Child Health in an Era of Globalization:
A Case Study of Saskatoon, Saskatchewan

A Thesis Submitted to the College of Graduate Studies and
Research in Partial Fulfillment of the Requirements
for the Degree of
Doctor of Philosophy
in the Department of Community Health and Epidemiology
University of Saskatchewan
Saskatoon, Saskatchewan, Canada

By

Jennifer A. Cushon

© Copyright Jennifer A. Cushon, August 2009. All rights reserved.
PERMISSION TO USE STATEMENT

In presenting this thesis in partial fulfillment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by the professor who supervised my thesis work or, in his absence, by the Head of the Department or the Dean of the College in which my thesis was done. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of Saskatchewan in any scholarly use which may be made of any materials in my thesis.

Requests for permission to copy or to make other use of material in this thesis in whole or part should be addressed to:

Head of the Department of Community Health and Epidemiology
University of Saskatchewan
107 Wiggins Road
Saskatoon, Saskatchewan S7N 5E5
Canada
ABSTRACT

Research Objectives

Globalization is increasingly considered an important influence on the determinants of health. Globalization, for the purposes of this study, was defined as “a process of greater integration within the world economy through movements of goods and services, capital, technology and (to a lesser extent) labour, which lead increasingly to economic decisions being influenced by global conditions.” (1) Although there have been many conceptual and theoretical explorations of the globalization and health relationship, only a limited number of empirical studies have sought to link the processes of globalization to health effects in a specific context and/or for a particular population such as children. The objectives of this thesis were two-fold: to investigate primarily the economic pathways and related political pathways by which globalization influences the determinants of health and health outcomes in low-income children ages zero to five in a mid-sized Canadian city (Saskatoon, Saskatchewan); to identify and analyze the policy responses at various levels (national, provincial, and municipal) that address the effects of globalization on determinants of health such as household income and distribution, employment and education for parents, housing, and social programs.

Study Design and Methodology

This study was a case study that used mixed methods. The case in this research was Saskatoon, a mid-size city located in the Canadian province of Saskatchewan. The analytical framework used to guide this study was developed by Labonte and Torgerson. (2) Methods included: a demographic profile for the City of Saskatoon; an environmental scan of federal, provincial, and municipal policy that has direct relevance
for child health; process tracing; semi-structured interviews with low-income parents of young children (n=26); and trend analysis of child health outcomes among children ages zero to five.

Findings

The current phase of globalization in Canada and Saskatchewan is inextricably linked with the implementation of neoliberal policies such as tax restructuring, trade liberalization, privatization, deregulation, and greater integration in the global economy. This phase of globalization contributed to changes in the determinants of health that affect children and their families in Saskatoon. For instance, globalization has involved retrenchment of the welfare state in Canada and Saskatchewan. As the welfare state diminished in size and responsibility, poverty tended to deepen among those that were already poor. The retrenchment of the welfare state also led to diminished program access. In addition, globalization has emphasized the restructuring of the labour market to be more competitive and flexible. A restructured labour market and reduced access to services and programs contributed to greater inequalities in income in Canada, Saskatchewan, and Saskatoon. Finally, globalization contributed to declining housing affordability in Canada’s cities such as Saskatoon.

Trend analysis at the neighbourhood-level to determine the linkages between changes in the determinants of child health and changes in child health outcomes was inconclusive. Further research is required to determine if the disparities in the determinants of child health that have been exacerbated by the economic and political
processes of globalization have contributed to increasing disparities in child health outcomes.

**Conclusion**

This study indicated that the economic and political processes of globalization influenced the determinants of health among young low-income children and their families in Saskatoon through a number of pathways, but this is not to suggest that globalization was the only phenomenon at work. Although it was very difficult to draw any conclusions regarding the globalization and health relationship with certainty, this study offered a logical and a multi-prong approach to examining the effects of globalization on children’s health and health determining conditions. Studies of this nature are important for contributing to our understanding of the complex structures that influence health and for building up the linkages between globalization and health on a case-by-case basis.
ACKNOWLEDGEMENTS

I would like to extend my sincere gratitude to my supervisor, Nazeem Muhajarine, for his kindness, support, and guidance throughout my program and the development of this thesis. He enriched my learning experience greatly and always encouraged me to explore new areas of inquiry and personal strengths. I will be forever grateful for my experience as one of his graduate students.

I would also like to expressly acknowledge my committee members. They each invested a great deal of time and energy in guiding me throughout this research process. Ronald Labonte introduced me to the field of population health many years ago, and has been a wonderful friend, support, and mentor since then. Ted Schrecker deserves special mention for his careful and astute review of the thesis. His guidance strengthened this thesis considerably. Joe Garcea has been a very kind, insightful, and supportive committee member, and it has been a pleasure to work with him once again. The Chair of my committee, Sylvia Abonyi, also deserves acknowledgement for her thoughtfulness, guidance, and patience.

There are a number of people and organizations that made data collection and analysis possible. The Saskatoon Health Region and Saskatchewan Health were extremely helpful and supplied all child health outcome data. I would also like to express my gratitude to the staff and clients at QUINT Development Cooperation and Westside Community Clinic. I especially want to thank the clients of these organizations for sharing their stories and for irrevocably altering my own life. I also wish to acknowledge Josh Lawson for his expertise and patience in guiding me through generalized estimating equations.
Finally, I am indebted to my husband, Craig, for bearing with me throughout this journey at every step and for always being there to encourage me to succeed. I also wish to thank my parents, Allan and Janice, and my brother, Ian, for being amazing people that support and love me unconditionally.

This research was financed by a Canadian Institutes of Health Research Institute of Population and Public Health-Public Health Agency of Canada Doctoral Research Award. The interview component of this research was generously funded by Globalization and the Health of Canadians: A Transdisciplinary Research Network.
TABLE OF CONTENTS

PERMISSION TO USE STATEMENT ..............................................................................................................I
ABSTRACT .....................................................................................................................................................II
ACKNOWLEDGEMENTS ...............................................................................................................................V
TABLE OF CONTENTS .................................................................................................................................VII
LIST OF TABLES ...........................................................................................................................................X
LIST OF FIGURES .........................................................................................................................................XI
LIST OF ABBREVIATIONS ..............................................................................................................................XII

CHAPTER 1. THE STUDY: DESIGN, ANALYTICAL FRAMEWORK, AND METHODOLOGY .......................... 1
1.1 INTRODUCTION ....................................................................................................................................1
  1.1.1 Research Objectives .......................................................................................................................2
  1.1.2 Research Questions ........................................................................................................................3
1.2 ORGANIZATION OF THESIS .............................................................................................................3
1.3 CASE STUDY .........................................................................................................................................4
1.4 POPULATION HEALTH PERSPECTIVE .............................................................................................8
1.5 ANALYTICAL FRAMEWORK ...............................................................................................................10
1.6 METHODOLOGY .................................................................................................................................18
  1.6.1 Demographic Profile ......................................................................................................................20
  1.6.2 Environmental Scan of Policies ....................................................................................................20
  1.6.3 Interviews ......................................................................................................................................22
  1.6.4 Trend Analysis ...............................................................................................................................27
  1.6.5 Process Tracing ..............................................................................................................................33
1.7 ETHICS ................................................................................................................................................35

CHAPTER 2. BACKGROUND: CHILDREN, GLOBALIZATION, AND PATHWAYS ..................................40
2.1 INTRODUCTION ..................................................................................................................................40
2.2 EARLY CHILDHOOD DEVELOPMENT ...............................................................................................40
2.3 GLOBALIZATION AND ITS HISTORY ..............................................................................................43
2.4 GLOBALIZATION AND CHILDREN ...................................................................................................46
2.5 PATHWAYS BETWEEN GLOBALIZATION AND CHILD HEALTH ..................................................50
  2.5.1 Neoliberalism and Poverty .............................................................................................................50
  2.5.2 The Decline of the Nation-State, Welfare State Retrenchment, and the Privatization of Risk ........................................................................................................................................53
  2.5.3 Income Inequality ...........................................................................................................................56
  2.5.4 Deindustrialization .........................................................................................................................59
  2.5.5 Non-traditional Work Arrangements ..............................................................................................61
  2.5.6 Housing and Social Polarization ....................................................................................................63
2.6 SUMMARY ............................................................................................................................................66

CHAPTER 3. NEOLIBERAL GLOBALIZATION AND CHILD HEALTH IN SASKATOON .................. 67
3.1 INTRODUCTION ..................................................................................................................................67
3.2 RE-SPECIFIED ANALYTICAL FRAMEWORK .....................................................................................67
3.3 SUPERORDINATE CATEGORIES .........................................................................................................69
  3.3.1 History and Tradition of Liberal Welfare State ...........................................................................69
  3.3.2 Economic Position of Canada, Saskatchewan, and Saskatoon ....................................................73
3.4 GLOBAL CONTEXTS ..........................................................................................................................78
  3.4.1 Neoliberalism in Canada and Saskatchewan ................................................................................79
  3.4.2 Trade and Gross Domestic Product ..............................................................................................86
  3.4.3 Foreign Direct Investment .............................................................................................................87
  3.4.4 Tax Restructuring in Canada and Saskatchewan .........................................................................89

vii
8.3 STRENGTHS OF STUDY ..................................................................................................................244
8.4 LIMITATIONS OF STUDY .............................................................................................................246

LIST OF REFERENCES ..........................................................................................................................250

APPENDICES .........................................................................................................................................284

APPENDIX A. POPULATION OF SASKATOON, SASKATCHEWAN, AND CANADA OVER TIME ..........284
APPENDIX B. THE SOCIAL-CULTURAL AND TECHNOLOGICAL PATHWAYS BETWEEN GLOBALIZATION AND HEALTH .....................................................................................................................................289
APPENDIX C. INTERVIEW GUIDE ........................................................................................................295
APPENDIX D. CONSENT FORM .............................................................................................................297
APPENDIX E. JOINPOINT REGRESSION MODEL STATISTICS ...............................................................300
APPENDIX F. DESCRIPTIVE STATISTICS FOR GROUPS OF NEIGHBOURHOODS ..................................306
APPENDIX G. MEAN RANK COMPARISONS BETWEEN GROUPS OF NEIGHBOURHOODS ..................312
APPENDIX H. LOGISTIC REGRESSION WITH GENERALIZED ESTIMATING EQUATIONS FOR NEIGHBOURHOOD-LEVEL CHILD HEALTH OUTCOMES ..................................................................................318
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Methods and Research Questions</td>
<td>38</td>
</tr>
<tr>
<td>Table 2</td>
<td>Gini Coefficients, Before- and After-Taxes and Transfers, 1980 and 2006</td>
<td>123</td>
</tr>
<tr>
<td>Table 3</td>
<td>Mean (Standard Deviation) for Percentage (%) of Low-Income in Saskatoon’s</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Neighbourhoods</td>
<td></td>
</tr>
<tr>
<td>Table 4</td>
<td>Mean (Standard Deviation) for Average Family Income (Unadjusted Dollars) in</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Saskatoon’s Neighbourhoods</td>
<td></td>
</tr>
<tr>
<td>Table 5</td>
<td>Expenditures in Social Areas as Percentage of Total Expenditure, Canada, 1980</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>and 2007</td>
<td></td>
</tr>
<tr>
<td>Table 6</td>
<td>Expenditures in Social Areas as Percentage of Total Expenditure, Saskatchewan,</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>1989 and 2007</td>
<td></td>
</tr>
<tr>
<td>Table 7</td>
<td>Government Expenditures as Percentage (%) of GDP, Saskatchewan and Canada,</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>1989 and 2007</td>
<td></td>
</tr>
<tr>
<td>Table 8</td>
<td>Welfare Incomes in Before- and After-Taxes Low-Income Cut-Offs, Saskatchewan,</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>Table 9</td>
<td>Mean (Standard Deviation) for Percentage (%) of No Education Post-High School</td>
<td>194</td>
</tr>
<tr>
<td></td>
<td>in Saskatoon’s Neighbourhoods</td>
<td></td>
</tr>
<tr>
<td>Table 10</td>
<td>Mean (Standard Deviation) for Percentage (%) of Unemployment in Saskatoon’s</td>
<td>198</td>
</tr>
<tr>
<td></td>
<td>Neighbourhoods</td>
<td></td>
</tr>
<tr>
<td>Table 11</td>
<td>Percentage (%) of Union Coverage, Canada and Saskatchewan, 1997 and 2007</td>
<td>202</td>
</tr>
<tr>
<td>Table 12</td>
<td>Part-Time Employment in Canada and Saskatchewan</td>
<td>204</td>
</tr>
<tr>
<td>Table 13</td>
<td>Self-Employment in Canada and Saskatchewan</td>
<td>204</td>
</tr>
<tr>
<td>Table 14</td>
<td>Multiple Jobholders in Canada and Saskatchewan</td>
<td>204</td>
</tr>
<tr>
<td>Table 15</td>
<td>Temporary Employees in Canada and Saskatchewan</td>
<td>204</td>
</tr>
<tr>
<td>Table 16</td>
<td>Housing Affordability, Saskatoon, 1981-2006</td>
<td>216</td>
</tr>
<tr>
<td>Table 17</td>
<td>Mean (Standard Deviation) for Gross Owner Payments (Unadjusted Dollars) in</td>
<td>216</td>
</tr>
<tr>
<td></td>
<td>Saskatoon’s Neighbourhoods</td>
<td></td>
</tr>
<tr>
<td>Table 18</td>
<td>Mean (Standard Deviation) for Gross Rent (Unadjusted Dollars) in Saskatoon’s</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>Neighbourhoods</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE 1: NEIGHBOURHOOD BOUNDARY MAP OF CITY OF SASKATOON ........................................................ 5
FIGURE 2: GLOBALIZATION AND HEALTH: BASIC FRAMEWORK................................................................. 17
FIGURE 3: THE ECONOMIC AND RELATED POLITICAL PATHWAYS BETWEEN NEOLIBERAL GLOBALIZATION AND CHILD HEALTH IN SASKATOON, SASKATCHEWAN ........................................... 68
FIGURE 4: PERCENTAGE OF CHILDREN LIVING BELOW POVERTY LINE, 2006 ........................................... 72
FIGURE 5: GROSS DOMESTIC PRODUCT (2002 DOLLARS), CANADA, 1981-2007 ........................................ 75
FIGURE 7: GROSS DOMESTIC PRODUCT (1997 DOLLARS), SASKATOON, 1995-2005 ................................. 78
FIGURE 8: CANADIAN FOREIGN DIRECT INVESTMENT ABROAD, 1983-2006 ......................................... 88
FIGURE 9: FOREIGN DIRECT INVESTMENT IN CANADA, 1983-2006 .......................................................... 89
FIGURE 10: TOTAL REVENUE AND MAJOR SOURCES OF REVENUE, FEDERAL GOVERNMENT, 1989-2008 .... 92
FIGURE 11: TOTAL REVENUE AND MAJOR SOURCES OF REVENUE, SASKATCHEWAN, 1989-2008 .......... 96
FIGURE 12: CITY-LEVEL TRENDS FOR INFANT MORTALITY RATE, SASKATOON, 1980-2006 .................... 105
FIGURE 14: CITY-LEVEL TRENDS FOR LOW BIRTH WEIGHT RATE, SASKATOON, 1980-2006 ................. 107
FIGURE 15: CITY-LEVEL TRENDS FOR HOSPITALIZATION RATE (AGES 0 TO 5), SASKATOON, 1980-2005 .... 108
FIGURE 16: CITY-LEVEL TRENDS FOR INJURY RATE (AGES 0 TO 5), SASKATOON, 1980-2005 .................. 109
FIGURE 17: CITY-LEVEL TRENDS FOR ASTHMA RATE (AGES 0 TO 5), SASKATOON, 1980-2005 ............ 110
FIGURE 18: LOW-INCOME GAP (2006 DOLLARS), CANADA, 1980-2006 ..................................................... 118
FIGURE 20: INCOME INEQUALITY BEFORE-TAXES AND TRANSFERS, SASKATOON, 1990-2000 .............. 124
FIGURE 22: MEANS FOR GROUPS OF NEIGHBOURHOODS, INFANT MORTALITY RATE, 1995-2006 .......... 132
FIGURE 23: MEANS FOR GROUPS OF NEIGHBOURHOODS, UNDER-FIVE MORTALITY RATE, 1995-2006 ..... 133
FIGURE 24: MEANS FOR GROUPS OF NEIGHBOURHOODS, LOW BIRTH WEIGHT RATE, 1995-2006 .......... 134
FIGURE 25: MEANS FOR GROUPS OF NEIGHBOURHOODS, HOSPITALIZATION RATE, 1996-2006 .......... 135
FIGURE 26: MEANS FOR GROUPS OF NEIGHBOURHOODS, INJURY RATE, 1996-2006 .............................. 136
FIGURE 27: MEANS FOR GROUPS OF NEIGHBOURHOODS, ASTHMA RATE, 1996-2006 ............................ 137
FIGURE 28: TOTAL EXPENDITURES AND MAJOR SOURCES OF EXPENDITURE (UNADJUSTED), CANADA, 1989- 2007 ...................................................................................................................................................... 158
FIGURE 29: TOTAL EXPENDITURES AND MAJOR SOURCES OF EXPENDITURE (UNADJUSTED), GOVERNMENT OF SASKATCHEWAN, 1989-2007 ........................................................................................................... 159
FIGURE 30: PUBLIC SPENDING ON SERVICES/BENEFITS FOR FAMILIES WITH YOUNG CHILDREN AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT, 2006 ................................................................. 163
FIGURE 31: FEDERAL TRANSFERS TO THE PROVINCES, 1977-1998 .......................................................... 166
FIGURE 32: NUMBER OF SOCIAL ASSISTANCE RECIPIENTS, SASKATOON, 1989-2007 .............................. 170
FIGURE 33: PUBLIC SPENDING ON EARLY LEARNING AND CHILD CARE PROGRAMS FOR CHILDREN AGES 0 TO 6 AS PERCENTAGE OF GROSS DOMESTIC PRODUCT, 2006 .............................................. 182
FIGURE 34: COSTS TO PARENTS FOR EARLY LEARNING AND CHILD CARE PROGRAMS, 2006 ........... 182
FIGURE 35: PERCENTAGE OF CHILDREN AGES 0 TO 3 IN REGULATED EARLY LEARNING AND CHILD CARE, 2006 .......................................................... 183
FIGURE 36: ACCESS TO EARLY LEARNING AND CHILD CARE PROGRAMS FOR CHILDREN AGES 3 TO 6, 2006 12 .................................................................................................................................................. 183
FIGURE 37: NUMBER OF LICENSED CHILD CARE SPACES, SASKATOON, 2001-2007 ............................ 185
FIGURE 38: PERCENTAGE OF SASKATOON RESIDENTS WITH NO EDUCATION POST-HIGH SCHOOL, 1981-2006 .................................................................................................................................................. 193
FIGURE 39: NUMBER OF EMPLOYMENT INSURANCE RECIPIENTS, CANADA, 1980-2006 .......................... 208
FIGURE 40: NUMBER OF EMPLOYMENT INSURANCE RECIPIENTS, SASKATCHEWAN, 1980-2006 ............ 208
FIGURE 41: PERCENTAGE OF HOME OWNERSHIP, SASKATOON, SASKATCHEWAN & CANADA, 1981-2006. 218
FIGURE 42: NUMBER OF CONDO CONVERSIONS, SASKATOON, 1997-2007 ............................................. 220
LIST OF ABBREVIATIONS

Bayesian Information Criterion-BIC
Business Council on National Issues-BCNI
Canada Assistance Plan-CAP
Canada Child Tax Benefit-CCTB
Canada Health and Social Transfer-CHST
Canada Health Transfer-CHT
Canada Mortgage and Housing Corporation-CMHC
Canada Social Transfer-CST
Canadian Centre for Policy Alternatives-CCPA
Canadian Pension Plan-CPP
Canadian Policy Research Networks-CPRN
Canadian Radio-Television and Telecommunications Commission-CRTC
Centre for Health Equity Studies-CHESS
Child Care Advocacy Association of Canada-CCAAC
Child Care Expense Deduction-CCED
Child Hunger and Education Program-CHEP
Child Tax Benefit-CTB
Commission on the Social Determinants of Health-CSDH
Community-University Institute for Social Research-CUISR
Early Childhood Development-ECD
Employment Insurance-EI
Established Programs Financing-EPF
European Union-EU
Family Health Benefit-FHB
Federation of Canadian Municipalities-FCM
Free Trade Agreement-FTA
Foreign Direct Investment-FDI
General Agreement on Tariffs and Trade-GATT
Generalized Estimating Equations-GEE
Goods and Services Tax-GST
Gross Domestic Product-GDP
Gross National Product-GNP
International Monetary Fund-IMF
Low-Income Cut-Off-LICO
Low-Income Measure-LIM
Multiple Listing Service-MLS
National Child Benefit-NCB
National Children’s Agenda-NCA
New Democratic Party-NDP
North American Free Trade Agreement-NAFTA
Offshore Financial Centres-OFC
Organisation for Economic Cooperation and Development-OECD
Provincial Training Allowance-PTA
Saskatchewan Assistance Plan-SAP
Saskatchewan Child Benefit-SCB
Saskatchewan Employment Supplement-SES
Saskatchewan Housing Corporation-SHC
Structural Adjustment Programs-SAPs
Transitional Employment Allowance-TEA
Transnational Corporations-TNCs
Unemployment Insurance-UI
Universal Child Care Benefit-UCCB
Working Income Supplement-WIS
World Health Organization-WHO
World Trade Organization-WTO
Chapter 1. The Study: Design, Analytical Framework, and Methodology

1.1 Introduction

Globalization, a broad and complex concept, most simply refers to various processes that intensify the interdependence of people, businesses, and countries through increased economic integration and advances in communications technology. It is widely acknowledged that since the 1980s the processes of globalization have been very influential for every corner of the globe in terms of politics, social lives, economics, the environment, culture, technology, and health. As a result, an increasingly popular field of inquiry is the globalization and health relationship.

Over the past decade the health-related effects of globalization have been extensively explored theoretically and conceptually. However, only a limited number of empirical studies have sought to link the processes of globalization to the determinants of health and health outcomes in a specific context and/or for a particular population such as children. Furthermore, the majority of these empirical studies have only focused on macro-level relationships, such as linking increased economic growth with mortality rates or life expectancy in a nation. These empirical studies, for the most part, have not explored in detail the pathways between a population’s health and well-being in a specific site and the processes of globalization at the macro-level. Since the effects of globalization are extremely context dependent, many authors suggest that the next stage in globalization and health research should be studying the pathways between globalization and health on a case-by-case basis.

This study was also informed by the fact that the health status of infants and children is eminently important for society and its future. From birth onwards,
development in the early years (commonly defined as the period up to age five) takes place at a rapid and unprecedented rate. Early childhood development affects well-being and health throughout the life course, with development prior to the age of five providing either a robust or vulnerable foundation for later health and well-being.(7)

The question today is not whether early experience matters, but rather how early experiences shape individual development and contribute to children’s continued movement along positive pathways.(7)

Yet, the health effects of globalization in relation to children have been relatively understudied. These considerations, along with the literature review presented in Chapter 2, informed the development of the following research objectives and questions.

1.1.1 Research Objectives

The objectives of this thesis were two-fold:

• to investigate primarily the economic pathways and related political pathways by which globalization influences the determinants of health and health outcomes in low-income children ages zero to five in a mid-sized Canadian city (Saskatoon, Saskatchewan); and

• to identify and analyze the policy responses at various levels (national, provincial, and municipal) that address the effects of globalization on determinants of health such as household income and distribution, employment and education for parents, housing, and social programs.
1.1.2 Research Questions

1. How have child health outcomes and the conditions determining child health (for children ages zero to five) changed from 1980 to 2007 in Saskatoon, Saskatchewan?

2. a) What are the major factors that account for the changes in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?

b) How has economic and political globalization contributed to the changes witnessed in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?

3. How has national, provincial, and municipal public policy responded to the effects of globalization on determinants of child health such as household income and distribution, employment and education for parents, housing, and social programs?

1.2 Organization of Thesis

The remainder of this chapter discusses the study design, analytical framework, and methodology used in this study. Chapter 2 is a literature review of the concepts and theories that were relevant to this study. Chapter 3 begins by presenting a re-specified analytical framework that illustrates the economic and political pathways between globalization and child health that emerged at the conclusion of data collection and analysis for this study. The remainder of Chapter 3 explores the nature and extent of globalization in Canada and Saskatchewan, and how these globalization trends compare
to trends in child health outcomes in Saskatoon. Chapters 4 through 7 explore primarily the economic pathways and related political pathways between globalization and child health, including: household income and its distribution (Chapter 4), the welfare state and program access (Chapter 5), employment and education of parents (Chapter 6), and housing (Chapter 7). The thesis concludes with an overview and analysis of the major findings (Chapter 8).

1.3 Case Study

This thesis study was a case study of the relationship between the economic and political processes of globalization and child health in Saskatoon, Saskatchewan, Canada\(^1\) (refer to Figure 1). In 2006, the population of the City of Saskatoon was 214,034.\(^{(8)}\) The population structure of the City of Saskatoon can be found in Appendix A.

---

\(^1\) Saskatoon is a city located in the province of Saskatchewan. Saskatchewan is one of ten Canadian provinces.
There is a growing focus on cities as a unit of analysis in the globalization canon of literature for a number of reasons. First, cities are important beyond their own borders since they act as the major exporters and importers in the global economy. Some authors such as Sassen contend that city-regions, rather than nations, are now engaged in economic competition against one another. Second, cities have become the primary sites for the knowledge and innovation that are driving the global economy. Third, cities are the main sites and contributors to environmental issues such as high levels of consumption. Moreover, the foremost social issues of our day, such as cultural diversity, are most profound in cities. Finally, scholars have emphasized that globalization and
the related concept of neoliberalism (see section 2.5.1) need to be considered in terms of place since neoliberalism is inherently based on networks between places and people. (12)

Saskatoon, a relatively small Canadian city, was selected for a particular reason in this case study. The majority of the globalization literature that focuses on urban places has been dedicated to exploring a few ‘global’ cities (e.g., London, New York, Tokyo). While the processes of globalization are exacted on a substantial scale in these ‘global’ cities, the processes of globalization are also felt in the daily experiences of people who do not reside in ‘global’ cities. (13)

There is a Cartesianism at the heart of the vast majority of this work which holds global cities separate from ‘non-global’ or local cities and understands them as distinct objects of analysis. As a result the relational and process-based aspects of uneven geographical development tend to be obscured by a focus on a few places that are defined as powerful on the basis of a narrow set of economic criteria, such as the concentration of and interaction between advanced producer services firms. (13)

Exploring the implications of globalization in smaller cities that are considered ‘non-global’, such as Saskatoon, can offer a more complete understanding of the interrelationships between cities and global structures and processes. (13)

Analysis of child health outcomes in this study was limited to outcomes among children ages zero to five. It is important to define the age of the children that are being investigated since the effects of globalization are age-dependent. (14) For instance, globalization may affect youth through avenues such as school completion, labour force entry, and secondary school policy, but these pathways would not apply in the same way to young children. (15) To specify further, low-income children in the predefined age range were the focus of this study since they may be the most vulnerable to the influences of globalization through economic and political pathways. (16) Low-income families were
also considered in this study since the circumstances of children are a direct result of their family’s economic and social position.(7,17) This study did not take into account the effects of globalization on the life course beyond the age of five. Moreover, this study did not account for the influences of globalization over the life course that would be cumulative (see section 2.2). As a result of the constraints imposed for this investigation, the significance of globalization in terms of health effects and health inequities were most likely underestimated.

A further parameter for this study was that investigation was mainly confined to the period 1980 to 2007. The year 1980 was selected as the baseline for this study since 1980 is often marked as a turning point in the intrinsic nature of globalization. After 1980, rapid strides in communications technology facilitated tremendous growth in international trade and investment, and neoliberal policies (e.g., trade liberalization, privatization of state-owned enterprises, deregulation, etc.) were adopted by most national governments as well.(6,18-20) Data from 2008 and 2009 are presented in a few instances, where it existed or added value to the study. Assessing the effects of the global economic crisis that began to surface in 2008, however, was beyond the scope of this study.

Globalization encompasses a number of different processes--economic, political, social-cultural, and technological--each of which may act as a pathway between globalization and health. The economic pathway was selected as the primary pathway for investigation in this study because it is argued that the drive for capital accumulation is the primary catalyst behind all processes of globalization.(21, 22) Labonte and Schrecker argue that even the pathways between globalization and health that do not appear to be
economic in nature are actually linked to processes occurring in the global marketplace. For instance, a Western diet based on high-fat, processed foods was spread to areas around the world through the marketing and financial strength of transnational food corporations. Political pathways that were related to the economic pathways were also explored in this study since economics and politics are intertwined and are always in a state of flux. It is important to consider the interrelationship between politics and economics when investigating global economic relations since the global economic system is largely the result of political decisions.

A restricted focus on the economic and political pathways between globalization and child health is not meant to suggest that the other processes of globalization are not relevant in terms of the determinants of child health and child health outcomes. However, the social-cultural and technological pathways usually do not fundamentally alter important structural determinants of child health such as income and its distribution or housing. Some of the main pathways between the social-cultural and technological processes of globalization and child health are touched upon in Appendix B.

1.4 Population Health Perspective

This case study was conducted from a population health perspective. When examining the relationship between globalization and health, most researchers approach the relationship from a population health perspective. The population health perspective, as with most complex concepts, lacks a standard, widely accepted definition. A commonly used definition of population health is offered by Kindig and Stoddart:

The health outcomes of a group of individuals, including the distribution of such outcomes within the group. These populations are often geographic regions, such
as nations or communities, but they can also be other groups, such as employees, ethnic groups, disabled persons, or prisoners. Such populations are of relevance to policymakers. In addition, many determinants of health, such as medical care systems, the social environment, and the physical environment, have their biological impact on individuals in part at a population level.(26)

The primary objectives of the population health perspective are “to maintain and improve the health of the entire population and to reduce the inequalities in health between population groups.”(28)

Most definitions of the population health perspective emphasize the determinants of health, particularly the non-medical determinants of health that exist outside of the health care system.(26) Explanations of the determinants of health vary given the particular author or institution conducting analysis. For example, Health Canada adopted the list of determinants of health identified by the Canadian Institute for Advanced Research, which include: income and social status, social support networks, education, employment and working conditions, physical and social environments, biology and genetic endowment, personal health practices and coping skills, healthy child development, and health services.(29)

In recent years, the World Health Organization (WHO) has dedicated resources to investigating the social determinants of health, which are defined as “the conditions in which people are born, grow, live, work and age, including the health system.”(30) To this end, the WHO established the Commission on the Social Determinants of Health (CSDH) in 2005 to provide advice on how to reduce persistent and widening health inequities within and between countries. The CSDH did not refer to a ‘list’ of social determinants of health to guide their work, but rather they used an analytical framework that identified key points where interventions to reduce health inequities can occur,
including: the circumstances of daily life, which include differential exposures to disease and health care responses; the structural drivers of health inequities such as social stratification in society; and the processes of governance from the international level to the local level.(30)

1.5 Analytical Framework

Political economists have often been criticized for failing to consider micro-level influences on social or health outcomes; on the other hand, health scientists have been accused of neglecting to account for the structural drivers or macro-level causes of health issues.(31) As a result, researchers in the area of globalization and health have sought to create or adopt an analytical framework that links macroeconomic policies and processes with population health outcomes in a specific context.(21) In addition, an analytical framework that attempts to illustrate the various pathways between macro-level factors and health determinants and health outcomes is necessary for policy-makers to address the macro-level factors that may influence local health determinants and outcomes.(21,32)

Over approximately the past couple of decades there have been many globalization and health frameworks presented in the literature. One of the first such analytical frameworks was used to guide the Adjustment with a Human Face study, which assessed ten developing countries that were subject to neoliberal policies under the Structural Adjustment Programs (SAPs) of the International Monetary Fund (IMF) and World Bank. This study used an analytical framework that distinguished among input indicators such as government social expenditure, process indicators that exist at the
household level such as the availability of food and social services, and outcome indicators such as the infant mortality rate.\(^{33}\) Despite the novel approach to conceptualizing the globalization and health relationship, the analytical framework used in this study suffered from a number of weaknesses. For instance, this framework did not capture the complex temporal dimensions of the globalization and health relationship, nor did it highlight the multitude of potential feedback loops that exist between globalization and individual health.

A more recent globalization and health framework was put forth by Woodward, Drager, Beaglehole, and Lipson in 2001. Here, the authors of the framework emphasized that economic factors are the key driving force behind the current phase of globalization. Moreover, the authors proposed that the globalization and health relationship occurs due to direct effects (e.g., global trade agreements that affect health) and indirect effects (e.g., the national economy mediates the globalization and health relationship). This analytical framework included feedback loops and recognized that household and national economies have the potential to affect the processes of globalization.\(^{21}\) Although this framework has the strength of highlighting the policy choices that may impact health, it has been criticized by others for focusing on health systems, to the neglect of globalization’s influence on the determinants of health (which would be consistent with the population health perspective).\(^{32}\)

Diderichsen, Evans, and Whitehead argued in their analytical framework that four main mechanisms—social stratification, differential exposure, differential susceptibility, and differential consequences—contribute to health inequity and are all affected by globalization. Moreover, this framework emphasized that stratification is fundamental in
terms of allocating resources, power, and risks. This framework also carefully considered
the potential feedback loops between components of the framework.(34) A modified
version of this framework was used to guide the work of the Globalization Knowledge
Network of the WHO’s CSDH.(35) Despite the strengths of this analytical framework, it
did not illustrate the influence of globalization on different levels of socio-political
organization such as the nation-state, the region, the community, and
households/families.

Another globalization and health framework was authored by Spiegel, Labonte,
and Ostry. This analytical framework was built upon the presumption that although
economic factors have been the main influence behind the expansion of globalization, the
influence of globalization is experienced or ‘felt’ through a number of dimensions. These
dimensions are based on ‘scapes’ that were outlined by Appadurai, including:
ethnoscapes (e.g., the flow of people), technoscapes (e.g., the import or export of
technology), finanscapes (e.g., global capital markets), mediascapes (e.g., global media
conglomerates), and ideoscapes (e.g., cultural images that are usually associated with
Western culture). According to these authors, the ‘scapes’ operate to influence different
levels of socio-political organization such as the nation-state, the region, the community,
and households/families.(36) However, this particular analytical framework failed to
sufficiently illustrate the potential pathways that may exist between the dimensions or
‘scapes’ of globalization and health outcomes. Moreover, feedback loops were not
explicitly noted in this analytical framework.

After a review of globalization and health analytical frameworks, Labonte and
Torgerson’s analytical framework was selected to guide this study (refer to Figure 2).
This analytical framework was selected for a number of reasons. First, the framework is comprehensive. There are different forms of this framework (a basic, a mid-level, and a high-level form) to simplify these relationships for policy and community activism purposes. All of the elements in the framework are supported by theory or evidence, and these elements can be operationalized. Furthermore, people are conceptualized as social actors in this framework, a neglected aspect in many analytical frameworks. Issues of power in race and gender relations were an intrinsic consideration in the development of the framework. Finally, the use of directional arrows in the framework have been carefully considered, based on available evidence, and speak to the complex feedback loops that exist between the levels in the framework.(37)

The authors of the selected analytical framework explicitly stated that their main concern was with promoting greater health equity.(2) This focus on health equity is consistent with the orientation of the WHO’s CSDH, which based its work on the principle that disparities in access to the determinants of health lead to disparities in health outcomes. Health equity was initially defined by the CSDH as, “the absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically.”(38)

Labonte and Torgerson’s globalization and health framework is organized hierarchically. Superordinate Categories is the highest level in the framework and includes pre-existing endowments (e.g., economic growth) and political systems and processes. According to this framework and the literature, the political, economic, and social history of a country, along with endowments such as the level of economic development, will affect how globalization influences health, and this was analyzed in
this study. The nature of the Canadian and Saskatchewan welfare states were also explored in this case study since the type of welfare state instituted in a country mediates the effects of globalization.

The next level in Labonte and Torgerson’s framework is Global Contexts, which includes: macroeconomic policies, trade agreements and flows, intermediary global public goods, and official development assistance and debt relief. These policy actions are some of the main expressions of globalization in countries. Macroeconomic policies that align with the current phase of globalization include: reduced subsidies for basic consumption items; trade liberalization; deregulation; reductions in state expenditures, particularly on social programs such as social assistance and education; and the privatization of state-owned enterprises. Rapid growth in trade agreements and flows are linked to increasing trade liberalization. For this study, the trade agreements and macroeconomic policies that have been pursued by Canada and Saskatchewan since 1980 were considered. In the Canadian context, official development assistance and debt relief were not a consideration due to Canada’s relatively strong economic position in the world. Intermediary global public goods are the institutions or rules established to protect global public goods such as water, land, or air. Since the environmental effects of globalization on the health of children were beyond the scope of this study, intermediary global public goods were not considered in analysis.

Domestic Contexts is located in the middle of the framework, and this level includes the domestic policy space. Policy space is the ability to implement policies without interference from external actors such as other nations or international organizations. Labonte and Torgerson’s analytical framework illustrates that public
policies determine the allocation of resources and opportunities in a particular context.
This particular component of the framework is based on a lengthy history of research that
has established the relationship between national policies and health outcomes.(37)
Simply stated, Domestic Contexts speaks to public policy within a country. For the
purposes of this study, federal, provincial, and municipal public policy that has direct
relevance for children and their health was explored. Other levels of governance, such as
the health region, were not explored in this study due to a lack of available data.

The next level in the framework, Community Contexts, entails: service and
program access, geographic disparities, community capacities, and urbanization. In this
study, the services and programs that have direct relevance for young children such as
child care and early childhood education were explored. Geographic disparities according
to income, adult education, adult employment, and housing were considered for
Saskatoon’s neighbourhoods (and the importance of neighbourhood effects is discussed
in section 2.2). Since social actors are a component of the analytical framework,
community capacities were investigated in relation to community-based organizations in
Saskatoon that have formed to combat and address determinants of health that are
affected by globalization (e.g., income, housing).

Household Contexts is the level in the framework that precedes health outcomes.
This level includes: current household income distribution; health behaviours;
subsistence production; and health, education, and social expenditures.(2,37) For this
thesis study, income and its distribution were carefully considered as fundamental
household conditions that affect child health. Since individual-level data for children and
their families was not available, health behaviours and health, education, and social
expenditures at the household level were not explored. Saskatoon is an urban centre that is not involved in intensive subsistence production, so this was also not a focus of analysis.

Finally, health outcomes are the level that is represented at the bottom of the analytical framework, and health outcomes of children ages zero to five in Saskatoon, Saskatchewan at the city-level and neighbourhood-level were of specific interest. Individual-level data was not available for the purposes of this study.
Figure 2: Globalization and Health: Basic Framework

Source: Labonte & Torgerson, 2005.(2)
The analytical framework in Figure 2 was used in this study with the understanding that, as Labonte and Schrecker argue, no single diagram or model of globalization and health will adequately capture all of the potential linkages. Nevertheless, this analytical framework was useful as it directed the research questions assessed in this study, it helped to structure data in a logical and coherent fashion, and it simplified a very complex phenomenon (i.e., acted as a heuristic device).

1.6 Methodology

The ‘case’ in this study was the City of Saskatoon, Saskatchewan. Yin defines a case study as: “an empirical investigation of a contemporary phenomenon that includes its everyday context, particularly when the boundaries between the phenomenon and context are not clear.” Case studies are used when an investigation of contextual factors is required to fully understand the phenomenon. Yin also explains that case studies are inherently useful when studying phenomena where there will be more variables of interest than data points, which then requires the use of multiple lines of evidence that can be triangulated (a term that is defined below).

The methods employed for this case study were both qualitative and quantitative in nature, which made this study a mixed methods case study design. Mixed methods research “involves both collecting and analyzing quantitative and qualitative data.” The benefits of mixed methods research are numerous: it mitigates the weaknesses specific to both quantitative and qualitative research by benefiting from the strengths of each type of data; it is able to provide a more comprehensive picture of a phenomenon than either quantitative or qualitative data alone; it is usually interdisciplinary, allowing a
researcher to borrow theories and methods from different disciplines; and this form of research is quite practical since the researcher is free to use whichever methods are best suited to the question at hand.(42)

Creswell and Clark describe four major types of mixed methods study designs, and according to their typology this case study was a triangulation design. A triangulation mixed methods design, the most common and well-known approach to mixed methods research, entails collecting complementary data on the same issue. The main objective of this design is to enhance, or diminish, the specific strengths and weaknesses of quantitative and qualitative methods by employing both types of methods. This design involves collecting quantitative and qualitative data in the same time period, with neither type of data assuming preeminence. Following concurrent collection of both qualitative and quantitative data, analysis proceeds by comparing and contrasting the data sets generated to fully understand the research problem under investigation. There are some challenges associated with this design. For instance, if the qualitative and quantitative data do not agree, further data collection of both qualitative and quantitative data may be required, depending on where discrepancies exist. Furthermore, two different sets of data may not ‘converge’ and this would be difficult to interpret, although this can often be addressed by building comparison matrices during analysis.(42)

While globalization is often depicted as a fairly simplistic process in analytical frameworks, this belies the multiple, often overlapping pathways that potentially contain numerous feedback loops and complex temporal dimensions. To capture and appropriately assess this complexity, it is suggested in the globalization and health literature that both quantitative and qualitative methodologies should be used, along with
methods and data that capture different units of analysis: the household level, the community level, the national level, and macro-level processes. This particular approach was pursued in this thesis study.

Three major data sources were used in this case study: archived quantitative data, an analysis of policy documents, and interviews. Each of these is discussed below.

1.6.1 Demographic Profile

A demographic profile for the City of Saskatoon was developed for the period 1980-2007, utilizing secondary data. Secondary data was in the form of archived research data, which is data that has already been used for research purposes and then stored for later possible use. Archived research data has a number of strengths such as: ease of access and availability, it is often inexpensive, and sometimes the researcher is able to study trends, if time series data was collected. However, archived research data can also suffer from a number limitations, including: certain time periods may be not be represented, different levels of geography may not be covered, and since archived research data was originally collected for other purposes it may not be relevant to other studies. Where the data permitted, differences between Saskatoon’s neighbourhoods on key demographic variables were assessed in order to determine where geographic disparities existed and how these may relate to disparities in child health outcomes.

1.6.2 Environmental Scan of Policies

An environmental scan of child-relevant policies in Canada, Saskatchewan, and Saskatoon was conducted for this study. This scan encompassed policy from 1980
 Environmental scans involve collecting all relevant data specific to a topic in order to identify trends and/or themes. Five key policy areas were examined: early childhood development policy, social welfare policy, early education and child care policy, housing policy, and labour policy (i.e., those labour policies that directly impact the family and children such as parental benefits and leave). Analysis was limited to policies that affect children from prenatal to age five and the determinants of child health of direct importance to this study: income and its distribution, employment and education of parents, housing, and social programs. Child-relevant policies specific to a certain cultural group (e.g., Aboriginal populations, immigrant populations) were beyond the scope of this study.

As already noted, this study was conducted from a population health perspective that emphasizes the non-medical determinants of child health. Some health care policy was reviewed in the environmental scan since public health and health care can be important in terms of reducing health disparities, even within Canada’s universal health care system. However, a number of significant studies have concluded that social and economic policy has enormous potential to improve the health of populations. Thus, the policies reviewed in the environmental scan were largely social and economic, with the implicit or explicit objective of improving child health and well-being.

Under the direction of the government publications librarian at the University of Saskatchewan, a number of databases and websites were searched for relevant policy documents. First, the Canadian Social Research Links was searched, which lists an enormous amount of policy literature in the social services area. Second, the Canadian
Research Index (formerly Microlog) was searched using the terms: housing, child welfare, poverty, parent benefits, child development, education, child care, employment insurance, public welfare, social policy, and welfare. Each of the aforementioned terms was entered with the geographic qualifiers of Saskatoon, Saskatchewan, and Canada. In addition, the websites of organizations such as Canadian Policy Research Networks (CPRN), the National Council of Welfare, and the Organisation for Economic Cooperation and Development (OECD)\(^2\) were searched for relevant publications. Once documents had been selected for relevance from websites and databases, the documents were scanned and placed into one of the five selected policy areas. Articles and documents were read at least once and the relevant information was noted in a data template.

1.6.3 Interviews

Interviews are particularly useful for gathering in-depth information about what the researcher cannot directly observe, or as a source of clarification about what the researcher has observed.(44) For this thesis study, interviews were an ideal method for further substantiating the economic and political pathways that were found in Saskatoon using other research methods such as the demographic profile and the environmental scan of policies. In addition, interviews were employed to ascertain the perceived success or

\(^2\) The Organisation for Economic Cooperation and Development (OECD) was established in 1961. Currently, there are 30 member countries of the OECD, including Canada. The OECD was created “to help its member countries to achieve sustainable economic growth and employment and to raise the standard of living in member countries while maintaining financial stability – all this in order to contribute to the development of the world economy.”(49)
failure of policies in terms of protecting or insulating families from the potentially negative consequences of globalization such as increasing poverty and income inequality.

Interviews were also used in this study to uncover the lived experience of low-income families and their children in Saskatoon. Quantitative data often does not provide details regarding the nature of material and social deprivation in a community. Lived experience is able to provide a more accurate picture of a phenomenon than that which can be communicated by academics, government officials, and other groups. By investigating the lived experience of those living in low-income situations, this gives a voice to this population and has the potential to encourage this population to organize around issues of mutual importance.(50)

A phenomenological approach to the interviews was pursued. An implicit assumption of phenomenological research is that the most important reality is the reality perceived by participants. Phenomenological reduction requires the interviewer to suspend their judgment regarding the validity of one’s lived experience in order to arrive at an unprejudiced description of the phenomenon. Essentially, the interviewer is required to determine their own preconceptions and attempt to not let these bias the interview and analysis.(51)

The sampling techniques used for qualitative research are generally more flexible than those used for quantitative research since qualitative sampling is not aimed at achieving generalizability. The intent of qualitative sampling is purposive, selecting cases that are information-rich and are able to describe the processes involved in a phenomenon rather than the distribution of a phenomenon.(52) For the interviews, criterion sampling
was selected, whereby each interview participant had to meet predefined criteria.(53) Predefined criteria for the recruitment of interview participants were as follows:

- Parent of child/children ages zero to five.
- Resident of Saskatoon.
- Considered low-income.
- Vulnerable to shifts in the determinants of child health resulting from globalization. More specifically, interview participants needed to fit into one or more of these categories:
  - employed in non-traditional work arrangement (e.g., temporary, casual, part-time, shift work, etc.);
  - unable to locate affordable housing; and/or
  - affected by the restructuring of social policies and programs in Saskatchewan (e.g., was moved off of social assistance through the Building Independence program, does not qualify for Employment Insurance any longer, etc.).

The population of interest for the interviews was low-income parents with young children. One of the main difficulties associated with interviewing low-income populations is establishing initial contact since mobility is often high in this population and/or a telephone may not be present in the home.(54) To reach low-income parents with children, recruitment occurred through placing posters in two community-based organizations (the Westside Community Clinic and QUINT Development Corporation) that primarily serve low-income individuals and families.
Since recruitment occurred through posting invitations to participate, this type of sampling may also be considered volunteer sampling. One of the limitations of volunteer sampling is that people who choose to participate may be different than those who do not volunteer to participate. This consideration must be kept in mind when reviewing the results from the interviews.

An honorarium of $20 was offered to each interview participant to respect the time they were dedicating to my research. As well, an honorarium has been found to increase response rates. The ethical implications of offering an honorarium are discussed in section 1.7.

The interview guide (refer to Appendix C) was designed to allow for the systematic collection of information from each participant. However, this interview guide was only a suggestion as to how the interview should be formatted, allowing the respondents some flexibility to express their perspectives. This form of interviewing is commonly termed a semi-structured interview or the general interview guide approach. The interviews were face-to-face since the respondents were not geographically dispersed. All interviews were tape recorded and transcribed verbatim.

A total of 28 individuals were interviewed; two of the individuals were recruited through QUINT Development Corporation and the other 26 were recruited through the Westside Community Clinic. Two of the interviews were not included in analysis due to the fact that interview participants did not meet selection criteria, namely their children were older than five years of age, although this was not discovered until after the interview had begun. In total, 26 interviews were included in analysis. Some of the quotations from the interviews presented in subsequent chapters have been modified.
slightly for clarity and/or to retain the anonymity of participants; however, the intent of all quotations has remained intact.

The ages of interview participants ranged from 18 to 47. Of the 26 interviews that were included in analysis, six of the participants were male and 20 were female. The before-taxes and transfers household income categories\(^3\) (including both social assistance and/or employment income) of the participants were as follows: Income Group A (n=3); Income Group B (n=10); Income Group C (n=5); Income Group D (n=4); Income Group E (n=1); and Income Group Unknown (n=3). Although education level was not an original interview question, the education level of participants eventually became integrated into the interview guide. An overwhelming majority of the participants did not have education post-high school. Ethnicity or race was not a component of the interview guide, but it should be noted that a large proportion of the clientele at both the Westside Community Clinic and QUINT Development Corporation are Aboriginal.

According to Kvale, there are six stages of analysis in the typical interview process: 1) interview participants describe their lived experience during the interview; 2) the interview participant discovers new relationships between the concepts they are describing during the interview process; 3) transcription; 4) the transcription of the interview is interpreted by the researcher; 5) a possible fifth step is re-interviewing the original participant; and 6) another possible step may be to produce action, for example,

\(^3\)Income Categories

A: Less than $5,000
B: Between $5,000 and $10,000
C: Between $10,000 and $15,000
D: Between $15,000 and $20,000
E: Between $20,000 and $25,000
F: Between $30,000 and $35,000
by influencing policy. For this study, stages one through four were followed since re-
interviewing was not possible due to limited time and resources. Moreover, while this 
study will hopefully influence policy, this was not the main objective of this research. 

Interpretation of the transcription by the researcher, stage four in Kvale’s stages 
of analysis, was accomplished using a categorization approach. Categorization means the 
interview is coded into categories, allowing a cumbersome transcript to be condensed 
into a few themes or trends, if appropriate. Coding was conducted with the software, 
Atlas.ti.

1.6.4 Trend Analysis

Child health outcome data at the city-level was provided by the Saskatoon Health 
Region and Saskatchewan Health for the period 1980-2006. Neighbourhood-level data 
was provided by Saskatchewan Health for the period 1995/96-2006. The child health 
outcomes in this study were: infant mortality, low birth weight (defined as below 2500 
grams), under-five mortality, hospitalization for children ages zero to five, hospitalization 
due to injury for children ages zero to five, and hospitalization due to asthma for children 
ages zero to five. All data was extracted from Saskatchewan Health files using the 
residence code 34424 (i.e., the City of Saskatoon). The infant mortality rate, low birth 
weight rate, and under-five mortality rate were calculated using data extracted from 
Saskatchewan’s Vital Statistics Database. Data for the hospitalization rate, injury rate, 
and asthma rate were extracted from Saskatchewan Health’s Year-end hospital files.

The infant mortality rate was calculated as the number of deaths of live born 
babies in their first year of life per 1,000 live births. The low birth weight rate was
calculated as the proportion of infants born under 2,500 grams per 100 live births. The under-five mortality rate was the number of children who die before the age of five per 1,000 live births. The child hospitalization rate was calculated as the number of discharges for children ages zero to five divided by the total population ages zero to five. For the child injury rate, the numerator was the number of children discharged from hospital with ICD-9 Chapter number 19 and E800-E999 (excluding E870-E879, E930-E949) and ICD-10 Chapter number 20 V01-Y98 (excluding Y40-Y84, Y88.0, and Y88.1). The denominator for the child injury rate was the total population ages zero to five. The child asthma rate was calculated as children discharged from hospital with J45 in ICD-10 and 493 in ICD-9 divided by the total population ages zero to five. All rates included children with Registered Indian Status, which were individuals that self-declared as a Registered Indian with Vital Statistics at Saskatchewan Health.

Trends in the six child health outcomes at the city-level over time were assessed using joinpoint regression. The software used to conduct joinpoint regression was Joinpoint 3.3, which is a statistical software package that was developed by the American National Cancer Institute to analyze cancer trends over time. This software basically connects different trend lines together at the joinpoints, enabling researchers to test if a change in trend is statistically significant. (56) Joinpoint 3.3 uses two different methods to find the best model: Permutation Test and Bayesian Information Criterion (BIC). Each method is testing the null hypothesis (H₀: there are k₀ joinpoints) against the alternative hypothesis (H₁: there are k₁ joinpoints). As with many statistical models, if you add more parameters to your joinpoint model, you will get a better fit. However, Joinpoint 3.3 tries to adhere to the principle of parsimony and chooses the smallest number of joinpoints
such that if one more joinpoint is added, the improvement is not statistically significant. Therefore, in the final model, each of the joinpoints and its corresponding changes in trend can be considered statistically significant.(56)

Trend analysis was also performed at the neighbourhood-level since aggregate analysis (i.e., analysis at the city-level) did not reveal the geographical differences that may exist in a city. Defining neighbourhoods and their exact boundaries has been a consistent methodological challenge discussed at length in the neighbourhood effects literature. This is due to an over reliance on bureaucratically circumscribed boundaries that are not meaningful for residents in these studies.(57) The boundaries of census tracts are often not the same as the neighbourhood boundaries as perceived by residents.(57-60) This methodological issue was easily addressed in Saskatoon since city planners have a lengthy history of establishing neighbourhood boundaries that are easy to maintain and service over the long-term. Neighbourhood boundaries have been identified by both the local city planning department and residents, meaning that residents’ perceptions align with bureaucratic boundaries.(61)

Neighbourhood-level analysis was especially important to consider in the Saskatoon context since there has been a historic and persistent divide between neighbourhoods located east and west of the South Saskatchewan River. Poverty rates are quite high in certain neighbourhoods on the west side, particularly the core neighbourhoods.(62) The core neighbourhoods include Riversdale, Pleasant Hill, King George, Westmount, and Caswell Hill.(63) The core neighbourhoods of Saskatoon generally contain older homes, large numbers of rental properties, and an ethnically
diverse population. Residents in the core neighbourhoods experience higher rates of unemployment than in other areas of the city, and there are also a greater number of families on social assistance. (64)

In 2006, the Saskatoon Health Region conducted a study that examined disparities in health status between Saskatoon’s six poorest neighbourhoods (Pleasant Hill, Riversdale, Westmount, King George, Meadowgreen, Confederation Suburban Centre) compared to the rest of the city and also to the five most affluent neighbourhoods in the city (Briarwood, Arbor Creek, East College Park, Lakeridge, Erindale). The poorest neighbourhoods in this study were defined as areas where more than 30% of families lived below the low-income cut-off (LICO)⁴. All of the poorest neighbourhoods have contiguous boundaries and are located on the west side of the city. The five most affluent neighbourhoods also have contiguous boundaries. This study established there were significant and sometimes staggering disparities between the poorest and most affluent areas in Saskatoon for a range of health outcomes. (65, 66)

For the purposes of this thesis study, neighbourhoods in Saskatoon were grouped in a similar fashion as the Saskatoon Health Region study to reflect the persistent socioeconomic disparities between certain east and west side neighbourhoods. However, in this thesis study, the neighbourhood, East College Park, was replaced by River Heights to represent the most affluent neighbourhoods in the city. This is because East College Park is a middle income neighbourhood, and River Heights is much more affluent. River Heights is located in the northwest of the city. Since the Saskatoon Health Region study

⁴ The low-income cut-off (LICO) is calculated by considering the after-taxes and transfers income of families, adjusted for family size and community size. A family falls below the LICO if they spend 20% more points than the average family spends on food, shelter and clothing. This value is readjusted for community size and inflation.
only assessed one point in time (2006), this thesis study attempted to conduct trend analysis over time to determine if disparities in health status are historical and are worsening under the current phase of globalization. Some neighbourhoods were excluded from all neighbourhood-level analysis in this study due to insufficient information. The neighbourhoods that were excluded included: Sutherland Industrial, NE Development Area, Hudson Bay Industrial, U of S Lands South MA, West Industrial, North Industrial, Central Industrial, SE Development Area, Agpro industrial, CN Industrial, and U of S MA. None of the neighbourhoods that were excluded from analysis are residential. A total of sixty-one neighbourhoods were retained for neighbourhood-level analysis in this study.

Mann-Whitney U tests were performed in SPSS Version 17.0 to compare neighbourhoods according to the six child health outcomes. This test was used since the distribution of child health outcomes was generally non-normal. A few of the child health outcomes in certain years were normally distributed, but for the sake of consistency only the results from the Mann-Whitney U tests are presented (see section 4.5). The Mann-Whitney U test is used to determine if there is a statistically significant difference between two groups. The Mann-Whitney U test proceeds by replacing the values of each observation with their rank and then by considering the ranks of the observations.(67) The two groups are each assigned a U value. To test if there is a significant difference, the smaller of the two U values is assessed to determine what the probability is of getting this value if there is no difference between the groups. If the probability is lower than 0.05, the null hypothesis can be rejected and there is a significant difference between the
two groups. The probability value can be obtained by looking at the Asymptotic
Significance (two-tailed). (68)

Neighbourhood-level child health outcomes were also assessed using logistic
regression with generalized estimating equations (GEE) in Stata Version 9.0. GEE is used
when a correlated response variable is binary or count, and is not normally
distributed. (69) GEE was employed because each neighbourhood over time represented a
cluster with correlated data. The GEE approach to logistic regression uses a weighted
combination of observations in order to account for correlation among the data. (70) GEE
uses quasi-likelihood estimation to determine statistical significance, which is very
similar to maximum likelihood estimation. (69) Quasi-likelihood estimation does not
assume that there is a known distribution. In Stata, the correlation structure must be
specified, and for this research and dataset the correlation structure was defined as
exchangeable. (71)

In this study, child health outcomes at the neighbourhood-level were count data
and were not normally distributed; however, there was too little data to pursue Poisson
regression or negative binominal regression (i.e., common models used for count data).
Thus, the count data for each child health outcome was transformed into a binary variable
in order to use logistic regression with GEE. For all child health outcomes, with the
exception of child hospitalization, the presence of the health outcome was coded as 1. If
the health outcome was not present in the neighbourhood, this was coded as 0. For child
hospitalization, where there was more variance in the data, the median of the variable was
ascertained. If the hospitalization count in the neighbourhood fell below the median, this
was coded as 0. If the hospitalization count in the neighbourhood was above the median, this was coded as 1.

Predictors included in the models for each child health outcome were variables that were available in the Canadian census, which included: proportion of low-income families in the neighbourhood, proportion of Aboriginal residents in the neighbourhood, average family income in the neighbourhood, proportion of no education post-high school among adults in the neighbourhood, proportion of unemployment in the neighbourhood, gross rent payments\(^5\) on housing in the neighbourhood, and gross owner payments\(^6\) on housing in the neighbourhood.

1.6.5 Process Tracing

Process tracing entails analyzing a sequence of events within a case and then demonstrating how the events are plausibly linked to one another. The strength of process tracing is that both inductive and deductive approaches to research can be employed. A deductive approach can be taken to predict and then show empirically the intervening variables in a case, using pre-existing theories. An inductive approach can be used when pre-existing theories are not consistent with findings and/or new hypotheses need to be generated. Process tracing is noteworthy in its ability to define and substantiate causal mechanisms such as the pathways between a particular policy and its outcomes\(^{72, 73}\). The main limitation of process tracing is that measurement error and omitted variables can lead to incorrect inferences. This limitation is due to the fact that tracing a process in

\(^5\) Gross rent payments include monthly rent payments as well as the costs of electricity, heat, and municipal services.

\(^6\) Gross owner payments include mortgage payments as well as the costs associated with owning a property such as property taxes, electricity, heat, and municipal services.
its infinite detail is usually impossible since all of the evidence required to trace a process in detail most often does not exist. However, in this study, trend analysis with GEE takes into account measurement errors. Process tracing is best conducted by assembling hundreds of observations or data points that support the linkages under investigation (in this case, the levels in the selected analytical framework).(72)

Process tracing is usually carried out through a process termed ‘strategic narrative’, where the narrative focuses specifically on how patterns of events potentially relate to a pre-existing theory or analytical framework. Process tracing is not intended to produce generalizable results, rather the goal is to test a particular theory or framework.(72,74) In this study, a strategic narrative was developed, and is detailed throughout the proceeding chapters. The strategic narrative largely encompasses the national and provincial policies pursued in Canada and Saskatchewan that were linked to the processes of globalization and that in all likelihood created changes in the case of Saskatoon in relation to child health determining conditions. Labonte and Torgerson’s analytical framework (2) was tested throughout this study to determine if the pathways explicated in their framework were consistent with the evidence uncovered in the Saskatoon case or whether other pathways, or explanations, were more probable.

Process tracing, as a method, has been applied to a number of case studies of globalization. This is because the relationship between globalization and local outcomes involves a complex series of events that occur over many years and dimensions, and process tracing is particularly well-suited to capture this temporal and dimensional complexity.(75) When applied to the relationship between globalization and health in this study, process tracing needed to encompass a number of components. First, the
international and national policy contexts were explored. Changes in the determinants of health were also investigated. Moreover, changes in health outcomes were considered in the context of probable causes. Finally, interviews were used to determine the experience of globalization from a local perspective.(23)

A key element of process tracing is attempting to investigate causal relationships. Causality, in social research, usually involves research that is undertaken to identify and explain patterns that could be consistently and correctly predicted (“if A then B” types of logical patterns. Process tracing assesses possible causal patterns between macro-level influences and micro-level outcomes, which for this research involved assessing the linkages between macro-level economic and political influences and changes in the determinants of child health and child health outcomes in Saskatoon. For this thesis study, process tracing was used in a strategic narrative manner, linked systematically to an a priori analytical framework, as well as assessing empirical relationships using statistical methods and by assembling hundreds of data points that linked sequences of events to one another over a number of years (i.e., 1980-2007).(75,76)

1.7 Ethics

Ethics applications to the University of Saskatchewan’s Behavioural Research Ethics Board were submitted in two phases. The first phase of this research project (i.e., demographic profile, environmental scan, and trend analysis) did not involve human participants. The Ethics Board determined that this phase of research was exempt from the Ethics Board review process due to Article 3.3 of the Tri-Council Policy Statement. Article 3.3 states: “review and approval is not required to conduct a secondary analysis of
data that cannot be linked to individuals, and for which there is no possibility that
ingredients can be identified in any published reports.”

The second phase of this research, conducting interviews, was informed by the
first phase of the research. The interview component was approved by the Ethics Review
Board (Beh 08-138) in June 2008. There were a number of ethical considerations for the
interview component of this project. First, informed consent needed to be obtained from
all interview participants prior to beginning the interview process. Generally, informed
consent entails: subjects realize they are part of a research study, subjects know about the
nature of the research, and subjects are aware of their right to withdraw from the research
process at any time. Prior to beginning the interview, the consent form was verbally
reviewed with the interview participant to ensure they understood the content of the
consent form. The consent form used in this research is reproduced as Appendix D.

One of the foremost ethical considerations for the interview component was
maintaining the privacy and confidentiality of research participants. All of the
datasets that emerged from the interviews had a numerical identifier attached to them that
did not automatically link data directly back to the participant that provided information.
Data that emerged from the interviews was held in strict confidence and discussed only
with the thesis committee. In addition, the anonymity of the respondents was maintained
when writing and reporting findings since any potential identifier such as the occupation,
place of work, or the health care provider of the participant was omitted from this thesis
and associated publications.

A further ethical consideration was conducting research with a vulnerable
population. Families living in conditions of poverty are considered to be a vulnerable
population by the Ethics Review Board at the University of Saskatchewan. To conduct research with a vulnerable population, the potential harms and benefits of the research need to be considered. Ethically, the research must have greater potential benefits than harms. (79) A potential benefit of this research was giving voice to people who are often not heard. The potential harm of this research was minimal since participants were briefed before the interview regarding the purpose of the interview and the questions that would be asked. One of the potential risks was that some of the questions in the interview guide were of a personal nature such as the interview participant’s level of income, employment history, and marital status. Through the consent form, it was made very clear that the participant did not have to answer any questions they felt uncomfortable answering. This point was also emphasized verbally before beginning the interview.

A $20 honorarium was offered to each interview participant to respect the time they were dedicating to this research. The honorarium and its amount were clearly stated on the recruitment poster, reflecting a recommendation by the employees of QUINT Development Corporation that an honorarium of this amount would be respectful of the time the interview participant was dedicating to this research; yet, this amount of money was not enough to be considered coercive.

1.8 Summary

All of the methods described in this chapter were employed to paint a complete, or complete as possible, picture of the political and economic pathways between globalization and child health in Saskatoon. The methods that have been used to answer each specific research question are detailed in Table 1.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Demographic profile</th>
<th>Environmental scan of policies</th>
<th>Interviews</th>
<th>Trend analysis</th>
<th>Process tracing</th>
</tr>
</thead>
<tbody>
<tr>
<td>How have child health outcomes and the conditions determining child health (for children ages zero to five) changed from 1980 to 2007 in Saskatoon, Saskatchewan?</td>
<td>The demographic profile was used to capture changes in the determinants of child health over the study period.</td>
<td>The environmental scan was used to capture changes in child-relevant policies since political decisions are considered a key determinant of child health.</td>
<td>Interviews were used to provide the lived experience of the determinants of child health.</td>
<td>Joinpoint regression was used to assess trends in child health outcomes at the city-level. Mann-Whitney U tests and logistic regression with GEE were used to assess trends in child health outcomes at the neighbourhood-level.</td>
<td>Process tracing was used to elucidate the macro-level processes that influenced micro-level outcomes (i.e., the pathways).</td>
</tr>
<tr>
<td>What are the major factors that account for the changes in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?</td>
<td>The demographic profile was used to determine the plausible demographic causes of changes in child health and the determinants of child health.</td>
<td>The environmental scan was used to determine the major policy decisions that may have influenced changes in child health and the determinants of child health.</td>
<td>Interviews were used to probe for plausible causes in the changes of child health and the determinants of child health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How has economic and political globalization contributed to the changes witnessed in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How has the environment changed in ways that matter for child health?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Question: National, provincial, and municipal public policy responded to the effects of globalization on determinants of child health such as household income and distribution, employment and education for parents, housing, and social programs?

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Demographic profile</th>
<th>Environmental scan of policies</th>
<th>Interviews</th>
<th>Trend analysis</th>
<th>Process tracing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>scan was used to elucidate the major policy responses to the child-relevant issues of household income and distribution, employment and education of parents, housing, and social programs.</td>
<td>interviews were used to assess peoples’ perceptions of policy responses to the effects posed by globalization to determinants of health.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 2. Background: Children, Globalization, and Pathways

2.1 Introduction

This chapter explores and defines the concepts that were relevant to this study. The first concept that is discussed is the importance of early childhood development in relation to the population health perspective. An explanation of globalization is provided, along with a discussion regarding the historical nature of globalization. Since this thesis was explicitly interested in assessing the influence of primarily the economic and related political processes of globalization, only the economic and related political pathways between globalization and child health are the focus of this literature review. Some of the major social-cultural and technological pathways between globalization and health are outlined in Appendix B. It should be noted that the plausible pathways between globalization and child health that are presented in this literature review are the most relevant in Canada, recognizing that the effects of globalization are ultimately country- and context-dependent.

“The effects of globalization are mediated by states, institutions, and individuals, creating different outcomes based on varying historical political legacies.”

2.2 Early Childhood Development

The population health perspective emphasizes the importance of early childhood experiences. Numerous empirical studies affirm the profound significance of early childhood development in providing a foundation for later achievement, growth, and health. For example, poverty experienced in the first five years of life is a strong predictor of delayed cognitive and physical developmental outcomes.

Young children
are particularly susceptible to the adverse effects of poverty, even more so than older children or teenagers. (7)

There are three main theories (which are not mutually exclusive) regarding the effect of early life experiences on later developmental outcomes and health. First, latent effects are typified by early developmental and biological factors that lay dormant but emerge later in life as health effects. Latent effects occur at very critical stages in the human development process and influence later development and health, regardless of intervening experiences. Second, pathway effects occur due to experiences in early life that set children on certain life trajectories. For example, a lack of school readiness in the first years of school will most likely negatively influence later academic achievement. Finally, cumulative effects represent the compounding of life experiences over the life course. Cumulative effects involve one experience building upon the other, including both pathway and latent effects. (83, 84)

Animal and human studies indicate that during the early years the brain is at its most malleable, with the development of neuronal pathways taking place at a rapid and unprecedented rate. (85, 86) From the time of conception, a process of biological embedding occurs in humans, where differences in psychosocial and material circumstances embed themselves. (84, 86) As a result, gradients in health are a function of the interplay between human development and social factors. This concept does not entail biological determinism, however, since interventions in later life have the potential to improve development and the potential for human agency exists as well. (87)

There is a growing consensus amongst researchers that individual-level variables and ecological variables interact with one another to produce health and developmental
outcomes in children. Accordingly, a child’s development is not only influenced by conditions within his or her immediate family, but also by conditions that exist within a series of overlapping environments or contexts. Despite these theoretical and conceptual advances, estimating the impact of contextual factors on children’s health or developmental outcomes has generally been confined to investigating the influence of children’s immediate contexts such as the neighbourhood. Empirical research has found that the neighbourhood does have important and long-lasting effects on children’s health outcomes and development, even after controlling for individual and family characteristics.

Various theories have been advanced in the literature to explain how neighbourhoods or place may operate to influence children’s social and health outcomes. The most commonly cited theories include: a) the neighbourhood resource theory which supposes that residents benefit when they are situated near to high-quality resources such as schools, libraries, etc.; b) the contagion model contends that peers have the potential to spread problem behaviour; c) collective socialization theories presume that role models in the neighbourhood are important in terms of socializing young children and strengthening normative behaviour in an area; d) competition theories believe that neighbours compete against one another for scarce resources; and e) relative deprivation theories are based on the contention that individuals assess their own social and economic circumstances compared to their neighbours.

Early childhood development has been a priority for many developed countries in the past couple of decades. In Canada, early childhood development has been a stated policy priority since at least the late 1980s. This stated priority may have been
selected for less than altruistic reasons. For example, Keating and Hertzman argue that
with the rise of the knowledge economy, and with less dependency on exploiting natural
and physical resources for wealth creation, the successful and healthy development of
children will be crucial for success in the global marketplace. (87) Children are also likely
a focus in policy development since they cannot be blamed for their disadvantage or
impoverishment. Within western society, children are socially constructed as innocent
and/or victims of their own circumstances. You cannot blame a child for being poor, yet
it is much more acceptable to blame adults for being poor. Adult dependency on the state
or others is considered to be deviant in a great deal of policy discourse. (98)

2.3 Globalization and Its History

Defining globalization is contested terrain. There is a great deal of debate in the
literature regarding what exactly constitutes globalization. There is general agreement
that globalization represents increasing interdependence amongst countries, economies
and people; however, debate arises when considering what aspects of globalization are
most important in exploring causal relationships and which ones can or should be
measured. (37) A further issue in the literature is whether globalization is a dependent or
independent variable. (99)

Wide-ranging definitions have attached themselves to the term “globalization,”
which may both account for its popularity and limit its practical utility. It is used
both as an independent variable (that is, something that requires explanation) and
an independent variable (for example, as a causal factor that explains other
developments such as the posited demise of the nation-state). In the latter capacity
its definitional vagueness puts it in danger of becoming all things to all people, of
being used to explain everything, and thus at risk of explaining nothing. (100)
Rosenau argues that globalization can act as either an independent or dependent variable within a matter of milliseconds. Globalization is treated as both an independent and dependent variable in this study since globalization has the potential to influence economic and political decisions and consequently contribute to health risks (i.e., acts as an independent variable); however, the very nature of globalization is dependent upon the economic and political decision-making it has the potential to influence (i.e., acts as a dependent variable). This approach to conceptualizing globalization acknowledges it is not the only factor that affects the determinants of health and health outcomes.

Since this research was focused explicitly on the economic pathways and related political pathways between globalization and health, the definition that most closely aligned with this focus is the one provided by Jenkins, where globalization is “a process of greater integration within the world economy through movements of goods and services, capital, technology and (to a lesser extent) labour, which lead increasingly to economic decisions being influenced by global conditions.” This was also the definition of globalization that was adopted by the Globalization Knowledge Network of the WHO’s CSDH. Jenkins’ definition typifies the common and compelling argument that “economic globalization has been the driving force behind the overall process of globalization over the last two decades.”

Globalization is not a recent phenomenon. The movement of production, ideas, and humans across borders has been occurring for centuries. Ostry argues that the nascent stages of contemporary globalization appeared in the last quarter of the 19th century, after the economic powerhouse of the time, Britain, adopted a policy of free trade in 1850. While the roots of contemporary globalization can be traced back to the
1800s, the current phase of globalization is considered by many to be a new or different phase all unto itself. The unprecedented pace and intensification of changes brought about by globalization in the current era—most would say due to technological advances in communication—are the defining features of this phase of globalization. (23, 102)

While there is some debate regarding the exact starting point of the current phase of globalization, most writers consider it to have begun approximately between the early 1970s and early 1980s. “Identifying a precise starting point is less important than recognizing that some time in the early 1970s the world economic and geopolitical environment changed decisively.” (22)

The current phase of globalization is distinct from previous phases of globalization in a number of ways, including: increasing recognition of the global nature of certain public health issues (e.g., pollution, H1N1, H5N1, SARS); the proliferation of legally binding, multi-lateral trade agreements; the domination of international trade by transnational corporations (TNCs); the pervasiveness of neoliberal forms of state restructuring; greater population mobility, particularly for the wealthy; the widespread outsourcing of manufacturing positions to low- and middle-income countries; the increasing importance of the service sector and the knowledge economy in high-income countries; increased cultural diffusion, particularly of Western culture; and advances in communications technology. (101, 103)

In addition, financial markets have become globalized at a rapid rate over the past 30 years, and this has been facilitated by advanced communications technology. It is more difficult to trade commodities or labour expeditiously; therefore, financial markets have been at the forefront of the current phase of globalization. (104) For example, in
1973, daily trade in money was estimated to be $20 billion worldwide.\(^{(36)}\) In 2007, the daily value of foreign exchange transactions totaled approximately $3.4 trillion.\(^{(105)}\) There is an increasing amount of economic activity that is speculative in nature, where investments are bought to rapidly produce profits and then are quickly sold again for a profit. Trade often now involves the exchange of slips of paper.\(^{(104)}\)

The current phase of globalization is also unique in the sense that a global labour market has been emerging, which has occurred largely due to the integration of China, India, and former Soviet bloc countries into the marketplace.\(^{(106)}\) The global labour market is far from mobile; rather it relies on the establishment of vast networks that span the globe. Networks among companies and capitalists are considered a key feature of neoliberal societies in order to continue perpetuating economic growth (refer to section 2.5.1).\(^{(12)}\) A related trend has been the emergence of global commodity chains, where the site of production is increasingly located where the costs to capital are least expensive (e.g., low wages, weak regulatory frameworks). Due to the increased mobility of TNCs, countries face limits in how many regulations and restrictions they can place on capital since they do not want to dissuade business from locating within their borders.\(^{(106)}\)

2.4 **Globalization and Children**

Recent models of child development have begun to include globalization as a key context that influences the national context, community context, and even the household context for children.\(^{(107,108)}\) While globalization has been included in recent child development models, relatively few empirical studies have been produced regarding the influence of globalization on child health and the conditions that determine child health.
Most of these empirical studies have focused on macro-level relationships such as linking increased economic growth to infant mortality in a certain region or nation. Cigno, Rosati, and Guarcello (109), for example, conducted a cross-country comparison study to investigate the relationship between globalization and child labour. The World Bank’s *Development Indicators* were used to assemble data on trade openness and child labour among children ages 10 to 14. This study concluded that trade liberalization does not increase the occurrence of child labour since trade openness and the incidence of child labour were negatively correlated. Yet, there were a number of methodological limitations associated with this study that should be noted. First, the authors attempted to compensate for only assessing formal labour participation by children ages 10 to 14 with data on primary school attendance. However, this study most likely grossly underestimated the number of children engaged in work since their measures did not account for work in the home and in informal or illegal situations. In addition, trade openness was measured as imports plus exports, divided by Gross Domestic Product (GDP). By not separating out export and import flows, this study may have failed to find an association that actually exists. This is because exports in a country can be reliant upon child labour, whereas imports may reduce the need for child labour. Finally, one of the main limitations associated with using country-wide databases is that they tend to mask a great deal of variation, often failing to detect trends at the regional- or community-level. (109)

Another example of an empirical study that relied on macro-level statistical relationships to explore the links between globalization and child health was a 2001 UNICEF study. This study found that the period 1960-1980 produced the most marked
improvements in history in terms of childhood well-being worldwide. The period 1980-2000 was characterized by a slowdown in the rate of improvement of key indicators of childhood well-being such as the infant mortality rate, the under-five mortality rate, primary and secondary school enrolment rates, under-five malnutrition, and child poverty. However, child health gains were largely confined to the children from wealthier families over the period 1980-2000, which mirrored a pattern of increasing income inequality within countries. The authors attributed this slowdown in the improvement of key child health indicators to: slow or negative Gross National Product (GNP) growth; increasing volatility in financial markets, which destabilized family income; rising income inequality; reductions in social expenditure; the privatization of utilities; shifts in demography and family structure; a decline in the time allocated to child care due to increased female labour participation; and an increasing number of local conflicts. However, evidence that linked these political, economic, and social changes to changes in key child health indicators was lacking.

In 2002, an entire book was devoted to exploring globalization and what this may portend for children’s lives throughout the world. The majority of this book, however, was largely conceptual and descriptive in nature, detailing how globalization may impact children’s lives. For instance, Rizzini and Barker described the policy landscape as it related to children in Brazil. They provided statistics on school enrolment, poverty, and child labour, but they made no attempt to link these descriptive statistics to the processes of globalization or even policy at the national level. Williams described poverty rates in Jamaica and the influence of American television on Jamaican
youth (112), but yet again no attempt was made to link these trends to broader global trends.

A few studies have sought to trace the pathways in detail between globalization and child health outcomes. As noted earlier, the Adjustment with a Human Face study assessed ten developing countries (Botswana, Brazil, Chile, Ghana, Jamaica, Peru, Philippines, South Korea, Sri Lanka, and Zimbabwe) subject to neoliberal policies under the SAPs of the IMF and World Bank. This study was guided by one of the first globalization and health analytical frameworks to be presented in the literature. This study found that, in a number of cases, reductions in social expenditure resulted in declining child welfare in terms of health, nutritional, and educational outcomes. Based on these findings, the study concluded by recommending a set of policies that would ameliorate the negative impacts of SAPs such as ensuring a basic income and protecting health and nutrition.(33)

Another study, by De Vogli and Birbeck, traced the potential pathways between globalization (expressed as neoliberal policies adopted under SAPs) and increased vulnerability to HIV infection among women and children in sub-Saharan Africa. These authors constructed an analytical framework that was composed of five different pathways between globalization and increased vulnerability to HIV infection. All five pathways accounted for changes at the macro-level, the meso-level, and the micro-level. Using previous studies on SAPs and HIV infection, De Vogli and Birbeck concluded that the evidence base affirms the validity of their analytical framework. While this analytical framework contributed to the conceptual literature regarding globalization and health, the authors were unable to definitively conclude that SAPs and globalization contributed to
increasing HIV vulnerability among women and children. More complex research designs that incorporate public health data and economic data from the macro-level, meso-level, and the micro-level were required to confirm this relationship.(113)

2.5 Pathways Between Globalization and Child Health

The following sections explore in greater detail the economic and related political pathways between globalization and child health that are relevant in a Canadian context. Although the pathways are presented as fairly linear, straightforward processes, this in all likelihood belies the true nature of these pathways, with multiple feedback loops inherent in these pathways.

2.5.1 Neoliberalism and Poverty

Globalization since the 1970s/1980s has co-evolved with neoliberalism and the neoliberal policies that have been adopted by almost every government in the world.(18) In other words, the tenets of neoliberalism and the current phase of globalization are mutually reinforcing. In fact, neoliberalism has been referred to as the ‘cousin’ of globalization.(114) To reflect the mutually reinforcing aspects of the current phase of globalization and neoliberalism, from this point forward the term ‘neoliberal globalization’ will be used in this thesis to convey the global socio-economic and political dynamics that have occurred since the 1970s/1980s.

Neoliberalism has its foundation in eighteenth century liberalism, which was premised on two central assumptions. One, the exercise of individual self-interest will lead to the greatest good for the greatest number. Two, the market will ensure optimal
benefits for everyone. Liberalism then evolved into a much different theory in the mid-
twentieth century, when it attempted to compensate for the failings of the market through
the building of the Keynesian welfare state.(18) Neoliberalism emerged in the 1970s and
is quite similar to eighteenth century liberalism in that it emphasizes the primacy of the
market. Other features of neoliberalism include: deregulation, trade liberalization,
privatization, tax restructuring (i.e., shifting taxation away from capital and towards
labour), and the retrenchment of the welfare state from certain areas of activity such as
social provision (for further discussion of the retrenchment of the welfare state see
section 2.5.2).(18,115)

The election of Margaret Thatcher as the Prime Minister of the United Kingdom
in 1979 stands as an important milestone in the emergence of neoliberalism as an
orthodoxy in national economic policy. Policy shifted along similar lines in the United
States in 1979 when the chairman of the Federal Reserve Bank, Paul Volcker, abandoned
the principles of the Keynesian welfare state in favour of fiscal and monetary policies
aimed at diminishing inflation, regardless of its costs for employment. When Ronald
Reagan was elected President of the United States in 1980, neoliberal policies such as
deregulation and privatization, tax cuts that favoured high-income earners, budget cuts to
social programs, and opposition to trade unions were adopted. Governments upholding
the precepts of neoliberalism occurred in other countries as well, sometimes through
direct military intervention (e.g., Chile, Argentina), although more often through
ostensibly democratic means. Neoliberalism was manufactured to appeal to society’s
desire for greater ‘personal freedom’.(116)

The new right of Margaret Thatcher and Ronald Reagan saw no such paternalistic
role for the state. Their focus was on minimizing the state’s role in order to
protect individual freedom. The assumption was that all individuals were equally free, with no consideration being given to the differences in their circumstances and their capacity to exercise such freedom. (117)

It was originally believed by many scholars and institutions that neoliberal globalization, and its attendant emphasis on trade liberalization, would increase trade. Increased trade would in turn increase economic growth, which would ultimately ‘trickle down’ to disadvantaged populations and improve their health. In other words, “a rising tide will lift all boats.” (118) Trade has indeed increased dramatically under neoliberal globalization. Throughout the 1980s and 1990s, international trade grew four times as quickly as GDP across countries. By 2000, international trade had reached more than $16 trillion per year, which was approximately half of world GDP. (119) Despite spectacular increases in the amount of trade worldwide, the jury is still out on the benefits of neoliberal globalization for income and its distribution. Many countries that have followed neoliberal tenets have not been able to significantly reduce poverty. (120) Moreover, the current worldwide recession has left many questioning the utility of the neoliberal model and its ability to produce stable economic growth that benefits all.

If neoliberal globalization does not generate economic prosperity for many, this has troubling implications for child health since there are many pathways by which income affects child health. For instance, the amount of income present in a home generally dictates the quality of the home environment. The physical condition of the home, the amount of educational materials present in the home, and access to developmentally appropriate activities are all affected by family income levels. Income also affects the need for child care, with higher-income families sometimes being able to afford to have a parent that stays at home. On the other hand, if parents or a single parent
require child care, the quality of child care accessed outside of the home may be affected by income levels. Dire economic situations for families can lead to increased tension, stress, and discord in a home. Finally, the neighbourhoods that families reside in can affect child health outcomes. (50, 121-123) For example, low-income neighbourhoods are more likely to be in close proximity to pollution, crime, and dangerous traffic arteries. (124)

2.5.2 The Decline of the Nation-State, Welfare State Retrenchment, and the Privatization of Risk

A few scholars have asserted that neoliberal globalization has spawned a borderless world, where national governments are on a path towards obsolescence. (125) However, many authors contend that the decline of the nation-state is not occurring and is overstated. (126) For example, Coleman and Porter argue that the Canadian state is changing (i.e., increasingly juridical and internationalized) under neoliberal globalization, but it still retains independence and autonomy in a number of policy areas. (127) Garrett and Lange also support the proposition that neoliberalism does not significantly or substantially limit a state’s autonomous policy-making power. (128) For example, the social-democratic states that exist in the Nordic countries have selected to pursue universal programs and policies that promote dual-earner families. The economies of the social-democratic states have flourished by implementing certain aspects of neoliberal globalization (e.g., trade liberalization), but not other aspects (e.g., reductions in welfare protection). (129, 130)

While the decline of the nation-state may be premature and even practically improbable (since rules and regulations are required to ensure the functioning of global
a more plausible argument is that neoliberal globalization promotes the retrenchment of the welfare state. The retrenchment of the welfare state is described as “policy changes that either cut social expenditure, restructure welfare state programs to conform more closely to the residual welfare state model, or alter the political environment in ways that enhance the probability of such outcomes in the future.”(131)

The residual welfare state offers a very basic social safety net that operates when the market and family have failed.(131)

Why does a retrenchment of the welfare state often occur under neoliberalism? In the literature, the efficiency hypothesis is sometimes advanced to explain the retrenchment of the welfare state. The efficiency hypothesis presumes that increased economic integration is associated with declining levels of public spending since reduced spending is associated with greater economic efficiency. Governments reduce spending levels in an effort to be competitive vis-à-vis other nations. Consensus regarding the relationship between neoliberalism and the retrenchment of the welfare state does not exist. Some scholars reject the efficiency hypothesis in favour of the compensation hypothesis, which predicts the complete opposite relationship between neoliberalism and the welfare state. The compensation hypothesis counters that since neoliberal globalization often exposes individual citizens to greater risk, the state seeks to mediate this risk with greater levels of public spending.(132)

The compensation and efficiency hypotheses are highly contested, particularly since a multitude of studies have found support for both hypotheses.(133-136) These divergent findings are most likely due to the various ways that neoliberal globalization and social welfare spending have been conceptualized. For instance, Schulze and
Ursprung criticize most of these studies for not employing disaggregated data. These authors further argue it is important to assess what type of spending is occurring, not just overall spending levels. Government restructuring under neoliberal globalization may entail spending cuts in certain areas (usually social areas), but spending increases in other areas such as research and innovation, the promotion of capital, and defense.(137)

Peck and Tickell also argue that the relationship between neoliberal globalization and welfare state retrenchment is usually not straightforward. Peck and Tickell differentiate between two forms of neoliberalism: “roll-back” and “roll-out”. “Roll-back” neoliberalism entails retrenchment of the state from certain areas of provision, usually social. “Roll-out” neoliberalism occurs when the state intercedes in new forms of activity such as mass incarceration of individuals (usually low-income) that represent a threat to order and the state, ensuring the growth of the knowledge economy (e.g., investments in research and development), welfare-to-work programs that ensure a steady supply of labour, and some re-regulation. However, “roll-out” neoliberalism does not usually include greater investment in social areas such as education, social assistance, and social services. “Roll-back” and “roll-out” neoliberalism can occur at the same time and within the same country.(138)

This constitutes qualitative rather than quantitative (as in a decline of state functions) restructurings of the state, in which the state is very often the author. This process of restructuring is only made possible through the activities and programs of states themselves…The qualitative restructuring of the relationships that exist between states, civil societies, and markets means different things for different groups in the same society.(12)

Hacker further argues that the qualitative nature of state retrenchment should be considered since neoliberalism often entails structural reforms that lead to the privatization of risk, which may not be evident when assessing overall spending amounts.
Hacker criticizes welfare state retrenchment studies for not assessing the movement towards the residual welfare state, where drastic cuts to social programs may not occur, but policy and programs will not be updated to suit changing social conditions. Moreover, neoliberal policies can incur greater spending in areas, but usually not in social areas.(139)

The premise that capital somehow escapes or overtakes the state is misleading. It overlooks how many of the dimensions of contemporary globalization are authored by states and involve states reorganizing, rather than diminishing, what they do.(127)

Hacker emphasizes that the privatization of risk has increased under the terms of neoliberal globalization. The consequences of the privatization of risk may be dire when volatility and risk increases in the globalized economy, and governments are less and less willing or able to insulate their citizens from these potentially destructive forces.(139) The privatization of risk can lead to the devolution of policy-making responsibility from national levels of government to other levels such as provinces or municipalities. At its most extreme, certain areas of social concern are privatized completely, assigning responsibility for social issues with the community or the individual.(140)

2.5.3 Income Inequality

A number of studies have found that neoliberal globalization is correlated with increasing income inequality within and between countries.(141-144) For instance, an extensive study of within-country inequality was conducted by Cornia and Kiiski. These authors analyzed inequality trends in 73 countries that accounted for over four-fifths of the world’s population. They found that income inequality rose in two-thirds of the countries examined from 1980 to the end of the 1990s, which represents a clear departure
from previous inequality trends. Traditional causes of inequality, such as a concentration of land among small groups of landowners and an urban bias, were found to not account for recent trends in inequality. In this study, increases in income inequality were empirically linked to a shift towards skill-intensive technology, domestic deregulation, and external liberalization (i.e., trends associated with neoliberal globalization).\(^{(145)}\)

Income inequality has increased internationally. In 1988, the ratio of the average income of the world’s richest five percent versus the world’s bottom five percent was 78 to 1; in 1992, this ratio had increased to 114 to 1. Furthermore, the richest one percent of people in the world earn the same amount of income as the bottom 57\%.\(^{(146)}\) Another study of world income distribution found that between 1970 and 1999 the Gini coefficient\(^7\) increased from 0.668 to 0.683.\(^{(147)}\)

According to a multitude of scholars, income inequality has enormous health implications, independent of individual income. In a study of nine countries that are members of the OECD, Wilkinson found that there was a strong association between life expectancy and income inequality, with income inequality measured as the share of the total income earned by the bottom 70% of the population.\(^{(141)}\) The pathways by which income inequality result in poor health outcomes are not well defined. One theory is that when income inequality is present, the disadvantaged members of social groups tend to compare themselves to others and this produces negative psycho-social implications. For example, when work is organized hierarchically and employees have little control over decisions, this produces a sense of helplessness that manifests itself in poor health.

\(^7\) The Gini coefficient is a number between zero and one that measures the relative degree of inequality in the distribution of income. If the Gini coefficient is zero (minimum inequality) for a population, then each member receives exactly the same income. If the Gini coefficient is one (maximum inequality), then one member receives all income and the rest of the population receives no income. A coefficient of approximately 0.4 is considered to be high.\(^{(148)}\)
outcomes.(149) Another popular theory is that income inequality leads to decreased levels of social cohesion in society.(39,150) Social cohesion is defined as, “the extent of connectedness and solidarity among groups in society.”(151) Studies have found that income inequality and social cohesion are related to rates of homicide and violent crimes in a community, as well as a range of other indicators such as library books per capita and high school graduation rates.(149)

There are three main hypotheses regarding how income inequality affects child health, specifically. First, income inequality may result in relative poverty for a number of children. Poverty diminishes the amount of material resources available to a family. Second, income inequality might affect the quality of family life and the relationships that occur within the family unit. Third, children may make social comparisons and this can lead to stress and negative psychosocial processes. Pickett and Wilkinson tested these three hypotheses across developed countries, using the UNICEF index of child well-being for cross-country comparisons. This index is ecological and cross-sectional, which limited the ability of this study to determine causal pathways between income inequality and health and well-being. Pickett and Wilkinson found little support for the first hypothesis since average income in their study was only weakly related to their index of child well-being. The second hypothesis also did not hold up since the measures used to approximate the income inequality relationship were not related to child health and well-being in their study. Finally, Pickett and Wilkinson found that children internalized social hierarchies and they had some effect on child health and well-being. Other studies have also found that children recognize and internalize social hierarchies.(152)
There are a number of critics of the income inequality and health relationship since some studies have not found support for a relation between income inequality and health. (153,154) Critics of the income inequality hypothesis usually argue that income inequality is simply a proxy measure or confounder for the unequal distribution of social conditions that produce poor health. For example, Coburn posits that income inequality is but one consequence of shifts in the class structure of nations. (39,149) Forbes and Wainwright suggest that while class may indeed be an important factor in assessing the impact of social status on health, social status should be situated within its particular cultural, historical, political, economic, and social context. (155)

Theory is often absent in income inequality and health studies. (39,149) Evidence regarding the income inequality and health relationship has been largely based on results from large-scale surveys. This is an inherently weak approach to theory development since these surveys were usually not designed to test theoretical assumptions or measure constructs such as social cohesion and health. (155) Another limitation associated with using large-scale survey data to measure the income inequality and health relationship is that marginalized people often do not respond to surveys. It is suggested that future income inequality and health research should incorporate more sophisticated methodological and theoretical considerations. (155)

2.5.4 Deindustrialization

Neoliberal globalization and technological change have perpetuated deindustrialization in high-income countries. While neoliberal globalization and technological advances are two distinct trends, where one did not cause the other, they
have both gained momentum over the past thirty years or so. New developments in technology over the past few decades have made many manufacturing positions obsolete. Machines have replaced positions once held by employees, a phenomenon that is discussed in more detail in the technological pathway section of Appendix B. For this study, the focus was on the economic and political processes of neoliberal globalization and their effects on labour markets.

Due to the greater mobility of capital under neoliberal globalization, manufacturing operations are increasingly outsourced to developing countries, usually countries with minimal labour standards and low wages. These decisions are often driven by a company’s desire to increase profits. Initially, outsourcing occurred most frequently in the manufacturing sector; more recently, jobs in the service sector and professional sector have been increasingly relocated to low-income countries that do not have stringent labour legislation and regulations.

Deindustrialization and outsourcing diminishes the bargaining power of workers since the impending threat of relocation discourages workers from bargaining for better wages or working conditions. Although some argue that relocating jobs to developing countries is beneficial for the economic development of those countries, these jobs are usually relocated to whichever location has the lowest labour standards and lowest wages.

If it were only about job loss, it could be readily argued that one nation’s job loss is another’s job gain. The problem is that the movement of jobs has spurred a downward spiral in working conditions. Employers have used the threat of relocated jobs to different countries as a basis for exacting lower wages and worse working conditions.
2.5.5 Non-traditional Work Arrangements

Neoliberal globalization encourages a flexible labour market to develop that supports mobile capital. Due to the greater mobility of capital, workers in high-income countries are now in direct competition with workers across the world. These trends have diminished the amount of full-time, permanent work in North America.(160) Burke and Shields classify the jobs available in the labour market as: a) sustaining employment, or b) vulnerable work. Sustaining employment involves full inclusion in the labour market, stability, appreciation (i.e., the value of the work appreciates over time), and fair compensation. In contrast, vulnerable work typically perpetuates exclusion from full participation in the labour market, it is disposable, it depreciates (i.e., the value of the work does not appreciate over time), and this type of work is associated with low wages and few benefits.(161) There has been an increase in vulnerable work or non-traditional work arrangements in North America over the past thirty years, such as increases in the amount of part-time work, shift work, contract work, self-employment, and workers with multiple low-paying jobs.(160)

Non-traditional employment arrangements have significant health implications since these forms of employment often expose workers to increased job insecurity, less control over work, less social support at work, and less access to benefits.(162) For example, studies have found that non-traditional work schedules among mothers have negative consequences for children. One study found that work schedules that involved night and rotating shifts led to greater marital instability among families with children. Another study found that for those children whose parents worked evening shifts, they had a 2.7 times greater chance of being suspended from school. Specific to very young
children, another study found that those children whose mother worked non-traditional hours were more likely to have lower cognitive scores at 15, 24, and 36 months, compared to children whose mother worked standard hours. On the other hand, non-traditional work arrangements may potentially be advantageous for parents who want a flexible or part-time work schedule that facilitates ease of child-rearing; yet, non-traditional employment arrangements need to be compensated with satisfactory wages and benefits in order to be considered beneficial for families.

An increase in non-traditional work arrangements has contributed to the development of an ‘hour-glass’ job market in high-income countries, which is characterized by significant polarization in terms of occupation and also security and income. For example, studies have found that a dual labour market has been created in the United States. There has been sustained growth in both low-skilled, service positions and in high-skilled, professional positions. Concurrently, there has been a decrease in unionized private sector positions. It is increasingly common to witness in American cities that alongside an elite class of highly educated managers, analysts, bankers, etc., there is another class that is characterized by low education levels and employment in low-paid service industries. Although Sassen argues that these trends are most profound in global cities (e.g., London, New York, Tokyo), they can also be witnessed, albeit on a smaller scale, in other cities or locales that are integrated into the global economy.

Occupation is often related to education levels. At present, the North American labour market offers the most opportunities to those who have an increasing amount of education. In terms of child health, higher levels of education attained by parents
are positively correlated with a range of developmental outcomes in children such as school readiness. However, for low-income families, opportunities to receive a high-quality education are usually restricted due to intrinsic barriers such as the location of high-quality schools in affluent neighbourhoods or costly post-secondary education tuition. Inequality in education levels therefore creates a gap not only in terms of educational attainment, but also between those in sustaining employment situations versus those in vulnerable employment situations. Furthermore, inequality in education and occupation further exacerbates disparities between the wealthy and poor. People without a great deal of education are generally relegated to the economic margins.

2.5.6 Housing and Social Polarization

There are at least three ways in which neoliberal globalization affects housing: increased off-shore investment in cities (usually large cities) that contain high-value real estate; the deregulation of the housing finance market; and social polarization, and the related phenomenon of gentrification. First, off-shore speculation and investment in housing has led to rising housing prices in countries throughout the OECD. The majority of investors in real estate have been from the United States and Europe. More recently, investors have also been from Asian countries (e.g., the property market in Vancouver). As a result of foreign capital investment in real estate, the affordability of housing has diminished in North American cities. For example, the total value of residential property in high-income countries increased from approximately $20 trillion in 2000 to $60 trillion in 2003. The precipitous increase in housing prices in high-income countries has not only been driven by off-shore investment; local investment in
housing as a means of wealth creation over the past decade or so has also been a contributing factor. (170)

Second, the deregulation of housing finance has also contributed to rising housing prices. Deregulation, a neoliberal tenet, was pursued in the housing finance sector to increase the number of consumers available to purchase homes and to increase profits among financial lenders. (170) Due to the deregulation of financial systems, sub-prime mortgage markets were able to develop, particularly in the United States and Europe. These markets charged higher than normal interest rates on mortgages for those who were unable to afford a down payment or did not meet the credit requirements. Nevertheless, these markets still largely excluded the poor. (81) Although the world financial crisis that began to escalate in 2008 is beyond the scope of this study, the crisis was largely generated by the sub-prime mortgage system in the United States, where large mortgages were assumed by consumers that were not able to make their mortgage payments. (171)

Third, neoliberal policies tend to exacerbate social polarization between the classes, and this is often gendered and racialized. For instance, poverty is concentrated among women across the world. Moreover, Aboriginal peoples and new immigrants are more likely to be exposed to poverty, unemployment, and non-traditional work arrangements. (172) As social polarization deepens under neoliberal globalization, the social geography of cities also shifts. Social class is often expressed in spatial terms, with social polarization in cities being largely based on who can afford to live in certain areas. (32, 168, 172)

A consistent pattern in the transformation of cities and metropolitan areas by transnational economic integration, in countries rich and poor alike, is that gaps
between economic winners and losers grow, based on their position within the
global economy and the basis or their connection (or lack of connection) to
it.(106)

Social polarization that is expressed spatially has been coined a form of ‘geographic
apartheid’. (124)

Social polarization can take various forms in cities. One distinct trend in many
North American cities is the suburbanization of the middle class. Poverty then becomes
concentrated in the inner city. (11) Alternately, in some cities, the inner city is gentrified,
which is defined as, “the loss of affordable older inner-city housing through their
renovation and upgrade by middle- and upper-income households.” (173) Gentrification
leaves low-income families with fewer affordable housing options, particularly since
social housing programs have been drastically cut under neoliberalism across many
countries. (174)

Numerous research studies have established the relationship between housing,
housing affordability, and child health. (175-177) Seven dimensions of housing have the
potential to affect child health: physical hazards, physical design of the house, social
dimensions, psychological dimensions, political dimensions, financial dimensions, and
housing location. (177) Social polarization within cities also has the potential to affect
child health through a variety of pathways, including: social isolation from the rest of the
metropolitan area; social isolation from the rest of the neighbourhood; and reduced access
to health-enhancing services and programs such as clinics, high-quality schools, or social
networks. (178)

Just as poverty is concentrated spatially, anything correlated with poverty is also
concentrated. Therefore, as the density of poverty increases in cities throughout
the world, so will the density of joblessness, crime, family dissolution, drug
abuse, alcoholism, disease, and violence. Not only will the poor have to grapple
with the manifold problems due to their own lack of income; increasingly they also will have to confront the social effects of living in an environment where most of their neighbors are also poor.(168)

2.6 Summary

This literature review suggests that the economic and political processes of neoliberal globalization have the potential to affect a number of determinants of child health such as household income and distribution, the employment and education of parents, housing, and social programs. The next chapter begins by presenting a re-specified analytical framework that illustrates the economic and political pathways between neoliberal globalization and child health. Following the presentation of this analytical framework, the remainder of the chapter explores the nature and scope of neoliberal globalization in Canada and Saskatchewan, and how this was related to trends in child health outcomes in Saskatoon.
Chapter 3. Neoliberal Globalization and Child Health in Saskatoon

3.1 Introduction

This chapter presents a re-specified analytical framework of the pathways between neoliberal globalization and child health (refer to Figure 3), based on the findings that emerged from this study and the case of Saskatoon. Following the presentation of this re-specified analytical framework, the macro-level and the micro-level of the framework are discussed in this chapter. The meso-level of the framework (i.e., the economic and related political pathways between neoliberal globalization and child health that have been found for Saskatoon) are the focus of the proceeding chapters.

3.2 Re-Specified Analytical Framework

A re-specified neoliberal globalization and child health analytical framework, building upon Labonte and Torgerson’s globalization and health analytical framework, illustrates the pathways between neoliberal globalization and child health that were supported by the data and analysis in this study (refer to Figure 3). The picture of neoliberal globalization and child health in Saskatoon that emerged from this thesis research is analogous to the pathways that were explicated in the literature review. While this analytical framework was based specifically on the context of Saskatoon, Saskatchewan, it may hold relevance for other Canadian contexts that have similar economic histories or child-relevant policies.
Figure 3: The Economic and Related Political Pathways Between Neoliberal Globalization and Child Health in Saskatoon, Saskatchewan
3.3 Superordinate Categories

In Figure 3, Superordinate Categories is composed of both a liberal welfare state tradition and a strong economic position for Canada, Saskatchewan, and Saskatoon. Each of these components will be discussed in turn.

3.3.1 History and Tradition of Liberal Welfare State

The structure of the welfare state (e.g., means-tested versus universal coverage) often mediates the processes of neoliberal globalization and health effects.(179) The welfare state is generically defined as, “involv[ing] state responsibility for securing some basic modicum of welfare for its citizens.”(180) Across countries in the West, there have been wide variations in the form of the welfare state. One of the starkest differences between welfare states is where responsibility for social issues is bestowed: the state, the market, or the individual.(129) Neoliberal globalization tends to place responsibility for social issues with the market or the individual.

Esping-Andersen developed a seminal typology of welfare states in the West. It must be noted that most states combine components of these state types. There is no single pure case, according to Esping-Andersen. The first type of welfare state is the liberal welfare state, which relies on means-tested assistance, modest universal transfers, or modest social insurance schemes. Benefits are largely aimed at low-income populations. These welfare strategies are adopted with the intent of encouraging greater participation in the labour market.(180) The United States, the United Kingdom, and Canada have all been classified as liberal welfare states by a variety of scholars.(50,180) The welfare states in Canada and in Saskatchewan have typically relied on means-tested
assistance and modest universal transfers. In fact, Rice and Prince argue that the universal state in Canada has been receding, particularly since the universal transfers of Family Allowance and Old Age Security were abolished by the Canadian federal government. “The decline in universality is among the most striking changes to social policy in Canada in modern times.” (181)

The second state type identified by Esping-Andersen is the conservative, or what is sometimes termed the corporatist, welfare state. Within this state type, the maintenance of class structures and status differentials is important. The state is willing to intervene in the market, if this will maintain status differentials. This type of state provides minimal social insurance schemes, but redistribution is not a consideration or even desirable. Most conservative states have historical links to the Church and are committed to upholding family values. (180) This state type has also been termed corporatist because it often places importance on agreements between employees and employers such as unions. (129) Esping-Andersen has classified countries such as France and Germany as possessing conservative welfare states. (180)

The third state type is termed the social-democratic state. The principle of universalism underpins social policy considerations in this type of state. This state form seeks to achieve equality of the highest standards, whereas equality of minimal standards is often pursued under the liberal welfare state. Although the social-democratic state is committed to attaining full employment, the quality of labour participation is also a key consideration. Within the literature, the Nordic countries are considered the best examples of social democratic states. (180) For instance, the Nordic countries have emphasized universal social policies, which have led to laudable reductions in poverty.
The Nordic countries also boast a narrow income distribution, compared to other countries.(129)

Navarro and Shi applied Esping-Andersen’s typology of welfare states to an analysis of poverty and health. They found that social-democratic states had the lowest levels of poverty, the least income inequality, and the best health status. Liberal welfare states, on the other hand, had the highest levels of poverty and income inequality, which is accompanied by the worst health status. Conservative states fall in between the two aforementioned state types in terms of poverty rates and health status.(182)

Navarro and Shi’s study findings were largely replicated by a recent study conducted by the Centre for Health Equity Studies (CHESS) in Sweden. CHESS compared health equity and social policy across welfare state types in the West, and they found that universal programs had positive health consequences. In fact, universalism seems to be the lynchpin in terms of the Nordic countries’ successes in promoting health equity. According to CHESS’ study, universalism is a response to social rights, where every citizen is entitled to certain benefits and rights such as the right to health. One of the main benefits of universal programs is that there is no stigma attached to receiving or accessing a certain program. Moreover, universal programs are generally supported across classes, which may promote solidarity and social cohesion.(129)

Another study conducted by CHESS found that family policies that support labour force participation by both parents were the most effective at promoting health equity. However, dual-earner family policies have not been extensively enacted in Canada. The dual-earner model, which supports both mother and father in raising children and participating in the labour market, has been pursued in the Nordic countries
of Denmark, Finland, Sweden, and Norway. In contrast, the market-oriented family policy model has been pursued in Canada, Australia, Japan, New Zealand, Switzerland, the United Kingdom, and the United States. The market-oriented family policy model emphasizes the market as the penultimate solution to social issues, and the welfare state is restricted to focusing on poverty relief. The differences between these policy models in terms of outcomes are quite stark when considering child poverty rates (refer to Figure 4). The market-oriented family policy model, which favours targeted social programs and policies, often leads to the highest child poverty rates among OECD countries.(130)

**Figure 4: Percentage of Children Living Below Poverty Line, 2006**

Research has demonstrated that universal programs garner more positive outcomes among children because universal programs and transfers ensure access to services and programs across society, regardless of class, geography, or income.

---

Country abbreviations: AT=Austria, AU=Australia, BE=Belgium, BE-Fl=Belgium (Flanders), BE-Fr=Belgium (French community), CA=Canada, CZ=Czech Republic, DE=Germany, DK=Denmark, FL=Finland, FR=France, HU=Hungary, IE=Ireland, IT=Italy, KR=Republic of Korea, MX=Mexico, NL=Netherlands, NO=Norway, PT=Portugal, SE=Sweden, UK=United Kingdom, US=United States
level. Children living in situations of poverty are at higher risk of developmental problems. Yet, there are a number of other factors that may make children vulnerable, including: negative parenting styles; living with a parent that is stressed or depressed; and lack of cognitive stimulation at home. In fact, all of these factors can occur across the income spectrum, meaning that children living in poverty are not the only children vulnerable to delayed development. Thus, universal program have the potential to reach and positively affect a greater number of children. A review of universal versus targeted approaches to early childhood development in Canada concluded that universal programs were required to address children’s developmental needs. This suggests that the very nature of the welfare state in Canada and Saskatchewan has not been very effective at promoting positive early childhood development.

3.3.2 Economic Position of Canada, Saskatchewan, and Saskatoon

The strong economic position of the jurisdictions examined (Canada, Saskatchewan, and Saskatoon) comprises the other component of the Superordinate Categories level in the re-specified analytical framework. Canada’s, Saskatchewan’s, and Saskatoon’s strong economic positions have the potential to bolster child health, and this is represented by the arrow that connects child health outcomes and the Superordinate Categories level in Figure 3.

At the beginning of the 1980s, Canada’s economic standing was one of the weakest among OECD countries; however, over 20 years later Canada strengthened its economic position considerably, and it possessed one of the strongest economies vis-à-vis other OECD countries. Between 1981 and 2005, Canada’s economy experienced 93%
real growth, adjusted for inflation. In the same period, Canadians were producing approximately $1 trillion more in goods and services per year than they did in 1981. In 2005, Canada’s economy was the ninth largest economy out of 183 nations, despite the fact that Canada’s population was relatively small, compared to the other top eight national economies in the world.(186)

For the period 1981-2007, Canada’s GDP more than doubled from $647,323 billion in 1981 to $1,316,219 billion in 2007 in 2002 dollars.(187) Canada’s trajectory of GDP growth reflected some slowdown after two major country-wide recessions in the periods 1981 to 1982, and 1991 to 1993. The economy recovered fairly quickly after the first recession, but recovery took slightly longer after the second recession since the Canadian economy did not start to really prosper again until 1996.(188)

Despite economic gains at an aggregate level, this does not appear to have benefited all individuals or families. The Canadian Institute of Well-being found that between 1981 and 2008, real GDP in Canada grew by 52.6%, yet personal income per capita only increased by 36.5%. Moreover, even with Canada’s strong economic growth, the incidence of low-paying jobs has been increasing (refer to Chapter 6). As a result, labour productivity growth in Canada has exceeded growth in real wages.(189) Another study found only the richest 20% of Canadian families with children have been benefiting from Canada’s recent economic successes, although the majority of these benefits have been confined to the top 10% (see section 4.4 for further details).(186)
Saskatchewan’s economy has largely been based on primary commodities, particularly the grain economy since the twentieth century. For over the past generation, however, the grain economy of Saskatchewan has been in decline. To offset this decline and due to new opportunities in the global economy, Saskatchewan has been building its economy on the primary industries of mining (e.g., uranium, potash), petroleum, and forestry. Just as agricultural commodities were subject to wide fluctuations in prices due to global competition, the primary industries of mining, petroleum, and forestry have also been subject to wide price fluctuations. Saskatchewan experienced economic hardships during the 1980s and 1990s when the prices of potash, oil, and uranium were weak. (190)

Saskatchewan’s economy has been significantly bolstered by soaring commodity prices for products such as oil and gas. (191) Beginning in approximately 2006, Saskatchewan experienced rapid economic growth, and this was dubbed the ‘Saskaboom’. Economic growth was partially due to high prices for oil, natural gas, and potash, as well as large government surpluses. (192) The 2006-2007 provincial budget
recorded total revenues of $7.7 billion, which was the largest in the history of the province. (193) Saskatchewan’s GDP almost doubled from $23,389 billion in 1981 to $39,500 billion in 2007 in 2002 dollars. (194)

**Figure 6: Gross Domestic Product (2002 Dollars), Saskatchewan, 1981-2007**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP (2002 Dollars) x 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>21,000</td>
</tr>
<tr>
<td>1983</td>
<td>22,000</td>
</tr>
<tr>
<td>1985</td>
<td>23,000</td>
</tr>
<tr>
<td>1987</td>
<td>24,000</td>
</tr>
<tr>
<td>1989</td>
<td>25,000</td>
</tr>
<tr>
<td>1991</td>
<td>26,000</td>
</tr>
<tr>
<td>1993</td>
<td>27,000</td>
</tr>
<tr>
<td>1995</td>
<td>28,000</td>
</tr>
<tr>
<td>1997</td>
<td>29,000</td>
</tr>
<tr>
<td>1999</td>
<td>30,000</td>
</tr>
<tr>
<td>2001</td>
<td>31,000</td>
</tr>
<tr>
<td>2003</td>
<td>32,000</td>
</tr>
<tr>
<td>2005</td>
<td>33,000</td>
</tr>
<tr>
<td>2007</td>
<td>34,000</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d. (194)

Saskatoon’s economy has historically been intimately linked to the agricultural market, as the city provided a variety of the services and products that were required to sustain the agricultural industry. But this also meant that when agricultural commodities declined in price on the international market, the Saskatoon economy suffered as well. Throughout the twentieth century, Saskatoon’s economy experienced a cycle of ‘booms’ and ‘busts’ that were determined by the price of agricultural commodities. To address this issue, Saskatoon has attempted to diversify its economy, beginning with a greater focus on uranium and potash in the 1970s. (195) Biotechnology was also encouraged throughout the 1980s, and Saskatoon is now considered the agricultural biotechnology capital of Canada. Biotechnology was bolstered in Saskatoon due to support from the provincial government to diversify and develop this facet of the economy. (196) In addition, the
Saskatoon region has become one of the world’s largest exporters of uranium and potash. As a result, when uranium and potash prices are high, employment in Saskatoon typically increases as well. (197)

In 2007, the Conference Board of Canada declared Saskatoon the fastest-growing metropolitan economy in Canada. This growth was attributed to an influx of out-of-province migrants that were attracted to Saskatoon due to its (formerly) low cost of living and an increase in job opportunities, primarily in the service sector. The strong demand for natural resources such as potash, uranium, and agricultural products in the global economy all bolstered Saskatoon’s economic standing at least through the first part of 2008. Ironically, when people were attracted to Saskatoon because of its low cost of living and greater economic opportunities, the influx of people partially caused housing prices and rental prices to dramatically increase, which is discussed in more detail in Chapter 7. (198)

During the period 1995-2005, Saskatoon’s GDP steadily increased. In 1995, Saskatoon’s GDP was $5,616 billion, and this amount increased to $7,744 billion in 2005 (in 1997 dollars). (199)
Figure 7: Gross Domestic Product (1997 Dollars), Saskatoon, 1995-2005

Source: City of Saskatoon, n.d.(199)

3.4 Global Contexts

Turning to the Global Contexts level presented in Figure 3, neoliberal globalization has informed the economic and social development strategies pursued by Canada and Saskatchewan over the study period. The next section discusses the entrenchment of neoliberal orthodoxy in Canada and Saskatchewan more generally. Subsequent sections then explore specific facets of neoliberal policy (e.g., trade liberalization, tax restructuring, privatization, and deregulation) in more detail with disaggregated data, where it exists. Disaggregated data has been assessed because neoliberal policies have the potential to vary from country to country. For example, Garrett and Mitchell produced a study regarding neoliberal globalization and the welfare
state in OECD countries. They discovered that while neoliberal globalization has dramatically increased international trade among OECD countries, other measures of neoliberal globalization such as the extent of financial market integration varied from country to country. As a result, these authors concluded that to study neoliberal globalization, data should be disaggregated and countries should be treated as distinct cases. (133)

Market integration has not been a unidimensional phenomenon that has affected all of the industrial democracies equally. One important implication of this fact is that the best way to analyze the effects of globalization is to disaggregate the phenomenon into its different components and to compare variations not only over time but among countries as well. (133)

3.4.1 Neoliberalism in Canada and Saskatchewan

Canada’s shift towards a neoliberal state was hastened due to a number of factors, which included: the economic recession of 1981 to 1982; a large debt; the liberalization of trade on a more global scale; the increasing strength of Canada’s capitalist class; and the rise of neoliberal governments in the United States and the United Kingdom. (100)

An important milestone in the development of neoliberalism in Canada was when the final report of the Macdonald Commission, also known as the Royal Commission on the Economic Union and Development Prospects for Canada, was released in 1985. The most notable recommendation of this Commission was that of continental free trade, which eventually led to the Free Trade Agreement (FTA) in 1988 and its successor the North American Free Trade Agreement (NAFTA) in 1994. The Commission was appointed by the Trudeau Liberals, although the results were not released until Mulroney’s Progressive Conservatives were in power, suggesting that the shift towards a neoliberal orientation transcended political affiliation. (200) Explicitly stated by the
Macdonald Commission was a confidence in the market to efficiently and effectively allocate resources for the well-being of Canadians. Moreover, the Macdonald Commission recommended that to counter the mounting debt in the country, income support programs would need to be fundamentally redesigned. Throughout the recommendations of the Macdonald Commission, the discourse of personal responsibility was evident.(201)

The final recommendations of the Macdonald Commission reflected the growing influence of the business community in Canada. For example, the Business Council on National Issues (BCNI), which was composed of the largest and mainly foreign-owned industries in Canada, was a large proponent of neoliberal ideology. The business community was driven by a desire to create greater flexibility in the economy to respond to global market conditions, new technologies, and restructured labour markets. Continental free trade in the form of the FTA and then NAFTA was a conduit for BCNI’s desire to create a less protectionist economy, one where the dictates of the market ruled.(202)

Neoliberalism – in spirit if not in words – also binds together those with a stake in its continued reproduction. Government ministers, venture capitalists, the chief executives of multinationals, the largest owners of the media, the officials in international institutions: all are involved in practicing neoliberalization.(12)

Although the Mulroney government was initially opposed to free trade and welfare state retrenchment, the Progressive Conservatives quickly rallied around the recommendations of the MacDonald Commission and based their policy platform on the free market principles espoused by the Commission.(202) The Progressive Conservatives also had another reason for supporting the recommendation of continental free trade--to politically appeal to Quebec and the West. Free trade was supported in provinces such as
Alberta and Saskatchewan since they wanted to avoid further federal interference with the energy sector, which had occurred when the Liberals introduced the National Energy Program in 1980. Canada’s negotiations for the FTA took place at the same time as negotiations for the Meech Lake Accord, which was an attempt to address Quebec’s initial objections to the Constitution Act implemented in 1982. Quebec was in favour of free trade because this represented one further step towards sovereignty. The Atlantic provinces were also supportive of free trade since this was viewed as an opportunity to diversify their economies. But the FTA was passed in 1988, with full support from Saskatchewan.(203)

In the 1993 federal election, Jean Chretien’s Liberals campaigned under a platform of job creation, active industrial and technology policy, as well as opposition to free trade agreements that interfered with the government’s ability to achieve the aforementioned campaign goals.(202) Jean Chretien and the Liberals assumed power from Campbell’s Progressive Conservatives in 1993.⁹ Despite their election promises, the Liberals pursued a vigorous neoliberal agenda, often with more commitment than the Progressive Conservatives. Spending was drastically cut, social programs were overhauled, and budgets were balanced. Mulroney’s Progressive Conservatives had never been able to deliver a balanced budget.(100,202)

Neoliberal legislation implemented by the Liberals was partially driven by recommendations emanating from the IMF. In 1995, the IMF was concerned with Canada’s high debt, which was approximately 70% of GDP. To remedy the situation, the IMF recommended that restructuring must occur and spending cuts should be made.

---

⁹ When Brian Mulroney stepped down as leader of the Progressive Conservatives in 1993, the leadership race was won by Kim Campbell. Kim Campbell served as the Prime Minister of Canada for 132 days in 1993, until Jean Chretien and the Liberals won a majority federal government in the election.
Government-owned corporations were considered a drain on economic growth, according to the IMF. The Government of Canada was lauded by the IMF for already restructuring the Employment Insurance system and for offloading the cost of the program from the government to employers and employees (see section 6.8). Canada was also praised by the IMF for reducing federal transfers to the provinces. Yet, the IMF recommended that the federal government should continue to pursue restructuring and reduce transfers to the provinces and territories (i.e., devolution).(204)

The neoliberal policy trajectory at the federal level was continued by Paul Martin and the Liberals, when Jean Chretien stepped down as Prime Minister in 2003.(100) Stephen Harper and the Conservatives have also pursued a neoliberal agenda since assuming power in 2006. For example, under the Conservative federal government, massive cuts to women’s issues have occurred.(205) Moreover, the discourse of personal responsibility runs throughout the Conservative’s approach to child care, which accords with the liberal welfare state in Canada (see section 5.3.4).

The federal government has increasingly shifted its focus away from social policy and towards economic policy. Responsibility for social policy has fallen directly on the shoulders of the provinces.(100) At the same time, however, redistributive funding to the provinces for social policy and programs has waned as a federal policy priority.(206) Since the provinces are now mainly responsible for social policy, the policies that have been implemented that have direct relevance for children and their health may vary greatly from province to province.

In Saskatchewan, the leader of the provincial Progressive Conservatives in the early 1980s, Grant Devine, espoused neoliberal rhetoric. In fact, some of Margaret
Thatcher’s key advisors visited Saskatchewan to extol the virtues of privatization in the early days of Devine’s premiership. In accordance with neoliberal tenets, the Devine government reduced taxes such as the fuel tax and taxes on royalties from petroleum. At the same time, the government increased spending in a multitude of areas such as building hospitals in small towns and providing subsidies for home improvements. Despite espousing rhetoric that aimed at less government intrusion in economic matters, the Devine government engaged in a number of private sector megaprojects funded by government coffers to stem unemployment. Moreover, the provincial government substantially increased spending, most of which was directed at boosting agriculture and preserving the rural way of life in Saskatchewan. Due to exceptional government spending levels during Devine’s tenure as premiere in the 1980s, provincial debt rapidly mounted.

The 1980s were economically unstable for many Canadians, with high rates of unemployment, downsizing, and the disappearance of the family farm. To address these hardships, governments across Canada had responded with spending to please voters, which was financed by deficits. By the 1990s, however, governments in Canada were no longer able to finance spending by running deficits since credit rating agencies threatened to demote government ratings. Janice MacKinnon, the former Minister of Finance under Saskatchewan’s New Democratic Party (NDP) government, believes that the real effects of the global economy hit Canada and Saskatchewan in the 1990s.

The ramparts that had been erected in the past to protect Canadians from external forces and allow them to build a unique society and political culture were being torn by forces beyond their control. The message the leaders had to deliver was not easy: no jurisdiction—whether a country or a province—could be an island unto itself, with barricades to keep out foreign competitors.
Janice MacKinnon described Saskatchewan’s fiscal situation in the early 1990s as “terrifying”. This was largely due to the fact that Saskatchewan was having trouble selling its bonds and credit rating agencies were threatening to downgrade Saskatchewan’s rating, if tougher budgets were not delivered. According to these credit-rating agencies, Saskatchewan had an uncontrollable debt, a troubled economy, and the federal government had offloaded many of its own financial issues onto the provinces.(117)

Canada and Saskatchewan both faced dire economic situations in the early 1990s, and both jurisdictions adopted the same approach of aggressive economic restructuring according to neoliberal tenets. The NDP’s 1993 provincial budget outlined a four-year plan to balance the budget, which hinged on tax increases for individuals and families, tax cuts for business, and severe program cuts. Due to the 1993 provincial budget, 52 hospitals across the province were closed, the Children’s Dental Plan was cancelled, and universal coverage under the Prescription Drug Plan was abolished. The sales tax was raised from eight to nine percent. Tax cuts were targeted at industries such as manufacturing and processing. Finally, grants for schools, hospitals, universities, and municipalities were severely curtailed by five to 13%. In 1995, the Government of Saskatchewan was able to declare its first balanced budget in more than a decade.(117)

Despite the socialist beginnings of the NDP, the welfare state was severely reduced under their tenure. Neoliberal policy emphasizes the importance of economic competitiveness in a global marketplace, and this axiom was a favourite of the NDP government throughout the 1990s and beyond.(117,208) In fact, international competitiveness was used to justify the offloading of social responsibility from the
government to the individual. According to Janice MacKinnon, the Government of Saskatchewan had been too involved in personal matters for too long:

The idea that governments could no longer be all things to all people was the most important long-term change to come out of the 1990s. For too long, particularly in Saskatchewan, with its history of big government, the government had extended its sway without the question being asked: What should government do and what should be left to other agencies or become the responsibility of individuals?(117)

The Saskatchewan Party and Premier Brad Wall assumed power in Saskatchewan in November 2007. The provincial Progressive Conservatives and Liberals had amalgamated to form the Saskatchewan Party in 1997. The guiding principles of the Saskatchewan Party are somewhat neoliberal in orientation. For instance, the party believes in the creation of economic growth through private means, and that the government must be smaller and less intrusive. On the other hand, the party supports a strong social safety net (although what this entails is not clear), and a health care system that is universal.(209) Since the Saskatchewan Party and Premier Brad Wall were elected in 2007, which is the year ending the period that is the focus of this thesis, their impact on Saskatchewan child-relevant public policy will not be discussed in any detail.

The Canadian provinces have generally resisted federal government intrusion into municipal matters. Municipal governments are largely dependent on the provinces for funds to fulfill their main function of: “a mechanism by which local people arrange for public infrastructure and the provision of public services.”(210) In recent years, municipal government restructuring has occurred in six of Canada’s largest cities: Toronto, Montreal, Ottawa and Hull, Hamilton, and Halifax. Some provincial governments have encouraged the creation of single municipal governments that control a large portion of the urban area. Restructuring was often motivated by an emphasis on
cost-cutting (i.e., neoliberal concerns of economic efficiency).(211) A devolution of services and responsibilities from the provincial government usually accompanied municipal restructuring, although this was not accompanied by an increase in funding from the province.(212) Although the City of Saskatoon has not been subject to municipal restructuring, the theme of devolution of services and responsibilities can be witnessed in some policy areas (refer to Chapter 5 for further details).

3.4.2 Trade and Gross Domestic Product

As noted in section 3.3.2., economic growth increased dramatically in Canada, Saskatchewan, and Saskatoon over the study period. But is this related to neoliberal globalization and economic integration? A common measure used to assess global economic integration is the value of exports of goods and services as a percentage of GDP. In 1981, Canada’s exports, as a percentage of GDP, were 26.9% and this value increased to 34.7% in 2007.(187,213) Canada has also been importing more goods and services as a percentage of GDP. In 1981, the value of Canada’s imports of goods and services as a percentage of GDP was 26.2%, and this value increased to 32.8% in 2007.(187,213) Canada’s value of exports and imports indicates a small trade surplus over the study period, where exports slightly exceeded imports.

Over the past decade, Saskatchewan has also increased its value of goods and services exported to other countries. In 1997, Saskatchewan’s international exports totaled $11.8 billion (214), and accounted for $19.5 billion in 2007.(215) However, as a percentage of GDP, Saskatchewan’s international exports decreased slightly from 40.3% in 1997 to 38.1% in 2007.(187,214,215) International imports of goods and services in
Saskatchewan increased by approximately $1.3 billion between 1997 and 2004. Imports composed 27.5% of Saskatchewan’s GDP in 1997, but this value decreased slightly to 23% in 2004. The preceding amounts demonstrate that Saskatchewan’s exports far exceeded imports, which suggests a strong trade surplus for the province. Trade surpluses have likely contributed to the strong growth witnessed in Saskatchewan and Saskatoon over the study period. Economic growth and trade surpluses can be absorbed into the economy in a variety of ways, including investment in social areas. However, whether this has occurred in Saskatchewan will be explored in more detail in Chapter 5.

3.4.3 Foreign Direct Investment

Another commonly used measure of global economic integration is foreign direct investment (FDI) by a country and in a country. Not surprisingly, given its geographical proximity, the United States has been the primary recipient of Canadian FDI. Nonetheless, Canada’s FDI has increased in all regions of the world, except for in Japan and other OECD countries. A decrease in FDI in Japan and other OECD countries just occurred recently (refer to Figure 8). Data on Saskatchewan and Saskatoon were not available.

An interesting finding to emerge from an assessment of Canadian FDI is that Canada’s FDI has increased dramatically in countries outside of the OECD and EU. This may be indicative of greater Canadian FDI in low- and middle-income countries, which was probably due to the outsourcing of Canadian manufacturing positions to countries with low wages and minimal regulation. There was also another trend of note occurring. In 2005, Statistics Canada reported that there had been growing and sustained Canadian
FDI by the Canadian financial sector in off-shore financial centres (OFCs) or, in other words, tax havens. For example, between 1990 and 2003, Canadian assets in OFCs increased from $11 billion to $88 billion. In 2003, one-fifth of Canada’s FDI was directed towards OFCs, mainly located in the Caribbean.(217)

**Figure 8: Canadian Foreign Direct Investment Abroad, 1983-2006**

Source: CANSIM, n.d.(216)

The amount of FDI in Canada rose precipitously during the period 1983-2006, largely due to an influx of American investment. There was also a substantial increase in the amount of FDI in Canada that originated from EU countries outside of the United Kingdom. While not as dramatic, there were also increases in FDI that originated from Japan, the United Kingdom, other OECD countries, and all other foreign countries.(216) According to FDI measures, Canada’s economy became much more integrated into the global economy over the study period.
Figure 9: Foreign Direct Investment in Canada, 1983-2006

Source: CANSIM, n.d.(216)

3.4.4 Tax Restructuring in Canada and Saskatchewan

A common hypothesis found in the literature is that the internationalization of markets catalyzes a shift towards market-oriented tax policy in developed countries. The ability of capital holders to move assets across national borders with relative ease forces governments to be highly competitive with their tax policies.(218) Both the Governments of Canada and Saskatchewan have attempted to make international investment in the country and the province more attractive through tax restructuring.\(^\text{10}\)(219)

\(^{10}\) Tax restructuring can incur either a progressive or a regressive tax system. In a progressive tax system, the tax rate rises as income increases. The share of income paid in tax falls as income increases in a regressive tax system. An example of a progressive tax would be an income tax that increases as you make more income, which reflects the principle of vertical equity (i.e., those with the ability to pay do so).(220) On the other hand, consumption taxes are considered one of the most regressive forms of taxation since all people pay the same amount of tax on a product, regardless of the ability to pay. Consumption taxes have
During the 1985 to 1986 period, the Mulroney government began to implement sweeping changes to the tax system. The government broadened the tax base, increased certain tax rates (e.g., introduced a new federal surtax and an Alternative Minimum Tax that ensured a certain minimum tax payable for high-income households), and de-linked the tax system from inflation. In 1988, the federal government reduced its ten-bracket schedule for income taxes, which ranged from six to 34%, to three income tax rates of 17, 26, and 29%. In addition, the federal government lowered the top marginal tax rate on corporations, converted tax exemptions and deductions into tax credits, increased the proportion of net capital gains that were taxable, and reduced the dividend tax credit. These decisions were largely prompted by tax reforms in the United States since Canada wanted to be more competitive vis-à-vis its main trading partner.

With debt reduction a top priority, the federal government again restructured its tax system in the 1990s. The primary strategy was to shift the majority of taxation away from personal and corporate incomes and towards other forms of taxation. One alternate form of taxation that was increasingly relied upon was the payroll taxes that were used to finance social insurance programs such as the Canadian Pension Plan (CPP) and Unemployment Insurance/Employment Insurance (UI/EI). Moreover, in 1991, the Goods and Services Tax (GST) replaced the Manufacturers’ Sales Tax. The elimination of the Manufacturers’ Sales Tax was the result of the federal government’s phasing out of tariffs on goods from the United States due to the FTA. The elimination of tariffs on

---

the potential to be progressive only if they are applied to luxury items that high-income individuals can afford.
goods from the United States was pursued to level the playing field between American
and Canadian goods in the Canadian marketplace. (220)

As already alluded to, corporate taxation was reduced in Canada over the study
period. In 1981, the top marginal rate for corporate income was 48% and this declined to
38% in 1998. (218) Between 2000 and 2005, the federal government decided to slash the
corporate income tax rate from 28% to 21%. In the 2005 federal budget, the Liberals
announced that the corporate income tax would be cut from 21% to 19% by 2010.
Moreover, it was declared in the 2005 federal budget that the corporate surtax would be
eliminated by 2008, which was in addition to the phasing-out of the federal capital tax on
corporations that was complete in 2008. These tax cuts translated into an estimated $2.8
billion cut to federal revenues annually. (223)

A study of tax incidence in Canada from 1990 to 2005 showed that Canada’s tax
system, overall, has become less progressive for individuals and families. While the tax
rates for Canada’s richest 1% of taxpayers have dropped dramatically, tax rates for poorer
Canadians have been rising steadily since 1990. The top 1% of Canadians had a lower tax
rate in 2005 than they did in 1990, and their rate was actually a bit lower than the bottom
10%. (220) This was propelled by income tax cuts, particularly in the provinces where tax
systems have become more regressive. (220)

The study of tax incidence in Canada from 1990 to 2005 included an analysis that
broke down tax rates by type of tax. Consumption taxes such as the GST remained
regressive over the study period. The federal government and the provinces all introduced

11 The very richest of Canadians, those with earnings of $266,000 a year or more, paid 30.5% of their
income towards taxes in 2005; those with the lowest incomes, families that make less than $13,523 a year,
paid 30.7% of their income towards taxes. This is compared to 1990, when the richest Canadians paid
34.2% of their income in taxes, and the poorest paid 25.5% of their income to taxes. (220)
corporate tax cuts over the study period. Nevertheless, corporate tax rates were moderately progressive up to the top decile of corporations in terms of earnings. Tax rates for the top decile of corporations became quite progressive between 1990 and 2005.(220)

Figure 10: Total Revenue and Major Sources of Revenue, Federal Government, 1989-2008

![Figure 10: Total Revenue and Major Sources of Revenue, Federal Government, 1989-2008](image)

Source: CANSIM, n.d.(224)

Canada has been ranked very highly in terms of tax competitiveness and overall competitiveness, in general, when it comes to foreign investment. A 2004 report prepared by the international business consulting firm, KPMG, found that corporate income tax rates were lower in Canada than in the United States. Furthermore, the Economist Intelligence Unit found that Canada ranked second only to Denmark in terms of competitiveness in their World Competitiveness Report. While Canada has been quite

---

12 This figure does not include all sources of revenue, rather it only presents major sources of revenue.
competitive in terms of tax rates, it has also been criticized for not investing enough in
the knowledge economy such as in innovation and skills. This has the potential to
dissuade corporations and capital from locating to Canada since tax rates are not the only
factor that capital considers when investing. (223)

Tax restructuring in Saskatchewan has also been informed by international
competitiveness concerns. Between 1982 and 1991, the Progressive Conservative
government in Saskatchewan enacted tax cuts such as reducing oil and gas royalties. (219)
An important milestone in Saskatchewan tax policy occurred in 1985, when the
provincial government introduced a flat tax as a component of the provincial personal
income tax. Previous to this policy change, the federal income tax rate structure was used
in the province. The flat tax was viewed as beneficial for Saskatchewan for two main
reasons: it would be a constant stream of revenue generation for the province, which
would not be subject to variation when the federal government changed its income tax
structure; and it lowered the difference in taxes owing between single-earner families and
dual-earner families. (225) However, a flat tax system is inherently regressive since every
taxpayer pays the same proportionate amount of tax, regardless of their ability to
pay. (220)

Prior to being elected in 1991, the NDP government pledged it would reverse
reductions in oil and gas royalties, but this did not occur. Royalties and taxes on primary
commodities such as oil, uranium, and coal were steadily reduced to approximately one-
third of what they were during the 1970s. (208, 219) Moreover, the NDP government
declared it wanted to create a tax structure that was similar to its neighbour, Alberta.
Income taxes were cut, particularly for those in the highest tax brackets. Business and
corporate taxes were cut. Provincial cuts to grants to school boards and municipalities were cut and resulted in higher property taxes and user fees. The municipal business tax was abolished.\(^{208}\)

Whether we liked it or not, we had to govern in the real world of the 1990s, where the idea of taxation based on ability to pay had to be tempered by the need to have tax rates that were competitive. Recent trade agreements and the global economy meant that borders were open and corporations were free to invest wherever they pleased; so if they did not like our tax regime, they might easily decide to invest elsewhere.\(^{117}\)

Saskatchewan has historically relied more heavily on personal income taxes for revenue generation than other provinces. In March 2000, the Saskatchewan budget outlined a plan to shift this balance away from personal income taxes and toward the sales tax. The government was concerned that the personal income tax was discouraging people from moving to the province. The 2000 budget also announced that the province would apply its own tax rates to taxable income rather than following the federal tax rates, deductions, and tax definitions. Alberta had already implemented this change in 1999, after the federal government announced it would allow the provinces to apply tax rates to taxable income rather than the federal tax rates. As a result, the province implemented a reduction in personal income taxes for all tax rates. A number of the tax decisions that were adopted in 2000 were selected because they made Saskatchewan’s competitiveness comparable vis-à-vis Alberta. For instance, the taxable rate on capital gains on farm property and small businesses was reduced to 11% in 2000, which was the exact same rate that had been adopted in Alberta.\(^{225}\)

Saskatchewan’s personal income tax system became increasingly regressive over the study period. Differentials between income tax brackets were reduced, so that benefits accrued to those who move up the income ladder. Furthermore, between 2000 and 2006,
income tax rates were reduced by almost one-third. (226) As noted in Lee’s study of tax systems in Canada from 1990 to 2005, the provinces accounted for most of the regressivity in Canada’s personal income tax system. (220) In the 2007/2008 budget, the NDP government cut the provincial sales tax from seven to five percent. This decision cost tax coffers approximately $340 million. (219) Consumption taxes such as sales taxes are almost always regressive, meaning this decision actually improved the progressivity of Saskatchewan’s tax system. However, as evident in Figure 11, consumption taxes have increasingly generated revenue in Saskatchewan. (224) The Calvert government also abolished the Corporate Capital Tax, which eliminated $480 million from the coffers. (219) Tax cuts were enacted despite evidence that Saskatchewan’s business taxes and costs were among the lowest in North America. (219, 227)
The preceding review of tax restructuring in Canada and Saskatchewan found that neoliberal globalization has sometimes led to reduced corporate taxes and greater tax burdens for labour. However, corporate taxes remained fairly progressive and income taxes became increasingly regressive, largely due to decisions regarding income taxes by the provinces. Thus, the picture that emerged regarding tax restructuring in Canada and Saskatchewan was mixed. Other researchers have also found mixed results when assessing tax restructuring in OECD countries under neoliberal globalization.\(^{133,228-230}\)

\(^{13}\) This figure does not include all sources of revenue, rather it only presents major sources of revenue.
3.4.5 Trade Liberalization

Global political structures such as the World Trade Organization (WTO), World Bank, and IMF have gained greater policy leverage in the global economy over the past couple of decades. These global political structures have been instrumental in entrenching neoliberal ideology throughout the global political system, for expanding global trade, and for increasing investment flows. For example, the WTO was created in 1995 and built upon the foundation of the General Agreement on Tariffs and Trade (GATT) that was created after World War Two to promote a reduction in tariff barriers (protectionism) amongst the high-income countries involved in the War. The member nation-states of the WTO set the rules for global trade and have access to a dispute resolution procedure, which can involve the imposition of trade sanctions on nation-states that disobey trade rules. The WTO seeks to abolish tariff and non-tariff barriers to trade. Tariff barriers involve using financial means to protect national industries from foreign competition. Non-tariff barriers are the laws and regulations that affect and direct trade.

Although trade liberalization in Canada has proceeded apace since at least after World War Two, trade liberalization increased rapidly over the past twenty years. Recent liberalization has largely been in the form of regional trade agreements such as the FTA with the United States in 1988 and then the NAFTA with the United States and Mexico in 1994. In addition, Canada’s membership in the WTO has meant that certain areas of international trade were required to be further liberalized.

In Canada, the manufacturing sector has been subject to the most liberalization, although the services sector has also been touched. Historically, tariffs against foreign
manufacturers were erected in Canada to shield Canadian industry. Yet, the new economic environment that occurred under neoliberal globalization encouraged a reduction in tariffs on manufactured goods. At the end of the 1980s, Canada’s tariff rate on manufactured goods from the United States averaged eight percent, and this rate was, on average, 15% for goods imported from other countries. As a result of staged liberalization in the FTA and NAFTA, tariffs on manufactured goods from the United States were completely eliminated. Tariff rates for trade on goods between Canada and Mexico also rapidly approached zero under NAFTA obligations. Due to its membership in the WTO, Canada’s tariff rates on goods from other countries have also been substantially reduced. This has allowed for the creation of global production chains, where Canadian manufacturers’ outsource part or all of their production to countries with low-wages. If tariffs remained high, these manufacturers would not be able to import their products into Canada at cheaper costs in order to promote consumption.(233)

Trade liberalization in services varies in Canada. Under the FTA, trade liberalization in services was only prospective. The FTA very briefly outlined measures that might be taken in the future. With NAFTA, many service sectors have not been subject to trade liberalization. The WTO has been the lead global negotiation forum for trade liberalization in service areas such as telecommunications and financial services; however, Canada was already undertaking trade liberalization in these service areas prior to the introduction of these obligations by the WTO.(233)

It is argued that agreements such as the FTA and NAFTA limit both federal and provincial powers. Regional trade agreements such as NAFTA may limit the type and form of welfare system that a provincial or federal government can implement.(234,235)
For example, since the inception of NAFTA it has been feared that this trade agreement could potentially lead to the dismantling of Canada’s health care system. These fears were realized in July 2008, when a group of 200 American investors asserted that barriers were unfairly limiting their ability to establish more private health care clinics in British Columbia. A decision is still pending in this case. If private health care clinics are established in Canada and lead to the creation of a two-tier health care system, this often negatively impacts low-income families and individuals. At this time, similar challenges have not been mounted in relation to Saskatchewan’s health care system.

3.4.6 Deregulation

Deregulation, in relation to neoliberal globalization, is a process of removing or reducing regulations or ‘rules’ on economic activity. Governments have traditionally been responsible for providing a regulatory framework that stipulates rules and provides protection from the vagaries of the free market. Deregulation is encouraged under neoliberal globalization due to the presumption that regulations or ‘rules’ interfere with the functioning of the free market. On the other hand, It is argued that deregulation could potentially lead to a ‘race to the bottom’, where countries abolish all regulations in favour of attracting capital and investment.

On a global scale, the deregulation of the financial sector and stock markets was widespread throughout the 1980s in major European and North American markets. This occurred due to pressures to integrate financial markets into the global economy. In Canada, deregulation has occurred on a sectoral basis and has usually been accompanied by privatization. For example, when the Canadian government sold Air Canada,
Canadian National Railways, and Petro Canada on the private market, these industries were subsequently deregulated. However, deregulation in sectors such as transport has been occurring in Canada since 1967.(238)

The Canadian sector that has been most affected by deregulation is telecommunications. Prior to the late 1980s, all telecommunications firms in Canada were regulated by the Canadian Radio-Television and Telecommunications Commission (CRTC). From 1992 onwards, the deregulation of the telecommunications industry in Canada has continued unabated, emphasizing private competition and less rate regulation.(238)

Deregulation in Saskatchewan has been occurring over the past few decades, although not on as grand a scale as in some other provinces such as Alberta and Ontario. When natural gas was deregulated in the late 1980s at the federal level, the Government of Saskatchewan followed suit and deregulated its gas pricing structure in 1987.(239) Portions of the transportation industry have also been deregulated in Saskatchewan such as the trucking industry.(240) Utility deregulation has been occurring across all of the provinces. However, the province of Saskatchewan has retained its publicly-owned telecommunications firm, Sasktel. SaskPower, a provincially-owned utilities company, has not been deregulated, except on the wholesale market.(241)

Deregulation has the potential to expose citizens to greater financial instability, which may negatively affect health.(242) Volatility in the global economy has largely been due to the financial deregulation that occurred in the late 1980s and the liberalization of capital flows in the 1990s. Deregulation has led to a pandemic of banking, financial, and currency crises throughout the world.(19) Financial crises
occurred as early as 1994 in Mexico, East Asia in 1997, Russia and Brazil in 1998, and Argentina and Turkey in 2000-2001. The global financial crisis that began to appear in 2007 and continues to until present has been due to credit markets that were extended too far, and many people defaulting on loans (e.g., mortgages). As a result, the United States used $700 billion to buy the securities that threatened to destroy the financial system. Government intervention was required to deal with this market failure.

Some “roll-out” neoliberal proponents view regulation as a necessary component of the economic system, although these proponents would not prescribe redistribution as an important or necessary objective.

The very nature of the global economy and how it evolved also fuelled the current global financial situation. New financial forms such as hedge funds, structure investment vehicles, and private equity partnerships have flourished since the 1990s. In addition, banks had devised a number of new means of assuming risky assets without having to account for them on balance sheets. Large investment banks were allowed to carry a greater debt to capital ratio, as the result of a decision in 2004 at the Securities and Exchange Commission, allowing banks to buy more mortgage-backed securities. This furthered the concept that banks can be ‘self-regulated’. In addition, low-income countries, in particular China, were subject to debt crises and currency crises for many years. Households in low-income countries had begun to save in response to past financial crises and to avoid the increasingly complex banking system that predominated in the West. As savings rose in these low-income countries, a great deal of this was lent to the United States. In fact, this facilitated the large amount of borrowing that occurred in the United States and other Western countries.
3.4.7 Privatization

Neoliberals posit that the privatization of state-owned industries will increase efficiency and circumnavigate the corruption that is ostensibly rife in these industries.(232) Privatization is also a form of deregulation since by shifting control for state-owned enterprises from the public to the private sphere, the regulation of these enterprises becomes a private matter.(237) This has been true in Canada and Saskatchewan, where the privatization of industries often led to deregulation by government.

Canada and its provinces have a long history of relying on public enterprise to provide services to the population. In a country as large as Canada, with a relatively small population base, there were many needs and functions that were considered beyond the capacity of the private sector in the early years of the country. Despite this history of relying on public enterprise, a large number of Crown corporations were privatized by the federal government throughout the 1980s and 1990s. This privatization sweep has been described as a “sustained attack” on public industry.(100) After the mid-1990s, the federal government’s privatization ventures were largely in the form of public-private partnerships such as in the areas of weather, food inspection, and defense supply. The 1990s also saw an increase in federal public service delivery contracted out to private firms.(100)

The picture at the provincial level is more mixed, however. Some provinces have undertaken extensive privatization, while others have stalled their privatization initiatives due to public opposition.(100) Saskatchewan has an established history of public
ownership in the utilities sector. This was pursued since private industries did not have much interest in expanding services to rural areas and the North in the province. The Progressive Conservative government under the leadership of Grant Devine began to privatize Crown corporations in the resource sector in the 1980s. The government sold most of Sask Oil, the Saskatchewan Mining and Development Corporation, and the Potash Corporation of Saskatchewan. Controlling interest in the Prince Albert Pulp Mill was sold to the Weyerhaeuser Corporation. SaskMinerals was privatized completely. Devine’s government also pursued the unpopular policy of contracting out government services to private industry. (245)

After Romanow was declared premier in 1991, the NDP privatized Sask Oil, Cameco, Sask Forest Products, and the Lloydminster Heavy Oil Upgrader. All remaining shares in the Potash Corporation of Saskatchewan were sold by the NDP. In 1998, the NDP abolished Sask Energy’s monopoly on natural gas, and allowed private competition in this market. The NDP also increased the practice of contracting out Crown corporation services to the private sector. In addition, the Saskatchewan government acquired major interests in private corporations over the years. In 2006, the NDP government transferred these interests in private corporations to a private company, Victoria Park Capital, Inc., to manage and privatize. However, some services such as telecommunications (i.e., Sasktel) have remained public in the province. (208, 245)

The privatization of state-owned industries has the potential to affect the determinants of health and health outcomes through decreased public revenues, although this would depend on whether the state-owned industries are profitable. In Saskatchewan, state-owned enterprises have often been sold under the guise of international
competitiveness, rather than concerns regarding the profitability of these enterprises. In fact, some of the state-owned enterprises that have been sold on the private market were extremely profitable (e.g., Cameco, Potash Corporation of Saskatchewan). For instance, Cameco is the world’s largest publicly traded uranium producer, and its production accounts for approximately 15% of the world’s uranium. In 2007, Cameco recorded net earnings of $416,112,000. At the end of 2008, a Cameco-owned corporation, Bruce Power, was undertaking a review regarding the feasibility of building a nuclear reactor in Saskatchewan. If the nuclear reactor is deemed feasible by Bruce Power, the Government of Saskatchewan declared they will conduct their own review. This could potentially lead to a situation where the province must purchase energy from a corporation it once owned.

3.5 City-Level Child Health Outcomes

The previous sections demonstrated that, at an aggregate-level, economic growth increased tremendously in Canada, Saskatchewan, and Saskatoon over the study period. Moreover, neoliberal policies such as economic integration, privatization, deregulation, and tax restructuring have been pursued by the Governments of Canada and Saskatchewan. Are these trends in the Superordinate Categories and the Global Contexts levels of the re-specified analytical framework similar to the trends witnessed in child health outcomes in Saskatoon?

Trend analysis for child health outcomes at the city-level was accomplished with joinpoint regression. Six child health outcomes were assessed: infant mortality rate, low birth weight rate (defined as below 2500 grams), under-five mortality rate, hospitalization
rate for children ages zero to five, hospitalization due to injury for children ages zero to five, and hospitalization due to asthma for children ages zero to five. The following graphs show the trends in the six child health outcome over time in the City of Saskatoon. The statistics for each of these graphs are presented in Appendix E.

Figure 12: City-Level Trends for Infant Mortality Rate, Saskatoon, 1980-2006

As noted in Chapter 1, joinpoint regression tests the null hypothesis \( H_0: \) there are \( k_0 \) joinpoints against the alternative hypothesis \( H_1: \) there are \( k_1 \) joinpoints.\(^{(56)}\) For the infant mortality rate, the null hypothesis was rejected in favour of the alternative hypothesis that there were three significant breaks in the trend line (i.e., joinpoints).
The null hypothesis was also rejected for the under-five mortality rate over time, in favour of the alternative hypothesis that there were three significant breaks in the trend line. The trend in under-five mortality was quite similar to the trend witnessed in the infant mortality rate. In 1980, the under-five mortality rate was at its highest recorded point, but it then declined until 1990. This rate significantly increased until 1995, when it significantly declined until 2002 and since then it has increased.
The null hypothesis was not rejected for low birth weight since there were no significant breaks in the trend line. Since 1980, the low birth weight rate has steadily increased in the City of Saskatoon.
The null hypothesis was rejected for the hospitalization rate and the alternative hypothesis of two significant breaks in the trend line was accepted. Analysis revealed a pattern where the hospitalization rate increased slightly until 1991, when it precipitously declined until 1997. Since 1997, the hospitalization rate has increased at a greater rate than that which was recorded in 1980.
The null hypothesis for the injury rate was rejected in favour of the alternative hypothesis that there were three significant breaks in the trend line. For the injury rate among Saskatoon’s children, this was at a high in 1980, but has declined substantially since then. The injury rate increased until 2001, but has declined significantly since then.
Finally, for the asthma rate in Saskatoon, this increased slightly between 1980 and 1992. Since 1992, the asthma rate significantly declined. According to these results, the null hypothesis of zero breaks in the trend line was rejected and the alternative hypothesis of one significant break in the trend line was accepted.

Trend analysis showed the infant mortality rate and the under-five mortality rate had very similar trend lines, although this was probably due to the fact that the under-five mortality rate included infant deaths. In fact, deaths among children ages one to four were not very common in Saskatoon over the study period, so infant deaths made up a large proportion of the under-five mortality rate. It is interesting to note the infant mortality rate, the under-five mortality, and the asthma rate all reached highs in the early 1990s, when a major recession affected the economies of Canada, Saskatchewan, and Saskatoon.

The other finding of note to emerge from trend analysis at the city-level was the low birth weight rate steadily increased in Saskatoon over time. At the national level,
Canada’s rate of low birth weight has almost always been higher than in several European countries, particularly the social-democratic states such as Sweden, Denmark, Finland, and Norway. Low birth weight rates are intrinsically linked to socioeconomic status. Historically and internationally, low birth weight rates have been highest in those groups with the lowest socioeconomic status. This suggests that child health outcome data should be disaggregated to reveal trends that are related to socio-economic status, and this is investigated in section 4.5.

3.6 Summary

Canada’s, Saskatchewan’s, and Saskatoon’s economies witnessed tremendous growth over the study period. Despite a few recessionary periods, the economies of these jurisdictions recovered and improved. In 2008, a worldwide recession was beginning to take place. Nevertheless, in 2009, the Conference Board of Canada predicted that Saskatoon’s economy would still grow faster than those of all other Canadian cities. Similar predictions have been made regarding Saskatchewan, with many analysts predicting that Saskatchewan will probably weather the worldwide recession successfully. The direction of Canada’s economy due to the recession is less clear, and open to quite a lot of speculation.

According to measures such as FDI, exports, and imports, Canada became more integrated into the global economy over the study period. In absolute dollar terms, Saskatchewan also became more integrated into the global economy, with increases in the amount of international exports and imports. Saskatchewan has been a large net exporter, with exports nearly double imports. Since net exports translate into greater
GDP, the economy of Saskatchewan has continued to be quite strong and helped the provincial government add substantial revenue to its coffers. The extent to which this economic growth has been invested in social areas that directly benefited child health will be explored in more detail in the following chapters.

As part of Canada and Saskatchewan’s increased integration into the global economy, neoliberal-oriented policy prescriptions such as trade liberalization, deregulation, tax restructuring, and privatization were more common in Canadian and Saskatchewan policy. Neoliberalism and the attendant policies of tax restructuring, trade liberalization, deregulation, and privatization have the potential to greatly influence the pathways that determine child health outcomes, largely through less government insulation from financial volatility and less government investment in social areas essential to health such as education, housing, social assistance, etc. The relationship between the welfare state in Canada and Saskatchewan and child health is investigated in Chapter 5.

Trends in certain child health outcomes were similar to trends in economic growth. The infant mortality rate, under-five mortality rate, and asthma rate experienced highs in the early 1990s, which coincided with when a country-wide recession was occurring. Another trend discovered at the city-level was the steadily increasing low birth weight rate. This could possibly be due to increasing poverty and income inequality in the city since the low birth weight rate is often sensitive to changes in socioeconomic indicators in a community, and this is further explored in the next chapter.
Chapter 4. Charting Pathways from Globalization to Child Health: Household Income and Distribution

4.1 Introduction

This chapter focuses specifically on the child health determinants of household income and income distribution. Over the study period, Canada, Saskatchewan, and Saskatoon experienced tremendous economic growth, as discussed in the previous chapter. This chapter explores whether economic growth at an aggregate-level has led to reduced poverty levels. Moreover, this chapter explores the depth of poverty and income inequality.

4.2 Poverty in Canada, Saskatchewan, and Saskatoon

Poverty rates in any given society provide an indication of the larger economic and political processes that are occurring. Poverty rates are the result of the interaction between two main sets of influence: a) access to market income through employment, wealth possession, or subsistence production; and b) a country’s policy decisions regarding issues such as income distribution, employment security, food security, health care, etc. Poverty can be defined in a number of ways. Absolute poverty is defined as severe deprivation of basic human needs such as food, water, shelter, etc. Relative poverty occurs when an individual’s income falls below a pre-determined poverty threshold.(50)

At this time, Canada does not have an official poverty measure.(252) Statistics Canada has generally defined low-income in two ways: the low-income measure (LIM) and the LICO. The LIM is calculated as the amount equal to one-half of the Canadian
median income, adjusted for family size. The LICO is calculated by considering the after-taxes and transfers income of families, adjusted for family size and community size. A family falls below the LICO if they spend 20% or more than the average family spends on food, shelter, and clothing. Although Statistics Canada insists that the LICO is not a measure of poverty, it is consistently used by many Canadian organizations as an unofficial measure of poverty. In fact, the former Chief Statistician at Statistics Canada, Ivan Fellegi, noted he did not have an issue with organizations using the LICO as a measure of poverty, if they viewed the LICO as the most accurate depiction of poverty in the country. The LICO is used to measure poverty in this study. It was selected because it has been consistently used by Statistics Canada since the 1960s to measure low-income in Canada.

In 1980, the proportion of Canadian families that were considered low-income was 21.6% before-taxes and transfers and 16.5% after-taxes and transfers. In 2006, the proportion of Canadian families that were considered low-income was 19.5% before-taxes and transfers and 14.6% after-taxes and transfers. In Saskatchewan, the poverty rate declined over the study period, whether measured in before- or after-taxes and transfers. The proportion of families that were considered low-income was 22% before-taxes and transfers and 15.9% after-taxes and transfers in 1980 in Saskatchewan. These numbers were 19.4% before-taxes and transfers and 13% after-taxes and transfers in 2006. Poverty rates remained fairly stagnant in Saskatoon over the study period. The incidence of low-income was not measured in the 1981 Census, but in the 1986 Census the incidence of low-income was 20% in the city. In 1996, the incidence of low-income reached a high of 23%, and this number declined to 20% in 2006.
poverty rates for Saskatoon were only available in before-taxes and transfers income.

Yet, according to the National Council of Welfare, this is a more accurate portrayal of poverty in Canada:

Some people argue that the post-tax LICOs are a better measure because they feature income that is closer to disposable income than pre-tax LICOs. That may be true at the upper end of the income spectrum, but it is certainly not true at the lower end. According to the latest data from Statistics Canada, only 32 percent of poor families and 27 percent of poor unattached individuals paid income taxes for 1997.(261)

Poverty has tended to become concentrated in certain populations in Saskatoon, in Saskatchewan, and in Canada. Aboriginal Canadians are more likely to live in impoverished situations. This is largely related to a history of colonialism and prejudicial government policy, the greater incidence of unemployment, the unavailability of full-time employment, and lower wages in both part-time and full-time positions for Aboriginal persons.(262) Other racialized groups, as well as persons with disabilities, are more likely to be living in impoverished situations.(262,263) Finally, women are much more likely to be living in poverty. This is partially due to the fact that women are more likely to work in part-time employment situations because of their child care responsibilities. However, even in full-time positions, women make less than men, regardless of their occupation. In 2001, women in full-time positions earned 72% of what men in similar or identical positions earned.(262)

Poverty rates among children are also an important measure to consider in relation to child health. At the national level, the incidence of child poverty before-taxes and transfers increased slightly over the study period (16.2% in 1980 and 16.8% in 2005).(264) In Saskatchewan, the incidence of child poverty before-taxes and transfers almost doubled from 1980 to 2005 (11.5% in 1980 and 20.7% in 2005). Child poverty
reached an all time high of 24% in 1995 in the province. According to the 2006 Census, child poverty in Saskatchewan was 19.9%, which was the second highest child poverty rate in the country next to British Columbia at 21.9%.(8) The Federation of Canadian Municipalities found the following rates of childhood poverty before-taxes and transfers in Saskatoon: 20% in 1991, 23% in 1996 and 19.1% in 2001.(265) These numbers illustrate that the infant mortality rate and the under-five mortality rate in the city followed a similar trajectory as poverty rates in children and in the overall population.

According to these numbers regarding child poverty, Saskatoon and Saskatchewan had higher levels of child poverty than Canada. There are a couple possible explanations for this difference. First, the one major change in Saskatoon’s population structure over the study period was an increase in the proportion of Aboriginal people in Saskatoon due to Aboriginal migration from reserves to cities and the higher birth rate among the Aboriginal population than the non-Aboriginal population Saskatoon and Saskatchewan both had higher proportions of Aboriginal residents than the Canadian average (refer to Appendix A). Furthermore, poverty rates among Aboriginal children living in Saskatchewan and Saskatoon tended to be higher than in non-Aboriginal children. For instance, the 2001 Census found that 50% of all Aboriginal children in Saskatchewan lived in poverty.(226)

Higher child poverty rates in Saskatoon and Saskatchewan may also be due to policy choices. The redistributive function of the welfare state in Saskatchewan was possibly weaker compared to other provinces.(219) Higher child poverty rates in Saskatchewan and Saskatoon may also be the result of the type of welfare state in Saskatchewan. The social-democratic countries of Sweden, Norway, Finland, and
Denmark are often used as examples of best practices in terms of child poverty. Rates of child poverty in these countries have been held constant at about 5% or less for the past 20 years due to the implementation of universal programs and policies that support dual-earner families.

4.3 The Low-Income Gap

One means of assessing the depth of poverty is the low-income gap, which is the amount that a low-income family falls short of the relevant LICO. For the calculation of the low-income gap, Statistics Canada treats negative incomes as zero. For example, for a family that has an income of $10,000, and if the relevant low-income cutoff is $15,000, the low-income gap would be $5,000. Since negative incomes are treated as zero, this has the potential to dramatically underestimate the depth of poverty in Canada.
Figure 18: Low-Income Gap (2006 Dollars), Canada, 1980-2006

Source: CANSIM, n.d.(267)
Figure 19: Low-Income Gap (2006 Dollars), Saskatchewan, 1980-2006

Source: CANSIM, n.d.(267)
The low-income gap increased substantially in Saskatchewan and declined slightly in Canada over the study period. Provincially, the low-income gap in after-taxes and transfers income increased by $2500 between 1980 and 2006, whereas this amount decreased by $100 in Canada over the same time period. Therefore, the depth of poverty in Canada improved by $100 over the past twenty-five years, despite the fact that the Canadian economy grew by 100%. In addition, the proportion of market incomes required to bring every family and individual up to or above the LICO has actually declined since 1980 at the national level. For instance, in 1980, $9.7 billion was required to raise all Canadians to the LICO, and this amount was $13.7 billion in 2005. Yet, if these amounts are adjusted for inflation, this goal would have required 2.1% of all market incomes in 1980, and this declined to 1.8% of all market incomes in 2005. Data related to the low-income gap was not available for the City of Saskatoon. Moreover, data specifically related to the low-income gap and children were not available.

4.4 Income Inequality

Income inequality among families with children under the age of 18 was measured from 1976 to 2004 in Canada in a study conducted by the Canadian Centre for Policy Alternatives (CCPA). Since individuals were not the unit of analysis, this study accounted for the growing proportion of families with both parents in the labour force. According to this study, income inequality reached a high in 2004, when the richest 10% of Canadian families earned 82 times more than the poorest 10% of Canadian families. In 1976, this ratio had only been 31 times. Only the richest 20% of Canadian families with children have been benefiting from Canada’s recent economic successes, although the
majority of these benefits have been confined to the top 10%. Between 1976 and 1979, the bottom half of Canada’s families earned 27% of total earnings in the country, yet between 2000 and 2004 the bottom half only earned 20.5% of total earnings. Moreover, the poorest 20% of Canadian families earned 4.5% of total earnings in the late 1970s, and this dropped to 2.6% in 2004. On the other hand, the richest 20% of Canadian families witnessed their share of total earnings increase from 23% in 1976 to approximately 30% in 2004. However, the richest 10% of families were the only group not working longer hours than in the past. In 2004, the average Canadian family with children worked 200 more hours than they had in 1996.(186)

Growing inequality between Canada’s income earners was also found in a Statistics Canada study of high-income earners in Canada. This study found the incomes of the top 1% of earners dramatically increased between 1992 and 2004. For example, the top 0.01% income threshold for families was 40 times the median in 1983, and this increased to 100 times in 2004. Increases in average incomes since 1982 were largely confined to the top quintile, and even these were largely concentrated among the top 5% of the income distribution.(268)

Other studies have also substantiated that income inequality has increased in Canada. Statistics Canada conducted a longitudinal study of income inequality for the period 1976 to 2004, using data from the Survey of Consumer Finances (for the period 1976-1997) and the Survey of Labour and Income Dynamics (for the period 1993-2004). This study showed that after-taxes and transfers income inequality among Canadian families was fairly stable throughout the 1980s. However, income inequality rose during the 1989 to 2004 period. In fact, after-taxes and transfers income inequality was higher in
the post-2000 period than it had been at any point since 1976. For example, the ratio of after-taxes and transfers income of the top decile to the bottom decile was 7.46 in 1979 and this fell to 6.58 in 1989. Income inequality then rose in the 1990s and the ratio of the top decile to the bottom decile was 8.85 in 2004. This study also found that income polarization increased, meaning that the middle class in Canada was shrinking. Increased income polarization suggests a hollowing out of the middle range of the income distribution, with a greater number of people in both the top and bottom ends of the distribution.

The Canadian welfare state is considered by many to be effective at offsetting income inequalities through taxes and transfers (i.e., redistribution). Yalnizyan found that while the Canadian welfare state does offset income inequality to an extent, it does not significantly reverse the fact that most Canadian families were earning less of the total earnings of all Canadians than in the 1970s. For example, between 1976 and 2004, families in the poorest decile and the eighth decile experienced no change in their share of total earnings, after adjusting for inflation. Families in the second to seventh decile received a smaller share of total earnings after-taxes and transfers since the late 1970s. For those families in the ninth decile, they received a slightly larger share of total earnings from 14.5% to 14.0%. The richest decile received 21% of total earnings in 1976 and this increased to 24.5% in 2004. Basically, only the richest 10% of Canadian families were able to significantly increase their share of total earnings. Heisz also found that the current Canadian welfare state pursues a less vigorous redistributive role than in previous decades.

---

14 In this study, income polarization was measured as the share of people with family income from 75% to 150% of the median. This measurement gives an indication of the size of the middle class.
Redistribution grew enough in the 1980s to offset 130% of the growth in family market-income inequality—more than enough to keep after-tax income inequality stable. However, in the 1990-to-2004 period, redistribution did not grow at the same pace as market-income inequality and offset only 19% of the increase in family market-income inequality.\(^{(188)}\)

Another common way of measuring income inequality is with the Gini coefficient. As evident in Table 2, Saskatchewan has always registered a slightly higher Gini coefficient than Canada.\(^{(269)}\)

<table>
<thead>
<tr>
<th></th>
<th>Canada</th>
<th>Saskatchewan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini Coefficient,</td>
<td>0.437</td>
<td>0.436</td>
</tr>
<tr>
<td>Before-Taxes and</td>
<td>0.506</td>
<td>0.515</td>
</tr>
<tr>
<td>Transfers, 1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini Coefficient,</td>
<td>0.353</td>
<td>0.349</td>
</tr>
<tr>
<td>After-Taxes and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers, 1980</td>
<td>0.392</td>
<td>0.395</td>
</tr>
<tr>
<td>Gini Coefficient,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After-Taxes and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers, 2006</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.\(^{(269)}\)

Income inequality, as measured by both before- and after-taxes and transfers income, increased in Saskatoon between 1990 and 2000. This data came from the Federation of Canadian Municipalities (FCM), which was created over 70 years ago to ensure municipal concerns were heard by the federal government.\(^{(270)}\) According to these numbers, income inequality before-taxes and transfers increased by 14.5% between 1990 and 2000. Income inequality after-taxes and transfers increased by 14.6%.\(^{(265)}\)

Using tax filer’s data, a study by the FCM found that Saskatoon had one of the worst income gaps among Canadian cities, and this was increasing. In addition, this study found the growing gap in Saskatoon was contributing to increasing neighbourhood inequality (see section 4.5).\(^{(271)}\)
Income inequality worsened in Canada, in Saskatchewan, and in Saskatoon over the study period. There are three main hypotheses advanced regarding increased income inequality in the Canadian context. The first hypothesis is demographic in nature, where trends towards smaller families and rising divorce rates increased income inequality. For
example, low-income becomes concentrated among lone parents. However, the proportion of lone parents in Saskatoon remained fairly stable over the study period (refer to Appendix A). A further demographic hypothesis is that an increase in dual-earner families in Canada increased the amount of families that earn a high-income.(272) In terms of assessing changes in dual-earner families in relation to changes in income inequality, this was not possible since data on dual-earner families only extends back to 2000 (refer to Appendix A).

Although the first demographic hypothesis regarding income inequality and lone parents does not hold up very well in Saskatoon, the argument that lone parents are driving the income inequality trend requires further exploration. The income inequalities displayed between single parent families and two-parent families do not entirely explain variations in child poverty across countries. In fact, previous research found that child poverty variations were usually due to how countries structured social policies around types of families. For instance, social-democratic countries such as Sweden and Denmark have experienced high rates of single mothers, but low rates of child poverty. Conversely, Italy has had low rates of single motherhood, yet high rates of child poverty.(273,274) This suggests that the welfare state and social policy is a key determinant of income inequality across family types.(129)

The second hypothesis regarding increased income inequality presumes that the restructuring of the economy and the labour market under neoliberal globalization favours high-income earners and their families at the expense of low-income families.(275) This hypothesis seems likely in Saskatoon for a number of reasons. Evidence indicates that the labour market in Saskatoon has been transformed over the
study period, privileging non-traditional work arrangements that keep many families poor (refer to Chapter 6).

A third explanation for increased income inequality in Saskatoon, Saskatchewan, and Canada is the nature of the welfare state itself. Research indicates redistribution may be less of a policy concern for the Canadian and provincial welfare states.(186,188) The supposition that government policy may be driving the income inequality trends in Canada was substantiated by an OECD report which noted that Canada spends less than any other OECD country on cash benefits, and this contributed to increasing income inequality in the country.(276)

Most of the research literature has validated the second and third hypotheses in the Canadian context, where increased income inequality in Canada has been attributed to shifts in the labour market (e.g., an increase in non-traditional employment) and the retrenchment of the welfare state in key social areas such as redistribution and income security.(277,278) For example, Zyblock examined family market income inequality in Canada from 1981 to 1993. Consistent with other studies, he found that income inequality increased substantially during this period. When determining the drivers behind this rise in income inequality, Zyblock discovered that young families in Canada were faring worse than they had in the past. Therefore, the main driver behind income inequality was improvements in the positions of already well-off families. This study concluded that neoliberal globalization was playing a large role in increasing income inequality due to the promotion of a knowledge economy, alongside non-traditional work arrangements (i.e., an increase in occupational polarization). A caveat to this conclusion was that neoliberal globalization was most likely not the only factor that was increasing
income inequality. As stated by Zyblock: “to understand why inequality in family market income has increased in Canada we must first admit that there is no single explanation.”(275)

Zyblock’s findings were substantiated by a more recent study. Yalnizyan found that income inequality in Canada has historically been driven by more people falling into the lower end of the income distribution. Since 1997, however, income inequality has also been driven by another trend: an acceleration of income for the richest 10% of families. Due to the combination of these two trends, the middle class in Canada has been shrinking.(186)

Though the pie is much bigger, it is not even getting divided into the same (unequal) pieces as a generation ago. The pieces are getting more unequal, with those at the top getting an ever-bigger share of the pie—at the expense of those at the bottom, but, more surprisingly, also at the expense of the majority of Canadian families.(186)

4.5 Geographic Disparities in Income and Child Health

Place matters for health.(279) For example, empirical research has found the neighbourhood has important and long-lasting effects on children’s outcomes and development, apart from individual and family characteristics.(58,60,90-95,280,281)

Related to place and health, neoliberal globalization tends to increase social polarization in cities, as discussed in Chapter 2. Social polarization is largely based on who can afford to live in certain areas. In other words, economic factors are intrinsically linked with social polarization.(168,172)

Previous studies have found that social polarization increased in Saskatoon, driven mainly by income levels.(282) For instance, in a study of residential segregation in Canada’s cities using census tract data for the period 1991-1996, it was found that
heightened social polarization occurred across Canada’s cities, according to income. In fact, Ross et al. found particularly high levels of segregation in Saskatoon, compared to other Canadian cities.(178) Another Statistics Canada study found that income inequality increased across Canada’s cities, including Saskatoon, between 1980 and 2000. This study also found that single parents, Aboriginal peoples, and immigrants were more likely to reside in low-income neighbourhoods.(283) However, Walks and Bourne used census tract data from 1991 and 2001 and found that ethnic segregation was not common in Canadian cities, unlike many American cities. Moreover, there were only a few cities (Toronto, Montreal, Vancouver and Winnipeg) where there was a large concentration of ethnic minorities in low-income neighbourhoods.(284)

To determine if social polarization continued to persist in Saskatoon, as determined by economic factors, descriptive statistics were produced to assess disparities across neighbourhoods in terms of the proportion of low-income and average family income. Neighbourhoods were organized according to four groups: all Saskatoon neighbourhoods, Saskatoon’s poorest neighbourhoods (Pleasant Hill, Riversdale, Westmount, King George, Meadowgreen, Confederation Suburban Centre), Saskatoon’s most affluent neighbourhoods (Briarwood, Arbor Creek, River Heights, Lakeridge, Erindale), and the rest of Saskatoon’s neighbourhoods (neighbourhoods included in analysis, but excluding the poorest and most affluent neighbourhoods). The first neighbourhood grouping was selected to reflect overall or aggregated economic status in the city. Since aggregate measures often mask trends among sub-groups, neighbourhoods were disaggregated according to high-, mid-, and low-income neighbourhoods.
Table 3: Mean (Standard Deviation) for Percentage (%) of Low-Income in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>22.2 (12.5)</td>
<td>43.3 (15.5)</td>
<td>6.0 (2.8)</td>
<td>19.3 (9.0)</td>
</tr>
<tr>
<td>1991</td>
<td>20.9 (12.9)</td>
<td>45.0 (10.1)</td>
<td>3.2 (3.7)</td>
<td>18.0 (9.8)</td>
</tr>
<tr>
<td>1996</td>
<td>24.3 (16.6)</td>
<td>55.7 (15.9)</td>
<td>3.6 (3.4)</td>
<td>20.5 (12.1)</td>
</tr>
<tr>
<td>2001</td>
<td>22.1 (15.5)</td>
<td>50.6 (12.1)</td>
<td>3.5 (2.6)</td>
<td>18.6 (12.0)</td>
</tr>
<tr>
<td>2006</td>
<td>21.0 (13.4)</td>
<td>44.6 (9.1)</td>
<td>4.7 (2.6)</td>
<td>18.4 (11.1)</td>
</tr>
<tr>
<td>Change (%) in mean 1986-2006</td>
<td>-5.4</td>
<td>3.0</td>
<td>-21.6</td>
<td>-4.7</td>
</tr>
</tbody>
</table>

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996; City of Saskatoon, 1991; City of Saskatoon, 1986.(8, 257-260)

The incidence of low income has always been higher in Saskatoon’s poorest neighbourhoods since 1986. In 1986, the incidence of low-income in Saskatoon’s poorest neighbourhoods was 7.2 times higher than in the most affluent neighbourhoods. The discrepancy between poorest and most affluent neighbourhoods increased to 9.5 times in 2006.
Table 4: Mean (Standard Deviation) for Average Family Income (Unadjusted Dollars) in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>37,145 (9,789)</td>
<td>23,265 (5,579)</td>
<td>48,661 (8,181)</td>
<td>39,037 (8,663)</td>
</tr>
<tr>
<td>1991</td>
<td>46,449 (12,737)</td>
<td>29,622 (5,602)</td>
<td>69,217 (6,178)</td>
<td>48,597 (11,761)</td>
</tr>
<tr>
<td>1996</td>
<td>51,243 (18,189)</td>
<td>27,963 (6,633)</td>
<td>89,020 (24,067)</td>
<td>54,153 (17,046)</td>
</tr>
<tr>
<td>2001</td>
<td>58,910 (21,429)</td>
<td>30,429 (5,239)</td>
<td>103,091 (17,730)</td>
<td>62,328 (20,035)</td>
</tr>
<tr>
<td>2006</td>
<td>63,193 (20,216)</td>
<td>34,492 (5,851)</td>
<td>96,508 (6,035)</td>
<td>66,325 (18,693)</td>
</tr>
</tbody>
</table>

Change (% in mean 1986-2006) 70.1 48.3 98.3 70.0

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996; City of Saskatoon, 1991; City of Saskatoon, 1986 (8,257-260)

In 1986, the average family income in Saskatoon’s most affluent neighbourhoods was 2.1 times the average family income found in the poorest neighbourhoods of the city. In 2006, the average family income in the most affluent neighbourhoods was 2.8 times greater than that found in the poorest neighbourhoods.

The tables above indicate that polarization between the most affluent and poorest neighbourhoods increased in Saskatoon over the study period. This supports earlier data in this chapter that indicated income inequality increased at an aggregate level, and in Saskatoon this appears to have a spatial dimension.

Chapter 3 presented results regarding city-level trends in six child health outcomes. One of the challenges associated with conducting city-level analysis was that intra-city variations were masked. A number of recent studies have found different rates of improvement for different social groups in urban locations, whether this is based on income, education, or geographic residence. As a result, analyzing smaller geographical spaces can uncover disparities that were not present when larger
geographical spaces were analyzed. It can also be quite useful to analyze different levels of social aggregation such as the city, the neighbourhood, and the individual. The remainder of this section presents results from analyses of neighbourhood-level child health outcome data. Data in this study was limited to the city-level and the neighbourhood-level for child health outcomes since individual-level data was not available for the purposes of this study.

First, descriptive statistics were generated to make comparisons between three groups of neighbourhoods in the City of Saskatoon, and are depicted in the figures below. When looking at the descriptive statistics for the infant mortality rate, it was immediately apparent that the mean has almost always been higher in the poorest neighbourhoods, compared to the rest of the Saskatoon and the most affluent neighbourhoods in the city. There were only a couple of anomalous years (2000, 2002), where the mean infant mortality rate was higher in the richest and other neighbourhoods in Saskatoon. In the last two years of available data, the infant mortality rate in the poorest neighbourhoods was at an all-time high (for the period of study).
For the under-five mortality rate, the mean has almost always been higher in the poorest neighbourhoods, compared to the other two groups of neighbourhoods. Near the end of the period for which data was available, the under-five mortality rate had become quite high in the poorest neighbourhoods.
The low birth weight rate has not fluctuated as greatly in the groups of neighbourhoods that were studied, compared to the other child health outcomes. For the years that were assessed, the low birth weight was higher in the poorest neighbourhoods of Saskatoon.
Overall, in Saskatoon, the hospitalization rate has been increasingly at or above 100 per 1,000 population. Since 2000, the hospitalization rate has been quite a bit higher in the poorest neighbourhoods of the city, compared to the other groups of neighbourhoods.
The injury rate has fluctuated quite a lot across the groups of neighbourhoods and over the years for which data was available. Injury rates have always been higher, on average, in the poorest neighbourhoods of the city.
The asthma rate over the years for which data was available declined. This was true across all groups of neighbourhoods. However, the asthma rate was typically higher in the poorest neighbourhoods of the city, compared to the other groups of neighbourhoods.
In summary, for all of the child health outcomes examined (infant mortality rate, under-five mortality rate, low birth weight rate, hospitalization rate, injury rate, asthma rate), adverse child health outcomes were almost always more common in the poorest neighbourhoods of Saskatoon since 1995/1996.

Appendix G presents the results from the Mann-Whitney U tests that compared the mean ranks for the poorest neighbourhoods and the most affluent neighbourhoods in Saskatoon, as well as comparisons between the mean ranks for the poorest neighbourhoods and the rest of the neighbourhoods in the city. When comparing the poorest neighbourhoods versus the most affluent neighbourhoods for significant differences, there were no consistent significant differences across years for the child
health outcomes of infant mortality rate, under-five mortality rate, hospitalization rate, or
the asthma rate. For the low birth weight rate, there were four years where there were
significant differences, and one year where significance was of borderline statistical
significance. For the injury rate, there were two years with significant differences, and
two years where significance was borderline.

When comparing mean rank differences between the poorest neighbourhoods and
the rest of the neighbourhoods in the city for the infant mortality rate, there were four
years when the infant mortality rate mean was significantly higher in the poorest
neighbourhoods, compared to the rest of the neighbourhoods. For the under-five
mortality rate, there were four years when the mean rank was significantly different, and
two years where the mean rank was at borderline significance. For the low birth weight
rate, there were three years where the mean rank was significantly different and two years
when significance was borderline. For the hospitalization rate, there was only one year
when the difference was significant, but there were two years when the difference was
borderline significant. For the injury rate, there were five years when the difference was
significant. For the asthma rate, there were two years when the difference between mean
ranks was significant.

The magnitude of difference between the poorest and most affluent
neighbourhoods for the infant mortality rate mean rank was 1.92 times in 1995. This
difference was reduced slightly in 2006, so that the mean rank in the poorest
neighbourhoods was 1.51 times higher than in the most affluent neighbourhoods. The
magnitude of difference between the mean rank of the poorest neighbourhoods and the
rest of the neighbourhoods in the city was 1.34 in 1995 for the infant mortality rate. This magnitude of difference increased to 1.50 in 2006.

The mean rank was 1.79 times higher in the poorest neighbourhoods versus the most affluent neighbourhoods in 1995 for the child health outcome of under-five mortality rate. This magnitude of difference decreased to 1.51 in 2006. For the under-five mortality rate mean rank, the difference between the poorest neighbourhoods and the rest of the neighbourhoods was 1.38 in 1995. This magnitude of difference between the mean rank increased slightly to 1.45 in 2006.

In 1995, the mean rank in the poorest neighbourhoods was 2.83 times higher than in the most affluent neighbourhoods for the low birth weight rate. In 2006, the mean rank difference decreased to 1.67. The mean rank difference between the poorest neighbourhoods and the rest of the neighbourhoods for the low birth weight rate was 1.87 in 1995. This magnitude of difference decreased to 1.40 in 2006.

For the hospitalization rate, the mean rank difference was 1.06 between the poorest neighbourhoods and the most affluent neighbourhoods in 1996. In 2006, this mean rank difference increased slightly to 1.13. In 1996, the mean rank in the rest of Saskatoon’s neighbourhoods was 1.28 times greater than in the poorest neighbourhoods for the hospitalization rate. This magnitude of difference changed direction over time, however. In 2006, the mean rank in the poorest neighbourhoods for the hospitalization rate was 1.18 times greater than in the rest of the neighbourhoods.

In 1996, there was no difference between the mean ranks for the injury rate between the poorest neighbourhoods and the most affluent neighbourhoods. The difference between mean ranks for the poorest and most affluent neighbourhoods
increased to 1.37 in 2006. For the injury rate, the mean rank was 1.04 times greater in the rest of the neighbourhoods, compared to the poorest neighbourhoods in 1996. In 2006, this difference had changed direction, and the mean rank was 1.40 times greater in the poorest compared to the rest of the neighbourhoods.

The difference between the mean ranks for the poorest neighbourhoods and the most affluent neighbourhoods was negligible in 1995 for the asthma rate. This difference increased to 1.37 in 2006. The asthma rate mean rank was 1.14 times greater in the poorest neighbourhoods of the city compared to the rest of the neighbourhoods in 1996. This magnitude of difference increased to 1.36 in 2006.

To summarize the results form the Mann-Whitney U tests, there was an increase in the hospitalization rate, injury rate, and asthma rate for children over time between the poorest neighbourhoods and versus the most affluent neighbourhoods in Saskatoon, as shown by the mean rank differences for these two types of neighbourhoods. For the infant mortality rate, the under-five mortality rate, and low birth weight rate, the mean rank difference between the poorest and most affluent neighbourhoods decreased over time. The mean rank difference between the poorest and the rest of the neighbourhoods increased for all child health outcomes since 1995/1996, except for the low birth weight rate, where the mean rank difference declined slightly.

Trend analysis was also performed with logistic regression with GEE to compare Saskatoon’s poorest neighbourhoods to the most affluent neighbourhoods on the six child health outcomes at the neighbourhood-level. However, the sample size was too small to obtain reliable results; thus, the results are not presented. The poorest neighbourhoods in the city were also compared to all other neighbourhoods, including the most affluent
neighbourhoods. Trend analyses found that there were no significant changes in the difference between the infant mortality rate, under-five mortality rate, low birth weight rate, injury rate, and asthma rate in the poorest neighbourhoods and the rest of the neighbourhoods over time. However, the hospitalization rate significantly worsened over time in the rest of the neighbourhoods compared to the poorest neighbourhoods in the city, after adjusting for the reference category of poorest neighbourhoods. This finding was highly unreliable, however, since it was not possible to test for interaction in the logistic regression with GEE models among the years or the predictor variables because the sample size was too small. It would have been possible to test for interaction if trends had been assessed in a standard logistic regression model. However, if interaction was assessed with a standard logistic regression model, this would not have accounted for clustering. Stratified analysis was attempted in order to test for interaction, but this produced extremely unstable and wide confidence intervals. Therefore, the findings presented for logistic regression with GEE should be approached with a great deal of caution (refer to Appendix H).

4.6 Policy Response to Child Poverty

This section explores the specific policy responses that have been enacted to address child poverty. Other responses to poverty that were not specific to children (e.g., social assistance, the minimum wage) are assessed in the following chapters.

In the 1980s, the Family Allowance was still being offered and was universal, meaning it was provided to all Canadian families, regardless of income. When Brian Mulroney became Prime Minister in 1984, the government claimed to be interested in
restructuring child benefits to be more targeted at children living in conditions of poverty. Thus, the federal government reduced the value required for the child tax deduction and then changed this deduction to a credit in 1988. Tax deductions disproportionately benefit higher income families rather than low-income families. Credits are considered to be more beneficial for disadvantaged families. (286) It is important to note that policy discussions surrounding child benefits have usually been framed in terms of children being the ‘deserving’ poor, whereas their parents are suspected of welfare fraud, negligence, or laziness. (98, 286)

In 1989, members of the House of Commons unanimously supported a resolution to end child poverty by 2000. (287) In response to this decision, the federal and provincial governments engaged in a number of priority-setting exercises and enacted certain policy mechanisms related to childhood well-being. For example, following the 1990 World Summit for Children, the federal government created *Brighter Futures: Canada’s Action Plan for Children*. The aim of this document was to ensure the effectiveness and coordination of activities related to children across federal departments. Also as a result of the 1990 World Summit for Children, Health Canada expanded their children’s programming in a number of areas, usually in the form of community-based interventions. (288) However, Health Canada’s programs were not focused on reducing child poverty. (248)

Reacting to the federal government’s *Action Plan for Children*, Saskatchewan introduced its own action plan for children in 1993. (289) Funded by the six largest departments at the provincial level, Regional Intersectoral Coordinating Committees (RICs) on Human Services were created to bring together local representatives of the
provincial departments that were involved in the children’s action plan. RICs were eventually expanded to include representatives from school districts, the police, tribal councils, and the municipal government. (290) Ministries such as finance are increasingly more powerful in the social policy arena in Canada due to their strong links to the international economy; yet, the Ministry of Finance has not been involved in the RICs, which may potentially limit the ability of the RICs to influence policy sectors and government budgets. (291) While RICs have facilitated greater communication amongst stakeholders, the means to make decisions and policy have been circumscribed. (290)

At the federal level, in 1993, the Child Tax Benefit (CTB) was introduced, which consolidated child tax credits and the Family Allowance into one monthly payment that was based on the number of children and the level of family income. (292) The elimination of the Family Allowance prompted Rice and Prince to argue that the principle of universalism was being abandoned in Canada. (181) The CTB also included the Working Income Supplement (WIS), which provided benefits to families that worked and were low-income. (292) In 1998, the maximum amount a family that made between $10,000 and $20,921 a year could receive under the WIS was $500 a year. Once a family made more than $25,921 a year, they were not eligible for any portion of the WIS. (293) The WIS and the CTB were then combined in 1998 to create the Canada Child Tax Benefit (CCTB). The federal government continues to pay the CCTB to all low-income families and a number of middle income families with children under the age of 18. (294)

The National Children’s Agenda (NCA) was announced in the 1997 Speech from the Throne, which gave rise to the National Child Benefit (NCB) in 1998. The NCB was premised on the principle that families are best off when parents participate in the labour
market. As such, the NCB has three official goals: prevent and decrease the depth of child poverty; ensure that families will be better off as a result of working; and reduce program duplication by streamlining administration.(292, 295) The reasoning behind these goals can be found in the history of the child benefit system. Prior to the introduction of the NCB, there was insufficient coordination between the federal and provincial governments, with the federal government delivering child benefits through the tax system and the provincial governments delivering child benefits through the social assistance system. Moreover, a welfare wall had been created, whereby families that left social assistance for unemployment often lost many benefits such as child benefits and extended health care coverage. The NCB was designed to ensure that families leaving social assistance for employment were not at a disadvantage.(292)

The federal and provincial child benefit programs have become quite complex since 1997, and according to the National Council of Welfare “incomprehensible to most people.”(294) For low-income families, child benefits come in the form of: the CCTB and the NCB. The maximum CCTB basic benefit went to families that had a net family income of $37,178, as of July 1, 2007. For the NCB, the maximum supplement went to those families with net family incomes below $20,883 in 2007. As of July 2006, the CCTB supplement for children under the age of 7 was replaced by a taxable Universal Child Care Benefit (UCCB). The monthly UCCB per child and per month is $100.(294)

On the provincial side of this funding equation, the provinces and territories have always had the option of adjusting their own social assistance or child benefit payments that were equivalent to the NCB. This is commonly termed the NCB clawback.(294) The funds that result from this adjustment process are supposed to be re-invested in new or
enhanced programs that target low-income children.(292) Employed parents get to keep all of their NCB Supplement, whereas the clawback is only enforced for parents on social assistance in Saskatchewan. The clawback was designed to encourage labour participation by parents since the restructured social assistance system did not want to create incentives to remain on social assistance.(294)

In Saskatchewan, clawback funds have been used for a number of initiatives such as programs aimed at housing and shelter allowances; nutrition in school; child care costs for low-income working families; health benefits that target dental services, optometry, prescriptions, etc.; community school projects; and employment support/training.(292) The National Council of Welfare argues that the NCB clawback for families on social assistance is one of the major problems with welfare financing in Canada. For example, the clawback that was not passed onto welfare recipients in Saskatchewan totaled approximately $60 million in 2006-2007.(296)

Some of the clawback funds in Saskatchewan have also been used to implement the KidsFirst Program, announced by the government in April 2001. KidsFirst focuses on prevention and early intervention, targeting children prenatal to age five that are considered vulnerable to social disadvantage. KidsFirst spans government departments, and includes a number of components such as: enhancing prenatal health; providing in-hospital screening; in-depth assessments of families; home visitation; increased access to child care; mental health and addictions services for families; and strengthening community-based supports.(297) At this point, only an evaluation of the home visiting component of KidsFirst has been completed, while a summative evaluation is currently being conducted. The evaluation of the home visiting component found that KidsFirst has
provided emotional support for families, empowered families, and also contributed to reducing social isolation. (298) In all likelihood, however, the programs that are funded with clawback funds have probably not significantly reduced child poverty rates since this is not one of their objectives.

The NCB was originally designed to target and benefit low-income families that were working, and there is some evidence that the NCB has been successful in reducing the rate of low-income among working families. For instance, a NCB Progress Report found that in 2003 the disposable incomes of low-income working families were approximately $2600 higher than they would have been without the NCB. But for those families on social assistance, there is little evidence that the NCB has done much in terms of reducing low-income. (294)

Community-based organizations in Saskatoon have also been working to address poverty in the core neighbourhoods of Saskatoon. For instance, QUINT Development Corporation was formed in the mid-1990s by core neighbourhood residents to enhance core neighbourhood revitalization. Following the creation of QUINT, the organization quickly moved to produce a strategy for making housing available to low-income core neighbourhood residents, with the aid of local credit unions that provided the mortgages. Applicants for housing become part of a housing co-op. By 2007, 110 households were part of QUINT’s Neighbourhood Home Ownership Program. QUINT, more recently, started to provide rental housing, by purchasing two apartment buildings in the core neighbourhoods. (63, 219) QUINT also runs an employment development program called the Core Neighbourhoods at Work. Interview participants for this research were recruited through QUINT’s Core Neighbourhoods at Work program. (63)
Another community-based organization in Saskatoon that addresses poverty and the specific issue of food security is the Child Hunger and Education Program (CHEP). Operating according to the principle that food is a basic human right, CHEP aims to provide quality, affordable, and accessible food in the core neighbourhoods. This type of programming has been necessary in the core neighbourhoods, where the number of grocery stores has severely dwindled over the past 20 years. In fact, the core neighbourhoods have been termed a food desert due to the lack of grocery stores in the area. \(^{(219)}\) The core neighbourhoods also have a high proportion of low-income residents, compared to other neighbourhoods in the city, meaning that access to a vehicle is most likely limited for a number of families.

QUINT and CHEP were two of the main organizations that spearheaded the development of the Station 20 West project in Saskatoon. This project was supposed to be a multi-purpose community centre that would have included: a grocery store, 55 units of affordable housing, a child care centre, a dental clinic, a health clinic, a public library, and offices for community-based organization such as QUINT and CHEP. \(^{(219)}\) Lorne Calvert’s NDP government pledged $8 million in provincial funding to develop Station 20 West in the heart of the core neighbourhoods of Saskatoon. Once the Saskatchewan Party was elected in 2007, however, the provincial funding for Station 20 West was withdrawn. The main reason cited for the withdrawal of funding was that the grocery store in Station 20 West would compete with private businesses. Provincial funds were not supposed to be used for ‘a mall’, in the words of Premier Brad Wall. \(^{(299)}\) Despite the lack of provincial funding for Station 20 West, this project is still set to go ahead, albeit on a much smaller scale. \(^{(300)}\)
4.7 Lived Experience of Poverty and Income Inequality in Saskatoon

The following section presents results from the interview component of this research, which was intended to further validate the pathways and to ascertain the lived experience of low-income families with young children in Saskatoon. All interview participants were considered low-income at the time of the interview. According to the majority of interview participants (n=23), poverty has been worsening in the City of Saskatoon over the past twenty years or so. Only one interview participant felt that poverty had not been increasing in the city, although this participant did mention that housing affordability was an issue that had affected many families. Participants provided many examples that were indicative of deepening poverty, including: many people cannot afford housing; families cannot afford food; homelessness was increasing; some people have resorted to sleeping in tents; couch surfing was increasing; and there was more drug and alcohol use. Many participants noted that people increasingly relied on charitable organizations to survive or make ends meet. For instance, an employed participant noted:

I work with people and they still have to go to the Food Bank. [I’m employed] and I had to start going to the Friendship Inn to eat.

Food insecurity, which occurs when the ability to attain nutritionally adequate food is limited or constrained, was an issue for some interview participants. Food bank usage is an indirect measure of food insecurity.(301) The number of children that used the services of the Saskatoon Food Bank were as follows: 11,637 in 1985, 45,975 in 1990, and 50,054 in 1993. Prior to 1990, child users had been defined as ages 12 and under. From 1990 onwards, child users were defined as ages 17 and under.(302) In 2003, 61,940 children in Saskatoon were served annually by the Food Bank.(303) At present, the Saskatoon Food Bank serves more than 12,000 people per month, of which half are
children. This means that the Food Bank serves approximately 72,000 children each year. Thus, from 1985 to 2009, Food Bank usage by children in Saskatoon increased six-fold, signaling an alarming rate of food insecurity for Saskatoon’s children.

Food insecurity may also be exacerbated by private businesses. One participant noted that grocery stores in her neighbourhood may be preying upon low-income families in order to increase profits. She indicated that the grocery store in her neighbourhood increased the price of food when social assistance cheques were issued.

I’ve gone to the grocery store and you can get a bag of noodles for 15 to 20 cents. And then you go to the grocery store when you get your cheque and they’re just about 50 cents for a bag of noodles.

The recent and significant rise in the cost of living was mentioned by ten participants as a major impediment to raising a family in Saskatoon. Basic necessities such as housing, transportation, and food were simply unaffordable for many families. As a result, budgeting for living expenses often involved a careful balancing act:

I just finally got my power paid off. I don’t know if you’ve seen the commercial where the girl’s trying to decide whether she should eat something or pay the power, but that’s exactly what happened to me.

Over half of the interview participants (n=15) believed it was more difficult to raise a family in Saskatoon than in the past, particularly due to the high cost of living. Two participants felt it was easier to raise children now, mainly because of the services and supports available to families (see section 5.4). Another two participants mentioned there was no difference between raising a family now and in the past.

Eight participants felt the neighbourhood they were residing in was a formidable barrier to raising children. These participants expressed that they did not want to remain
in the core neighbourhoods, where violence and drugs were rampant. But these were the only neighbourhoods they could afford to live in.

Just living where I live it’s constantly cops and things going on. And I don’t have a choice to live there because I can’t afford to live anywhere else so. Every day there’s something. There’s never a dull moment I guess. My house has been broken into about four times and I had the guy that raped a girl in the alley last year run right through my house and run over my girl when she was in her crib. I told my landlord that, and she said “well there’s nothing I can do. I can put you on a waiting list.” I’ve been waiting on that list for about a year now.

Violence is driving a wedge between me and my son. The neighborhood’s driving a wedge between me and my son. My son’s into drugs. The drugs are driving a wedge between me and my son. He’s eight and into drugs. I need to get out of here and I don’t know how.

It’s more dangerous to raise a family now, especially in Riversdale. You can’t let them out after 7. It’s pretty rough. It’s not the way it was, even five years ago. Things have changed. There are a lot of drugs. Drugs have just become more of a problem too, needle drugs. They’re all over back alleys; it doesn’t matter where you go.

I’m stuck in a place that used to be a drug house, where I’ve got people coming up and down my street, in and out of my yard, knocking on my door, banging on my windows. There are gunshots at night, it’s ridiculous.

Another participant felt that there was stigma attached to residing in the core neighbourhoods.

I’d just say the core neighbourhood has affected me a lot. It’s basically stigmatized and it’s been pretty hard. You get stigmatized by employers and by social assistance and the government and different agencies. If I was living across the river it’d be no problem, but seeing as I’m living in a core neighborhood it’s frowned upon. That’s been my experience since I’ve been living here in Saskatoon.

Gangs were terrorizing the core neighbourhoods as well. Many parents were very concerned that if they remained in the core neighbourhoods, their children were more likely to join a gang. The issue of Aboriginal-based gangs has been a concern in
Saskatchewan since the 1990s. Gangs established a greater presence in Saskatchewan in
the mid to late-1990s, largely through correctional centres.(305,306)

I don’t like these gangs in Saskatoon. If I had a choice, I’d demolish it. It started
in the mid ‘90s but as the turn of the century came along that’s where it started
getting worse like after 2000. That’s where even young little kids were trying to
do bad stuff. They recruit these young guys and they make them, you know, they
initiate them. They have to go rob this person or go get into a fight with this one
so they’re recruiting lots of young kids. They make those young kids because the
older ones don’t want to go to jail and to correctional. That’s what they use those
young kids for.

Participants also reported that violence seemed to be increasing in their
communities. They provided firsthand experiences of rape, home invasions, stabbings,
etc. As a result, the majority of participants did not feel safe walking in their own
neighbourhoods, even during the day.

It’s harder to raise a family now because there’s so much violence in the city and
you can’t really be safe even walking around with your baby or if there are kids.
It’s uncomfortable walking around here. There are a lot of hookers and guys tend
to look at you.

A number of participants mentioned that drug and alcohol use in their community
had become visibly worse over the past five to ten years. A few parents mentioned they
constantly worried about their children suffering a needle stick injury due to all the used
needles that littered the sidewalks and streets. After asking one participant why this
increase in drug and alcohol use may be occurring, she replied:

It could be a way to numb yourself, or to forget about how things in your life are
going. Because it’s not very fun to watch your nieces, nephews or your kids go
hungry.

The issue of income inequality was touched upon in some of the interviews. Two
participants explicitly noted, without probing, that low-income families were the most
vulnerable to worsening poverty in the city. While many of these families may have
struggled in the past with financial burdens, the recent economic situation has made this struggle even more pronounced.

Well [for] most of them it was a stretch to make their rent in the first place. It was rob Peter to pay Paul. Welfare would only cover so much and then you had to throw all your bills in a hat and draw out four and those are the ones you pay and everybody else has got to wait. [The rise in the cost of living has an] all around toll on everybody. Even when you’re living in a place, if you have a place, it could be sold out from underneath you in a heartbeat.

Four interview participants believed the gap between the rich and poor was widening in Saskatoon. One participant cited the noticeable differences in affluence between the core neighbourhoods and the neighbourhoods east and north of the South Saskatchewan River. According to six interview participants, the rise in the cost of living and income inequality were directly linked to the recent economic boom in Saskatchewan. It was felt by six participants that the recent economic boom in Saskatchewan and Saskatoon only seemed to benefit certain segments of the population.

When discussing the City of Saskatoon’s decision in 2007 to install lights on the Victoria Bridge at the cost of approximately $.5 million, one participant had this to say about the economic boom in Saskatoon:

The economic boom is doing well for people coming in to the city such as tourists. But for people actually living here I don’t think it is helping because they don’t put any money back into anything, except lights on the bridge. They might as well just go sit there and watch the lights all night.

One participant was particularly angered that abject poverty continues to grow during this supposed time of prosperity:

If this province is on an upswing and it’s so rich and you listen to Brad Wall and all the politicians, why are the people living in the streets? This isn’t a far away place in Africa. This is downtown Saskatoon.

Another participant expressed the need for more regulation during the economic boom:
There has to be more stipulations on the government as to what can be a safe boom for our families. We need better planning by the city and government on how they should manage the growth in this city.

While most participants who discussed Saskatoon’s economic boom were skeptical that it would benefit all families, two interview participants felt that the economic boom had increased the number of employment opportunities available. However, one participant mentioned it was still quite difficult to find employment even in these supposed times of prosperity. A fairly similar sentiment was voiced by another participant, who stated that even though there might be more job opportunities in Saskatoon, these jobs usually only paid minimum wage. This same participant noted that minimum wage was not sufficient to pay rent even when you were working more than full-time hours. A more detailed discussion of low-paid work is in Chapter 6.

4.8 Summary

This exploration of poverty found that since 1980 the poverty rate has essentially not changed in Saskatoon. In Saskatchewan and in Canada, the poverty rate declined by a few percentage points. Child poverty in Saskatoon seems to have declined slightly, according to the available data (which was only available for as late as 2001), although these rates were at odds with the numbers of children that use the Saskatoon Food Bank. This could indicate a deepening of poverty among those that were already poor. Provincial data regarding the low-income gap supports this interpretation. At the provincial level, the rate of child poverty almost doubled. In Canada, child poverty increased slightly.
The distribution of income, or income inequality, has been worsening across all levels of social aggregation examined: the city, the province, and the country. As a result of increased income inequality in Canada, the share of income that was going to the bottom 80% of Canadian families was smaller in 2004 than it was almost three decades ago, whether this was measured by income before- or after-taxes and transfers. These findings suggest that the Canadian and Saskatchewan governments have reduced their redistributive function, especially over the past decade.(186)

Canada and Saskatchewan’s targeted response to childhood poverty, the NCB, has not been terribly effective. The NCB has been criticized for entrenching and deepening the stigma attached to social assistance recipients. Considerable criticism is directed at its emphasis on work incentives that aim to take children off welfare. Moreover, since social assistance recipients do not receive the NCB in Saskatchewan, this reinforces the stereotype that social assistance recipients are unfit parents and are not able to manage money.(98)

Geographical disparities in the City of Saskatoon in terms of income increased over the study period. Increased disparities in the determinants of health can often incur widened disparities in child health outcomes.(279,307) For instance, in its 2008 Health Status Report, the Saskatoon Health Region found that the gap between life expectancy in the core neighbourhoods versus all other neighbourhoods in the city widened from 4.1 years in 1997 to 5.4 years in 2004.(308) Yet, this thesis study was unable to definitively determine if geographical disparities across Saskatoon’s neighbourhoods exacerbated disparities in child health outcomes in spatial terms. Further data is required to
substantiate or disprove the relationship between geographic disparities and disparities in child health outcomes.
Chapter 5. Charting Pathways from Globalization to Child Health: Welfare State and Program Access

5.1 Introduction

As outlined in Chapter 2, neoliberal globalization is often associated with a decline of the welfare state. The welfare state has the potential to ameliorate the income inequalities that were discussed in Chapter 4. Yet, neoliberal globalization tends to encourage governments to privatize responsibility for social issues, which is most acutely witnessed in the devolution of responsibility for addressing problems from different levels of government to non-governmental organizations and sometimes even to families and individuals.

5.2 The Retrenchment of the Welfare State

Neoliberalism is usually associated with a retrenchment of state welfare policies in order to encourage economic efficiency, and this retrenchment is often expressed in decreased social spending. When reviewing the body of literature devoted to investigating the welfare state and neoliberal globalization, Schulze and Ursprung suggest it is important to not only look at aggregate levels of social welfare spending, but to also determine precisely where spending increases or decreases have occurred with disaggregated data. (309)

In Canada, federal government expenditures increased from $136,559 billion in 1989 to $237,021 billion in 2007 in unadjusted dollars. According to the percentages in Table 5, federal government expenditure increased in the areas of health and social
services. Federal government expenditure declined in the areas of social assistance, education, labour, employment, and immigration, and housing.\(^{(224)}\)

**Table 5: Expenditures in Social Areas as Percentage of Total Expenditure, Canada, 1989 and 2007**

<table>
<thead>
<tr>
<th>Federal Social Expenditure as % of Total Expenditure</th>
<th>1989</th>
<th>2007</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of health expenditures</td>
<td>5.7</td>
<td>10.9</td>
<td>91.2</td>
</tr>
<tr>
<td>% of social services expenditures</td>
<td>28.7</td>
<td>31</td>
<td>8.0</td>
</tr>
<tr>
<td>% of social assistance expenditures</td>
<td>27.4</td>
<td>13.3</td>
<td>-51.5</td>
</tr>
<tr>
<td>% of education expenditures</td>
<td>3.3</td>
<td>2.4</td>
<td>-27.3</td>
</tr>
<tr>
<td>% of labour, employment, and immigration</td>
<td>1.4</td>
<td>0.9</td>
<td>-35.7</td>
</tr>
<tr>
<td>% of housing expenditures</td>
<td>1.2</td>
<td>0.9</td>
<td>-25.0</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.\(^{(224)}\)
On the provincial side, Saskatchewan’s total expenditures increased from $5,326 billion in 1989 to $9,777 billion in 2007. In Saskatchewan, health and education were the only sectors that received an increased percentage of funding from the province, although the increase in funding for education was marginal. Other sectors such as social services, social assistance, labour, employment, and immigration, and housing have all received smaller proportions of provincial expenditure since 1989.(224)

Table 6: Expenditures in Social Areas as Percentage of Total Expenditure, Saskatchewan, 1989 and 2007

<table>
<thead>
<tr>
<th>Proportional Social Expenditure as % of Total Expenditure</th>
<th>1989</th>
<th>2007</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of health expenditures</td>
<td>21.3</td>
<td>34.6</td>
<td>62.4</td>
</tr>
<tr>
<td>% of social services expenditures</td>
<td>13.4</td>
<td>12.3</td>
<td>-8.2</td>
</tr>
<tr>
<td>% of social assistance expenditures</td>
<td>4.6</td>
<td>3.2</td>
<td>-30.4</td>
</tr>
<tr>
<td>% of education expenditures</td>
<td>15.4</td>
<td>17.7</td>
<td>14.9</td>
</tr>
<tr>
<td>% of labour,</td>
<td>0.3</td>
<td>0.2</td>
<td>-33.3</td>
</tr>
</tbody>
</table>
To view the trajectory of government expenditure, it is common to describe government expenditure as a percentage of GDP, and this is presented in Table 7.
<table>
<thead>
<tr>
<th></th>
<th>Saskatchewan</th>
<th>Percentage Change</th>
<th>Canada</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall government expenditure as % of GDP</strong></td>
<td>26.7</td>
<td>17.9</td>
<td>20.8</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Health expenditures as % of GDP</strong></td>
<td>5.7</td>
<td>6.0</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Social services expenditures as % GDP</strong></td>
<td>3.6</td>
<td>2.3</td>
<td>6.0</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Social assistance expenditures as % GDP</strong></td>
<td>1.2</td>
<td>0.6</td>
<td>5.7</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Education expenditures as % of GDP</strong></td>
<td>4.1</td>
<td>3.2</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Labour, employment, and immigration expenditures as % of GDP</strong></td>
<td>0.07</td>
<td>0.04</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Saskatchewan</td>
<td>Percentage Change</td>
<td>Canada</td>
<td>Percentage Change</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Housing expenditures as % of GDP</td>
<td>0.6</td>
<td>0.3</td>
<td>-50.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Overall, government expenditure as a percentage of GDP declined in both Canada (-67.3%) and Saskatchewan (-70.4%). In addition, social spending decreased considerably in Canada and Saskatchewan. By disaggregating social spending by sector, it is clear that only the health sector received an increased proportion of social spending as a percentage of GDP. All other sectors received a decreased share of social spending as a percentage of GDP. This occurred despite the great deal of evidence that suggests while health care contributes to reducing the burden of illness, infirmity, and recovery from disease, it is social spending in sectors such as education, housing, and social services that would lead to improvement in health equity. (30, 107, 310)

Data prepared by the OECD also confirmed a decline in government expenditure as a percentage of GDP in Canada. The OECD found that only four OECD countries (Greece, Japan, Portugal, and Turkey) did not follow a similar trend of declining social spending over the past couple of decades. (311) Moreover, the OECD’s Starting Strong research series found that Canada spends less on benefits and services for families and young children compared to most other OECD countries (refer to Figure 30). (183)
Figure 30: Public Spending on Services/Benefits for Families with Young Children as a Percentage of Gross Domestic Product, 2006\textsuperscript{15}

Sizable declines in government expenditure as a percentage of GDP indicate a retrenchment of the welfare state in Canada and Saskatchewan. A retrenchment of the welfare state has the potential to seriously and negatively affect child health, with fewer dollars spent on programs that are fundamental to early childhood development such as early childhood education, child care, or income security.

5.3 Service and Program Access

Service and program access is largely determined by the type of the welfare state that exists within a jurisdiction, as well as the degree of social spending. The following sections explore the influence of the liberal welfare state in Canada and in Saskatchewan and reduced social spending in terms of some of the most important services and

\textsuperscript{15} Country abbreviations: AT=Austria, AU=Australia, BE=Belgium, BE-Fl=Belgium (Flanders), BE-Fr=Belgium (French community), CA= Canada, CZ=Czech Republic, DE=Germany, DK=Denmark, FL=Finland, FR=France, HU=Hungary, IE=Ireland, IT=Italy, KR=Republic of Korea, MX=Mexico, NL=Netherlands, NO=Norway, PT=Portugal, SE=Sweden, UK=United Kingdom, US=United States
programs for child health such as social assistance, health care, child care, and early childhood education. Service and program access related to the other pathways that were explored in this study, such as housing and employment for parents, are discussed in subsequent chapters.

5.3.1 Social Assistance

With the introduction of the Canada Assistance Plan (CAP) in 1966, the Canadian social policy environment was dramatically altered. Under CAP, the federal government paid for half of all social programs in the provinces, although these programs had to adhere to the federal government’s stipulations and financing regulations. Federal government stipulations included: the provinces should provide assistance to every person in need, assistance rates should be based on people’s need, appeal mechanisms to contest eligibility barriers need to be established, work is not required for assistance, and access to assistance should not be determined by province of origin.(288)

From 1977 to 1996, health services and education were financed separately from CAP under the Established Programs Financing (EPF). Prior to the introduction of EPF, education and health were financed on a fifty-fifty basis between the federal government and the provinces. EPF involved a new formula, where federal contributions to these sectors were a combination of cash transfers and tax points. The main impact of the EPF was to devolve political responsibility for health and education from the federal government to the provincial and territorial governments.(100)

Prior to the signing of the FTA in 1988, the Progressive Conservative’s “roll-back” of the welfare state was exercised with some restraint. The welfare state was first
reduced through the de-indexation of transfers such as the Family Allowance program, old age security transfers, and transfers from the federal government to the provinces under the EPF. As a result of deindexation, universal programs that had once been disbursed through the income tax system became much more selective. The “rolling-back” of the welfare state became more pronounced in the early 1990s, when the federal government put a cap on CAP payments to Canada’s three wealthiest provinces: Alberta, British Columbia, and Ontario. Welfare was shared on a 50/50 basis with the provinces until 1990, but due to the cap on CAP the federal government’s share of welfare expenditures decreased to 28% by 1993.(312)

As of April 1, 1996, the Canada Health and Social Transfer (CHST) replaced CAP and EPF, with the CHST providing funding for health, post-secondary education, social assistance, and social services in one block fund.(313) The IMF had recommended in 1995 that Canada eliminate CAP and replace it with a block funded transfer.(204) The introduction of the CHST represented diminished federal funds for social policy in the provinces, as depicted in Figure 31.(100) In April 2004, the CHST was further split into two separate transfers: the Canada Health Transfer (CHT) for health care; and the Canada Social Transfer (CST) for education, social assistance, and social services.(314)
At the provincial level, in Saskatchewan in 1984, social assistance was reformed. The primary objective of these reforms was to create short-term employment opportunities and training for welfare recipients that were considered employable. Reforms included slight increases to benefits for seniors and families, although for families the benefit increase only entailed an extra $5-$10 a month. In order to finance employment opportunities and training, the Progressive Conservative government stipulated that single unemployed ‘employables’ were to look for work. If these single ‘employables’ did not locate work after three months, their benefits were to be reduced from $530 a month to $345 a month. In addition, more strict screening processes were introduced for social assistance.

Devine’s social assistance programs were severely oversubscribed, and often did not prepare participants for long-term employment. According to MacKinnon, these programs were based on providing cheap labour to employers and/or encouraging welfare
recipients to work no more than twenty hours a week so they would qualify for Employment Insurance (EI), a federal government responsibility. The Devine government also instituted legislation that made it more difficult for many welfare recipients to return to work. For instance, the provincial government ended the free bus passes that had been available to all welfare recipients and seniors.(117) Despite Devine’s welfare reforms, social assistance caseloads continued to rise and food bank usage also increased in the province.(316) These reforms were not successful at encouraging welfare recipients to work since they created even more barriers to employment.

What the Canadian programs overlook or downplay are the structural barriers to market income: the availability of work in the local economy, family responsibilities that might interfere with full-time employment, the availability of child care, and any idea of social responsibility for children. Individual responsibility has taken over for social responsibility.(286)

When the NDP defeated the Progressive Conservative government in 1991, the new government criticized the previous government for paltry welfare rates, unfair controls, and treating people on welfare without dignity. These recommendations were acted upon in some instances (e.g., the elimination of mandatory cheque pick-up, indexed benefits), but were largely reversed later in the 1990s when the CHST was introduced.(317) Since the CHST was a block-funded program, it allowed the provinces to experiment with welfare delivery. All federal government stipulations that had been set out under CAP were eliminated, except for the requirement that a person applying for assistance must be residing in the province.(100) Across the country, this has led to the implementation of workfare approaches to welfare, an approach that is based on the
assumption that individuals and families thrive most when they are part of the labour market.(100,313)

After the introduction of the CHST, the Saskatchewan government’s initial forays into social assistance redesign occurred when the Saskatchewan government introduced the Provincial Training Allowance (PTA) in 1997, which continues to be administered by the Government of Saskatchewan. This allowance is provided to low-income adults attending adult basic education or related training programs that facilitates their participation in the labour market. The PTA provides assistance for living expenses such as food, shelter, and clothing, but it does not provide assistance for tuition, books, or other related education costs.(318) The PTA is delivered by Saskatchewan’s Ministry of Education, therefore, the subscribers to this program do not appear as social assistance recipients. Hunter speculates this decision was prompted by a desire to reduce the social assistance caseload, further bolstering the apparent success of welfare reform in the province.(319)

In the summer of 1998, the Government of Saskatchewan unveiled its approach to workfare: the Building Independence-Investing in Families initiative. The provincial social assistance program was named the Saskatchewan Assistance Plan (SAP). The Building Independence initiative included six programs, with three directly targeted at child poverty, including:

- the Saskatchewan Employment Supplement (SES) is a monthly grant paid to supplement income for low-income working families and to offset child-related costs of employment;
• the Saskatchewan Child Benefit (SCB) is a monthly allowance paid to all low-income families with children, regardless of work status; and

• the Family Health Benefit (FHB) program provides supplementary health benefits to low-income, working families.(313)

Children’s basic benefits in Saskatchewan were to be provided through the SCB, which was created in 1998. The SCB was paid along with the CCTB and the NCB.(320) The SCB was adjusted by the amount of the federal investment in the NCB. In July 2004, families with two children were eligible to receive up to $214 a year under the SCB. Single parent families were eligible to receive up to $420 a year.(321) As of July 2005, two-parent families with one child were no longer eligible for the SCB, and in 2006 two-parent households with two or more children were no longer eligible. Only a lone parent in Saskatchewan, regardless of the number of children, is still eligible for the SCB.(294)

Following the introduction of workfare in Saskatchewan under the NDP government in 1998, the number of social assistance cases dropped precipitously. In Saskatchewan, the number of social assistance recipients reached an all-time high in 1994 at 39,405, and has substantially decreased since then. As of 2006, there were 26,541 social assistance recipients in the province. In Saskatoon, the number of people on social assistance was estimated to be 11,473 as of December 2007. In 1989, this number was 14,351.(322)
The decrease in caseloads is often attributed to fewer people qualifying for welfare, rather than the ‘good news’ story of people leaving welfare for quality, paid employment. Eligibility requirements were tightened considerably under workfare, meaning that a large proportion of people did not qualify for social assistance any longer.

A further change to social assistance in Saskatchewan occurred in 2003, when the government introduced the Transitional Employment Allowance (TEA). TEA regulations stated that it was directed towards “persons in need who are participating in certain pre-employment programs” or those who would not require welfare in the long-term. The main objective of TEA was to further ‘build independence’ among social assistance recipients. TEA is not viewed as social assistance by the government, but as a means for
people to become independent and enter the workforce. Recipients of TEA receive fewer benefits than those on social assistance.\(^{313,324,325}\)

Initially, TEA recipients were transferred to SAP after three to four months, if they did not find employment. However, in May 2005, TEA legislation was altered. TEA is the program that most applicants to social assistance now qualify for and recipients can now remain on TEA for an indefinite amount of time. As mentioned earlier, TEA recipients receive fewer benefits than those on SAP. For example, in 2005, a single parent with one child under SAP received a total of $580 per month, after combining both the basic allowance and the shelter allowance. This same single parent would receive $66 less per month under TEA.\(^{325}\)

In 1994, the Government of Saskatchewan chose to pay utility bills in full for social assistance recipients. However, when TEA was introduced in 2003, an accompanying policy change was to introduce flat rate utility payments for those on TEA. The provincial government soon extended this decision to include most people on forms of social assistance. Due to the harsh climate in Saskatchewan and consistently increasing utility rates, many families on social assistance use their basic allowance to pay for utilities. As a result, less money is available for necessities such as food and clothing.\(^{325}\)

In 2008, in response to the housing affordability crisis that plagued Saskatchewan’s cities in recent years (refer to Chapter 7), the provincial government raised the monthly shelter allowance on social assistance by a minimum of $5 to a maximum of $75. Despite this modest increase, shelter allowances under SAP or TEA are woefully inadequate to afford any type of housing in Saskatoon.\(^{65}\) For example, in
2009, after the increase to the shelter allowance, the maximum amount provided for shelter to a family with one or two children on SAP was $598. A family with five or more children was allocated a maximum of $760 a month for shelter. At the end of 2008, the average rent for a two-bedroom suite in Saskatoon was $841, and this was predicted to increase to $860 in 2009.

The National Council of Welfare has also validated that social assistance rates are often insufficient. In all of the years that the National Council of Welfare has been tracking welfare incomes, social assistance rates have never reached the LICO thresholds in any of the provinces. As evident in Table 8, social assistance rates in Saskatchewan, regardless of family type, were not enough to meet the LICO in 2007. Single employable persons on welfare were subject to the largest gap between income and the LICO, whereas a lone parent with one child experienced the smallest gap between income and the LICO. Across Canada social assistance benefits do not provide for much more than basic subsistence, although this has not even been achieved for some families.

Table 8: Welfare Incomes in Before- and After-Taxes Low-Income Cut-Offs, Saskatchewan, 2007

<table>
<thead>
<tr>
<th>Type of Recipient</th>
<th>Total Welfare Income</th>
<th>Before-Taxes LICO</th>
<th>After-Taxes LICO</th>
<th>Before-Taxes LICO Gap</th>
<th>After-Taxes LICO Gap</th>
<th>Total Welfare Income as % of Before-Taxes LICO</th>
<th>Total Welfare Income as % of After-Taxes LICO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Employable</td>
<td>$9,105</td>
<td>$18,659</td>
<td>$15,184</td>
<td>-$9,554</td>
<td>-$6,079</td>
<td>49%</td>
<td>60%</td>
</tr>
<tr>
<td>Person with a Disability</td>
<td>$9,772</td>
<td>$18,659</td>
<td>$15,184</td>
<td>-$8,887</td>
<td>-$5,412</td>
<td>52%</td>
<td>64%</td>
</tr>
</tbody>
</table>
Welfare restructuring in Saskatchewan reflects broader trends in the international political landscape. According to the literature, there are two approaches to welfare restructuring in Western countries. The first approach of Human Capital Development involves training and education in order to allow individuals to enter the job market in positions that pay above the minimum wage. The second approach is termed the Labour Force Attachment model and it encourages workers to move into any position, regardless of pay. In Canada and Saskatchewan, the Labour Force Attachment model has been favoured. The Labour Force Attachment model is beneficial for the business community, by increasing the labour supply and decreasing wages.

Similar to Canada, countries in the EU have adopted an employment-centred strategy for social assistance. However, unlike the Canadian context, European countries that are either conservative or social-democratic states have emphasized well-paid quality jobs and the human capital development approach to welfare restructuring. European countries have realized that work does not ensure an escape from poverty, recognizing that transfers and services such as child care are necessary for many people. In addition, EU countries acknowledged that poverty, health, and housing are inextricably linked. This has led many EU countries to supply more generous benefits for housing and the building of social housing units.
5.3.2 Lived Experience of Social Assistance in Saskatoon

Quantitative data regarding the social assistance system in Saskatchewan only provides a partial picture of social assistance in the province; it does not reveal the nature or impact of social assistance for recipients. Interviews were used for the purposes of triangulation and to elicit the lived experience of social assistance recipients and their families. More than half of the interview participants (n=19) in this study were on some form of social assistance such as disability, SAP, PTA, or TEA. The majority of participants on social assistance had been employed in the past. Past employment experiences generally involved: temporary work; not enough hours; low wages; and very few benefits.

When asked about their experiences with social assistance, eight participants explicitly mentioned the negative experiences they had with social assistance, which took two forms: a) meager benefits that did not cover the cost of living; and b) negative interactions with case workers. First, nine participants that were on social assistance felt the rates were adequate to survive. Ten of the participants on some form of social assistance felt that social assistance rates were insufficient and were not enough to subsist on. Many participants noted they could not afford to buy food, and they sometimes had to resort to accessing charitable organizations.

Places like the Salvation Army, Friendship Inn, and the Food Bank are usually full. And there’s another place, the Clothing Depot and the City Centre Church, I think they receive a lot of people who are barely scrapping by on welfare.

And you see more people eating at the Friendship Inn because they have to cut into their basic allowance [from social assistance] to pay the difference on their rent.

They give you so much a month like $450 a month for a family. But then some people are renting a house that’s like $650, so then they have to take that $200 out
of there and then they’re left with $200 for groceries and other expenses. Sometimes that isn’t even enough to last the whole month, especially if there are extra mouths.

A number of interview participants relayed stories of negative interactions with case workers. For instance, one woman who was temporarily residing in a shelter had this to say regarding her case worker:

My social worker won’t help me out for anything until I find a place. She won’t give me my basic allowance, and when I want something she acts like she’s opening her wallet and giving it to me out of her own purse or something.

Another woman also noted negative experiences with the social assistance system:

They’re ignorant, they’re rude. People mess up things for other people and then they start judging families like me that are struggling to death to keep my children with me and not be taken away to other homes when there’s people out there doing drugs and needles in front of their kids and not feeding them and then I’m the one that loses my kids and struggling and they don’t see it, they don’t care. They’re really, I don’t know. I have a lot of troubles with Social Services. I find them very ignorant.

In relation to the economic boom occurring in Saskatchewan at the time of the interviews, some participants mentioned that social assistance rates were not keeping pace with the cost of living, particularly housing costs.

You don’t have really much money to spend on your children or anything or for basic needs and that’s because it all has to go to the rent or for groceries and it’s not enough. The supplements that social assistance gives each individual with a family are not enough because of the increase in the rent.

It was a lot easier in the past to make ends meet because the rent wasn’t so high, but nowadays it’s just unbelievable. It’s hard to keep up with the rent and pay the power and everything when you have to dig into your basic allowance and pay for your housing and your basic needs.

A number of participants were hoping to leave social assistance for employment since social assistance provided very little flexibility in terms of what they could buy or do.
It’s really hard right now. Right now I live at the Y and they give you meals and stuff, but in the morning you have to sign that thing like for me, him and her. We get two sausages and two eggs for breakfast and they put them in little baggies. Then I asked my worker if I could have at least my basic allowance so I can buy my own groceries and feed my kids whenever I want, whenever they’re hungry. And she says: “No. You’re not getting money until you find a place and when you find a place I’ll give you whatever you’re entitled to.”

I find working better than being on assistance. There’s just more freedom. You only get so much money once a month on assistance and you have to budget it and if something comes up you can’t go. If the Fair comes or something, you can do things like that if you’re working.

Some of the participants on social assistance had been on social assistance for most of their lives. These participants had grown up in families that were on social assistance, so they had a lifetime of experience with this system. For the participants with a lengthy history of social assistance engagement, a common sentiment echoed was that social assistance rates used to be sufficient and were enough to subsist on. Insufficient social assistance rates in Saskatchewan were cited as beginning approximately ten years ago. This agrees with the finding that social assistance requirements have become more stringent since 1998 in Saskatchewan.

My mom, for instance, she’s been on assistance for a while. While we were growing up, she was on assistance as well. And we seemed to get along, we used to get by fine back then. So I think it is way harder now than ten years ago because my mom was able to survive with six kids. And now she’s got two, but she can’t look after them.

Eligibility requirements were also discussed with interview participants on social assistance. Two interview participants felt that it was relatively easy to qualify for social assistance, although in the case of one of the participants her children were young and case workers mentioned that once the children were older the participant would need to find employment. Six interview participants noted difficulties in obtaining social
assistance, citing stringent eligibility requirements as one of the main challenges. In particular, fathers, single or otherwise, had difficulties qualifying for social assistance.

5.3.3 Health Care

Apart from the kindergarten to grade twelve education system, health care is the only universal social program in Canada and all the provinces. The province of Saskatchewan actually spearheaded a universal public health insurance system in Canada, when the province introduced the first universal medical insurance plan in the country in 1962. In 1966, the federal government established the Medical Care Act, which allowed access to medical care based on need rather than income. By 1972, all of the provinces and territories had signed onto the Medical Care Act.(181)

Under Saskatchewan health insurance, all residents are covered for: medically necessary services provided by physicians, as defined by the provincial government; occupational and physiotherapy services; screening and immunization services; Sexually Transmitted Infection treatment; HIV testing; services for treating alcohol and drug abuse issues; mental health services; and problem gambling services.(329)

With the introduction of Saskatchewan’s approach to workfare, Building Independence, the FHB program provided supplementary health coverage for dental, optical, emergency ambulatory, and chiropractic services for families that qualify for the SCB and the SES. It was believed that the health benefits provided under social assistance had been creating a disincentive to work, so the Government of Saskatchewan aimed to provide benefits for low-income, working families.(252) Supplementary coverage under the FHB is largely confined to children, and usually not extended to
parents. For instance, only chiropractic services, a $100 semi-annual deductible for drug costs, and eye examinations once every two years are extended to parents under the FHB program. Children, on the other hand, are covered for dental care, eye care, drug expenses, emergency ambulatory care, medical supplies and appliances, and chiropractic services under FHB. The impact of the FHB program has not been assessed at this point.

5.3.4 Child Care

The Progressive Conservative government led by Mulroney attempted to institute a national child care system, after the Task Force on Child Care recommended a comprehensive child care system. In fact, Canada briefly had a National Child Care Strategy in 1987, although the intent of this Strategy was not to create a national child care system, but rather to improve tax relief for child care and to create 200,000 new child care spaces in the country. Tax relief was implemented, but the intention to create 200,000 new spaces was abandoned in 1992, when the Progressive Conservatives felt that other areas of child welfare (e.g., nutrition, abuse) were of higher priority.

Prior to 1996, federal funding for child care was provided through CAP, with a specific program that provided subsidies for low-income children on a cost-shared basis with the provinces. With the elimination of CAP, however, federal funding that was specifically earmarked for child care was abandoned. In the CHST, there was no specific money that was allocated for child care. The federal government still provides some funding for child care in the form of tax benefits such as the Child Care Expense.
Deduction (CCED). The CCED was introduced in 1972 to allow parents who work or study to deduct some of their child care expenses from their federal income tax.

In 1993, the Liberal government had promised to expand child care. However, this was not met with any commitments until the turn of the century. As a component of the 2000 Health Accord, the federal government, the territories, and nine of the provinces (Quebec chose to opt out) signed onto the Early Childhood Development (ECD) initiative in order to increase and expand provincial programs for young children and families. The funding provided through this initiative was to be used in four general areas for new or existing programs: 1) the promotion of healthy pregnancy, birth and infancy; 2) improving family functioning; 3) fostering better early childhood development, learning and care; and 4) strengthening community supports. The provinces were allowed to establish their own programs and policies based on these four general areas. Moreover, to ensure accountability in spending these federal transfers, the provinces were required to publicly report the amount spent on ECD initiatives every year. However, federal funding was not dependent on performance and/or outcomes. Provincial governments were just required to report on the amounts spent on ECD.

The province of Saskatchewan committed to: expanding early childhood development programs in the areas selected by the federal government; reporting annually on progress and funds spent; and providing provincial funding in the four areas outlined by the federal government, as needed.

In 2003, a further commitment to federal funding for early childhood development, specifically child care, was made when the Multilateral Framework Agreement on Early Learning and Child Care was introduced. This Agreement was a
product of consultation between federal, provincial, and territorial governments. (333) Saskatchewan’s response to the 2003 Multilateral Framework was quite positive. (297) Further, in 2005, the federal government entered into bilateral agreements-in-principle with nine provinces, including Saskatchewan, between April and November 2005. Due to the bilateral agreements-in-principle, another $5 billion was committed by the federal government to develop a national child care system. (334)

The Child Care Advocacy Association of Canada (CCAAC) assessed the spending on early childhood development across the provinces, after the implementation of the ECD initiative, the multilateral agreements, and the bilateral agreements. To conduct this assessment, the authors used public reports since one of the stipulations of these initiatives and agreements was to publicly report how much money was infused into early childhood development. Federal transfers in Saskatchewan were used in some years to increase the number of licensed child care spaces and the average amount of child care subsidies. For example, the number of licensed child care spaces in the province increased from 4,650 in 2000 to 6,317 in 2005/2006. However, even though the amount of a monthly child care subsidy increased ($240 in 2002/2003 and $283 in 2005/2006), the number of child care subsidies provided actually declined (3,535 in 2002/2003 and 3,375 in 2005/2006). The public reporting that emerged from Saskatchewan regarding these initiatives was less than clear, with some federal transfers that were not completely accounted for. In fact, this review found that no government in Canada has fully met their public reporting requirements since 2000. (334)

The federal Conservative government elected in January 2006 announced that the bilateral child care agreements with the provinces would be cancelled in one year’s time.
All of the provinces that had entered into bilateral agreements received federal funding until March 31, 2007. To replace the bilateral agreements, in 2006, the federal government announced a $1200 per year Choice in Child Care Allowance for each child under the age of six, and a Community Child Care Investment Program. The latter program was intended to provide tax credits to employers who created new child care spaces. This decision was justified on the grounds that it provided ‘choice’ for families. Moreover, this decision was consistent with the neoliberal tenet of privatization of risk, where child care responsibilities were assigned to the individual and government involvement was discouraged.

There was very little uptake of the Community Child Care Investment Program; therefore, in September 2006, the Minister of Human Resources and Social Development created a ministerial advisory committee to re-design this program. In March 2007, the federal government redirected the $250 million a year it had committed to the Community Child Care Investment Program to the provinces and territories to support the creation of child care spaces. In the 2007 budget, the federal government announced a 25% tax credit for businesses that created child care spaces.

A 2006 OECD review of early learning and child care in twenty OECD member states found that Canada spends the least among the countries reviewed on early learning and child care, as a percentage of GDP. Canada spent approximately 0.2% of GDP on early learning and child care, whereas Denmark spent 2.0% of GDP in this sector (refer to Figure 33). Canada’s low spending levels in the area of early learning and child care is reflected in comparative data regarding access, enrolment, and costs to parents (refer to Figures 34 to 36).
Figure 33: Public Spending on Early Learning and Child Care Programs for Children Ages 0 to 6 as Percentage of Gross Domestic Product, 2006\textsuperscript{16}

Source: Organisation for Economic Cooperation and Development, 2006.(183)

Figure 34: Costs to Parents for Early Learning and Child Care Programs, 2006\textsuperscript{12}

Source: Organisation for Economic Cooperation and Development, 2006.(183)

\textsuperscript{16} Country Abbreviations: AT=Austria, AU=Australia, BE=Belgium, BE-Fl=Belgium (Flanders), BE-Fr=Belgium (French community), CA= Canada, CZ=Czech Republic, DE=Germany, DK=Denmark, FL=Finland, FR=France, HU=Hungary, IE=Ireland, IT=Italy, KR=Republic of Korea, MX=Mexico, NL=Netherlands, NO=Norway, PT=Portugal, SE=Sweden, UK=United Kingdom, US=United States
Canada’s poor record in early learning and child care was highlighted once again when UNICEF assessed the 25 most affluent countries in the world according to ten benchmarks for early learning and child care: parental leave of 1 year at 50% of salary; a national plan with priority for the disadvantaged; subsidized and regulated child care services for 25% of children under the age of three; subsidized and accredited early
education for 80% of four-year-olds; 80% of all child care staff are trained; 50% of staff in accredited early education services are educated with the relevant qualification; minimum staff-to-child ratio of 1:15 in preschool; 1.0% of GDP is spent on early learning and child care; child poverty rate of less than 10%; and almost universal essential child health services. Canada only achieved one out of the 10 benchmarks: 50% of staff in accredited early education services was educated with the relevant qualification.\textsuperscript{(336)}

While the federal government has been involved in child care to an extent, child care in Canada is actually a provincial jurisdiction. Most municipal governments in Canada have no role or a very circumscribed role in terms of early education and development, with the exception of kindergarten programs that are usually publicly funded and controlled by school boards at the local level.\textsuperscript{(337)} Regulated child care varies from province to province. In Saskatchewan, the government has favoured non-profit provision, resulting in a publicly funded system that is privately delivered. All provinces have emphasized child care for low-income families, generally in the form of subsidies. As a result, there have been quite different child care options for low-income families, compared to middle-income and upper-income families. In Saskatchewan, the Child Day Care Subsidy is provided to low-income parents that require more than 36 hours of child care per month, are employed, looking for work, in school, or in training.\textsuperscript{(288)}

Data on licensed child care spaces in Saskatoon was only available from 2001. During the period 2001 to 2007, the number of child care spaces increased from 1865 to 2146 in the city.\textsuperscript{(338)}
At the provincial level, the number of licensed child care spaces increased from 2791 in 1980 to 8850 in 2007. Despite these increases in the number of licensed child care spaces, the province of Saskatchewan received a ‘C’ grade from the Canadian Labour Congress in their 2008 Report Cards on Child Care. This grade was based on the fact that average child care fees increased by over $400 between 2001 and 2005 in the province, and they continue to rise. Fee increases meant child care was unaffordable for many families, despite the availability of subsidies for a select few. Moreover, there were only enough regulated spaces in the province for 6% of the children in Saskatchewan. A lack of funding may be partially responsible for the lack of child care spaces in Saskatoon and Saskatchewan. According to a 2008 CCPA report, Saskatchewan spends less than any other province on child care, except for Alberta.

Child care access in Saskatchewan is far from the universal model that was established in many European countries and the province of Quebec. In 1997, Quebec fundamentally restructured their child care provision system and introduced universal
access to regulated child care for $5 per day in its White Paper, *Les enfants au coeur de nos Choix*. Quebec provides child care for not only low-income families, but for families of all means. In fact, Quebec is the only province where child poverty rates have been steadily declining over the past decade. This decline is often attributed to the progressive package of family support benefits that were implemented in 1997 such as universal child care.

### 5.3.5 Early Childhood Education

A plethora of studies have shown that participation in preschool promotes school readiness, and narrows the differential between low-income children and others in terms of scholastic achievement. Universal programs are probably the most successful at fostering early childhood development. The OECD recommended that in order to maximize social and economic investments in the long-run, Canada should implement free early education for *all* three- and four-year-olds.

It was estimated in 2001 that approximately 40% of children aged three to five in Saskatchewan attended preschool. Meager participation rates in preschool programs in Saskatchewan were due to the fact that universal preschool has not been implemented in Saskatchewan, although the province has introduced a few targeted preschool programs. For instance, in 1997, Saskatchewan Education implemented a part-day preschool program for three- and four-year-olds that were considered at-risk.

---

17 The concept of ‘at-risk’ is commonly used in the fields of epidemiology and education to describe a group of individuals predisposed to either negative health outcomes (e.g., diabetes, obesity) or negative social outcomes (e.g., poor academic achievement, delinquency). Using the term ‘at-risk’ has been criticized for several reasons, including negative labeling that can lead to adverse psychological effects in those that are labeled. ‘At-risk’ labeling has been deemed inherently sexist, racist, and classist. Moreover, by applying interventions to only those deemed to be ‘at-risk’, this approach may not be very effective since this excludes a large proportion of the population that could benefit from the intervention.
Apart from Saskatchewan Education’s targeted preschool program, other targeted preschool programs have been introduced in Saskatoon. For example, after teachers noticed that children living in poverty were often behind their peers when entering kindergarten, four preschool programs were created in the core neighbourhoods of Saskatoon in 1991. These preschool programs were non-profit and funded by an array of stakeholders, including: the province, service clubs, professional association, churches, and concerned citizens. These same stakeholders funded the Saskatoon Inner City Preschool Foundation, which was created in 1994 and became the Saskatoon Preschool Foundation in 1998. The Foundation advocates for preschool services for all and also provides funding for low-income children to attend preschool.

Community Schools in the province also deliver preschool programs for children considered ‘at-risk’. In 1980, the province of Saskatchewan established 11 Community Schools in the core neighbourhoods of Saskatoon, Regina, and Prince Albert. Community Schools were intended to address urban Aboriginal poverty in the province. Community schools were based on a relationship between the school and the surrounding community, with an emphasis on encouraging participation in the community through the school system to address social exclusion. These schools were established in neighbourhoods that had a high percentage of Aboriginal children. Moreover, Community Schools aimed to take into account the diverse cultures and socioeconomic
situations of their students. As of 2009, the Ministry of Education in Saskatchewan funded preschool programs in 17 Saskatoon Community Schools.

Following preschool, the majority of Canada’s children enter into kindergarten. Most school boards across Canada introduced publicly funded kindergarten after World War Two. Publicly funded kindergarten programs are operated by both the Saskatoon Public School Division and the Greater Saskatoon Catholic Schools, and these bodies are funded through a combination of provincial grants and municipal property taxes. Most kindergarten programs in Saskatoon are part-day. A recent pilot study of full-time kindergarten in three Saskatchewan school divisions (Onion Lake, Living Sky, Saskatoon Catholic) demonstrated that full-time kindergarten had cognitive, social, and behavioural benefits for children, particularly for those children that were considered disadvantaged. Other research has also found that full-day early education programs are usually more effective at improving developmental outcomes than part-day programs.

5.4 Lived Experience of Programs and Policies for Families in Saskatoon

One of the objectives of the interviews was to ascertain parents’ perceptions of policies and programs in their community. Are these responses and programs working? Where are the gaps?

Interview participants reported that they were accessing a wide variety of programs and organizations in their community such as KidsFirst, CHEP, QUINT, the Friendship Inn, the Salvation Army, the Food Bank, SWITCH, the Westside Community Clinic, Egadz, Tamara’s House, and White Buffalo Youth Lodge among others. For the
most part, participants did not report any negative experiences with the programs or organizations they were accessing. One exception was a participant that noted it was difficult to maintain regular appointments with the home visiting component of *KidsFirst*, particularly when attempting to find employment.

*KidsFirst* is alright here, I did home visiting. It was useful for a while, but it was too hard for me to stay home and meet with them. I had to be there every week just to visit them and things pop up, you know, and I have to do something like I need diapers or I need to go make money here, I need to go baby-sit, I need to do this because I need the money. And they’re like, “well if you don’t visit with us once a week, then okay your file’s closed.” So now they closed my file because I couldn’t do it. And then I had a job and I was trying to get a job and everything was all messed up, so I just gave up on all the programs.

When asked if it was easier to raise children in Saskatoon now than in the past, two participants believed that it was easier to raise children in Saskatoon at the time of the interview due to the wide array of programs and services available. One participant reported that there were enough programs and supports available for families in Saskatoon. However, twelve participants believed that there were not enough programs and supports available for low-income families.

I think there’s not enough programming for like open door programs for the parents to go to, to learn with their children or their grandparents. A lot of grandparents they get stuck with their grandchildren and that’s a harsh word ‘stuck’ but at the beginning, yes, that’s how you feel until you can work things out.

A few participants mentioned that programs for families were too targeted and restrictive; for instance, there were not enough programs for single parents or older mothers.

It seems like there used to be a lot more programs. Before you could get into these programs and now there’s only selective programs. They get put into little certain files and stuff. With people here it doesn’t matter if you have a job or anything. They’re not going to help you period unless you’ve got a really good reason.
I think we need more housing and more places for people to go and ask for help or to teach people, to educate people how to ask for help because I know a lot of people out there who just don’t know how because they’ve never had to because they’ve lived on welfare for so long like me. I hate living on welfare and I’m, I refuse to live on it but I have no choice. That’s why I like QUINT. QUINT does lots like for just this part of town right here like they do a lot of work. And there’s like White Buffalo, but that’s for kids. They don’t have anything for single parents or anything.

Five participants did not access any programs or services for raising their family. For the most part, lack of access was determined by a lack of awareness of the programs and services available in Saskatoon.

There’s not enough information out there, to let you know what’s out there. They don’t, the government doesn’t make enough information out there for what we are entitled to and to help our children in the future.

The programming is definitely a must in this town in regards to showing you proper nutrition. There’s not enough information to show us what’s out there to help us. Because that’s what I’ve been searching for the last week and there’s not much out there to inform me. One person there was passing the buck. Go here, go there and then that person go here, go there.

5.5 Summary

The welfare state in Canada and Saskatchewan has been reduced; fewer dollars are spent on social programs, with the exception of health, as a percentage of GDP. There has been a substantial reduction in public funds available for education, social services, social assistance, housing, labour, employment, and immigration. The federal and provincial governments have emphasized the importance of early childhood development, but the health status of infants and children may suffer when there is reduced funding for essential social needs such as education, housing, or employment security for parents.
Reduced spending on social programs and services has led to the restructuring of child-related policies and programs at both the federal and provincial levels. Restructuring has followed the broad trend of devolution of authority/responsibility. In a number of cases, devolution occurred from the federal government to the provincial government. Yet, increased responsibility for social policy by the provinces was accompanied by large reductions in the federal transfer of funds. For example, the elimination of CAP and the introduction of the CHST was touted by the National Council of Welfare as, “the worst social policy initiative by the federal government in more than a generation.” This declaration was based on the fact that the introduction of the CHST resulted in large reductions in federal funding for health care, post-secondary education, social assistance, and social services.

Devolution from the federal to provincial governments has facilitated even further devolution to municipal governments and sometimes even further down to community-based organizations, families, and individuals. Municipal governments in Canada such as the City of Saskatoon have been saddled with more responsibilities, but they actually have very little policy-making clout and possibilities for revenue generation. While cities are considered the main site of economic generation in a globalized economy, Canadian cities actually have very little room to maneuver when addressing the effects of neoliberal globalization within their communities.
Chapter 6. Charting Pathways from Globalization to Child Health: Employment and Education of Parents

6.1 Introduction

The literature review in Chapter 2 demonstrated that a restructured, flexible labour market is fostered under the political and economic processes of neoliberal globalization. Education is strongly linked to occupation since those with more education are able to compete more effectively in the global marketplace. Thus, for those parents without education post-high school, competing in the global marketplace and the current job market may be increasingly difficult. A more flexible, and probably more insecure, labour market among parents has the potential to create disparities in child health outcomes.

6.2 Education of Parents

Overall, the population of Saskatoon increased its educational attainment since the beginning of the study period. In 1981, 51.9% of Saskatoon’s citizens aged 20 and over did not have any education post-high school. In 2006, this percentage had decreased to 34.7% of Saskatoon’s adults.(8,257-260,349)
In a globalized economy, highly skilled, educated people are considered essential for economic growth and to help attract foreign investment. The federal government began to recognize the importance of building the capacity of citizens in its 1994 document, “Agenda: Jobs and Growth.” This document outlined the need to pay attention to the growing problem of poverty and to renew social programs, however, this document also cautioned that labour shortages may be an issue in the future. In fact, a number of reports in the 1990s warned that by 2010, Canada would be subject to a shortage of skilled, educated workers. Given these stated concerns regarding the skills and education of Canada’s workforce, it is rather surprising that both Canada and
Saskatchewan have consistently reduced their proportion of spending on education, as discovered in Chapter 5.

As described in previous chapters, the urban space is very important to consider when investigating social issues such as class, education, or labour. This is because these social issues are often expressed spatially, usually in the form of segregation. (172)

Educational disparities increased in spatial terms over the study period in Saskatoon, when measured at the neighbourhood-level. The incidence of no education post-high school was 1.87 times higher in Saskatoon’s poorest neighbourhoods, compared to the most affluent neighbourhoods in 1981. In 2006, the difference between neighbourhoods in terms of educational attainment increased to 2.3 times.

Table 9: Mean (Standard Deviation) for Percentage (%) of No Education Post-High School in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>52.5 (11.5)</td>
<td>69.6 (2.2)</td>
<td>37.2 (0.0)</td>
<td>50.8 (10.5)</td>
</tr>
<tr>
<td>1986</td>
<td>50.7 (12.9)</td>
<td>68.7 (2.8)</td>
<td>34.8 (5.2)</td>
<td>48.2 (11.7)</td>
</tr>
<tr>
<td>1991</td>
<td>45.8 (12.9)</td>
<td>63.7 (3.7)</td>
<td>33.8 (10.9)</td>
<td>43.6 (11.9)</td>
</tr>
<tr>
<td>1996</td>
<td>43.7 (12.7)</td>
<td>60.0 (6.8)</td>
<td>29.5 (10.7)</td>
<td>41.7 (11.7)</td>
</tr>
<tr>
<td>2001</td>
<td>36.8 (12.4)</td>
<td>51.8 (8.1)</td>
<td>22.7 (1.8)</td>
<td>35.0 (11.6)</td>
</tr>
<tr>
<td>2006</td>
<td>36.5 (11.8)</td>
<td>53.8 (6.5)</td>
<td>22.9 (2.2)</td>
<td>34.5 (10.7)</td>
</tr>
<tr>
<td>Change (% in mean 1981-2006)</td>
<td>-30.5</td>
<td>-22.7</td>
<td>-38.4</td>
<td>-32.1</td>
</tr>
</tbody>
</table>

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996; City of Saskatoon, 1991; City of Saskatoon, 1986; City of Saskatoon, 1985.(8,257-260,349)

A recent American study found that educational polarization, expressed in spatial terms, increased between and within American cities over the period 1940-2000. The more highly educated tended to congregate in certain areas and the less educated congregated in separate areas. The trend towards increasing educational polarization
occurred in all forms of American metropolitan areas: from global cities to smaller cities and counties. Educational polarization occurred in this study despite the fact that racial segregation declined and economic segregation changed very little over the study period. This led the author of this study to conclude that “educational segregation was the leading segregation trend of the late 20th century.” (166)

If certain segments of the population are unable to access post-secondary education, this will contribute to occupational polarization because education is tied to one’s occupation. Occupational polarization is related to the income inequality trends discussed in the Chapter 4, where there were increasing wages at the top end of the income distribution and stagnating wages at the other end of the income distribution.

Several years of corporate and government downsizing and the emergence of the so-called "new economy" has produced clear winners and losers. Those with skills and education, commonly referred to as "knowledge" workers, are enjoying escalating salaries and benefits as the demand for their skills increases with the onset of new technologies and the growing wealth in high-end service industries such as management and financial consulting. By contrast, those with less education and fewer marketable skills are facing either unemployment or low wages and insecure forms of work. (293)

6.3 Policy Response to Education of Parents

Post-secondary education in the province of Saskatchewan has been the purview of successive provincial ministries of post-secondary or advanced education. Since 2007 it has been under the direction of the province’s Ministry of Advanced Education, Employment, and Labour, created in 2007 when the Department of Advanced Education and Employment was merged with the Department of Labour. The creation of this Ministry reflects the perceived importance of developing a highly educated workforce to participate in the knowledge economy. The Ministry is responsible for delivering post-
secondary programs and services in partnership with Saskatoon’s post-secondary institutions, namely the University of Saskatchewan, the Saskatchewan Institute of Applied Science and Technology, the Saskatchewan Indian Institute of Technologies, and the Gabriel Dumont Institute. Through this ministry, the Government of Saskatchewan provides funding directly to post-secondary institutions. Tuition fees also cover some of the costs associated with providing post-secondary education.(350)

In 2002, the federal government declared that every graduating high school student should have the opportunity to participate in post-secondary education. However, the reality is far from a universal system. Attendance in post-secondary education is largely based on either the ability to pay or the ability to borrow. Historically, individuals from higher income families have been much more likely to pursue post-secondary education, and this trend persisted until the mid-1990s, especially when tuition fees increased across Canada. The difference decreased in the late 1990s, with more individuals from lower-income families pursuing post-secondary education. This partially reflects a policy change in 1994 to the student loan system, where students were able to borrow more through student loans and the average amount a student borrowed also increased.(351) This means, however, that a number of students will finish post-secondary education with a high debt load. In fact, Saskatchewan students leaving post-secondary education have some of the highest debt loads in the country. For example, 18% of university graduates in Saskatchewan leave university with a debt load of $25,000 or more, whereas this proportion is 13.4% in the rest of Canada.(352)

The Government of Saskatchewan conducted a review of accessibility and affordability of post-secondary education in the province in 2007, referred to as the
McCall Report. This review was conducted for two reasons: first, the province froze tuition in 2004, when tuition in the province was among the highest in the country, and a new tuition framework was considered necessary; second, this review was a follow-up to the 2005 Training System Review Report, which had made 121 recommendations regarding the provincial training system. The CCPA criticized the McCall Report for not clearly defining affordability and for neglecting to assess the non-financial barriers to education such as racism. Moreover, CCPA argued the recommendations contained in the McCall report may increase access and affordability for middle-income earners, with the introduction of new tuition structures, but the recommendations neglected to pay serious attention to increasing access and affordability for the poor, disabled, older, and Aboriginal peoples. As a result of these oversights, educational polarization may remain stagnant or increase, with parents from certain groups unable to afford or access post-secondary education.

6.4 Employment of Parents

According to the 1981 Canadian Census, 5% of Saskatoon residents were unemployed. In 1986, the unemployment rate reached 10.1%. Since recorded highs of 10.6% in both 1991 and 1992, the Saskatoon unemployment rate has been falling steadily. In 2007, the unemployment rate in the city was 4%. Although the current worldwide recession was outside of the study period for this research, Saskatoon’s economy and job market have remained robust despite the economic downturn experienced throughout the world.
Table 10 shows that geographic disparities increased in the City of Saskatoon between groups of neighbourhoods over time, according to the unemployment rate. The unemployment rate was 3.3 times higher in Saskatoon’s poorest neighbourhoods versus the most affluent neighbourhoods in 1981. This difference grew to 5.2 times in 2006. Yet again, this is indicative of increasing social polarization in the City of Saskatoon, according to measures such as income and now unemployment.

Table 10: Mean (Standard Deviation) for Percentage (%) of Unemployment in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods Mean (SD)</th>
<th>Poorest Neighbourhoods Mean (SD)</th>
<th>Most Affluent Neighbourhoods Mean (SD)</th>
<th>Rest of Neighbourhoods Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>5.1 (2.4)</td>
<td>10.1 (4.1)</td>
<td>3.1 (0.0)</td>
<td>4.5 (1.5)</td>
</tr>
<tr>
<td>1986</td>
<td>10.9 (4.2)</td>
<td>18.2 (4.6)</td>
<td>8.1 (2.7)</td>
<td>9.9 (2.9)</td>
</tr>
<tr>
<td>1991</td>
<td>9.4 (4.5)</td>
<td>17.7 (2.7)</td>
<td>3.8 (3.6)</td>
<td>8.4 (3.5)</td>
</tr>
<tr>
<td>1996</td>
<td>8.5 (4.4)</td>
<td>15.9 (7.1)</td>
<td>4.9 (0.9)</td>
<td>7.6 (2.9)</td>
</tr>
<tr>
<td>2001</td>
<td>8.1 (5.5)</td>
<td>18.9 (7.3)</td>
<td>3.8 (1.2)</td>
<td>6.8 (3.4)</td>
</tr>
<tr>
<td>2006</td>
<td>7.1 (5.1)</td>
<td>18.3 (6.9)</td>
<td>3.5 (1.0)</td>
<td>5.9 (2.9)</td>
</tr>
<tr>
<td>Change in mean (%)</td>
<td>39.2</td>
<td>81.2</td>
<td>12.9</td>
<td>31.1</td>
</tr>
</tbody>
</table>

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996; City of Saskatoon, 1991; City of Saskatoon, 1986; City of Saskatoon, 1985.(8,257-260,349)

Despite the fact that productivity and education levels have been increasing in Canada, median hourly earnings since 1981 have barely increased after adjustment. Between 1981 and 2000, the real median wage in Canada hovered around $15 per hour in 2001 dollars.(355) These findings are quite similar to the findings that emerged after the 2006 Canadian Census was released. The median earnings of a full-time worker in Canada was $41,348 in 1981, and this amount was $41,401 in 2005. The passing of twenty-five years raised the median earnings of a full-time worker by approximately $1 a
week. However, these amounts were based on individuals. For families with one partner that was aged 15 to 64, median earnings increased by 9.3% to $63,715, which reflects the growing number of dual-earner households (refer to Appendix A).(356)

A series of papers produced by CPRN investigated the nature of low-paid work in both Canada and Saskatchewan since 1981. Low pay was defined as a wage of less than $10 an hour in 2000 or 2001 dollars. In Canada, one in six full-time adult workers earned low pay in 2000, as expressed in 2001 dollars. Half of these employees would not earn improved wages within five years, especially women and those with little education. Most starkly, the proportion of jobs that paid less than $10 an hour (in 2001 dollars) had not decreased since 1981.(355)

This portrait of the persistence of low pay is at odds with Canadians’ vision of a knowledge economy…Clearly, this rising economic tide failed to lift all boats.(355)

In Saskatchewan, 21.4% of full-time adult (ages 15 to 64) employees earned less than $10 an hour in 2000; this proportion was 16.3% for the rest of Canada in the same year. Disaggregation of these amounts revealed that there was a gender dimension to low pay, with more women receiving low pay than men. Low pay also tends to become concentrated among those who are young, less educated, Aboriginal, single mothers, persons with a disability, and/or immigrants. While low-pay was concentrated among those with less education, it was found that one-third of low-paid workers in Saskatchewan actually had a post-secondary certificate or degree. Education did not make one immune from low-paid work.(357)

National data indicates that those in low-paid employment situations are less likely to have access to benefits, employer-sponsored training, and union
Social Development Canada conducted analysis regarding Canada’s low-paid workers that expended significant work effort in 2001. Among these workers, 76% of them had clocked more than 1500 hours of work in the past year. Only 17.9% of these workers had life or disability insurance, whereas 61.5% of other Canadian workers had access to these benefits. Among low-paid workers, only 15.1% were employed by an employer that offered a pension plan. This proportion was 48.7% among other Canadian workers. Dental plans were available for 25.6% of low-paid workers, but were available to 74.6% of other workers. Similarly for medical plans, 26.6% of low-paid workers had access to such a plan, but access was 74.6% for other workers.

The working poor are becoming a larger and more prominent demographic in most OECD countries. For example, Nolan and Marx compared low-pay among full-time, full-year employees across a number of countries. Low-paid workers were defined as those workers making less than two-thirds of the country’s median annual earnings. Canada had one of the largest proportions of low-paid, full-time workers (20%), compared to countries such as Germany (13%) and Finland (7%) over the past couple of decades. The United Kingdom (20%) and the United States (26%) also had high proportions of low-paid employees throughout the 1980s and 1990s. These numbers indicated that the working poor were more common in liberal welfare states than in conservative or social-democratic welfare states.

6.5 Union Coverage

Trade unions have struggled to survive under neoliberal globalization. It is more difficult for unions to organize for a number of reasons, including: privatization, a
competitive international market, and an increase in non-traditional work arrangements. Overall, union coverage among employees in Canada and Saskatchewan declined between the period 1997 and 2007 (the years data was available). Union coverage among public sector employees remained stagnant in Canada and decreased slightly in Saskatchewan. For private sector employees, union coverage never reached the rates witnessed among public sector employees, and union coverage for this group declined in both Canada and Saskatchewan over the study period. In 2007, 77% of Canadian employees worked in the private sector. In Saskatchewan, 70% of employees worked in the private sector in 2007.
<table>
<thead>
<tr>
<th></th>
<th>Union Coverage Among All Employees, 1997</th>
<th>Union Coverage Among All Employees, 2007</th>
<th>Union Coverage Among Public Sector Employees, 1997</th>
<th>Union Coverage Among Public Sector Employees, 2007</th>
<th>Union Coverage Among Private Sector Employees, 1997</th>
<th>Union Coverage Among Private Sector Employees, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td>33.7</td>
<td>31.5</td>
<td>74.6</td>
<td>74.5</td>
<td>21.2</td>
<td>18.7</td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td>36</td>
<td>34.8</td>
<td>76.5</td>
<td>75.5</td>
<td>18.6</td>
<td>17.1</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.(360)
6.6 Overtime Hours

Since January 1997, Statistics Canada’s Labour Force Survey has collected information on overtime hours. In Saskatchewan, employees were logging more overtime hours than in the past decade. In 1997, Saskatchewan’s employees, on average, put in 1.9 hours of overtime per week, and in 2007 they were putting in 2.4 hours of overtime per week. Canadians, on the whole, were also logging more overtime hours than in the previous decade. In 1997, Canadian employees, on average, worked 1.7 hours of overtime per week; in 2007, this number increased to 1.9 hours per week. This affirms Yalnizyan’s finding that most Canadians, with the exception of the richest decile, were working longer hours than the previous decade.

6.7 Non-traditional Employment

Flexibility is a key consideration in a restructured labour market since the capitalist class can benefit from paying lower rates of pay, offering fewer benefits, and by transforming security of tenure into a personal responsibility. The restructuring of the labour market to encourage greater flexibility and increased profit margins for the capitalist class has been termed ‘accumulation by dispossession.’ A Canadian study found that those in non-traditional work arrangements often remain in these jobs for extended periods of time.

The labour and employment data presented in the following tables regarding non-traditional employment was only available at the national and provincial level, but provincial numbers most likely provide a fairly accurate depiction of what was occurring in Saskatoon since the city represents almost ¼ of the population of the province.
Table 12: Part-Time Employment in Canada and Saskatchewan

<table>
<thead>
<tr>
<th></th>
<th>Number of Part-time Employees, 1997</th>
<th>Part-time Employees as % of All Employees, 1997</th>
<th>Number of Part-time Employees, 2007</th>
<th>Part-time Employees as % of All Employees, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>2,616,700</td>
<td>26.0%</td>
<td>3,063,300</td>
<td>24.7%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>97,200</td>
<td>31.8%</td>
<td>93,700</td>
<td>26.1%</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.(363)

Table 13: Self-employment in Canada and Saskatchewan

<table>
<thead>
<tr>
<th></th>
<th>Number of Self-Employed Positions, 1997</th>
<th>Self-Employed Positions as % of All Positions, 1997</th>
<th>Number of Self-Employed Position, 2005</th>
<th>Self-Employed Positions as % of All Positions, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1,604,146</td>
<td>11.4%</td>
<td>1,555,152</td>
<td>9.4%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>103,969</td>
<td>21.2%</td>
<td>76,301</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.(364)

Table 14: Multiple Jobholders in Canada and Saskatchewan

<table>
<thead>
<tr>
<th></th>
<th>Number of Multiple Jobholders, 1980</th>
<th>Multiple Jobholders as % of All Employees, 1980</th>
<th>Number of Multiple Jobholders, 2007</th>
<th>Multiple Jobholders as % of All Employees, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>339,600</td>
<td>2.9%</td>
<td>891,100</td>
<td>5.0%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>22,500</td>
<td>5.1%</td>
<td>39,400</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Source: CANSIM, n.d.(365)

Table 15: Temporary Employees in Canada and Saskatchewan

<table>
<thead>
<tr>
<th></th>
<th>Number of Temporary Employees, 1997</th>
<th>Temporary Employees as % of All Employees, 1997</th>
<th>Number of Temporary Employees, 2007</th>
<th>Temporary Employees as % of All Employees, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1,284,100</td>
<td>12.7%</td>
<td>1,842,600</td>
<td>14.8%</td>
</tr>
</tbody>
</table>
In Saskatchewan and Canada, increases in the absolute number of multiple jobholders and temporary employees occurred at the same time that the number of self-employed and part-time employees decreased. The decrease in self-employment in Saskatchewan is in all likelihood the result of rural depopulation. Rural dwellers in Saskatchewan may have moved to urban areas and assumed multiple jobs or temporary positions since these numbers increased at the same time that self-employment decreased.

6.8 Policy Response to Employment of Parents

A labour policy instrument with the potential to significantly affect low-income families is the minimum wage, which is determined by each province/territory (and by the federal government for workers within its jurisdiction). According to a CPRN report published in 2007, the Saskatchewan minimum wage reached an all-time high in 1976 at $9.47, expressed in 2005 dollars. From 1976 to 1989, the Saskatchewan minimum wage declined to a low of $6.37. Since 1989, the minimum wage has only gradually increased. During the period 1991 to 2006 in Saskatchewan, the minimum wage increased by a total of $2.95. However, when this amount is adjusted for inflation, the purchasing power parity of the minimum wage declined from a $0.97 dollar in 1993 to a $0.74 dollar in 2006, meaning the value of the dollar had declined. In October 2007, the Government of Saskatchewan announced its intentions to raise the minimum wage to $8.25 per hour on January 1, 2008, then to $8.60 on May 1, 2008, to $9.25 on May 1, 2009, and to make further adjustments in 2010 to more closely align the minimum wage with the LICO.
Currently, an individual working full-time at the minimum wage in Saskatchewan does not meet the LICO. According to the Saskatchewan Minimum Wage Board, the majority of minimum wage workers in Saskatchewan are employed in one of two sectors: the accommodation and foodservices industry and the retail sales industry. The Board found that while sales volumes had risen approximately 100% in these industries from 1991 to 2006, the minimum wage had only increased by around 50% in the same time period.\(^{368}\)

Canada’s main social safety net for workers is UI/EI. Since the 1980s, movement has been made towards shifting the responsibilities for the funding of UI from the federal government to employers and employees. In 1990, the federal government’s responsibilities for financing were completely eliminated and the entire cost of the UI Fund was borne by employers and employees.\(^{370}\) This policy decision at least partly supports Rodrik’s argument that neoliberal globalization shifts the burden of funding large-scale social programs from government to labour.\(^{135}\) Changes in financing signaled a retrenchment of the UI system, which has continued unabated. Retrenchment has led to more stringent entrance requirements and reduced benefit rates.\(^{370,371}\) For example, due to the 1990 decision to shift the costs of the UI fund, only 74% of all unemployed Canadians were eligible for UI.\(^{372}\) Benefits decreased from 60% of insurable earnings in 1990 to 57% in 1993. In 1995, benefits decreased even further to 55% of insurable earnings for workers with children or to 52% for repeat users.\(^{312}\)

With the passing of Bill C-12 in 1996, the UI system was renamed EI. Bill C-12 was a product of the 1995 federal budget, which pledged to reduce the costs of UI by ten percent.\(^{373}\) While a number of policy circles were in favour of reform to EI, there were
also a number of detractors. Ismael argues that the restructuring of UI into EI represented the dismantling of Canada’s fundamental anti-poverty program. Under restructuring, large segments of the population were not eligible for EI assistance due to more strict eligibility requirements. In 1996, only 42% of all unemployed individuals were eligible for EI. The restructuring of the UI/EI system was a deliberate decision by policy-makers to appeal to business and also the government’s concerns that EI was creating disincentives to work. In addition, the federal government sought to balance the budget. Since 1986, any surpluses in the UI/EI account have been carried over to the government’s budget balance. Through a combination of high premium rates and less spending on UI/EI, the EI fund boasted a surplus of more than $50 billion by 2007, which was included on the revenue side of the federal government’s budget.

The number of people receiving EI has changed quite noticeably during the period 1980 to 2006. In 1980, 702,716 Canadians were receiving EI, and this number steadily increased until approximately the mid-1990s, when the EI system was restructured. Since the mid-1990s, the number of EI recipients decreased across the provinces and in Canada, as a whole. The decrease in the number of EI recipients was mainly due to more stringent eligibility requirements. Moreover, restructuring has led to a decline in the amount of dollars that employees invest in the UI/EI system that are then not returned in the form of UI/EI benefits. The Canadian Labour Congress estimated that between 1990 and 2001, employees in Saskatchewan did not receive $210.6 million they had invested in the UI/EI system due to changes to eligibility requirements.
Figure 39: Number of Employment Insurance Recipients, Canada, 1980-2006

Source: CANSIM, n.d.(375)

Figure 40: Number of Employment Insurance Recipients, Saskatchewan, 1980-2006

Source: CANSIM, n.d.(375)
A component of the UI/EI system that facilitates employment in the labour force, most often female employment, is parental leave policy. Leave policies have important consequences for children, with most researchers finding that generous parental leave policies after childbirth improve child health outcomes.\(^{(163)}\) Responsibility for the administration of maternal and parental leave is shared between the federal government and the provincial/territorial governments.\(^{(288)}\)

Since 2001 in Saskatchewan, birth mothers and the primary caregivers of adopted children are entitled to have their job protected for up to 52 weeks. Birth fathers and the spouses of primary caregivers of adopted children are entitled to 37 weeks of job protection. Both parents can choose to remain at home, for a combined 89 weeks of job protection, although this must occur during the first year of the child’s life. Under UI/EI, either the mother and/or father are eligible for 50 weeks of benefits.\(^{(376)}\) Since maternity and parental benefits are administered under UI/EI, a two-week waiting period before accessing benefits exists. Canada is one of the only countries in the world to have such a waiting period. Maternity and parental leave are calculated at 55% of insured earnings or a maximum of $413 per week, depending on which amount is lower.\(^{(377)}\)

When UI was replaced by EI in 1996, this shift had major repercussions for maternity and parental leaves. Under the EI program, only those who had worked 700 hours in the previous 52 weeks were eligible for maternal or parental leave. This was double the number of hours that had been required prior to the introduction of EI. As a result of these eligibility restrictions, in 1998, less than half of all families with a newborn were eligible for a paid maternal or parental leave.\(^{(288)}\) Studies have suggested that changes to maternal and parental leave have penalized many women due to the
increasing number of hours required, which disqualifies most part-time and new workers. (98)

Even for those eligible for maternity or parental leave, subsisting on 55% of wages or $413 per week for up to one year is simply not feasible for many families. Low-income families are often not able to benefit from the whole year of parental or maternity leave. (98) Within highly unionized sectors of the economy (e.g., the public service), collective agreements often provide a ‘top-up’ of EI benefits paid for by the employer. But most low-income families are employed in non-unionized sectors of the economy that do not provide a top-up. (17) Moreover, as indicated in section 6.5, the majority of Canada’s and Saskatchewan’s employees were employed in the private sector, where rates of union coverage were typically low and have declined. (360)

6.9 Lived Experience of Employment and Education in Saskatoon

All interview participants were asked about their employment history and current employment situation. At the time of the interview, four participants were employed, in either the service or the construction sector. Only one of the employed participants reported access to benefits such as sick leave, medical, and dental. Most of the employed participants were not working as many hours as they would have liked. Across employed participants, a common theme was low wages, usually at the minimum wage.

Our wages need to be looked at by the government. I think the wages are way too low. You know minimum wage is definitely not sufficient. And the boom it’ll cause more problems for the people that are already having financial issues.

For employed participants, wages were often considered insufficient to provide for basic necessities such as housing. One employed participant noted:
I’m looking for a two-bedroom and they’re $850, but how can I afford that when I’m only working for minimum wage?

A further common theme was low education levels. None of the interview participants had post-secondary education.

And that’s what I’m worried about because I have my baby and a low education, and then to try and find a decent job that pays good money, and to try and afford a place for $1,500 a month or something. You’ve got to have good self esteem to succeed. A lot of people don’t have that I don’t think and I think it’s mostly because of lack of education.

For participants that worked in non-traditional situations, this sometimes conflicted with work-family responsibilities. For example, the following quote is from a parent that was working night shifts:

I was full time, so I got all my hours. More hours, more money. But I wasn’t spending that much time with my kids. I was working late hours so every time I got home I was too tired to spend the day with them and stuff because all I wanted to do was sleep.

Three participants were unemployed and were without any form of assistance such as EI or social assistance. These unemployed interview participants were actively looking for work in either the service or construction sector. The job opportunities available to these participants were usually low-paying and of a temporary nature.

I think it is easier to find a job nowadays, but to get anything decent that will help you keep a place and stuff you’d probably have to find two or three because half of them pay only minimum wage.

Among all interview participants the number one barrier to employment cited was child care responsibilities.

The babysitting is way higher now. There’s not enough daycare facilities just in every aspect. The housing, the daycare, the schooling, babysitting fees, just the finances are really, really a problem now. I want that someone with a license and not only a license but with, you know, papers saying that they’re good at what they do or whatever. It’s just you’re hearing on the news every day about all these
terrible things that people are doing, that are licensed daycares and stuff, to your children.

Other barriers to employment were: lack of transportation; lack of a driver’s license; disabilities, including learning disabilities; low education levels; low self-esteem; racism; and housing. One participant described the racism she had encountered in the workplace that partially prompted her decision to quit her job:

These other two were being discriminating. The one, every time she passed me, she was always bumping into me. I watched her after awhile. after I started working there and just walking past me, and she’d just always bump into me. I never saw her do that to anybody else. It was just the way their attitude was with me and then also always talking about past employees there who were also native.

With regards to housing, participants without a permanent residence (i.e., were temporarily living in a shelter or with friends) found it quite difficult to find employment. These participants were in the process of looking for housing, but were unable to find anything affordable.

I can’t keep a job because I always have different addresses from the last two months. And I’ve been moving all over the city and I was having difficulty getting to my work site.

6.10 Summary

Overall, education levels increased in Saskatoon over the study period, yet geographic disparities deepened between the poorest and most affluent neighbourhoods on this measure. This has the potential to contribute to income inequality and occupational polarization.

The labour and employment situation in Saskatchewan deteriorated over the study period according to many measures, even though education levels increased. Employees in Saskatchewan were working longer hours, were more likely to be employed in
multiple jobs, and were less likely to be unionized. There was some divergence in these trends, however, where there was less self-employment and a decreased incidence of part-time employment over the study period. However, this may be indicative of self-employed and part-time workers moving into multiple job-holding since these trends all started to escalate in the 1990s. A trend towards non-traditional employment usually exposes workers to increased insecurity, less control, less social support at work, and little or no access to benefits.(162) This was validated by some interview participants. At the same time, EI, which is the primary policy response and social safety net for employees in Saskatchewan and Saskatoon, was severely curtailed over the study period.
Chapter 7. Charting Pathways from Globalization to Child Health: Housing

7.1 Introduction

The child health determinant of housing is considered in this chapter, along with the supposition that neoliberal globalization in Canada has made housing less affordable and/or accessible. This chapter also explains some of the policy responses that have been formulated by governments to address housing affordability and availability in Canada’s cities, specifically those policies with direct impacts in Saskatoon, Saskatchewan.

7.2 Housing Prices and Ownership

Due to changes in the way that house prices are captured by CMHC, it was challenging to compare housing prices over the entire study period. Prior to 1990, CMHC measured the average starter home price as an indicator of home prices. However, in 1990, CMHC began using the average Multiple Listing Service (MLS)\(^{18}\) price to convey information regarding home prices in Canada. CMHC has not compiled data regarding average starter home prices since 1997. This change regarding how home prices were measured must be kept in mind when reviewing the following amounts. In 1980, the average starter home price in Saskatoon was $46,517.\(^{(378)}\) In 1990, the average Multiple MLS price on a house in Saskatoon was $76,008 \(^{(354)}\), but the average starter home price was $64,210 in the same year.\(^{(378)}\) These amounts demonstrate that the average starter home price tended to be lower than the average MLS price.

Despite the difficulties associated with comparing housing prices over the entire study period, overall, Saskatoon was considered an affordable Canadian city throughout

\(^{18}\) MLS data is compiled by the Canadian Real Estate Association and provides national information on the selling prices of all homes that are listed by agencies.
the 1980s and 1990s. The average MLS price on a house in Saskatoon was $88,132 in 1996, and this increased to $116,472 in 2001. Housing affordability in Saskatoon has dramatically changed in recent years, when Saskatoon experienced a housing market boom near the end of the study period. In 2006, the average MLS price in Saskatoon was $160,577. This amount increased to $232,754 only a year later. The average MLS price in Saskatoon was almost $60,000 more than the average MLS price in Saskatchewan in 2007.(354)

According to an international study released by the Frontier Centre for Public Policy, Saskatoon’s housing affordability has seriously diminished since 2006. Saskatoon’s affordability ranking was 2.6 in 2006, and decreased to 4.6 in 2008. As a result of housing prices in 2008, Saskatoon was deemed a seriously unaffordable city by the Frontier Centre. This rating was calculated by dividing the median house price by the median household income.(379) To determine if housing affordability declined over the study period, the Frontier Centre for Public Policy methodology was applied and the ratio between average home prices/MLS price and average household income was calculated for Saskatoon since 1981. A larger ratio indicates decreased housing affordability. Average household income was used in these calculations because the 1981 Census did not capture median household income, and consistency was important. Since average income was used to calculate affordability, this might actually underestimate or overestimate the decline in affordability in Saskatoon because median income is less affected by outliers at the top and bottom end of the distribution.(67) Table 16 demonstrates that housing affordability decreased from 1.7 in 1981 to 2.5 in 2006, and
according to the Frontier Centre housing affordability substantially decreased in 2008 to 4.6.(379)

Table 16: Housing Affordability, Saskatoon, 1981-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Household Income</th>
<th>Average Starter Home Price/Average MLS Price(^{19})</th>
<th>Housing Affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$28,157</td>
<td>$46,931</td>
<td>1.7</td>
</tr>
<tr>
<td>1986</td>
<td>$38,852</td>
<td>$64,221</td>
<td>1.7</td>
</tr>
<tr>
<td>1991</td>
<td>$48,927</td>
<td>$75,049</td>
<td>1.5</td>
</tr>
<tr>
<td>1996</td>
<td>$53,461</td>
<td>$88,132</td>
<td>1.6</td>
</tr>
<tr>
<td>2001</td>
<td>$62,451</td>
<td>$116,472</td>
<td>1.9</td>
</tr>
<tr>
<td>2006</td>
<td>$65,487</td>
<td>$160,577</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Sources: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996; City of Saskatoon, 1991, City of Saskatoon, 1986, City of Saskatoon, 1985; Canada Mortgage and Housing Corporation, 2008; Canada Mortgage and Housing Corporation, 1998.(8,257-260,349,354,378)

Analysis was also conducted to determine neighbourhood disparities in terms of housing costs for owners. Gross owner payments on housing have been higher in Saskatoon’s most affluent neighbourhoods, historically. In 1996, a gross owner payment was 2.4 times higher in the most affluent neighbourhoods versus the poorest neighbourhoods. Only ten years later, this disparity between neighbourhoods decreased to 1.4 times greater in the most affluent neighbourhoods. This suggests that residing in an affluent neighbourhood has become less costly over time, yet it has become more expensive to live in some of the poorest neighbourhoods in the city.

Table 17: Mean (Standard Deviation) for Gross Owner Payments (Unadjusted Dollars) in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>634 (198)</td>
<td>435 (108)</td>
<td>1055 (242)</td>
<td>659 (193)</td>
</tr>
</tbody>
</table>

\(^{19}\) Average starter home price was used for the years 1981 and 1986. Average MLS price was used for the years 1991, 1996, 2001, and 2006.
<table>
<thead>
<tr>
<th>Year</th>
<th>Home Ownership Rate</th>
<th>Change (%) in mean 1996-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>726 (168)</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>744 (131)</td>
<td></td>
</tr>
</tbody>
</table>

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996. (8, 257, 258)

Home ownership rates in Saskatoon and Canada have been quite comparable. Home ownership rates in the province of Saskatchewan have consistently exceeded those of Saskatoon and Canada. It is important to note that home ownership tends to exacerbate wealth inequality since those in the lowest end of the income distribution are not able to qualify for a mortgage, even with the deregulation of housing finance systems (see section 7.4 for more details). (81) Low-income families that qualified for mortgages with no down payment and an extended amortization period became the most vulnerable to recessionary periods, as occurred in the United States.
7.3 Rental Housing

Rental prices in Saskatoon increased substantially in recent years. The average gross rent of tenant-occupied dwellings increased from $483 in 1991 to $596 in 2006.(8,257-259) Another commonly used measure of rental prices is the average rent for a two-bedroom apartment. In Saskatoon, the average rent on a two-bedroom apartment in 1990 was $437.(354) According to CMHC, the average rent for a two-bedroom apartment increased to $584 in 2005 and then to $693 in 2007.(380) At the end of 2008, the average rent for a two-bedroom suite in Saskatoon was $841, and this was predicted to increase to $860 in 2009.(327)
As discussed in Chapter 4, a number of parents in the interviews expressed they did not wish to reside in the core neighbourhoods, where poverty, unemployment, and crime were common, but these were the only neighbourhoods they could afford to live in. Gross rent payments have been rising in all of Saskatoon’s neighbourhoods. However, payments on gross rent have always been higher in the most affluent neighbourhoods of Saskatoon compared to the poorest neighbourhoods over the study period. Payments on gross rent were 1.2 times higher in the most affluent neighbourhoods, compared to the poorest neighbourhoods of Saskatoon in 1996. The difference between neighbourhoods on gross rent payments increased to 1.5 times in 2006.

**Table 18: Mean (Standard Deviation) for Gross Rent (Unadjusted Dollars) in Saskatoon’s Neighbourhoods**

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>492 (61)</td>
<td>453 (59)</td>
<td>554 (44)</td>
<td>497 (60)</td>
</tr>
<tr>
<td>2001</td>
<td>596 (134)</td>
<td>495 (36)</td>
<td>759 (303)</td>
<td>609 (137)</td>
</tr>
<tr>
<td>2006</td>
<td>635 (134)</td>
<td>513 (33)</td>
<td>774 (119)</td>
<td>649 (134)</td>
</tr>
<tr>
<td>Change (% in mean 1996-2006)</td>
<td>29.1</td>
<td>13.2</td>
<td>39.7</td>
<td>30.6</td>
</tr>
</tbody>
</table>

Source: City of Saskatoon, 2006; City of Saskatoon, 2001; City of Saskatoon, 1996.(8,257,258)

Condominium conversions exacerbated the availability of rental housing in Saskatoon, particularly over the past few years. In 1997, the number of apartment units converted to condominiums in Saskatoon was only 42. This number increased exponentially to 1077 in 2007.(381) Condominium conversions and the depletion of rental housing stock (discussed in more detail below) have led to a low vacancy rate in
the city. In 1992, the vacancy rate in Saskatoon stood at 4.4%. This rate fluctuated over approximately the next two decades and declined to 3.2% in 2006.(354)

**Figure 42: Number of Condo Conversions, Saskatoon, 1997-2007**

![Graph showing the number of condo conversions in Saskatoon from 1997 to 2007.](image)

Source: City of Saskatoon, 2008.(381)

A number of Canadian cities such as Vancouver, Victoria, and Ottawa have implemented municipal bylaws regarding condo conversions, stipulating that if the vacancy rate in a city reaches a predetermined low, then condo conversions cannot proceed. For example, Ottawa does not allow condo conversions to occur if the vacancy rate is below 3%. Vancouver does not allow the conversion of condos if the vacancy rate is below 4%. When Saskatoon’s vacancy rate reached an all-time low of 0.6% in 2007, a number of community activists and citizens requested that City Council enact similar bylaws regarding condo conversions. These requests were not acted upon.(382,383)
Condominium conversions are a form of gentrification, where the more affordable housing stock is converted to appeal to a more affluent clientele. A Canadian study found that gentrification has occurred in a number of Canada’s cities over the past 30 years, which has displaced low-income residents in inner-city neighbourhoods.\textsuperscript{20}(174) The interviews conducted for this study found that many participants were forced to leave their current residence due to condo conversions. For these interview participants, finding affordable housing in a city that was increasingly unaffordable was extremely difficult. Interview results regarding housing in the city are contained in section 7.6.

Social housing allows some low-income families to reside in adequate, affordable housing.\textsuperscript{177} In Saskatchewan, the provincial government body responsible for addressing issues related to social and affordable housing is the Saskatchewan Housing Corporation (SHC). Across the province, the SHC holds 31,000 social and affordable units.\textsuperscript{21} As of December 31, 2007, 5239 of these units were located in Saskatoon.\textsuperscript{384} In 2000, there were 717 individuals/families in Saskatoon on the waiting list for social housing.\textsuperscript{385} In 2006, there were approximately 2,150 people on a waiting list for social housing in Saskatoon.\textsuperscript{65} These numbers indicate that demand for social housing has exceeded the supply.

Homelessness has increasingly been on the public policy agenda in Saskatoon. The Saskatoon Health Region estimated there were approximately 6,400 homeless individuals in the city as of 2008.\textsuperscript{65} The Community-University Institute for Social

\textsuperscript{20} Saskatoon was not one of the cities included for analysis in this study. Yet, a clear trend across other Canadian cities indicates that gentrification is a common Canadian trend that probably occurs in most cities in the country such as Saskatoon.

\textsuperscript{21} Affordable housing units are available to low-and moderate-income seniors and families and are priced at the low-end of the private market or at a break-even point, according to the Ministry of Social Services (which works in cooperation with SHC). Social housing units are available to low-income families and are priced according to a sliding scale that is based on the tenant’s ability to pay.\textsuperscript{387}
Research (CUISR) undertook a count of Saskatoon’s homeless population in May 2008. A total of 260 individuals were counted as homeless in this study, including 28 children. The large discrepancy between the Saskatoon Health Region’s estimate and the count conducted by CUISR may be due to the fact that homeless populations are notoriously difficult to locate and survey in studies. The CUISR study administered 38 needs assessments to individuals captured in the count. Among these 38 individuals, the most common form of income was employment (45%), followed by social assistance (37%). Of the 45% that were employed, 70% of these individuals were working full-time.(386)

In May 2006, the United Nations Committee on Economic, Social, and Cultural Rights declared that Canada’s housing and homelessness record was a ‘national emergency’. This Committee urged the federal government to honour its international housing obligations and to develop a national housing strategy. Canada is one of the few developed countries that does not have a national affordable housing strategy with permanent funding.(340)

7.4 Reasons for Declining Housing Affordability in Saskatoon

There are a number of reasons for the erosion of housing affordability in Saskatoon. First, rental prices were allowed to rise unabated since the province ended rental control in 1992.(388,389) In many cases, the older apartments that had been covered by rental control were bought by Boardwalk, an Albertan development company, after rental control ended. Boardwalk generally performed minimal upgrades to these apartments and then raised rents significantly.(389)
The housing market boom in Saskatoon was also driven by local residents that were looking to make a quick profit. Furthermore, out-of-province investors viewed the Saskatoon housing market as ripe for investment. Due to the greater mobility of capital under neoliberal globalization, greater external speculative investment occurred in Saskatoon’s housing market. It is believed that the majority of out-of-province investors never intended to reside in Saskatoon, but were only interested in ‘flipping’ properties for large profit margins. (390)

A number of community leaders and politicians encouraged the NDP government in 2006 and 2007 to impose regulations or policy that would stem the tide of speculative investment in the city. These suggestions were not heeded. (390) Instead, the province convened a Task Force to investigate the housing issue in the province. The final report of this Task Force noted that while new housing starts had risen recently, the decline in the amount of rental housing had seriously compounded housing affordability. Lack of affordability was further exacerbated by the high rate of condo conversions in recent years and the fact that almost no new rental units had been built in the province of Saskatchewan in the past two decades. The number of apartment units in Saskatoon declined from 17,000 units in 1997 to approximately 13,500 units in 2007. Predictably, this shortage in rental units resulted in low vacancy rates and rising rents. (384)

Another factor that contributed to declining housing affordability in Saskatoon was the deregulation of financing for housing. Studies of the deregulation of housing financing show that deregulation leads to greater volatility in house prices. (391) Under the federal Conservatives, in 2006, the maximum amortization period for a federally insured mortgage was extended from 25 to 40 years. (171) This decision increased the
demand for housing and subsequently housing prices. In 2007, approximately 50% of all houses in Canada were financed with no money down and a 40-year amortization period. (389) Deregulation of this nature in the United States and Europe led to a housing bubble that contributed to a worldwide recession. To avoid a similar housing crisis from occurring in Canada, the federal government quickly repealed its decision to insure mortgages with a 40-year amortization period and no money down at the end of 2007. Mortgages in Canada are now only insured with no more than a 35-year amortization period and a 5% down payment. (171)

7.5 Policy Response to Housing

Housing policy in Canada has been historically set by the federal government. Beginning in the 1970s, provincial governments began playing a more prominent role in the housing portfolio. By the 1980s, housing policy was a shared responsibility between the federal and provincial governments. (177) Canada had one of the most comprehensive social housing programs in the world until the mid-1980s. The mid-1980s marked a turning point in federal housing policy, with cuts to housing budgets and programs such as the Non-Profit and Private Rental Residential Rehabilitation Program, the Rural and Native Program, the Urban Aboriginal Housing Program, the Non-Profit Housing Program, etc. By 1993, federal funding for housing had become nearly nonexistent. In 1996, although the federal government still continued to provide some minimal funding for housing, all responsibility for housing was devolved from the federal government to the provinces and territories. (392)

Housing has become an “orphaned child” over the past couple of decades and there is confusion over who is responsible for what, and a lack of leadership. The
housing policy field has become an area of shared neglect. Strong leadership is required to get housing on the social policy agenda.(177)

Once housing responsibilities were devolved to the provinces, in most instances, the responsibility was moved further down to the municipalities.(392) As discussed in section 7.3, the SHC is responsible for managing the funds contributed by the municipal, provincial, and federal levels of government for affordable housing. In 2005, the SHC was responsible for a portfolio that included nearly 30,000 housing units in approximately 340 communities across Saskatchewan. However, the SHC is actually only responsible for managing about 3% of this portfolio, with 60% being managed by housing authorities and about 37% being managed by non-profit groups. In Saskatoon, a large proportion of the SHC portfolio is managed by the Saskatoon Housing Authority.(393)

More regular federal involvement in housing occurred again after the 1990s, when the federal government introduced a homeless initiative under the Community Initiatives Program, with a billion dollars in funding over six years. The provinces were to provide matching funds for this initiative.(177) This initiative was largely introduced due to the United Nations Committee on Economic, Social, and Cultural Rights’ finding, noted earlier, that Canada’s homelessness situation and the shortage of affordable housing were national emergencies.(392) The federal government also went on to introduce the Affordable Homes Program, with a billion dollars over five years and matching provincial funds. This program was intended to increase the affordable housing supply by 23,500 units across Canada. While these programs provided some relief to homeless individuals and low-income families, Canada still lacks a continuum of housing programs that comprehensively address the issue of quality, affordable housing for all.(177)
In 2004, the Centenary Affordable Housing Program was introduced in Saskatchewan, funded by CMHC, SHC, and municipal governments. This program was intended to allow low-income households (defined as households with incomes below $44,500) to apply for forgivable loans of up to $19,500 to be used for down payments. Families were only allowed to apply for loans on homes that did not exceed $120,000 in cost. Due to Saskatoon’s housing boom, it has been nearly impossible for low-income families to find a home for less than $120,000 in any area of the city, unless the home was in need of major repairs. (394)

In 2002, the City of Saskatoon implemented the Municipal Enterprise Zone Policy to encourage economic development in the core neighbourhoods of the city. Incentives offered under this policy sought to encourage business development in the core neighbourhoods or to encourage landowners to conduct renovations or build new rental properties. Some of the incentives offered under this policy include property tax abatement, rebates for building permits, and land swap exchanges. Between 2002 and 2006, the City spent $1.2 million on incentives associated with the policy, and 60 development projects have occurred as a result. (62) The impact of the Municipal Enterprise Zone Policy on housing affordability is not clear though.

Despite creating the Municipal Enterprise Zone Policy, the City of Saskatoon’s role in housing was not clearly defined until the release of the Housing Business Plan in 2006. The goals of this Business Plan were: affordability of housing; balanced growth/stability; safe and adequate housing; monitor demographics; and meet the need for innovative housing. (395) As a result of the Business Plan, in July 2007, the City of Saskatoon set a target of creating 500 affordable housing units annually. The city
implemented a number of programs to achieve this goal. First, the City of Saskatoon provides a $5000 rebate for the building of new multi-unit rental units or for additions to existing structures, and the property must remain a rental property for a minimum of 15 years. Second, capital funding may be provided to affordable housing projects that qualify for a cash grant of 10% of the total project costs, although eligibility for capital funding is not entirely clear. A third program offered by the city is exemption from incremental tax increases for five years on affordable rental projects. Fourth, the city allows for the direct sale of city-owned land to non-profit organizations for the purposes of affordable housing projects. Finally, the city will cover the costs of applying for permits to build secondary suites. This final program is intended to act in conjunction with the SHC’s HomeFirst Secondary Suites Program, where homeowners that build a secondary suite are eligible for a forgivable loan of up to $24,000.(396)

Although the City of Saskatoon has attempted to increase the amount of affordable housing in the city, some municipal tax policies discourage investment in multi-family units. Residential rental units that house more than one family are the most common form of housing for low-income households. In 2001, the effective tax rate applied to multi-family buildings was 87% higher than that which was applied to single-family units in Saskatoon. However, City Council decided to phase out this discrepancy between tax rates on multi-family and single-family units by 2012.(397) Federal government tax policies regarding capital gains also tend to penalize those who own or build rental property.(384)
7.6 Lived Experience of Housing in Saskatoon

Housing was the first and foremost issue on the mind of almost every interview participant. No interview participants were homeowners. When asked if poverty was worsening in Saskatoon, many participants replied that yes it was worsening, and evidence of this was the housing crisis in the city. The availability of affordable housing is a key factor in the depth of poverty experienced by families because housing costs decrease the amount of income available for other necessities such as food and clothing. (340) Eighteen participants stated that housing was not affordable for themselves or their families. Due to the high cost of housing, many participants reported having to resort to temporarily staying with friends, living with extended family, residing in shelters, sleeping on couches, and sleeping in tents.

This housing thing has become impossible. I’ve probably housed ten friends just in the last few months until they could find a place to live. Especially with little kids it’s really, really hard and I find it really depressing to see kids on the street. But I think something has to be done in regards to putting some stipulations on these people raising the rents. All the other cities I’ve ever lived in they weren’t allowed to just boom the rents up like that. The rent is skyrocketing and there’s no control on it. There’s no control on what they’re doing and how they’re moving people out.

Before everybody had a place to go. Now it seems like nobody has anywhere to go. People are pitching tents in back yards. My niece had to do that. There’s quite a bit of them that do that, and some live under the bridge.

I was paying $750 last year and this year it just jumped up lots in two years. It’s just ridiculous. Might as well set up tents somewhere. A person might as well, you know. You get all the sunlight, you know, the water in the river, boil it up. Pretty soon a person’s going to have to learn how to make an igloo and have a fire set up right in there.

For those families that had to reside in shelters (n=3), this often resulted in the separation of families. Most shelters in the city do not allow children of certain genders or ages. For example, the YWCA does not allow male children over a certain age to
reside in their shelter. These parents were desperately searching for housing in the hopes of reuniting their families.

Well it’s hard because I’m allowed so much for rent and a two bedroom is pretty high and, and my [case] worker says, “well don’t be fussy, just go.” Well, I’m not trying to be fussy. I’m just trying to find a place and my 16 year old son only wants to come home and he can’t. He told me, “Mom, I’ll just come home.” Then I said “well where are you going to stay if you come home because you can’t stay with me at the Y because it’s all ladies there?”

Overcrowding was prevalent among those participants that felt housing was not affordable. In a number of cases, overcrowding led to mental and physical health issues such as increased stress levels.

There is no way you’re going to be able to find a house on social assistance. Most people just end up living together, like totally crowded rooms, probably like it is in the reserves, there’s inadequate housing and everything. You have three families living in a three bedroom house and that’s pretty much what you’ve got to do in Saskatoon to be living anywhere decent. Living with my mom and her having the two kids and then my sister coming back and forth was very stressful throughout my pregnancy.

Overcrowding was just one example of the relationship between housing and health, a relationship that was starkly apparent in a number of the interviews. A few parents reported that substandard housing had directly contributed to chronic colds and chest infections in their young children. Both of the following quotes were from parents that resided in Saskatoon Housing Authority buildings:

Right now I’m okay where I am because it’s through Saskatoon Housing Authority, but because I think it’s old or something there’s black mould in the bathroom. Whenever the last snow melts and when it rains it comes in through my bedroom and soaks the rug. It’s been like that since I moved in and now my baby and I are taking turns having nose bleeds or getting sick all the time. So I called the landlord and I told him you can see the black mould. All they did was just fix the tile and he put new tiling on, but nothing was done about the mould problem. But I can’t move because the rent is so high everywhere else. I’ve talked to even a health inspector about that place and they just said to phone the caretakers.
I’ve had ants in my place for, I don’t know, when I moved in there were ants and there still are ants, so I’m constantly killing them. It’s just one problem after the other. In the winter my place is really cold because I have a big draft under the door and I told him all winter that my baby was getting sick from it and he still didn’t do anything about that.

Another participant noted the important link between housing and childhood well-being.

There are a lot of government issues that really piss me off, and the city is growing so fast and it really goes back to the housing, which is a big, big issue. If you don’t have that stability there for the kids, that’s going to make a big impact in their life.

According to interview participants, landlords and social housing agencies were quite unresponsive or negligent to disrepair issues such as black mould or insufficient insulation. Parents that resided in substandard housing that was maintained by social housing agencies were reticent to report or complain about these issues due to the fear of being evicted.

At the time of the interviews, the majority of participants were in the midst of locating housing or had been through this process in the past couple of years (i.e., during a period when housing prices and rents had risen dramatically). In order to locate housing, participants sometimes relied on friends and family for recommendations, utilized newspapers, contacted property management companies, or contacted community organizations such as the Friendship Inn. Although the main barrier to finding housing was cost, there were a number of other barriers noted as well such as landlords who often did not want to rent to families, blatantly discriminated against Aboriginal families, or did not want to rent to people on social assistance. This was despite the fact that this is illegal to so under the Saskatchewan Human Rights Code.
At this one place, I just finished talking to them and they said “come over and look at it.” Then when I got there they wouldn’t show me the place, and I asked him “well what’s the problem? Is it because I’m an Indian?” They said “no. No. Are you on Social Assistance?” I said yes and then they said “well we’re not going to take anybody that’s on Social Assistance.” Then I said “or is it just because I’m an Indian?”

7.7 **Summary**

Housing affordability has declined over the study period due to a number of reasons, including: speculative investment from outside of the province; an influx of migration due to the increased number of job opportunities; rental housing stock has been depleted over the past few decades, and this has been further exacerbated by the process of condominium conversions (i.e., gentrification); and the deregulation of the housing finance system. A number of these processes are directly linked to neoliberal globalization such as speculative investment due to the increased mobility of capital. The deregulation of the housing finance system has also occurred under neoliberal policy prescriptions. Further, housing affordability in the City of Saskatoon has been affected by a sustained retrenchment of the welfare state in the area of housing. Less and less public funding is allocated to the housing sector, and it is a policy area that has been largely abandoned by most levels of government. As the result of all these factors, many low-income families can only afford sub-standard housing that has direct and negative effects on child health.
Chapter 8. Discussion and Conclusions

8.1 Introduction

This chapter begins by presenting a figure from an earlier chapter to summarize the pathways between neoliberal globalization and child health that were explored in this thesis. Following the presentation of this figure, a discussion of key findings that were detailed in the previous chapters is provided. To conclude, the strengths and weaknesses of this study are highlighted.
8.2 Research Questions and Key Findings

1. How have child health outcomes and the conditions determining child health (for children ages zero to five) changed from 1980 to 2007 in Saskatoon, Saskatchewan?

Child health outcomes at the city-level varied considerably since 1980. A few discernible trends emerged. First, the infant mortality rate and the under-five mortality
rate had very similar trend lines, although this was probably due to the fact that the under-five mortality rate included infant deaths. Second, the infant mortality rate, the under-five mortality, and the asthma rate all reached highs in the early 1990s, when a major recession affected the economies of Canada, Saskatchewan, and Saskatoon. Third, the infant mortality rate and the under-five mortality rate in the city followed a fairly similar trajectory as the child poverty rate and the overall poverty rate in Saskatoon. Finally, the low birth weight rate has been steadily increasing in Saskatoon over time, an indicator of child health that is sensitive to socioeconomic status.

At the neighbourhood-level, it was found that for all of the child health outcomes examined (infant mortality rate, under-five mortality rate, low birth weight rate, hospitalization rate, injury rate, asthma rate), adverse child health outcomes have almost always been more common in the poorest neighbourhoods of Saskatoon since 1995/1996. When comparing mean rank differences for the poorest neighbourhoods and the most affluent neighbourhoods in Saskatoon, there were significant differences for some years for the low birth weight rate and the injury rate. When comparing mean rank differences between the poorest neighbourhoods and the rest of the neighbourhoods, there were certain years where the difference was significant for all of the child health outcomes assessed.

Trend analysis at the neighbourhood-level with logistic regression with GEE did not provide reliable results. This could have been due to a number of reasons. First, perhaps a wider array of child health outcomes or developmental outcomes should have been analyzed in relation to the determinants of child health that were affected by neoliberal globalization. It is quite possible that different indicators would have provided
very different results. Certain health or social indicators are more sensitive to social conditions than others. However, the availability of historical information on child health outcomes apart from the outcomes that were analyzed in this study was very limited. If historical information on child health outcomes had been available, developmental outcomes may have provided different results. Previous studies have found that contextual factors, such as the neighbourhood, influence child development outcomes such as school readiness. Since adverse events such as infant mortality and under-five mortality were not very common in Saskatoon, developmental outcomes such as school readiness may have been more sensitive to contextual factors.

A further potential reason for the lack of reliable results at the neighbourhood-level was the small sample size. For example, it was impossible to test for interaction due to the small sample size. As noted already, child health outcomes such as infant mortality or under-five mortality were not very common in Saskatoon over the study period. Hence, there were very small sample sizes in terms of adverse child health outcomes. But why were adverse child health outcomes not very common over the study period? The answer to this question is the third potential reason as to why trend analysis at the neighbourhood-level did not provide reliable results: Canada’s universal health care system prevents most adverse child health outcomes. Due to the introduction of new interventions, vaccines, diagnostic methods, and medical technologies, adverse health outcomes such as child mortality are not common in developed countries. Moreover, as noted in Chapter 5, Canada and Saskatchewan have spent increasing percentages of GDP on the health sector. Perhaps the health sector and the introduction of
new interventions have buffered the potentially deleterious effects of neoliberal globalization in terms of child health outcomes.

In terms of changes to the determinants of child health over the study period, this study found that poverty rates generally stagnated in Saskatoon over the study period. Poverty rates at the provincial and federal level declined marginally. The low-income gap increased substantially in Saskatchewan and only improved by $100 in Canada. Specific to children, the child poverty rate in Saskatoon has not changed much since 1980. At the provincial level, the rate of child poverty almost doubled. In Canada, the child poverty rate increased slightly. Income inequality increased in Saskatoon, Saskatchewan, and Canada.

Due to Canada’s and Saskatchewan’s neoliberal orientation, a retrenchment of the welfare state occurred in terms of governmental responsibilities (i.e., the devolution of government responsibilities to lower levels of government or the individual) and the proportion of the GDP that was spent on social issues. An exception to this general trend was an increase in health care spending as a percentage of GDP in both Canada and Saskatchewan. As mentioned earlier, increased health care spending may have acted as a buffer between the potentially negative consequences of globalization (e.g., increased income inequality, deepened poverty) and adverse child health outcomes. Therefore, even though the determinants of child health worsened on most accounts over the study period, child health outcomes may have not significantly worsened because of increased health care spending. The privatization of risk was a common theme throughout many of the child-relevant policies implemented over the past 30 years. As a result of these policy
changes, program access in a number of areas (e.g., social assistance, EI, social housing) has declined since 1980.

On the whole, education levels rose in Saskatoon over the study period. A different story emerged when neighbourhood-level analysis was conducted. Disparities in educational attainment widened over the study period, when comparing the richest and poorest neighbourhoods of the city. The interviews found that persons without post-secondary education were often relegated to low-paying, non-traditional work arrangements.

This study found employees in Saskatchewan and Canada have been working longer hours, although median wages have not improved since 1981 for individuals. Median wages improved for families though. An increase in dual-earner families likely accounted for improved median wages among families. Despite increased median wages among families as a whole, rates of child poverty did not dramatically improve and, in some jurisdictions, even deteriorated. It is quite possible that certain dual-earner families were earning quite a lot more than they did in the past, but other dual-earner families did not witness an improvement in their wages. This would contribute to the income inequality trends that were found in this study.(188) This study also found that workers in Saskatchewan were more likely to be employed in multiple jobs and were less likely to be unionized. Since the 1990s, however, fewer employees in Saskatchewan have been self-employed or employed part-time. Self-employment in Saskatchewan likely declined due to rural depopulation. Large numbers of farmers in Saskatchewan have either retired or moved into urban areas.(401) It is quite possible that self-employed and part-time
employees in the rural areas of the province transitioned into other forms of non-traditional employment such as multiple job-holding in urban areas.

Near the end of the study period Saskatoon’s housing market experienced unprecedented demand and growth. Housing prices and rental prices soared. Although this situation occurred across Canada near the end of the study period, Saskatoon ranked first in re-sale home price increases. This pan-Canadian housing boom was considered to be Canada’s ‘strongest and longest’ housing boom since World War Two.(402) There is a well-established body of literature that affirms the important relationship between housing and child health.(175-178) While housing at the neighbourhood-level did not appear to be related to increased disparities in child health outcomes (according to trend analysis), the interviews provided many examples of the direct relationship between child health and housing. Future research should incorporate individual-level data to more accurately portray the fundamental importance of adequate, affordable housing for optimal child health and development.

2. a) What are the major factors that account for the changes in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?

b) How has economic and political globalization contributed to the changes witnessed in child health outcomes and the conditions that determine child health from 1980 to 2007 in Saskatoon, Saskatchewan?

Despite the fact that the economies of Saskatoon, Saskatchewan, and Canada were booming over the study period, prosperity has not led to poverty reduction for
families. According to Raphael, this was probably due to at least two factors: the nature of the Canadian welfare state (e.g., an emphasis on means-tested, targeted programs and transfers); and the fact that neoliberal globalization created a number of harsh realities for families such as unaffordable housing, a labour market that left many workers in insecure employment positions, and increased income inequality. These two explanatory factors will be considered in turn.

First, poverty rates in the City of Saskatoon may be partially the result of the liberal welfare state that has been implemented in Canada and Saskatchewan. For example, in 2000, while Sweden and Canada began from the same point of child poverty when only market income was considered, Sweden managed to almost entirely eliminate child poverty after transfers. Canada, on the other hand, only cut child poverty rates by a third when transfers were included. The social-democratic countries of Sweden, Norway, Finland, and Denmark are often used as examples of best practices in terms of child poverty. Rates of child poverty in these countries have been held constant at about five percent or less for the past 20 years. These countries have been successful at maintaining low levels of child poverty for numerous reasons, including: an explicit focus on child poverty in policy; female labour participation and full employment are emphasized; universal programs are promoted; child care is highlighted as important in facilitating female employment; equality in terms of both income and rights is supported; the importance of two wages and income transfers is acknowledged; and high rates of social spending.

The second potential factor that may have contributed to minimal improvements
in poverty reduction is neoliberal globalization has likely contributed to a number of harsh realities for families in Saskatoon, Saskatchewan, and Canada. For instance, housing affordability in Saskatoon declined quite substantially, particularly in the past few years. Due to an increase in population and financial speculation from outside and inside the province, the demand for affordable housing increased. At the same time, the rental housing stock in the city was seriously depleted over the past couple of decades. Deregulation of the financing of housing also contributed to rising housing prices in Canadian cities since deregulation leads to volatility in housing prices. Deregulation was not as steadfastly pursued in Canada, compared to the United States or Europe, which insulated the country from a collapse of the mortgage system. In addition, the ‘orphaning’ of the housing sector by governments in Canada, Saskatchewan, and Saskatoon has exacerbated the housing affordability situation in the city.

The labour and employment situation in Saskatchewan deteriorated over the study period according to many measures, especially for low-income families. There were greater numbers of employees with multiple jobs and/or in temporary positions in the province, although workers were less likely to be self-employed or employed in part-time positions. Moreover, the median wage for individuals in Canada has essentially not improved since 1981. Multiple lines of evidence, including interviews, found that the wages offered in most positions were not sufficient to raise a family. As a result, an increasing number of families in Saskatoon relied on charitable organizations such as the food bank to make ends meet, which was indicative of deepening poverty in the city. Deterioration in employment situations occurred at the same time as the main policy response for employees in Saskatchewan and Saskatoon, EI, was restructured.
Income inequality increased in Saskatoon, Saskatchewan, and Canada over the study period, similar to international trends. Income inequality trends have likely been perpetuated by two factors: the restructuring of the economy and the labour market to favour high-income earners and their families at the expense of low-income families; and the Canadian and Saskatchewan welfare states have pursued a less vigorous redistributive role than previously. In addition to the deterioration of the redistributive role, the Canadian and Saskatchewan welfare states have been increasingly inclined to invest less in social programs such as social assistance, social services, housing, or education, combined with a trend towards devolution of responsibility (i.e., the privatization of risk).

The findings of this study suggest that neoliberal globalization has contributed to: the deepening of poverty among those that were already vulnerable to poverty, income inequality, the retrenchment of the welfare state and diminished program access, a restructured labour market, and declining housing affordability. While this study indicates that neoliberal globalization affected important determinants of health for young low-income children in Saskatoon, this is not to suggest that neoliberal globalization was the only phenomenon at work. For instance, this study did not account for changes over the study period in the other determinants of child health such as social support networks, culture, biology, or genetic endowment. Individual-level determinants of child health such as biology or genetic endowment or even coping skills were impossible to assess due to a lack of historic individual-level data. Future studies should incorporate an individual, prospective component. For example, the same group of children that were captured in the interviews could be followed over the life course to more accurately
ascertain changes in their health outcomes and then link these to the determinants of health that are related to the processes of neoliberal globalization.

3. **How has national, provincial, and municipal public policy responded to the effects of globalization on determinants of child health such as household income and distribution, employment and education for parents, housing, and social programs?**

The Canadian and Saskatchewan welfare states are liberal welfare states, where programs and transfers are means-tested and targeted, usually at people living in conditions of poverty. The Government of Canada, the Government of Saskatchewan, and the City of Saskatoon have structured policy responses according to liberal welfare state tenets, where universalism has not been emphasized. Comparative policy studies have found this approach to social welfare provision is not very successful at alleviating poverty. (129, 130, 403) Moreover, evidence indicates the redistributive function of the Canadian state has declined over the past few decades. (186, 188)

Neoliberal globalization has also encouraged Canada and Saskatchewan to steadily reduce the percentage of GDP that was spent in social areas, with the exception of health. Increased health care spending may have insulated children from the potentially negative health consequences of globalization. Less government spending was directed towards housing, labour, social assistance, and social services. In other words, Canada and Saskatchewan have reduced the amount of spending that is allocated to the fundamental determinants of child health. This has resulted in the restructuring of social programs (e.g., social assistance in Saskatchewan, EI in Canada), which was often
associated with more strict eligibility requirements and reduced benefits. In addition, the privatization of risk has been pursued by Canada and Saskatchewan in a number of policy areas. The classic example is the housing sector in Canada, where the federal government devolved responsibility to the provinces, and this was further devolved to the municipalities. While this study was able to prove that neoliberal globalization has been linked to heightened disparities in the determinants of child health, it was unable to further prove that this has led to increased disparities in child health outcomes.

This study also highlights the importance of considering economic and political pathways in tandem. Politics and economics are inextricably linked because politics are intended to constrain markets and markets do not operate perfectly, contrary to some neoliberal theorists. If markets operated efficiently and fairly when allocating resources, politics would not be required.(404) Throughout this study it was apparent that economic decisions in Canada and Saskatchewan were authored by local policy-makers, and these economic decisions have taken into account political factors such as national political will and support, the policy preferences of external actors (e.g., the WTO, IMF), and policy lessons from other countries (e.g., Canada soon adopted neoliberal policies after similar policies had been pursued in the United States and the United Kingdom). Rather than considering globalization to be an omnipotent, external force, we need to start viewing globalization as a factor that politicians and decision-makers use to legitimize certain policies, particularly in developed countries such as Canada. Thus, we are witnessing the creation of a competitive neoliberal state that has been created by local decision-makers.(405)

Political leaders—especially in the English-speaking world dominated by neoliberal economic philosophy—have themselves played a large part in contributing
to this view of government helplessness in the face of global trends. In canvassing support for policies lacking popular appeal, many OECD governments have sought to “sell” their policies of retrenchment to the electorate as being somehow “forced” on them by “global economic trends over which they have no control.”(406)

8.3 Strengths of Study

The majority of the neoliberal globalization and health literature has focused on macro-level relationships such as linking increased economic growth with mortality rates or life expectancy in a certain region or nation.(3-5) Moreover, investigating the political and economic pathways that affect health is an important area of research that has been underdeveloped in Canada.(50) This thesis research represents a departure from previous neoliberal globalization and health studies, with in-depth analysis of the exact political and economic pathways that were operating between neoliberal globalization and child health in a specific context (Saskatoon, Saskatchewan).

Another strength of this study is that multiple, mixed methods were used to explore the pathways between neoliberal globalization and child health. Multiple, mixed methods allowed this study to fully explore the phenomenon of economic and political neoliberal globalization as it relates to health in a specific context and for a particular population. By using a combination of qualitative and quantitative methodologies, a more complete picture of the phenomenon emerged. This is one of the main strengths of mixed methods research.(42)

The study design employed in this study adhered to the best practices set out in the determinants of health literature. For example, the CSDH was explicitly concerned with what exactly constitutes evidence, when they were gathering evidence regarding health inequities and the determinants of health. The CSDH concluded that the evidence
base regarding the determinants of health needed to encompass more than randomized control trials since real world situations do not allow for the control of exogenous variables. The CSDH concluded that evidence needs to be assessed from a fit-for-purpose approach, where multiple methods are employed, such as case studies and process tracing. (30,407) The mixed methods selected for this study were used to capture the complexity of the neoliberal globalization and health relationship, including the various interceding levels between the processes of neoliberal globalization and individual health status.

A further strength of this case study is its potential to inform policy. This case study found that a number of policy responses are not adequate enough to address the negative consequences of neoliberal globalization for child health. For instance, the NCB has not been very effective at diminishing child poverty in Canada, Saskatchewan, and Saskatoon. This study systematically reviewed some of the policy responses to these pressing social issues and found where the policy responses were not having the intended effects (e.g., reducing child poverty or increasing affordable housing).

Finally, part of the strength of this study lies in the use of a pre-existing analytical framework that has been theoretically and, in some cases, empirically substantiated. Labonte and Torgerson’s framework acted as a heuristic device where research findings could be applied and used to chart pathways specific to the case under investigation. The main strength of this selected analytical framework was its explication of the various levels (e.g., community level, household level) in the neoliberal globalization and health relationship and their potential interactions with one another via feedback loops. (23)
8.4 Limitations of Study

Although this study used multiple, mixed methods and addressed a number of gaps in the literature, there are also a number of limitations associated with this study. First, analysis was limited to the political and economic processes of neoliberal globalization due to time and resource constraints. There was also a theoretical justification for this focus. It is believed that the political and economic pathways are most profound in terms of shaping health outcomes. However, by not considering the health impacts of the cultural and social aspects of neoliberal globalization, this study neglected a piece of the neoliberal globalization and health picture in the City of Saskatoon. But as Labonte and Torgerson note, a plethora of case studies on a phenomenon as complex as neoliberal globalization are required to build up the links one-by-one. It would be near impossible (except with unlimited time and resources) to capture all of the links between neoliberal globalization and health in a single study. Future studies should consider the cultural and social aspects of neoliberal globalization in specific contexts and among particular populations.

A further limitation of this study was that the differential impact of neoliberal globalization among groups of children was not examined. Certain research questions have not been addressed such as: does neoliberal globalization impact Aboriginal children differently than non-Aboriginal children in Saskatoon? Saskatoon has a larger Aboriginal population than most Canadian cities, and poverty is concentrated among Canada’s Aboriginal populations. This would possibly lead to differential impacts for Aboriginal children, compared to non-Aboriginal children. It will be important in future studies to consider the impact of neoliberal globalization on Aboriginal children’s health.
As already mentioned in Chapter 1, by limiting analysis to children between the ages of zero to five, this study likely underestimated the impact of neoliberal globalization in terms of the determinants of health and health outcomes. Due to time and resource constraints, the impact of neoliberal globalization on older children, adults, and senior citizens have not been explored. While this study did investigate the changing determinants of health for parents of young children in Saskatoon, this study did not assess health outcomes among parents or the potential for the intergenerational transmission of deprivation. In addition, according to theories of child development, development is cumulative over the life course, but this was not assessed in this study. For all of these reasons, the impact of neoliberal globalization with regards to the determinants of health and health outcomes in Saskatoon was probably underestimated.

A further limitation in this study was introduced by using a large number of secondary data sources. Most data sources did not cover the entire study period (1980-2007). For example, the neighbourhood-level data for child health outcomes was only available for 1995 at the earliest. This limited the study’s ability to detect trends in health disparities over time. Data sources largely varied in terms of the time periods they covered, and they also varied in terms of the levels of geography they represented. Economic data was often easy to locate for Canada and Saskatchewan, but economic data specific to the City of Saskatoon was not as common. These limitations reduced the ability of this study to paint a complete picture of the political and economic pathways between neoliberal globalization and child health in Saskatoon.

Another limitation in this study was that it was ecological in nature. Individual-level data for children and their parents was not available for this study. While it would
be incorrect to automatically assume that what holds at the ecological level also holds at the individual level (i.e., the ecological fallacy), in some instances ecological studies can provide a fairly accurate picture of what is occurring among individuals. (152) Whether this study represents one such instance is not known. In the future, globalization and health studies should attempt to incorporate individual-level data in order to further substantiate claims regarding the impact of globalization on individual health outcomes.

Due to some of the limitations already mentioned, most investigations of the causal linkages between neoliberal globalization and health can only be tentative or exploratory. (285) As mentioned by De Vogli and Birbeck in their study on the impact of SAPs on the vulnerability of women and children to HIV, separating out the effects of SAPs from other exogenous factors such as famine and wars is impossible. (113) Real world situations do not allow for the controlling of exogenous factors, as is possible in a laboratory setting. (407) There are also a large number of intervening variables between a process as broad as neoliberal globalization and an individual’s health.

The more steps in the causal pathway from globalization to the health of any particular individual, group or community, the more difficult it becomes to describe the web of causation—especially to audiences that may be skeptical because of their own privileged positions in the global order, or sympathetic but unaccustomed to arguments about causation that are not based on experimental situations where all but one variable can be carefully controlled. The real world does not work like that... (159)

This does not mean, however, that investigations of neoliberal globalization and health should be abandoned or considered fruitless. Neoliberal globalization and health studies, including the one presented here, are important for building up the links between neoliberal globalization and health. Moreover, studies of this nature are important for contributing to our understanding of the complex structures that impact our health and
daily lives. This will eventually allow for the identification of entrees for policy and program responses.
LIST OF REFERENCES


(61) City of Saskatoon. City of Saskatoon Development Plan: Bylaw no. 7799. Saskatoon: City of Saskatoon; 2006.


(65) Lemstra M, Neudorf C. Health Disparity in Saskatoon: Analysis to Intervention. Saskatoon, SK: Saskatoon Health Region; 2008.


(85) Mustard JF, McCain MN, Bertrand J. Changing beliefs to change policy: The early years study. ISUMA 2000; 1(2).


(198) Dyck S. Saskatoon #1 in Country. Saskatoon: Saskatoon Regional Economic Development Authority; 2007.

(199) City of Saskatoon. GDP in Saskatoon. Saskatoon: City of Saskatoon; n.d.


(213) CANSIM. Table 380-0027: Exports and imports of goods and services, annual (dollars x 1,000,000). Available at: http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-eng.HTM. Accessed 12/29, 2008.

(214) CANSIM. Table 386-00023: Interprovincial and international trade flows at producer prices, annual (dollars x 1,000,000). Available at: http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-eng.HTM. Accessed 12/29, 2009.


(216) CANSIM. Table 376-0053: International investment position, Canadian direct investment abroad and foreign direct investment in Canada, by industry and country, annual (dollars x 1,000,000). Available at: http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-eng.HTM. Accessed 12/29, 2008.


(224) CANSIM. Table 385-00021: Federal, provincial and territorial general government revenue and expenditures, for fiscal year ending March 31, annual (dollars x 1,000,000). Available at: http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-eng.HTM. Accessed 12/29, 2008.


(241) International Brotherhood of Electrical Workers. Utility deregulation in Canada is most unpopular in those provinces that found out too late it is not free-market paradise. 2001; Available at: http://www.ibew.org/articles/01journal/0107/canadaderegulation.htm. Accessed 02/20, 2009.


(251) Nickel R. Saskatchewan dodges the recession--so far. Financial Post March 6, 2009.


(257) City of Saskatoon. Census 2001. Available at: 

(258) City of Saskatoon. Census 1996. Available at: 

(259) City of Saskatoon. Census 1991. Available at: 

(260) City of Saskatoon. Census 1986. Available at: 


(262) Jackson A. Work and Labour in Canada: Critical Issues. Toronto: Canadian 

(263) Galabuzi GE. Canada's economic apartheid: The social exclusion of racialized 

(264) Centre for the Study of Living Standards. Incidence of Child Poverty in Vital Signs 
CMAs Using LICO, Pre-Tax, 1980, 1985, 1990 and 2000-2005. 2007; Available at: 

(265) Federation of Canadian Municipalities. Indicators. Available at: 

(266) Graham KAH, Peters E. Aboriginal Communities and Urban Sustainability. 

(267) CANSIM. Table 202-08051: Low income gap, by economic family type, 2006 
constant dollars, annual. Available at: http://estat.statcan.gc.ca/cgi-

(268) Murphy B, Roberts P, Wolfson M. High-income Canadians. Perspectives on 
Labour and Income 2007; 8(9).

(269) CANSIM. Table 202-07051: Gini coefficients of market, total and after-tax 
income, by economic family type, annual (number). Available at: 
http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-

(270) Federation of Canadian Municipalities. A Brief History. Available at: 


(299) Cantrill M. Pulling the Plug on Station 20 West: Hope takes a beating. Briarpatch Magazine; 2008.


(360) CANSIM. Table 282-0078: Labour force survey estimates (LFS), employees by union coverage, North American Industry Classification System (NAICS), sex and age group, annual (persons x 1,000). 2009; Available at: http://estat.statcan.gc.ca/cgi-win/CNSMCGI.EXE. Accessed 06/17, 2009.

(361) CANSIM. Table 282-00843: Labour force survey estimates (LFS), employees working overtime (weekly) by North American Industry Classification System (NAICS),


(365) CANSIM. Table 282-00364: Labour force survey estimates (LFS), multiple jobholders by usual hours worked at main and all jobs, annual (persons x 1,000). Available at: http://estat.statcan.gc.ca/cgi-win/cnsmcgi.pgm?LANG=E&EST-Fi=/ESTAT/Index-eng.HTM. Accessed 12/29, 2008.


(384) Merriman T, Pringle B. Affordable Housing: An Investment. Regina, SK: Task
Force on Housing Affordability; 2008.

(385) McGovern K. The State of Saskatoon Housing Update Report. Saskatoon, SK:
Community Services Department, City of Saskatoon; 2006.

(386) Chopin NS, Wormith JS. Count of Saskatoon's Homeless Population: Research
Findings. Saskatoon, SK: Community-University Institute for Social Research; 2008.

(387) Ministry of Social Services. Housing Rentals. 2009; Available at:

(388) Canadian Broadcasting Corporation. Amid housing boom, some renters struggling
in Saskatoon. Available at:

(389) Warnock JW. Squeezed out in Saskatchewan: A Critical Look at the History of
Provincial Housing Policy. The Sasquatch 2009; 1(1).

(390) Burton R. Downside of the housing boom. The Star Phoenix Thursday, May 24,
2007.

(391) Clapham D. Housing Policy and the Discourse on Globalization. European Journal
of Housing Policy 2006; 6(1):55-76.

(392) Cooper M. Housing Affordability: A Children's Issue. Ottawa: Canadian Policy

(393) Government of Saskatchewan. 2005 Annual Report-Saskatchewan Housing

(394) Wallace K. Housing boom bust for some: Low-income residents feel left out in the

(395) City of Saskatoon. Housing Business Plan-2006-City of Saskatoon. Saskatoon: City
of Saskatoon; 2006.

(396) City of Saskatoon. Housing Initiatives-Current Programs. 2009; Available at:

(397) Fair Rental Policy Organization. The Urgent Need to Bring Fairness to the
Taxation of Multi-Residential Properties in Ontario. 2001; Available at:
http://www.frpo.org/Document/Topics&Issues/Property%20Tax/Multi-


(408) Hutton D. Population boom eyed: City population forecast to increase by 50,000 by 2026. The Star Phoenix 2009 March 10, 2009.


(413) CANSIM. Table 109-0012: Aboriginal population as a proportion of total population, Canada, provinces, territories and health regions, 1996, every 5 years (percent). 1996; Available at: http://estat.statcan.gc.ca/cgi-win/CNSMCGI.EXE. Accessed 04/24, 2009.


(415) CANSIM. Table 111-0020: Family characteristics, single-earner and dual-earner families, by number of children, annual (dollars unless otherwise noted). 2006; Available at: http://estat.statcan.gc.ca/cgi-win/CNSMCGI.EXE. Accessed 04/24, 2009.


Appendices

Appendix A. Population of Saskatoon, Saskatchewan, and Canada Over Time

A.1 Population of Saskatoon, Saskatchewan

According to the 1981 Canadian Census, the population of the City of Saskatoon was 154,210. In 2006, the population of the city had increased to 214,034. This represents a 39% increase in the population of Saskatoon between 1981 and 2006.

A.2 Age Structure

It is important to consider the age structure of a community. Age structure directly impacts the availability of employees. Moreover, the age structure of a community provides an indication of the ability of a community to pay taxes and to take care of its young and elderly through social programs.

Table A1: Age Structure in Percentage (%) for Saskatoon, Saskatchewan, 1981 and 2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>8.17</td>
<td>7.37</td>
<td>6.44</td>
<td>5.89</td>
</tr>
<tr>
<td>5-9</td>
<td>7.61</td>
<td>6.74</td>
<td>7.28</td>
<td>6.25</td>
</tr>
<tr>
<td>10-14</td>
<td>7.71</td>
<td>6.91</td>
<td>7.47</td>
<td>6.68</td>
</tr>
<tr>
<td>15-19</td>
<td>9.80</td>
<td>9.91</td>
<td>7.61</td>
<td>7.28</td>
</tr>
<tr>
<td>20-24</td>
<td>12.02</td>
<td>13.20</td>
<td>9.39</td>
<td>9.38</td>
</tr>
<tr>
<td>25-29</td>
<td>10.83</td>
<td>10.25</td>
<td>7.65</td>
<td>7.30</td>
</tr>
<tr>
<td>30-34</td>
<td>8.34</td>
<td>7.68</td>
<td>6.76</td>
<td>6.58</td>
</tr>
<tr>
<td>35-39</td>
<td>5.86</td>
<td>5.46</td>
<td>8.04</td>
<td>7.74</td>
</tr>
<tr>
<td>Age Group</td>
<td>1981</td>
<td>2006</td>
<td>2026</td>
<td>Projected Increase</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------------------</td>
</tr>
<tr>
<td>40-44</td>
<td>4.95</td>
<td>4.79</td>
<td>8.30</td>
<td>3.61</td>
</tr>
<tr>
<td>45-49</td>
<td>4.71</td>
<td>4.37</td>
<td>7.39</td>
<td>2.99</td>
</tr>
<tr>
<td>50-54</td>
<td>4.35</td>
<td>4.38</td>
<td>6.01</td>
<td>1.82</td>
</tr>
<tr>
<td>55-59</td>
<td>4.01</td>
<td>4.23</td>
<td>4.82</td>
<td>0.76</td>
</tr>
<tr>
<td>60-64</td>
<td>3.50</td>
<td>3.80</td>
<td>3.26</td>
<td>0.57</td>
</tr>
<tr>
<td>65-69</td>
<td>2.75</td>
<td>3.44</td>
<td>2.94</td>
<td>0.23</td>
</tr>
<tr>
<td>70-74</td>
<td>2.16</td>
<td>2.79</td>
<td>2.30</td>
<td>0.23</td>
</tr>
<tr>
<td>75-79</td>
<td>1.56</td>
<td>1.97</td>
<td>2.31</td>
<td>0.34</td>
</tr>
<tr>
<td>80-84</td>
<td>0.89</td>
<td>1.37</td>
<td>1.23</td>
<td>0.44</td>
</tr>
<tr>
<td>85+</td>
<td>0.77</td>
<td>1.33</td>
<td>0.82</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Source: (8,349)

The age distribution in the city in 1981 was typically concentrated in the younger age groups. The largest proportion of people was in the 15 to 34 age category. In 2006, the age distribution became more evenly distributed across all age categories. (8,349) It is estimated that by 2026 Saskatoon’s population will grow to 260,000. It is also projected that over the next few decades there will be a large increase in the proportion of people aged 65 and over. However, at the end of the next twenty years, it is projected there will be a large increase in the elementary school aged demographic of the population. (408)

The age structure in the province of Saskatchewan is currently quite similar to that which is witnessed in Saskatoon. (409)

According to the 2006 Census, the age structure of Canada is increasingly concentrated in the upper age brackets. Persons aged 65 and over composed 13.7% of
Canada’s total population in 2006, which was a recorded high. A record low was also recorded for children aged 15 and under, where this population made up 17.7% of Canada’s total population.(410)

A.3 Immigrant Population

Saskatoon’s proportion of immigrants has always been relatively low, particularly when compared to Canada’s major immigrant-receiving cities of Toronto, Vancouver and Montreal.(411) Census data from 1981 was not available on the proportion of immigrant citizens. The proportion of immigrant citizens in Saskatoon was 10.1% in 1986, and has remained fairly stagnant ever since. In 2006, the proportion of immigrants had declined slightly to 9.1%. (8,257-260)

In Saskatchewan, the proportion of immigrants in the province was 5.0% in 2006.(409) This percentage was slightly higher at 5.4% in 1996.(412)

In Canada, the 2006 Census found that 19.8% of the total population was foreign-born. This was the highest recorded number for immigration in Canada in 75 years. Almost 70% of all recent immigrants move to the cities of Toronto, Montreal, and Vancouver.(412)

A.4 Aboriginal Population

The proportion of Aboriginal residents in Saskatoon could not be obtained until the 1991 Census. In 1991, 4.1% of the city’s population was self-identified as Aboriginal in identity; in 2006, this percentage had increased to 9.6% of the city’s population.
Currently, there are a larger proportion of Aboriginal citizens in Saskatoon than immigrant citizens.(8,257-259)

Table A2: Mean (Standard Deviation) for Proportion of Aboriginal Population, Percentage (%) in Saskatoon’s Neighbourhoods

<table>
<thead>
<tr>
<th>Year</th>
<th>All Neighbourhoods</th>
<th>Poorest Neighbourhoods</th>
<th>Most Affluent Neighbourhoods</th>
<th>Rest of Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>4.6 (5.3)</td>
<td>15.1 (7.6)</td>
<td>0.1 (0.3)</td>
<td>3.3 (3.3)</td>
</tr>
<tr>
<td>1996</td>
<td>8.6 (9.7)</td>
<td>29.9 (11.3)</td>
<td>1.1 (1.1)</td>
<td>6.0 (5.3)</td>
</tr>
<tr>
<td>2001</td>
<td>10.8 (10.4)</td>
<td>33.1 (12.0)</td>
<td>2.8 (1.7)</td>
<td>8.1 (6.2)</td>
</tr>
<tr>
<td>2006</td>
<td>10.1 (10.3)</td>
<td>33.3 (13.2)</td>
<td>2.8 (2.2)</td>
<td>7.5 (5.7)</td>
</tr>
<tr>
<td>Change</td>
<td>119.6</td>
<td>120.5</td>
<td>2700.0</td>
<td>127.3</td>
</tr>
</tbody>
</table>

Source: (8,257-259)

Geographic disparities based on the proportion of Aboriginal peoples have decreased over time in Saskatoon. The proportion of the Aboriginal population in Saskatoon’s most affluent neighbourhoods was almost negligible in 1981 at 0.1% of the population. When comparing Saskatoon’s poorest versus most affluent neighbourhoods in 1981, the proportion of the Aboriginal population was 151 times greater in the poorest neighbourhoods. In 2006, the proportion of Aboriginal population was 11.9 times higher in the poorest neighbourhoods than in the most affluent neighbourhoods.

In Saskatchewan, the proportion of Aboriginal population was 14.9% in 2006.(409) This increased from 11% of the total population of Saskatchewan in 1996 (the earliest date for which data was available).(413)

In Canada, Aboriginal peoples composed 2.9% of the population of the country in 1996.(413) According to the 2006 Census, Aboriginal peoples in Canada were 3.8% of the total population.(414)
A.5 Dual-Earner Families with Children

In Saskatoon, the number of dual-earner families with children increased slightly from 35% of all families in 2000 to 35.1% of all families in 2006. The number of dual-earner families with children decreased slightly in Saskatchewan from 34% of all families in 2000 to 33.2% of all families in 2006. In Canada, the proportion of dual-earner families was 32% in both 2000 and 2006.(415)

A.6 Lone Parent Population

The proportion of lone parent families in Saskatoon has ranged from a low of 10.3% in 1991 to a high of 12.4% in 2001. The most recent Census ascertained that 12.2% of Saskatoon’s families were headed by single parents. Female lone parent families composed the majority of lone parent families for all years assessed.(8,257-260,349)

In Saskatchewan, 17.3% of families were headed by a lone parent in 2000.(416) In 2006, 16.7% of families in the province were headed by a lone parent.(409)

According to the 2006 Canadian Census, the proportion of lone parent families in Canada was 15.9%, only up 0.2% from 2001. In the past 75 years, the lowest proportion of lone parent families in Canada was recorded in 1966 at 8.2%, but since then the proportion has been steadily increasing.(417)
Appendix B. The Social-Cultural and Technological Pathways Between Globalization and Health

B.1 The Social-Cultural Pathway

B.1.1 Urbanization

Neoliberal globalization and its impacts are often exacted through the process of urbanization.(172) Urbanization is defined as, “the migration of an increasing proportion of rural dwellers into cities.”(418) Over the past 200 years, the proportion of the world’s population that resides in urban conditions has increased from approximately five percent to 50%.(102, 418)

As the French writer Henri Lefebvre suggested, the production of urban space, the expansion of the built environment, and the industrialization of agriculture have made distinctions between city and countryside a thing of the past. Toronto and Moose Jaw are less absolutely different social forms than gradual distinctions within an unevenly urbanized world.(172)

Increasing urbanization has well documented impacts on child health, including a negative effect on dietary and exercise patterns. In addition, injuries among children are quite common in urban areas, with many industrialized countries citing injuries as the first and foremost cause of death among children.(418) Urbanization is associated with higher levels of pollution and environmental hazards. There are two sides to the story of urbanization and the environment, however. First, urbanization does move people away from rural and protected regions, which may have a beneficial impact for some conservation areas. On the other hand, urbanization increases per capita demands for energy, consumer goods, services, and food production.(277,419)
B.1.2 Feminization of Poverty

Neoliberal globalization has been found to increase poverty in certain segments of the population. Women are thought to be particularly vulnerable to poverty due to the ubiquity of patriarchal structures. Currently, 70% of the world’s poor are female, and this number has been increasing.(103) Some have argued that neoliberal globalization empowers women because women are increasingly integrated into the labour force. Women’s participation in the labour force can garner positive income growth and greater health gains for families, although this must be accompanied by the provision of educational opportunities for mothers and high quality child care.(19)

In most instances, increased female labour participation in the global marketplace has been disempowering. Women often become employed in industries with low wages and unsatisfactory working conditions. Female employment situations generally have few, if any, benefits, and there is little control over work or security.(242) Female labour participation also increased at the same time as rates of unionization were decreasing, which increases their vulnerability to discrimination.(6) In addition, women are most often relegated to non-traditional forms of employment.(103) Women are also more often caregivers for both children and relatives, making them more vulnerable to changes in social assistance policies, and the provision of health and social services.(420) In Heymann’s ‘Project on Global Working Families’, far more women than men had lost their jobs due to care giving responsibilities associated with a young child. Furthermore, the realm of unpaid domestic work is generally dominated by women, creating a double workload for many working women.(157)
B.1.3 Culture

In cultural terms, the greatest change brought about by neoliberal globalization has been the emergence of an awareness of peoples’ lives in every corner of the world; worldwide social relations are becoming more common since diverse cultures can more easily share ideas because of advanced technology. At this point though, this global awareness of other cultures is dominated by the English language and Western values. (101,421) Of direct salience for population health, the spread of Western values is accompanied by the marketing of unhealthy lifestyles and products. For instance, Western lifestyles usually revolve around purchasing McDonald’s at a drive-thru in a large SUV. This portrayal of the cultural implications of neoliberal globalization is in line with scholars that speculate neoliberal globalization will create more individualistic patterns that are premised on Western values. (422)

An alternative interpretation of the cultural impact of neoliberal globalization suggests that greater heterogeneity will occur in terms of cultural values and beliefs. Under this interpretation, the diffusion of culture will lead to a rich multiculturalism in all pockets of the world that is aided by communications technology. A third view on the cultural aspects of neoliberal globalization has been proposed by Fukuyama. He argues that there will be cultural convergence at some levels, and also divergence at other levels. Thus, for instance, there will be cultural convergence in terms of economic and political ideologies, while trends to cultural distinctiveness will occur concurrently. (422)
B.2 The Technological Pathway

B.2.1 Nature of Work

Neoliberal globalization has been propelled by and, according to some, been a direct result of advances in technology. During the mid-1970s, only 50,000 computers existed in the world. Today, that number is 556 million, allowing people from opposite ends of the globe to communicate in a matter of seconds. Computerization has also inexorably altered the nature of work. For example, manufacturing plants that once employed a multitude of well-paid, unionized workers have been replaced by plants that employ a few workers that operate highly mechanized means of production. As noted previously, neoliberal globalization has brought about a decline in manufacturing employment. While manufacturing employment has been precipitously declining, employment in the service sector has been increasing, which has been aided by computerization and advances in communications technology. Information and communications technologies have also allowed for the disconnection of the worker and the physical location of work. For example, many people are able to work from home now.

B.2.2 Time-Space Compression

Technological advances have also resulted in a time-space compression, where actions in one location may have direct implications for another location that is half a world away. People are now able to establish connections with others in distant locales on a real time basis. One example of this increasing connectedness is the ability of stock markets to almost instantaneously react to political or economic changes throughout the
world such as when a terrorist attack occurs. Advanced technology moves $3.4 trillion in currency around the world each day. Technology allows for the rapid flight of capital, with investors being able to move funds from country to country in a matter of seconds. Much of this capital flight is speculative in nature, which contributes to economic volatility. Economic volatility often leads to political instability.

B.2.3 Migration

Due to advances in transportation and communication (i.e., the technological aspects of neoliberal globalization), human migration has increased among certain populations. For example, between 1991 and 2000, the annual number of airline passengers increased by 51%. Involuntary migration is also an increasingly relevant issue, with civil strife in certain corners of the world creating an unprecedented number of refugees. Involuntary migration has been linked to the economic and political instability that is associated with neoliberal globalization and its features such as capital flight. Including both voluntary and involuntary migration, it is estimated that over 175 million people lived outside their country of origin in 2000. Migration itself has direct health effects since it facilitates the rapid spread of illness and disease.

But has migration actually increased under the current phase of neoliberal globalization? Some authors argue that migration has actually dwindled under neoliberal globalization, largely due to the stringent immigration laws in developed countries. Migration has been described as a missing feature of neoliberal globalization. Disparities exist in migration, where those who are neoliberal globalization’s winners are able to move throughout the world with relative ease. On the other hand, those who have
not benefited from neoliberal globalization are usually quite restricted in their movements, or are forced into migration due to war or famine. Wealth obviously facilitates ease of movement. Immigration also tends to occur among the best educated, which is commonly referred to as brain drain.

B.2.4 Environment

Environmental degradation can result from any of the pathways of neoliberal globalization (economic, political, social-cultural, or technological), although most often environmental impacts are linked to technological advancement. To illustrate the numerous linkages between the environment and other pathways, corporations and states often bypass stringent environmental legislation since it hampers economic competitiveness and the profit margin. While humans have restructured their ecosystems over the past 30-40,000 years, the rise of neoliberal globalization has facilitated environmental change on a global scale. Human impact on the environment was historically confined to local or regional areas. More recently, human impacts on the environment manifest themselves on a global scale such as with climate change or global biodiversity loss. The linkage between neoliberal globalization and climate change is quite straightforward since to transport goods around the world requires the consumption of fossil fuels. Studies have found that environmental changes most acutely affect poor populations since they are the least likely to be able to remove themselves from such hazards, whereas affluent citizens are able to relocate.
### Appendix C. Interview Guide

<table>
<thead>
<tr>
<th>Objective</th>
<th>Interview Question</th>
</tr>
</thead>
</table>
| • Introduction to interview; Basic demographic information               | • How long have you lived in Saskatoon?  
• What neighbourhood do you live in? How long have you lived in this neighbourhood?  
• What is your age?  
• What is your marital status?  
• How many people are in your family?  
• How old are your children?                                                                                           |
| • To further validate the causal pathways of increased poverty and income inequality and their impact on families | • Within Saskatoon, do you believe that poverty is more of a problem or less of a problem now than it was 10 years ago? 20 years ago?  
• Do you believe that families living in Saskatoon are better off than they were 10 years ago? 20 years ago? |
| • To further validate the causal pathways of a rise in non-traditional employment, usually in the service sector, and their impact on families | • Can you tell me about your employment history?  
If the interview respondent is currently employed:  
• Do you receive any benefits (e.g., sick leave, maternity leave, health insurance, etc.) at your current workplace?  
• Can you tell me about any barriers/problems that you have encountered due to your present form of employment?  
• Are you working as many hours as you would like to?  
• Do you consider the conditions of your workplace to be satisfactory?  
• How does your current employment situation affect your family?  
If the interview respondent is currently not employed:  
• Can you tell me about your experiences with income security and/or Employment Insurance in Saskatchewan?  
• Have you participated in a labour attachment program? If so, was it helpful? Did it help improve your family situation?  
• What type of work do you hope to do in the future? |
For all interview respondents, once the employment situation has been discussed:

- What is your household income (using the Canadian census range)*?
- Do you feel that your household income is adequate enough to meet your family’s needs?

- To further validate the causal pathway of decreased housing affordability and its impact on families
  - Has affordable housing been an issue for your family?
  - If so, what have been some of the barriers to obtaining affordable housing?
  - Have any supports or programs been particularly helpful in obtaining affordable housing?

- To determine people’s experience and perceptions of policy responses at the local level
  - What supports or programs have been particularly useful for raising your family?
  - Have there been any significant barriers or problems in the community that have affected your ability to raise your family?

- Completion of interview
  - Is there anything else that you would like to mention that we have not covered yet?

*Income Categories

A: Less than $5,000
B: Between $5,000 and $10,000
C: Between $10,000 and $15,000
D: Between $15,000 and $20,000
E: Between $20,000 and $25,000
F: Between $30,000 and $35,000
Appendix D. Consent Form

CONSENT FORM

You are invited to participate in a research project entitled, *Child Health in an Era of Globalization: A Case Study of Saskatoon, Saskatchewan*. Please read this form carefully, and feel free to ask any questions you may have.

Researcher(s):

Jennifer A. Cushon  
Department of Community Health & Epidemiology  
Health Science Building, 107 Wiggins Road  
University of Saskatchewan  
Saskatoon, Saskatchewan, Canada S7N-5E5  
Phone: 306-966-7879  
Fax: 306-966-7920  
jennifer.cushon@usask.ca

Dr. Nazeem Muhajarine  
Department of Community Health & Epidemiology  
Health Science Building, 107 Wiggins Road  
University of Saskatchewan  
Saskatoon, Saskatchewan, Canada S7N-5E5  
Phone: 306-966-7940  
Fax: 306-966-7920  
nazeem.muhajarine@usask.ca

Purpose and Procedure:

The objectives of this research are:

- to investigate the political and economic pathways by which globalization impacts the determinants of health and health outcomes in Saskatoon, Saskatchewan, with special reference to young low-income children; and

- to determine the Canadian, Saskatchewan and municipal policy responses to two primary determinants of child health, poverty and income inequality.

One of the methods selected to attain the above objectives is interviews. The objectives of the interview component are as follows:
• to further validate the causal pathways and their impact on families that have been identified as being particularly relevant for the Saskatoon case: declining family income, increasing income inequality, a rise in non-traditional employment, usually in the service sector, declining housing affordability, fewer and less generous social policies; and

• to determine people’s experiences and perceptions of family-relevant policy responses that have the potential to mitigate the negative consequences of globalization.

Interviews with individuals will occur in offices at QUINT and the Westside Community Clinic. The length of the interview will be approximately one hour in total. With your permission, interviews will be tape recorded and transcribed. The data from this research project will be published and presented at conferences; however, your identity will be kept confidential. Although we will report direct quotations from the interview, you will be given a pseudonym, and all identifying information such as your occupation, place of employment and/or health care provider will be removed from our reports and presentations.

**Potential Benefits:** The main benefit of this research is that results from the interviews and the larger research project will be reported to policy-makers. Thus, this body of research has the potential to inform policy.

**Potential Risks:** Some of the questions in the interview guide are of a personal nature such as your level of income, employment history and marital status. You do not have to answer any questions you feel uncomfortable answering.

**Storage of Data:** As per University regulations, all interview consent forms, data, tapes and transcriptions will be securely stored in a locked cabinet in the research supervisor’s (Dr. Nazeem Muhajarine) office at the University of Saskatchewan for a minimum of five years upon the completion of this study. If the research supervisor and student choose to destroy the data after five years, the data will be destroyed beyond recovery.

**Confidentiality:** All of the datasets that emerge from the interviews will have a numerical identifier attached to them that does not automatically link data directly back to the interview participant that provided information. The information you provide will be held in strict confidence and discussed only with the research team.

In addition, the anonymity of the respondents will be maintained when writing and reporting findings since any potential identifier such as your occupation, place of work and/or health care provider will be omitted from reports and presentations.

**Right to Withdraw:** Your participation is voluntary, and you may answer only those questions that you are comfortable with. During the interview, you may request that the recording device be turned off at any time.
There is no guarantee that you will personally benefit from your involvement. You may withdraw from the research project for any reason, at any time, without penalty of any sort such as a loss of relevant entitlements, medical care, access to services, etc. If you withdraw from the research project at any time, any data that you have contributed will be destroyed at your request.

Questions: If you have any questions concerning this research project, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided if you have other questions. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on (insert date). Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). Out of town participants may call collect.

Transcript Release: Direct quotations from the interviews will be reported, however, all identifying information such as your occupation, place of employment, health care provider, etc. will be removed. If at some later point, you have any second thoughts about your responses, you should contact the researchers and your responses will be removed from the database.

Follow-Up or Debriefing: You may find out about the results of the research project by contacting Jennifer Cushon or Nazeem Muhajarine at the contact information provided above. If you wish to be invited to any public presentations about this research, please leave your contact information with the interviewer.

Consent to Participate: I have read and understood the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

___________________________________  ____________  
(Name of Participant)     (Date)

___________________________________  __________________
(Signature of Participant)    (Signature of Researcher)
Appendix E. Joinpoint Regression Model Statistics

Table E1: Infant Mortality Rate, Saskatoon, 1980-2006

<table>
<thead>
<tr>
<th>Number of Joinpoints</th>
<th>Number of Observations</th>
<th>Number of Parameters</th>
<th>Degrees of Freedom</th>
<th>Sum of Squared Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>27</td>
<td>8</td>
<td>19</td>
<td>37.23776</td>
</tr>
</tbody>
</table>

Estimated Joinpoints

<table>
<thead>
<tr>
<th>Joinpoint</th>
<th>Estimate</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1990</td>
<td>1987</td>
<td>1993</td>
</tr>
<tr>
<td>3</td>
<td>2003</td>
<td>1997</td>
<td>2004</td>
</tr>
</tbody>
</table>

Estimated Regression Coefficients

| Parameter      | Standard Parameterization | Parameter Estimate | Standard Error | Z      | Prob > |t|     |
|----------------|---------------------------|--------------------|----------------|--------|--------|------|
| Intercept 1    |                           | 1287.13            | 321.5706       | 4.002637 | 0.001026 |
| Slope 1        |                           | -0.64436           | 0.162041       | -3.97653 | 0.001084 |
| Slope 2 - Slope 1 |                   | 1.989148           | 1.053266       | 1.888552 | 0.07722  |
| Slope 3 - Slope 2 |                   | -2.0528            | 1.065218       | -1.92712 | 0.071914 |
| Slope 4 - Slope 3 |                   | 2.29715            | 1.065218       | 2.156507 | 0.046604 |

General Parameterization

| Parameter      | Standard Parameterization | Parameter Estimate | Standard Error | Z      | Prob > |t|     |
|----------------|---------------------------|--------------------|----------------|--------|--------|------|
| Intercept 1    |                           | 1287.13            | 321.5706       | 4.002637 | 0.001026 |
| Intercept 2    |                           | -2671.27           | 2073.128       | -1.28852 | 0.215885 |
| Intercept 3    |                           | 1422.009           | 453.8701       | 3.133075 | 0.006419 |
| Intercept 4    |                           | -3179.18           | 2086.658       | -1.52358 | 0.147134 |
| Slope 1        |                           | -0.64436           | 0.162041       | -3.97653 | 0.001084 |
| Slope 2        |                           | 1.344787           | 1.040727       | 1.292161 | 0.214653 |
| Slope 3        |                           | -0.70801           | 0.227105       | -3.11756 | 0.006631 |
| Slope 4        |                           | 1.589137           | 1.040727       | 1.526949 | 0.146299 |
Table E2: Under-Five Mortality Rate, Saskatoon, 1980-2006

<table>
<thead>
<tr>
<th>Number of Joinpoints</th>
<th>Number of Observations</th>
<th>Number of Parameters</th>
<th>Degrees of Freedom</th>
<th>Sum of Squared Errors</th>
<th>Mean Squared Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>27</td>
<td>8</td>
<td>19</td>
<td>71.73264</td>
<td>3.7754</td>
</tr>
</tbody>
</table>

Estimated Joinpoints

<table>
<thead>
<tr>
<th>Joinpoint</th>
<th>Estimate</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1990</td>
<td>1985</td>
<td>1993</td>
</tr>
<tr>
<td>3</td>
<td>2002</td>
<td>1996</td>
<td>2004</td>
</tr>
</tbody>
</table>

Estimated Regression Coefficients (Beta)

| Parameter | Estimate | Standard Error | Z       | Prob > |t| |
|-----------|----------|----------------|---------|--------|---|
| Intercept 1 | 1818.522 | 370.9907 | 4.901799 | 0.00016 |
| Slope 1   | -0.91099 | 0.186944 | -4.87307 | 0.000169 |
| Slope 2 - Slope 1 | 2.477189 | 0.782043 | 3.167588 | 0.005971 |
| Slope 3 - Slope 2 | -2.96058 | 0.861045 | -3.43836 | 0.003376 |
| Slope 4 - Slope 3 | 2.938114 | 0.861045 | 3.412267 | 0.003567 |

General Parameterization

| Parameter | Estimate | Standard Error | Z       | Prob > |t| |
|-----------|----------|----------------|---------|--------|---|
| Intercept 1 | 1818.522 | 370.9907 | 4.901799 | 0.00016 |
| Intercept 2 | -3111.09 | 1513.045 | -2.05618 | 0.056458 |
| Intercept 3 | 2795.277 | 811.1922 | 3.445887 | 0.003322 |
| Intercept 4 | -3086.83 | 1522.158 | -2.02793 | 0.059557 |
| Slope 1   | -0.91099 | 0.186944 | -4.87307 | 0.000169 |
| Slope 2   | 1.566198 | 0.75937  | 2.062496 | 0.055785 |
| Slope 3   | -1.39438 | 0.4059   | -3.43529 | 0.003397 |
| Slope 4   | 1.54373  | 0.75937  | 2.032909 | 0.059 |
### Table E3: Low Birth Weight Rate, Saskatoon, 1980-2006

<table>
<thead>
<tr>
<th>Number of Joinpoints</th>
<th>Number of Observations</th>
<th>Number of Parameters</th>
<th>Degrees of Freedom</th>
<th>Sum of Squared Errors</th>
<th>Mean Squared Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>27</td>
<td>2</td>
<td>25</td>
<td>6.30029</td>
<td>0.25201</td>
</tr>
</tbody>
</table>

**Estimated Regression Coefficients (Beta)**

**Standard Parameterization**

| Parameter     | Parameter Estimate | Standard Error | Z      | Prob > |t| |
|---------------|--------------------|----------------|--------|--------|---|
| Intercept 1   | -76.9719           | 24.72089       | -3.1136| 0.004588|   |
| Slope 1       | 0.041392           | 0.012404       | 3.337047| 0.002651|   |

**General Parameterization**

| Parameter     | Parameter Estimate | Standard Error | Z      | Prob > |t| |
|---------------|--------------------|----------------|--------|--------|---|
| Intercept 1   | -76.9719           | 24.72089       | -3.1136| 0.004588|   |
| Slope 1       | 0.041392           | 0.012404       | 3.337047| 0.002651|   |
Table E4: Hospitalizations (ages 0 to 5), Saskatoon, 1980-2005

Model Statistics

<table>
<thead>
<tr>
<th>Number of Joinpoints</th>
<th>Number of Observations</th>
<th>Number of Parameters</th>
<th>Degrees of Freedom</th>
<th>Sum of Squared Errors</th>
<th>Mean Squared Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>19</td>
<td>6</td>
<td>13</td>
<td>511.3516</td>
<td>39.33474</td>
</tr>
</tbody>
</table>

Estimated Joinpoints

<table>
<thead>
<tr>
<th>Joinpoint</th>
<th>Estimate</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1991</td>
<td>1987</td>
<td>1994</td>
</tr>
<tr>
<td>2</td>
<td>1997</td>
<td>1995</td>
<td>1999</td>
</tr>
</tbody>
</table>

Estimated Regression Coefficients (Beta)

| Parameter   | Estimate  | Standard Error  | Z       | Prob > |t| |
|-------------|-----------|-----------------|--------|--------|----------|
| Intercept 1 | -2017.26  | 1990.431        | -1.01348| 0.332606|
| Slope 1     | 1.077674  | 1.00223         | 1.075277| 0.30527 |
| Slope 2 - Slope 1 | -7.91013 | 2.285435 | -3.46111 | 0.005323 |
| Slope 3 - Slope 2 | 12.66343 | 2.285435 | 5.540925 | 0.000175 |

General Parameterization

| Parameter   | Estimate  | Standard Error  | Z       | Prob > |t| |
|-------------|-----------|-----------------|--------|--------|----------|
| Intercept 1 | -2017.26  | 1990.431        | -1.01348| 0.332606|
| Intercept 2 | 13731.82  | 4095.597        | 3.352824| 0.006445|
| Intercept 3 | -11557    | 2005.964        | -5.76134| 0.000126|
| Slope 1     | 1.077674  | 1.00223         | 1.075277| 0.30527 |
| Slope 2     | -6.83246  | 2.05396         | -3.32648| 0.006753|
| Slope 3     | 5.830968  | 1.00223         | 5.817995| 0.000116|
Table E5: Injuries (ages 0 to 5), Saskatoon, 1980-2005

<table>
<thead>
<tr>
<th>Model Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Joinpoints</td>
<td>Number of Observations Number of Parameters Degrees of Freedom Sum of Squared Errors Mean Squared Error</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Joinpoints</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Joinpoint Estimate Lower CI Upper CI</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1991</td>
</tr>
<tr>
<td>2</td>
<td>1997</td>
</tr>
<tr>
<td>3</td>
<td>2001</td>
</tr>
</tbody>
</table>

| Estimated Regression Coefficients (Beta) | Standard Parameterization |  |
|----------------------------------------|--|------------------|--|
| Parameter | Parameter Estimate Standard Error | Z | Prob > | |t| |
| Intercept 1 | 537.7742 | 166.6262 | 3.227429 | 0.012104 |
| Slope 1 | -0.26627 | 0.0839 | -3.1736 | 0.013123 |
| Slope 2 – Slope 1 | -0.34888 | 0.191322 | -1.82351 | 0.105682 |
| Slope 3 – Slope 2 | 1.39917 | 0.421176 | 3.322055 | 0.010508 |
| Slope 4 – Slope 3 | -1.40561 | 0.454922 | -3.08979 | 0.014894 |

<table>
<thead>
<tr>
<th>General Parameterization</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Parameter Estimate Standard Error</td>
</tr>
<tr>
<td>Intercept 1</td>
<td>537.7742</td>
</tr>
<tr>
<td>Intercept 2</td>
<td>1232.391</td>
</tr>
<tr>
<td>Intercept 3</td>
<td>-1561.75</td>
</tr>
<tr>
<td>Intercept 4</td>
<td>1250.878</td>
</tr>
<tr>
<td>Slope 1</td>
<td>-0.26627</td>
</tr>
<tr>
<td>Slope 2</td>
<td>-0.61514</td>
</tr>
<tr>
<td>Slope 3</td>
<td>0.784026</td>
</tr>
<tr>
<td>Slope 4</td>
<td>-0.62159</td>
</tr>
</tbody>
</table>
Table E6: Asthma (ages 0 to 5), Saskatoon, 1980-2005

<table>
<thead>
<tr>
<th>Model Statistics</th>
<th>Number of Joinpoints</th>
<th>Number of Observations</th>
<th>Number of Parameters</th>
<th>Degrees of Freedom</th>
<th>Sum of Squared Errors</th>
<th>Mean Squared Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
<td>4</td>
<td>15</td>
<td>4.3228</td>
<td>0.28819</td>
<td></td>
</tr>
</tbody>
</table>

Estimated Joinpoints

<table>
<thead>
<tr>
<th>Joinpoint</th>
<th>Estimate</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1992</td>
<td>1987</td>
<td>2000</td>
</tr>
</tbody>
</table>

Estimated Regression

Coefficients (Beta) Standard Parameterization

| Parameter     | Estimate | Standard Error | Z     | Prob > |t| |
|---------------|----------|----------------|-------|--------|-------------|
| Interception 1| -101.976 | 137.3341       | -0.74254 | 0.470038|
| Slope 1       | 0.053776 | 0.069116       | 0.778054 | 0.449487|
| Slope 2 – Slope 1 | -0.29371 | 0.080027 | -3.67015 | 0.002522|

General Parameterization

| Parameter     | Estimate | Standard Error | Z     | Prob > |t| |
|---------------|----------|----------------|-------|--------|-------------|
| Interception 1| -101.976 | 137.3341       | -0.74254 | 0.470038|
| Interception 2| 483.1006 | 80.64055       | 5.990789 | 0.000033|
| Slope 1       | 0.053776 | 0.069116       | 0.778054 | 0.449487|
| Slope 2       | -0.23994 | 0.04034        | -5.94781 | 0.000036|
Appendix F. Descriptive Statistics for Groups of Neighbourhoods

Table F1: Means and Standard Deviations, Infant Mortality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods</th>
<th>SD-All Neighbourhoods</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>8.5969</td>
<td>15.85637</td>
<td>.0000</td>
<td>.0000</td>
<td>13.9700</td>
<td>11.88673</td>
</tr>
<tr>
<td>1996</td>
<td>4.6293</td>
<td>8.80687</td>
<td>2.5640</td>
<td>5.73328</td>
<td>8.0350</td>
<td>12.44917</td>
</tr>
<tr>
<td>2000</td>
<td>4.3136</td>
<td>13.03629</td>
<td>25.8340</td>
<td>35.40537</td>
<td>.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>2003</td>
<td>2.3124</td>
<td>7.88735</td>
<td>.0000</td>
<td>.0000</td>
<td>6.5900</td>
<td>11.39699</td>
</tr>
<tr>
<td>2004</td>
<td>3.4593</td>
<td>10.53780</td>
<td>.0000</td>
<td>.0000</td>
<td>3.4717</td>
<td>8.50381</td>
</tr>
<tr>
<td>2005</td>
<td>8.4395</td>
<td>15.23376</td>
<td>12.7020</td>
<td>11.72794</td>
<td>23.9033</td>
<td>34.39370</td>
</tr>
</tbody>
</table>
Table F2: Means and Standard Deviations, Under-Five Mortality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods</th>
<th>SD-All Neighbourhoods</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7.5019</td>
<td>23.61972</td>
<td>2.5641</td>
<td>5.73351</td>
<td>11.7370</td>
<td>12.87681</td>
</tr>
<tr>
<td>2000</td>
<td>4.4591</td>
<td>13.12226</td>
<td>25.8333</td>
<td>35.40441</td>
<td>.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>2001</td>
<td>3.8779</td>
<td>12.06736</td>
<td>7.6923</td>
<td>17.20052</td>
<td>22.9248</td>
<td>29.23529</td>
</tr>
<tr>
<td>2002</td>
<td>5.4409</td>
<td>15.45539</td>
<td>9.0909</td>
<td>20.32789</td>
<td>1.6340</td>
<td>4.00243</td>
</tr>
<tr>
<td>2004</td>
<td>3.4593</td>
<td>10.53752</td>
<td>.0000</td>
<td>.00000</td>
<td>18.9693</td>
<td>26.12274</td>
</tr>
<tr>
<td>2005</td>
<td>9.6298</td>
<td>15.89979</td>
<td>12.7022</td>
<td>11.72813</td>
<td>23.9018</td>
<td>34.39369</td>
</tr>
<tr>
<td>2006</td>
<td>7.0452</td>
<td>17.41856</td>
<td>5.9779</td>
<td>8.38937</td>
<td>21.0252</td>
<td>23.70527</td>
</tr>
</tbody>
</table>
Table F3: Means and Standard Deviations, Low Birth Weight Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods Excluding Poorest</th>
<th>SD-All Neighbourhoods Excluding Poorest</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>5.9609</td>
<td>6.14046</td>
<td>6.3440</td>
<td>5.79800</td>
<td>8.1017</td>
<td>4.18069</td>
</tr>
<tr>
<td>2002</td>
<td>5.3291</td>
<td>5.61726</td>
<td>3.8540</td>
<td>2.42576</td>
<td>7.0067</td>
<td>5.57397</td>
</tr>
<tr>
<td>2006</td>
<td>5.4080</td>
<td>5.21540</td>
<td>3.5940</td>
<td>3.96137</td>
<td>7.5933</td>
<td>3.78934</td>
</tr>
</tbody>
</table>
Table F4: Means and Standard Deviations, Hospitalization Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods Excluding Poorest</th>
<th>SD-All Neighbourhoods Excluding Poorest</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>86.1015</td>
<td>44.01229</td>
<td>60.6480</td>
<td>36.26563</td>
<td>83.1100</td>
<td>30.17560</td>
</tr>
<tr>
<td>1997</td>
<td>81.9507</td>
<td>42.29123</td>
<td>97.2700</td>
<td>29.73683</td>
<td>74.9700</td>
<td>8.37114</td>
</tr>
<tr>
<td>1998</td>
<td>83.0907</td>
<td>44.44663</td>
<td>84.2780</td>
<td>15.99947</td>
<td>84.8150</td>
<td>37.82098</td>
</tr>
<tr>
<td>1999</td>
<td>80.8849</td>
<td>36.02327</td>
<td>101.9480</td>
<td>20.79698</td>
<td>91.4383</td>
<td>53.86381</td>
</tr>
<tr>
<td>2000</td>
<td>80.6895</td>
<td>44.19623</td>
<td>90.1280</td>
<td>30.33147</td>
<td>117.6300</td>
<td>36.54306</td>
</tr>
<tr>
<td>2001</td>
<td>100.8707</td>
<td>133.77798</td>
<td>74.4840</td>
<td>26.96350</td>
<td>112.7300</td>
<td>33.37515</td>
</tr>
<tr>
<td>2002</td>
<td>78.6735</td>
<td>37.11715</td>
<td>70.1760</td>
<td>24.32574</td>
<td>113.2550</td>
<td>35.18820</td>
</tr>
<tr>
<td>2003</td>
<td>106.3015</td>
<td>106.93717</td>
<td>90.7540</td>
<td>25.57416</td>
<td>106.7817</td>
<td>23.38268</td>
</tr>
<tr>
<td>2004</td>
<td>93.8669</td>
<td>42.71642</td>
<td>112.9900</td>
<td>29.68789</td>
<td>140.6300</td>
<td>70.47430</td>
</tr>
<tr>
<td>2006</td>
<td>108.7193</td>
<td>38.97195</td>
<td>121.9040</td>
<td>12.49194</td>
<td>125.3717</td>
<td>32.14029</td>
</tr>
</tbody>
</table>
Table F5: Means and Standard Deviations, Injury Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods Excluding Poorest</th>
<th>SD-All Neighbourhoods Excluding Poorest</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3.7705</td>
<td>4.40120</td>
<td>2.9820</td>
<td>2.84032</td>
<td>2.1450</td>
<td>1.77454</td>
</tr>
<tr>
<td>1999</td>
<td>4.2385</td>
<td>4.76703</td>
<td>1.9640</td>
<td>1.92799</td>
<td>7.6817</td>
<td>4.37784</td>
</tr>
<tr>
<td>2002</td>
<td>5.1158</td>
<td>7.26018</td>
<td>3.2960</td>
<td>2.37125</td>
<td>9.1933</td>
<td>3.75237</td>
</tr>
<tr>
<td>2004</td>
<td>4.0971</td>
<td>5.85609</td>
<td>2.7300</td>
<td>2.66449</td>
<td>9.0867</td>
<td>5.93554</td>
</tr>
<tr>
<td>2005</td>
<td>3.5600</td>
<td>5.22387</td>
<td>1.4740</td>
<td>2.01851</td>
<td>1.1800</td>
<td>2.07731</td>
</tr>
</tbody>
</table>
Table F6: Means and Standard Deviations, Asthma Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean-All Neighbourhoods Excluding Poorest</th>
<th>SD-All Neighbourhoods Excluding Poorest</th>
<th>Mean-Most Affluent Neighbourhoods</th>
<th>SD-Most Affluent Neighbourhoods</th>
<th>Mean-Poorest Neighbourhoods</th>
<th>SD-Poorest Neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3.6613</td>
<td>5.07073</td>
<td>1.0920</td>
<td>2.44179</td>
<td>1.9667</td>
<td>2.25360</td>
</tr>
<tr>
<td>1998</td>
<td>3.0964</td>
<td>5.72463</td>
<td>2.9380</td>
<td>4.20799</td>
<td>2.9850</td>
<td>2.95231</td>
</tr>
<tr>
<td>1999</td>
<td>3.7104</td>
<td>5.79162</td>
<td>1.0960</td>
<td>1.52589</td>
<td>3.1917</td>
<td>2.73018</td>
</tr>
<tr>
<td>2000</td>
<td>2.0022</td>
<td>3.56546</td>
<td>2.1380</td>
<td>2.26009</td>
<td>10.5667</td>
<td>16.90278</td>
</tr>
<tr>
<td>2001</td>
<td>2.3304</td>
<td>3.67340</td>
<td>.6460</td>
<td>1.44450</td>
<td>.2817</td>
<td>.68994</td>
</tr>
<tr>
<td>2002</td>
<td>3.2700</td>
<td>7.30120</td>
<td>1.9480</td>
<td>3.01912</td>
<td>.6333</td>
<td>1.55134</td>
</tr>
<tr>
<td>2003</td>
<td>1.8756</td>
<td>4.29756</td>
<td>4.3480</td>
<td>4.16714</td>
<td>2.8633</td>
<td>3.45683</td>
</tr>
<tr>
<td>2004</td>
<td>1.8720</td>
<td>3.67900</td>
<td>.8060</td>
<td>1.80227</td>
<td>.9800</td>
<td>1.66479</td>
</tr>
<tr>
<td>2005</td>
<td>1.2796</td>
<td>2.55623</td>
<td>.7300</td>
<td>1.63233</td>
<td>3.6233</td>
<td>4.14221</td>
</tr>
<tr>
<td>2006</td>
<td>.7042</td>
<td>2.27662</td>
<td>.6380</td>
<td>1.42661</td>
<td>1.9800</td>
<td>2.36850</td>
</tr>
</tbody>
</table>
Appendix G. Mean Rank Comparisons Between Groups of Neighbourhoods

Table G1: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Infant Mortality Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>4.00</td>
<td>7.67</td>
<td>-2.115</td>
<td>.034</td>
</tr>
<tr>
<td>1996</td>
<td>5.40</td>
<td>6.50</td>
<td>-.697</td>
<td>.486</td>
</tr>
<tr>
<td>1997</td>
<td>4.50</td>
<td>7.25</td>
<td>-1.742</td>
<td>.082</td>
</tr>
<tr>
<td>1998</td>
<td>5.70</td>
<td>6.25</td>
<td>-.299</td>
<td>.765</td>
</tr>
<tr>
<td>1999</td>
<td>5.80</td>
<td>6.17</td>
<td>-.232</td>
<td>.816</td>
</tr>
<tr>
<td>2000</td>
<td>7.20</td>
<td>5.00</td>
<td>-1.625</td>
<td>.104</td>
</tr>
<tr>
<td>2001</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.195</td>
<td>.232</td>
</tr>
<tr>
<td>2002</td>
<td>6.20</td>
<td>5.83</td>
<td>-.271</td>
<td>.787</td>
</tr>
<tr>
<td>2003</td>
<td>5.00</td>
<td>6.83</td>
<td>-1.354</td>
<td>.176</td>
</tr>
<tr>
<td>2004</td>
<td>5.50</td>
<td>6.42</td>
<td>-.913</td>
<td>.361</td>
</tr>
<tr>
<td>2005</td>
<td>5.80</td>
<td>6.17</td>
<td>-.187</td>
<td>.852</td>
</tr>
<tr>
<td>2006</td>
<td>4.70</td>
<td>7.08</td>
<td>-1.248</td>
<td>.212</td>
</tr>
</tbody>
</table>

Table G2: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Under-Five Mortality Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>4.20</td>
<td>7.50</td>
<td>-1.792</td>
<td>.073</td>
</tr>
<tr>
<td>1996</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.269</td>
<td>.205</td>
</tr>
<tr>
<td>1997</td>
<td>4.50</td>
<td>7.25</td>
<td>-1.742</td>
<td>.082</td>
</tr>
<tr>
<td>1998</td>
<td>5.70</td>
<td>6.25</td>
<td>-.299</td>
<td>.765</td>
</tr>
<tr>
<td>1999</td>
<td>5.80</td>
<td>6.17</td>
<td>-.232</td>
<td>.816</td>
</tr>
<tr>
<td>2000</td>
<td>7.20</td>
<td>5.00</td>
<td>-1.625</td>
<td>.104</td>
</tr>
<tr>
<td>2001</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.195</td>
<td>.232</td>
</tr>
<tr>
<td>2002</td>
<td>6.20</td>
<td>5.83</td>
<td>-.271</td>
<td>.787</td>
</tr>
<tr>
<td>2003</td>
<td>5.00</td>
<td>6.83</td>
<td>-1.354</td>
<td>.176</td>
</tr>
<tr>
<td>2004</td>
<td>4.50</td>
<td>7.25</td>
<td>-1.742</td>
<td>.082</td>
</tr>
<tr>
<td>2005</td>
<td>5.80</td>
<td>6.17</td>
<td>-.187</td>
<td>.852</td>
</tr>
<tr>
<td>2006</td>
<td>4.70</td>
<td>7.08</td>
<td>-1.248</td>
<td>.212</td>
</tr>
</tbody>
</table>
Table G3: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Low Birth Weight Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>3.00</td>
<td>8.50</td>
<td>-2.751</td>
<td>.006</td>
</tr>
<tr>
<td>1996</td>
<td>3.40</td>
<td>8.17</td>
<td>-2.379</td>
<td>.017</td>
</tr>
<tr>
<td>1997</td>
<td>3.80</td>
<td>7.83</td>
<td>-2.008</td>
<td>.045</td>
</tr>
<tr>
<td>1998</td>
<td>6.50</td>
<td>5.58</td>
<td>-.457</td>
<td>.647</td>
</tr>
<tr>
<td>1999</td>
<td>6.20</td>
<td>5.83</td>
<td>-.183</td>
<td>.855</td>
</tr>
<tr>
<td>2000</td>
<td>5.00</td>
<td>6.83</td>
<td>-.913</td>
<td>.361</td>
</tr>
<tr>
<td>2001</td>
<td>5.20</td>
<td>6.67</td>
<td>-.730</td>
<td>.465</td>
</tr>
<tr>
<td>2002</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.106</td>
<td>.269</td>
</tr>
<tr>
<td>2003</td>
<td>3.80</td>
<td>7.83</td>
<td>-2.008</td>
<td>.045</td>
</tr>
<tr>
<td>2004</td>
<td>6.10</td>
<td>5.92</td>
<td>-.093</td>
<td>.926</td>
</tr>
<tr>
<td>2005</td>
<td>4.00</td>
<td>7.67</td>
<td>-1.826</td>
<td>.068</td>
</tr>
<tr>
<td>2006</td>
<td>4.40</td>
<td>7.33</td>
<td>-1.464</td>
<td>.143</td>
</tr>
</tbody>
</table>

Table G4: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Hospitalization Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>5.80</td>
<td>6.17</td>
<td>-.183</td>
<td>.855</td>
</tr>
<tr>
<td>1997</td>
<td>7.60</td>
<td>4.67</td>
<td>-1.461</td>
<td>.144</td>
</tr>
<tr>
<td>1998</td>
<td>6.20</td>
<td>5.83</td>
<td>-.183</td>
<td>.855</td>
</tr>
<tr>
<td>1999</td>
<td>7.60</td>
<td>4.67</td>
<td>-1.461</td>
<td>.144</td>
</tr>
<tr>
<td>2000</td>
<td>4.60</td>
<td>7.17</td>
<td>-1.278</td>
<td>.201</td>
</tr>
<tr>
<td>2001</td>
<td>4.40</td>
<td>7.33</td>
<td>-1.461</td>
<td>.144</td>
</tr>
<tr>
<td>2002</td>
<td>3.80</td>
<td>7.83</td>
<td>-2.008</td>
<td>.045</td>
</tr>
<tr>
<td>2003</td>
<td>5.00</td>
<td>6.83</td>
<td>-.913</td>
<td>.361</td>
</tr>
<tr>
<td>2004</td>
<td>5.80</td>
<td>6.17</td>
<td>-.183</td>
<td>.855</td>
</tr>
<tr>
<td>2005</td>
<td>4.40</td>
<td>7.33</td>
<td>-1.464</td>
<td>.143</td>
</tr>
<tr>
<td>2006</td>
<td>5.60</td>
<td>6.33</td>
<td>-.365</td>
<td>.715</td>
</tr>
</tbody>
</table>
Table G5: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Injury Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>6.00</td>
<td>6.00</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>1997</td>
<td>6.60</td>
<td>5.50</td>
<td>-.561</td>
<td>.575</td>
</tr>
<tr>
<td>1998</td>
<td>5.00</td>
<td>6.83</td>
<td>-.957</td>
<td>.338</td>
</tr>
<tr>
<td>1999</td>
<td>3.40</td>
<td>8.17</td>
<td>-2.379</td>
<td>.017</td>
</tr>
<tr>
<td>2000</td>
<td>4.00</td>
<td>7.67</td>
<td>-1.830</td>
<td>.067</td>
</tr>
<tr>
<td>2001</td>
<td>3.80</td>
<td>7.83</td>
<td>-2.008</td>
<td>.045</td>
</tr>
<tr>
<td>2002</td>
<td>3.40</td>
<td>8.17</td>
<td>-2.373</td>
<td>.018</td>
</tr>
<tr>
<td>2003</td>
<td>6.00</td>
<td>6.00</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>2004</td>
<td>4.00</td>
<td>7.67</td>
<td>-1.843</td>
<td>.065</td>
</tr>
<tr>
<td>2005</td>
<td>6.20</td>
<td>5.83</td>
<td>-.211</td>
<td>.833</td>
</tr>
<tr>
<td>2006</td>
<td>5.00</td>
<td>6.83</td>
<td>-.934</td>
<td>.350</td>
</tr>
</tbody>
</table>

Table G6: Mean Rank of Poorest Neighbourhoods Compared to Most Affluent Neighbourhoods, Asthma Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Most Affluent Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>6.00</td>
<td>6.00</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>1997</td>
<td>5.40</td>
<td>6.50</td>
<td>-.634</td>
<td>.526</td>
</tr>
<tr>
<td>1998</td>
<td>5.80</td>
<td>6.17</td>
<td>-.191</td>
<td>.848</td>
</tr>
<tr>
<td>1999</td>
<td>4.40</td>
<td>7.33</td>
<td>-1.532</td>
<td>.126</td>
</tr>
<tr>
<td>2000</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.106</td>
<td>.269</td>
</tr>
<tr>
<td>2001</td>
<td>6.20</td>
<td>5.83</td>
<td>-.271</td>
<td>.787</td>
</tr>
<tr>
<td>2002</td>
<td>6.70</td>
<td>5.42</td>
<td>-.813</td>
<td>.416</td>
</tr>
<tr>
<td>2003</td>
<td>6.40</td>
<td>5.67</td>
<td>-.374</td>
<td>.709</td>
</tr>
<tr>
<td>2004</td>
<td>5.80</td>
<td>6.17</td>
<td>-.232</td>
<td>.816</td>
</tr>
<tr>
<td>2005</td>
<td>4.80</td>
<td>7.00</td>
<td>-1.269</td>
<td>.205</td>
</tr>
<tr>
<td>2006</td>
<td>5.00</td>
<td>6.83</td>
<td>-1.057</td>
<td>.290</td>
</tr>
</tbody>
</table>
Table G7: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Infant Mortality Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>30.00</td>
<td>40.17</td>
<td>-1.572</td>
<td>.116</td>
</tr>
<tr>
<td>1996</td>
<td>30.51</td>
<td>35.50</td>
<td>-.865</td>
<td>.387</td>
</tr>
<tr>
<td>1997</td>
<td>29.86</td>
<td>41.42</td>
<td>-2.258</td>
<td>.024</td>
</tr>
<tr>
<td>1998</td>
<td>29.80</td>
<td>42.00</td>
<td>-2.303</td>
<td>.021</td>
</tr>
<tr>
<td>1999</td>
<td>30.62</td>
<td>34.50</td>
<td>-.673</td>
<td>.501</td>
</tr>
<tr>
<td>2000</td>
<td>31.49</td>
<td>26.50</td>
<td>-1.060</td>
<td>.289</td>
</tr>
<tr>
<td>2001</td>
<td>29.39</td>
<td>45.75</td>
<td>-3.197</td>
<td>.001</td>
</tr>
<tr>
<td>2002</td>
<td>31.01</td>
<td>30.92</td>
<td>-.020</td>
<td>.984</td>
</tr>
<tr>
<td>2003</td>
<td>30.32</td>
<td>37.25</td>
<td>-1.548</td>
<td>.122</td>
</tr>
<tr>
<td>2004</td>
<td>30.88</td>
<td>32.08</td>
<td>-.268</td>
<td>.788</td>
</tr>
<tr>
<td>2005</td>
<td>29.95</td>
<td>40.67</td>
<td>-1.658</td>
<td>.097</td>
</tr>
<tr>
<td>2006</td>
<td>29.55</td>
<td>44.25</td>
<td>-2.488</td>
<td>.013</td>
</tr>
</tbody>
</table>

Table G8: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Under-Five Mortality Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>29.87</td>
<td>41.33</td>
<td>-1.772</td>
<td>.076</td>
</tr>
<tr>
<td>1996</td>
<td>30.09</td>
<td>39.33</td>
<td>-1.565</td>
<td>.118</td>
</tr>
<tr>
<td>1997</td>
<td>29.87</td>
<td>41.33</td>
<td>-2.163</td>
<td>.031</td>
</tr>
<tr>
<td>1998</td>
<td>29.93</td>
<td>40.83</td>
<td>-1.940</td>
<td>.052</td>
</tr>
<tr>
<td>1999</td>
<td>30.69</td>
<td>33.83</td>
<td>-.532</td>
<td>.595</td>
</tr>
<tr>
<td>2000</td>
<td>31.49</td>
<td>26.50</td>
<td>-1.060</td>
<td>.289</td>
</tr>
<tr>
<td>2001</td>
<td>29.38</td>
<td>45.83</td>
<td>-3.125</td>
<td>.001</td>
</tr>
<tr>
<td>2002</td>
<td>31.07</td>
<td>30.33</td>
<td>-.150</td>
<td>.881</td>
</tr>
<tr>
<td>2003</td>
<td>30.45</td>
<td>36.08</td>
<td>-1.146</td>
<td>.252</td>
</tr>
<tr>
<td>2004</td>
<td>29.81</td>
<td>41.92</td>
<td>-2.461</td>
<td>.014</td>
</tr>
<tr>
<td>2005</td>
<td>30.07</td>
<td>39.50</td>
<td>-1.418</td>
<td>.156</td>
</tr>
<tr>
<td>2006</td>
<td>29.68</td>
<td>43.08</td>
<td>-2.178</td>
<td>.029</td>
</tr>
</tbody>
</table>
Table G9: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Low Birth Weight Rate, 1995-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>28.56</td>
<td>53.33</td>
<td>-3.261</td>
<td>.001</td>
</tr>
<tr>
<td>1996</td>
<td>29.48</td>
<td>44.00</td>
<td>-1.896</td>
<td>.058</td>
</tr>
<tr>
<td>1997</td>
<td>29.77</td>
<td>42.25</td>
<td>-1.643</td>
<td>.100</td>
</tr>
<tr>
<td>1998</td>
<td>30.15</td>
<td>38.75</td>
<td>-1.135</td>
<td>.257</td>
</tr>
<tr>
<td>1999</td>
<td>30.63</td>
<td>34.42</td>
<td>-.499</td>
<td>.618</td>
</tr>
<tr>
<td>2000</td>
<td>29.58</td>
<td>44.00</td>
<td>-1.910</td>
<td>.056</td>
</tr>
<tr>
<td>2001</td>
<td>30.03</td>
<td>39.92</td>
<td>-1.310</td>
<td>.190</td>
</tr>
<tr>
<td>2002</td>
<td>30.23</td>
<td>38.08</td>
<td>-1.039</td>
<td>.299</td>
</tr>
<tr>
<td>2003</td>
<td>29.19</td>
<td>47.58</td>
<td>-2.245</td>
<td>.015</td>
</tr>
<tr>
<td>2004</td>
<td>31.26</td>
<td>28.58</td>
<td>-.353</td>
<td>.724</td>
</tr>
<tr>
<td>2005</td>
<td>28.99</td>
<td>49.42</td>
<td>-2.686</td>
<td>.007</td>
</tr>
<tr>
<td>2006</td>
<td>29.84</td>
<td>41.67</td>
<td>-1.559</td>
<td>.119</td>
</tr>
</tbody>
</table>

Table G10: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Hospitalization Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>31.67</td>
<td>24.83</td>
<td>-.897</td>
<td>.370</td>
</tr>
<tr>
<td>1997</td>
<td>32.02</td>
<td>21.67</td>
<td>-1.357</td>
<td>.175</td>
</tr>
<tr>
<td>1998</td>
<td>31.04</td>
<td>30.67</td>
<td>-.048</td>
<td>.961</td>
</tr>
<tr>
<td>1999</td>
<td>31.65</td>
<td>25.00</td>
<td>-.872</td>
<td>.383</td>
</tr>
<tr>
<td>2000</td>
<td>29.39</td>
<td>45.75</td>
<td>-2.145</td>
<td>.032</td>
</tr>
<tr>
<td>2001</td>
<td>29.77</td>
<td>42.25</td>
<td>-1.635</td>
<td>.102</td>
</tr>
<tr>
<td>2002</td>
<td>29.71</td>
<td>42.83</td>
<td>-1.720</td>
<td>.085</td>
</tr>
<tr>
<td>2003</td>
<td>30.42</td>
<td>36.33</td>
<td>-.775</td>
<td>.438</td>
</tr>
<tr>
<td>2004</td>
<td>29.96</td>
<td>40.50</td>
<td>-1.381</td>
<td>.167</td>
</tr>
<tr>
<td>2005</td>
<td>29.71</td>
<td>42.83</td>
<td>-1.720</td>
<td>.085</td>
</tr>
<tr>
<td>2006</td>
<td>30.45</td>
<td>36.00</td>
<td>-.727</td>
<td>.468</td>
</tr>
</tbody>
</table>
Table G11: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Injury Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>31.13</td>
<td>29.83</td>
<td>-0.176</td>
<td>0.860</td>
</tr>
<tr>
<td>1997</td>
<td>31.53</td>
<td>26.17</td>
<td>-0.731</td>
<td>0.465</td>
</tr>
<tr>
<td>1998</td>
<td>30.42</td>
<td>36.33</td>
<td>-0.800</td>
<td>0.424</td>
</tr>
<tr>
<td>1999</td>
<td>29.56</td>
<td>44.17</td>
<td>-1.967</td>
<td>0.049</td>
</tr>
<tr>
<td>2000</td>
<td>29.31</td>
<td>46.50</td>
<td>-2.287</td>
<td>0.022</td>
</tr>
<tr>
<td>2001</td>
<td>28.51</td>
<td>53.83</td>
<td>-3.388</td>
<td>0.001</td>
</tr>
<tr>
<td>2002</td>
<td>29.21</td>
<td>47.42</td>
<td>-2.452</td>
<td>0.014</td>
</tr>
<tr>
<td>2003</td>
<td>30.55</td>
<td>35.17</td>
<td>-0.645</td>
<td>0.519</td>
</tr>
<tr>
<td>2004</td>
<td>29.44</td>
<td>45.33</td>
<td>-2.168</td>
<td>0.030</td>
</tr>
<tr>
<td>2005</td>
<td>31.73</td>
<td>24.33</td>
<td>-1.047</td>
<td>0.295</td>
</tr>
<tr>
<td>2006</td>
<td>29.82</td>
<td>41.83</td>
<td>-1.689</td>
<td>0.091</td>
</tr>
</tbody>
</table>

Table G12: Mean Rank of Poorest Neighbourhoods Compared to Rest of the Neighbourhoods, Asthma Rate, 1996-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest of Saskatoon’s Neighbourhoods Mean Rank</th>
<th>Poorest Neighbourhoods Mean Rank</th>
<th>Z-score</th>
<th>Asymptotic Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>30.58</td>
<td>34.83</td>
<td>-0.575</td>
<td>0.565</td>
</tr>
<tr>
<td>1997</td>
<td>31.37</td>
<td>27.58</td>
<td>-0.529</td>
<td>0.597</td>
</tr>
<tr>
<td>1998</td>
<td>30.55</td>
<td>35.17</td>
<td>-0.654</td>
<td>0.513</td>
</tr>
<tr>
<td>1999</td>
<td>30.65</td>
<td>34.17</td>
<td>-0.487</td>
<td>0.626</td>
</tr>
<tr>
<td>2000</td>
<td>29.40</td>
<td>45.67</td>
<td>-2.323</td>
<td>0.020</td>
</tr>
<tr>
<td>2001</td>
<td>32.05</td>
<td>21.33</td>
<td>-1.560</td>
<td>0.119</td>
</tr>
<tr>
<td>2002</td>
<td>31.91</td>
<td>22.67</td>
<td>-1.344</td>
<td>0.179</td>
</tr>
<tr>
<td>2003</td>
<td>30.05</td>
<td>39.67</td>
<td>-1.509</td>
<td>0.131</td>
</tr>
<tr>
<td>2004</td>
<td>31.13</td>
<td>29.83</td>
<td>-0.203</td>
<td>0.839</td>
</tr>
<tr>
<td>2005</td>
<td>30.12</td>
<td>39.08</td>
<td>-1.431</td>
<td>0.152</td>
</tr>
<tr>
<td>2006</td>
<td>29.94</td>
<td>40.75</td>
<td>-2.113</td>
<td>0.035</td>
</tr>
</tbody>
</table>
Appendix H. Logistic Regression with Generalized Estimating Equations for Neighbourhood-Level Child Health Outcomes

In the following tables, all other neighbourhoods in the city, excluding the poorest neighbourhoods, were treated as the reference category. Predictors included in the models for each child health outcome were: proportion of low-income families in the neighbourhood, proportion of Aboriginal residents in the neighbourhood, average family income in the neighbourhood, no education post-high school in the neighbourhood, proportion of unemployment in the neighbourhood, gross rent payments on housing in the neighbourhood, and gross owner payments on housing in the neighbourhood.
Table H1: Infant Mortality Rate Between Poorest and Rest of Neighbourhoods

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Odds Ratio</th>
<th>Semi-Robust Standard Error</th>
<th>Z-Score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low vs. Rest</td>
<td>1.011</td>
<td>.639</td>
<td>0.02</td>
<td>0.986</td>
</tr>
<tr>
<td>Year 1996</td>
<td>.552</td>
<td>.233</td>
<td>-1.41</td>
<td>0.159</td>
</tr>
<tr>
<td>Year 1997</td>
<td>.384</td>
<td>.174</td>
<td>-2.11</td>
<td>0.035</td>
</tr>
<tr>
<td>Year 1998</td>
<td>.436</td>
<td>.211</td>
<td>-1.71</td>
<td>0.087</td>
</tr>
<tr>
<td>Year 1999</td>
<td>.323</td>
<td>.160</td>
<td>-2.29</td>
<td>0.022</td>
</tr>
<tr>
<td>Year 2000</td>
<td>.189</td>
<td>.101</td>
<td>-3.11</td>
<td>0.002</td>
</tr>
<tr>
<td>Year 2001</td>
<td>.287</td>
<td>.140</td>
<td>-2.55</td>
<td>0.011</td>
</tr>
<tr>
<td>Year 2002</td>
<td>.220</td>
<td>.114</td>
<td>-2.93</td>
<td>0.003</td>
</tr>
<tr>
<td>Year 2003</td>
<td>.189</td>
<td>.091</td>
<td>-3.45</td>
<td>0.001</td>
</tr>
<tr>
<td>Year 2004</td>
<td>.147</td>
<td>.080</td>
<td>-3.53</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2005</td>
<td>.582</td>
<td>.252</td>
<td>-1.25</td>
<td>0.211</td>
</tr>
<tr>
<td>Year 2006</td>
<td>.377</td>
<td>.157</td>
<td>-2.34</td>
<td>0.019</td>
</tr>
<tr>
<td>Proportion of Low-Income</td>
<td>.982</td>
<td>.019</td>
<td>-0.97</td>
<td>0.333</td>
</tr>
<tr>
<td>Proportion of Aboriginal Residents</td>
<td>1.100</td>
<td>.038</td>
<td>2.60</td>
<td>0.009</td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>.000</td>
<td>1.29</td>
<td>0.196</td>
</tr>
<tr>
<td>Proportion No Education Post-High School</td>
<td>1.022</td>
<td>.023</td>
<td>1.00</td>
<td>0.319</td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>.991</td>
<td>.058</td>
<td>-0.16</td>
<td>0.871</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>1.000</td>
<td>.001</td>
<td>0.18</td>
<td>0.854</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>1.001</td>
<td>.001</td>
<td>0.93</td>
<td>0.351</td>
</tr>
<tr>
<td>Parameter</td>
<td>Odds Ratio</td>
<td>Semi-Robust Standard Error</td>
<td>Z-Score</td>
<td>p-value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------</td>
<td>----------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Low vs. Rest</td>
<td>0.774</td>
<td>0.435</td>
<td>-0.46</td>
<td>0.649</td>
</tr>
<tr>
<td>Year 1996</td>
<td>0.630</td>
<td>0.241</td>
<td>-1.21</td>
<td>0.226</td>
</tr>
<tr>
<td>Year 1997</td>
<td>0.410</td>
<td>0.163</td>
<td>-2.24</td>
<td>0.025</td>
</tr>
<tr>
<td>Year 1998</td>
<td>0.460</td>
<td>0.198</td>
<td>-1.81</td>
<td>0.071</td>
</tr>
<tr>
<td>Year 1999</td>
<td>0.323</td>
<td>0.149</td>
<td>-2.44</td>
<td>0.015</td>
</tr>
<tr>
<td>Year 2000</td>
<td>0.151</td>
<td>0.077</td>
<td>-3.70</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2001</td>
<td>0.229</td>
<td>0.113</td>
<td>-2.98</td>
<td>0.003</td>
</tr>
<tr>
<td>Year 2002</td>
<td>0.201</td>
<td>0.101</td>
<td>-3.21</td>
<td>0.001</td>
</tr>
<tr>
<td>Year 2003</td>
<td>0.175</td>
<td>0.085</td>
<td>-3.57</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2004</td>
<td>0.161</td>
<td>0.083</td>
<td>-3.55</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2005</td>
<td>0.571</td>
<td>0.238</td>
<td>-1.34</td>
<td>0.179</td>
</tr>
<tr>
<td>Year 2006</td>
<td>0.377</td>
<td>0.158</td>
<td>-2.33</td>
<td>0.020</td>
</tr>
<tr>
<td>Proportion of Low-Income</td>
<td>0.983</td>
<td>0.020</td>
<td>-0.86</td>
<td>0.390</td>
</tr>
<tr>
<td>Proportion of Aboriginal</td>
<td>1.093</td>
<td>0.035</td>
<td>2.80</td>
<td>0.005</td>
</tr>
<tr>
<td>Residents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>0.000</td>
<td>0.48</td>
<td>0.629</td>
</tr>
<tr>
<td>Proportion No Education Post-</td>
<td>1.014</td>
<td>0.022</td>
<td>0.63</td>
<td>0.528</td>
</tr>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>1.012</td>
<td>0.056</td>
<td>0.22</td>
<td>0.828</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>1.000</td>
<td>0.001</td>
<td>0.31</td>
<td>0.753</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>1.002</td>
<td>0.002</td>
<td>1.35</td>
<td>0.178</td>
</tr>
</tbody>
</table>
Table H3: Low Birth Weight Rate Between Poorest and Rest of Neighbourhoods

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Odds Ratio</th>
<th>Semi-Robust Standard Error</th>
<th>Z-Score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low vs. Rest</td>
<td>.354</td>
<td>.341</td>
<td>-1.08</td>
<td>0.282</td>
</tr>
<tr>
<td>Year 1996</td>
<td>1.309</td>
<td>.751</td>
<td>0.47</td>
<td>0.639</td>
</tr>
<tr>
<td>Year 1997</td>
<td>.798</td>
<td>.522</td>
<td>-0.35</td>
<td>0.730</td>
</tr>
<tr>
<td>Year 1998</td>
<td>.470</td>
<td>.205</td>
<td>-1.73</td>
<td>0.084</td>
</tr>
<tr>
<td>Year 1999</td>
<td>.240</td>
<td>.126</td>
<td>-2.71</td>
<td>0.007</td>
</tr>
<tr>
<td>Year 2000</td>
<td>.180</td>
<td>.108</td>
<td>-2.86</td>
<td>0.004</td>
</tr>
<tr>
<td>Year 2001</td>
<td>.206</td>
<td>.132</td>
<td>-2.48</td>
<td>0.013</td>
</tr>
<tr>
<td>Year 2002</td>
<td>.158</td>
<td>.074</td>
<td>-3.92</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2003</td>
<td>.240</td>
<td>.126</td>
<td>-2.71</td>
<td>0.007</td>
</tr>
<tr>
<td>Year 2004</td>
<td>.202</td>
<td>.109</td>
<td>-2.98</td>
<td>0.003</td>
</tr>
<tr>
<td>Year 2005</td>
<td>.202</td>
<td>.094</td>
<td>-3.45</td>
<td>0.001</td>
</tr>
<tr>
<td>Year 2006</td>
<td>.160</td>
<td>.100</td>
<td>-2.94</td>
<td>0.003</td>
</tr>
<tr>
<td>Proportion of Low-Income</td>
<td>1.001</td>
<td>.030</td>
<td>0.04</td>
<td>0.966</td>
</tr>
<tr>
<td>Proportion of Aboriginal</td>
<td>1.157</td>
<td>.046</td>
<td>3.67</td>
<td>0.000</td>
</tr>
<tr>
<td>Residents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>.000</td>
<td>-0.05</td>
<td>0.958</td>
</tr>
<tr>
<td>Proportion No Post-High School</td>
<td>.953</td>
<td>.019</td>
<td>-2.40</td>
<td>0.017</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>.977</td>
<td>.072</td>
<td>-0.31</td>
<td>0.757</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>.998</td>
<td>.001</td>
<td>-1.02</td>
<td>0.305</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>1.003</td>
<td>.001</td>
<td>2.76</td>
<td>0.006</td>
</tr>
</tbody>
</table>
For logistic regression with GEE for the outcomes of hospitalization, injury, and asthma, the year 1998 was dropped from analysis due to collinearity.

### Table H4: Hospitalization Rate Between Poorest and Rest of Neighbourhoods

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Odds Ratio</th>
<th>Semi-Robust Standard Error</th>
<th>Z-Score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low vs. Rest</td>
<td>.182</td>
<td>.151</td>
<td>-2.05</td>
<td>0.040</td>
</tr>
<tr>
<td>Year 1996</td>
<td>1.183</td>
<td>.403</td>
<td>0.49</td>
<td>0.622</td>
</tr>
<tr>
<td>Year 1997</td>
<td>.772</td>
<td>.338</td>
<td>-0.59</td>
<td>0.554</td>
</tr>
<tr>
<td>Year 1999</td>
<td>1.217</td>
<td>.510</td>
<td>0.47</td>
<td>0.639</td>
</tr>
<tr>
<td>Year 2000</td>
<td>.876</td>
<td>.380</td>
<td>-0.31</td>
<td>0.760</td>
</tr>
<tr>
<td>Year 2001</td>
<td>1.217</td>
<td>.566</td>
<td>0.42</td>
<td>0.673</td>
</tr>
<tr>
<td>Year 2002</td>
<td>1.550</td>
<td>.663</td>
<td>1.02</td>
<td>0.306</td>
</tr>
<tr>
<td>Year 2003</td>
<td>1.823</td>
<td>.775</td>
<td>1.41</td>
<td>0.158</td>
</tr>
<tr>
<td>Year 2004</td>
<td>2.284</td>
<td>1.035</td>
<td>1.82</td>
<td>0.068</td>
</tr>
<tr>
<td>Year 2005</td>
<td>4.4685</td>
<td>2.009</td>
<td>3.60</td>
<td>0.000</td>
</tr>
<tr>
<td>Year 2006</td>
<td>6.358</td>
<td>2.995</td>
<td>3.93</td>
<td>0.000</td>
</tr>
<tr>
<td>Proportion of Low-Income</td>
<td>.945</td>
<td>.016</td>
<td>-3.36</td>
<td>0.001</td>
</tr>
<tr>
<td>Proportion of Aboriginal</td>
<td>1.091</td>
<td>.030</td>
<td>3.21</td>
<td>0.001</td>
</tr>
<tr>
<td>Residents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>.000</td>
<td>1.54</td>
<td>0.124</td>
</tr>
<tr>
<td>Proportion No Education Post-</td>
<td>1.018</td>
<td>.018</td>
<td>1.05</td>
<td>0.294</td>
</tr>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>1.052</td>
<td>.054</td>
<td>1.00</td>
<td>0.318</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>1.000</td>
<td>.001</td>
<td>0.12</td>
<td>0.904</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>.997</td>
<td>.001</td>
<td>-3.01</td>
<td>0.003</td>
</tr>
<tr>
<td>Parameter</td>
<td>Odds Ratio</td>
<td>Semi-Robust Standard Error</td>
<td>Z-Score</td>
<td>p-value</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------</td>
<td>----------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Low vs. Rest</td>
<td>0.343</td>
<td>0.250</td>
<td>-1.46</td>
<td>0.143</td>
</tr>
<tr>
<td>Year 1996</td>
<td>0.676</td>
<td>0.260</td>
<td>-1.02</td>
<td>0.308</td>
</tr>
<tr>
<td>Year 1997</td>
<td>0.742</td>
<td>0.317</td>
<td>-0.70</td>
<td>0.485</td>
</tr>
<tr>
<td>Year 1999</td>
<td>0.533</td>
<td>0.221</td>
<td>-1.52</td>
<td>0.129</td>
</tr>
<tr>
<td>Year 2000</td>
<td>0.923</td>
<td>0.478</td>
<td>-0.15</td>
<td>0.878</td>
</tr>
<tr>
<td>Year 2001</td>
<td>0.590</td>
<td>0.255</td>
<td>-1.22</td>
<td>0.223</td>
</tr>
<tr>
<td>Year 2002</td>
<td>0.484</td>
<td>0.220</td>
<td>-1.59</td>
<td>0.111</td>
</tr>
<tr>
<td>Year 2003</td>
<td>0.239</td>
<td>0.099</td>
<td>-3.44</td>
<td>0.001</td>
</tr>
<tr>
<td>Year 2004</td>
<td>0.318</td>
<td>0.149</td>
<td>-2.45</td>
<td>0.014</td>
</tr>
<tr>
<td>Year 2005</td>
<td>0.218</td>
<td>0.106</td>
<td>-3.14</td>
<td>0.002</td>
</tr>
<tr>
<td>Year 2006</td>
<td>0.235</td>
<td>0.110</td>
<td>-3.09</td>
<td>0.002</td>
</tr>
<tr>
<td>Proportion of Low-Income</td>
<td>0.989</td>
<td>0.018</td>
<td>-0.62</td>
<td>0.537</td>
</tr>
<tr>
<td>Proportion of Aboriginal Residents</td>
<td>1.116</td>
<td>0.043</td>
<td>2.84</td>
<td>0.004</td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>0.000</td>
<td>-0.22</td>
<td>0.825</td>
</tr>
<tr>
<td>Proportion No Education Post-High School</td>
<td>0.974</td>
<td>0.018</td>
<td>-1.44</td>
<td>0.150</td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>1.026</td>
<td>0.044</td>
<td>0.61</td>
<td>0.541</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>0.999</td>
<td>0.001</td>
<td>-0.63</td>
<td>0.525</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>1.002</td>
<td>0.001</td>
<td>2.25</td>
<td>0.024</td>
</tr>
</tbody>
</table>

Table H5: Injury Rate Between Poorest and Rest of Neighbourhoods
Table H6: Asthma Rate Between Poorest and Rest of Neighbourhoods

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Odds Ratio</th>
<th>Semi-Robust Standard Error</th>
<th>Z-Score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low vs. Rest</td>
<td>.471</td>
<td>.217</td>
<td>-1.63</td>
<td>0.102</td>
</tr>
<tr>
<td>Year 1996</td>
<td>1.985</td>
<td>.665</td>
<td>2.05</td>
<td>0.041</td>
</tr>
<tr>
<td>Year 1997</td>
<td>1.280</td>
<td>.436</td>
<td>0.72</td>
<td>0.469</td>
</tr>
<tr>
<td>Year 1999</td>
<td>1.011</td>
<td>.404</td>
<td>0.03</td>
<td>0.978</td>
</tr>
<tr>
<td>Year 2000</td>
<td>.677</td>
<td>.294</td>
<td>-0.90</td>
<td>0.369</td>
</tr>
<tr>
<td>Year 2001</td>
<td>.625</td>
<td>.285</td>
<td>-1.03</td>
<td>0.304</td>
</tr>
<tr>
<td>Year 2002</td>
<td>.578</td>
<td>.219</td>
<td>-1.45</td>
<td>0.148</td>
</tr>
<tr>
<td>Year 2003</td>
<td>.354</td>
<td>.155</td>
<td>-2.37</td>
<td>0.018</td>
</tr>
<tr>
<td>Year 2004</td>
<td>.302</td>
<td>.138</td>
<td>-2.61</td>
<td>0.009</td>
</tr>
<tr>
<td>Year 2005</td>
<td>.327</td>
<td>.152</td>
<td>-2.41</td>
<td>0.016</td>
</tr>
<tr>
<td>Year 2006</td>
<td>.125</td>
<td>.056</td>
<td>-4.64</td>
<td>0.000</td>
</tr>
<tr>
<td>Proportion of Low-Income Residents</td>
<td>.976</td>
<td>.016</td>
<td>-1.45</td>
<td>0.147</td>
</tr>
<tr>
<td>Proportion of Aboriginal Residents</td>
<td>1.076</td>
<td>.023</td>
<td>3.44</td>
<td>0.001</td>
</tr>
<tr>
<td>Average Family Income</td>
<td>1.000</td>
<td>.000</td>
<td>0.05</td>
<td>0.958</td>
</tr>
<tr>
<td>Proportion No Education Post-High School</td>
<td>.998</td>
<td>.016</td>
<td>-0.14</td>
<td>0.887</td>
</tr>
<tr>
<td>Proportion of Unemployment</td>
<td>1.020</td>
<td>.040</td>
<td>0.53</td>
<td>0.595</td>
</tr>
<tr>
<td>Gross Rent Payments</td>
<td>.999</td>
<td>.001</td>
<td>-0.52</td>
<td>0.605</td>
</tr>
<tr>
<td>Gross Owner Payments</td>
<td>1.001</td>
<td>.001</td>
<td>1.13</td>
<td>0.261</td>
</tr>
</tbody>
</table>