# Financial Strain, Child Maltreatment and the Great Recession in Canada

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#### Introduction

This CWRP Information Sheet examines the prevalence of financial stress in Canada and the relationship between financial stress and child maltreatment within the context of the economic recession that began in 2008.

### **Background**

UNICEF recently released an important report entitled "Children of the Recession: the impact of the economic crisis on child well-being in rich countries." The report compiles an impressive array of survey data pertaining to children's living standards before and after the Recession that began in 2008 (UNICEF Innocenti Research Centre, 2014).

How did children in Canada fare? UNICEF gave Canada a passing grade for the period under measure. The reports shows the percentage of children in poverty fell from 23.2 to 20.8. Any judgment of a decline in relative poverty is sensitive to the choice of measure used. For international comparisons, UNICEF measured poverty as 60% of the median income (UNICEF Innocenti Research Centre, 2014). The UNICEF report also showed that the poverty gap for children in Canada – a measure of the distance between the poverty threshold and current household income – increased. Canada is ranked at the top of the bottom third of industrialized countries, ranking 24<sup>th</sup> for overall child poverty and 23<sup>rd</sup> for the child poverty gap (UNICEF Canada, 2014).

## **Child Well-Being Through the Recession**

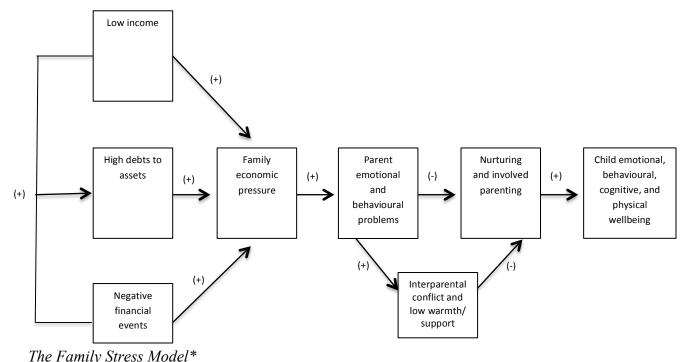
The release of the UNICEF report brings up many questions about how Canada's children have fared in the Recession. In this Information Sheet, we use other Canadian data to further explore child well-being through the Recession years. Specifically, we address the following questions: What do we know about financial stress and its relationship to children? What is the prevalence of financial stress in Canada? What do we know about the relationship between financial stress and child maltreatment?

#### What do we know about financial stress and child development?

Family stress model. The family stress model emerged from intensive longitudinal studies that followed relatively large cohorts of people over time. These studies allowed researchers to examine how children and families experience stress brought about by major macroeconomic changes taking place in society (Conger & Conger, 2002; Conger & Elder Jr, 1994; Conger, Ge, & Lorenz, 1994; Vaillant, 2012). Via this work, we see a direct link between financial stress, parental conflict, parenting and, ultimately, child well-being. Specifically, it is typically interparental conflict caused by financial stress, rather than financial hardship itself, that negatively affects child well-being. Figure 1 depicts the family stress model. When parents are able to avoid or manage this conflict, the potential negative emotional, behavioural, cognitive and physical effects in children may be avoided (Conger & Conger, 2002).

Several Canadian longitudinal studies have examined the impact of economic hardship on child well-being. Longitudinal studies in Quebec have demonstrated that children living in poverty are more likely to develop health problems (Séguin, Nikiéma, Gauvin, Zunzunegui, & Xu, 2007), display disruptive behaviour (Civita, Pagani, Vitaro, & Tremblay, 2007), and to drop out of high school (Janosz, Le Blanc, Boulerice, & Tremblay, 2000). To our knowledge, the Canadian studies have been designed to be nationally representative.

Figure 1.



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<sup>\*</sup>Source: Model recreated based on Conger and Donnelan (2007)

**Biology model.** There is a growing body of evidence in a complementary model rooted in biological sciences. This models emphasizes how the interaction between genes and environment affect brain development and later outcomes. The effects of stress on brain development are now well established. Studies show that the prolonged, intense or recurrent activation of the stress response system during early childhood development can change the "architecture of the brain", and may negatively affect children's learning, behaviour and health across the lifespan (National Scientific Council on the Developing Child, 2014). More recently, researchers have examined the way that genes and genetic predispositions interact with environmental stress to influence later outcomes. For example, a Canadian study on the role of the neurological transmitter serotonin demonstrated that interaction between genes and environmental stressors in utero and early childhood can increase an individual's vulnerability to psychopathology (Booij, Tremblay, Szyf, & Benkelfat, 2014).

#### What is the prevalence of financial stress in Canada?

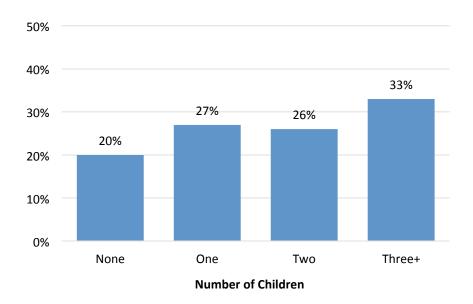
Financial stress has direct and indirect influences on children. How widespread is financial stress in Canadian society? To answer this question, we use data from the 2011 General Social Survey (GSS). The purpose of this survey is to "gather data on social trends in order to monitor changes in the living conditions and well-being of Canadians over time; and to provide information on specific social policy issues of current or emerging interest" (Statistics Canada, 2011). The 2011 wave of the GSS included a module on financial resiliency. Using this data, we can estimate the prevalence of financial stress in Canada.

We focused on the ability to make ends meet. The survey asked, "Are you/is your household usually able to make ends meet?" Of the 12.7 million households in Canada, 23%, or 2.92 million households, were experiencing financial stress in 2011. At the individual level, 22%, or 5.81 million (+/- 2.6 percentage points; based on population of 26.4 million) people were experiencing financial stress (Statistics Canada, 2011). "

A next step in understanding financial stress is to examine how the number of children in a household is related to financial stress. Of the 3.5 million households with children, 29%, or 1.01 million were experiencing financial stress (+/- 1.5%). In comparing households with and without children, we find that households with children were 1.4 times more likely than households without children to experience financial stress (29% versus 20%) (Statistics Canada, 2011). Further, there is positive relationship between number of children and financial stress, meaning that as the number of children in the family increases, so does financial stress (see Figure 2).

There are several further questions that can be addressed by analyzing the 2011 GSS data. For example, we find that 6% of individuals (or more than 1.6 million individuals; +/- 1.5%) struggled to pay utilities in the year before the survey was conducted. This may be a measure of even more extreme economic hardship (Statistics Canada, 2011).

Figure 2. Struggling to make ends meet by number of children\*



\*Source: Statistics Canada. General Social Survey, 2011

# What do we know about the relationship between financial stress and child maltreatment?

It is widely accepted in the literature that poverty and child maltreatment are closely related (e.g., Drake & Pandey, 1996; Garbarino & Kostelny, 1992). Knowledge about this relationship in Canada is somewhat underdeveloped and inconsistent (Rothwell & de Boer, 2014). It is possible to use data from the 2008 Canadian Incidence Study of Reported Child Abuse and Neglect (CIS-2008) to explore this topic. The CIS-2008 is the third nation-wide study to examine the incidence of reported child maltreatment and the characteristics of children and families investigated by child welfare authorities in Canada.

The CIS-2008 used a multi-stage sampling design to select a representative sample of 112 child welfare agencies in Canada and then to select a sample of cases within these agencies. Information was collected directly from child welfare workers on a representative sample of 15,980 child protection investigations conducted during a three-month sampling period in the fall of 2008. This sample was weighted to reflect provincial annual estimates. iii

For maltreatment investigations, information was collected regarding the primary form of maltreatment investigated as well as the level of substantiation for that maltreatment. Thirty-two forms of maltreatment were listed on the data collection instrument, and these were collapsed into five broad categories: physical abuse (e.g., hit with hand), sexual abuse (e.g., exploitation), neglect (e.g., educational neglect), emotional maltreatment (e.g., verbal abuse or belittling), and

exposure to intimate partner violence (e.g., direct witness to physical violence). Workers listed the primary concern for the investigation, and could also list secondary and tertiary concerns.

For each form of maltreatment listed, workers assigned a level of substantiation. Maltreatment could be substantiated (i.e., the balance of evidence indicated that the maltreatment had occurred), suspected (i.e., the maltreatment could neither be confirmed nor ruled out), or unfounded (i.e., the balance of evidence indicated that the maltreatment had not occurred).

In order to evaluate the economic hardship experienced by the child's family, the CIS-2008 asked workers to indicate whether the "household regularly runs out of money for basic necessities." Workers could indicate "yes", "no", or "unknown". In 17% of cases, the answer was unknown, therefore these cases were removed from the analysis.

We use the responses to this question regarding economic hardship to form a dichotomous proxy indicator for child poverty. Overall, in about 13% (95% CIs [.12, .15]) of all investigations in the CIS-2008, the worker indicated the family experienced economic hardship (Public Health Agency of Canada, 2010).

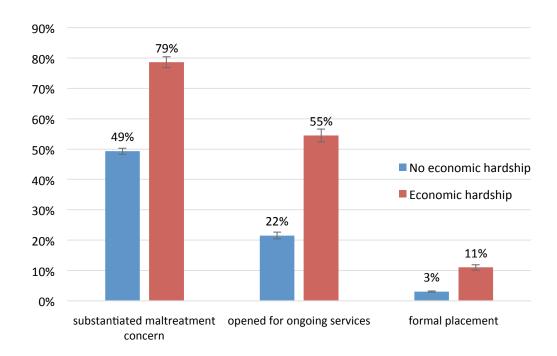
We focus our analysis on three commonly studied child welfare outcomes: 1) substantiation, 2) ongoing services, and 3) placement in out-of-home care. Each outcome was converted to a dichotomous variable. For example, suspected maltreatment cases were dropped leaving substantiated maltreatment and unfounded maltreatment. We then calculate the probability of substantiation, ongoing services, and placement for those experiencing economic hardship compared to those not experiencing economic hardship. Findings of this bivariate analysis are presented in Figure 3.

Figure 3 displays the proportion of investigations which were substantiated, transferred to ongoing child welfare services, and where a placement in formal out-of-home care was made for those investigations where economic hardship was indicated compared to those investigations without noted economic hardship. In over three-quarters (79%) of investigations with noted economic hardship there was a substantiated maltreatment concern whereas maltreatment was substantiated in just under half (49%) of investigations without noted economic hardship<sup>iv</sup>. Over half (55%) of investigations with noted economic hardship were transferred to ongoing child welfare services compared to only 22% of investigations where the worker did not indicate economic hardship. A placement was made in 11% of investigations where economic hardship was indicated compared to only 3% of investigations without noted economic hardship.

After calculating the probabilities of the outcomes across economic hardship in Figure 3 we can begin to understand the risk that is associated with economic hardship. For the purposes of this Information Sheet, we define risk as the proportion of all children who experience the outcome of interest. We formulate the risk ratio as the risk of outcome Y for children experiencing economic hardship to the risk of outcome Y for children not experiencing economic hardship. For example, the risk for substantiation is the probability of substantiation for investigations with economic hardship (.79) over the probability of substantiation for investigations without economic hardship (.49), resulting in an unweighted risk ratio of 1.61. After applying the survey weights and dropping missing variables the risk ratio for substantiation was 1.54 [1.53, 1.56].

This means that investigations with economic hardship were 1.54 times as likely to be substantiated compared to investigations without economic hardship. Other economic hardship risk ratios were 2.49 [2.46, 2.53] for ongoing services, and 3.21 [3.11, 3.32] for placement.

Figure 3. *Child welfare outcomes by perceived economic hardship, in Canada in 2008* 



Caveats. This analysis is subject to the limitations affecting any cross-sectional study. It is not possible to draw causal inferences from these results. In other words, we cannot say that experiencing economic hardship causes substantiated maltreatment, ongoing services, and placement. Further, these data are limited in their self-reported nature. There is likely considerable variation in the assessment of economic hardship across child welfare caseworkers. Future research is needed to understand the reliability of this survey item.

#### Conclusion

Beyond standard measures of child poverty, we have little information about how Canadian children have fared in the Recession. Further, there is a lack of consistency in the measurement of child poverty that informs child welfare research. At the same time, the Recession has renewed public interest in how children and families are affected by economic hardship.

In this Information Sheet, we examine the prevalence of financial stress at the tail end of the Recession, using the 2011 General Social Survey. We find that financial stress is widespread, with 23%, or 2.95 million households experiencing difficulty making ends meet. Using CIS-2008 data we then show the risk of outcomes (substantiation, ongoing services and placement) is considerably higher for children living in households experiencing financial stress (as compared to those who are not). It is important to note that these results do not imply that people living in poverty are more abusive to children than others – there is no evidence to support this claim. In other analysis not reported here, we find that the risk ratios for economic hardship reported here are considerably higher than risk ratios for other major outcome gaps, e.g., between Aboriginal and non-Aboriginal children. To better understand child welfare outcomes and reduce disparities across groups of children, there is a considerable need to better understand child poverty.

In time, we will better understand how the Recession has affected child and family well-being. Some results on health and medical outcomes are available (see Millett, Lanier, & Drake, 2011; Rajmil et al., 2014). However, because of limited longitudinal data, we currently have an inadequate understanding of changes in child well-being over time – a point that was emphasized in the UNICEF report. Further, future analysis will require an evaluation of policies designed to shelter Canadian children from the effects of the Recession. Institutional arrangements play a major role in shaping long-term outcomes and provided opportunity for children to grown and develop. Reflecting on how children responded to the hardship brought on by the Great Recession, Glen Elder (1999) summarized the importance of policy mechanisms, "not even great talent and industry can ensure life success without opportunity," (p. 26).

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<sup>&</sup>lt;sup>i</sup> See Miles Corak's blog (2014) for a review of the UNICEF findings, and a discussion of the three predominant poverty measures used in Canada. For a review of the relationship between household income and child outcomes in general see McEwen and Stewart (2014).

 $<sup>^{1}</sup>$  We report the margin of error for our estimate based on a 95% confidence limit. In other words, the estimate is accurate to within +/ - 2.6 percentage points, 19 times out of 20, had all Canadian households been polled.

iii A detailed presentation of the CIS study methodology is available at http://cwrp.ca/publications/cis-2008-study-methods.

<sup>&</sup>lt;sup>iv</sup> Risk-only investigations were automatically dropped from the analysis of substantiation resulting in a reduced sample. Cases from Quebec are not included in any of the analysis because of difference in reporting.