1.7	43.6	45.7	4.8	
Single parents with one child	60.1	61.1	1.7	54.3	56.9	4.8	
Couples with two children	89.7	91.2	1.7	81.0	85.0	4.9	
Rural LICO							
Single employable persons	38.6	39.2	1.6	34.9	36.6	4.9	
Persons with a disability	38.6	39.2	1.6	34.9	36.6	4.9	
Single parents with one child	48.0	48.9	1.9	43.4	45.5	4.8	
Couples with two children	71.7	72.9	1.7	64.8	67.9	4.8	

Table 8: Trends in the Indicators of Minimum Wages Relative to the Poverty Line for NovaScotia and Canada: Weekly Hours of Work Needed at Minimum Wage to Reach LICO

Compared to the average in Canada, Nova Scotians in rural areas would have had to devote more hours at minimum wage to reach the rural LICO. Single persons in Canada had to work 36.6 hours only at minimum wage to reach the LICO in 2006 (almost 3 hours less than in Nova Scotia). For single parent families with one child, 45.5 hours were needed. For couples with two children, 67.9 hours were enough to reach the LICO.

Analysis of 'earnings-only' income for persons working at minimum wage enables us to see how adequate the minimum wage is <u>by itself</u> but in fact minimum wage workers are eligible for two important income supplement programs – GST credits and Canada Child Tax Benefits.. These programs make a huge difference to the adequacy of incomes in rural and urban areas.

For all four categories considered, these benefits enable families to reach the poverty line while working at minimum wage with considerably fewer hours of work. However, for obvious reasons, the greatest improvements are for single parent families and couples with two children. Single employable persons in rural areas are hardly affected – the number of hours they need to work at minimum wage decline by a mere 0.6 hours to 38.7 hours in 2006, virtually identical to the difference seen by those living in urban areas (of 0.7 hours, to 48.4 hours). Similarly, there is little difference for single persons with a disability.

However, single parent families with one child benefit greatly from the Canada Child Tax Benefits program. Due mainly to the sum they receive from that program, amounting to \$4,241 in 2006 from both federal and provincial sources in Nova Scotia, the number of hours per week they need to work at minimum wage to reach the LICO is 37.1 hours in rural areas and 46.4 hours in urban areas (for 52 weeks a year – which may not always be possible). These differences of 11.8 and 14.8 hours compared to the basic minimum wage salaries makes for work weeks that are at least conceivably reasonable. Couples with two children (who would receive \$7,018 from Child Tax Benefits programs if working full time at minimum wage) also experienced similar declines, with the number of hours of work needed when accounting for benefits standing at 58.1 hours in rural areas and 72.7 hours in urban areas.

12. Child Benefits

The National Child Benefit is a joint initiative of the federal, provincial, and territorial governments that is intended to help prevent child poverty and to reduce the depth of child poverty. In July 1998, the Government of Canada enhanced the Canada Child Tax Benefit (CCTB) by introducing the National Child Benefit Supplement (NCBS).¹⁶

Since 1998, child benefit expenditures are therefore reported in two categories — 'reinvestments' and 'total investments' (including new investment). Re-investments include spending by the provinces that are funded by the National Child Benefit Supplement, while investments are additional funds spent on child benefits by provinces. 'Total investments' represent the sum of these two figures. Re-investments by all provinces except Quebec¹⁷ increased from \$264.3 million in 1998-1999 (2007 dollars) to \$660.1 million in 2006-2007. This represents a 149.8 per cent increase, or an average compound increase of 10.7 per cent per year. Total investments (including new investment) grew at about the same rate — 162.4 per cent over the period, or 11.3 per cent annually. In 1998-1999, therefore, nationwide total investment in child benefits was \$330.2 million (2007 dollars), and this increased to \$866.5 million by 2006-2007.

Child benefit re-investments in Nova Scotia grew at a slower rate than in the rest of Canada, at 103.7 per cent or 8.2 per cent annually. From a level of \$10.3 million in 1998-1999 (2007

dollars), re-investments reached \$21.0 million in 2006-2007. Including new investments, the growth was 144.4 per cent over the period, or 10.4 per cent annually, slightly below the national average. Total investments in Nova Scotia reached \$27.0 million in 2006-2007, up from \$11.1 million in 1998-1999 (Table 9).

It is interesting to note that re-investments represented a much higher proportion of total child benefits investment in Nova Scotia in 1998 than they did in 2006. This indicates higher relative spending by the province itself on child benefits in 2006. Further investigation is required to understand the reasons for the changing balance between reinvestments and new investments in child benefits.

		Nova Scotia		Canada		
	Indicator Values		Per Cent Change	Indicator values		Per Cent Change
	1998-1999 ¹⁸	2006-2007		1998-1999	2006-2007	
Child benefits, re- investment in million \$	10.3	21.0	103.7	264.3	660.1	149.8
Child benefits, total investment in million \$	11.1	27.0	144.4	330.2	866.5	162.4

Table 9: Trends in	the Indicators of	of Child Benefits	for Nova S	Scotia and Canada	. 2007 Dollars
Table 7. Trenus in	inc mulcators (JI CHING Denemes	101 11074	Scotta and Canada	, 2007 Donai s

Source: National Child Benefits (2001, 2008)

PART IV: CONCLUSIONS

This report has adopted the CSLS approach to measuring economic security in an aggregate index, based on security from the risks imposed by four key factors – unemployment, illness, old age, and single parenthood – to provide an examination of trends in economic security in both Nova Scotia and Canada. It has also examined provincial and national trends in four additional indicators (minimum wage levels, social assistance levels, child benefits, and the adequacy of the minimum wage in relation to the poverty line) to assess the degree of economic security provided through Nova Scotia's social safety net. The basic conclusions are the following:

- Economic security in Nova Scotia decreased during the 1981-2007 period, as it did nationwide. In 2007, the overall index of economic security in Nova Scotia was 0.595, a decline of 10.8 per cent from its level of 0.667 in 1981. Nationwide, the economic security index declined from 0.666 to 0.560, which represents a decline of 15.9 per cent.
- The increased economic risks associated with illness, due to sharp increases in direct private health care expenditures as a proportion of disposable income, were the main driving force behind this development, since the index of security from the risks imposed by illness in Nova Scotia declined by 52.9 per cent from 0.915 in 1981 to 0.431 in 2007. Nationwide, the decline was 59.3 per cent from 0.813 in 1981 to 0.331 in 2007.
- The economic risks from single parent poverty, unemployment, and elderly poverty decreased between 1981 and 2007.
- However, our analysis highlighted some key caveats to the above results that point both to the danger of using only the start and end years (1981 and 2007) as points of comparison, and to the importance of analysing internal variations. Thus we noted, for example, that security from the risks of elderly poverty in Nova Scotia was 5.6 per cent lower in 2007 than its peak in 1994, and lower, in fact, than at any point during the entire period 1990-1997. The magnitude of the 17.9 per cent recorded improvement between 1981 and 2007 is due partly to the fact that the 1981 level was the second lowest on record in the last quarter century, 9.0 per cent lower even than the following year (1982).
- We saw also that security from unemployment risks largely followed the business cycle, dropping particularly dramatically during the 1990s, and not recovering to 1981 levels until 1999. We also saw that the registered improvement of 13.8 per cent between 1981 and 2007 is particularly sensitive to the relative weights given to the different components of that sub-index. Thus, the much stronger weight given to the unemployment rate than to employment insurance benefits (4:1) means that the significant drop in the unemployment rate far outweighs the sharp reduction in EI coverage during this period.
- The marked improvement in security from the risks of poverty associated with single parenthood is attributable primarily to two factors the decline in Nova Scotia's divorce rate and the marked increase in labour force participation by single mothers. The improvement in economic security for single mothers must, however, be balanced both against their higher levels of time poverty and reduced time with children, and against the

hidden costs of employment (like higher child care costs and other expenditures) that are not accounted for in the index of economic security.

- In terms of the overall index of economic security, Nova Scotia ranked third out of ten Canadian provinces in 1981 and second out of ten in 2007. Despite the very sharp drop in Nova Scotia's index of economic security from financial risks imposed by illness, which resulted in a decline in overall economic security in Nova Scotia, this decline did not result in a drop in its relative ranking in the overall index compared to other provinces, since the risks imposed by illness increased more sharply nationwide than in Nova Scotia.
- Minimum wages in Nova Scotia are increasing at a somewhat faster rate in Nova Scotia than the average in Canada. This province had the third lowest minimum wages in Canada in 1981, and improved its ranking by one by 2007. Inflation kept real hourly minimum wages at about the same level in 2007 as in 1981 in all provinces. In Nova Scotia, they increased by 4.0 per cent in real terms over the period.
- Welfare benefits have decreased in Canada over the period of 1986-2006, but Nova Scotia has seen a sharper decline in welfare benefits than the Canadian average.
- Canadians and Nova Scotians working at minimum wage have to put in more hours than a normal full-time working week just to reach the poverty line, raising serious questions about the adequacy of minimum wages to meet household needs. Compared to most other Canadians, Nova Scotians in 2006 generally had to devote more hours at minimum wage to reach the Low Income Cut-Off (LICO). The LICOs — used here as a proxy for the poverty line — are set considerably lower for rural than for urban Canadians, but a Market Basket Method of drawing the poverty line would set it somewhat higher (3 per cent) in rural than in urban areas. The cost of living in rural areas is a particularly important issue for Nova Scotia, because of the more rural composition of the population.

REFERENCES

Battle, Ken (2003) "Minimum Wages in Canada: A Statistical Portrait with Policy Implications," Caledon Institute of Social Policy, February.

Di Tella, Rafael, Robert MacCulloch and Andrew Oswald (2003) "The MacroEconomics of Happiness," *The Review of Economics and Statistics* November 2003, 85(4) pp.809-827.

Health Council of Canada (2008) "Rekindling Reform: Health Care Renewal in Canada, 2003-2008," Toronto: Health Council, available online at <u>www.healthcouncilcanada.ca</u>,

Human Resources and Social Development Canada (2006) "Low Income in Canada: 2000-2002 Using the Market Basket Measure", Cat. No.: HS28-49/2006E-PDF, June.

Human Resources and Social Development Canada (2007) "Low Income in Canada: 2000-2004 Using the Market Basket Measure", Catalogue No.: HS28-49/2004E-PDF.

Lapointe, Simon (2007) "An Overview of Data Sources for Private Healthcare Expenditures in Canada," draft available on request from CSLS.

Michaud, Sylvie, Cathy Cotton and Kevin Bishop (2004), "Exploration of methodological issues in the development of the market basket measure of low income for Human Resources Development Canada", Income research paper series, Catalogue no. 75F0002MIE - No. 001 Income Statistics Division, Ottawa.

National Child Benefit (2001) "National Child Benefit Progress Report 2000", available online at <u>www.nationalchildbenefit.ca/ncb/library2.shtml</u>

National Child Benefit (2008), "National Child Benefit Progress Report 2006", available online at <u>www.nationalchildbenefit.ca/ncb/library1.shtml</u>

National Council of Welfare (2007), "Welfare Incomes 2005", available online at <u>www.ncwcnbes.net/en/research/welfare-bienetre.html</u>

National Council of Welfare (2008), "Welfare Incomes 2006: Web-Only Data", available online at <u>www.ncwcnbes.net/en/research/welfare-bienetre.html</u>

Osberg, Lars (1998) "Economic Insecurity" Discussion paper No. 88, Social Policy Research Center, University of New South Wales, Australia.

Osberg, Lars and Andrew Sharpe (2002a) "An Index of Economic Well-being for Canada and Provinces," retrieved online from <u>www.csls.ca/events/nctb/provwbn.pdf</u>.

Osberg, Lars and Andrew Sharpe (2002b), "An Index of Economic Well-being for Selected OECD Countries," *Review of Income and Wealth*, September, Vol. 48, No. 3, pp. 291-316.

Osberg, Lars and Andrew Sharpe (2005) "How Should We Measure the Economic Aspects of Well-Being?" *Review of Income and Wealth*, June, Vol. 51 no. 2, pp. 311-336.

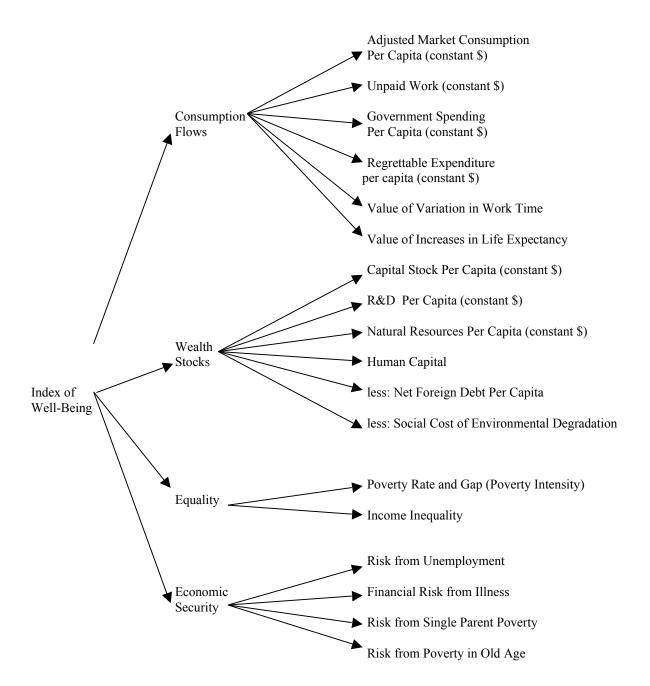
Osberg, Lars and Andrew Sharpe (2006) "New Estimates of the Index of Economic Well-Being for Canada," Paper presented at the annual meeting of the Canadian Economics Association in 2006.

Sharpe, Andrew and Jean-Francois Arsenault (2007) "Living Standards Domain of the Canadian Index of Wellbeing," CSLS paper prepared for the Atkinson Charitable Foundation.

Smith, Jeremy (2003) "Guide to the Construction and Methodology of the Index of Economic Well-Being", available online at <u>www.csls.ca/iwb/iewb-guide.pdf</u>.

APPENDIX 1: THE CSLS INDEX OF ECONOMIC WELLBEING

Figure 14: The CSLS Index of Economic Wellbeing Weighting Tree



APPENDIX 2: SUPPLEMENTARY TABLES

			Proportion	Proportion			
			of	of			
			Unemployed	Earnings		Scaled	Overall Index of
		Scaled	Receiving	Replaced	Financial	Financial	Security from the
	Unemployment	Unemployment	Benefits	by	Protection for	Protection for	Risk Imposed by
	Rate (%)	Rate	(coverage)	Benefits	Unemployment	Unemployment	Unemployment
	Α	A'	В	С	D=B*C	D'	E=A'*0.8+D'*0.2
1981	7.6	0.708	66.6	38.4	0.256	0.293	0.625
1982	11.0	0.540	75.9	38.0	0.288	0.337	0.499
1983	12.0	0.490	74.3	38.5	0.286	0.333	0.459
1984	11.3	0.525	73.7	38.4	0.283	0.330	0.486
1985	10.6	0.560	73.6	39.2	0.288	0.337	0.515
1986	9.7	0.604	75.6	40.2	0.304	0.358	0.555
1987	8.8	0.649	76.2	40.6	0.309	0.365	0.592
1988	7.8	0.698	82.6	41.3	0.342	0.409	0.640
1989	7.5	0.713	83.8	42.0	0.352	0.422	0.655
1990	8.1	0.684	83.1	43.5	0.361	0.435	0.634
1991	10.3	0.574	78.2	44.2	0.345	0.414	0.542
1992	11.2	0.530	71.5	44.1	0.316	0.374	0.499
1993	11.4	0.520	65.3	43.9	0.287	0.335	0.483
1994	10.4	0.569	59.1	42.5	0.251	0.286	0.513
1995	9.5	0.614	52.8	42.2	0.223	0.249	0.541
1996	9.6	0.609	49.4	41.8	0.206	0.226	0.532
1997	9.1	0.634	44.1	40.0	0.176	0.186	0.544
1998	8.3	0.674	45.4	40.3	0.183	0.195	0.578
1999	7.6	0.708	45.0	40.7	0.183	0.195	0.606
2000	6.8	0.748	44.9	40.4	0.182	0.193	0.637
2001	7.2	0.728	44.8	42.0	0.188	0.202	0.623
2002	7.7	0.703	43.8	42.4	0.186	0.199	0.602
2003	7.6	0.708	43.8	42.3	0.185	0.198	0.606
2004	7.2	0.728	43.8	41.7	0.183	0.195	0.621
2005	6.8	0.748	44.1	40.7	0.180	0.190	0.636
2006	6.3	0.773	44.6	40.9	0.182	0.194	0.657
2007	6.0	0.788	44.4	41.2	0.183	0.195	0.669

Appendix Table 1: Security from the Risk Imposed by Unemployment, Canada, 1981 - 2007

Source: Statistics Canada Labour Force Survey, *Employment Insurance Statistics and Survey of Employment, Payroll and Hours.*

Appendix Table 2:	Security from th	e Risk Imposed b	v Unemployment	t, Nova Scotia, 1981 - 2007
rr · · · · · ·		r r r		.,

		-	Proportion	Proportion			
			of	of			
			Unemployed	Earnings		Scaled	Overall Index of
		Scaled	receiving	replaced	Financial	Financial	Security from the
	Unemployment	Unemployment	benefits	by	Protection for	Protection for	Risk Imposed by
	Rate (%)	Rate	(coverage)	Benefits	Unemployment	Unemployment	Unemployment
	Α	Α'	В	С	D=B*C	D'	E=A'*0.8+D'*0.2
1981	10.0	0.589	90.0	37.1	0.334	0.398	0.551
1982	12.8	0.450	95.8	36.8	0.352	0.423	0.445
1983	13.4	0.421	92.1	38.1	0.351	0.421	0.421
1984	13.0	0.440	91.2	37.7	0.344	0.411	0.435
1985	13.5	0.416	88.6	38.6	0.342	0.409	0.414
1986	13.3	0.426	86.7	39.2	0.340	0.407	0.422
1987	12.0	0.490	91.9	40.4	0.371	0.449	0.482
1988	10.2	0.579	103.6	41.1	0.426	0.523	0.568
1989	9.9	0.594	108.0	43.0	0.465	0.575	0.590
1990	10.7	0.555	103.4	43.7	0.452	0.557	0.555
1991	12.1	0.485	102.0	43.6	0.445	0.548	0.498
1992	13.1	0.436	96.0	43.9	0.421	0.516	0.452
1993	14.3	0.376	84.8	44.6	0.379	0.459	0.393
1994	13.5	0.416	83.1	43.7	0.363	0.437	0.420
1995	12.2	0.480	73.4	43.9	0.322	0.383	0.461
1996	12.4	0.470	67.2	43.9	0.295	0.346	0.445
1997	12.2	0.480	59.9	42.0	0.252	0.287	0.442
1998	10.5	0.564	66.4	43.3	0.287	0.335	0.519
1999	9.6	0.609	68.1	44.1	0.301	0.353	0.558
2000	9.1	0.634	70.5	45.0	0.317	0.376	0.582
2001	9.7	0.604	65.6	45.2	0.296	0.348	0.553
2002	9.6	0.609	68.0	44.9	0.305	0.360	0.559
2003	9.1	0.634	69.3	45.0	0.312	0.368	0.581
2004	8.8	0.649	70.2	44.2	0.310	0.366	0.592
2005	8.4	0.669	72.6	43.1	0.313	0.370	0.609
2006	7.9	0.693	76.2	44.8	0.341	0.408	0.636
2007	8.0	0.688	71.3	45.3	0.323	0.383	0.627

Source: Statistics Canada Labour Force Survey, *Employment Insurance Statistics and Survey of Employment, Payroll and Hours.*

Appendix Table 3: Index of Security from the Risk Imposed by Unemployment, Canada and Provinces, 2007

	Unemploy- ment Rate (%)	Scaled Unemploy- ment Rate	Proportion of Unemployed Receiving Benefits (coverage)	Proportion of Earnings Replaced by Benefits	Financial Protection for Unemploy- ment	Scaled Financial Protection for Unemploy- ment	Overall Index of Security from the Risk Imposed by Unemploy- ment
	А	A'	В	С	D=B*C	D'	E=0.8*A'+ 0.2*D'
Canada	6.0	0.788	44.4	41.2	0.183	0.195	0.669
Alberta	3.5	0.912	23.8	42.3	0.101	0.083	0.746
Saskatchewan British	4.2	0.877	42.9	45.3	0.194	0.210	0.744
Columbia	4.2	0.877	37.7	42.3	0.159	0.163	0.734
Manitoba	4.4	0.867	38.1	43.8	0.167	0.173	0.728
New Brunswick	7.5	0.713	102.6	43.8	0.449	0.554	0.681
Quebec	7.2	0.728	56.7	43.1	0.244	0.277	0.638
Ontario	6.4	0.768	29.3	40.4	0.118	0.107	0.636
Nova Scotia	8.0	0.688	71.3	45.3	0.323	0.383	0.627
Prince Edward Island	10.3	0.574	97.2	50.4	0.490	0.610	0.581
Newfoundland	13.6	0.411	105.1	42.7	0.449	0.553	0.439

	Car	nada	Nova Scotia		
	Proportion of Private Expenditure on Health Care in Personal Disposable Income (%)	Index of Security from the Risk Imposed by Illness	Proportion of Private Expenditure on Health Care in Personal Disposable Income (%)	Index of Security from the Risk Imposed by Illness	
1981	0.982	0.813	0.794	0.915	
1982	1.026	0.789	0.851	0.884	
1983	1.068	0.767	0.868	0.875	
1984	1.086	0.757	0.918	0.848	
1985	1.116	0.741	0.967	0.821	
1986	1.174	0.709	1.148	0.723	
1987	1.198	0.696	1.202	0.694	
1988	1.197	0.697	1.186	0.703	
1989	1.212	0.689	1.222	0.683	
1990	1.259	0.663	1.216	0.687	
1991	1.323	0.629	1.242	0.672	
1992	1.386	0.595	1.295	0.644	
1993	1.463	0.553	1.322	0.629	
1994	1.510	0.528	1.383	0.596	
1995	1.515	0.525	1.379	0.598	
1996	1.529	0.517	1.443	0.564	
1997	1.587	0.486	1.485	0.541	
1998	1.570	0.495	1.555	0.503	
1999	1.636	0.460	1.523	0.520	
2000	1.586	0.487	1.728	0.410	
2001	1.554	0.504	1.616	0.470	
2002	1.721	0.413	1.822	0.359	
2003	1.685	0.433	1.848	0.345	
2004	1.741	0.402	1.722	0.413	
2005	1.802	0.369	1.847	0.345	
2006	1.855	0.341	1.683	0.434	
2007	1.872	0.331	1.689	0.431	

Appendix Table 4: Security from the Risk Imposed by Illness, Canada and Nova Scotia, 1981 - 2007

Source: Statistics Canada, *Provincial Economic Accounts and Survey of Household Spending*; Canadian Institute on Health Care Information (National Health care Expenditures Database)

Appendix Table 5: Inde	ex of Security from the	Risk imposed by Illness.	Canada and Provinces, 2007
repending rubic of max	ch of Security from the	insumposed by inness,	

	Private Expenditure on Health Care, millions of current dollars	Personal Disposable Income, millions of current dollars	Proportion of Private Expenditure on Health Care in Personal Disposable Income	Index of Security from the Risk Imposed by Illness
	А	В	C = A/B*100	D
Canada	16,514	881,964	1.87	0.331
Newfoundland	196	13,702	1.43	0.570
Nova Scotia	380	22,513	1.69	0.431
Alberta	2,028	118,242	1.71	0.417
Ontario	6,045	349,824	1.73	0.410
New Brunswick	325	17,661	1.84	0.348
Manitoba	563	28,772	1.96	0.285
Saskatchewan	497	23,841	2.09	0.216
Quebec	3,918	185,358	2.11	0.201
British Columbia	2,482	115,199	2.15	0.179
Prince Edward Island	70	3,106	2.27	0.118

Appendix Table 6: Security from the Risk Imposed by Single-Parent Poverty, Nova Scotia, 1981 - 2007

	Divorce Rate (%)	Poverty Rate for Lone Female Families	Poverty Gap for Lone Female Families	Risk Imposed by Single-Parent Poverty	Index of Security from the Risk Imposed by Single- Parent Poverty
	А	В	С	E=A*B*C	(max-x)/(max-min)
1981	1.127	69.3	0.361	28.236	0.286
1982	1.115	62.1	0.325	22.519	0.433
1983	1.129	70.5	0.330	26.205	0.338
1984	1.079	78.8	0.334	28.394	0.282
1985	1.101	73.8	0.356	28.928	0.268
1986	1.220	76.3	0.320	29.802	0.246
1987	1.274	72.3	0.308	28.340	0.283
1988	1.138	65.7	0.285	21.344	0.464
1989	1.139	67.9	0.281	21.731	0.454
1990	1.079	73.9	0.286	22.827	0.425
1991	1.007	74.9	0.257	19.383	0.514
1992	1.014	77.4	0.265	20.777	0.478
1993	1.043	82.2	0.261	22.390	0.437
1994	1.001	74.7	0.274	20.487	0.486
1995	1.005	79.5	0.281	22.442	0.435
1996	0.975	73.3	0.281	20.084	0.496
1997	0.863	77.9	0.329	22.114	0.444
1998	0.838	72.0	0.320	19.301	0.516
1999	0.842	49.6	0.266	11.077	0.728
2000	0.882	47.0	0.251	10.415	0.745
2001	0.834	54.8	0.260	11.883	0.707
2002	0.846	63.7	0.329	17.708	0.557
2003	0.811	52.0	0.322	13.564	0.664
2004	0.849	45.3	0.268	10.318	0.748
2005	0.856	38.6	0.258	8.510	0.794
2006	0.860	45.3	0.283	11.011	0.730
2007	0.865	45.3	0.283	11.074	0.728

Source: Statistics Canada, Survey of Labour and Income Dynamics

Note: The poverty rate and poverty gap is not available for 2006-2007. Therefore, it is assumed equal to the average of 2003 to 2005.

		Poverty Rate			
		for Lone	Poverty Gap for	Risk Imposed by	Index of Security from the
	Divorce Rate	Female	Lone Female	Single-Parent	Risk Imposed by Single-
	(%)	Families	Families	Poverty	Parent Poverty
	А	В	С	E=A*B*C	(max-x)/(max-min)
1981	1.116	66.7	0.304	22.603	0.431
1982	1.146	61.6	0.298	21.051	0.471
1983	1.103	60.4	0.300	19.971	0.499
1984	1.037	59.2	0.301	18.505	0.537
1985	0.977	60.1	0.309	18.133	0.546
1986	1.221	57.7	0.278	19.605	0.508
1987	1.475	55.8	0.276	22.736	0.428
1988	1.260	55.8	0.270	18.959	0.525
1989	1.199	56.6	0.251	17.012	0.575
1990	1.144	54.6	0.274	17.099	0.573
1991	1.110	54.2	0.266	16.009	0.601
1992	1.129	51.8	0.242	14.172	0.648
1993	1.109	49.3	0.217	11.895	0.707
1994	1.109	49.5	0.218	11.979	0.705
1995	1.084	49.6	0.232	12.488	0.692
1996	0.992	52.1	0.263	13.557	0.664
1997	0.924	50.6	0.294	13.715	0.660
1998	0.938	47.9	0.299	13.421	0.668
1999	0.953	44.0	0.287	12.045	0.703
2000	0.947	40.4	0.290	11.085	0.728
2001	0.935	40.6	0.295	11.210	0.725
2002	0.915	48.7	0.300	13.345	0.670
2003	0.918	46.6	0.303	12.962	0.680
2004	0.895	42.7	0.277	10.582	0.741
2005	0.885	36.9	0.297	9.686	0.764
2006	0.875	42.1	0.292	10.755	0.736
2007	0.866	42.1	0.292	10.639	0.739

Appendix Table 7: Security from the Risk Imposed by Single-Parent Poverty, Canada, 1981 - 2007

Source: Statistics Canada, Survey of Labour and Income Dynamics

Note: The poverty rate and poverty gap is not available for 2006-2007. Therefore, it is assumed equal to the average of 2003 to 2005.

Appendix Table 8:	Index of Security from	the Risk Imposed by Sing	gle-Parent Poverty, 2007
-ppenam rabie of	mach of Security mom	me men imposed of om	5.0

	Divorce Rate	Poverty Rate for Lone Female Families	Poverty Gap for Lone Female Families	Risk Imposed by Single- Parent Poverty	Index of Security from the Risk Imposed by Single-Parent Poverty
	А	В	С	D=A*B*C	Е
Canada	0.866	40.3	0.294	10.6	0.739
Prince Edward Island	0.830	38.4	0.191	5.7	0.866
Quebec	0.857	34.3	0.256	7.9	0.810
Manitoba	0.806	39.3	0.275	9.0	0.782
Newfoundland	0.590	57.2	0.280	9.6	0.765
Ontario	0.844	40.5	0.289	10.1	0.753
New Brunswick	0.674	56.3	0.280	10.9	0.732
Saskatchewan	0.722	52.9	0.290	11.0	0.729
Nova Scotia	0.865	43.0	0.274	11.1	0.728
Alberta	1.034	38.3	0.357	14.1	0.651
British Columbia	0.946	44.2	0.341	15.8	0.607

Note: The poverty rate and poverty gap are not for 2007, but are the average over 2005 to 2007.

	Poverty Rate	Poverty Gap	Poverty Intensity	Index of Security from the Risk
	for Elderly	for Elderly	for Elderly	Imposed by Poverty in Old
	Families (%)	Families	Families	Age
	A	В	C=A*B*Constant	(max-x)/(max-min)
1981	15.4	0.209	0.061	0.719
1982	13.6	0.158	0.041	0.790
1983	12.4	0.164	0.038	0.798
1984	11.3	0.170	0.036	0.806
1985	12.6	0.150	0.036	0.808
1986	11.6	0.133	0.029	0.830
1987	7.8	0.117	0.017	0.872
1988	11.3	0.131	0.028	0.834
1989	10.0	0.128	0.024	0.848
1990	6.6	0.086	0.011	0.895
1991	7.1	0.093	0.012	0.889
1992	6.8	0.101	0.013	0.887
1993	6.4	0.103	0.012	0.889
1994	4.6	0.111	0.010	0.898
1995	5.2	0.149	0.015	0.881
1996	6.7	0.111	0.014	0.883
1997	7.8	0.130	0.019	0.865
1998	10.9	0.310	0.064	0.709
1999	15.0	0.204	0.058	0.730
2000	16.5	0.153	0.048	0.764
2001	15.2	0.121	0.035	0.811
2002	16.5	0.121	0.038	0.801
2003	17.5	0.133	0.044	0.779
2004	9.7	0.181	0.033	0.816
2005	10.7	0.119	0.024	0.848
2006	12.7	0.144	0.034	0.812
2007	12.7	0.144	0.034	0.812

Appendix Table 9: Security from the Risk Imposed by Elderly Poverty, Nova Scotia, 1981 - 2007

Source: Statistics Canada, Survey of Labour and Income Dynamics

Note: The poverty rate and poverty gap is not available for 2006-2007. Therefore, it is assumed equal to the average of 2003 to 2005.

	Poverty Rate	Poverty Gap	Poverty Intensity	Index of Security from the Risk
	for Elderly	for Elderly	for Elderly	Imposed by Poverty in Old
	Families (%)	Families	Families	Age
	А	В	C=A*B*Constant	(max-x)/(max-min)
1981	18.7	0.269	0.095	0.600
1982	14.0	0.212	0.056	0.737
1983	13.1	0.228	0.056	0.734
1984	12.2	0.244	0.057	0.734
1985	9.8	0.270	0.050	0.757
1986	9.3	0.249	0.044	0.779
1987	8.4	0.244	0.039	0.796
1988	10.5	0.226	0.045	0.776
1989	9.6	0.198	0.036	0.807
1990	6.8	0.199	0.025	0.843
1991	5.1	0.180	0.017	0.872
1992	4.9	0.200	0.019	0.867
1993	5.4	0.196	0.020	0.863
1994	4.2	0.202	0.016	0.876
1995	3.5	0.190	0.013	0.888
1996	4.9	0.215	0.020	0.863
1997	6.2	0.223	0.026	0.840
1998	6.8	0.232	0.030	0.828
1999	7.3	0.179	0.025	0.846
2000	8.7	0.209	0.034	0.812
2001	8.9	0.171	0.029	0.832
2002	10.3	0.150	0.029	0.830
2003	9.2	0.172	0.030	0.828
2004	6.3	0.172	0.021	0.860
2005	7.2	0.166	0.023	0.853
2006	7.6	0.170	0.024	0.847
2007	7.6	0.170	0.024	0.847

Appendix Table 10: Security from the Risk Imposed by Elderly Poverty, Canada, 1981 - 2007

Source: Statistics Canada, Survey of Labour and Income Dynamics

Note: The poverty rate and poverty gap is not available for 2006-2007. Therefore, it is assumed equal to the average of 2003 to 2005.

Appendix Table 11: Index of Security from the Risk Imposed by Poverty in Old Age, Canada and Provinces, 2007

	Poverty Rate for Elderly Families (%)	Poverty Gap Ratio for Elderly Families	Poverty Intensity for Elderly Families	Index of Security from the Risk Imposed by Poverty in Old Age
	А	В	C=A*B*Constant	D
Canada	7.5	0.169	0.024	0.847
Alberta	2.5	0.199	0.013	0.888
Ontario	4.2	0.224	0.019	0.866
Quebec	11.0	0.130	0.027	0.839
Saskatchewan	11.1	0.124	0.027	0.839
British Columbia	8.4	0.188	0.031	0.823
Nova Scotia	12.0	0.136	0.034	0.812
Newfoundland	16.0	0.122	0.036	0.807
New Brunswick	12.1	0.156	0.036	0.807
Manitoba	8.9	0.213	0.037	0.804
Prince Edward Island	17.5	0.129	0.043	0.780

Note: The poverty rate and poverty gap are not for 2007, but are the average over 2005 to 2007.

			Weight for	Weight for	
	Weight for	Weight for	Security from Risk	Security from Risk	
	Security from Risk	Security from Risk	Imposed by	Imposed by	Overall Index of
	Imposed by	Imposed by Illness	Single-Parent	Poverty in Old	Economic Security
	Unemployment	imposed of imos	Poverty	Age	
1981	0.2843	0.4318	0.2049	0.0790	0.667
1982	0.2857	0.4324	0.2030	0.0789	0.660
1983	0.2875	0.4334	0.2004	0.0786	0.631
1984	0.2891	0.4343	0.1981	0.0785	0.613
1985	0.2906	0.4354	0.1959	0.0781	0.594
1986	0.2918	0.4358	0.1943	0.0781	0.551
1987	0.2924	0.4364	0.1928	0.0784	0.567
1988	0.2930	0.4369	0.1907	0.0794	0.628
1989	0.2938	0.4376	0.1883	0.0803	0.626
1990	0.2943	0.4383	0.1860	0.0814	0.616
1991	0.2948	0.4387	0.1837	0.0828	0.610
1992	0.2949	0.4388	0.1810	0.0854	0.578
1993	0.2951	0.4387	0.1783	0.0879	0.548
1994	0.2955	0.4388	0.1752	0.0905	0.552
1995	0.2960	0.4390	0.1719	0.0931	0.556
1996	0.2968	0.4396	0.1680	0.0956	0.548
1997	0.2984	0.4410	0.1620	0.0986	0.528
1998	0.2985	0.4401	0.1602	0.1013	0.531
1999	0.2989	0.4391	0.1579	0.1042	0.586
2000	0.2995	0.4388	0.1545	0.1072	0.551
2001	0.3001	0.4383	0.1513	0.1103	0.569
2002	0.2998	0.4358	0.1515	0.1129	0.499
2003	0.3001	0.4347	0.1498	0.1155	0.513
2004	0.3007	0.4341	0.1470	0.1182	0.564
2005	0.3002	0.4320	0.1472	0.1206	0.551
2006	0.2997	0.4304	0.1467	0.1233	0.585
2007	0.2990	0.4290	0.1462	0.1258	0.581

Appendix Table 12: Overall Index of Economic Security, Nova Scotia, 1981 - 2007

Source: Weights are calculated from population data from Statistics Canada, and then applied to the four subindexes to obtain the overall index.

Appendix Table 13	: Population	Shares of the Fo	our Groups at Ris	k, Nova Scotia,	1981-2007
11	1		1	, , ,	

	Percentage of population aged 15-64	Percentage of population at risk of illness	Mothers and children as a percentage of population	Percentage of population aged 45-64
1981	65.8	100.0	47.5	18.3
1982	66.1	100.0	46.9	18.2
1983	66.3	100.0	46.2	18.1
1984	66.6	100.0	45.6	18.1
1985	66.7	100.0	45.0	17.9
1986	67.0	100.0	44.6	17.9
1987	67.0	100.0	44.2	18.0
1988	67.1	100.0	43.7	18.2
1989	67.1	100.0	43.0	18.3
1990	67.2	100.0	42.4	18.6
1991	67.2	100.0	41.9	18.9
1992	67.2	100.0	41.2	19.5
1993	67.3	100.0	40.6	20.0
1994	67.3	100.0	39.9	20.6
1995	67.4	100.0	39.2	21.2
1996	67.5	100.0	38.2	21.7
1997	67.7	100.0	36.7	22.3
1998	67.8	100.0	36.4	23.0
1999	68.1	100.0	36.0	23.7
2000	68.2	100.0	35.2	24.4
2001	68.5	100.0	34.5	25.2
2002	68.8	100.0	34.8	25.9
2003	69.0	100.0	34.5	26.6
2004	69.3	100.0	33.9	27.2
2005	69.5	100.0	34.1	27.9
2006	69.6	100.0	34.1	28.6
2007	69.7	100.0	34.1	29.3

			Weight for	Weight for	
	Weight for	Weight for	Security from Risk	Security from Risk	
	Security from Risk	Security from Risk	Imposed by	Imposed by	Overall Index of
	Imposed by	Imposed by Illness	Single-Parent	Poverty in Old	Economic Security
	Unemployment		Poverty	Age	
1981	0.2933	0.4305	0.1949	0.0813	0.666
1982	0.2945	0.4314	0.1926	0.0815	0.638
1983	0.2955	0.4321	0.1906	0.0818	0.622
1984	0.2962	0.4329	0.1887	0.0822	0.633
1985	0.2969	0.4338	0.1870	0.0822	0.639
1986	0.2978	0.4347	0.1852	0.0824	0.632
1987	0.2982	0.4361	0.1830	0.0827	0.624
1988	0.2980	0.4365	0.1823	0.0832	0.655
1989	0.2982	0.4373	0.1809	0.0836	0.668
1990	0.2980	0.4380	0.1799	0.0841	0.653
1991	0.2974	0.4382	0.1794	0.0851	0.619
1992	0.2967	0.4383	0.1782	0.0868	0.599
1993	0.2963	0.4382	0.1770	0.0885	0.587
1994	0.2965	0.4387	0.1745	0.0903	0.586
1995	0.2969	0.4389	0.1721	0.0920	0.592
1996	0.2974	0.4393	0.1695	0.0938	0.579
1997	0.2978	0.4393	0.1673	0.0956	0.566
1998	0.2982	0.4392	0.1648	0.0977	0.581
1999	0.2979	0.4376	0.1648	0.0998	0.582
2000	0.2986	0.4374	0.1618	0.1022	0.604
2001	0.2993	0.4371	0.1592	0.1044	0.609
2002	0.3002	0.4369	0.1560	0.1069	0.555
2003	0.3003	0.4359	0.1546	0.1092	0.566
2004	0.3002	0.4346	0.1540	0.1113	0.571
2005	0.3006	0.4338	0.1521	0.1135	0.565
2006	0.3004	0.4325	0.1517	0.1155	0.554
2007	0.3001	0.4314	0.1513	0.1172	0.555

Appendix Table 14: Overall Index of Economic Security, Canada, 1981 - 2007

Source: Weights are calculated from population data from Statistics Canada, and then applied to the four subindexes to obtain the overall index.

Appendix Table 1	5: Population Sha	res of the Four Group	s at Risk, Canada, 1981-2007
11	1	1	, ,

	Percentage of population aged 15-64	Percentage of population at risk of illness	Mothers and children as a percentage of population	Percentage of population aged 45-64
1981	68.1	100.0	45.3	18.9
1982	68.3	100.0	44.6	18.9
1983	68.4	100.0	44.1	18.9
1984	68.4	100.0	43.6	19.0
1985	68.5	100.0	43.1	19.0
1986	68.5	100.0	42.6	19.0
1987	68.4	100.0	42.0	19.0
1988	68.3	100.0	41.8	19.1
1989	68.2	100.0	41.4	19.1
1990	68.0	100.0	41.1	19.2
1991	67.9	100.0	40.9	19.4
1992	67.7	100.0	40.7	19.8
1993	67.6	100.0	40.4	20.2
1994	67.6	100.0	39.8	20.6
1995	67.6	100.0	39.2	21.0
1996	67.7	100.0	38.6	21.3
1997	67.8	100.0	38.1	21.8
1998	67.9	100.0	37.5	22.3
1999	68.1	100.0	37.7	22.8
2000	68.3	100.0	37.0	23.4
2001	68.5	100.0	36.4	23.9
2002	68.7	100.0	35.7	24.5
2003	68.9	100.0	35.5	25.0
2004	69.1	100.0	35.4	25.6
2005	69.3	100.0	35.1	26.2
2006	69.5	100.0	35.1	26.7
2007	69.6	100.0	35.1	27.2

	Index of Security from the Risk Imposed by Unemploy ment	Weight for Security from Risk Imposed by Unemploy ment	Index of Security from the Risk Imposed by Illness	Weight for Securit y from Risk Impose d by Illness	Index of Security from the Risk Imposed by Single- Parent Poverty	Weight for Security from Risk Imposed by Single- Parent Poverty	Index of Security from the Risk Imposed by Poverty in Old Age	Weight for Security from Risk Imposed by Poverty in Old Age	Overall Index of Economic Security
	А	Α'	В	В'	С	C'	D	D'	Е
Canada	0.669	0.300	0.331	0.431	0.739	0.151	0.847	0.117	0.555
Alberta	0.746	0.304	0.417	0.429	0.651	0.160	0.888	0.107	0.605
Newfoundland	0.439	0.302	0.570	0.426	0.765	0.139	0.807	0.132	0.589
Ontario	0.636	0.299	0.410	0.431	0.753	0.157	0.866	0.114	0.583
Nova Scotia	0.627	0.299	0.431	0.429	0.728	0.146	0.812	0.126	0.581
New Brunswick	0.681	0.301	0.348	0.429	0.732	0.143	0.807	0.127	0.561
Manitoba	0.728	0.292	0.285	0.435	0.782	0.161	0.804	0.112	0.553
Saskatchewan	0.744	0.289	0.216	0.437	0.729	0.163	0.839	0.111	0.521
Quebec	0.638	0.301	0.201	0.432	0.810	0.142	0.839	0.124	0.499
British Columbia Prince Edward	0.734	0.304	0.179	0.434	0.607	0.141	0.823	0.122	0.486
Island	0.581	0.295	0.118	0.430	0.866	0.152	0.780	0.123	0.450

	Canada	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
1981	3.59	3.45	3.30	3.30	3.20	3.93
1982	3.66	3.45	3.75	3.75	3.80	3.93
1983	3.67	3.75	3.75	3.75	3.80	3.93
1984	3.87	3.75	3.75	3.75	3.80	3.93
1985	3.90	4.00	4.00	4.00	3.80	3.93
1986	4.19	4.00	4.00	4.00	4.00	4.35
1987	4.34	4.00	4.00	4.00	4.00	4.55
1988	4.63	4.25	4.25	4.00	4.00	4.75
1989	4.85	4.25	4.50	4.50	4.38	5.00
1990	5.13	4.25	4.50	4.50	4.75	5.30
1991	5.49	4.75	4.75	4.75	5.00	5.55
1992	5.76	4.75	4.75	5.00	5.00	5.70
1993	5.89	4.75	4.75	5.15	5.00	5.85
1994	6.06	4.75	4.75	5.15	5.00	6.00
1995	6.35	4.75	4.75	5.15	5.00	6.45
1996	6.49	5.00	5.15	5.35	5.38	6.70
1997	6.53	5.25	5.40	5.50	5.50	6.80
1998	6.60	5.25	5.40	5.50	5.50	6.90
1999	6.66	5.50	5.40	5.60	5.50	6.90
2000	6.74	5.50	5.60	5.70	5.75	6.90
2001	6.83	5.50	5.80	5.80	5.90	7.00
2002	6.94	5.88	6.00	6.00	6.00	7.20
2003	6.99	6.00	6.25	6.25	6.00	7.30
2004	7.17	6.00	6.50	6.50	6.20	7.45
2005	7.43	6.25	6.80	6.80	6.30	7.60
2006	7.65	6.75	7.15	7.15	6.70	7.75
2007	7.93	7.00	7.50	7.60	7.25	8.00

Appendix Table 17: Minimum Wage in Canada and the Provinces, 1981- 2007 (Current Dollars)

Appendix Table 17 (Continued): Minimum Wage in Canada and the Provinces, 1981 -2007 (Current Dollars)

	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
1981	3.40	3.45	3.93	3.80	3.53
1982	3.40	4.00	4.25	3.80	3.53
1983	3.40	4.00	4.25	3.80	3.53
1984	3.93	4.00	4.25	3.80	3.53
1985	3.93	4.30	4.25	3.80	3.53
1986	4.35	4.30	4.50	3.80	3.53
1987	4.55	4.60	4.50	3.80	3.53
1988	4.75	4.60	4.50	4.50	4.50
1989	5.00	4.60	4.50	4.50	4.75
1990	5.40	4.60	4.50	4.50	5.00
1991	6.00	5.00	4.88	4.50	5.00
1992	6.35	5.00	4.88	5.00	5.50
1993	6.35	5.00	5.35	5.00	6.00
1994	6.70	5.00	5.35	5.00	6.00
1995	6.85	5.25	5.35	5.00	6.75
1996	6.85	5.40	5.60	5.00	7.00
1997	6.85	5.40	5.60	5.00	7.00
1998	6.85	5.40	5.60	5.40	7.15
1999	6.85	6.00	6.00	5.78	7.15
2000	6.85	6.00	6.00	5.90	7.60
2001	6.85	6.25	6.00	5.90	8.00
2002	6.85	6.50	6.50	5.90	8.00
2003	6.85	6.75	6.65	5.90	8.00
2004	7.15	7.00	6.65	5.90	8.00
2005	7.45	7.25	7.05	7.00	8.00
2006	7.75	7.60	7.55	7.00	8.00
2007	8.00	8.00	7.95	8.00	8.00

Source: Human Resource and Social Development Canada, *Database on Minimum Wages* **Note**: The minimum wage in Canada is the average of provinces weighted by the number of minimum wage workers in each province.

	Canada	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
1981	8.09	7.22	7.11	7.31	7.00	8.63
1982	7.43	6.55	7.37	7.59	7.61	7.74
1983	7.04	6.68	7.02	7.14	7.13	7.33
1984	7.12	6.39	6.73	6.84	6.79	7.05
1985	6.90	6.54	6.93	6.98	6.49	6.75
1986	7.13	6.36	6.78	6.77	6.60	7.14
1987	7.06	6.18	6.55	6.54	6.41	7.16
1988	7.25	6.42	6.71	6.32	6.20	7.20
1989	7.24	6.20	6.85	6.80	6.48	7.27
1990	7.30	5.94	6.52	6.47	6.72	7.39
1991	7.40	6.25	6.40	6.45	6.64	7.21
1992	7.65	6.19	6.35	6.74	6.60	7.27
1993	7.67	6.09	6.23	6.86	6.52	7.36
1994	7.89	6.01	6.25	6.78	6.48	7.65
1995	8.08	5.93	6.15	6.69	6.38	8.08
1996	8.14	6.14	6.54	6.82	6.76	8.26
1997	8.06	6.32	6.78	6.88	6.79	8.27
1998	8.06	6.31	6.81	6.83	6.76	8.27
1999	8.00	6.51	6.73	6.84	6.65	8.15
2000	7.87	6.33	6.70	6.73	6.73	7.95
2001	7.79	6.25	6.76	6.72	6.78	7.89
2002	7.73	6.53	6.82	6.75	6.68	7.95
2003	7.58	6.48	6.86	6.80	6.46	7.86
2004	7.64	6.36	6.98	6.94	6.58	7.87
2005	7.74	6.45	7.08	7.07	6.53	7.85
2006	7.82	6.85	7.28	7.29	6.83	7.87
2007	7.93	7.00	7.50	7.60	7.25	8.00

Appendix Table 18: Minimum Wage in Canada and the Provinces, 1981 - 2007 (2007 Dollars)

Appendix Table 18 (Continued): Minimum Wage in Canada and the Provinces, 1981 - 2007 (2007 Dollars)

	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
1981	7.82	7.81	8.90	9.00	7.49
1982	7.07	8.32	8.83	8.09	6.77
1983	6.66	7.81	8.31	7.68	6.42
1984	7.32	7.53	7.97	7.49	6.17
1985	7.04	7.77	7.69	7.27	5.98
1986	7.46	7.44	7.93	7.03	5.81
1987	7.44	7.64	7.56	6.76	5.64
1988	7.41	7.33	7.23	7.79	6.95
1989	7.38	7.00	6.93	7.48	7.02
1990	7.60	6.69	6.64	7.07	7.02
1991	8.07	6.92	6.84	6.68	6.66
1992	8.46	6.83	6.77	7.31	7.13
1993	8.31	6.65	7.21	7.24	7.52
1994	8.76	6.55	7.08	7.14	7.37
1995	8.74	6.70	6.95	6.98	8.11
1996	8.61	6.74	7.13	6.82	8.33
1997	8.45	6.61	7.04	6.69	8.27
1998	8.38	6.52	6.95	7.14	8.42
1999	8.21	7.11	7.32	7.45	8.33
2000	7.98	6.94	7.13	7.36	8.70
2001	7.74	7.04	6.93	7.19	9.01
2002	7.59	7.21	7.29	6.96	8.80
2003	7.39	7.35	7.29	6.66	8.61
2004	7.57	7.48	7.13	6.57	8.45
2005	7.72	7.54	7.40	7.63	8.28
2006	7.89	7.75	7.76	7.35	8.14
2007	8.00	8.00	7.95	8.00	8.00

Source: Human Resource and Social Development Canada, Database on Minimum Wages

		Single Employable		with a pility	Lone Par Ch	· ·	Couple, Two Children	
	1986	2006	1989	2006	1986	2006	1986	2006
Newfoundland	5,704	9,036	11,188	10,588	16,088	18,111	20,119	21,331
Prince Edward Island	10,682	6,482	12,137	8,456	16,529	15,234	25,187	22,691
Nova Scotia	7,840	6,119	11,615	9,154	15,378	14,308	19,945	20,379
New Brunswick	3,851	3,555	11,025	8,267	13,363	15,069	16,104	18,829
Quebec	4,040	7,140	9,437	10,458	15,320	16,792	21,434	21,982
Ontario	8,665	7,186	13,559	12,384	17,314	15,820	22,908	20,525
Manitoba	8,630	5,940	9,844	8,992	15,134	14,551	23,804	21,523
Saskatchewan	7,288			9,614	16,772	16,155	24,615	22,248
Alberta	10,777	10,777 5,726		8,933	17,528	14,812	27,405	22,926
British Columbia	7,304	6,574	11,166	10,852	14,946	15,190	21,551	19,550

Appendix Table 19: Welfare Benefits by Province (2007 Dollars)

Source: National Council of Welfare, Welfare Incomes 2005 and Welfare Incomes 2006: Web-Only Data

Appendix Table 20: Non-Reimbursed Out-of-Pocket Expenditures on Health Care in Canada (Millions of Current Dollars)

		Expen	ditures		Growth Rate (Per Cent)		of Total s (Per Cent)
	1987	1995	2000	2004	1987-2004	1987	2004
Total Expenses	6,335.0	11,621.1	15,278.4	18,907.0	198.5	100.0	100.0
Hospital Accommodation ¹⁹	516.5	567.6	587.9	663.1	28.4	5.9	3.5
Other Institutions	1,197.1	2,112.6	2,574.0	3,410.7	184.9	18.9	18.0
Physicians Care	76.1	108.3	174.2	228.4	200.1	1.2	1.2
Dental Care	1,498.5	2,283.0	2,998.2	3,662.8	144.4	23.7	19.4
Eye-Care goods & Services	806.1	1,281.9	1,860.5	2,260.3	180.4	12.7	12.0
Other Health Care Practioners	231.9	519.3	711.5	1039.7	348.4	3.7	5.5
Prescribed Drugs	791.2	1,683.6	2,562.5	3,364.8	325.3	12.5	17.8
Non-Prescribed Drugs	863.7	1,389.4	1,717.7	2,048.2	137.1	13.6	10.8
Personal Health Supplies	758.0	1,314.2	1,605.0	1,770.9	133.6	12.0	9.4
Other Health Care goods	74.6	155.6	205.7	228.8	206.5	1.2	1.2
Other Health Care services	37.9	205.8	281.2	229.4	505.3	0.6	1.2

Source: CIHI, *National Health Expenditure Database*

11													
	Canada	Nfld.	PEI	NS	NB	PQ	ON	Man.	Sask.	Alb.	BC		
1981	335.65	347.90	266.83	317.17	329.30	371.33	361.87	331.70	366.65	402.49	421.71		
1982	378.39	383.68	297.13	352.24	359.54	407.81	397.19	365.53	406.97	448.95	461.49		
1983	400.09	389.29	340.01	364.28	368.46	400.90	391.67	374.83	395.04	426.63	433.59		
1984	416.69	412.20	351.63	386.56	390.24	416.02	411.59	394.96	411.06	438.99	442.30		
1985	431.41	420.51	367.90	402.80	402.17	427.59	431.09	404.51	421.44	448.13	454.41		
1986	444.38	432.64	375.25	420.18	418.62	437.71	450.73	419.71	431.60	450.67	456.31		
1987	461.18	447.36	393.73	431.91	423.22	456.14	472.00	432.34	437.52	455.73	470.60		
1988	481.50	469.90	412.22	447.64	437.82	477.84	496.85	445.47	446.34	471.64	481.19		
1989	506.12	487.67	428.28	460.88	459.96	496.21	525.36	469.93	461.83	494.92	512.78		
1990	529.13	503.52	444.75	485.97	476.94	524.21	547.93	486.35	483.96	518.54	530.51		
1991	553.42	527.41	457.95	507.96	502.03	545.34	576.13	503.78	504.96	545.85	550.98		
1992	572.66	543.02	470.96	524.48	511.79	566.02	598.8	514.61	511.69	562.23	568.09		
1993	583.15	555.64	479.96	529.89	525.77	572.57	612.33	520.44	515.95	571.73	581.52		
1994	593.15	559.03	486.9	532.33	525.94	575.39	628.16	528.24	531.11	574.5	597.71		
1995	598.9	556.9	493.24	526.47	534.83	579.34	634.17	532.52	532.35	573.19	615.58		
1996	611.26	556.27	515.71	533.00	537.47	585.46	649.55	541.59	535.68	597.45	628.42		
1997	623.63	556.43	511.91	538.61	549.34	594.15	663.73	551.83	548.66	618.69	638.83		
1998	632.93	566.43	514.08	549.26	553.14	602.08	672.67	566.59	563.95	635.72	643.08		
1999	640.71	576.56	512.35	549.24	561.67	605.71	683.7	567.72	569.7	644.89	651.03		
2000	655.91	594.45	522.77	562.77	586.11	616.28	700.12	588.46	586.87	664.37	662.91		
2001	665.3	600.64	529.01	579.63	594.89	627.76	709.37	596.07	599.75	679.34	663.76		
2002	679.32	619.42	549.29	600.2	611.44	644.3	722.97	608.21	610.97	694.35	672.01		
2003	688.31	628.95	557.96	607.3	625.56	655.43	731.07	613.15	622	703.74	679.71		
2004	702.87	647.54	567.18	624.33	639.16	668.48	743.43	636.24	643.88	724.79	692.09		
2005	725.51	668.59	582.82	645.75	663.2	686.26	764.52	660.18	669.36	762.69	712.56		
2006	747.08	691.12	606.84	659.02	683.76	703.28	782.02	676.83	693.56	800.17	739.82		
2007	764.60	710.79	623.73	676.16	703.07	719.44	797.42	694.25	714.01	826.80	756.05		

Appendix Table 21: Average Weekly Earnings in Current Dollars

Source: Statistics Canada, Survey of Employment, Payroll and Hours

Note: Data in 2007 are estimated with the growth rate of average earnings between 2001 and 2006.

Appendix Table 22: Personal Disposable Income in Canada and the Provinces, 1981-2007 (Millions of Current Dollars)

	a 1	2101	DET	210		7.0	0 V I		<i>a</i> 1		DG
	Canada	Nfld.	PEI	NS	NB	PQ	ON	Man.	Sask.	Alb.	BC
1981	238,606	3,860	916	6,920	5,279	56,549	89,340	9,556	8,984	25,826	30,478
1982	263,452	4,273	1,036	7,716	5,925	61,237	100,176	10,665	10,148	28,299	32,987
1983	275,529	4,441	1,120	8,194	6,319	63,810	107,263	10,825	10,065	28,793	33,668
1984	299,169	4,656	1,184	8,922	6,849	70,124	117,448	12,346	10,891	29,825	35,762
1985	322,989	4,964	1,248	9,721	7,282	74,845	127,274	13,452	11,685	33,210	38,012
1986	340,403	5,274	1,397	10,151	7,815	78,973	135,236	13,939	12,896	33,888	39,452
1987	362,185	5,826	1,466	10,836	8,336	84,819	146,620	14,411	11,957	34,166	42,254
1988	395,217	6,306	1,613	11,681	9,000	91,103	161,853	15,355	12,775	37,625	46,242
1989	432,772	6,805	1,724	12,682	9,699	99,387	178,681	16,375	13,412	40,559	51,646
1990	457,400	7,257	1,814	13,292	10,134	105,125	187,079	17,368	14,343	43,015	55,976
1991	472,509	7,579	1,886	13,764	10,556	108,569	192,713	17,531	14,535	44,883	58,398
1992	483,370	7,750	1,914	14,115	10,881	110,254	197,670	17,828	14,246	46,131	60,545
1993	494,944	7,944	2,020	14,449	11,154	113,342	199,925	17,926	14,717	47,920	63,513
1994	501,678	8,010	1,997	14,498	11,278	114,606	202,019	18,269	14,728	48,202	66,053
1995	519,588	8,108	2,062	14,806	11,708	117,642	209,272	18,905	15,823	50,047	69,126
1996	527,783	7,987	2,070	14,811	11,813	119,859	210,778	19,553	16,799	51,359	70,595
1997	546,166	7,949	2,118	15,367	12,034	121,990	220,394	19,535	16,029	55,500	72,985
1998	568,766	8,097	2,155	16,045	12,579	125,486	231,462	20,509	16,776	59,073	74,388
1999	596,227	8,378	2,266	16,827	13,189	131,076	244,136	21,133	17,517	61,845	77,412
2000	639,567	8,740	2,420	17,526	13,730	139,159	265,316	22,102	18,187	67,790	81,901
2001	669,196	9,116	2,467	18,126	14,167	145,505	274,607	22,974	18,494	75,535	85,332
2002	694,010	9,381	2,606	18,674	14,480	151,871	284,156	23,678	19,049	78,323	88,594
2003	720,855	9,773	2,635	19,202	15,027	158,823	293,943	24,436	20,238	81,942	91,505
2004	758,569	10,041	2,769	20,062	15,789	165,727	307,170	25,670	21,797	89,308	96,714
2005	791,486	10,397	2,865	20,872	16,308	170,612	319,255	26,326	21,998	97,528	101,559
2006	842,302	12,802	2,989	21,714	17,024	178,028	335,990	27,713	22,853	109,732	109,579
2007	881,964	13,702	3,106	22,513	17,661	185,358	349,824	28,772	23,841	118,242	115,199
04-07	16.3	36.5	12.2	12.2	11.9	11.8	13.9	12.1	9.4	32.4	19.1

Source: Statistics Canada, Provincial Economic Accounts

Note: Data in 2007 are estimated with the growth rate of personal disposable income between 2001 and 2006.

Appendix Table 23: Out-of-Pocket Private Expenditures on Health Care, Millions of Current Dollars (1981-2007)

											-
	Canada	Nfld.	PEI	NS	NB	PQ	ON	Man.	Sask.	Alb.	BC
1981	2,342	84	16	55	65	602	706	122	103	265	365
1982	2,704	87	16	66	76	658	842	134	113	359	392
1983	2,943	94	16	71	84	708	967	143	121	328	427
1984	3,249	77	16	82	96	787	1,077	156	143	350	482
1985	3,604	79	17	94	100	906	1,188	176	184	379	510
1986	3,997	68	16	117	104	1,071	1,297	197	208	415	548
1987	4,339	75	17	130	111	1,133	1,442	191	218	449	601
1988	4,732	79	18	139	120	1,228	1,581	185	204	540	664
1989	5,245	82	21	155	128	1,370	1,746	205	234	601	737
1990	5,760	88	22	162	144	1,506	1,921	226	254	648	826
1991	6,252	99	24	171	161	1,645	2,091	242	271	686	898
1992	6,697	108	27	183	170	1,783	2,250	256	279	722	952
1993	7,239	114	30	191	183	1,914	2,452	280	317	784	1,009
1994	7,575	120	31	200	189	1,997	2,585	291	333	810	1,047
1995	7,871	118	33	204	180	2,001	2,785	311	342	821	1,064
1996	8,068	111	34	214	177	2,029	2,856	332	345	841	1,112
1997	8,665	113	35	228	199	2,136	3,050	359	374	971	1,195
1998	8,927	116	37	250	190	2,020	3,247	348	342	944	1,417
1999	9,752	132	38	256	222	2,344	3,535	370	367	1,121	1,348
2000	10,142	143	43	303	229	2,357	3,760	369	388	1,175	1,379
2001	10,400	130	54	293	245	2,490	3,709	354	370	1,217	1,516
2002	11,946	146	46	340	263	2,801	4,598	404	405	1,232	1,701
2003	12,143	161	49	355	267	2,973	4,345	446	424	1,290	1,804
2004	13,209	175	59	345	277	2,986	4,925	442	450	1,461	2,088
2005	14,266	188	60	386	335	3,471	5,200	457	488	1,428	2,232
2006	15,623	187	66	365	301	3,699	5,704	534	484	1,918	2,364
2007	16,514	196	70	380	325	3,918	6,045	563	497	2,028	2,482

Source: Statistics Canada, Survey of Household Spending and CIHI, National Health Expenditure Database