

FARMING IN THE FREE MARKET: THE IMPACT OF THE
DISMANTLING OF THE CANADIAN WHEAT BOARD ON THE
MENTAL HEALTH AND WELL-BEING OF OIL AND GRAIN SEED
FARMERS IN SASKATCHEWAN

ZSOFIA M. ZAMBO

A Dissertation submitted to the Faculty of Graduate Studies

In Partial Fulfillment for the Requirements for

the Degree of Doctor of Philosophy

Graduate Program in Health

York University

Toronto

June 2024

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ABSTRACT

The Harper Government's dismantling of the Canadian Wheat Board's (CWB) marketing monopoly in 2012 can be understood as part of a broader political project to liberalize Canada's agriculture sector. While this policy shift has transformed Canada's position within the global economic system, the impact it has had on small and mid-sized farmers in the grain sector is largely unknown, particularly with regards to mental health and well-being.


The purpose of this research was to examine the social, political and economic impacts that removing the CWB has had on the lives of grain and oilseed farmers in Western Canada. This research's methodology relies on both the ontological and epistemological assumptions of critical realism and employs a critical materialist political economy framework. A total of 29 semi-structured, open-ended interviews were included for this research study, including 17 Saskatchewan grain farmers and 12 individuals classified as relevant informants.

This research found that the dissolution of the CWB had a tremendous impact on both farmers and their communities. The loss of the CWB likely exacerbated inequalities between farms, hastening the consolidation of farmland and contributing to rural depopulation. The issue of the CWB was also found to be highly divisive. A majority of farmers expressed either strong support or opposition to CWB, reflecting ideologically informed beliefs with regards to the benefits of collective marketing versus the marketing freedom respectively. For the most part, perceptions of farming post-CWB differed between these groups. Opponents of the CWB reported less overall stress with regards to grain marketing compared with CWB supporters. Perceptions of market competition, control, and transparency also varied with ideological views; CWB opponents generally believed they had greater control over their operations, faced adequate competition, and saw the current system as more transparent compared with CWB

supporters. Farmers in both groups, however, identified corporate concentration and lack of adequate competition in the grain sector a major concern and source of stress.

Given that the CWB remains highly divisive, solutions to improving farmer market power and thus reducing farmer stressors with regards to marketing may rest on reducing corporate power and concentration through legislation rather than reinstating a single desk marketing board, although that is an option that should be seriously considered as well.

DEDICATION

To my father, Janos Zambo, who I know would have loved this. 

ACKNOWLEDGEMENT

In its physical form, this dissertation is 260 odd pages, but it represents years of coursework, research, conferences, volunteer hours, network building, and friendships. It also stands upon ten further years of previous academic pursuits which were only possible with the help of *so many* friends and family. If the reader will indulge me, I would like to tell you a bit about this journey.

It began with my break from the field of nutritional sciences. Although many factors contributed to my disillusionment with this approach to health, including reading Robert Albritton's *Let Then Eat Junk*, it is most memorably punctuated with my first meeting with Dennis Raphael. On that day in early January 2016, I went to see Dr. Raphael about applying to the Health program at the doctoral level. I'm not sure I was even fully in his office before he told me I didn't stand a chance of getting into the program, given I came from sciences and this was a social science program—a highly competitive one at that. Having been frustrated with nutritional science and also having lost my job at the City of Toronto two weeks prior, I was adamant that he let me plead my case. I told him about how my previous work at a self-described “childhood obesity prevention” NGO made me realize the role that capitalism played in contributing to poor health, and that the role of corporate power in shaping health outcomes was what I wished to research. Maybe what actually won him over was when I told him that both my parents were socialists, and that I was cut from a similar cloth. I can only imagine that for Dennis, who has spent so much time and effort writing about the ills of capitalism and the potentials of socialism for improving health, that this was music to his ears. He also likely sensed that I would probably not leave his office until he agreed to help me.

To ease my transition into the social sciences from science, I applied and was accepted to the MA in Health. After the successful completion of this degree, including co-authoring an article with Dr. Raphael (the first of many), I was admitted to the PhD program in 2017.

This academic journey really began in earnest in 2004 when I moved to Montreal from North Vancouver, with no French and little to no money or life experience. Recognizing rather quickly that I would not last a lifetime in a call center, troubleshooting broken fax machines, I began the process of credentializing—doing high school science courses from a distance—so I could go to McGill University for Nutrition. For this, I would like to thank Daniel Weatherill for holding my hand through this challenging process.

In 2005, I was accepted to McGill for Nutritional Sciences. Upon hearing the news, my father replied “I went to McGill too. I worked as a janitor.” Neither my mother nor my father, immigrants from Hungary, had the opportunity to go to school, and as difficult and unprepared as I was to do a BSc, I was so proud to be the first in my family do so. I fully recognize that I could not have done it without their support of my entire family. Thank you to my father Janos, my mother Kati, my sister Kat, and my brother Csubi. I appreciate you all so much. It’s been hard to come to terms with the fact that my father passed away before I even completed my BSc, let alone any of my other three degrees, but I know he would have been so proud to see how seriously I took his command to “go to school”. This PhD is for you, Apu!

I would like to extend my heartfelt thanks to my supervisor and mentor, Dennis Raphael, who has provided unwavering support since I came to York, and I am incredibly grateful for all the work we have done together, including recently co-editing a volume on food insecurity. I am

also grateful to my dissertation committee, Claudia Chaufan and André Magnan, for their expert advice and valuable feedback which has greatly enriched this work.

I would also like to acknowledge the support of the faculty and staff at York University in the Department of Health, particularly Hannah Wong, Farah Ahmed, Marina Morrow and Collette Murray. In one way or another, each of you has provided me with a great deal of support and guidance. I am deeply grateful to Dr. Amber Fletcher at the University of Regina for her insightful discussions and valuable contributions to my research. I am particularly appreciative of Dr. Fletcher's use and discussion of critical realism in the research setting, which was foundational in guiding this work.

I want to take a moment to say thank you to my fellow graduate students at York University who provided me with so much strength and support, friendship and inspiration. Thank you: Faisal Ali Mohamed, Stella Medvedyuk, Joli Scheidler-Benns, Omar Elsharkawy, Ngozi Iroanyah, Morris Komakech, Luke Power, Tyler Ball, Michelle Yeboah, and Mariana Astrid Núñez Silva.

I would also like acknowledge the love and support of my friends: ETTY Anderson, Cheylene Tattersall, Jessi Rainville, Kathy DeKoven, Gordon Krieger, Lisa Starr, Lisa Gamble, Grant and Anna Guard, Éric Lamoureux, John Constantinides, Corina MacDonald, Aida Setrakian, Andrew Ottaway, Claire Bennett, Dan Casey, Rachelle Elliott, and Martine August. Thank you to the Farkas-Horn family (Maryann, Robin, Simon and Pat) for adopting me into their family, and for allowing me to miss far too many family dinners so I could steal time on Sunday nights to finish this research. Special thank you to Mr. Martin Place, and Mrs. Christina Sears, high school teachers who inspired me and gave me confidence and friendship.

Thank you to the National Farmers Union Mental Health Working Group, as well as Mara Shaw, Cathy Holtslander and Darrin Qualman for their input into the mental health report we released that also makes up sections of this thesis.

I would also like to acknowledge that this research could not have been possible without the farmers and others who were interviewed for this research. Thank you all so much for giving me your time and for speaking with me. All of your input has been crucial for this work.

Finally, thank you to my loving husband Martin Horn. You helped me weather the storm of the pandemic, two CUPE3903 strikes, two failed (and one successful) SSHRC applications, many terrible landlords, three degrees, and most momentously, the birth of our son, Imre. Thank you for everything.

LIST OF ABBREVIATIONS

Agreement on Agriculture (AoA)
Canadian Transportation Employees (UCTE)
Canadian Wheat Board (CWB)
Critical materialist political economy (CMPE)
Critical realism (CR)
European Union (EU)
Farm Credit Canada (FCC)
Global Grain Group (G3)
Grain handling and transportation (GHT)
Mercantile Consulting Venture (MCV)
National Farmers Union (NFU)
New Democratic Party of Canada (NDP)
Tariff Rate Quotas (TRQ)
United States-Mexico-Canada Agreement (USCMA)
Western Canadian Wheat Growers Association (WCWGA)
World Trade Organization (WTO)

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Chapter 1: Introduction and Thesis Overview

Introduction and Background

The Canadian Wheat Board was a ‘single desk seller’ established with the goal of providing fair prices to farmers for wheat and barley amidst a “lopsided international grain market”, in which there were numerous sellers but only a few buyers (Skogstad & Whyte, 2015, p. 82). The creation of a single desk seller effectively created a monopsonist agency which increased collective marketing power for barley and wheat farmers exporting to global markets (Skogstad and Whyte 2015). On October 18, 2011, the Canadian federal government introduced Bill C-18, *the Marketing Freedom for Grain Farmers Act*, which began the process of stripping the Wheat Board of its single desk selling powers, effectively removing it as the sole seller of wheat and barley produced by farmers in Western Canada ¹ (Fulton 2012). Despite opposition, including an internal plebiscite by the Canadian Wheat Board which showed that a majority of farmers were in favour of maintaining the single desk (NFU 2020), the bill reached Royal Assent on December 16th, 2012, ending over 60 years of the board’s rule (NFU 2020). The dismantling of the Canadian Wheat Board’s marketing monopoly by the federal government can be understood as part of a broader political project to liberalize Canada’s agriculture sector. The removal of the Wheat Board’s single desk powers, however, has caused problems in transporting, handling and marketing grain crops (Larsen 2017), resulting in significant losses for farmers and for the Canadian economy, with an estimated \$6.5 billion lost due to diminished export capacity alone over a two-year period (Gray 2015). Despite the apparent economic impact

¹ Specifically, Manitoba, Alberta, Saskatchewan and the North-Eastern corner of British Columbia.

this policy change has had, its impact on farmers is largely unknown, particularly with regards to their mental health and well-being.

In Canada and elsewhere poor mental health among farmers is so pervasive that it has been described as a mental health ‘crisis’ (Tait and Leeder 2019). Although the mental health of farmers is a growing area of research, the mental health experiences of Canadian farmers are still under-examined. What little research exists focuses on access to health services and the mental health literacy of the Canadian agriculture community (Jones-Bitton, Best, et al. 2019; Sharkey 2018). This is crucial work, but a more detailed examination of the impact that agriculture policy has on farmers’ health and well-being in the Canadian context is needed, particularly as past market uncertainties in agriculture sectors, such as in hog farming, have led to high rates of farm closures and declining mental health among farmers, including high rates of suicide (Nairn, personal communication, 2018) and worldwide, a growing body of literature has linked broader agriculture policy, particularly trade liberalization, and financial instability to declining mental health and increased farmer suicide (Purdon and Palleja 2020; Alt 2019; Kennedy and King 2014; Merriott 2016).

Purpose of this Study and Research Questions

The purpose of this research was to examine the social, political and economic impacts that removing the Canadian Wheat Board has had on the lives of grain and oilseed farmers in Western Canada. As this research was taking place amid a burgeoning mental health crisis among Canadian farmers, an examination into the potential policy environments which contribute to poor mental health in farmers was necessary and timely.

Four research questions guided this work: 1) What are the associated ideological, political and economic underpinnings of the policy related to the removal of the Wheat Board's single desk powers? 2) What has been the social, political, and economic impact of this policy change on farmers in Saskatchewan? 3) What are the lived experiences and self-reported mental health statuses of farmers in light of the dismantling of the Board?; and finally, 4) How do farmers perceive the policy environment they inhabit, and what sense do they have of how these environments have affected their wellbeing?

Overview of Methodological Design

Methodology

This research was conducted using critical realism (CR) which is a philosophy of science aimed at explaining social reality, and as such is well positioned to produce policy recommendations aimed at addressing social issues (Fletcher 2017). This research's methodology relies on both the ontological and epistemological assumptions of CR, which draws from the positivist and constructivist knowledge paradigms, and employs a critical materialist political economy (CMPE) framework which understands politics and economics as interrelated factors that shape living and working conditions via public policy (Bambra 2011b).

Briefly, CMPE considers the influence of markets, power, states, ideas, discourses, as well as civil society on policy (Bryant 2016). It also examines political and economic structures which shape health outcomes such as capitalist modes of accumulation and production as well as trade agreements. CR understands facts as theory-dependent but not theory-determined and as such knowledge and theory are fallible. In following the methodologies put forth by Fletcher (2013, 2017) who conducted similar work in Canadian grain farmer populations, this research

will employ CMPE as the guiding framework for this research, with an understanding that given the fallibility of knowledge and theory, this theory might need to be modified or rejected in order to accurately explain the experience of Canadian grain farmers.

Method

Research was conducted to examine the impact the dismantling of the Canadian Wheat Board has had on the mental-health and well-being of Canadian farmers. The research was carried out in two phases, with the first phase informing the data collection of the second phase. In the first phase of research, in-depth interviews were conducted with relevant informants to understand from their point of view the impact that changes to the Wheat Board has had on the mental health and well-being of farmers, as well as on the industry at large. Next, in-depth interviews were conducted with producers to help to understand the lived experiences of farmers and probe underlying structures and processes that cause stress and poor mental health (Kubik and Moore 2001).

Contribution to research

In 2018, Gerald Pilger wrote an article in CountryGuide entitled '*Why don't we know?*' In this article, he asks why there has been no post-mortem examination of any kind on the dismantling the Canadian Wheat Board. He writes:

What has been the net economic impact in Western Canada resulting from the privatization of the Canadian Wheat Board?... What impact has the privatization of the Canadian Wheat Board had on rural society in Western Canada?

Farmers cannot answer these questions because there has not been any comprehensive study or evaluation of the impact of the elimination of the CWB monopoly and the subsequent privatization of the CWB. Shouldn't we be demanding a real analysis of the most significant change in our grain handling system in decades? (cited in Neville, 2019, Unpublished).

To date, and to the best of my knowledge, no research has examined the impact that dismantling the Wheat Board has had on farmers or on their mental health and well-being. As indicated in the quote above, however, there is some interest in understanding the impact of this major policy change on farmers and the farming industry. This work is difficult, however, as vital empirical data on the grain trade is now private, including information on prices paid to farmers versus prices for exported grain (Cathy Holtslander, cited in Neville, 2019, Unpublished). For this reason, this research relies on qualitative data obtained by speaking with farmers about their lived experiences after the Wheat Board was dismantled.

This research builds on the work of scholars in the fields of health equity, agriculture and political economy. Dennis Raphael and Toba Bryant's work on critical materialist political economy has provided a framework for understanding and investigating health inequities, particularly with regards to corporate influence on the public policymaking process and how this impacts health. I draw on their work, predominantly in Chapter 2, but their influence is found throughout this thesis.

André Magnan's in-depth discussion on food regime theory as well as his historical examination of the Canadian Wheat Board and international wheat trade provided important context and information on this topic. Their work has helped situate this research in a larger global and historical context, and their work is featured heavily in chapters 2 and 4.

Amber Fletcher's work examining the social and gendered effects of agriculture policy changes provided a framework for implementing critical realism in research. Their thorough and detailed application of CR methodology and methods has been a major contribution to the methods in this thesis in Chapter 5.

Finally, this research will inform international theoretical debates on the relationship between agriculture policy and the mental health of farmers (e.g. Kennedy & King, 2014 and San Sebastián & Hurtig, 2004), which to date is lacking a Canadian perspective.

Dissertation Overview

This dissertation is divided into two parts, Part I (Chapters 1-5) and Part II (Chapters 6-8). Part I comprises an overview of existing literature, and presents key concepts as well as methodology used in this research, while Part 2 contains findings, discussion, and conclusions.

In this chapter, (**Chapter 1**) I provide an overview of the thesis topic and questions, the methodological design as well as provide a chapter overview. **Chapter 2** provides an overview of the conceptual frameworks that guide this research. In the first part of this chapter an overview of the assumptions and theories related to health equity and policy are provided, while the second part provides a historical overview of the agri-food system, largely drawing on food regime theory.

Chapter 3 is an examination of farmer mental health in the Canadian setting and abroad. Using a critical materialist political economy framework, this chapter argues that the decline of the family farm, occurring as a result of the current corporate food regime, is driving the farmer mental health crisis. It also argues that current approaches to addressing farmer mental health are insufficient as they do little to address underlying causes of stress, particularly economic and financial uncertainty. Significant portions of this chapter appear in a report prepared in

collaboration with the National Farmers Union (NFU) and published by the Canadian Centre for Policy Alternatives (Mendly-Zambo and the NFU 2023).

Chapter 4 provides a historical overview of the Canadian Wheat Board with special attention given to the political, social and economic conditions in which the board was formed and later dismantled. The historical antecedents of the Board are important as they provide context for debates that later arose *vis-à-vis* dismantling the board.

The methodology and methods of this research are discussed in **Chapter 5**. This chapter begins with an overview of key concepts of both CR and CPME. Followed by a detailed overview of the methods used in this research.

Part II of this thesis begins with a summary of the empirical findings of the research detailed in **Chapter 6**, including a look at how dismantling the Wheat Board impacted both day-to-day farming operations, as well as farmer mental health. In **Chapter 7**, these empirical findings are situated within the context of neoliberalism occurring at macro, meso, and micro levels.

Finally, **Chapter 8** provides an overview of this research, its limitations and future directions. Importantly, this chapter provides three policy recommendations aimed at improving economic uncertainty and precarity for grain farmers, as well as improving farmer mental health.

Chapter 2: Conceptual Frameworks

Chapter introduction

The intent of this chapter is to provide the reader with context and background information to help situate the research of this dissertation, particularly as it draws from two disparate yet related fields of study, health equity and agriculture. The first part of this chapter will provide an overview of the assumptions and theories of health and health equity, and of the process of public policymaking that shapes them. The second half of this chapter will be a historical overview of the agri-food system, using a political economy approach—that is, looking at economic relations in political, social and historical terms (Magnan 2016). In particular, this analysis will consider “how social actors interact with state structures and markets to shape the production, distribution and consumption of food” (Magnan, 2016, p. 4). This will be done by drawing on food regime theory which situates both the inception and later the dissolution of the Canadian Wheat Board in its historical and global context.

Understanding Health Equity and Public Policymaking

Providing consensus on a comprehensive definition of health has been difficult and attempts to define health have often spurred debate (Aggleton 1990; Blaxter 2010). One common definition of health frames health in terms of ‘absence of illness’. This definition is fraught with difficulties, however, including difficulties in defining the concept of ‘illness’ (Blaxter 2010). Indeed, both what can be defined as ‘health’ *or* ‘illness’ will vary between individuals and depend on individual factors such as age, gender, sex, class, and circumstances (Aggleton 1990;

Blaxter 2010). What is considered an illness or disease is also historically specific² and culturally defined. Secondly, this definition suggests that health is either something one has or does not have, and as such denies the existence of a gradient between health and illness and suggests that having a disease or illness necessary implies ill-health and that illness is always detrimental (Blaxter 2010).

Health has also been defined as a state of normality. Illness then, is considered a deviation from that normality—be it either a physical or mental deviation (Blaxter 2010). This is also problematic as the concept of normality is dependent on social constructs of what is ‘normal’—in effect creating a standard against which people are judged. In this definition, health is *normative* in that it emphasizes a person’s capacity to subscribe to society’s expectations and standards, to otherwise ‘fit in’ (Aggleton 1990; Blaxter 2010). The definition of ‘normal’ is not universal, is subjective, and largely reflects a person’s personally held beliefs about health (Blaxter 2010).

Health as function—that is the ability ‘to do things’ necessary in ordinary life without pain or significant restriction—presents similar definitional issues, as ability to do things is differently defined for different people, at different stages of their lives, and may change over the life course (Blaxter, 2010, p. 8). Importantly, this definition has serious implications for those with disabilities as it implies that those who lack certain functional abilities are not healthy and reflects broader questions regarding how society defines both physical and mental fitness and functionality in general (Aggleton 1990; Blaxter 2010).

² An example of a historically specific disease is hysteria, a ‘mental disorder’ attributed to women, and believed to exist for over 4000 years. The concept of hysteria was removed from the 1980 DSM-III (Tasca et al. 2012).

Although not a definition of health per se, health may also be understood in terms of *inequalities* in health³. Broadly, health inequalities refer to differences in health among individuals, groups and jurisdictions (including cities, or nation states), as well as between those occupying unequal positions in society (Kawachi, Subramanian, and Almeida-Filho 2002; Graham 2007; Raphael 2012). Disparities in health can manifest as differences in mortality rates, life expectancy as well as self-reported measurements of health and differences in incidence of disease or injury (Raphael 2012; Farrants and Bambra 2017). Health inequalities exist for most diseases or conditions including cardiovascular disease, diabetes, cancer, depression, suicide and others, and are apparent throughout the life course (Raphael 2012; Graham 2007).

What is health equity?

Health inequalities refer to differences in health among individuals, groups and jurisdictions (including cities, or nation states), as well as between those occupying unequal positions in society (Kawachi, Subramanian, and Almeida-Filho 2002; Graham 2007; Raphael 2012). Disparities in health can manifest as differences in mortality rates, incidence of disease or injury, life expectancy as well as self-reported measurements of health (Raphael 2012; Farrants and Bambra 2017; Graham 2007). For example, Canadian farmers self-report having higher rates of anxiety, stress and depression compared to non-farming populations (Jones-Bitton, Best, et al. 2019) indicating that the farmer mental health crisis is a health equity issue.

The concept of health inequalities as a social problem came to the fore in the 20th century with the Whitehall studies (1978, 1991), and later with the Black Report (1980). The first

³ The terms ‘health inequality’ and ‘health inequalities’ are often used interchangeably, with a preference for the pluralized form as it denotes “...that both inequalities, and the dimensions of health with which they are associated, are multiple” (Graham, 2007, p. 4).

Whitehall study was a longitudinal study of 17,350 British civil servants and was the first of its kind to observe an inverse relationship between job classification and cardiovascular disease (CVD). Employees in the ‘lowest grade’ of employment had 3.6 times higher risk of having CVD compared to those in highest job categories of administration (Marmot et al. 1978). A second Whitehall study was conducted between 1985 and 1988, and again found an inverse relationship between job status and health outcomes (Marmot et al. 1991).

The Black Report examined health inequalities across the United Kingdom and found a strong link between social class and longevity and death rates (Bartley, 2016; Townsend, Davidson, & Whitehead, 1992). The importance of the Black Report, however, was that for the first time it was shown that even in a society with near universal access to healthcare, health disparities were observed between groups, and had even worsened since the implementation of the national health service in Great Britain (Bartley 2016). The Black Report led researchers to view health disparities occurring not as a result of absolute income differences but rather *relative* differences (Bartley 2016).

Health inequalities exist because of the unequal distribution the social determinants of health⁴, which are in turn shaped by larger structural determinants, including politics and the economy, and the organization of the state and of the labour market (Raphael 2012; Bambra 2011b). There is growing consensus that the inequitable distribution of social determinants of health is not naturally occurring (Raphael 2012), but rather is politically determined (Bambra 2011b). In this way, health inequalities can be understood as health *inequities*—broadly defined as

⁴ The social determinants of health refer to a broad range of societal factors which shape the conditions in which people are born, grow, work and age (World Health Organization 2018; Tremblay 2016; Health Council of Canada 2010). These societal factors include income, early childhood education, housing, food, and the ability to participate in society, among other determinants (Health Council of Canada 2010; Raphael 2012).

inequalities in health that are avoidable and unnecessary and have occurred through unfair or unjust circumstances (Kawachi, Subramanian, and Almeida-Filho 2002; Whitehead 1991). Moral and ethical consideration of what is ‘unjust’ or ‘unfair’, however, is open to interpretation (Kawachi, Subramanian, and Almeida-Filho 2002). In an effort to clarify the definition of health inequity, Braveman and Gruskin (2003) argue that “Health equity is the absence of systematic disparities in health (or its social determinants) between more and less advantaged social groups” (p. 256). Furthermore, health inequities systematically disadvantage those who are worse off in society (Braveman and Gruskin 2003). Despite the noted distinction between *inequality* and *inequity*, some authors, such as Raphael (2012), employ the term ‘health inequalities’ to refer to inequities, as they argue most health inequalities are avoidable, and therefore are unfair and unjust (Raphael, 2012, p. 2). The terms are employed interchangeably in this thesis.

Health inequities are sensitive to public policy. For example, redistributive policies, such as taxes and cash transfers, are an effective way to reduce income inequality and its attendant consequences for health (Graham 2007). Although there are various theories of public policymaking used to explain or understand policy development and implementation, this thesis will discuss one such theory only, that of political economy. How health is understood is important, as these conceptions largely shape both research and public policymaking and implementation activities. Similarly, in the field of public policy there are different conceptions of policy making and change underpinned by different theories of the policymaking process, which will be discussed in the following section.

What is Policy?

Broadly defined, policy refers to an action, or a set of actions or related activities implemented to achieve a desired purpose or goal, and includes both the intended and unintended consequences of those actions (Walt 1994). Public policy, as opposed to policy implemented by private organizations or associations, is concerned with policies made and implemented by governments. As such, attention is paid to the actions—or inactions—of government with regards to policy development, implementation, and enforcement (Walt 1994). A subset of public policy is health policy. These policies are concerned with the operation and management of the healthcare system (funding to hospitals, drug coverage etc.), and with health in general, including public health (anti-tobacco campaigns, vaccines), and more broadly, to the social determinants of health (Bryant 2016).

Policies concerned with SDH, however, are not always health policies—but represent another subset of public policy—social policy. Social policy is concerned with policies related to social service and income supports, including supports for families and seniors, as well as unemployment insurance and pensions (Bryant 2015). These policies influence individuals' living and working conditions, which in turn impact their health over the life course. In this way, social policy can be considered a form of health policy, and as such, the use of health policy in this report will include aspects of social policy. There is policy, however, which cannot be strictly categorized as either health or social policy and includes policy that shapes society at a higher level. This includes policy concerned with labour, tax and cash transfers, industry, trade and agriculture (Raphael, 2010). These broader policies shape the distribution of social and economic resources and are in turn are shaped by differences in power and influence of different societal sectors (Raphael 2015).

Political scientists are interested in a number of aspects of public policy, including how public policy is made and implemented, who influences the policy change process, and who does not. Like the understanding of health, different theories on policy making and change exist to attempt to answer these—and other—questions (Bryant 2016). Although a number of theories and versions of theories exist, we will consider some that are most related to health and healthcare policy.

Select theories of public policy decision making and change

Just as there exist theories which inform our understanding and ways of thinking about health, there are similar theories for understanding how public policymaking is developed. Theories of public policymaking can be categorized into consensus or conflict models, and can be further categorized based on their micro, macro, or meso views of public policymaking and implementation, and are informed by their own set of assumptions regarding the policymaking process—and of the nature of society in general (Bryant 2016).

The consensus model is concerned with how groups compete to influence policy (Walt 1994) as well as with the technical day-to-day activities of policymakers. Policy is believed to occur through a process of collective decision making and is seen as a rational process (Bryant 2016; Walt 1994). The conflict model, by comparison, reflects tenets of critical theory and considers the influence of power in the policymaking process, and the larger social, economic and political factors in which policymaking is situated. Furthermore it asks the question: *who* makes public policy—many different groups, or a small number of elites? (Walt 1994). Macro view theories are concerned the broader shape of political systems, as well as with issues of power in political systems (Walt 1994; Bryant 2016). Meso-view theories are concerned with the

role middle-level institutions play in influencing health care and health-related public policy. These include governmental institutions, as well as institutions which operate at arm's length from governments (Bryant 2016). Micro level theories focus on the day-to-day administrative and basic government operations to examine how these impacts public policymaking and implementation (Bryant 2016).

Bryant (2016) identifies three theories of public policymaking most often used to explain or understand policy development and implementation for both healthcare and health related policy. These models include pluralistic interest group (pluralism), new institutionalism, and political economy.

Pluralism theory

Pluralism, or pluralistic interest theory is concerned with the activities of groups, particularly how they compete with one another to gain influence of the public policy process (Latham 1952). Pluralistic interest theory holds that all groups have equal opportunities to influence policymaking, and as such public policy is a balanced reflection of competing inputs, representing collective public interest (Bryant 2016; Latham 1952). In this theory, the government is considered a neutral arbiter between competing interest groups, and as such power is “diffused” throughout society with no consideration given to the power of certain groups over others (Walt 1994). In this way pluralism is predicated on political rights and on the tenets of liberal democracy (Bryant 2016), where all members of society are considered to have the equal ability and opportunity to participate in the political process (Walt 1994). As interest groups are central to this theory, focus is on the interest group and their ability (and strategies) to influence public policy decision making (Bryant 2016). These basic tenets are reflected in Kingdon's

agenda-setting model and Easton's model of the political system, where in both, governments are assumed to be neutral and receptive to addressing a given issue (Bryant, 2016, Walt, 1996).

Kingdon's agenda setting model, for example, holds that there are three separate⁵ streams—problem, politics, and policy—which need to converge in order for a 'policy window' to open up (Kingdon and Thurber 1984; Walt 1994). The Easton model of political systems identifies various inputs into the policymaking system. In this model, the government is believed to be neutral and receptive to ideas from all sectors of society (Bryant 2016).

Bryant (2016) and Walt (1994), however, criticize pluralism theory for viewing the government as a neutral participant of the policy making process. Rather, governments should be considered their own entity with substantial power, power that is linked to other large interest groups including the military, banks, or transnational corporations (Walt 1994). Furthermore, pluralism does not take into consideration the uneven power and influence that certain groups have compared to others in the policy making process (Bryant 2016).

Phoebe Hall (1975) suggests a modified theory of pluralism which incorporates a theory of power referred to as *bounded pluralism*. Hall proposes that day-to day social policy decisions are made using a pluralist process, but there are a small number of elites who have substantial power and influence on social policy (Hall 1975; Walt 1994). Regardless of any modification or variation of the theory, the basic tenets remain, with the role of power and influence being

⁵ Briefly three the three streams are as follows. The problem stream is concerned with which policies are recognized by government officials and which problems are not- this is largely understood to occur as a result of how information of the policies is obtained, as well as critical events or feedback from an existing policy. The politics stream is concerned with those who influence the agenda and includes both hidden (academics and media) and visible (government official) actors. Lastly, the policy stream draws from the two other streams to ultimately chose which ideas become policy and is based on criteria of feasibility, alignment with existing values, public acceptability and anticipation of future constraints (Walt 1994; Kingdon and Thurber 1984).

largely ignored in this theoretical approach.

Institutionalist theory

The institutionalist theory of public policy views institutions as the primary influence on public policymaking and implementation (Amenta and Ramsey 2010). Institutions are believed to shape social and political outcomes by shaping the values or promoting particular ideologies, which then influence the policy making preferences of policymakers. As such, institutions are seen to 'define terms of engagement' of policymaking, having the ability to encourage or restrict the choices available to policy makers (Bryant 2016). In this model, institutions include independent governmental or state structures such as hospitals, schools or various governmental ministries (Bryant 2016). This theory of policy change can be macro or meso and is consensus driven, similar to pluralistic theory. The primary focus, however, is on the role of the institution rather than on interest groups.

New institutionalism, Hall and Taylor (2009) write, is comprised of three different analytical approaches which aim to explain the role that institutions play on policy outcomes. Briefly, rational choice institutionalism focuses on the economic position of actors, and sociological institutionalism sees cultural structures and processes as influencing policy (Amenta and Ramsey 2010; Bryant 2016; Hall and Taylor 1996). Historical institutionalism examines how previous policy decisions influence present-day policy decisions, and operates on the assumption that policy is 'path dependent', in that policymaking will stay on a particular trajectory until a critical juncture occurs which allows for rapid policy shifts (Hall and Taylor 1996). Proponents of this policymaking model look at policy legacies which already exist to understand current policy, as these legacies heavily influence current public policymaking ability (Hall and Taylor 1996). Institutionalist theory is reflected in Hall and Lamont's (2009) work, in

which they examine how institutions and cultural structures interact and relate to one another to create healthy and successful societies.

There exists a third theory, political economy, which goes beyond the pluralist and institutionalist understandings of public policymaking and is concerned with the role power and influence plays in influencing the public policymaking process. This theory, however, will be discussed in more detail in the following section as it is also a model for policy change. Finally, a discussion of household food insecurity will reveal how these different theories translate into diverse approaches to research and advocacy activities.

Models of policy change

Policy change is an important aspect of public policymaking, and simply refers to “an adjustment to an existing public policy or set of related public policies” (Bryant, 2016, p. 93). As simple as this definition makes policy change seem, there are many theories and approaches to understanding how both minor and major policy changes come to be. As discussed by Bryant (2016), learning models are used to understand policy change as it seen that knowledge is a source of policy change—and that change happens because policymakers learn from the accumulated experiences of previous policies, and make changes based on their understanding of how well these policies have performed (Hall 1993). Therefore, there is a focus on role that knowledge (both acquisition and application of) has on influencing policymakers. Two models in particular, policy paradigms and knowledge paradigms, will be discussed.

Policy paradigms

A policy paradigm is described as a theoretical tool used for understanding public policymaking, with a primary focus on how ideas impact policy change (Hogan and Howlett 2015). Similar to Kuhn's description of a scientific paradigm, Peter Hall (1993) suggests that policy makers exist within a 'policy paradigm'—that is a realm, or framework within which policy makers operate; this realm defines the ideas and the nature of the problem. It also defines their policy goals as well as the types of instruments used to attain this goal. Policy change, according to Hall, comes about through a process of social learning where policy change is not so much influenced by current economic and social conditions as it is by past policy decisions. That is, policy at time-1 is impacted by policy at time-0. Public policy then, is made based on previous policy choices and as such policy change is believed to be incremental and path dependent. A paradigmatic shift occurs when major changes in the dominant policy discourse occur (Hall 1993; Bryant 2016). Hall's model also provides a framework for understanding different levels of policy change, which he describes as first, second and third order. First order policy change is described activities which constitute day-to-day policymaking. These are the routine and minor policy adjustments which are path dependent. Second order policy change is concerned with altering policy tools⁶, but do not alter policy goals in any significant way. In third order change both

⁶ This thesis looks at the social, political and economic impacts that removing the Canadian Wheat Board has had on the lives of grain and oilseed farmers in Western Canada. More than being a policy, however, the Wheat Board can also be described as being a policy tool. As outlined by Bali et al. (2021) policy tools, also known as policy instruments, are techniques of governing used to define and achieve policy goals. They are also referred to as governing instruments or the tools of government. Policy tools are characteristically different from policy which more broadly is concerned with an action or set of actions to achieve a desired goal or purpose (Walt 1994). While a policy outlines what is to be achieved, policy tools detail how to achieve those goals.

There are two categories of policy tools: procedural tools and substantive tools (Bali et al. 2021). Briefly, procedural tools are techniques or mechanisms which are used to influence the policy-making process including how policy is formulated and implemented. Procedural policy tools include the creation

policy instruments and goals are modified. Hall calls the latter a ‘paradigmatic shift’ to describe a radical shift in policy discourse, which occurs as a result of political influence rather than from knowledge alone (Hall 1993; Bryant 2016).

Bryant (2016) critiques Hall’s policy paradigms, arguing that by focusing primarily on institutions, the role of societal sectors and other factors which influence the policymaking process are excluded from this analysis. While Hall describes societal actors and the state as key in policy change, this model does not take into account the relationships between civil service and the public, or between the state and civil society. Lastly, Hall sees the role of the policy expert as being of high importance in the policy making process, though he fails to see this role as problematic despite the possibility that resultant policy may reflect the interests of said policy makers rather than those whom the policy is likely to impact (Bryant 2016).

Knowledge paradigms

Building on Hall’s policy paradigm, Bryant (2016) proposes another framework, the knowledge paradigm policy change framework, which expands this idea to take into consideration how the broader economic and political structures—such as power and ideology—impact on the public

of advisory committees, public consultations and other mechanisms. They are seen as necessary for substantive tools to work effectively and to help gain legitimacy or buy-in from stakeholders (Bali et al. 2021).

Substantive tools are policy instruments which directly or indirectly affect the outcomes of policies and include mechanisms like regulations, subsidies, and public enterprises (Bali et al. 2021). The Canadian Wheat Board fits within this category as it was an organization established to market wheat and barley worldwide. To accomplish this policy goal, the Wheat Board, as a policy tool, coordinated grain exports and provided advanced and final payments to farmers, among other actions, to provide economic stability for farmers.

policymaking process as well as considers how some forms of knowledge are privileged over others in the policy process (Bryant 2002). In contrast to Hall's model, Bryant's knowledge paradigm policy change framework sees influence on policymaking as not limited to policy experts or elected officials but expanded in this model to include civil society including trade groups, professional associations, the market, as well as citizens. A key feature of this model is the recognition that inequalities exist between groups in their ability to influence the policy process in terms of resources and finances (Bryant 2016). Both policy change and knowledge are framed as political. Bryant's model of policy change can be more broadly understood as being situated within the political economy model of public policymaking and implementation, discussed in detail in the next section.

A critical materialist political economy model of public policymaking

Political economy is the study of how politics and economic systems interact and influence each other. As a field in the social sciences, it also examines the relationship between individuals and society and between markets and the state (Vaseth and Balaam 2024). Political economy emerged with theorists like Adam Smith, David Ricardo, and later John Stuart Mill, who viewed the economic and political worlds as inseparable, the field has gained prominence in political science and economics, as it provides valuable insight to both understanding and improving society (Frieden 2020).

In terms of policy, there are different streams of political economy which differently conceptualize how public policymaking and policy change comes to be (Coburn 2010). The first stream's approach to public policymaking sees politics and economics as interrelated factors that shape living and working conditions, which are in turn shaped by how society organizes

production, and the distribution of economic and social resources (Bryant 2016; Coburn 2004; Raphael 2015). One example of this approach is reflected in Esping-Andersen's (1990) welfare state typology and the role of neoliberalism on shaping policy outcomes⁷.

Bryant and Raphael (2020) write that welfare states refer to the different ways in which nations organize themselves to provide their citizens with living and working conditions that ensure social and economic security (Bambra, Reibling, and McNamara 2018). Gøsta Esping-Andersen (1990) contributed to the discussion of the welfare state in his work *The Three Worlds of Welfare Capitalism* which analyzed and classified 18 countries in the Organisation for Economic Co-operation and Development into one of three typologies⁸, or institutional arrangements, either of the conservative, social democratic or liberal type. This analysis was conducted based on the extent of the social stratification, de-commodification⁹, and social security of labour (Bryant 2015) and furthermore whether the state or the market served as the dominant institution in the country (Saint-Arnaud & Bernard, 2003). Esping-Andersen's (1990) work has had significant impact on health research, as it has been shown that through the de-commodification of the social determinants of health (like income, daycare, housing, education), welfare states impact the health and well-being of citizens (Farrants and Bambra 2017). As such

⁷Esping-Andersen (1990) sees that welfare states dictate the distribution of key resources in a society which acts to reduce social hierarchy resulting in a more equal distribution of resources including key social determinants of health (Farrants and Bambra 2017; Graham 2007).

⁸ A fourth typology 'Latin' was later added by Leibfried (1992), Ferrera (1996) and Bonoli (1997) cited in (Saint-Arnaud and Bernard 2003).

⁹ De-commodification of labour, occurs when a "service is rendered as a matter of right, and when a person can maintain a livelihood without reliance on the market" (Esping-Andersen 1990, p. 16). A highly de-commodified welfare state insulates workers from the market pressures (Orloff 1996) and welfare regimes take different approaches to protecting workers and citizens from the market place (Saint-Arnaud and Bernard 2003).

the welfare regime typology is often used to explain health inequalities (Navarro 1999; Raphael and Bryant 2004, 2015).

Welfare states dictate the distribution of key resources in a society, which acts to reduce social hierarchy resulting in a more equal distribution of resources including key SDH (Farrants and Bambra 2017; Graham 2007). De-commodification of the SDH allows citizens to enjoy a higher quality of life independent of the market, with higher standards of living and less financial stress (Bambra 2011, 2007; Raphael and Bryant 2015; Farrants and Bambra 2017). Due to its critical role in health, de-commodification is itself considered a social determinant of health (Farrants & Bambr, 2017). A key insight in Esping-Andersen's work is the characterization of the liberal¹⁰ welfare state, of which Canada, the United States, the United Kingdom and Australia are examples. It is characterized by limited universal transfers, means tested social assistance and modest social insurance plans (Esping-Andersen, 1990). In this regime, the market is the dominant institution and policymaking is influenced by neoliberal ideology which has a "preference for market solutions to welfare problems" (Myles, 1998, p. 342). This has translated into decades-long austerity, including cuts to social and health spending, post-secondary education, child and elderly benefits, and unemployment insurance (Myles 1998; Sanscartier 2015; Raphael 2015) as well as the deregulation trade and financial investment (Ellwood 2010)¹¹.

¹⁰ As Bryant and Raphael (2020) note, the term 'liberal', is a specific term used in political science and is different from the common term in North America associated with progressive politics. Liberal welfare states are less progressive than other forms of welfare states (social democratic, conservative and Latin).

¹¹ Given recent investments by the Canadian government in a number of initiatives including increased child-benefits, pharma care, dental care and proposed investments in housing and a national school food program, a reassessment of Canada's status as a liberal welfare state may be warranted.

In general, liberal welfare regimes provide little to support to individuals and families, and what support is provided is means tested and meagre (Raphael 2010; Saint-Arnaud and Bernard 2003). This type of policy making is not benign either, as nations who pursue neoliberal policies have greater levels of social inequalities, including higher rates of poverty (Coburn 2004) and decreased health outcomes (Navarro 2007; Raphael 2002; Ruckert and Labonté 2014, 2017). For the past four decades, Canada's public policymaking has been largely influenced by neoliberalism (Coburn 2004). To understand *why* this has happened, however, we must look at the 'story behind the story' and examine the larger influences in this shift to neoliberal policymaking. To do this, we draw from another stream of political economy, *critical materialist* political economy.

The critical materialist political economy stream extends political economy analysis to also consider the influence of markets, power, states, ideas, discourses as well as civil society as factors¹² which impact policy (Bryant 2016). Civil society actors include, but are not limited to the corporate and business sector, labour groups, civil society, health coalitions, as well as the media (Raphael 2015; Bryant 2016; Langille 2016). Although these different actors vie for influence over the public policymaking process, their influence is not equal; that is, some have more resources and ability to influence the process and special interest groups are instrumental in fostering consensus on issues of public policymaking (Olsen 2010). In the corporate and business sector, for example, interest groups—including lobbyists, business associations and citizen front groups—have been very successful in swaying policy to their favour, including relaxation of employment standards and multiple reductions in corporate taxes (Langille 2016). For Farnsworth and Holden (2006) understanding the role of the business sector is key in

¹² Patriarchy and militarism are also noted influences on public policymaking (Scott-Samuel 2012).

understanding current social policy development. This is in stark contrast to both institutionalist theory, which is concerned primarily with ideas, and pluralism which does not consider the role of power and ideology on the public policymaking process (Bryant, 2015, 2016).

How a society organizes the production and distribution of social and economic resources is fundamental in understanding public policymaking, as these aspects of society play a key role in shaping both ideas and institutions (Bryant 2016). Our current social formation is the capitalist mode of production, which, according to Marx forms the basis of class division within a society between those who sell their labour, and those who own and control the means of production (Cottrell 1984). Those who own and control means of production have tremendous power and influence over the media, politics and state, and this power "...fundamentally shapes and limits what is possible" (Coburn, 2010, p. 67). As such, this stream of political economy is concerned with issues of power and influence, specifically how power is gained, maintained and used to influence public policymaking, and is as such informed by Marxist social theory, predicated on the materialist conception of history, or historical materialism (Wood 2004).

Raphael (2015) sees public policy decision making in Canada as contributing to income inequality and health inequalities because of the power and influence of certain groups over others—primarily that of the business sector—and their ability to then shape public policy in their interest. As such, the quality and distribution of the social determinants of health—and health inequalities—is not only explained by the welfare typology, but by the power and influence of those who benefit, and even create, social and health inequalities¹³ (Raphael, 2015).

¹³ There are balancing mechanisms to sway public policymaking towards redistributive mechanisms which do not serve only the elite business class. These mechanisms largely entail labour, as well as left political institutions which have been empirically shown to greatly reduce poverty via improving welfare state provisioning and redistributive policies (Brady, 2003).

Critical materialist political economy theory was chosen for this thesis because it is a theory of policymaking which takes into account issues of power and influence. For example, pluralistic interest theory holds that all groups have equal opportunities to influence policymaking, and as such public policy is a balanced reflection of competing inputs, representing collective public interest. Among other issues, pluralism does not take into consideration the uneven power and influence that certain groups have compared with others in the policy making process (Bryant, 2016). Furthermore, critical materialist political economy approach aligns well with the tenets of critical realism, the research methodology of this thesis, which is why it was employed in this research as a framework for understanding public policymaking.

A Historic and Holistic Approach to Understanding Food and Agriculture

Within a capitalist economic system, food is a commodity, a private good produced to be sold in a market for a profit. This profit function largely dictates how food is produced and distributed and as a commodity, food responds to market demands, as distinct from responding to need (Holt-Giménez 2017). Food is essential, however, and has its own set of socio-economic, cultural and political characteristics that have played a critical role in “establishing human existence as a *social existence*” (emphasis in original, Winson 1993, p.1).

Anthony Winson (1993) writes that the production of food today is a complex of economic, social and political practices and in order to understand this complex, an examination that is both historic and holistic is required. This examination should be historic in order to understand the trajectories and histories that have shaped the current food system. Furthermore, he argues that a holistic approach is necessary as an “effort to get at the heart of any piece of our

social reality will fail if it does not strive to decipher how it fits into the whole and how both parts and whole are mutually determined” (p. 9).

To situate this thesis, I will provide a historical look at how food first became a commodity. Following this, an overview of food regime theory will not only situate the food system today but also provide broader context to the environment in which the Canadian Wheat Board was first created and then later dismantled.

Food as a Commodity: Enclosures and Primitive Accumulation

In the British Isles, the commons had historically been communal property used by peasant communities to graze cattle and grow food. The peasantry refers to small agricultural producers who produce food by using basic tools and the labour of their families, mainly for their own consumption and if applicable, for the fulfillment of obligations to those who held economic and political power, such as was the case under feudalism (George and Paige 1982). Under feudalism, surplus food was appropriated from serfs by landed aristocrats as a form of in-kind taxation for living and growing food on the land of the aristocrats. Any remaining food was used by serfs to feed their families, and otherwise was taken to the market for barter (Magdoff 2012). The disintegration of the feudal economic order, however, left English lords and other landed aristocrats in search of new ways of recouping their incomes and organizing land as “the previous mode of exploitation had virtually collapsed” (Katz 1993, p. 377). Thus, the wealthy could no longer appropriate economic surplus through the feudal system, and as such the transition to capitalism began with the enclosing of the commons.

A series of enclosures acts starting as early as the Elizabethan era and carrying on through to the Georgian era (1760-1830) converted much of the commons into private property

(Hobsbawm 1996; Lekachman 1981). Land obtained through the enclosures were, for the most part, appropriated to the already wealthy landed-aristocracy, allowing them to further consolidate their wealth and resources (Holt-Giménez 2017). The enclosures of the commons had a transformative impact on society as the peasant class lost its ability to remain self-sufficient, and social inequalities were exacerbated. The enclosures, as Lekachman (1981) notes, destroyed the peasantry as a class throughout Britain, and in its place created a class of landless workers forced to enter the labour market in order to survive. Some peasants worked on larger farms, while others moved into cities and towns often working in factories or other industry.

The enclosure of the commons not only represents the theft of land from the people, but it also represents the origin of capitalist accumulation in what Karl Marx (1967 [1867]) refers to as ‘primitive accumulation’. He wrote “...the expropriation of the agriculture producer, of the peasant from the soil is the basis of the whole process [of primitive accumulation]”. Adopted from earlier political economists, notably Adam Smith, Marx’s formulation of primitive accumulation describes the dual process of mass dispossession of land, along with the creation of a class of landless workers, in effect, describing the origin of the separation of producers from the means of production (Peekhaus 2011; Tilley, Kumar, and Cowan 2017). The peasants were, “robbed of all their own means of production”, and as a result themselves became commodities, who had no other choice but sell their labour power on the market for whatever price the market would give (Marx 1967 [1867]). In effect, it created a new class of people who became the reserve army of labour for the industrial revolution (Lekachman 1981). Primitive accumulation, however, did not stop with enclosing of the commons, as the British Empire was participating in primitive accumulation on a much grander scale through mercantile capitalism and colonialist expansion and was the hegemonic power underpinning the first food regime.

Food Regime Theory

Food regime theory or analysis offers historical examinations of how key actors—including corporations, governments, collective organization and individuals, shape the food system while allowing for “renewed accumulation of capital based on shared definition of social purpose by key actors while marginalizing others” (Friedmann, 2005, p. 228). This theory links “international relations of food production and consumption to forms of accumulation broadly distinguishing periods of capitalist transformation” (Friedmann and McMichael 1989, p. 95). In this way food regime theory situates the changes or restructuring of the agri-food system within the context of world-historical changes (Magnan, 2016, p. 7) and has been key in shaping our thinking about the relationship between the state, capitalism and agriculture (Tilzey 2019, p. 230).

Food regimes themselves are conceptualized as periods of stability which contain their own set of implicit rules, practices and institutions for regulating trade, consumption and food production (Magnan 2016; Friedmann 2005). The social actors within the regime are all bound to these rules and as a result the relationships between these actors shape the politics of the global food system, in addition to the agricultural division of labour and trade patterns (Magnan 2016, p. 4).

Importantly, food regimes are underscored by hegemonic power—the British Empire in the first food regime and United States in the second—and these hegemons set the rules of the regime in their favour, ultimately leading to tension in the system with other actors (farmers, governments, corporations). The internal tensions of these actors lead to a ‘crisis’ or periods of

rapid social, economic or ecological change, marking the end of the regime and the eventual transition to the next one (Magnan 2016, p. 7).

First articulated by Harriet Friedmann and Phillip McMichael (1989), food regime theory has undergone many formulations (see McMichael, 2009). For this chapter, I draw on the work of Harriet Friedman (2005), Phillip McMichael (2009, 2012) and André Magnan (2016).

Magnan's research was particularly useful as he uses this theory to examine how the Canada-UK wheat trade, including the creation and later dismantling of the Canadian Wheat Board, "reflected and contributed to food regime stability and changes over the decades" (p. 9).

First Food Regime (1870-1915)

The First Food regime, also called *Colonial-Diasporic Food Regime*, is characterized by colonialist rule and hegemonic power of the British Empire. Colonization and mercantile capitalism enabled the Kingdom of Great Britain, and later the United Kingdom, to expand its power and accumulate wealth (Lekachman 1981) and was fuelled largely through agriculture products taken from these colonies (Holt-Giménez 2017). The production and subsequent trading of agriculture commodities was done according to principles of Ricardian comparative advantage¹⁴ and as such, cemented the first international division of labour in agriculture (Friedmann and McMichael 1989, p. 102).

Tropical imports from colonies, as well as grains and livestock from settler states (Canada, USA Australia) were imported to Europe, to feed the European proletariat (Friedmann

¹⁴ Comparative advantage is an economic theory which holds that nations should produce goods that they have the advantage in making, an advantage which allows them to export this product at a cheaper price than other nations (Rosset 2006). As such, if agricultural producers experience economic hardship, it is because they are not producing the appropriate commodity.

and McMichael 1989) which underpinned Britain's "workshop of the world" (McMichael 2013, p. 5). Colonies produced/supplied crops such as tea, tobacco, sugar and coffee, while settler states primarily provided 'meat and wheat', all of which became integral parts of working-class European diets, reducing the cost of industrialization while defusing discontent among this group (Magnan 2016, p.12). In exchange for their wheat and meat, settler states were given manufactured goods, migrants and capital (Magnan 2016). Migrants were particularly key for helping drive territorial expansion, but also allowed governments to emigrate troublemakers those who were deemed as provoking unrest including anarchists, labour activist or others (Friedmann 2005).

This food regime created a new class of farm, the 'family farm,' dependent on family labour and access to cheap land which allowed them to produce food cheaper than was possible in Europe. However, as these farmers still required money to purchase goods as well as to export their grain by rail (as railway companies began to charge for shipping), this class of farmers shifted away from mixed crop and livestock operations towards monocropped fields and factory livestock operations (Friedmann 2005). Many small farmers in Europe, who could not compete with the cheap influx of commodities, lost their farms, while some moved to settler states to farm there (Friedmann 2005).

Crisis of the First Food Regime

The regime crisis lasted approximately 30 years, beginning with World War I and the collapse of the gold standard as currency in 1914. This turmoil created global instability which precipitated the end of British Empire's hegemony (Magnan 2016; Friedmann 2005). For settlers in the US in particular, the economic turmoil was exacerbated by ecological crisis, the 'dust bowl' conditions

of the 1930s. In only two generations of industrial agriculture, settler farmers depleted the soils of the grasslands¹⁵ (Friedmann 2005). The depleted soils left the land vulnerable to drought and erosion and revealed the “shaky ecological foundations of settler agriculture” (Magnan 2016, p.13). At this time, many farmers exited the industry, and those who stayed began organizing politically and economically, including through agriculture cooperatives. This was particularly needed as farmers were already at the mercy of private interests such as grain merchants, railways and banks (Magnan 2016).

To deal with volatile markets and growing food insecurity during this crisis period, governments responded by setting up international commodity agreements where governments committed to import and export certain negotiated quantities (Friedman 2005). The American government responded by implementing commodity programs to support the beleaguered agriculture sector under the New Deal. As this was done in the form of price supports rather than directly subsidizing farm incomes, it created oversupply and would in part set the stage for the US hegemony in the second food regime (Magnan 2016).

Second Food Regime (1950s-1970s)

The second food regime was characterized primarily by increased export subsidies, at first from the US and later from Europe, and the rapid growth and development of the industrial agri-food business complex dominated by agri-food corporations (Magnan 2016). For these reasons, Friedmann (2005) calls the second food regime, the *mercantile-industrial* food regime.

¹⁵ In Canada, dust bowl conditions were largely seen in southeastern Alberta and southern Saskatchewan.

After the Second World War, the US maintained its agriculture policies developed during the depression, including price supports for farmers in addition to tariffs and export subsidies (Magnan 2016). As a result of price supports the US continued to have agricultural surpluses. Where in the first food regime the US was one of many exporters, these agricultural surpluses allowed it to become the dominant food exporter, creating the perception that the US was the natural 'breadbasket' of the world (Friedmann 2005, p. 241). The US, under the Marshall Plan, however, was able to alleviate this oversupply by sending food to war-torn Europe. They also sent fertilizer and feed, which Friedman (2005) notes helped put key commodity crops, particularly grain and livestock, on the same path to industrial farming as was developing in the US. As we will see later, this would result in Europe also having an oversupply of food which they would begin battling over the US over markets to off-load it.

Once Europe had recovered and no longer required aid, the US had to find new markets to absorb their surpluses of agricultural goods. They did this by sending food to the global South¹⁶, which not only reduced their surpluses, but allowed the US to "forge geopolitical ties with key Third World states, contributing to its anticommunist agenda" (Magnan, 2016, p. 15) while creating dependency and ensuring future markets for these goods (Friedmann 1993). Local governments accepted food shipments from the US as they were not thought of as subsidized exports, but rather as aid sent to encourage industrialization. The influx of cheap food forced peasants out of subsistence farming and the local markets into cities (Friedmann 2005, p. 241), in a similar process to what happened to European farmers during the first food regime.

¹⁶ This thesis employs the terms 'global South' and 'global North', as commonly used in texts in this research area. I would like to acknowledge the criticisms associated with these terms, including the potential to misrepresent the geographical and economic realities of the countries they categorize. Furthermore, these terms often frame countries in the global South as 'less' or 'other', reinforcing a global hierarchy that may perpetuate inequality (Prys-Hansen 2023).

During this time, the US was also successful in promoting the US model of agro-industrialization through the ‘green revolution’¹⁷ which significantly and permanently changed some developing nations, particularly Mexico and India (McMichael 2013). The spread of capitalist agriculture during the Green Revolution had the twin impacts of reducing farmers and peasant’s capacity for self-reliance, while laying the groundwork for the third food regime, where chemical and seed corporations became powerful players within the food system. The shift towards industrial agricultural techniques, including new fertilizers, pesticides and crop varieties, facilitated the rapid growth of the agriculture input industry (Magnan 2016). As a result, farmers became increasingly specialized, growing monocrops or focusing exclusively on livestock production (Friedmann 2005).

Farming also began to change with regards to outputs, as cheap commodities (predominantly soy and corn) were used as feed in the livestock sector, producing cheap meat. The resultant ‘livestock complex’ changed the diets of Americans who could now afford to eat meat more regularly (Magnan 2016). The livestock complex was not restricted to the US, and indeed became internationally integrated with raw materials being sourced globally. Resultant meat products were sold into differentiated world markets, with higher quality cuts of meat going

¹⁷ The Green Revolution was an agricultural development campaign in the 1960s, promoted by Rockefeller and Ford Foundation in the U.S., to spread industrial farming practices to the global South. During this campaign, farmers in Mexico, India, and parts of Asia were encouraged to adopt industrial farming practices to improve yields of key crops like wheat, maize and rice (Holt-Giménez 2017; Perkins 1990). The Green Revolution produced a new type of crop, one which was capital–as opposed to labour–intensive as these crops produced more yield, but required industrial inputs such as fertilizer, pesticides and new seed varieties (McMichael, 2009; Shiva, 2004). The Rockefeller Foundation placed particular importance on increasing yields in countries with growing populations, and as such were thought to be “caught in a Malthusian trap and teetering on the brink of communism” (Perkins, 1990, p. 13). This specter of communism made the Green Revolution part of the US government Cold War strategy to prevent nations from supporting communist uprisings otherwise known as ‘red revolutions’ (Holt-Giménez 2017).

to wealthier nations, and lower quality meats going to poorer nations (Friedmann and McMichael 1989). The process of bifurcating diets globally continued and deepened with the third food regime (McMichael 2013).

Food processing and manufacturing flourished during this time with the creation of ‘durable foods’, particularly canned, processed, and frozen foods. Like the ‘livestock complex’, durable foods also became a complex, using US commodity crops such as soy, wheat and corn as inputs—shoring up American commodities—while undermining the global South whose products were being replaced (Magnan 2016, p. 16). Branded goods and supermarkets came to “epitomize the cheap food economy” which facilitated the standardization of western diets (Magnan 2016, p. 16).

Crisis of the Second Food Regime

As in the regime before, internal tensions between social actors lead to the eventual crisis and breakdown of this regime (Friedmann 2005). The colonial division of agricultural labour established in the first regime shifted. Tropical colonial countries which depended on exports of commodities such as sugar or palm oil faced plummeting prices. This was driven by the ‘durable-food’ complex which favoured US derived commodities, such as high fructose corn syrup and its by-products over sugar and palm oil, for example (Friedmann 2005).

Up until the 1970s, the Soviet Union was not a global player in agriculture trade as they were separated from the west by mutual trade embargos (Friedmann 2005, p. 242). After failed crops, however, the Soviet Bloc reached a deal with the US to purchase grain at a subsidised price. In 1972 and 1973, under the Soviet-American grain deals, the Nixon administration sold thirty million metric tons of grain to the Soviet Union, representing three quarters of all grain traded world-wide (Friedmann 1993). This sudden and huge expansion of the market for grain

depleted the US's grain surplus, causing the price of wheat and other grains to triple, triggering a global food crisis. Particularly hard hit were nations in the global South who had become dependent on cheap food imports from the US (Friedmann 2005). The US government responded to the grain shortage and ensuing food crisis by encouraging farmers to increase production. Skyrocketing grain prices made it feasible for farmers to take on large amounts of debt to expand operations. This debt, however, would become unmanageable for some when price volatility and surpluses returned to the market later that decade (Magnan, 2016, p. 17), putting many farmers out of business.

Growing corporate concentration caused a 'cost-price squeeze' for farmers, who were paying more for inputs and receiving less for the sale of their goods, and this severely exacerbated the decline in farm numbers (Friedmann 2005). This decline in farms coupled with an increasingly specialized and thus divided farm industry led to a decline in farmers' political influence and with it their ability to protect their farms and way of life (Friedmann 2005; Winson 1993; Magnan 2016).

Another factor contributing to the crisis of this regime was that European countries that had adapted industrialized agriculture techniques from the US also now produced surplus agriculture commodities they needed to sell. These surpluses, as in the US, were offloaded in the world market using export subsidies. With two major players now engaged in 'dumping', Friedman (2005) notes that by the 1980s the export subsidies between the US and Europe bordered on becoming a trade war. Furthermore, other countries at the time that could not afford to subsidize their exports including Argentina, Canada and Australia pushed for an end to mercantile trade and for food to be included in trade agreements. Transnational corporations also

began to agitate for trade liberalization as they felt constrained by both domestic subsidies and the trading rules of this regime (Friedman, 2005, p. 244).

The Uruguay Round series of trade talks (1986-1994) accomplished this goal by establishing the Agreement on Agriculture (AoA), enforced by a new international body the World Trade Organization (WTO)—an organization McMichael (2009) sees as being the epitome of neoliberal development. The end of this regime coincided with governments shifting towards neoliberal-inspired public policy, including austerity and welfare retrenchment, and pursued policies that actively promoted free markets, including deregulation of trade and financial investment (Ellwood 2010).

The Third Food Regime (Circa ~ 1995 to present)

André Magnan (2016) writes that although there is debate regarding the key characteristics of the third food regime “because the neoliberal restructuring of agri-food sectors has proceeded quite unevenly” (p.18) there are still broad trends associated with this regime, including ongoing colonization and dispossession facilitated by trade liberalization, the rise of supermarkets and continued corporate concentration in all aspects of the agri-food system.

Occurring against the backdrop of declining US hegemony, Friedmann (2005) characterizes the third food regime as a “convergence of environmental politics and retail led reorganization of food supply chains”, in what she calls the corporate-environmental food regime (p. 251). As supermarkets continued to become dominant players in the food system, as did their ability to reorganize food supply chains to “correspond with increasingly transnational classes of rich and poor consumers” (Friedmann p. 251-252), bifurcating class diets globally (McMichael 2013).

In this regime private capital (retail and transnational corporations) have selectively appropriated the demands made by social movements and activists in a new round of accumulation Friedmann (2005) describes as ecological or “green” capitalism (Fairbairn 2010; Friedmann 2005). This appropriation comes in the forms of differentiated products, private standards and certification schemes (e.g., fair trade, organic, vegan) which have set standards for food quality higher than those governments are capable of setting or willing to, or that can be achieved through inter-governmental negotiations (Magnan 2016; Fairbairn 2010; Friedmann 2005). Retailers and transnational corporations are successful at imposing these standards up the supply chain - placing the risk and cost of these standards onto other actors in the food system, particularly farmers (Magnan 2016, p. 19). The division of quality conventions have continued to exacerbate inequalities in food standards across the globe (Friedmann 2005; Magnan 2016).

McMichael (2013) views the third food regime, however, as the ‘corporate food regime’. Underpinned by neoliberal and free trade rhetoric, this food regime is a ‘globalization project’, rather than the previous ‘development project’, in that nation states now serve the market, rather than managing it (p. 47). This regime contains elements of the previous food regimes and is centered around “a politically constructed division of agricultural labour between Northern staple grains traded for Southern high-value products (meats, fruits and vegetables)” (p. 148), where Southern countries are forced to reduce agriculture protections and import food from the North, who have been able to maintain their subsidies. This is largely enforced by the World Trade Organization and the AoA which restricts measures that would allow nations to support their agricultural producers, including but not limited to establishing state trading boards (or marketing boards), production controls and implementing trade restrictions (McMichael 2009). Furthermore, the AoA includes a ‘minimum import’ rule which requires nations to import at

least 5 percent of the volume of domestic consumption (McMichael 2005). These rules and restrictions have disproportionately disadvantaged smaller nations, as larger nations, or the global North, are generally granted more freedom to subsidize key crops and as such flood foreign markets with foods at prices well below the cost of production. The European Union (EU), and the U.S., for example, have maintained many of their subsidies allowing them to produce agricultural products at competitive rates while countries within the global South have not (McMichael 2009). Small producers and peasant farmers in the global South are not able to compete with the influx of cheap agricultural products and many have lost their farms and as such their livelihoods. As a result, large numbers of people have been displaced to cities and urban slums, in a process known as de-peasantization of the countryside (McMichael 2009). Land grabs further dispossessed peasants and farmers, as foreign companies and or governments purchase large areas of land to farm for either food or bio-fuel production for export (McMichael 2012).

Globalization, facilitated through trade agreements and legitimized by governments and organizations like the WTO, the International Monetary Fund and the World Bank, has extracted massive amounts of resources and wealth from the global South, in processes that are in fact the continuation of Marx's primitive accumulation. David Harvey (2004), no longer viewing this process as 'original' or 'primitive' has coined the expression 'accumulation by dispossession' as a term used to describe this process in the modern era.

McMichael (2013) views these changes to the food system as effective in 'fueling' a counter movement, comprised of "farmers, fisherfolk, pastoralists and landless workers" under the "unifying principle of food sovereignty" (p. 6). The food sovereignty movement is a counter-framework to the current food system of neoliberal agriculture and trade which aims to create a

food system that seeks out economic, environmental, and social justice (Wittman, Desmarais, & Wiebe 2010). With complete food sovereignty, nations would be able to obtain the right to develop and maintain their own food production in ways that are respectful to their cultural and productive diversity (Via Campesina 1996).

Integrating food regime analysis and CMPE to understand farmer mental health

In this dissertation, declining farmer mental health is examined through the lens of two frameworks, food regime analysis and critical materialist political economy. As discussed in this section, food regime analysis offers a historical analysis of the development or restructuring of the agri-food system within the context of world-historical changes (Magnan, 2016), providing us with broader understanding of the context in which farmers are situated. As food regime analysis is not directly concerned with the impacts of these macro-level processes on individual farmers or other actors within the food system, integrating another approach—CMPE of health—is necessary.

The CMPE analysis of health extends food regime analysis to examine the impact that specific agriculture policies have had on farmer mental health and well-being. Declining farmer mental health, furthermore, is understood as occurring as a result of overarching processes of neoliberalization of farming, and the resulting agriculture policies. The consequence has been increased economic precarity and uncertainty for farmers due to a number of changes including trade liberalization, commodity speculation, financialization of farmland, and growing concentration in the food system among others. These factors are, in fact, outcomes of the third food regime, aptly named the *corporate food regime*. CMPE's contribution to food regime analysis can be understood as extending the macro level understanding of the restructuring of the

agri-food system changes down to the meso and micro levels to better understand the impacts that these changes in the food system are having on individual and community health, and the mechanisms through which these impacts occur.

Chapter Conclusion

Although this section has been global in perspective, Canadian farmers have not been immune to the neoliberalization of the agri-food system. Indeed, it was during the third food regime that the forced restructuring and later dismantling of the Canadian Wheat Board, and changes to other sectors such as the hog sector (see page 51), occurred, placing farmers in open and often volatile commodities markets. Given that economic uncertainty has been found to be a primary cause of stress and anxiety among farmers (Das, 2017), I argue in the next chapter that the economic and political underpinnings of the current food regime are precipitating and worsening the current farmer mental health crisis. A review of the farmer mental health crisis in Canada and globally as well as current approaches to addressing the issue are also provided in the following chapter.

Chapter 3: The Farmer Mental Health Crisis

Introduction

Worldwide, studies in agriculture and health describe farming populations as having high rates of stress, depression and anxiety, and as having higher rates of suicide compared to the rest of the population (Das 2017; Wiebe 2016; Hounsome et al. 2012; Kolstrup et al. 2013; Shorthouse and Stone 2018). Poor mental health among farmers is so pervasive that it has been described as a mental health *crisis* (Tait and Leeder 2019) one that has gained the attention of federal and provincial governments, the media and farm organizations.

In Canada, news articles from the Globe and Mail and Canadian Broadcasting Corporation (CBC) have been written on the topic of the farmer mental health crisis (Purdon and Palleja 2020; Tait and Leeder 2019) and it is not uncommon to see articles in farmer magazines dedicated to the topic. The July 2019 addition of *The Rural Voice*, for example, had an article dedicated to giving “advice on how to encourage and respond to mental unwellness among farm employees” (Pot 2019). Organizations dedicated to reducing stigma of mental health in farming communities have also formed. These include the Do More Agriculture Foundation which was established “to help educate community members on mental health” (Tait and Leeder 2019).

Explanations of and recommendations for dealing with poor mental health in farmers vary, but primarily, these focus on providing or improving support, education and resources to farmers, as well as reducing stigma around mental health in farm communities (Shorthouse and Stone 2018; Sharkey 2018; Stanley-Clarke 2019; Do More Agriculture Foundation 2020). Canada’s House of Commons Agriculture Committee, for example, has identified farmer mental health as a priority. In one of their reports they provide ten recommendations for the Government of Canada which include tailoring mental health care to farmers, focusing efforts on mental

health prevention and awareness, and educating workers and stakeholders to “detect the signs of psychological disorders and distress [in farmers] in order to refer them to resources that can help them” (Finnigan 2019, p. 4). While these efforts are crucial for promoting the health and well-being of farmers, they are insufficient in tackling key underlying causes of poor mental health, mainly financial uncertainty as a result of market volatility and growing corporate concentration, characteristic of the third, or corporate food regime. Rather, financial and economic uncertainty are treated as a just another fact of farming, rather than the result of policy choices and policy inaction at all levels of government.

This chapter begins with an overview of the mental health of Canadian farmers and the current approaches taken by governments and farm organizations to improve their situation. Next, I examine economic uncertainty as a key driver of poor mental health and discuss some of the underlying contributing factors of economic uncertainty, including increased corporate concentration in the food sector, consolidation and financialization of farmland, as well as global trade and markets.

Farmer Mental Health in Canada

In Canada, a survey of 1,100 farmers across sectors revealed that approximately 57% of producers were classified as possibly suffering from anxiety, while 33% of participants were classified as probably suffering from anxiety. Possible and probable prevalence of depression was approximately 34% and 15% respectively. Furthermore, the reported scores for anxiety, depression and stress were higher in the farm population as compared to the Canadian population as a whole (Jones-Bitton, Best, et al. 2019). This supports previous research that found that 42% of male dairy farmers in the province of Quebec felt that days were either somewhat or

extremely stressful, compared with only 20% of men in the general population (Finnigan 2019, p. 9).

Farm Management Canada conducted a nationwide study on farmer mental health and found that 62% of farmers who participated were categorized as having mid stress scores, and 14% with high stress scores. Women were more likely to report having high stress, as were younger farmers (Farm Management Canada 2020). Finally, the COVID-19 pandemic proved difficult for farmers, as they fared worse than the general population in terms of mental health, and those who had previously reported moderate to severe scores for any outcome, like stress or anxiety, reported that over the pandemic these symptoms became worse (Thompson et al. 2022).

Mental health is an important part of our overall health and well-being. Having good mental health is associated with happiness, work satisfaction, positive self-esteem and helps individuals realize their potential and contribute to society (Goldner, Bilsker, and Jenkins 2016). Poor mental health, however, and in particular high levels of stress can lead to a variety of health problems including high levels of anxiety and depression, as well as headaches, difficulties sleeping, memory loss, and in decision making (Williams 2001; Yazd, Wheeler, and Zuo 2019). Stress in farming populations has been linked to an increase in rates of farm work injuries (Low, Griffith, and Alston 1996; Simpson et al. 2004), impacts the welfare of farm animals (Farm Management Canada 2020), and increases risk of suicide (Andersen et al. 2010 Kølves, & De Leo, 2010).

Poor mental health, particularly anxiety and depression, may impact the ability of producers to work effectively, lowering farm productivity (Jones-Bitton, Best, et al. 2019), which could cause further stress and anxiety. Poor mental health, particularly chronic stress can lead to burnout—a condition which gradually develops and may cause mental and physical

exhaustion, a cynical attitude towards work, and a decrease in professional self-esteem (Yazd, Wheeler, & Zuo, 2019). In Canada, research has found that 12% of farmers surveyed were classified as experiencing burnout while many more were on the verge of burnout. Among other attributes, burnout may negatively impact work life as it is associated with absenteeism and presenteeism (working while ill) and lowered job satisfaction (Jones-Bitton, Hagen, et al. 2019).

Farmers also have higher rates of suicide compared with non-farming populations across the globe including India (Kennedy and King 2014), Australia (Perceval et al. 2018), and the United States (Ringgenberg et al. 2018). Statistics Canada, the Canadian governmental agency responsible for reporting key statistics, however, does not include occupation when reporting rates of suicide (Government of Canada 2019a). For this reason, it is difficult to estimate the true scope of farmer suicide in Canada. Anecdotal evidence from news articles and other sources provides a powerful testament to the problem of suicide in the farming population (see Purdon and Palleja 2020; Cecco 2019).

The Canadian House of Commons Standing Committee on Agriculture and Agri-Food recently released a 70-page report entitled *Mental Health: A Priority for our Farmers*, which was delivered to the Canadian House of Commons in 2019. The report was a culmination of 12 public meetings with testimony and written briefs from stakeholders across sectors including farm organizations, mental health groups and researchers regarding farmer mental health and included testimony from farmers who spoke about the “pervasiveness of suicide in their community or family” (p. 10). In one person’s testimony, an agriculture producer recounted that in a meeting with approximately 400 other producers, the majority had raised their hand when asked if they had lost a friend or family member to suicide (Finnigan 2019, p.18).

Current Responses and Approaches to Farmer Mental Health

As of this writing there are no federally mandated national programs for addressing the mental health of farmers. Only three provinces in Canada have a dedicated phone help stress line for farmers—the Manitoba Farm, Rural Support and Northern Support Services Stress line, the Saskatchewan Farm Stress Line and a newly implemented stress line through the Ontario Farmer Wellness Initiative. AgPal is a self-described “web-based discovery tool” from the Government of Canada “to help producers and others in the agriculture and agri-business sector”, and among other offerings has a page dedicated to farmer mental health (Government of Canada 2023). The government response to the farmer mental health crisis is piecemeal at best, and insufficient for dealing with the issue. The lack of adequate government support has resulted in the creation of a multitude of responses from farm groups and grass-roots organizations to fill this gap. These approaches vary, but primarily focus on providing subsidized or free access to mental health services as well as providing education and mental health resources for farmers.

For example, Farm Safety Nova Scotia provides farmers and their families with up to three hours of free mental health services (Farm Safety Nova Scotia 2022). In Prince Edward Island, farmers, families, and farm hands can access up to six counselling sessions for free (Farmers Talk 2023). In Quebec (Agir en Sentinelle pour la prévention du suicide), and in Ontario (the Guardian network), volunteer peer support networks have been developed to help prevent suicide in farming and rural populations (Guardian Network 2022; Union des producteurs agricoles 2022).

The grass-roots organization, Do More Agriculture, has been prominent in advocating for improved farmer mental health services, as well as on reducing stigma surrounding mental health in farm communities (Do More Agriculture Foundation 2020; St-Onge 2018). Do More Ag

provides workshops on the topic of farmer mental health, including recognizing the signs and symptoms of mental illness, and tips on self-care, and furthermore has created a ‘Community Fund’ for mental health education and literacy in partnership with Farm Credit Canada (Do More Agriculture Foundation 2022).

Keystone Agriculture Products of Manitoba have partnered with researchers at the University of Guelph to create a mental health literacy course called ‘In the Know’, developed for farmers to raise awareness around topics of mental health and illness and to promote wellbeing (KAP 2021). Figure 3.1 is an example of the material that was created for this course, and it outlines a number of actions individuals can take to support their own mental health and the mental health of others (Great Plains 2022).

Figure 3.1 Poster of 'Supports for Farmer Mental Health'



Finally, some organizations, notably Farm Management Canada and Farm Credit Canada, have produced reports on the topic of farmer mental health. For example, Farm Credit Canada, a farm-finance organization, issued a report *Rooted in Strength* which provides information on

stress and how to manage it, and includes personal stories to help reduce stigma and improve resilience (Farm Credit Canada 2020). Farm Management Canada found that having a farm business plan can reduce stress and contribute positively to mental health (Farm Management Canada 2020).

A focus of farmer mental health, both from farm organizations and researchers, has been on improving the “resilience” of farmers, to better deal with or manage the stress associated with farming. Resilience is seen as the ability of individuals to protect themselves against the stressors of everyday life and is key in protecting against negative mental health outcomes (Jones-Bitton, Best, et al. 2019). Researchers measuring resilience examine the ability of a person to “bounce back” from challenging situations or periods of distress (Howell and Voronka 2012, p. 4). Furthermore, as it is seen as a learned process, resilience is viewed as a way to help protect farmers from stress and to help them succeed in their demanding occupations (Jones-Bitton, Best, et al. 2019, p. 233). For example, Jones-Bitton et al (2019) suggests that providing resilience training to farmers could be an effective way to help them cope better with stresses associated with farming, including participating in self-care and off-farm activities (hobbies or sport) and by seeking out social support (Greenhill et al. 2009). Farm Credit Canada’s report: *Rooted in Strength*, suggests that one can boost their serotonin levels to “build resilience” by engaging in activities including sleep, smiling, sports, social contact and spirituality (p. 22-23).

The focus on behaviour change, particularly “self-care” and resilience, however, is problematic, as it assumes that poor health results primarily from individuals having poor coping and life skills when research has shown this assumption to be questionable (Bryant 2016; Dougherty 1993; Labonte 1993). Furthermore, by focusing solely on the individual as the locus for solving the farmer mental health crisis, it ignores the larger economic and political structures

that have contributed to it. There is, in fact, a growing body of literature linking economic uncertainty, as a result of neoliberal agriculture public policy and unfettered corporate concentration, to declining mental health and increased farmer suicide worldwide (Alt 2019; Kennedy and King 2014; Merriott 2016). Indeed, research from Hagen et al. (2021) observed that resilience had only a small negative association with perceived stress. This suggests its role in overcoming stress in farmers may be overstated.

Economic Uncertainty as a Key Driver of Poor Mental Health

Farmers face a variety of challenges that can impact mental health including unpredictable weather due to the climate crisis, financial stress, debt, isolation and overwork (Yazd, Wheeler, and Zuo 2019). Regulatory burden and government regulation, as well as lack of services including internet and appropriate mental health services have also been cited for contributing to farmer stress (Finnigan 2019; Booth and Lloyd 2000; Jones-Bitton, Best, et al. 2019; Fraser et al. 2005). Economic uncertainty, including commodity price volatility, debt and related financial stress, is one of the primary drivers of poor mental health among farmers (Alt 2019; Merriott 2016; Das 2017; Gregoire 2002; Stanley-Clarke 2019). This is particularly true for producers with small farms (Santos et al. 2021). For example, a recent literature review by Yazd, Wheeler, and Zuo (2019) found that farmers reported financial stress related to increased costs of inputs, difficulties with cash flow, debt, fluctuating market prices for crops and livestock, as well as increases in non-farming issues including health care costs, and taxes. A literature review of farmer suicide rates in India showed that socioeconomic factors, specifically indebtedness, was among the most important factors associated with farmer suicide and these factors are more predominant than pre-existing mental health problems (Merriott 2016).

In the Canadian setting, researchers have found that financial uncertainty had the biggest negative impact on the physical health and psychological well-being of farm families as it led to high levels of stress and overwork (Kubik and Moore 2001). Indeed, financial and economic uncertainty, including rising cost of inputs and variability in commodity pricing, is a commonly cited stress for farmers (Finnigan 2019) and current research has shown that financial stress was the single most significant factor associated with increased perceived stress in Canadian farmers (Hagen et al. 2021). The financial stress that Canadian farmers face can be understood as being part of a larger ‘farm income crisis’ where farmers’ income has stagnated and their cost of operations have skyrocketed leaving many in precarious financial situations.

The Realities of the Canadian Farm

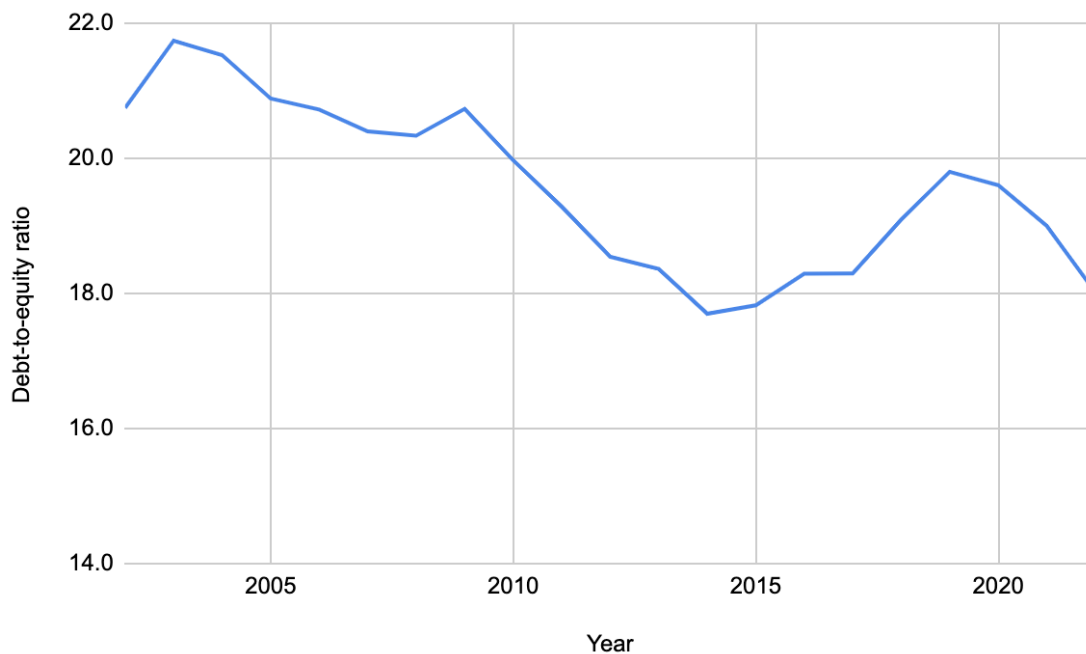
Today, Canadian farms are among the most mechanized and industrialized in the world, farming larger tracts of land than ever before utilizing new and advanced equipment and technology (Wiebe 2022). Canada is now the 5th largest exporter of agricultural commodities in the world (Government of Canada 2022). Despite these advances in technologies and increase agricultural exports, Canadian farmers are experiencing difficulties, including stagnating farmer income and rising levels of debt.

In 2021, Canadian farm debt was reported to be \$129.9 billion, an amount that has more than doubled since 2000 (Statistics Canada 2022a). Although debt is not a new part of farming, the amount of debt taken on by farms is. For example, the debt-to-income ratio for farms in the 1970s was only 3.4, but in the early 2000s that ratio rose to 23. That means that for every \$1 of net income farmers had on average \$23 of debt (Qualman 2011). As Qualman (2019) notes, since 2000, Canadian farmers have been taking on debt at an average of \$2.7 billion per year.

Although the debt-to-income ratio has increased, the debt-to-equity ratio has decreased. This shift has led prominent financial institution Farm Credit Canada (FCC) to view farmers as being in a relatively stable financial position. The current debt-to-equity ratio across Canada remains below the average for the past ten years (Figure 3.2), and this is due to rising land prices that provide farmers with equity to cover outstanding debt (White 2023). A low-debt-to-equity ratio is viewed favourably by FCC particularly as it provides farmers with the opportunity to borrow more if necessary or advantageous to do so (Farm Credit Canada 2019). It should be noted, however, that with rising interest rates and lower crop prices¹⁸, farmers still face financial strain, especially younger farmers with more debt who have to service higher value loans (White 2023).

¹⁸ Manitoba Agriculture Statistics reports that Western red spring wheat was valued at \$307 per tonne in March 2023, down from \$411.17 per tonne the year before. Canola had a similar drop selling at \$609 per tonne, down from \$766 per tonne the previous year (Wichers, 2024).

Figure 3.2 Debt-to-equity ratio¹⁹ for Canadian farmers, 2002-2022



Source: Statistics Canada, Table: 32-10-0056-01

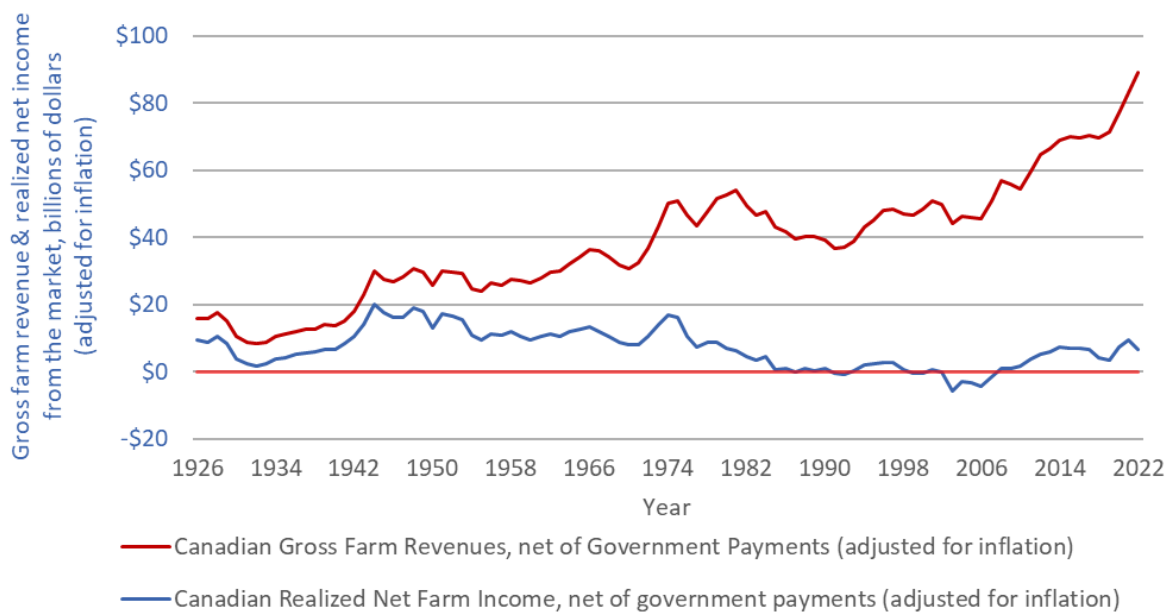
Although debt-to-equity ratio values have fallen, servicing debt is still costly for farmers. Qualman (2019) notes that the average interest farmers pay to lenders is roughly equal to what farmers receive through Government support programs, meaning that taxpayer money is effectively subsidizing banks and lenders (p. 11). A total of 48% of farmers reportedly worked off-farm in 2020 as a means of supplementing their income (Statistics Canada 2022a). It is likely that many of these farm families did so to manage their increasing debt. Even with a second income, farms are left in a precarious financial position, particularly now as interest rates have risen.

A key facet of the farm income crisis is the ‘cost-price squeeze’, which refers to the rising costs of inputs such as fertilizers, herbicides, seeds and equipment, coupled with

¹⁹ Debt-to-equity ratio calculated by dividing Total liabilities by Equity, as provided by Statistics Canada.

decreasing or stagnating prices paid for agricultural products. Farmers are paying more to farm and getting paid less to do it. Over the past 50 years the price of farm inputs has increased nearly twice as fast as farm product prices resulting in many farm products being well below the cost of production (Wiebe 2017). The cost-price squeeze has meant that farmers’ profit margins—the money remaining after all expenses are paid—are diminishing (Qualman, 2019).

Figure 3.3 Total farm revenue and net income, from the markets, 1926-2022



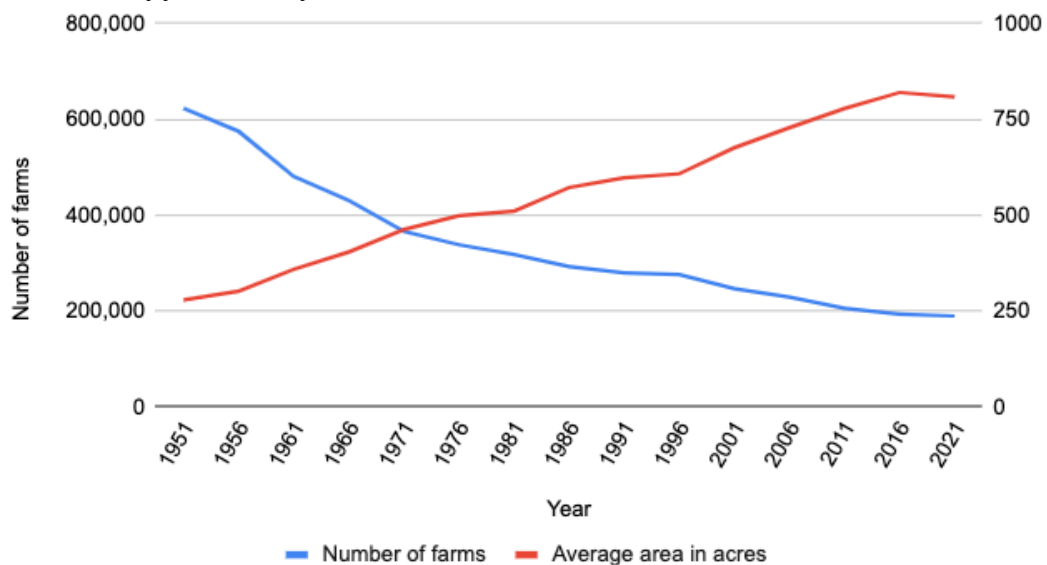
Source: Statistics Canada, Tables 32-10-0052-01 and 32-10-0045-01.

Figure 3.3 illustrates the realities of the cost-price squeeze in terms of falling margins. In this Canadian gross farm revenues, (top line) refers to total income earned by farmers for the sale of their commodities, after deducting any government payments received. The bottom line, Canadian realized net farm income, represents what farmers take home after expenses. The growing gap between these values represents the increasing cost of farming. This includes land, fertilizer, seeds, maintenance for equipment, medication for animals and other expenses

(Qualman 2019). As illustrated by this graph, the share of revenue that goes to farmers is eroding (Qualman 2019).

If we look only at 2016 to 2021, the market value of farmland and buildings increased by nearly 23%, to over \$603 billion²⁰. Market value for farm equipment, machinery and vehicles also increased a more modest 3.9% in comparison, but these increases are enough to pose a barrier to entry to the industry (Statistics Canada 2022a). In contrast, in 2018, Statistics Canada reported that realized net farm income fell 45.1%, the largest decrease since 2006 (Statistics Canada 2018). But as visible from Figure 3.1, the trend of falling margins has begun much earlier than that, taking shape in the late 1950s and only progressing from there.

Figure 3.4 Number of farms and farm size in Canada, 1951-2021



Source: Statistics Canada. Table 32-10-0153-01

²⁰ Rising farmland prices make it difficult for new and younger farmers to acquire the land they need to farm. On the other hand, rising farmland prices have benefited farmers who own land, as it has reduced their debt-to-equity ratio.

One way of overcoming diminishing margins has been to increase farm operation capacity by renting or buying additional land and additional equipment. This has contributed to the significant growth of the average size of Canadian farms, which in 2016 was 820 acres, compared to 463 acres in 1971 (Statistics Canada 2017). Larger farms now capture a majority of operating revenue with the top 10% generating over two thirds of all revenue (Statistics Canada 2022d). While farms are becoming bigger in terms of employees, land and sales, the number of small and mid-sized farms is continuing to decline (Figure 3.3) (Statistics Canada 2022a). Between 1981 and 2021 the number of farms has decreased by 40.4% (Statistics Canada 2022c).

Rural Depopulation

Fewer farms, coupled with advances in technologies that have reduced labour requirements, have contributed to depopulation in rural and farming communities. Between 2011 and 2021, the number of farm operators declined by 11% (Statistics Canada 2022a). Rural depopulation increases the geographical and social distance between neighbours (Fletcher et al. 2020) and is a significant contributor to poor mental health in the farming population. In Australia, farmers living in remote areas had worse mental health and overall wellbeing compared with non-farming populations regardless of other factors including financial hardship or recent adverse events (Brew et al. 2016). In Japan, researchers found that regardless of type of farm, farmers living in neighbourhoods where farm density was low had a higher prevalence of depressive symptoms (Kanamori et al. 2021). In the Canadian prairies, rural depopulation was found to decrease farmer's social capital, including a decrease in social relationships, networks and connections, all of which can be assets to draw upon in times of need (Fletcher et al. 2020). The decrease in social capital was especially problematic in face of climate change, where, for

example, one would have previously drawn on the support of neighbours in times of emergency, such as an on-farm fire. Social isolation and rural depopulation make this kind of mutual aid more difficult.

Rural depopulation has had negative impacts on local economies as well, precipitating a loss in rural business and services (Fletcher et al. 2020). Decreases in health services, including mental health, would only further worsen the mental health crisis in rural areas. Furthermore, as rural populations decline, so does the political voice of this population (Wiebe 2017).

Corporate Concentration and the Cost-Price Squeeze

The cost-price squeeze is understood to be caused by corporate concentration in all aspects of the agri-business food sector including wholesaling, retailing, food production, farm inputs (fertilizers, equipment, seeds and others) and transportation (Howard 2016; Magdoff and Tokar 2009). For example, in 2020, only four companies controlled 51% of global market seed sales, and 62% of agrochemical sales. For farm equipment, the top four companies account for over 44% of global market share, with Deere & Co alone accounting for 17.5% of market share (ETC Group 2022). The ETC group reports that only 25 years ago, the top ten seed companies owned 46% of the seed market share. In 2022, only two companies, Bayer and Corteva Agriscience, control 40% of the seed market (ETC Group 2022).

High levels of concentration in the agrifood sector have serious consequences for all players in the food system. For farmers, corporate concentration drives the cost-price squeeze, as a concentrated market results in few choices for inputs (fertilizers, seed, etc.), and drives down prices paid to farmers for commodities, as there are fewer buyers. Although producers with large farms may have some ability to negotiate prices as they buy inputs and sell commodities in

higher volumes, small and mid-sized farmers have little-to-no bargaining power. They are considered price takers on both ends (Brekveld 2022).

Financialization of Farmland

Farmland is also subject to corporate and financial investment and speculation in a process known as ‘financialization’. After the 2007-2008 financial crash, farmland became attractive to investors as a secure and stable asset and a hedge against inflation while providing steady income from rents (Magnan 2015). Research on this topic has typically, focused on ‘land grabs’ happening in the global South and the impacts on farmers there. Farmland in the global North, however, is also adversely impacted by financialization which has been found to contribute to the “homogenization, flattening, and emptying out” of rural landscapes (Magnan, Davidson, and Desmarais 2022). Furthermore, financialization of farmland exacerbates land inequality, increasing the barrier to entry for new farmers.

In Alberta, Katherine Aske (2022) found that financialization of farmland increased the price of farmland above its agri-economic value, as well as has increasing both tenant farming and rental rates. The practice of tenant farming was seen as increasing the insecurity and precarity of farmers, as well as changing the relationship of farmers with their land, as renting farmers were less likely to invest in techniques that ensured the longevity of the soil. The financialization of farmland is further entrenching current large-scale conventional farming practices which are energy and emissions intensive, simultaneously worsening climate change whilst making farmers more vulnerable to it (Aske 2022).

Global Markets and Trade Liberalization

Trade agreements have changed the landscape of farming. As Nettie Wiebe (2017) notes, the key aim of trade agreements in Canada has been to increase both the volume and value of agriculture exports. In 2021, Canada was the 5th largest exporter in the world, with the value of agricultural exports being \$82.2 billion (Government of Canada 2022). Net farm income, however, has not kept pace with the increase in agricultural exports, suggesting that success in exports has not benefited farmers (Wiebe 2022).

Trade agreements have exposed farmers worldwide to price volatility with little to no mechanisms to guard against it such as state trading boards (or marketing boards), production controls or trade restrictions (see example of the Canadian hog sector below) (McMichael 2009). Furthermore, farmers are now competing with other farmers in countries that have more favourable growing conditions, allowing them to produce the same goods for less. This global competition has put downward pressure on farm gate prices, and farmers have little choice but to absorb financial losses which occur as a result of fluctuating markets, which can have devastating and long-lasting impacts on farmers and industry (Wiebe 2022).

The negotiation of trade agreements has been noted as a significant source of stress for producers (Herman 2019), particularly for farmers in supply managed sectors. Canada has a limited number of commodities under the supply management system, including dairy, table and broiler hatching eggs, chicken and turkey. Tariff Rate Quotas (TRQ) limit the amount of supply managed commodities that can come into Canada at low or zero tariff rates from other countries. Effectively, this avoids flooding the Canadian market with cheaper agricultural products from elsewhere (NFU 2019). In the last round of negotiations of the United States-Mexico-Canada Agreement (USCMA), however, TRQs for dairy were increased for the United States, allowing

more exports into Canada to the detriment of Canadian farmers. Canada was also asked to not set the price for skim milk solids lower than the price in the US (Office of the United States Trade Representative 2018) removing the ability for Canada to compete with the US market. Witnesses at the House of Commons Standing Committee on Agriculture and Agri-Food discussed how farmers felt “abandoned” by the latest USCMA trade agreement because “a good supply management system gives them a certain quality of life and helps them to be able to predict their income and expenditures” (Finnigan 2019, p. 15-16). Indeed, Canada’s dairy sector remains one of the few that continue to provide viable incomes and attract new and young farmers (Wiebe 2022).

Farmers are also susceptible to the effects of financial speculation in agricultural products. Increasingly, agricultural commodity prices are influenced by speculation on global markets. With the deregulation of commodity markets in 2000, agricultural products became subject to speculation by investors, whereas trading exchanges had previously existed as a way for farmers, buyers and food processors to hedge prices to protect their business against the uncertainties of weather and competition (Magdoff 2012). As a result, huge sums of money are now invested in commodities futures, which have resulted in large swings in prices (Clapp 2012). The deregulation of commodity markets has contributed to the precarity of farmers who now deal with increased price volatility, and whose businesses can fail when prices crash.

Impact of Market Volatility: Canadian Hog Sector

Price volatility in farming can have devastating and long-lasting impacts on farmers and the overall industry. The Canadian hog sector experienced market collapse in 2008 as a result of external global forces and related domestic policy that raised the cost of production well above selling price and depressed prices for hogs at the farm gate (Brisson 2015). Farmers were left

with a surplus of hogs and mounting debt. The Canadian federal government responded to the crisis by introducing a massive culling program, which reduced the hog breeding stock by 8.4% across the country. It also implemented was the Hog Farm Transition Program to help farmers downsize or exit from production all together. As a result, the number of hog farms across Canada decreased a tremendous 35% between 2006 and 2011 (Brisson 2015). The COVID-19 pandemic caused an economic downturn in the hog sector as a result of diminished slaughter capacity due to packing plant closures. Producers saw some of the steepest declines on record, causing farmers to seek economic aid from the Canadian Federal government (Bedard 2020). This recent downturn highlights that economic instability is not exceptional and will likely occur again.

In response to ongoing market difficulties, Alberta Pork producers have voted to explore the possibility reinstating the single-desk selling system for the sale of hogs and pigs in the Province of Alberta. Between 1969 and 1996, Alberta Pork sold pork on behalf of producers in the province, which enabled farmers to receive a higher market value for their product as they had greater market leverage. Without a single-desk, however, Alberta Pork argues that individual farmers negotiate the sales with buyers, mainly meat packers and retailers, who have now gained considerable buying power and are able to negotiate for a lower purchase price. As such, a single-desk selling agency would increase the collective marketing power of hog farmers and provide much needed market stabilization. The Province of Quebec, for example, has maintained its marketing board and has enjoyed higher prices for hogs compared with other provinces who no longer have a single-desk (Alberta Pork 2020).

The Role of Government Public Policymaking

Financial instability and economic uncertainty do not have to be taken as an immutable fact of farming. Governments can, through robust policy, support farmers in a variety of ways. In their analysis of suicides in India, Kennedy and King (2014) found that while 74% of the variability of state-level suicide rates was accounted for by cash crop production, proportion of marginal farmers and indebtedness of farmers, West Bengal was an outlier in their data. Despite West Bengal being a region with higher proportion of marginal farmers, this region had lower than expected rates of suicide. They suggest this is likely attributable to the party leadership in the province being the Communist Party of India (Marxist) who have had “unrivalled commitment to improve the hitherto precarious position of marginal farmers” (Kennedy and King 2014, p. 4).

A review by Kolstrup et al. (2013) found that dairy farmers’ life satisfaction and stress levels varied depending on country. In general, and although there was variation, it appeared that dairy farmers in Nordic countries fare well. For example, Danish farmers, although they experienced high demands associated with the job, they felt the psychosocial work environment favourable. Furthermore, despite working alone they felt they had a large degree of social support. Norwegian farmers were reported as not experiencing distress (Melberg 2003) compared with dairy farmers in Australia, who had extremely high levels of distress, exceeding other occupations (Wallis and Dollard 2008). Farmers in England and Wales also reported having high levels of stress (Simkin et al. 1998) and suicide (Charlton 1995). This may be because social democratic welfare states (including countries such as Denmark and Norway) have a long legacy of providing substantial supports to their citizens through robust welfare policies. In contrast, liberal welfare states (including Australia, Canada, US and UK) provide

little to support to individuals and families, and what support is provided is means tested and meagre (Raphael 2010; Saint-Arnaud and Bernard 2003). It is likely that the government support available in these nations is having a differing impact on the health and well-being of farmers. A full policy analysis using welfare state analysis is beyond the scope of this study, but none the less suggests that government policy has an influence on the well-being and satisfaction of farmers.

In Canada there exist policy tools which can help provide price and supply stability to farmers in the form of demand-supply coordination including supply management systems and orderly marketing (Union des producteurs agricoles 2022). Many of the agriculture sectors that had some form of demand-supply coordination, however, had it removed in favour of operating in a free-market, as is the case of wheat in western Canada and hogs in Alberta.

Rather than address economic uncertainty and its many policy antecedents, however, farmer mental health is treated as an immutable fact of farming by the current Canadian government. The Canadian House of Commons report, for example, dedicates an entire section on the role that financial and economic uncertainty play in shaping farmers' mental health, including changes in commodity and input prices, trade agreements, levels of debt and access to finance but offers no solutions or recommendations to help this situation (Finnigan 2019). Rather, the report provides 10 recommendations that largely focus on downstream effects of the farm income crisis, and not the root causes themselves.

Conclusion

Although the role of personal and individual factors cannot be ignored, the farmer mental health crisis can be understood as a result, at least in part, of the farm income crisis—itsself a

symptom of the larger corporate food regime in which farmers are imbedded. In this regime, agricultural liberalization, underpinned by neoliberal ideology, and increased corporate concentration in the agri-food system has created a volatile and hostile environment for farmers who have little control over their input costs and price of commodities. As previously noted, the dismantling of the Wheat Board can be understood as part of a continued effort on behalf of the Conservative Canadian government to neoliberalize the agri-food system. The impact that broad trade liberalization and increased corporate concentration has had on farmers is not fully known but will be explored in more detail in the next chapter and is the fundamental question this thesis investigates.

Chapter 4: The Canadian Wheat Board

Introduction

The Canadian Wheat Board (the Board) was a ‘single-desk seller’, or monopoly marketing agency, for selling wheat and barley in the prairie provinces of Canada, including Manitoba, Alberta, Saskatchewan and the North-Eastern corner of British Columbia (Skogstad 2008). The Wheat Board was comprised of three main pillars: single-desk selling, government financial guarantees, and price pooling, all of which were integral to its operation.

Single-desk selling, the Wheat Board’s most distinctive feature, meant that it was the sole entity that could purchase and sell prairie grain to domestic and international buyers (Skogstad 2008). Its goal was to maximize revenues from the customer and return these to the farmer (Measner 2007). Farmers received an advanced payment for their grain based on what the Board projected the commodity would sell for, and a final payment after the commodities had sold if there was additional profit. If the commodity price decreased below the initial price, however, the Canadian Government absorbed the loss and farmers were spared (Emerson 2015). Government financial guarantees of the Wheat Board represented the second pillar of its operation and allowed it to borrow money to provide initial payments to farmers as well as to credit sales to foreign buyers (Skogstad, 2008, p. 112). The latter was particularly important as this allowed the Board to secure long-term agreements with major grain-importing countries like China and the Soviet Union (Skogstad 2008) and create additional profit through interest and currency trading (Pugh 2007). The price pooling system meant that farmers received the same price for grain given the type and quality, irrespective of time of year it was sold (Skogstad and Whyte 2015). Furthermore, as the Wheat Board issued permits/quotas

to farmers for delivering grain, all farmers were given equal opportunity to deliver grain within a crop year. As such, the Wheat Board provided Prairie grain farmers with a significant degree of price stability and protection from market volatility (Skogstad, 2008, p. 111).

In the late 1970s and early 1980s, the Wheat Board became actively involved in grain handling and transportation (GHT) by purchasing large quantities of rail cars to move grain (Skogstad 2008). Unlike many other grain-exporting countries, in Canada, prairie grain must travel long distances, an average of 1500 km, by train to reach deep water ports (Larsen, 2017). The long distance, especially in winter, adds significant costs and time to grain selling, making it ever more of a challenge to compete in global marketplace. Despite these challenges, the Canadian Wheat Board created a successful and competitive grain export system (Larsen 2017). Finally, the Wheat Board advocated on behalf of farmers on transportation and trade disputes (Pugh and McLaughlin 2007).

The Rise of the Canadian Wheat Board

The history of the Canadian Wheat Board (Figure 4.1) is part of a larger history of Canadian producers struggling to better their material reality against special interests, including banks, rail roads and grain companies (Winson 1993). Winson (1993) notes that wheat farmers in particular were successful political agitators as many had come from Europe had been exposed to “radical labour movements in the old country” and or been involved in socialist politics themselves (p. 19). Furthermore, the dependence on a single commodity, one that was at the whim of market volatility, had the added benefit of uniting farmers to a single cause “despite their disparities in wealth” (p. 19). Producer agitation alone, however, was not enough to secure the creation of the Canadian Wheat board as Skogstad (2008) writes, “Canadian governments

were not persuaded of the need to correct the inequity of often arbitrary pricing by grain buyers until their own interests as political parties and governments meshed with those of prairie grain farmers” (p. 111).

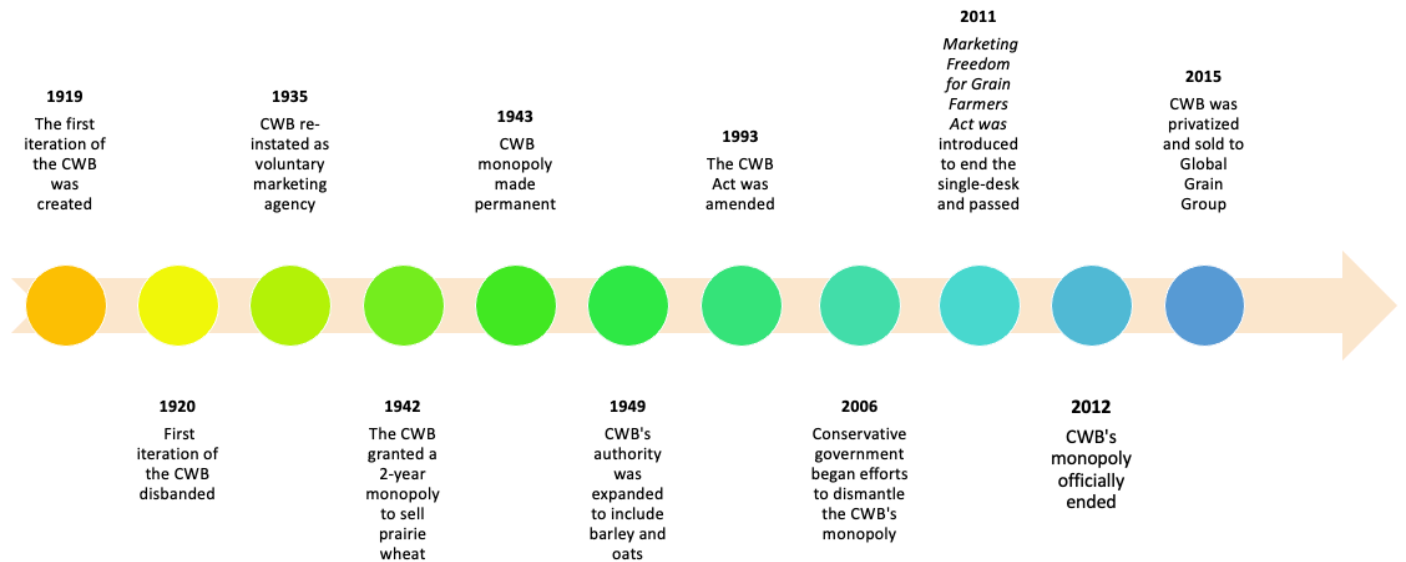


Figure 4.1 Timeline of the Canadian Wheat Board (1919-2015)

In the early 20th century, the grain sector was already dominated by a handful of large private companies in both grain and rail transportation, including Bunge (founded in 1818), Cargill (1865), Archer Daniels Midland (1902), Canadian Pacific Railway (1881), and Canadian National Railway (1918). As Canadian settler-farmers became dependent on export markets for their grain, a concentrated market meant that farmers had very little power to negotiate the selling price and shipping of their grain (Skogstad, 2008 p. 110). The desire for collective marketing led farmers to experiment with various forms of

expressions of power including pro-farmer federal legislation²¹, co-operatives and price pooling Winson (1993), the latter of which will be discussed below.

The first established farmer co-operative was in 1906, the Growers' Grain Company, which bought and sold grain on behalf of producers (Magnan 2016). In 1911, farmer-owned grain elevators were created with the Saskatchewan Co-operative Elevator Company, which gave farmers who owned a share, to buy, store and sell grain, allowing farmers to compete with large grain-elevator companies. The provinces of Alberta and Manitoba followed suit, and by 1917, 35 per cent of all prairie grain went through farmer-controlled cooperatives which "helped primary producers avoid some of the most rapacious aspects of this early period of Canadian capitalism" (Winson, 1993, p. 25).

It wasn't until the First World War, when the federal Canadian government became heavily involved in the grain trade, that the first iteration of the Canadian Wheat Board was created. During the War, Canada and Britain worked closely to ensure that sufficient supplies of wheat were available for the war effort, including restricting where Canada sold its wheat, and closing the Winnipeg Grain Exchange to control price volatility, along with other measures (See Magnan 2016 for more). After the First World War had ended, the Canadian government attempted to open the Winnipeg Grain Exchange, but this immediately triggered a decrease in the price of wheat. In order to help with the volatility of the grain market and to sell off excess supply, the Canadian government created the first Canadian Wheat Board under the War Measures Act on July 31, 1919. The Board was lauded as a success as farmers received the highest to date prices for wheat (Larsen 2017), but despite this success—and despite vocal

²¹ Including the Manitoba Grain Act of 1900 which was established to provide oversight with the purchasing of grain, and later the Canada Grain Act of 1912 which was in place to regulate grain handling (Magnan, 2016; Winson, 1993).

opposition from farmers—the Wheat Board was disbanded in favour of open trading in 1920. Although it had been in operation for only one year, Magnan (2016) writes that “orderly marketing became a rallying cry for the farm movement” (p. 49).

The experimentation with the wheat board prompted farmers to form wheat pools in Saskatchewan, Manitoba and Alberta, which later combined to form the Canadian Co-Operative Wheat Producers Central Selling Agency and sold grain to foreign buyers (Larsen 2017). Wheat pooling created equity between farmers as all participants received the same price for their grain, and furthermore, provided a degree of control to producers by allowing them to sell wheat directly to foreign markets (including Germany, Netherlands, China and others) without relying on the Winnipeg Grain Exchange (Wilson, 1978 p. 221). Combined with the farmer-controlled elevator systems, farmers were competitive against large grain companies in foreign and domestic markets, and by 1925, 52 per cent of prairie wheat went through wheat pools (Wilson, 1978 p. 225). Between 1929 and 1930 however, the price of wheat plummeted to a fraction of its former value, leaving the wheat pools in a dire financial position. In exchange for financial assistance to deal with the massive debt the wheat pools had incurred, the Federal government ordered the wheat pool central selling agency to be shut down. After a brief 10 year run, the wheat pools had collapsed (Winson 1993). The collapse of the wheat pools and of the marketing agency highlighted “the weakness of co-operative organizations [existing] as long as the wider economy continued to be organized along the lines of private market relations” (Winson, 1993, p. 45).

In response to depressed wheat prices and large surpluses, the National Products Marketing Act of 1934 was passed by the federal Conservative Bennett Government to reinstate the Board, only to be declared unconstitutional by the incumbent Mackenzie King Liberals in

1935 (Winson 1993). As such, the Canadian Wheat Board from 1935 onwards was a voluntary marketing agency, with a government-guaranteed initial price to farmers (Wilson 1978). Under this system, farmers could deliver their grain to the Wheat Board or to the private trade, which meant that farmers tended to use the Wheat Board predominantly when prices dropped below the price of their initial payment, in which case the Federal government absorbed the losses (Magnan, 2016, p. 51). Under these circumstances, the voluntary board had difficulty finding grain to meet its contracts (Measner 2007). It wasn't until the Second World War, in 1942, when the Liberal government granted the Canadian Wheat Board a 2-year monopoly to sell prairie wheat. This was necessary to again stop inflation of grain prices, as well as to fulfill Canada's obligation provide grain to wartime allies under the Mutual Aid agreements, while securing the Liberal Party's re-election in Western Canada (Skogstad 2008; Winson 1993).

As Winson (1993) notes:

“... the marketing board arrangement came not as a means of propping up prices for farmers in a desperate situation, but as an attempt to prevent open market prices from escalating drastically and thereby jeopardizing the federal government's wartime commitments” (p. 74-75).

During the Post war years, the Canadian Wheat Board was expanded to include barley and oats and enjoyed support from a majority of farmers and politicians (Skogstad 2008). Skogstad (2008) writes that in the early 1980s, export of wheat and barley was at an all-time high making the disappearance of the Board, and the undoing of the cooperative gains that farmers fought a century to gain, unthinkable at this time (p. 112). Yet, opposition to the Board which began to

emerge in the 1970s intensified in the 1990s and onwards with new free trade deals and the rise of neoliberal ideology (Skogstad 2008; Magnan 2016).

The Decline of the Canadian Wheat Board

The topic of the Canadian Wheat Board grew to become extremely divisive amongst prairie farmers and political parties. The divide, as Skogstad (2008) writes, was ideological "...and represent[ed] a choice between instruments and institutions of market regulation in the state assistance paradigm and reregulation in the market-liberal model" (p. 108). Critics of the Board argued that the single desk was outdated and that with computer technology, every farmer now had the ability to access market prices and compete in the global market. Ultimately, some farmers felt that the board infringed on their rights and economic freedoms, and they themselves were in the best position to make decisions for their farm (Pugh and McLaughlin 2007; Magnan 2016). Younger farmers, who had never known the realities of the open market, were also now more entrepreneurial and, Skogstad (2008) argues, better positioned to assume the risks of the liberalized grain market (p. 115). As it was believed that 'marketing choice' would bring in new economic opportunities to the Prairies, among other benefits, opponents lobbied for a "dual market", where the Canadian Wheat Board retained its collective selling abilities but no longer had monopoly powers, allowing farmers to choose where they sold their grain (Magnan 2016). Supporters of the Wheat Board, however pointed out that it would be unable to survive in a dual market as the change would make the Board yet another grain company competing with international grain giants, and they had no significant grain-handling infrastructure to do so (Magnan, 2016, p. 139). In this way, the dual market was a steppingstone to an open market

(Skogstad, 2008, p. 127). The arguments for deregulating the Canadian Wheat Board from Canadian Federal politicians are closely examined in this chapter.

In the early 1990s, a series of agriculture policy changes both in the USA and in Canada culminated in increased grain deliveries to the USA from Canada. In response, US grain farmers and private grain companies began to push back, saying that Canada's grain marketing practices were 'unfair' (Skogstad, 2008, p. 114). What followed was a seemingly unending stream of investigations into the Canadian Wheat Board, and although the Wheat Board was not found to be in any violation, these investigations galvanized domestic opponents of the board who wanted to see it dismantled (Skogstad 2008).

In the domestic arena, barley farmers began agitating for a continental market so that they could sell independently to the USA and capture some of the higher prices available there. This idea gained enough traction that the Federal Conservative government at the time, led by Brian Mulroney, issued a feasibility study on the Wheat Board which argued the board was causing farmers to lose out on valuable American markets. Based on the findings of this report alone, in 1993, the Conservative government removed²² barley from the Canadian Wheat Board. The removal was controversial and was met with a legal challenge by three prairie wheat pools leading to a swift reversal of the decision as it was deemed unconstitutional. Changes to the Canadian Wheat Board could only be done by making changes to the Canadian Wheat Board Act, and subject to parliamentary approval (Skogstad, 2008 p. 115-116). Opposition to the Canadian Wheat Board, however, continued to grow and intensify. The 'Canadian Farmers for Justice', for example routinely conducted border-runs, where they would drive barley to the USA

²² Previously in 1989 Oats were removed from the Canadian Wheat Board, but as Skogstad (2008) notes as the amount exported for sale was relatively small, and so was the response from farmers.

for sale. This tactic was excellent at garnering media attention and bringing awareness to the movement and farmer discontent (Skogstad 2008). The anti-Wheat Board movement continued to be supported by the Alberta government and the Reform Party of Canada. Supporters of the Board included the New Democratic Party of Canada (NDP) and the government of Saskatchewan²³ (Skogstad 2008).

In 1993 a new federal Liberal government came into power, but the tensions around the Canadian Wheat Board remained. In an effort to quell tensions between pro- and anti-Wheat Board groups and governments, Ralph Goodale, the Member of Parliament responsible for the Canadian Wheat Board, began a lengthy and thorough consultation process with the prairie grain community. The result of these consultations was the creation of a new Canadian Wheat Board Act in 1998 which reformed the Wheat Board, creating an organization that was more representative of farmer interests and increased autonomy from the federal government (Skogstad 2008; Magnan 2016). The Act also introduced new pricing options, which allowed for more flexibility in terms of payments for farmers and helped “offset some farmer grievances with the board, especially among young farmers with larger operations” (Magnan, 2016 p. 143). Importantly, the Act stipulated that any major changes to the Wheat Board be done through a mandatory farmer plebiscite, to ensure farmer’s voices were heard. Magnan’s (2006) research revealed that all in all, “the governance changes helped democratize the CWB and improved farmer buy-in for the organization” (p. 142). Although these changes helped achieve farmer buy-in, the tensions never fully ceased (Magnan 2016). For example, the amendments to the Act was passed in Parliament with the support of the Conservative, Liberal and Bloc Québécois parties

²³ Farm organizations which sought ‘marketing choice’, included the Western Barley Growers Association and the Western Canadian Wheat Growers Association, while the National Farmers Union sought to maintain the Board.

only, with the NDP opposing it for making too many changes, and the Reform Party of Canada opposing it for not making enough (Skogstad, 2008, p. 122).

The Harper Era

In 2006 the Stephen Harper Conservatives won a minority government having campaigned for, among other things, marketing choice for the Canadian Wheat Board. As Skogstad (2008) notes, Harper and other elected Conservative MPs had been part of the Reform Party of Canada, a political party that openly advocated for deregulation of the Wheat Board. When they were elected to power, they experienced pressure from farmers and other farm organizations to bring in ‘marketing choice’ to the grain sector, which would make the board voluntary, thereby ending its single-desk selling status (p. 134). Attempts to deregulate the board proceeded over the next five years, using both legislative and non-legislative pathways, which were described as undemocratic by NFU president Steward Wells (Pugh and McLaughlin 2007).

In 2006, Conservative MP Gerry Ritz introduced a private member’s Bill (Bill C-300), which would allow the selling of grains outside of the Wheat Board. As the Conservative government had a minority, the Bill was voted down in parliament but was considered a ‘trial balloon’ for future attempts (Pugh and McLaughlin 2007). Following this failure, the Conservative MP Chuck Strahl, who was responsible for overseeing the Wheat Board, engaged in other tactics including issuing a ‘gag’ order preventing the Canadian Wheat Board from advocating for a single-desk and pushing out elected board members who did not support marketing-choice, including the then CEO, Adrian Measner (Skogstad 2008; Pugh and McLaughlin 2007). These board members, including the CEO, were then replaced with

government appointed members who did support marketing choice (Pugh 2007) in a move that further divided western prairie farmers (CBC News 2006).

In an effort to put the issue to rest, the Province of Manitoba and the Canadian Wheat Board organized a plebiscite asking farmers if they wished to retain the single-desk or sell in an open market (Skogstad 2008). This plebiscite found that 69.5% of wheat and 61.8% barley farmers wanted to retain the single-desk, indicating that a majority of producers were in favour of keeping the Board. Chuck Strahl responded to the vote, however, by calling it a “propaganda campaign” on part of the Manitoba government (CBC News 2007) and organized his own plebiscite for barley producers. Strahl’s vote found barley producers in all prairie provinces to be in favour of market choice, however, the Conservative government was accused of election tampering as 16,000 farmers were disqualified from voting. Other issues with the vote included some farmers receiving no ballots, while others received multiple ballots, a lack of farmer scrutineers, and a lack of clarity of the questions as well as the interpretation of the results (Skogstad 2008, p. 136). Nevertheless, the Conservative government went ahead with removing barley from the Wheat Board, even going as far to create ‘Barley Freedom Day’, which was to be on August 1st, 2007. The Canadian Wheat Board and other organizations mounted a legal challenge against the decision and one day before Barley Freedom Day, the Federal Court of Canada ruled that the Conservative government had acted illegally. The Canadian Wheat Board Act stipulated that any changes to the Board had to be made through parliamentary legislation, and as such the Conservative government could not remove barley from the Board (Skogstad, 2008, p. 137). It wasn’t until 2011 when the Conservatives won a majority government that they had the legal authority to make changes to the Canadian Wheat Board.

On October 18, 2011, the Canadian federal government introduced Bill C-18, *the Marketing Freedom for Grain Farmers Act*, which began the process of stripping the Wheat Board of its single desk selling powers, removing it as the sole seller of wheat and barley produced by farmers in Canada (Fulton 2012).

Parliamentary Debates

The federal government convened over a three-day period in October of 2011 to debate Bill-C18 (among other issues). Hansard contains the official parliamentary records of debates, which provides a transcription of these debates for the public. To begin to understand the associated ideological, political and economic underpinnings of Bill C-18, all three days of the parliamentary debates were examined. The debates can be broadly classified into supporters (the Conservative part of Canada), and opponents of the bill (NDP, Liberals and Bloc Québécois). What follows are key findings from these debates, including the contents and types of arguments used by either side.

To begin, the Conservative Party of Canada described the Wheat Board as being antiquated and not able to meet the needs of today's farmers (Gerry 2011). Furthermore, the board was described as tyrannical, and Conservatives argued that farmers had "shackles holding them back" (Storseth 2011, p. 2258). The situation for wheat farmers in the prairies was often compared with Ontario, which did not have a wheat board. As such, prairie farmers were described as being denied the "rights and privileges" that farmers in Ontario had (Gerry 2011, p. 2248), thereby creating two classes of grain farmers "those who live under the oppression of the Canadian Wheat Board...and the rest of Canada that has complete marketing freedom" (Storseth 2011, p. 2257).

The Conservative party couched the bill in terms of marketing freedom, that is, “giving farmers the freedom to market their grain when and where they choose, and to what buyer they choose” (Dreeshen 2011, p. 2145). In this way, the bill was framed as being additive, “[w]e are not taking anything away from them, we are just giving them more choices and more options” (Storseth 2011, p. 2260), and therefore didn’t pose as a threat to the Canadian Wheat Board. The CPC was adamant that the Wheat Board would still be there if farmers chose to use it (Hoback 2011).

Liberals, NDP and Bloc Québécois members of parliament opposed the bill, arguing among other points for the benefits of price pooling including maximizing returns, minimizing risk to farmers, and creating financial stability (Groguhé 2011). Furthermore, the opposition expressed concern that dismantling the Board would lead to a decrease in grain quality, an economic downturn in Churchill Manitoba, and a concern that this bill represented a “slippery slope” for all supply managed sectors (Ashton 2011; Eyking 2011). Niki Ashton also raised the concern that this move would benefit large agriculture corporations at the expense of farmers and that the move to end the single-desk was viewed as a purely ideological decision, one which lacked the proper evidence to support it (Ashton 2011).

Another argument from the opposition was over the legality of the bill, with MPs viewing it as being in violation of the law, as it did not give prairie grain farmers a plebiscite (Atamanenko 2011; Lamoureux 2011). Another member saw it as a threat to Canadian democracy as a whole “[t]hrough this legislation, the government is denying farmers a legally constituted right that is currently provided for in legislation. All Canadians should be worried about this affront to democracy” (Easter 2011, p. 2105). Skogstad and Whyte (2015) agree that this bill did not follow democratic norms. Specifically, it is custom that agriculture bills are sent

to the Standing Committee on Agriculture and Agri-Food, but instead Bill C-18 was referred to special legislative committee. Furthermore, both the times for debate, as well as the witnesses who could be heard, were restricted (p. 94).

As discussed by Skogstad and Whyte (2015), Conservative members countered the objections to the bill by claiming representational authority, citing their electoral mandate-having been elected by majority—and their close personal relationships with grain farmers. Based on this they argued that they understood farmers’ concerns better than the opposition and thus were in a better position to enact legislation on their behalf (p. 94). Although several opposition MPs did mention also knowing farmers and being from rural areas, these points were largely dismissed.

Representational authority was also used as a reason to disregard the previous plebiscite vote on the Wheat Board. When asked why they were “afraid” of the plebiscite (Sgro 2011, p. 2274), Bob Zimmer (2011) responded “Mr. Speaker, I beg to differ. We did have a plebiscite on May 2, and it was called the national election. By the way, we have a majority” (p. 2274).

Overall, the Hansard records reveal a contentious debate over the removal of the Canadian Wheat Board’s single-desk seller. The Conservative party was primarily motivated by idea of bringing farmers into the free market, and arguments made by members of this party relied heavily on anecdotes from farmers they had spoken with. This was counter to the opposition, particularly NDP members Niki Ashton and Kevin Lamoureux who provided research from various forums including excerpts from *The Economist*, academic literature and other grey literature on the history and functioning of the Wheat Board.

Many of these arguments appear throughout the interviews conducted for this research, and as such will be discussed again in Part II of this thesis.

The End of the Canadian Wheat Board

On December 16th 2012, Bill C-18 received Royal Assent, ending over 60 years of the Board's rule (NFU 2020). The Canadian Wheat Board did not disappear right away. Rather it occurred in stages over the course of four years. As summarized by Magnan (2016), upon deregulation the Canadian Wheat Board was renamed 'CWB' and operated for three years as a voluntary marketing board. The CWB was now another grain company, one that had to negotiate grain handling and transportation alongside other larger transnational grain companies that had their own well-established networks including inland elevators and coastal port facilities. Furthermore, as the CWB now only marketed a fraction of wheat and barley, they no longer had the same level of negotiation power. To try and compete in this new market, the CWB expanded its operations to include canola and offered price pooling as well as other contract and payment options. In 2013, the CWB offered farmers an equity stake in the business to attract more grain and build farmer loyalty (Magnan, 2016 p. 171-172). In 2015, however, the CWB was issued its final blow when the Conservative Federal government announced that the CWB would no longer be farmer-owned, but 51% was sold to Global Grain Group (G3) in return for a \$250 million investment in grain-handling infrastructure (Magnan 2016)²⁴. This meant that CWB assets including its contingency fund, made up of farmers' earnings and valued at \$145 million, was rolled up with other CWB assets including lake freighters, hopper rail cars, and locomotives and sold to G3 (Boehm 2020). This move came after an attempt by a farmer-owned coalition (Farmers of North America) to try to buy the CWB. Their bid of \$250-300 million was rejected without reason (McGregor 2014). In 2012, farmers launched a class action lawsuit against the

²⁴ G3 is a partnership of Bunge Canada (subsidiary of Bunge Limited) and SALIC Canada Limited, a subsidiary of Saudi Arabia's main agriculture investment fund (NFU 2020; McGregor 2015).

Canadian Government and G3 Canada on the basis that farmers weren't paid out money from their contracts, as well as for the loss of the money and assets including the contingency fund. Ten years after it was first launched, a Manitoba judge has certified the legal action allowing the case to be heard (Dawson 2022).

Grain farming in the prairies today

The Canadian Wheat Board provided a counterweight to a concentrated grain market and created a sophisticated just-in-time grain exporting system, marketing quality-assured grains world-wide (Larsen 2017). Although it is difficult to fully assess the impact that dismantling the Board has had, farmers now negotiate individually with a handful of large corporations who hold more power to not only dictate the price of grain, but also where grain will be transported for export (Owram 2016). One consequence of this is that grain is no longer shipped out of the sub-arctic port of Churchill, Manitoba, but rather is sent to ports with cheaper docking fees such as Vancouver, BC leading to longer distances for shipped grain and providing greater logistical challenges for farmers. For example, in 2013 difficult weather resulted in shorter trains being run which, after several weeks, created a bottleneck preventing many farmers from transporting their products to the port of Vancouver for payment. Gray (2015) estimated that the diminished export capacity between 2013 and 2015 led to a \$6.5 billion loss, representing a significant loss for farmers and the Canadian economy.²⁵

²⁵ Communities have also been impacted by the removal of the Board's single desk seller powers. The town of Churchill, which was as for over a century a hub for train transport and grain exportation suffered a major economic downturn when part of their rail line was washed out in 2017. At the time, the rail line was owned by American company Omnitrax-Hudson Bay Rail saw no financial incentive to repair the rail line owing to its commercial disuse (Robson 2017; Lamont 2016). In 2018, the Canadian federal government stepped in and spent \$74 million to buy and fix the line, ending over a year of nearly 900 people being disconnected from the rest of the province (Canadian Press 2018).

Under the Board, the quality of grain yielded differential prices based on protein content²⁶, as such high-quality wheat yielded higher prices. Grain marketing companies today, however, have removed the Canadian quality assurance system on wheat (and as such removing quality control) by pooling all grain together (Magnan 2016). This has both caused Canadian sourced grain to lose its credibility and market share in the international grain market (Larsen 2019), as well as having resulted in a loss of price premiums for farmers (Cross 2013).

The dismantling of the Canadian Wheat Board has therefore had a significant impact on the lives of Prairie farmers in Canada, and indeed on the entire grain sector. We therefore have good reason to believe that the dismantling of the Wheat Board—although one important policy change among many—may be contributing to the decline in mental health among farmers described above. How these changes have impacted on the day-to-day farm operations, as well as on the mental health and well-being of farmers will be explored in the second part of this thesis.

²⁶ High protein milling weight versus low-protein feed varieties (Cross 2013).

Chapter 5: Research Methodology and Methods

Critical Realism

Critical realism (CR) is a philosophy of science which arose in response to the tension emerging between the positivist and constructivist (or interpretivist) knowledge paradigms²⁷ (Denzin and Lincoln 2011; Sayer 2000). The CR framework, developed by Roy Bhaskrar (1993, 1975) as an alternative framework to both positivist and constructivist approaches, draws from both, retaining a realist ontology with a form of epistemological constructivism (Maxwell, 2012, p. 5).

Positivism holds that “scientific” knowledge—that is knowledge created using the scientific method—is the only authentic knowledge (Bryant 2016). Knowledge is pursued using quantifiable, measurable and reproducible methods, such as those associated with the scientific method (Wilson 1988). Therefore, in this paradigm, knowing ‘reality’ is limited to what can be empirically known. Where positivism holds that there is such a thing as objective truth, constructivism holds that if events are perceived as real, their impact will be real as well (Bryant et al., 2010b; Wilson, 1988). Furthermore, these ideas and ‘truths’ can differ between individuals, and even change over time. In this way, all views are considered equally valid, meaning that “individuals’ understandings of how and why something occurs are accepted without critique” (Bryant 2016, p. 53).

²⁷ Knowledge paradigms are a set of basic beliefs or assumptions about knowledge and how it is created and inform ways in which phenomena are understood or investigated. These paradigms also set limits or parameters on what can be known (Guba 1990; Kuhn 1970). As such, knowledge paradigms shape the ways in which we think about numerous issues including health and therefore inform how we conduct research and make policy (Bryant 2016). Each paradigm comes with its own set of assumptions about ontology—what sort of entities comprise reality—as well as epistemology—how knowledge is constructed, and methodology—the way in which we go about discovering knowledge (Bryant, Raphael, and Rioux 2010; Bryant 2016).

As discussed by Fletcher (2017), critical realists share the same basic assumptions about ontology—what sort of entities comprise reality—as positivists, positing the existence of a world independently of our knowledge of it (Sayer 2000). In the positivist paradigm, however, reality is limited to what can be empirically observed (Danermark, Ekström, and Karlsson 2019), which Bhaskar (2013) critiques as upholding an ‘epistemic fallacy’, that is the inappropriate reduction of ontology to epistemology (p. 36). Critical realist assumptions about epistemology—how knowledge is constructed—also differ from positivism in viewing knowledge about the world as socially constructed from our own perspectives (Maxwell, 2012, p. 5), similar to assumptions of a constructivist epistemology. Unlike constructivist epistemology, however, critical realists don’t just see reality as only constructed through human knowledge or discourse, but rather, reality—including events and human experiences—are understood to be causally related to mechanisms and structures that are otherwise unobserved (Fletcher 2017).

Critical realism ontology stratifies reality into three levels: the empirical, the actual, and the real (Denzin and Lincoln 2011; Fletcher 2017). As outlined by Fletcher (2017) the empirical level is where events are experienced and observed by individuals through human interpretation and are examined through empirical measurement and analysis. The actual level is where true events occur, regardless of whether or not they are observed. Finally, the real level refers to casual mechanisms within objects and structures that cause events to occur at the empirical level (Figure 5.1).

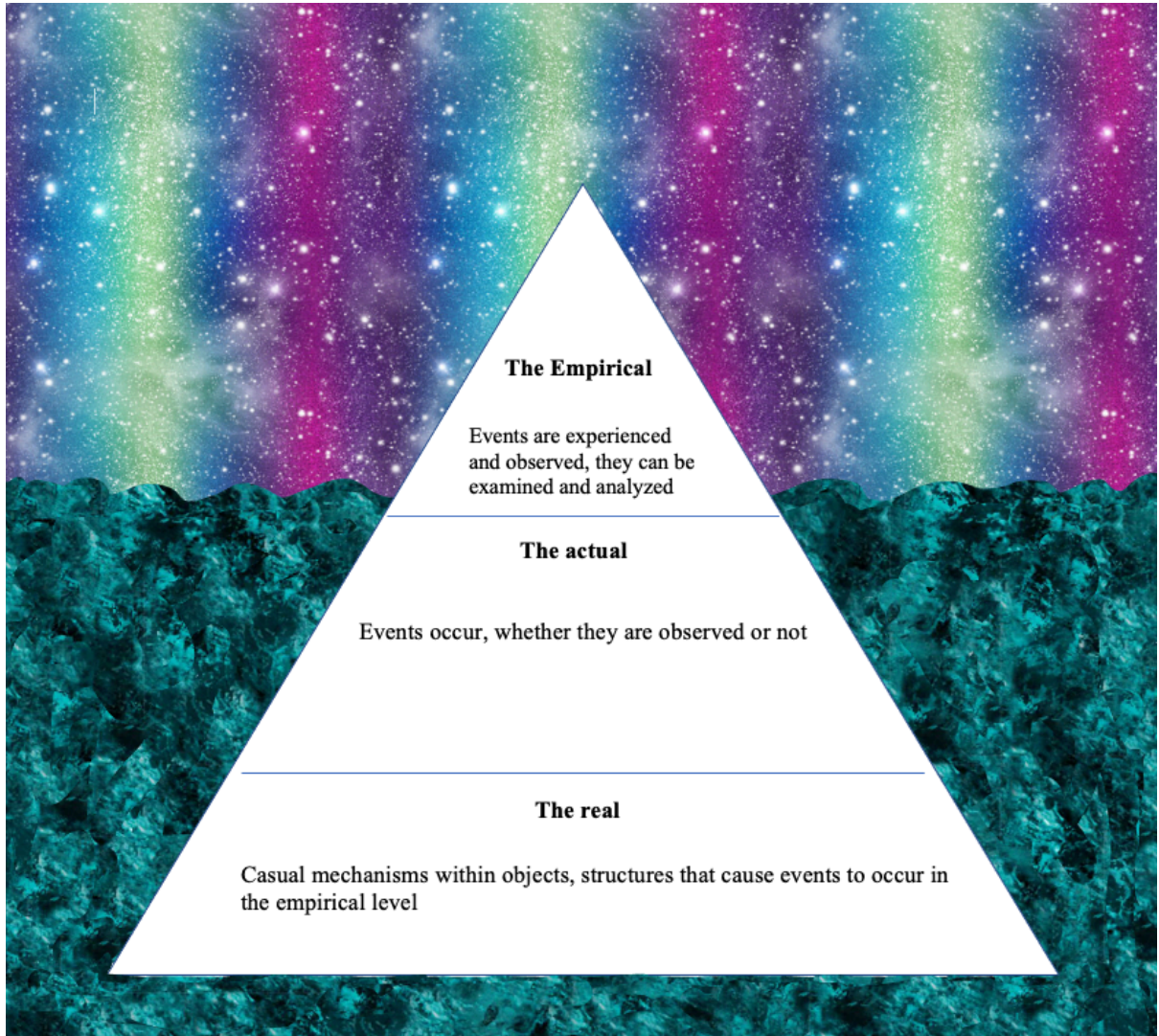


Figure 5.1. A pyramid/iceberg metaphor for CR ontology, adapted from Fletcher (2017).

CR work is aimed at explaining social phenomena by uncovering the casual mechanisms, process and structures that produce events in the empirical (Danermark, Ekström, and Karlsson 2019; Denzin and Lincoln 2011). For this reason, Fletcher (2017) argues that researchers employing a CR philosophy are well positioned to produce policy recommendations that are aimed at addressing social issues, such as in the case of addressing the current mental health crisis among farmers. Critical realists also seek to understand the social world by examining what actions or events mean to individuals. Danermark, Ekström, and Karlsson (2019) argue that

as researchers, we are therefore “a product of social interpretations” (p. 200). As such, the epistemological approach of critical realism is subjectivist. Rather than aim to control subjectivity, or treat it as bias, the CR approach requires that researchers acknowledge the values, beliefs and dispositions that they bring to the research, understanding that they can be both used as a valuable resource as well as a source of distortion (Maxwell, 2012, p. 97). My positionality as a researcher is, therefore, discussed in detail.

This methodology for this research relies on both the ontological and epistemological assumptions of critical realism and employs a CMPE framework, which understands politics and economics as interrelated factors that shape living and working conditions via public policy (Bambra 2011b). Broadly, political economy asserts that policy actions (or inactions) are the result of Canada’s historical traditions as a liberal welfare state (Esping-Andersen 1990). The critical materialist stream of political economy, however, extends this analysis to also consider the influence of markets, power, states, ideas, discourses as well as civil society as factors that impact policy (Bryant 2016). It also examines political and economic structures that shape health outcomes such as capitalist modes of accumulation and production, as well as trade agreements. Critical realists understand that “all theories about the world are seen as grounded in a particular perspective and worldview, and all knowledge is partial, incomplete and fallible” (Maxwell, 2012, p .5). As such, this research will employ the CMPE as the guiding framework for this research, with an understanding that this theory might need to be modified or rejected in order to accurately explain the experience of Canadian grain farmers.

Positionality

In addition to theory, another important factor that impacts the way we seek out knowledge is the positionality of the researcher. As Holmes (2020) outlines it, positionality refers to both “an individual’s world view and the position they adopt about a research task and its social and political context” and is influenced by a number of personal attributes including social class, race, gender, geographical location, values and beliefs and so on (p. 1). Positionality influences not only how research is carried out, but the interpretation of the outcomes and results, and also what is chosen to be investigated in the first place (Holmes 2020; Creswell and Creswell 2017). As “[r]eflexivity informs positionality”, it is important to “acknowledge and disclose” oneself in one’s research to try to understand one’s part in influencing it (Holmes, 2020, p. 2).

I write and conduct this research from the position of a white woman, born to Hungarian immigrant parents in North Vancouver. My father was a longshore worker and millwright and my mother was a small business owner. My brother and sister followed in their footsteps respectively. From this upbringing, I have strong affiliation with unions and workers, and I advocate for redistributive social policy. Although I have working class roots, I acknowledge that today I am comfortably within the middle class both economically and socially. Lastly, during the data collection phase I was between 3-7 months pregnant.

For this research I was, for the most part, an outsider. The definition of an insider and outsider is that “[i]nsiders are the members of a specified groups and collectives or occupants of specified social statuses: Outsiders are non-members” (Merton, 1972 cited in Holmes, 2020, p. 5).

Although there is debate over the usefulness of the insider-outsider dichotomy, as an individual “may inhabit multiple positions along that continuum at the same time” (Holmes,

2020, p. 6), I would argue that in this research it did matter. This was particularly made apparent to me when I was conducting the recruitment and interviews. Most participants asked me what my interest in the Wheat Board was and where I was from. When I told them that I did not grow up in the prairies, and that this research was primarily academic interest the conversation moved on, but in one or two instances, I did sense that perhaps the participant was disappointed. How I was viewed as a researcher was more explicit online. On social media, particularly on Facebook, where I had posted the recruitment poster (Appendix D), comments were made that I was an academic from “out East”. One person wrote “...of course York university is out east. Isn’t it? That explains a few things”. In a subsequent post, I was described as someone working for the Justin Trudeau government or someone who wanted to bring back the Canadian Wheat Board (more below). These comments made me feel that I was an outsider, and apprehensive that I was the ‘right’ person to conduct this research. Fortunately, the interviews went well and there was none of the scepticism that I experienced online in any of the discussions I had with farmers.

Methods

The research was conducted in two phases with the first phase informing the data collection of the second phase. In the first phase of the study, 13 in-depth interviews were conducted with relevant informants regarding the mental health and well-being of farmers, and when applicable, about the impact that changes to the Wheat Board had on farmers and the sector at large. Not all informants were able to speak to both the Canadian Wheat Board and farmer mental health. Informant interviews included individuals at mental health and farm organizations including the NFU, Agriculture Producer Association of Saskatchewan, previous employees and board members of the Canadian Wheat Board, Canadian Grain Commission, the

Do More Agriculture Foundation, Manitoba Farm, Rural & Northern Support Services, Alberta Federation of Agriculture, Farm Management Canada, Friends of the Canadian Wheat Board and Western Canadian Wheat Growers Association (WCWGA). These individuals were across located across Canada and represented a spectrum of opinions about the Canadian Wheat Board. These interviews provided a strong foundation on the history and workings of the Canadian Wheat Board, and insight into the types of issues that grain farmers deal with today. In this way, these interviews were integral in forming the questions that were asked in the next portion of this research.

In the next stage of the research, in-depth interviews were conducted with Saskatchewan grain farmers to help to understand the impact that the dismantling of the Wheat Board had on their mental health and well-being, as well as their day-to-day farm operations. It should be noted that several individuals in the informant phase of the interview were also primarily grain and/or oilseed farmers.

Data Triangulation

Triangulation in qualitative research is used as a way to increase validity of research through the use of multiple methods or information sources. It is believed that in doing so a more comprehensive understanding of the phenomenon in question is created (Carter et al. 2014, p. 545). Denzin (1978) describes four ways in which data triangulation may be used: investigator triangulation, that is, using multiple investigators for collecting data, theoretical triangulation, where multiple theories are used in the analysis of data, methodological triangulation, where multiple methods are employed for data collection (like interviews and quantitative questions), and finally data source triangulation, where multiple sources of data are used.

To help strengthen the validity of this research, triangulation of data was conducted using theoretical triangulation and methodological triangulation. As discussed in more detail below, one of CRs main mode of inference is ‘retroduction’, where data is redescribed using different theories to interpret the data. This represents theoretical triangulation (Fletcher, 2014) and will be conducted in the analysis phase of this research. Methodological triangulation was achieved using more than one method of collecting data (Denzin 1978). In this regard, I used two quantitative Likert-scale questions to capture self-assessed mental health of farmers, in addition to the open-ended questions in the interview.

Setting

The farmer interview portion of this research was conducted with farmers from the province of Saskatchewan. Although the Canadian Wheat Board operated in other provinces in Western Canada including Alberta and Manitoba, focusing this research on one province was necessary due to time and financial constraints. Saskatchewan was chosen because it has the highest number of grain and oilseed farms in the country (Statistics Canada 2017). Data from 2016 revealed that Saskatchewan held more than two-fifths of Canada’s total field crop acreage, more than the provinces of Manitoba and Alberta combined (Statistics Canada 2017). Additionally, a committee member for this thesis resides in Saskatchewan which would have helped in the logistical planning of research, although the pandemic made travel to this province not possible.

About Saskatchewan

The province of Saskatchewan has been considered a unique province with a distinctive collectivist culture (Eisler 2022). This began with the Regina Manifesto (1933) and the

establishment of the Farmer-Labour Party, which later became the Co-operative Commonwealth Federation and later still became the New Democratic Party (Smith 2009). Saskatchewan is also known as the birthplace of healthcare with the implementation of a provincial system of Medicare in 1962, which was later adopted by the rest of Canada in 1966 (Eisler 2022).

Eisler (2022) writes that part of the perception of Saskatchewan as having its own unique and distinctive political culture arose from comparisons with Alberta, particularly as both provinces joined confederation at the same time. He writes:

...while each has experienced the rise of prairie populism, their politics and economies have diverged. Alberta's modern economy emerged with the development of its rich oil and gas sector that was fuelled by private investment. Meanwhile, Saskatchewan's economy remained much more agrarian and collectivist in terms of its agricultural institutions (p. 4).

In its early years Saskatchewan experienced significant demographic and population growth. From 1905, when Saskatchewan joined Confederation, to 1926, the population skyrocketed from 257,763 to 829,738 people (Smith 2009). This massive growth led to the creation of hundreds of thousands of farms, and the growth of towns, villages in cities across the province (Knuttila 2023). While at the time it was Canada's third most populous province, since the 1930s population growth has stagnated (Smith 2009). Latest census figures place the population of Saskatchewan at just over 1.2 million in 2024 (Saskatchewan 2024).

Despite having a similar population, Saskatchewan today is a different province compared to its inception. Many early settlers in Saskatchewan were homesteaders from Europe, including Ukraine and Hungary (Russell 2012). As Smith notes, "Once a recipient of diaspora, it is now a donor" (p. xxi). Furthermore, the province, initially home to Canada's youngest

population, now has one of the oldest demographics due to prevalent youth migration out of the region (Smith 2009).

The province is no longer predominantly rural, but rather declining farm numbers have hollowed out the countryside. This point can be made by looking at first census year of 1911, there were 95,013 farms covering 28.1 million acres of farmland (Statistics Canada 2017). By 2021, the number of farms had decreased to 34,128, yet the total farm area had increased to 60.3 million acres (St. Pierre and Mhlanga 2022). This decrease in the number of farms and people working on them has contributed to rural depopulation and the emptying out of the countryside (Smith 2009). As Knutilla writes “As towns and villages disappear, so, too, do local merchants, implement parts dealers, mechanics, bank tellers...” among others. He further notes that “dozens of villages and hamlets existed in name only, with fewer and fewer people remembering them each year” (p. 237).

Today, Saskatchewan's political landscape has shifted towards the right. The Saskatchewan Party, which initially emerged as an opposition to the dominant NDP, has now itself become dominant, effectively becoming the natural governing party of Saskatchewan (Eisler 2022). As Eisler writes the Saskatchewan Party “has created a hegemony that includes not only complete dominance of rural Saskatchewan but also strength in urban areas exceeding that of the NDP, which has been forced to the margins of electoral politics” (p. 4). Understanding Saskatchewan's history and current political landscape is necessary for contextualizing these interviews with farmers.

Participants and Sampling

A total of 31 interviews were conducted for this research study, including 18 Saskatchewan grain farmers and 13 individuals classified as relevant informants. Two of these

interviews, however, did not meet the inclusion criteria for this study (n = 29). Both times, despite asking preliminary questions, it became clear the participant did not meet the inclusion criteria once the interview was well underway. Once this was established, the interview was terminated but a \$25 Amazon gift card was still provided. Those interviews were not transcribed and no data from those interviews is included in this research.

With regards to response rates, 19 informants were contacted, and 14 responded, a response rate of 74%. Five informants did not respond, resulting in a nonresponse rate of 26%. A total of 14 farmers were recruited through email/list serve announcements from either the NFU or WCWGA. Additionally, 11 farmers were recommended via the snowball method, where participants suggested other potential interviewees. Of these 11 farmers, 5 responded and were included, while 6 did not respond. This led to a response rate of approximately 45% and a nonresponse rate of 55% for the snowball method of recruitment.

Interviews were conducted until theoretical saturation was met, and no new information was being uncovered through the interview process. Theoretical saturation occurred earlier than expected, as I had originally anticipated conducting 35 interviews. This may be due to the cross-over between interview groups, as many of the informants were also—or had been, grain farmers. Regardless, the sample size is similar to participant numbers in other studies of farmers in the Canadian setting (see Fletcher, 2017 and Kubik & Moore, 2001).

Selection Criteria and Participant Recruitment

Selection criteria for the informant interviews were based on relevancy of their work or experience with the grain and oil-seed sector and the Canadian Wheat Board or with the mental health of farmers in general. To recruit participants, a mix of purposive and snowball sampling

was employed. Purposive sampling is a strategy for collecting participants in which the researcher decides who to include in the research based on the research questions and goals of the project (Maxwell 2012). Purposive sampling was only employed in the first phase of interviews and was done by via email, (Appendix A) and in one case via Twitter when email failed to provide a response. Informant interviews were conducted between November 2020 and February 2021.

To recruit farmers, relevant farm organizations were approached and asked to distribute information on this study to producers in an effort to reach as many oil and grain seed farmers as possible (Appendix D). To be included in this research, producers had to be farming before the year 2009 and up until 2013, in order to have had experience farming both under the Canadian Wheat Board and without. Farmers who had operated under the Wheat Board but left the industry for financial or other reasons after 2013 were also eligible to participate in this study though none were recruited (Appendix D).

Two farm organizations shared the recruitment poster in their newsletter and on social media. They were the National Farmers' Union, and the Western Canadian Wheat Growers Association, with another organization declining (see below). These organizations and their members represent opposing views on the Board, with the Wheat Growers Association having been active advocates for dismantling of board, and the NFU having been active in trying to maintain it. As such, those who responded who contacted me to be interviewed tended to reflect strong ideological positions (either for or against the Board) and finding neutral individuals on the topic was a challenge. One neutral organization was asked to share this recruitment poster but responded with the following:

The CWB conversation is still an extremely divisive issue in Western Canadian agriculture. If we passed this along to our membership I am certain that I would have members withdraw from our organization. Please don't refer to myself or REDACTED in anyway in relationship to your study. Removal of the CWB mandate was a very turbulent time in Ag policy. Looking back and trying to learn from past practices is important. However the intent of your recruitment poster could be seen as re-opening the conversation on re-establishment of the Board. It is a very controversial position.

- Anonymous high-level member of a Canadian farm organization

This divisiveness of the issue was further demonstrated when additional recruitment was attempted through Facebook. With permission from group moderators, I joined two Saskatchewan Farm groups. One post in particular was removed by group moderator after approximately 30 minutes after a large number of mostly negative comments. These comments were directed at myself as the researcher for being 'at a university out East'. There were also comments which were disparaging of both the Canadian Wheat Board itself, as well as comments about Prime Minister Justin Trudeau., although for the latter case, it was not exactly clear why. I was unfortunately not able to capture the comments before the post was taken down.

Further recruitment of participants was done using the snowball sampling technique, as described by Bernard (2012). Using this method, I asked participants at the end of their interview to suggest other individuals they feel may be well suited for this research study. As described by Fletcher (2013), snowball sampling may also be used to increase diversity of participants included in a study, by asking participants to suggest individuals who they viewed as being 'different from them in some way' (p. 117). I asked participants for other producers I could speak to particularly those who had to exit the industry for financial reasons or female producers.

While this did increase the number of female participants in this study, I was not successful in recruiting retired farmers.

The second phase of interviews began in March 2021, and was completed by mid-April 2021. The majority of these interviews took place in a span of 10 days, and I was fortunate to speak with farmers before seeding of crops began at the end of April 2021. Finally, a financial incentive was provided, with all participants entered into a draw to win a \$250 gas card, and each farm interview participant receiving a \$25 Amazon gift card.

Interviews

The interview questions cover a range of topics pertaining to the impact of the removal of the Wheat Board's single desk powers on small and mid-sized farmers. Particularly, I asked questions with regards mental health, changes to farm operation and grain transportation and handling, as well as policy. Informants who felt able to speak on the topic of farmer mental health were also asked to discuss the 10 recommendations set out by the House of Commons Standing Committee on Agriculture (Appendix F).

A set of interview questions were designed for both informants and farmer interviews, with each containing approximately 30-35 questions, which were predominantly open-ended (Appendix E and G). The interview questions were not static and changed as new information was gathered. Some questions were added, or removed, or refined. The questions in the appendix are the last iteration of that process.

The length of interview varied considerably between 30 and 120 minutes. On average the interviews were 60 minutes in duration. The majority of informant interviews were conducted and recorded via Zoom, while the majority of farmer interviews were conducted by telephone

and recorded using a password protected handheld recording device to ensure accuracy and confidentiality. Furthermore, extensive handwritten notes were taken using pen and notebook during the interview to note any additional information or observations.

Consent and Ethics

Participants also signed a detailed consent form or gave verbal consent after reading the consent form prior to beginning the interview (Appendix B). Participants were made explicitly aware that their consent may be withdrawn at any time, with no repercussions. Furthermore, participants were given my contact information should they wish to change or add any information to any of their interview responses or retract statements or withdraw from the research completely. Lastly, because the farmer interview touched on issues related to mental health and well-being, follow-up emails were sent containing information on mental-health resources in their particular area (Appendix H).

This research received ethics approval from York University, Office of Research Ethics, certificate number STU 2020-074 on July 28, 2020, and was revised and again approved February 5th, 2021 to include the new protocol necessary in light of the COVID-19 pandemic. Predominantly, the research protocol changed from being in person interviews, to remote interviews done online or by Zoom.

Data Handling and Transcription

Audio files were uploaded to a secure computer by USB cable, and original files on the portable recording device were deleted. Audio files transferred to the computer were stored in secure electronic files with password protection along with any other digital data collected for this research, including interviews downloaded from Zoom. Physical copies of interview

transcripts and consent forms are kept in a locked cabinet. During the analysis and presentations, all data records were coded, removing any direct and indirect identifiers to ensure privacy and security of participants. Interviews were transcribed using online software program Trint, which provided an automated transcription. All interview transcripts were then meticulously checked for accuracy and fidelity by re-listening to the recordings and fixing any errors.

Qualitative Data Analysis

Data coding using thematic analysis

Data analysis began with coding data using thematic analysis following Braun and Clarke's (2006) six-step process, facilitated by qualitative data management software, NVivo. As thematic analysis is flexible—not restricted to any theoretical framework—it is appropriate for this research and has been done by other researchers employing a CR framework (see Lawani 2020). Data coding was conducted with the intent of revealing demi-regularities at the empirical level of reality—where events are experienced and observed (Fletcher 2017).

Braun and Clarke (2006) detail two common approaches to thematic analysis, inductive and theoretical. Inductive thematic analysis is data driven—themes are found within the data, which is collected with the expressed purpose of answering specific questions. Themes identified then relate to these questions. Thematic analysis, however, relies on the researcher's theoretical framework for analysis, but as “data are not coded in an epistemological vacuum” (p. 84), it would be difficult to code my data not based on theoretical analysis. Therefore, my approach to thematic analysis is both inductive and theoretical.

While the data was collected with the expressed purpose of answering a specific set of questions, my theoretical assumptions and previous knowledge on the topic also informs the

analysis. Furthermore, coding was done at both the semantic and latent level, where the latter refers to analysis that identifies the “underlying ideas, assumptions, and conceptualizations—and ideologies” (p. 84).

The first step of the process entailed data transcription and writing down initial thoughts and codes. As nearly 2 years had passed between initial interviews and data analysis, rereading the transcripts was essential in order to re-familiarize me with the data. In the second step, initial open codes were generated, and data was gathered based on these codes, both at the sentence and paragraph level. Whole paragraphs were coded to ensure important context and meaning was not lost. A total of three word-clouds were generated to see if any other key words or concepts emerged. One word-cloud was generated for all participants, and another was for farmers classified as supporting the wheat board and another for farmers classified as opposing the wheat Board. NVivo allows you to create groups and analyze text based on these groups for comparison. Key questions relating to stress and mental health were also analyzed separately in NVivo to ascertain if differences in responses existed between groups.

In the third step, themes were identified and data relevant to that theme were gathered. In particular, axial coding was conducted to group open codes into rough trends, or demi-regularities. Demi-regularities, another key concept in CR, can be understood as “rough trends or broken patterns” in the data (Fletcher 2017, p. 185). Demi-regularities are indicative of occasional mechanisms or tendencies that are “less than universal” (Lawson 1997, p. 204- cited in Scambler, 2001). Social scientific research begins with identifying demi-regularities and then working from there to find explanations (Danermark, Ekström, and Karlsson 2019) that is, causal mechanisms as well as broader structures and relationships (Hoddy 2019; Mukumbang 2021).

In the fourth step, themes were reviewed to assess fit within the larger data set and a thematic ‘map’ of the analysis was generated to help visualize and gain deeper understanding of the data. As suggested by Braun and Clarke (2006), I also read over the entire data set to determine how these themes fit within the data set, and to do any additional coding if necessary. In this step, I expected new codes and themes would be created, combined, separated, or removed. In the fifth step, themes were refined to provide descriptive definitions and names for each theme. Here one can begin to tell the ‘story’ of the theme, not only what the data says but why it is of interest (p. 93). Lastly, both extensive (quantitative) and intensive (qualitative) data were integrated as part of the overall analysis, in line with mixed methods retroductive theorizing described by Mukumbang (2021).

Abstraction

One of CR’s tools for analysis is abstraction, a process in which the researcher isolates a specific aspect of a concrete object or phenomenon. Abstractions are identified with the intent of narrowing or isolating certain aspects of study in order to begin to identify causal and generative mechanisms which caused events to occur in the empirical. Danermark and colleagues (2019) view abstraction as a necessary part of the research process because the domain of the actual (that is the events in the world) are many and diverse and make up a “heterogeneous dimension of reality” (p. 38). Furthermore, they write:

If we seek to explain concrete objects and phenomena—for example how a thunderstorm is formed, the locomotive powers of living organisms or gender segregation on the labour market—then we must have a means of isolating the different mechanisms involved, which together produce these events (p. 39).

The abstracted concept thus aims to isolate an essential element from a concrete sequence of events, allowing for a focused examination of its significance (Danermark et al., 2019).

Abduction and Retroduction

As discussed above, where positivists focus on the experiences of the empirical, that is on what can be observed and measured, CR aims to uncover underlying mechanisms (in the real) that produce or facilitate events that we may or may not observe in the empirical or actual levels (Scambler 2001). Two modes of inference are key to CR's methodological approach, abduction and retroduction (Scambler 2001) and will be employed in the analysis of this data.

Abduction refers to redescription or recontextualization of phenomena using theory (Fletcher 2017). This process “involves interpretation of phenomena in relation to structures and mechanisms” often giving new meaning to an already known phenomenon (Danermark, Ekström, and Karlsson 2019, p. 112). In this process, it is understood that theories here are fallible, and may be transcended by new theories (Danermark et al., 2019, p. 54). As such, at this stage, many theoretical interpretations and explanations can and should be compared, evaluated, and even integrated where appropriate (Danermark et al., 2019, p. 130). Abduction can increase knowledge in two ways:

First, redescription can provide a deeper and more comprehensive knowledge about particular cases under study; second, one can also gradually test, modify, and ground theories about general contexts and structures by relating these theories to ever new cases (Danermark et al., 2019, p. 115).

Where abduction provides “ideas about relevant interpretative frameworks and theories”, the casual mechanisms are further explored by retroduction (Danermark et al., 2019, p. 130). Briefly,

retroduction is a mode of inference where “events are explained by postulating (and identifying) mechanisms (in the real) which are capable of producing them” (Sayer 2000, pg. 107). Importantly, the explanatory power of different key causal mechanisms is evaluated in an effort to explain how these mechanisms influence activities, events and processes (Danermark, et al., 2019, p. 130). Scambler (2001) notes that retroduction “moves from a knowledge of events to a knowledge of mechanisms, ‘at a deeper level of strata of reality’, which contributed to the generation of those events” (p. 35). The aim at uncovering and explaining key causal mechanisms makes retroduction particularly well suited to health equity research (Scambler 2001). As discussed below, abduction and retroduction will be employed in the analysis of this data.

PART II

Chapter 6: Impact of the dissolution of the Canadian Wheat Board

I mean, it's kind of almost not fair to have this conversation now because markets have changed so much. Like, in such a large amount since 2012, mean if you even look at the difference in the amount of canola grown now versus what was grown in 2012, it's not even comparable. So how many of those changes would have happened naturally? I think a lot of them would have. –F09

Farming has evolved rapidly following the dissolution of the Wheat Board in 2011. The widespread use of smartphones and personal computers has ushered in a new era of grain marketing, making it easier for farmers to sell their commodities. At the same time, advancements in agricultural inputs and technologies have led to increased crop yields, all of which have contributed to the creation of a very different farming landscape compared with that which existed during the Wheat Board's operation. Understanding the impact of removing the Canadian Wheat Board on both grain farming and on farmer mental health and well-being is thus not straightforward, given that farming has changed so rapidly. In the face of these changes, however, many farmers did still attribute a great deal—both good and bad—to the demise of the Wheat Board, including impact on profitmaking, their day-to-day farm operations, as well as on their current levels of stress.

The interview data collected for this research provided rich context into the lives of farmers as well as farming in the prairie grain industry. From this data, demi-regularities—rough trends in the data that are indicative of occasional mechanisms or tendencies—were identified (Scambler 2001). Discussions on how the Board operated, past and current market trends, the

decline of the Wheat pooling system, transportation and trucking operations and other aspects of farming were examples of some of the topics discussed with both informants and farmers.

Following the process of CR analysis (as outlined by Fletcher 2013, 2017), however, not all of these topics could be included in this research. Rather, abstractions were identified with the intent of narrowing—or isolating—certain aspects of our study, and to begin to identify causal and generative mechanisms that caused events to occur in the empirical. Abstraction singles out objects or events “that are of most concern to the researcher” (Fletcher 2013, p. 98).

From the empirical data collected for this study I have generated three abstractions as they relate to farmer mental health. As discussed in Part I, I argue that at the heart of the mental health crisis is a much larger issue of economic uncertainty and precarity in which farmers carry increased levels of debt and are vulnerable to volatile global markets. For these abstractions, I focused on *if* and *how* changes to the Canadian Wheat Board—a mechanism which provided economic stability to farmers—impacted farmers’ mental health. Has operating without the Wheat Board impacted stress or other mental health measures? Why or why not?

Other trends that were abstracted for analysis included the impact of corporate concentration on farmers’ every day lived experiences and their mental health, as well as the possible role ideologically informed beliefs had in influencing farmers experiences of a number of things, including how they viewed the impact of dismantling the Wheat Board and marketing their own grain, as well as perceptions of their own mental health.

The first part of this chapter provides an overview of participant demographics followed by an overview of the impact of removing the single-desk selling powers of the Wheat Board on grain farming in Saskatchewan. Key themes that arose in this study were then discussed including concentration in the grain sector, as well as feelings towards market transparency and

control. The last section of the chapter provides an overview of the farmer mental health findings including a look at the impact of removing the Wheat Board on farmer mental health by examining the impact of operating under volatile market conditions.

Study Demographics

A total of 17 farmers were interviewed for the second phase of research. Although a majority of informants interviewed in the first phase of research were farmers, the specifics of their farming operations and other demographic information were not collected as those interviews were primarily intended to provide background information on either the topic of mental health or the Canadian Wheat Board. While some quotes from the informant phase of research are included in this chapter, this is done to provide context, with the majority of the chapter focusing on interviews conducted for the second phase of this research.

The average age of the farmers in this study was 62 years (although two participants did not give their age), with the highest age being 89 while the lowest age was 33 (Table 7.1) The average age for farmers in this study is somewhat higher than what was reported by Statistics Canada Census of Agriculture for 2021, which found the average age of farm operators to be 56 (Statistics Canada 2022a). The higher average age observed in this study might be attributable, at least in part, to the recruitment process, which required participants to have been operating their farm since 2011 or before.

Table 7.1 Frequency table of age category

Age category	Number of participants (n=15)
31-40	1
41-50	2
51-60	4
61-70	3
71-80	3
81-90	2

Out of the 17 participants, 10 had mixed crop farms growing a variety of crops including cereals, oils and pulses with some having cattle or bison, while 6 participants were strictly engaged in grain farming. One respondent did not answer this question.

The average farm size was 6,982 acres, with the smallest farm having 2,500 and largest having 22,600 (Table 7.2). The average farm size in Saskatchewan is reported by Statistics Canada to be 1,766 acres, which is significantly lower than the average for this research. Arnason (2023) argues, however, that this value is low due to the inclusion of a high number of small, non-commercial farms in the calculation. To circumvent this, Arnason calculated the average size of commercial²⁸ grain and oilseed farms by only including commercial grain farms which were 3,520 acres or more and found the average size to be larger at 7100 acres. Although the latter calculation is not official, it does suggest that the average commercial farm size in Saskatchewan may be larger and more in line with my findings.

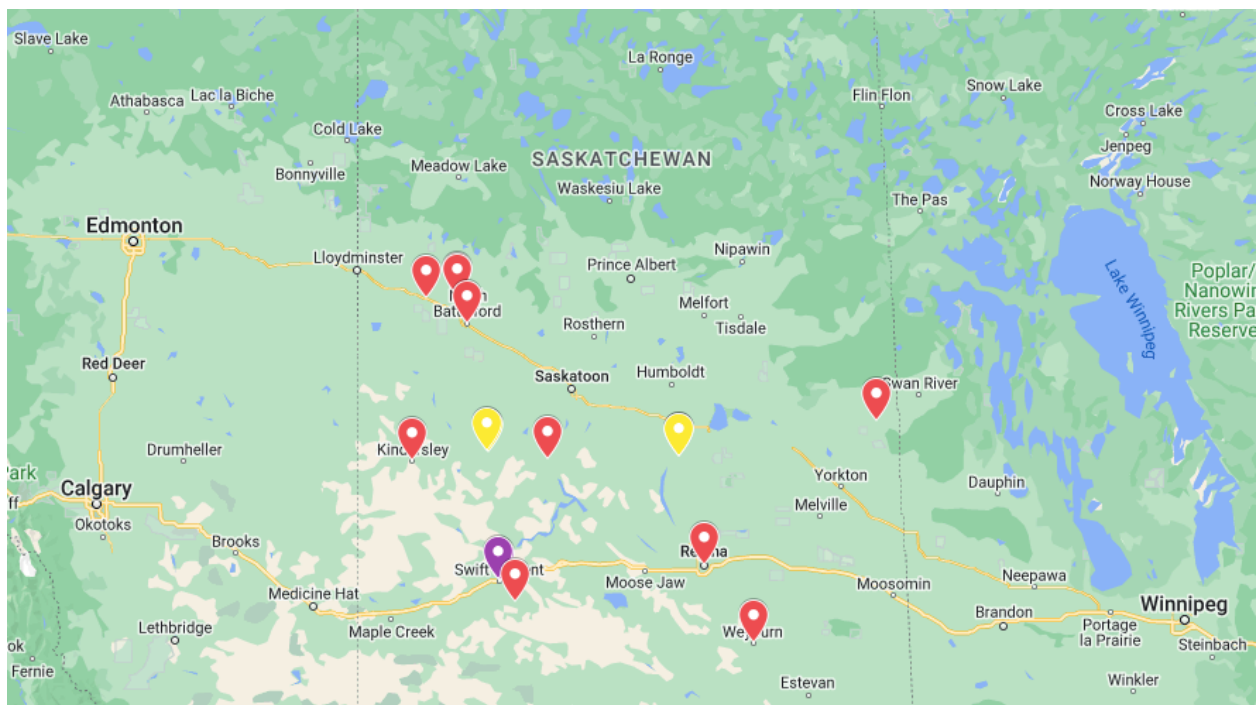
²⁸ Commercial farm is defined by Arnason (2023) as farms which rely on crops or livestock for main source of income.

Table 7.2 Frequency table of farm acreage

Acreage category	Number of participants (n=17)
under 2,500	2
3,000 to 5,000	8
6,000 to 8,000	3
10,000 to 15,000	3
20,000 and above	1

The 17 farmers interviewed for this study were located in 13 different communities across Saskatchewan (Figure 7.1).

Figure 7.1 Geographic location of participants



Map indicating where participants were located. Red colour indicates one individual from that location, yellow indicates two and purple indicates three individuals. Created using Google Maps.

In this study, farm net revenue ranged from between \$50,000 to \$99,999 to over \$2.5 million (Table 7.3). Farmers were also asked to rate their financial stability on a scale of 1 through 5.

The responses were exclusively in the 4 to 5 range indicating that all farmers in this study felt a level of financial security. Some respondents indicated that their financial stability was due to off-farm labour or other types of work. Three farmers mentioned having other agricultural businesses, including one farmer who had “a whole ‘nother’ business that employs six people and has revenues over a million dollars...” (F14) to make ends meet on the farm. As questions about off-farm work or income from other sources were not included in this study, the actual number of farmers in the study with supplemental income contributing to feelings of financial stability may be higher.

Table 7.3 Frequency table of net farm revenue category

Net farm revenue category	Number of participants (n=17)
under \$10,000 to \$49,999	0
\$50,000 to \$99,999	3
\$100,000 to \$249,999	4
\$250,000 to \$499,999	4
\$500,000 to \$999,999	4
\$1,000,000 to \$2,499,999	1
\$2,500,000 and over	1

Several respondents attributed their financial stability to having farmed for many years and carrying little or no debt. Most farmers rated their debt level as low or medium, with only one interviewee rating their debt level as *high*, and they still scored their financial stability as a 4, or high. This high level of financial stability may also be attributable to survivorship bias, as I was not able to reach any farmers who had exited the industry for financial reasons.

To try to overcome this selection bias, I attempted to recruit farmers who had either retired or who stopped working for financial reasons. Many farmers who knew of a farmer who retired or exited the industry for financial reasons said that they had lost touch with these

individuals and had no idea “where they’ve gone” (F14). Another farmer conveyed his discomfort with the request. As an example, he said: “So a guy in my position gives you a name of somebody that exited because they’re in financial trouble, that I’m sure that guy wouldn’t feel very good either, right?” (F17).

Political Polarization

As discussed in Part I, the topic of the Canadian Wheat Board remains an extremely divisive issue amongst prairie farmers and this posed challenges in recruiting respondents. This is illustrated by the following quote from one informant:

I wasn’t here at [REDACTED] at the time, but I know there’s still left over hard feelings during that time because, we didn’t, because [REDACTED] represents the full political spectrum. So we would have had pro and anti-wheat board farmers and you know, there’s still is lingering resentment about how that was handled. And some felt the inability of [REDACTED] to kind of rally behind the Wheat Board, a lot of hard feelings. We have farmers who refuse to be members still because of that. –I08

Although snowball sampling was applied and was useful to a degree in finding more participants for the study, particularly those who identified as neutral, the majority of interviewees were respondents to the recruitment poster shared by the National Farmers’ Union and the Western Canadian Wheat Growers Association. These organizations and their members typically represent opposing views of the Board, with the Wheat Growers Association having been active advocates for dismantling of board, and the NFU having been active in trying to maintain it.

To gauge sentiment regarding the Board, interviewees were asked if they were for, against, or neutral with regards to the removal of the Wheat Board’s single desk seller powers. A

total of 7 participants indicated they supported the dismantling of the Board, while 2 were neutral, and 8 were opposed to the dismantling. Furthermore, supporters of the Wheat Board tended to vote for the NDP as well as be members of the National Farmers Union, both left-leaning organizations. By contrast, those who were in favour of dismantling or were opponents of the Wheat Board voted for the Conservative Party of Saskatchewan, and were members of the Western Canadian Wheat Growers Association, both right leaning organizations. Neutral respondents did not belong to any farm organizations, and one of them indicated they supported the Liberal party.

These same ideological cleavages were also apparent in the informant interviews as some of those interviewees belonged, either now or in the past, to these farm organizations, or political parties and also expressed strong supportive or oppositional views of the Wheat Board.

Depending on the person's position, trends emerged with regards to how they answered the questions. Self-reported stress was also differently reported between these two groups (discussed below). For this analysis, I have separated out some of the key responses based on a rough grouping of supporters and opponents, as well as those who were neutral. I describe this process as “rough” as individuals expressed multiple perspectives and perceptions of the Board changed or shifted depending on the topic, or even just as the interview progressed and the participant had more opportunity to reflect more deeply on their feelings about the Board.

These cleavages, however, represent more than disagreements about the Canadian Wheat Board, but also reflect a deeper phenomenon of political polarization, which is felt to be intensifying in Canada. Political polarization, as McCoy and colleagues (2018) write, “is a process whereby the normal multiplicity of differences in a society increasingly align along a single dimension and people increasingly perceive and describe politics and society in terms of

‘Us’ versus ‘Them’” (p. 18). The natural differences between groups are increasingly becoming reduced to two polarized political identities, which creates camps of mutually exclusive identities and interests; while the opinions within one group grow more aligned, the distance between the opinions and views of another group grows more distant (Holowach and Parkins 2023). Political polarization can move into the realm of the social where “at the societal level, citizens become divided spatially and socially. They come to believe they can no longer coexist in the same nation” (McCoy et al., 2018, p. 19). Social polarization hinders the collective pursuit of a shared common good (Stewart, McCarty, and Bryson 2020) which could be a detriment to farmers who have historically made considerable gains by pursuing collective action, such as the establishment of the Canadian Wheat Board.

The next section of this chapter provides an overview of how grain farming changed for farmers after the dismantling of the Canadian Wheat Board, beginning with a discussion of the impact it had on their day-to-day farming operations, followed by a discussion with regards to mental health and well-being.

Farming after the Canadian Wheat Board

Following the dissolution of the Canadian Wheat Board, producers were confronted with the primary challenge of selling their grain directly to grain companies, which preceding generations of grain farmers hadn’t done since the Board’s establishment. The transition from operating under the Wheat Board to operating in the free market was not uniform. Farmers who already had experience marketing other commodities such as peas, or lentils found the adjustment relatively easy. Some, however, stated that there was a steep learning curve and for some the marketing of grain was stressful and overwhelming. As one farmer noted “...it is

stressful because, we didn't know what we were doing and we are trying to make well-informed decisions, but you don't really understand everything...I guess we felt in over our heads." (F15). To help offload some of the stress associated with grain sales, some farms have hired marketing consultants to help sell their commodities. These consultants help make decisions, and for one farmer was a way to make *someone else* responsible for the decision, shifting the burden off themselves. As one farmer noted, "maybe in a poorer way of looking at it, [but] we can go 'oh it was his fault' [laughs]" (F15). Depending on type or level of service, farmers paid between 5 to 20 thousand dollars per year to help market their grain and other commodities. These services included consultants and commodities trading groups, as well as publications with information and forecasts for commodity prices, which were seen as a way to level the playing field against corporate grain companies.

Marketing of grain has become a daily activity, as one farmer put it: "if you don't do anything, you don't sell anything" (F12). Although marketing was not seen as overly time-consuming activity for many, with one farmer indicating they spent 30-45 minutes per day marketing, it was an activity that they did do continuously throughout the day via checking their smartphone for latest numbers, as well as receiving texts or phone calls from grain elevators. Some farmers noted that the added marketing tasks became burdensome and substantially increased workload. This was especially true for one farmer who indicated receiving multiple phone calls per day from grain companies inquiring about buying their grain. Another farmer noted "...I just felt it a struggle because all we would do is call around to get pricing and try to make decisions based on our limited knowledge" (F15).

Farmers also adapted to the free market by increasing grain storage to hold back grain to sell when the market demand for grain was at its peak. Rapid retrieval of grain from bins allowed

farmers to capture price premiums that are offered by grain companies who need immediate delivery. Increased grain storage was also seen as necessary, with farmers discussing increased yields due to new technologies including new seed varieties, seeding and planting equipment, and fertilizers. Some farmers noted they had also invested in trucks such as the Mack Semi Truck and Volvo SuperTruck (Super B) to provide flexibility for delivering their grain to elevators. The need for the tremendous capital investments made by farmers was attributed by a majority of farmers to changes in agriculture (including advances in seed technology and fertilizer) rather than as a result of the removal of the Wheat Board.

Impact on farms, farmers, and the community

Farmers were asked a series of questions regarding how they thought removing the Wheat Board had impacted different groups, including younger and older farmers, men and women, larger and smaller farms, as well as general impacts on their communities. The removal of the Wheat Board was not seen as something that particularly impacted older and younger farmers differently. Rather, marketing success after the Wheat Board was primarily attributed to financial security, tenacity and ability to market, rather than age.

With regards to impact on gender, the issue was viewed differently for women compared with men. The majority of male farmers who were asked if the dismantling of the Board impacted male and female operators differently answered that they either felt they were not in a position to answer that question, or did not see that there was a different impact. Two female participants, however, noted impacts for themselves. For example, one farmer felt that it was more of a challenge to market grain in the beginning because she was a woman. She said:

Well, at the beginning...mostly the grain buyers wanted to deal with the husband or needed to check with the husband or father or whoever it was, but they didn't think that the woman was the one actually making the decisions. So, I didn't get phone calls. I had to hound for the longest time. But once they figured out if they were going to get the grain from our farm, that I'm the one they deal with. ...it's a learning curve for everybody, I guess. –F14

Unfortunately “female farm operators are kind of few and far between” (F14), and in this study women only accounted for 4 of the 17 participants, making examining the impact this policy change had on women a challenge.

The consensus among farmers was that the impact of the removal of the Wheat Board was not equal for small and large farms. In general, larger farms were felt to have advantages over smaller farms when negotiating with input suppliers as well as in negotiating better prices and terms with grain companies. In contrast, it was felt that grain companies didn't want to “deal” with smaller farms (F14). Economies of scale also meant more ability for farms to survive price falls while also having a higher likelihood of being able to pay more for buying or renting land, which directly disadvantaged smaller farms. As one respondent noted:

You know, you were renting the neighbour's farm for, you know, fifty dollars an acre, he [other farmer] came over and offered to go one hundred dollars an acre to rent his land. Well, you can't afford that. And the next thing you know, you're gone, and the auction sale starts. –F02

With regards to inequalities, a majority of farmers (n=12) indicated that dismantling the Wheat Board increased inequalities to the benefit of larger farms. A majority of individuals who felt that inequalities had not increased were from opponents of the Board (n=4). For example, rather

than see inequities increased, one farmer said it “actually levelled the playing field” (F08). While another said “There’s no losers. Everybody wins because the system is better, everybody wins.” (F07).

Increasing inequities between large and small farmers, especially related to land consolidation, was a point of concern for some farmers, especially as it related to the potential for larger farms to dominate the grain market. The concern is well warranted. As discussed in Part 1, the average farm size in Canada has grown significantly. In 2016 the average farm size in Canada was 820 acres, compared to 463 acres in 1971. There has also been a significant decrease in the number of farms, with a decline of 40.4% from 1981 to 2021 (Statistics Canada 2022c, 2017). Today, the largest 10% of farms generate over two thirds of all revenue (Statistics Canada 2022d) indicating that inequities have indeed increased in the farming sector. Furthermore, an analysis of farm size trends observed that small and medium sized farms are “struggling to grow- or even hang on” because they are not able to compete with larger farms who can use their economies of scale to yield better prices on inputs as well as for the selling of their commodities (Mussell and Dedley 2021, n.p).

The growing consolidation of farmland was seen as having a negative impact on community and rural life.

... from the community point of view, with the farms getting bigger, you eliminate the farmers or the insurance company... People move out of town and the rink doesn't have as many kids to skate in them or the schools or the hospitals. Because when you, at least in theory, the rural community is better off having, the more farmers, the better. Because of, you know, the local shopping, the hospitals, the schools, everything. So, it did hurt because like the bigger the farmers get, the less farmers there are. Like, you can just see,

you drive out they're farms 30 miles apart. Before cell phones, if you broke down you could walk anywhere and get help. Now, you might be walking for 15 miles before you see anyone. –F05

While the rise in farmland consolidation couldn't solely be attributed to the demise of the Wheat Board, there was a sense that its dismantling hastened this trend due to the departure and retirement of numerous grain farmers when the Board was dismantled. One respondent noted the following:

Competition is always good. But what has happened is it [dismantling the Wheat Board] has really sped up the process of farms getting larger and larger and larger. And in our communities, what it's done is killed our community because as the farms get larger, larger, we lose people. And, well, big farms may have many hired hands, they don't tend to be super active within the community. And they also may not live within the community...It also, it takes down our economic development because a lot of that money is now going into the cities that would have gone into our communities. So, there's a real impact there. It's not totally on the wheat board, you know, the leaving of the Wheat Board, but it's a big portion of that in the rural and community, in my opinion. –F09

While another farmer, a Wheat Board opponent, noted “So, yes, it hurt, yes it hurt rural Saskatchewan. There's no nobody can convince me it didn't...” (F05).

Characterization of the Canadian Wheat Board

Farmer perceptions of the Canadian Wheat Board varied, with farmers expressing both positive and negative views of the Board and how it operated. Benefits and drawbacks were discussed by

farmers classified as opponents, neutral or supporters, highlighting the complexity of the issue. Despite these complexities, trends did emerge between amongst these groups.

In general, opponents of the Board described it as inflexible, slow to adapt and restrictive as it limited their freedom to engage in the open market. Restriction, or lack of marketing freedom was a key issue as farmers discussed feeling restricted both in terms of how much of their grain they could sell and when they could sell it. In this view, one farmer called it “dictatorial”. As an example, he said:

Well with the wheat board, I mean, they said when you could sell, or like when you could haul it, what price you were getting, they were too dictatorial. I mean, there was no freedom you couldn't... If I found a higher price somewhere else, I couldn't take it.– F05

Being told when they could sell their grain and how much grain they could sell also led some farmers to feel beholden to the Board, with one saying they felt they were “like a pet dog” (F07), while another described the relief they felt with it being dismantled “...I describe it as having someone standing on your chest, and they finally got off, that allowed us to do our own thing” (F04). While another described the dismantling of the Wheat board as like “being released out of prison” (F07) because now they are now free to manage their assets, chose their delivery date, and manage their bank payments as well as their revenues.

In contrast, Wheat Board supporters discussed feeling a sense of loss, not only at having lost a marketing agency that they felt had their best interest at heart, but the loss of an organization which they described as advocating on their behalf over “issues that were hurting farmers” (F11). It was also an institution they felt they had a voice in. As one farmer said “I picked the board members, had my voice in it, I went to the meetings, I was part of it all” (F06).

The Canadian Wheat Board was at times blamed for how well the grain market was doing. Some farmers spoke of grain downturns in both the 1960s and 1980s (years not specified), where grain was left out in their fields due to what they saw as a failure on the part of the Canadian Wheat Board to sell the grain. Furthermore, the prosperity that farmers experienced during the pandemic and when I was conducting these interviews was also attributed by some to the demise of the Board.

Farmers were asked if the dismantling of the Canadian Wheat Board had an impact on their overall net profit. While the majority of respondents indicated that they could not say one way or the other—because farming had changed so significantly—some farmers felt it did. Importantly, the way in which it had impacted their net profit tended to correspond with their stance on the Board. Specifically, Wheat Board opponents felt that the Board’s removal had increased their overall net profit. It was felt by some that the Board was not skilled at marketing and was never “extracting a top price” (F05). Now, however, farmers are able to “seek out the price [they] want” (F08) as well as “negotiate qualities and prices...and not be limited in the volume [they’re] selling.” (F13).

The ability to generate income was, for some, primarily attributed to the characteristics of the farmer themselves rather than the dismantling of the Board. In this way, there was a characterization of the “other” farmer, particularly from opponents of the Wheat Board. This “other” farmer did not thrive after the demise of the Board because they were viewed as unskilled, unmotivated or dependent on the Wheat Board. For example, one farmer said: “In my opinion, I feel the operators that probably were very lazy or not equipped to we’re just coasting and it’s they’ve left the industry The dummies are leaving the industry [laughs]” (F17). This characterization is also seen in other research recently published on the topic of marketing

programs. The following excerpt is from the *Report to Parliament on the Review of the Agricultural Marketing Programs Act* (Casey et al.) (2016 – 2021) from the Minister of Agriculture and Agri-Food (2023) and said the following:

As part of the AMPA legislative review, AAFC [Agriculture and Agri-Food Canada] engaged with stakeholders, both present and past participants, as well as eligible agricultural cooperatives and marketing agencies. Consultations with stakeholders, particularly those operating within larger more established commodity sectors, highlighted the fact that many producers no longer use pools because producers are becoming more sophisticated with their marketing plans and are using tools such as forward contracts to maximize profits. **Price pools are considered a conservative strategy to secure an average price and an ideal option for producers who do not have sufficient time, skill or desire to take care of their own marketing. The review also revealed that there is a stigma with price pools for some producers due to its connection to the former Canadian Wheat Board** (emphasis added, p. 37).

This suggests that the perception of farmers who support collective marketing as deficient in skill or motivation could be a more widely held belief within the agricultural sector.

With regards to income, Wheat Board supporters felt that they were making less income now than they did under the Wheat Board. As one farmer noted “the only difference without the Wheat Board is on wheat, we’re making about 20 percent less money per tonne than we used to” (F06). As another interviewee noted, unless a farmer is “lucky enough” to have a large supply of a commodity and sell it at the peak price, “it’s my feeling that overall, we’re taking less for our product” (F12). One of the main reasons farmers felt that they were receiving less income from grain was due to profit-making from grain companies. Whereas the Wheat Board’s goal was to

get “farmers grain sold for the best price that [they] could, take the expenses out, and you've got the rest of it back [to the farmers]”. Grain companies, in contrast, are understood to make a “pretty good return” for handling, moving and marketing of the grain (F01).

Many supporters also felt that the loss of price premiums paid for grain was another contributor to lost profits for farmers. Price premiums refer to the higher prices paid for higher quality commodities. The Canadian Wheat Board, according to a previous employee “put a lot of work into making sure that the value that they got for grain was reflected in the value to the farmers” (I08). The Board specifically worked to obtain price premiums on behalf of farmers in order to return a maximum price to them. They did this by finding markets overseas that wanted higher quality wheat and were willing to pay for it. Many farmers and informants felt that price premiums were no longer being offered for quality of grain. Grain companies—in an effort to maximize their own profits—underpaid the farmer for their higher quality commodities. As one respondent said “...we’ve got a feed company...that seems to pay the best for wheat...And that bugs me because I said ‘this is my good hard red number one spring wheat’ and it’s going to be used for feed for animals when it should be baking the top-quality bread!” (F16).

For nearly every farmer, a positive aspect of the Wheat Board being dismantled was that farmers felt they now had a better ability to plan financially for their farms. This was because there was no longer a delay in the final payment (with some farmers indicating having to wait 12-18 months for final payment) and farmers could sell as much crop as they needed and not be restricted. One farmer, also an informant, told a story about another farmer who “basically sold his whole crop off the combine one year, got a fantastic price...and he was able to have the cash flow to secure the loan to buy the land that was right next to him” (I05). That type of rapid cash influx was less common for grain farmers under the Wheat Board.

Despite these noted benefits in ability to plan, some supporters did feel an overall loss of financial stability from the dismantling of the Board because they no longer receive the cash advances that were built into the programme.

I always believed that one of the reasons we got a cash advance system was because to help mitigate that transition from if you couldn't haul it, well, then you would get some interest free money to compensate you for carrying that grain a bit. –F10

Supporters generally regarded the Board as possessing a skilled and proficient marketing team with insights into global market trends. They also believed that the Board's ability to sell in large volumes enabled it to secure the best possible global prices, which were then relayed to the farmers. The Board was also seen as promoting fairness and equality as all farmers had access to the same markets and received the same price for the same quality of grain. The Board ensured that “farmers had equal opportunities for delivery” (F11) through the equitable delivery of grain cars to different regions throughout the prairies. The Wheat Board was also characterized as an advocate for farmers on a variety of issues, particularly with regards to transportation. The Board could go “toe to toe with the railroads because they had some dollars behind them” (F02) and furthermore, while under the Board, farmers “had one voice that could yell at them [rail companies] from the sidelines” (F06). Now, however, “...we have nobody to advocate for a fair standard for how you're going to get treated” (F09).

Misinformation and polarization

Another distinction between opponents and supporters was how they viewed the role of government in the management and everyday operations of the Canadian Wheat Board. In particular, opponents tended to view the Board as a government entity, or “a big government

ship”, one that was slow to adapt or make changes necessary in a rapidly changing environment. As one farmer indicated, it was “an entity that towards the end that might have been just trying to help the government gather money, taxes, things like that to help the government pay for things.” (F03). In contrast, Wheat Board supporters did not view the Board as a government run entity, but rather as an entity that did not “answer to government or a company” (F14). Overall, Wheat Board supporters had greater knowledge of its operation, with some farmers having worked for the Board or otherwise involved with it in some capacity.

This distinction reveals that opponents often possessed incorrect information about the Wheat Board, and this may have negatively influenced their perception of it. There were no research questions asked as part of this study with regards to knowledge of Wheat Board operations, but despite this, the subject surfaced in several interviews and knowledge of Board operations seemed to positively correlate to increased support for the Board. Two farmers, one self-classified as a neutral, while the other a supporter, discussed initially being opponents of the Board but had their opinion change once they both learned more about how it was operated. As one respondent noted:

I went on a tour down to Winnipeg and went through to see how things actually worked and how they achieved the numbers that they were claiming, and I went through everything and I came back with a little bit of a different attitude. And I kind of wish more farmers had gone through that. –F10

Given the pervasive presence of social media in general, it is entirely possible that misinformation and disinformation played a critical role in shaping farmers’ views of the Wheat Board. Disinformation refers to deliberately incorrect information designed to mislead or deceive, while misinformation is the spread of false information without malicious intent, often

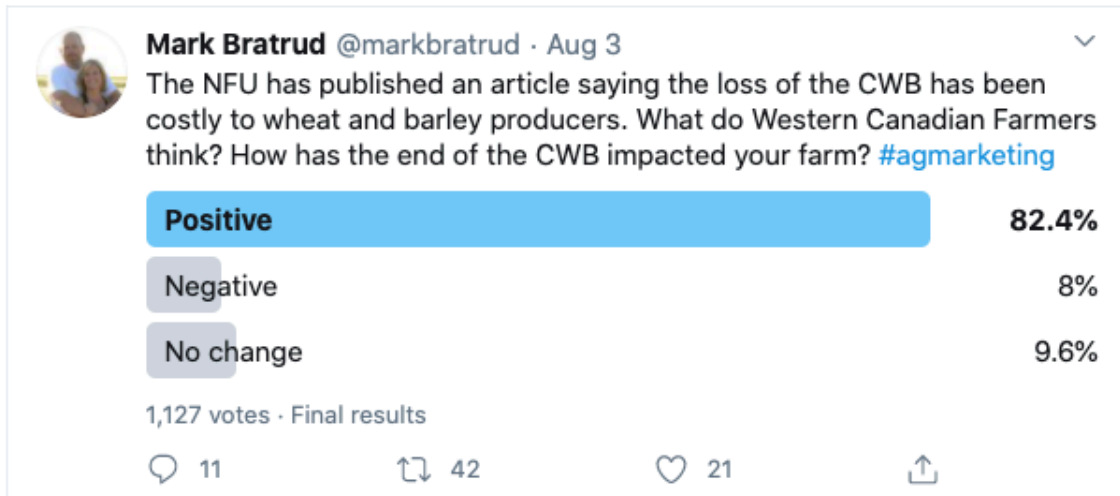
due to misunderstandings or misrepresentations (Jack 2017). Conversations with farmers as well as informants suggested that social media was a source of misinformation, contributing to stress and possibly exacerbating misconceptions about the Wheat Board. As one informant noted:

We're getting really polarized as communities and as people. And you really see that it's been brought out within the social media...you've got people accusing other people of being socialists and communists or fascists and things like this...But it seems to be expanding and as people have more and more access to that. The false information, and what they're being influenced by... and I don't know how you fix that. –I07

Disinformation spread on social media, particularly Facebook and Twitter, likely played a role in spreading inaccuracies that fueled further polarization, distrust, and disdain towards the Wheat Board and the government, as disinformation and misinformation are a noted key driver of polarization (Vasist, Chatterjee, and Krishnan 2023).

In 2019, in preparation to conduct this research, I followed a small handful of grain farmers from Western Canada as well as farm organizations on social media. In 2020 farmer Mark Bratrud made the following post on Twitter which came into my feed organically, asking farmers how they felt about the end of the Canadian Wheat Board. Included below is an example of one reply which contained misinformation about the Board from a user named Lyle Benjamin (Figure 7.2).

Figure 7.2 Example of misinformation/disinformation on social media (highlighted in yellow, second panel)



The fact that this tweet surfaced organically in my feed, without actively searching for discussions on the Board, suggests that the topic remains active on social media and is probably accompanied by a significant amount of disinformation and misinformation.

One informant spoke about how the opposition “absolutely lied over and over again in public.” Particularly over the issue of transparency, where opponents claimed “everything was secret” despite audited financial statements being made available every year by the Board. He

also attributed the spread of misinformation to major media outlets that “didn’t seem to care one way or the other” (I09).

Not all discussions about the Wheat Board were polarized. Rather there was a sense that the feelings about the Board were complicated, with there being many pros and cons to its dismantling. Two participants in particular, while they identified as being opponents of the Board, did at points in their interviews seem to soften their opinion of the Board from being strongly opposed to it to indicating that it was a system that could have been saved had it been run differently. One respondent said:

...I think it was a great concept, but they got carried away, so I don’t know what to tell you. I was so frustrated, I wanted to get rid of it because, but I know in my own mind that it was the right way to go. So, I think it should have been fixed, not eliminated (F05).

At another point in the interview, when discussing the impact the dismantling of the Board had on rural community life in Saskatchewan (discussed above) he also noted “and I’m not convinced we should have 100 percent eliminated the Wheat Board. I think we’ve could have fixed it.” (F05). While another opponent indicated that they didn’t want the Wheat Board dismantled, but rather just wanted marketing freedom. He said, “I just wanted another person’s opinion on what my grain was worth” (F03).

Concentration in the grain sector and market competition

Farmers were asked about their feelings regarding competition in the grain market, and in particular if they felt there was enough competition among grain companies for farmers to obtain a good price for their grain. Responses were mixed and for many farmers the answer to this

question was not a straightforward yes or no (Table 7.4). One farmer responded to the question about competition in the following way:

Some days yes, some days no. Sometimes they're competitive, but I have noticed I don't know about half the time, and it'll go for months or even a whole year at a time, that one of the elevators that I haul to, I usually haul to one of two elevators. One of them will have better prices for wheat and barley and the other will have better prices for canola and peas. And it will stay that way for months. It's like they don't compete with each other. -F06

Table 7.4 Perceptions of market competition

<i>Group</i>	Number of grain companies within a reasonable driving distance ²⁹	Do you feel that there is enough competition in the market to allow you to obtain good prices for your grain?
<i>Neutral (n=2)</i>		
	3	“No, it’s a captive market”
<i>Supporters (n =8)</i>	6	“Yes, but you have to book ahead”
	3-4	“Yes”
	3	“Some days yes, some days no”
	0	“Absolutely not”
	5	“Yes and no”
	4	“Yes, but not enough to see benefit”
	8	“Depends on the year”
	3-4	“No, that’s a capitalist dream”
	6	“Yes”
<i>Opponents (n =7)</i>		
	4	“Yes”
	6	“For the most part”
	3	“Yes and no, like I said, we have a lot of options. However, I do find that southeast Saskatchewan tends to be a lower pricing area.”
	6-8	“Yes”
	4-6	“Yes”
	4-6	.
	3	“I would like to see more”

Despite mixed responses from many farmers, a pattern did emerge from supporters versus opponents of the Board. While some supporters did feel there was good competition in the

²⁹ Reasonable driving distance was not defined but is rather a subjective measurement for each farmer. When asked what they considered to be a reasonable driving distance, answers varied. As examples, some responses included 2 hours, 16 km and 50 miles.

market, many in this group felt that there was not enough competition to secure good prices for their grain. One supporter called competition in the grain market a “capitalist dream” (F02) while another discussed similar pricing between elevators which led them to believe that “competition's pretty well being eliminated” (F011). Lack of competition was also attributed to oversupply of grain produced by farmers, giving grain companies little incentive to compete and reducing farmers' ability to negotiate higher prices.

Opponents of the Wheat Board more often felt that there was adequate competition in the market. Grain companies were seen as competitive in their pricing of grain but also on basis rates which “didn't exist when [there] was [the] Wheat Board” (F04). But as we will discuss below in the section on transparency, the rates paid by farmers for basis are no longer detailed like they were under the Board.

Some farmers as well as informants highlighted the entry of new companies into the market—such as G3 (Global Grains Group)—as a positive occurrence that increased market competition. It is important to note, however, that G3 is a joint venture that was created through the purchase of a majority stake in the privatized Wheat Board and the combining of these assets with existing Bunge Canada assets. Had the Board continued to exist, albeit without a single desk mandate, it would have continued to add to market competition.

One farmer recognized an absence of competition but appeared to be unfazed by it. When asked about market competition, they responded “Yes....yes for the most part there is...” though they continued by saying “some people say there's lots of collusion that goes on. And yes, I do believe there is at times, but in the same breath, there's different sources.” They go on discuss how grain could be sold for animal feed or other uses, which “gives you that option” (F03) as opposed to being under the Wheat Board, which did not.

Farmers' sense of market competition was possibly influenced by their willingness to adapt to market concentration, including driving long distances to deliver grain. One farmer noted that in order to not "be a victim to one buyer" (F07) they were willing to drive 100 miles or upwards of 5 hours to have access to more competition. This distance is in contrast to grain delivery under the Board to the local elevators pools which were located typically 10-15 miles away from a given farm³⁰. Driving long distances to deliver grain was a common occurrence among farmers. Farmers also adapted by selling their grain for animal feed or ethanol rather than for human consumption. These actions help foster a sense of marketing freedom and marketing choice, even as farmers acknowledged that these were not always ideal solutions.³¹

There was also frustration with regards to the different prices made available from the same company but located in different areas of the province. As one farmer, who identified as neutral, said "if I can call three to five hours [away] and get more money from the same company, though, something is wrong with the system!" (F09). Price spreads between companies also caused mistrust of these grain companies, as one opponent said:

Well, I'll give you a perfect example, in December, I had some...our protein wasn't that high so it was number 1-12-0. So I went to Viterra, said, I've got this quote, \$6.05 a bushel. So I went to Cargill and I said here's the give me a quote, \$6.30 a bushel. Phoned G3, \$7.35. Now, how can that be? With the same quality of grain with three different elevators. I mean, on a 100,000 bushels, we're making like a buck...a Hundred thousand

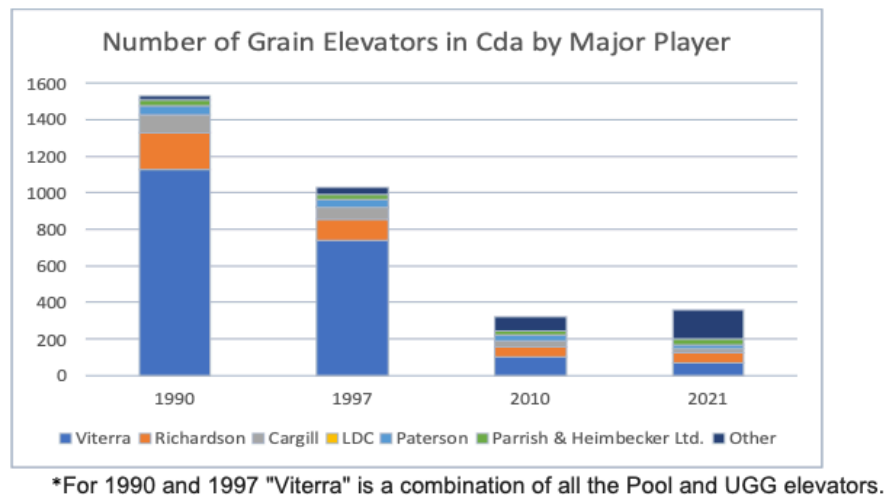
³⁰The rationalization of Wheat Pools and commercially owned elevators occurred independently of the demise of the Wheat Board and began in the late 1980s, early 1990s, along with the rationalization of railways. Older wooden grain elevators were abandoned for larger more technologically advanced elevators, resulting in fewer elevators across the province (Okay, 2023).

³¹ As recounted earlier, some farmers expressed dismay and frustration at having to sell high quality wheat for feed because it yielded a higher price at that time.

dollars just by shopping around. To me, I was expecting, you know, 10 or 15 cents a bushel difference. I couldn't believe it....So does that mean Cargill and Viterra are putting that buck in their pocket? You know what I mean? Because G3 is doing this and losing money. So you see, that's part of my frustration, too, because I get a feeling that Cargill and Viterra were trying to rip me off sort of thing....That was one of the good things about the Wheat Board, it didn't matter when or who you sold it to you were getting the same thing as the next guy, right? Yeah. Like I said, I think the Wheat Board, I think it could have been fixed. Because the concept was right, I think. But that's just a personal opinion. –F05

Research from Mercantile Consulting Venture (MCV) found that since the 1990s there has been a significant decrease in the number of grain elevators in Canada (Figure 7.3). As they note “Depending on the commodity and area under discussion, there seem to be fewer company options available in Canada, so that sales to alternative companies are not always a viable option” (Mercantile Consulting Ventures 2022).

Figure 7.3 Number of Grain Elevators in Canada by Major Player, 1990-2021



Source: Mercantile Consulting Venture 2022, p. 18

As discussed in Part One of this dissertation, corporate concentration is a growing issue throughout the food system. The concentration ratio, known as CR4, is a metric to assess market concentration. A market is deemed concentrated if the four largest firms hold 40% or more of the market share, and it is considered highly concentrated if these firms possess 60% or more of the share (MacRae 2020; Clapp 2021). CR-4 was discussed by an informant to explain why he did not think there was competition in the market, given most farmers only have access to only three or four grain companies for the selling of their grain. While the perception of the level of concentration was generally felt acceptable for opponents, by objective measures, concentration among grain companies should be expected to negatively impact farmer revenue.

The situation may also be getting worse. In the spring of 2023, two years after conducting these interviews, a proposed merger between Bunge and Viterra, two major grain companies operating worldwide, was announced. This proposed merger would decrease competition even further. Gunter Jochum, president of the Canadian Wheat Growers Association (noted opponents

of the Canadian Wheat Board), appeared on BNN Bloomberg, expressing his concerns that this merger could decrease competition in the grain sector (Jochum 2023). According to the NFU, if “the Bunge-Viterra merger goes ahead, we are looking at a CR-4 ratio above 80% in Canada’s grain handling sector” (Holtslander 2023).

Concentration was also an issue in the railway sector. In Canada, while there are a number of short line freight rail and passenger rail companies, the majority of rail is controlled by only two companies: Canadian National (CN) Rail and Canadian Pacific (CP) Rail (Statistics Canada 2023). Many farmers expressed concern about the railroads' priorities, such as hauling oil or coal, over grain. As a result, some described being “at the mercy of the railways,” as what was prioritized for transportation was perceived as dependent on which commodity yielded a higher profit (F13). Missed delivery dates were attributed to the de-prioritization of grain by railways, which impacted farmer cash flow and financial stability, and created logistical challenges for delivery by the farmer to the elevator. Grain companies were viewed as not being able to manage these transportation problems because “they’re afraid, because the railroads can be pretty nasty. And especially if you’re a smaller company and you don’t want to piss off the railroads, because they will blackball you... won’t get the service that you need, that you require” (F02).

Arguments for dismantling the Canadian Wheat Board largely hinged on there being more opportunity for farmers and business to operate as they please in the open market. As one farmer told me, however, this “didn’t work”. They go on to say that they had “started a community pulse processing plant and we couldn’t get through the red tape to ship overseas, and we couldn’t get railways to deliver to us even if we built the railway to us” (F14). This farmer

attributed the failure of this processing plant being too small, a lack of lobbying power and big corporations not wanting them in the market.

It is worth noting that two separate opponents of the Board, one farmer and an informant (also a farmer) suggested that a farmer led price-fixing scheme could be a way to fix the current one-sidedness of the market. For example, one farmer when asked if they would consider some type of single selling desk similar to how the Wheat Board, responded:

Well, it just depends how it was set up. But I would look at it for sure. Because a perfect example, I don't know if you know the stats or not, but 90 per cent of the red lentils shipped out of Canada are grown in Saskatchewan. If all the farmers would get together and say, "well red lentils are 25 cents were not selling any of them"...I think we could manipulate the price.... I think it could work. If the farmers would cooperate. –F05

They later added "Like I said, the Wheat Board when it set up originally, it was a good idea. It just, to deal with them by the end was just unbelievably frustrating" (F05).

Another informant and farmer and a member of the Canadian Wheat Growers Association suggested a type of price fixing scheme. Unprompted, they said:

...you're consolidating and there is going to be a point, where the amount of farms is going to be smaller and smaller and they will control the food. And it will be easier to get a thousand farmers on the same page as ten thousand or one hundred thousand.... So, you know, you get enough of those guys and they just go, "we're not delivering wheat today" and you're going to go get a loaf of bread [and] the bakery says, "I got no flour, guys won't deliver. They want more money". –I05

And later he continued “...And that tells you, to me, that if farmers really and truly keep getting stepped on, that if they decided to, they could really put a squeeze on the Canadian consumer.”

(I05).

Transparency

Transparency was an important issue for farmers. Different aspects of transparency were discussed including farmers’ assessments of the transparency of the Board’s operations, the Board’s ability to obtain fair prices for grain on behalf of farmers, and their assessment of the current system’s transparency (Table 7.5). Whereas previous discussions regarding competition in the market had mixed and conflicting responses, the issue of transparency was much more clear-cut and was generally bifurcated based on ideological position.

Table 7.5 Perceptions of transparency

<i>Respondents</i>	Did you feel the CWB obtained fair prices for grain on behalf of farmers?	Was the CWB Transparent?*	Do you feel the marketing current system is transparent?
<i>Neutral (n=2)</i>			
	"Not always."	No	No
	"Yes, I do."	.	"No, it's not."
<i>Supporters (n =8)</i>			
	"Yes, I do."	.	"No, I guess maybe that's why we have a marketer to help us."
	"Absolutely."	Yes	No
	"Yes, I do."	Yes	"Not at all."
	"I think so, yeah."	.	"No."
	Yes	"Yes, for the most part."	No
	"Yes."	"Absolutely."	"No."
	"Absolutely."	Yes	"No, it's not transparent whatsoever."
	"Generally, I think they did pretty good, yeah."	Yes	"Oh, boy, I don't know how to answer that, yes and no. With some areas, yes, and some areas I would say no."
<i>Opponents (n =7)</i>			
	"I can't say that they were they were top of the market."	No	"As transparent as it can be?"
	"No."	No	"Yes, but not one hundred percent."
	"I don't really necessarily feel that they did."	No	"It could be better for sure."
	[laughs] "No."	No	Yes
	"I think they did a good job on the surface, like marketing the grain make it attractive. I think they did the best they could."	No	Yes
	"I'm a little reluctant to say yes or no on that one because number one, we never knew what they were selling it for."	No	"Well, within reason..."
	"No"	No	"No."

* This question was not asked directly to many participants. Responses are provided based on answers to other questions and discussion. Answers not otherwise in quotes were too long for the table above.

Overall, farmers who supported the Wheat Board felt that it was transparent in its operations and obtained fair prices for grain on behalf of farmers. Although some supporters still felt that they lacked understanding with regards to how the Board operated, they still had trust in the institution. As one farmer said, “I feel that to the best of my knowledge they’re doing as good a job as they felt they could do. And I think you have to accept that” (F01). In comparison, a majority of Wheat Board supporters did not view the current grain trading system as transparent, especially regarding the price for grain and basis³². Under the Board’s system, when farmers sold their grain they received a cash ticket detailing their payment and itemizing deductions, including costs related to terminal elevators, country elevators, transportation, and other costs. The current system, however, typically only displays the final price without a detailed breakdown of these costs. As one informant noted “What they have lost is a little bit of transparency on handling costs” (I08).

For opponents, the Canadian Wheat Board was not seen as transparent. This finding was unsurprising given that ‘lack of transparency’ was a key argument for dismantling the Board in parliamentary debates. For example, Mr. Jim Hillyer (Lethbridge, CPC) said:

If the majority of the farmers really does want the Wheat Board, what need is there to make it a monopoly? It will thrive in the absence of the minority. We must not buy into the fear. We must embrace the future, where producers will be able to manage their business as never before, with transparency of prices and control over to whom they sell, where young farmers will finally have the tools they need to make their farming dreams a

³² Basis refers to the charges associated with handling and shipping a farmer's grain, which are levied by grain companies.

reality, where farming entrepreneurs can harness innovation and add value to their crops beyond the farm gate (p. 2500).

Many farmers in this research felt there was a lack of transparency with regards to the sales of grain as they didn't know the price grain was being sold for. One informant, a former employee of the Canadian Wheat Board, described this as an "irreconcilable tension" as there was "no way to give more sales price information and even volume to farmers in a way that wouldn't have exposed the Wheat Board's sales program" (I08). Furthermore, she continued, the Board was "heavily scrutinized by the federal government as well as the public" regarding its operations, and that "there was way more reporting then, than there is now." One farmer said that the lack of transparency on pricing caused some farmers to lose trust in the entire institution of the Canadian Wheat Board. As he said:

A mentality [developed] amongst farmers that the board was not trustworthy and because the sellers that they're selling to cannot and won't release what they paid, then it was hard to compare what the so-called free market would give us compared to what the Wheat Board was getting us. And one of the selling features that the anti-board people said was that transparency on price would be right in front of us and we would know exactly what that grain was being sold for. And it certainly is never, I've never seen it.—

F10

Lack of transparency also seemed to be related to mistrust in government, as some opponents felt that the Board could fabricate numbers because of the government's involvement. One farmer, for example, discussed their suspicions about the accuracy of the Wheat Board's financial statements: "I think in the back of our minds here, and unfortunately, that it gets ingrained, you know, that 'well, is that actually the whole truth? Is that the actual statement?' They could

produce whatever they wanted on a financial statement because they were Government run...” (F03). This farmer also acknowledged that their opinion may have been influenced by who was in office at the time, especially if it was not a party that they voted for. Pied and Sappleton (2023) in their research on the topic of polarization in the agricultural sector also noted a “keep government out of agriculture” sentiment, which they attributed to being a growing trend of government distrust in the US (p. 1104). They also saw it as likely stemming from dairy farmers’ frustration at being denied price supports or other programs that would help stabilize income, particularly for small-scale farmers.

Opponents generally viewed the current system as transparent or at least *more* transparent than the Wheat Board. Despite this, many opponents did feel that the current system was not as transparent as they would like it to be. For example, one opponent noted: “No, I didn't feel that [the Wheat Board] was transparent. I'm not sure it's transparent today either, honestly” (F08). While another opponent responded “I’m a little reluctant to say yes or no on that one, because number one we never knew what they were selling it [grain] for” (F13). Another opponent suspected that grain companies are engaging in price-fixing. When asked if the current system is transparent, he noted:

Yes, but not one hundred percent. Because like I said before, I think with some commodities there still, I still think there's and I'll use the word collusion, the lack of a better term. It doesn't happen all the time....I think there was a time where spring wheat values, I think there wasn't anybody that had a different price. And for months, you

know, it didn't matter which elevator or line company or grain companies that you phoned, everybody had the same price....” –F03³³.

Control

Farmers were asked several questions regarding how much control they felt they had over various aspects of grain marketing, including their ability to obtain fair prices for specific grades of grain, their control over their ability to generate income, as well as control over grain handling and transportation.

A majority of Wheat Board supporters did not feel that they had the ability to obtain fair prices for grain, feeling instead that they were price takers with minimal influence. Additionally, farmers felt they were paid less for grain overall and no longer received premiums for higher grade grain since the removal of the Wheat Board, despite occasional market peaks. The lack of control some farmers felt over obtaining value for grain quality was also attributed to a sense that grain grading was at times arbitrary. This was a source of frustration for some farmers.

Opponents, on the other hand, felt that they had the ability to obtain fair prices for their grain, with one farmer rating it at 110% control. Not all farmers spoke of having complete control, as some recognized that “sometimes the fair price is set by the world, nothing to do with our...local markets” (F13), and therefore prices were out of their immediate control.

Most farmers, regardless of stance on the Wheat Board, however, did feel a degree of control over generating income as they could control when they sold their grain and to whom. Although many farmers felt they had control over generating their income, there was a sense that

³³ This quote also appears, although in a truncated form, in an earlier section of this chapter regarding feelings about market competition.

this control had its limits, especially for operators with a smaller farm who aren't able to grow enough grain to negotiate prices. As one farmer told me:

I didn't have control before when I was with the Wheat Board, but the people who were doing it had my best interests at heart. Now I have control to go from one elevator to another, but there's only such a few of them that the price isn't going to change that much. So, I have control, but it's not like I can without deciding I'm going to farm two hundred thousand acres and commanding the market that way, I don't have a whole lot of control. –F14

Finally, farmers were also asked if they felt they had control over grain handling and transportation to which the majority responded feeling that had little to no control or influence. While they did feel they had control over delivering their own grain by trucks, for matters involving rail, farmers felt they had little no say or control. Furthermore, many farmers felt that rail companies were not held accountable for transportation issues and this was observed from both Wheat Board supporters and opponents.

Farmer mental health

Farming was described as a stressful occupation. The logistics of farming—including managing the finances and operation of the farm—was described as stressful and at times burdensome. Some farmers described having to work long hours, and struggling with overwork and exhaustion. Lack of control regarding a variety of issues such as grain infestations, the timing of planting and harvesting, and other issues was another noted source of stress and anxiety. For example, one of the consistent uncontrollable contributors to stress was weather, particularly the risk of drought and flooding which could lead to crop failures. This was described as a very

difficult situation, which one farmer took to be “a huge failure on our part”, even if the crop failed due to uncontrollable elements (F04).

Several farmers mentioned the burden associated with maintaining a family farm through generations and the urgency to keep it profitable. This burden is intensified by the substantial risks involved in managing daily farm operations. “The amount of the level of risk that we take is huge. One bad turn could actually ruin us. And that’s a huge stress for me, because to think that I could ruin something that is for generations along with one decision,” said one farmer (F14). This farmer also noted that despite owning a medium sized farm, decisions made on the farm could mean millions in lost (or gained) revenue. The decisions they needed to make were described as requiring meticulous planning because “...making one wrong move...I could mess it up for our entire operation, for my family, for my parents. So, yes, there’s a huge stress load there” (F14). This stress seemed to be compounded by the lack of separation between the workplace and home. As one farmer explained:

...and so if there are stresses, it’s more serious, you know, like people might escape from a difficult home life by going to work. Well, if you’re on a farm, you’re not doing that. You know, you’re there and you don’t have any break from it. So, it makes farming a little tougher on people for stress... there’s no escape. –F12

The economics of agriculture were a significant source of stress for farmers. Farmers discussed feeling the pressure of being price takers for both their inputs and their commodities, describing the cost-price squeeze, which has been intensifying in the agricultural sector. As one farmer described it: “It’s frustrating. You feel stuck in the middle...like everybody is making money off the farm and we’re doing all the work” (F05). While another farmer noted “...I feel that so many people want a piece of my pie” (F16). The latter was in reference to chemical and other input

companies, trucking companies as well as brokers, and anyone else in the food distribution chain who might take a cut of their profits. Some farmers felt that the cost-price squeeze has eroded mental health among farmers and also considered it a major factor in driving people away from farming due to the increasing challenges of running a financially viable farm. The cost-price squeeze was also discussed as being a direct result of corporate concentration in the food sector.

The financial strain that results from the cost-price squeeze has likely intensified since these interviews were conducted, given the recent upsurge in the cost of farming inputs. According to Statistics Canada (2022b), the period from April to June 2022 saw a significant increase in total input costs by 17.4% nationwide, a stark contrast to the typical annual increment of 4.5%. Saskatchewan's farmers experienced the most substantial increase, at 21.5%. This financial strain has been exacerbated by higher interest rates, which have increased the interest burden on existing debts, pushing farmers into an even more vulnerable financial position than when I spoke with them in the beginning of 2020.

Impact of dismantling the Canadian Wheat Board on Mental Health

Farmers were asked if they felt that changes to the Canadian Wheat Board have affected (either now or at the time of transition) their level of stress, anxiety, moods (including incidence of depression) or overall happiness (Table 7.6).

Table 7.6 Impact of removing the Canadian Wheat Board on stress, anxiety, moods and happiness

Group	Stress	Anxiety	Moods	Happiness
<i>Neutral (n=2)</i>	“Yes, it was huge”	No	No	Yes
	Yes	Yes	“Certainly, though I think it could cause anger...disappointment or it could cause loss of friendship ... It was very polarising.”	“...maybe deep down it has...”
<i>Supporters (n =8)</i>	No	No	No	“No, I don't think so.”
	“Yes, it's increased my stress, decreased my happiness”	.	.	.
	“Increased my stress and anxiety and my moods are more swinging because, you lament more of the loss of the Wheat Board...”	Yes	Yes	.
	“Oh, absolutely now and at the time of transition, it did, yep.”	“Personally, not very much.”	No	.
	No	No	No	No
	“Yes”	“So anxiety. Absolutely.”	No	“I was sad we lost it.”
	“Holy cow. Sometimes, yeah.”	.	.	“Yeah, I guess it did.”
	“Oh, I would say initially it did a fair bit.”	“Yes it probably did.”	No	“Yeah, I would think so.”
<i>Opponents (n =7)</i>	“Down.”	“No, I think I went down too.”	“No.”	“I think it's the same.”
	“I'm not really sure how to answer that, to be honest with you...”	.	.	Happier now
	“...there was a bit of a celebration. So, yeah, less.”	“Less.”	“...generally it's better.”	“Yeah, better.”
	.	.	.	“Made me 100 per cent happier.”
	“think my level of stress has probably dropped”	.	.	“I think I'm happier not having it.”
	“Relief. At last we've got. At last, we can control some of our own, more of our own destiny.”	.	.	.
	Neutral	Neutral	Neutral	Neutral

Although few participants said it impacted their moods either way, a clear trend emerged with supporters responding that they felt more stress now and at the time of transition compared with opponents who felt less stress and reported feeling happier. For example, one Wheat Board opponent said “I personally I think it’s reduced my stress, but it’s just because I felt restricted, and like I said, it was like having someone standing on my chest” (F04). While another farmer said they felt relief: “at last, we can control ... more of our own destiny” (F13). The reduction in stress was attributed to an increased level of control over when they sold their grain, for how much, and to whom and when. As one farmer told me “we never knew when we were going to sell, right? That was that was way more stressful, not knowing how much we could sell and if we can sell. Nowadays, I mean, if you want to discount your product, you can sell anytime, anywhere” (F17).

For supporters, the loss of the Wheat Board was difficult, with some describing it as a sad and stressful time in their life. One farmer told me that it “increased my stress and anxiety and my moods are more swinging because, you lament more of the loss of the Wheat Board... They had losses to don't get me wrong. They weren't angels. But they muscled it out with the highs too” (F11). While another farmer said “I mean, these are historically, historically huge changes... You just can’t overestimate the impact of the negative reaction this has caused” (F02). While another said: “In a nutshell, we’ve now got more work, more stress and less money” (F06).

For some farmers, the impact of removing the Wheat Board on their mental health was not straightforward. For example, one opponent, when asked if they felt more stress now than under the Wheat Board said the following:

I’m not really sure how to answer that, to be honest with you, other than I’m going to say that with the Wheat Board there were there were years that it was stressful just because...

you just couldn't generate enough cash flow or income to get that job done ... in some cases, it maybe wasn't stressful at all because...there's nothing you could do. It just comes down to, well, I need an extra ten thousand dollars back then to buy a truck, but how am I going to generate that? And yes, you do go get a cash advance, but sometimes if you didn't have enough crop, you still couldn't get enough cash advance for that... And as for now, after the Wheat Board it's a situation where it can be stressful because now times are [sighs], our bills are due within 30 days. We need to buy food once a week. We need to do a lot of things on a more continuous basis. And you can be stressed out because maybe you didn't sell your grain at the right time and now you've got to sell it at a lower price because I need that cash flow or that income now. And so, I just have to sell it. And that gets stressful knowing that I maybe should have kept it for a higher price later on. – F03

The dismantling of the Canadian Wheat Board and the shift to a free-market system was highlighted as a stressor for farmers, especially among supporters, as they felt the transition lacked democratic processes and fairness. One farmer recounted how farm groups had repeatedly asked to have a vote on the issue but were never given the option. He said "It was boiled down to politics and some nasty stuff and boom! It was gone" (F10). In addition, some producers spoke of farmer-owned assets which were lost when the Wheat Board was sold to G3. As one farmer noted:

I think part of the stress of what at least in our situation was more concerning to us was the fact that the government took the bank accounts, the cars, the ships, everything that was owned by the farmers, because it was farmer owned, and never paid anything for it.

The farmers never got any re-capture of what it cost, and I think that has always sort of been a burr under the blanket, if you want to call it, of farmers in that it was unjust. – F01

These tensions seemed to be further exacerbated by arguments between supporters and opponents, both in person and over social media. These arguments caused considerable stress within the farming community at the time of its dismantling as one farmer described it as pitting farmers against each other, and even impacting friendships. The polarizing impact of the Wheat Board is still felt today as one farmer noted how they would “get totally lambasted with comments that are not called for” on social media (F10). Furthermore, they note “I could post something ... a Facebook post right now, and I guarantee you that I would have out of twelve hundred friends, I probably would have three or four that would go on with rude uneducated comments about the Wheat Board, which they would have no merit or background truth to what they’re saying. And that causes me stress” (F10).

While another farmer added “...you know how people get on the Internet when they really get into an argument?...people are passionate on both sides so that’s really getting stressful, too. And the amount of dishonesty and outright lying about the end of the Wheat Board stuff is pretty hard to take” (F06). This farmer confirmed that the issue of the Wheat Board is still being discussed on social media today.

Marketing stress and market volatility

Almost all farmers, with the exception of two who don't directly market their grain themselves, discussed the stress involved in grain marketing. To explore this further, farmers were asked a mix of open-ended and quantitative questions. For the quantitative questions, they were asked to score, from 1 to 5—with 5 being the most stressful—their level of stress related to marketing or

selling grain and dealing with price fluctuations. Assigning a number value to marketing stress or price volatility was not straightforward for some farmers. For example, one farmer spoke about how quantifying that stress was difficult because it changed depending on the time of year. They said:

At harvest time, and I'm not trying to overinflate my head, but I'm probably worth a thousand dollars an hour. Do you think I have time to sit down in front of a computer screen for an hour at harvest time trying to figure out what I should be doing?.... I'd like to answer a five during harvest and seeding, and maybe like a two during the rest of the year. I know that's not what you're looking for, but I think that's more reflective. –F11

In the case of this and other individuals who gave more than one answer, the average of these two values was taken to determine the mean group score (Table 7.7). Detailed scores are provided in Table 1, Appendix I.

The mean score of self-perceived stress from marketing grain was 2.53 for all farmers. For the two respondents who were categorized as being neutral on the Wheat Board, the mean score was 1. For those who supported the Wheat Board the mean score was higher at 3.5, while Wheat Board opponents had a lower mean score of 1.75, indicating less stress reported overall for the opponent group.

Table 7.7 Perceived stress of selling grain and market volatility (Summary of results, average of each group).

<i>Group</i>	Do you feel that selling grain has been a source of stress in your life? Please rate on a scale of 1 through 5.	Do you feel that price volatility has been a source of stress in your life? Please rate on a scale of 1 through 5.
<i>Neutral (n = 2)</i>	1	3.25
<i>Pro/Supporters (n =8)</i>	3.5	3.6
<i>Anti/Opponents (n =6)</i>	1.74	2.5
<i>Total (n =16)</i>	2.53	3.1

There were a number of aspects of marketing that caused farmers stress, including time spent marketing and marketing volatility. As an example of the impact marketing was having on farmers day to day, one farmer said:

I spend at least an hour every day trying to figure out the markets and when to price.

Whereas that hour previously could have been used on other things. And the stress level is high like I've got bills to pay and a family I'd like to spend time with. But I've got another job to do now.– F-11

The stress of market volatility, particularly the challenge of not hitting the highs of the market, was widely discussed among farmers. As one informant noted:

The biggest thing that I kind of found in talking to neighbours and acquaintances is when to kind of pull the trigger, because it was always that, “I don’t want to sell too early and then see the price go up.”–I05

Canola was often used as an example to demonstrate current stresses and anxieties that resulted from market volatility. During the time that the interviews were taking place, the price for canola

was increasing. One farmer explained that canola had been about 10 dollars a bushel for a long period of time, but the price began to rise 25 -50 cents per month and continued to rise.

And by December is up to twelve bucks. Hey, that's pretty good. So, everybody contracted in and over this past last month, canola has been selling for up to eighteen dollars a bushel... Because everybody contracted. Nobody knew with the price was going up and even if, no matter how hard they studied the situation, nobody knew the price is going up to eighteen dollars in March. –F06

While another farmer, discussing the price increase within a year from 10 to 18 dollars said:

The problem is we didn't know that was coming. So, most of us sold a lot of our canola along the way at profitable prices at the time. Really pale in comparison to 18 bucks. So, what's really difficult to get out of your mind sometimes is, you know, it's better not to do that math. –F08

One farmer, however, did estimate that they lost \$50,000 from not reaching the high of the canola market. He said "...my son's looking to buy a house and I wanted to help him out. Well, that hurt" (F11). He furthermore went on to say that "the price at the table or the store doesn't change ...So when they [grain companies] bought [the] commodity at the high price, they still made money on it. Why does it always have to come off the skin of the farmer? ...And I really find that not right" (F11). Other farmers also attributed the volatility of the market to grain companies. One farmer expressed feelings of frustration and anger.

...it's not stress... It's anger usually...you know you get to a point where you can really, you know, you begin to hate grain companies is what it boils down to in the end...The Wheat Board was put into place not because farmers, you know, just, banded together

and said, 'hey this might be a good idea to try it'. It was put in place because they needed to do it because the grain companies were ripping us off! –F02.

Although marketing grain and market volatility were seen as sources of stress they were often also seen as facts of farming, and for many opponents these were less stressful than operating under the Wheat Board and not knowing when they would receive their final payment. One opponent viewed the current market volatility as a “a source of opportunity” and added, unprompted “I certainly wouldn’t want the government to try to step in and fix that for us” (F08). Stress related to marketing and price volatility was seen to be mitigated by factors such as having a private trucking fleet and being situated near several grain companies. Moreover, financial stability was also seen as a buffer against marketing stress, with some farmers citing their minimal debt as a reason for lower stress levels concerning marketing and price fluctuations.

Grain marketing and contracts

When farmers sell their grain, they can do so by taking spot prices (prices at that moment), or by using forward or futures contracts. As explained by MCV (2022) in their report on contracts:

For grain farmers, contracts with grain companies are one of the primary ways to manage market and price risk, to manage cash flow throughout the marketing year, and to obtain debt financing. Additionally, when there are capacity constraints at the elevator, a producer might not be able to receive space allocations without a forward sale. Thus, contracts are important tools that allow producers to reduce price risk and to determine a marketing plan that best works for their farm with respect to cash flow considerations, and the management of storage space (p. 9).

In their report, MCV found that a majority of farmers regularly used forward contracts for the selling of their grain and other commodities. These contracts, however, were not without issues and nearly all farmers interviewed for this research spoke of the difficulties they had with grain companies over the delivery of grain or contracts in general.

Contracts with grain companies were seen by most, if not all farmers, as being one-sided, with one farmer saying that “the elevator companies make the rules” (F06). Grain companies were said to have made contracts that included penalties for farmers if they were late in delivering their grain or they did not fulfill the grade in the contract, but few or no penalties for grain companies if they were late in accepting the grain. Two separate farmers mentioned sharing their grain contracts with lawyers who had characterized the contracts as either very one-sided or “very aggressive” and one farmer was told that they should “never to deal with them again” (F04). Furthermore, they said “...when my lawyer looked at the [contract] he said that’s a terrible, dangerous document. He said if it ever went to court...it could raise the issue on who actually owns to the grain in the bin in your yard that’s not contracted” (F04). One farmer explained that they did not use forward contracts because the risk was too high. They explained that one year the grain they grew did not meet the grade they had signed a contract for, and were contractually obligated to write a cheque to the grain company because they could not fulfill the order. As she said “I had to write the grain company [a] cheque, and I won’t do that again” (F14).

A frequent issue encountered by farmers with forward contracts was delays in grain companies accepting delivery. Delays in collecting grain from farmers can have serious negative impacts for the farmers in two principal ways. In the first instance, the farmer is responsible for

maintaining their grain until it can be delivered, which increases the risk of damage to the grain.

This can cause both financial and emotional stress. As one farmer recounted:

I booked two hundred and fifty tons of canola in October, an elevator company couldn't take it in October. Couldn't take it until three days before Christmas. We had a very warm fall and in the meantime the canola heated and spoiled. I had to haul about 200 tons to an industrial crusher... But I had the contracts that I couldn't fill because they didn't have the canola anymore and I had to buy back, spot market price canola at fifteen dollars a bushel to replace the canola I contracted at twelve dollars and pay the difference. And the actual canola had to sell for about six dollars. –F06

Secondly, delays in delivering grain caused some farmers emotional stress—with some expressing embarrassment at having their cash flow interrupted and being late on payments, while others expressed frustration. For example, one participant, an opponent, said: "...and it's not just me, because, I mean, I talk to a lot of farmers and everyone's frustrated the same way, you know, about you sign the contract, they promise you October delivery and it's February and March" (F05). Delays in payment were less stressful for farmers who reported being financially stable, and with little to no debt. "...I might wait a couple of months sometimes... But is it undue? No. It's frustrating mostly" (F04). Delays, however, were a significant source of stress for farms approaching dates on which loans were due:

...I can specifically remember, you know, me and my dad going to meet with an elevator agent to try and explain the situation to him, that we had crop input loans that are typically due on the 15th of March. That's just the way they're usually structured from Farm Credit Canada. We were coming up to that date, and I mean, we didn't have the money to pay them. So, we were counting on those January contracts being delivered for

that to work. ... It causes considerable stress and headaches when things don't go the way they're supposed to. –F08

Due to these conflicts, some farmers mentioned that they have stopped dealing with companies they had disagreements with. This would reduce their options in the marketplace.

In addition to delays, grain companies could request delivery with little to no notice, which could be difficult for farmers who had already prepared the delivery of other commodities for other contracts. In this way, delays from grain companies hindered the ability of producers make plans for their farming operation. As one farmer noted:

...Because, I mean, even with Cargill here, they'll phone me up and say the need to haul your wheat next Monday. They'll phone me up Monday morning and say 'well the train didn't come in, they promised it would be here Friday'. So then, I have to call my trucker and cancel him...I've been told, too, that they'll say well, next week we're taking wheat and then they'll decide on Friday oh no we're not taking wheat, we're taking barley. So they change internally as well. And here we are stuck, we made all plans, and in the in the wintertime, you plough all your yard out so you can get out the bins. And then they cancel ya. I know it's frustrating.– F05

Another participant, who is both a farmer and runs a marketing consulting agency, noted that four out of her fourteen farmer clients faced cash flow issues due to problems with contracts with grain companies. She described it as the "dirtiest game around," a sentiment illustrated in the following story:

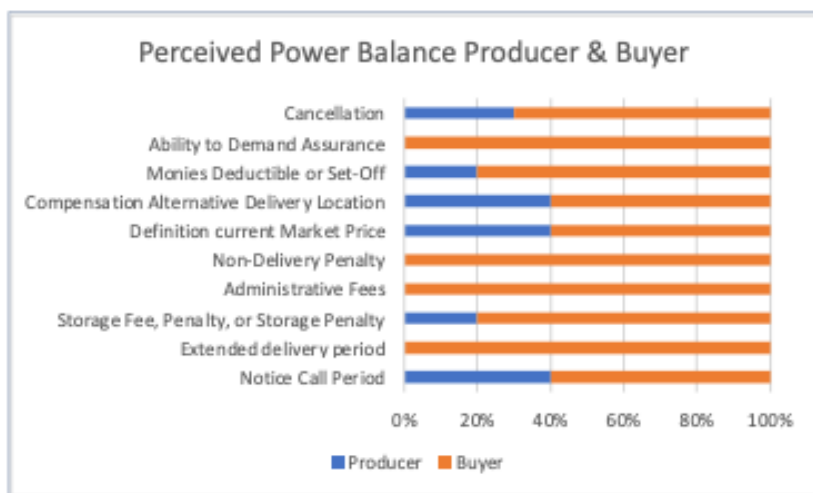
So, there was a company who had built a brand new elevator and we were contracted into it. Well, then their elevator didn't get done on time and they had a fight with the railway and so they couldn't take Jeff's grain. But a lot of other farmers in that area, they grabbed

their grain and took it to one of the other elevators...And I mean, for him, it went on for seven months. Then finally, he let them know, he said, "I need the cash" and they said, "well, tough, tough luck. It says right there in the contract, if we've got a problem, this is what's going to happen". So then he said, "well, OK, just to let you know, I'm selling this somewhere else that can move it and, you know we'll do what we can here, but I have to have this cash". Well, then they tried to take them to court and it got really ugly... we were able to resolve it, are you ready for this? Four years later. –F09

Commonly, farmers who shared their experiences of contractual disputes and other issues with grain companies often chose not to name the companies and even asked for anonymity to protect their business relationships and avoid potential backlash.

The issue of grain contracts has been a growing area of concern for farmers and has garnered the attention from a number of agricultural groups. Agricultural Producers Association of Saskatchewan (APAS) conducted a survey that found that 75% of respondents reported difficulties fulfilling grain contracts, with some having to pay interest upwards of 19% for replacement cost and administrative fees. These penalties and fees amounted between \$20,000 to \$300,000 being paid to grain companies (APAS 2021). After this survey, APAS along with SaskCrops, commissioned a review of contracts from MCV to specifically examine the issue more closely and to make recommendations to help "bring greater balance and predictability to grain contracts." Among other findings, the report identified that current contracts between farmers and corporations lacked transparency as the terms and conditions of contracts were often difficult to understand and penalty calculations were unclear. Contracts were also discussed as being one-sided, written in favour of the buyer. MCV also charted power imbalance between the producer and buyer, and is included in this chapter (Figure 7.4).

Figure 7.4 Perceived Negotiation Power Balance between Producer and Buyer



Source: Mercantile Consulting Venture 2022, p. 17

APAS later released a statement asking the Minister of Agriculture and Agri-Food Canada to help farmers against one-sided grain contracts. According to their press release, Saskatchewan farmers suffered a \$60 million loss due to contract cancellation by a buyer (although this buyer is unnamed) and this followed previous losses which occurred “when farmers experienced drought and couldn’t deliver product, they had to pay hundreds of millions on buy-out costs, admin fees, and legal costs” (McNally 2023).

Separately, the Western Canadian Wheat Growers sent a sample of 14 contracts to a lawyer who determined that “the sample contracts all appear to be drafted by buyers and are heavily tilted in their favour” (Kent 2021). It is noteworthy that the Wheat Growers association is concerned with these contracts, given they were strong advocates of dismantling the Board in favour of marketing freedom and marketing choice. This also suggests that had the interviews been conducted more recently, responses from opponents regarding competition, transparency, and sense of control could have differed, as the situation appears to have deteriorated.

Personal responsibility and Policy

One of the predominant themes that arose in discussions with farmers was that of personal responsibility both with regards to taking care of their farms, and for their own mental health. This theme came up organically throughout the interviews as well as when farmers were directly asked who they felt was in the best position to manage mental health: the individual, community or government? Responses varied but generally it was believed that the individual was the most important actor for improving mental health as “everything comes down to the individual first” (F06) followed by support at the community level (help lines, counsellors and other efforts). Farmers questioned whether the government had any role in improving farmer mental health, where one individual stated “I don’t think the government really has much effect on anything” (F06) while another person said “rural people won’t to respond to some... federal person coming to help with their mental state” (F10).

At the individual level, farmers were seen as having different levels of resilience, with some being able to cope with stressful events better than others. As one farmer said “the response to any particularly stressful event for one person might be almost a catastrophe” while “another person just deals with it” (F01). While another farmer said: “...you have to be flexible and progressive thinking, adaptable. Not everybody’s like that. Right?” indicating that ability to manage stress was seen as resulting from one’s personal characteristics. Other characteristics which were seen as impacting one’s ability to manage stress included attitude as well as background and current economic position. For example, as one farmer noted “I guess if you’re having problems... you sort of make up your mind if you can’t change it, get on with life” (F01).

Farmers were asked what they saw as some of the barriers to improving mental health, as well as what could be the potential policy levers for improving it. This discussion was important as it helped inform Chapter 9 regarding policy implications and recommendations.

Discussions on the barriers to improving mental health primarily focused on stigma and the difficulty for some farmers in seeking out help. As one farmer noted, “mental [health] issues has always been a very difficult thing to talk about as a farmer. But it’s also something that because it’s difficult to talk about, it’s not talked about that much” (F10). The difficulty for some farmers in opening up about or discussing their mental health was attributed to the inherent characterization of farmers as a “breed of people that don’t... that do everything ourselves...you know, it’s very, very difficult ask for help” (F17).

Some of the policy levers suggested by informants that could improve mental health included improving internet access in rural areas, increased mental health resources and more funding from the government for these supports. There was also an emphasis on supports that come from people with farming backgrounds. Efforts to reduce stigma on the topic of mental health were also seen as important to help normalize the issue within the farming communities. This included public health messaging such as advertisements on TV and social media. Funding to farm groups like APAS and other organizations that “have a larger ear for the rural people” (F10) should also be provided to support their efforts to promote mental health and community outreach.

Other policy levers discussed by informants included decreasing maximum revenue entitlement³⁴ to ensure railways moved more grain as well as subjecting railways to more

³⁴ Maximum revenue entitlement is an amount determined by the Canadian Transportation Agency which limits the total amount of revenue CN and CP can receive from transporting western grain (Canadian Transportation Agency 2020).

regulation “...and if they don’t want to move grain, let’s put some competition in. Farmers will buy their own trains” (F11). A few farmers spoke of reducing risk for farmers by addressing the cost-price squeeze. As one respondent said “the stress needs to come out of it [farming]. It needs to stop being all one sided where we take all the risk for the whole entire food supply for the world, because that’s a huge weight on our shoulders” (F14).

Lastly, one farmer highlighted the complexity of policy in agriculture, particularly with regards to reducing market and financial volatility:

You can’t produce a solution without creating another problem, like a lot of the stress would be reduced if we had some sort of guaranteed income for prices, valid insurance or crop insurance and stuff. That would be great, take a lot of stress off. but then some farmers would feel strangled by that lack of opportunity. Listless. I don’t know...Now, if I had a Wheat Board back again, I would lose some of my stress, that’s for sure. –F06

Chapter conclusion

The dissolution of the Canadian Wheat Board had a tremendous impact on farmers, both personally and on their communities. Through conversations, often an hour long or more, farmers shared with me many of their experiences about operating under the Board and farming today without it. My intent for this chapter was to capture some of the salient aspects of these conversations, both with regards to how the Board’s removal has impacted their day-to-day life and operations, but also how this change has affected their mental health.

A majority of farmers I spoke with felt that the loss of the Board had potentially exacerbated inequalities between farms, hastening the consolidation of farmland. This in turn has had a negative impact on rural communities, driving rural depopulation. It is also likely that

grain farmers in Saskatchewan are generating less income overall given that many have hired marketing specialists or long-haul truckers, as well as others to help manage their operations in this new environment. Aside from these new costs, there is also the issue that grain companies, unlike the Wheat Board, prioritize their own profits and have no mandate to maximize returns for farmers.

This research also found that despite the Canadian Wheat Board's single desk mandate ending nearly a decade earlier, the topic remains highly divisive. This situation is likely fuelled by misinformation and social media. A majority of farmers interviewed had expressed strong support or opposition to the Board, reflecting ideologically informed beliefs with regards to the benefit of collective marketing versus marketing freedom, respectively. For the most part, perceptions of farming post-Wheat Board differed between these groups. For example, opponents of the Wheat Board reported less overall stress with regards to grain marketing compared with Wheat Board supporters. Perceptions of market competition, control, and transparency also varied with ideological views, with Wheat Board opponents generally believing they have greater control over their operations, faced adequate competition, and saw the current system as more transparent compared with Wheat Board supporters.

Farmers in both groups, however, identified corporate concentration and lack of adequate competition in the grain sector as a major concern and source of stress. Finally, possible solutions for countering corporate concentration in the grain market were also differently conceived between groups, with some farmers advocating for the reinstatement of the Wheat Board while two opponents suggested price-fixing or a farmer-controlled cartel in order to gain market power. In the next chapter, these findings are further explored using critical realist

methodologies, particularly abduction and retroduction, informed by critical materialist political economy theory to examine underlying causal mechanisms driving these findings.

Chapter 7: Discussion

Abduction and retroduction

In this research, farmers discussed their experiences related to the removal of the Canadian Wheat Board, both on their day-to-day farming operations and on their mental health. Themes which arose from this research included increased inequities between farms, increased corporate power and declining rural communities. Farmers were polarized on the issue of the Canadian Wheat Board, and ideological cleavages were observed that coincided with different perceptions regarding the marketing of grain, including perceptions of market competition and transparency as well as on farmers' self-perceived levels of stress. As Campbell-Gale, Fletcher, and Reed (2023) note, these lived experiences, beliefs and perceptions at the empirical level of reality, “rarely capture the full picture of social complexity, but may point toward broader social, political, and economic trends at the actual level of reality” (p. 373).

The aim of critical realism as a framework for understanding social phenomena, however, is to uncover underlying mechanisms (in the real) that produce or facilitate events that we may or may not observe in the empirical or actual levels (Scambler 2001). In this way we are attempting to find the ‘story behind the story’, to identify causal mechanisms as well as broader structures and relationships which can help explain and understand the phenomenon we observe (Hoddy 2019; Mukumbang 2021). Two modes of inference used to achieve this within CR’s methodological approach are abduction (re-description) and retroduction.

Abduction, or theoretical redescription, refers to the recontextualization of phenomena within a conceptual framework or set of ideas using theory (Fletcher 2017; Danermark, Ekström, and Karlsson 2019). This process “involves interpretation of phenomena in relation to structures and mechanisms”, often giving new meaning to an already known phenomenon or providing a

new or different interpretation of a phenomenon (Danermark, Ekström, and Karlsson 2019). In this process, it is understood that theories here are fallible, that they may be “more or less accurate in describing or reflecting reality” (Fletcher, 2013, p. 99) and may be transcended by new theories (Danermark, Ekström, and Karlsson 2019). Although there are no fixed criteria for assessing the validity of an abductive conclusion, it is important none the less that theoretical interpretations and explanations be compared, evaluated, and even integrated where appropriate (Danermark, Ekström, and Karlsson 2019) with the aim of ensuring that the selected theory is the most appropriate (Fletcher 2013).

One of the key findings from this research was that perceptions of farming post-Canadian Wheat Board differed between opponents and supporters of the Wheat Board, including differences in self-perceived stress, with opponents reporting less stress with regards to grain marketing as compared with supporters. Theoretical re-description allows us to examine different theories for explaining this finding.

To begin with, an epidemiological approach to understanding these health disparities would view these results and ask what variables inherent to the individual might contribute to create the observed differences. This inquiry would then proceed to look at measurable differences between these two groups, including age, income, education level, or resilience scores, to examine possible mechanisms contributing to these differences. Uncovering this relationship could involve further statistical analysis or even the design of further studies such as a case control or cohort study. In this paradigm for understanding health, the focus is on what is quantifiable and measurable, such as prevalence and etiology of disease (Wilson 1988). Furthermore, in health science, and epidemiology in particular, the conception of health is predominantly informed by the social theory of positivism. Positivism maintains that only

knowledge derived through the scientific method is truly authentic (Bryant 2016). Knowledge is understood as neutral and value free, and presented without context (Lincoln & Guba, 1985; Wilson, 1988). Bryant (2016) argues that positivists do not generally consider the impact of larger social, economic and political contexts on the phenomenon being researched, but place their focus at the individual level.

There are what Aggleton (1992) describes as ‘social positivists’ who employ a model of understanding health which recognizes the impact of social influences, such as cultural and environmental factors which act on health, in addition to individual lifestyle and behaviours. Despite some acknowledgment that larger societal structures influence individuals’ behaviours, this model still places emphasis on the individual as a locus for action in improving health outcomes. Research and public health engagement is predicated on the assumption that individuals are capable of engaging in behaviour change, and making ‘healthy’ lifestyle choices, when research has shown this assumption to be questionable (Dougherty 1993). This approach has been criticized for de-politicizing the issue of ill-health and health inequalities and ignoring the larger societal processes which restrain individuals’ choices (Raphael 2003).

The social determinants of health approach (SDH) to understanding population health is another paradigm for understanding health, which while not rooted in positivism, nonetheless fails to capture structural and causal mechanisms leading to health inequities. The SDH refer to a broad range of societal factors which shape the conditions in which people are born, grow, work and age (World Health Organization 2018; Tremblay 2016; Health Council of Canada 2010). These societal factors include income, housing, food, the ability to participate in society, and other determinants (Health Council of Canada 2010; Raphael 2012) The SDH approach is also described metaphorically as taking a “upstream” approach to health referring to the larger

determinants which shape living and working conditions, compared with the “downstream” approach which is focused on medical or patient care at the micro or individual level (Graham 2007).

Although the SDH framework has shifted the conversation from individual to social factors in health disparities, it is inadequate, in that it often overlooks the political and economic dimensions of health and health inequities (Bambra (2011a). Bambra writes:

Too many contemporary accounts of health and health inequalities focus exclusively on the social determinants of health without recognising that these meso-level social determinants are themselves shaped by macro-level structural determinants: politics, the economy, the (welfare) state, the organisation of work, and the labour market—the political economy of health (p. 21).

The political economy approach to health then, by contrast, explicitly examines the economic, political and social processes which shape health (Bryant 2016). The critical materialist stream of political economy (CMPE) further examines how power and the influence of specific sectors—such as the corporate and business sector—shape policymaking to create the policies that lead to poor health (Bryant 2016). Using the CMPE approach to understand these findings, the disparities in self-perceived health can be understood by placing farmers in the larger social, political and social context in which they are embedded. Furthermore, CMPE aligns well with CR methodological tool of retroduction, which is aimed at explaining social phenomena by uncovering the causal mechanisms, processes and structures that produce events in the empirical (Danermark, Ekström, and Karlsson 2019; Denzin and Lincoln 2011).

To recapitulate, critical realism posits that reality consists of three domains: the empirical (experienced events), the actual (events whether experienced or not), and the real (underlying

mechanisms, structures, and powers that cause events). As Campbell-Gale, Fletcher, and Reed (2023) write “...lived experiences, perceptions, and beliefs at the empirical level reveal a part of reality—a part shaped by human observation and understanding. These empirical patterns rarely capture the full picture of social complexity, but may point toward broader social, political, and economic trends at the actual level of reality” (n.p.).

In this way “critical realism attempts to identify the deeply rooted structural causes of the phenomenon” (p. 372). Furthermore, the explanatory power of different key causal mechanisms is evaluated in an effort to explain how these mechanisms influence activities, events and processes (Danermark, et al., 2019, p.130). It is an iterative process, moving between the empirical and real levels to interpret the data and justify conclusions, yet hypotheses derived from this study are not conclusive; rather they provide a foundation for ongoing refinement and testing through continued inquiry (Fletcher, 2013 p. 97).

The key themes which arose from this research, in particular widening inequalities, increased corporate concentration, rural decline and political polarization, were all important findings, which although on the surface may appear to be unrelated, are interconnected and can be understood by situating them within the larger context of neoliberal capitalism. Specifically, they reflect the broader shift towards neoliberal capitalism and the subsequent 'neoliberalization' of agriculture, which has resulted from decades of policymaking at the macro-level. This shift has had profound effects on the agricultural sector, influencing individual farmers and their communities.

Neoliberalism and the neoliberalization of agriculture

Neoliberalism³⁵ can be understood as “a set of economic reform policies that...are concerned with the deregulation of the economy, the liberalization of trade and industry, and the privatization of state-owned enterprises” (Ganti 2014, cited in Knutilla, 2023, p. 127).

Neoliberalism is thus a set of practices which support capitalist regulation favouring corporate interests. In terms of agriculture, this has meant the integration of agricultural and food markets into speculative systems of investment and finance (Essex, 2016, p. 516-518). The neoliberalization of agriculture was discussed in length in Chapter 2 using food regime analysis which mapped the “development of a global corporate dominated and market-oriented neoliberal system of agricultural production, trade, and consumption” (Essex, 2016, p. 514) in what McMichael (2013) views as the ‘corporate food regime’.

Essex (2016) points out that while there is “no one singular form of neoliberal agriculture ...there is a highly differentiated set of interlocking systems shaped strongly by neoliberal principles and frameworks...” (p. 519-520). Therefore, our discussion of neoliberalism and its impact on farming pertains to the Canadian context, and the province of Saskatchewan in particular. Already, the neoliberalization of agriculture in Saskatchewan has been associated with the growth of large-scale industrial farming, growing dependence on international trade, as well as financialization and consolidation across the agri-food chain, coupled with reduced market-stabilization measures and agricultural support programs for farmers (Campbell-Gale et al.,

³⁵ As discussed by Murray Knutilla, 2023 there are five key points of neoliberalism: 1) The rule of the market (liberating “free” enterprise from the state) 2) cutting public expenditure for social services (e.g., education, transportation, healthcare) 3) Reducing the safety-net for the poor 3) Deregulation 4) Privatization 5) Eliminating the concept of “the public good” or “community” and replacing it with individual responsibility.

2023, p. 367). As Pied and Sappleton (2023) note, for decades sociologists have “documented how shifts to large industrial farms contribute to population declines, class inequalities, and fewer investments in rural economies” (p. 1106).

The following sections will examine the impact of neoliberalism on farming in Canada, to situate this research’s empirical findings and guide this discussion. To do this, I employ macro, meso, and micro levels of analysis, beginning with neoliberalism at the macro-level, which examines changes to public policymaking over the past 50 years. Next, I will discuss the impacts of these policy changes and of neoliberalism writ large for farming communities at the meso level and on individuals at the micro level.

Macro-level: Federal policies and agriculture

In "Eroding a Way of Life," Murray Knuttila (2023) provides a detailed account of 50 years of Federal policies and a shift in rhetoric away from Keynesian economic principles towards neoliberal, free-market ideologies, and detailed its impacts on the agricultural sector. For our purposes, it is enough to say that post-World War II Canadian governments adapted principles of Keynesian economics and increased spending and government investment across sectors, including creation of old-age pensions and old-age security, unemployment insurance, the *National Housing Act* (1964), and the creation of the Canadian Broadcast Corporation and funding for arts and culture (p. 91). With regards to agriculture, as Jaffe and Quark (2021) note, the Canadian government was “committed to protecting domestic agribusiness interests and encouraged by the collective efforts of farmers, the Canadian government specifically intervened against market forces to secure and protect rural livelihoods from the ravages of free market capitalism” (p. 100). This was perhaps best exemplified by the establishment of the Canadian

Wheat Board (1947) as well as the Agricultural Prices Support Act (1944) which supported farm prices during from the transition from wartime to peace time (p. 96-97).

The Crow's Nest Pass Agreement of 1897, also known colloquially as the Crow Rate, was another important policy, as it regulated train freight rates, stabilizing the price of shipping for producers—a particularly important issue for grain and oilseed farmers (Fletcher 2013). Criticism of the Crow Rate began to mount in the 1960s and 1970s. For example, the 1974 Snively Commission³⁶ concluded that the “Crow Rate had resulted in the railroad companies losing money and had hampered efficiency in the entire system” (p. 146). In 1983, the *Western Grain Transportation Act* discarded the Crow Rate, which was replaced with the “Crow Benefit”. Freight rates doubled and tripled for some farmers. The Federal Government gave a one-time payment to the provinces as compensation under the Western Grain Transition Payment Program which was made available to farmers (p. 159).

Throughout the 1980s and 1990s the size of the civil service continued to be reduced, government spending on social and economic programs was cut or entirely removed, and numerous crown corporations were sold, including the sale of Canadian National (CN) rail to private investors by the Liberal government of Jean Chrétien. For Canadian agriculture, the focus was now predominantly on free trade and global economic matters, a focus which intensified under the Mulroney Conservatives as they pushed for a new trade agreement with the United States (Knuttila 2023).

³⁶ The Snively Commission set up under the Liberal Trudeau government, the purpose of which to investigate various aspects of railway practices including examining the costs and revenues (Knuttila, 2023).

Supreme Court justice Emmett Hall, who led a Royal Commission on rail and grain transportation between 1975 and 1977, noted in his report “Throughout the hearings there was almost universal support for the Canadian Wheat Board. There is probably no single institution in Western Canada which affects the daily lives of farmers more than the Canadian Wheat Board” (Hall Commission, cited in Knutilla, 2023, p. 149). By the 1980s, however, anti-Wheat Board sentiment had grown. The Wheat Board had become a trade-related concern as it was perceived as an impediment to fair and free-trade particularly by farmers in the United States (p. 170). As discussed in length in Chapter 4, changes to the board began in earnest in the late 1980s when Trade Minister Charlie Mayer used an Order-in-Council to remove oats from the Board in 1989 (Skogstad 2005), and lost its single-desk mandate under the Harper Conservatives in 2011 before having its assets sold off in subsequent year. The Canadian Wheat Board, as an entity premised on collective marketing stood in direct opposition to the tenets of neoliberalism and the belief in the free-market. Indeed, the rhetoric extolled by politicians during the parliamentary debates over the board’s future (Chapter 4) regarding “marketing freedom” and “marketing choice” reflects this ideology and these discourses were also present thorough out discussions with farmers who were Wheat Board-opponents.

By the late 20th century nearly all provincial governments had embraced a neoliberal policy model of reduced spending—usually including cuts to both social and economic programs—and an increased reliance on market forces. These changes to welfare systems informed agricultural legislation (Knutilla, 2023, p. 167) as exemplified by policy changes such as the removal of the Crow Rate, and importantly, the dismantling of the Canadian Wheat Board. At the community level (meso), neoliberal policymaking negatively impacted upon both rural and urban spaces, as declining federal transfers for social spending decreased social services and

infrastructure. The government of Saskatchewan further contributed to this decline by allocating little money to the health, housing, social and educational needs of rural areas. This is perhaps best exemplified by the recent axing of the provincial bus system—the Saskatchewan Transportation Company—in 2017, along with opening up farmland for sale to corporations and individuals living outside of the province (Jaffe and Quark 2021).

How neoliberal policymaking has impacted agriculture at the community and societal level will be discussed next, particularly with regards to the impacts on rural depopulation and social polarization.

Meso-level: rural decline and social polarization

The neoliberalization of agriculture has, among other things, led to the growth of large-scale industrial farming and an increase in the financialization and consolidation of land. Neoliberal policymaking has played a role in changing land ownership dynamics within the province, as detailed by Jaffe & Quark (2021). The lifting of restrictions in 2003 on land purchasing eligibility paved the way for owners outside the province, including corporations, to acquire land. This deregulation attracted investments from pension funds and similar groups, contributing to a surge in land prices. As noted in Chapter 3, land consolidation is also driven by the cost-price squeeze as farmers expand and farm more land as a way to deal with diminishing margins.

The impacts of farm consolidation and land concentration in Saskatchewan are not benign. Magnan, Davidson, and Desmarais (2022) observed that the reduction in the number of farms and rural families as a result of farmland consolidation was leading to a weakening of community bonds and eroding the social and economic foundations of rural areas. The study also

highlighted that the increased concentration of land ownership was aggravating disparities among farmers, as smaller operations struggle to compete with larger farms in acquiring or leasing land. The overall disappearance of farming families due to land consolidation was seen as a predominantly negative development which led to the depopulation of rural towns and villages and a decline in local services.

Discussions with farmers in this study reveal that land consolidation is a concern, especially as it was associated with driving inequalities and negatively impacting rural and local communities. While the rise in farmland consolidation couldn't solely be attributed to the demise of the Wheat Board, there was a sense that its dismantling severely accelerated the process in two ways. First, when the Board was dismantled, it likely hastened the retirement and departure of numerous grain farmers, resulting in a significant amount of farmland becoming available for purchase by other farms. Additionally, because the Wheat Board functioned as a type of equalizer among farms—ensuring that all farms received an equal price for their grain based on quality—it meant that larger farms did not receive a higher price for their grain, compared with smaller farms that didn't hold the same negotiating power.

This increasing disparity in land ownership adversely affects the social fabric of these rural communities in a number of ways. Campbell-Gale, Fletcher, and Reed (2023) examined how the neoliberalization of farming has decreased adaptive capacity to climate change in rural Saskatchewan. They observe that through the expansion and consolidation of farms and subsequent rural depopulation, social infrastructure has been weakened, including the decline of small businesses, banks, hospitals, and transportation among other services. This erosion of social infrastructure increases the vulnerability of rural communities to climate disasters while decreasing their adaptive capacity to manage climate extremes. Previous to this, Fletcher et al.

(2020) observed that rural depopulation was decreasing farmer's social capacity including a decrease in social relationships, networks and connections, all of which can be assets to draw upon in times of need. Increasing social isolation and rural depopulation have made cooperation difficult and impacting the vital informal economies of exchange that support rural communities (Mendly-Zambo and the NFU 2023). Another important consequence of weakening of social cohesion within rural communities has been the apparent rise in social polarization, a phenomenon often linked to the escalating social inequality associated with neoliberal capitalism (Walks 2014).

In this research as well as research conducted with the NFU, the issue of social polarization arose as an important factor contributing to stress amongst farmers (see Mendly-Zambo and the NFU, 2023). For this research, some farmers and informants felt that polarization was becoming more pronounced and was having a negative impact on communities and on social cohesion especially during the height of the debates over the Canadian Wheat Board. One informant noted "... some of these battles, some of these debates weren't debates...I would call it very Trumpian sort of tactics, but the anti-Wheat Board folks coming out of the 80s and 90s into the 20s, relied on bullyboy tactics at meetings....they would deliberately be over confrontational at public meetings..." (I09). The observation that polarization is infiltrating community-level debates and policy (Pied and Sappleton 2023, p. 1105) has been noted by other researchers as well (Warner 2019; Gartzou-Katsouyanni, Kiefel, and Olivas Osuna 2022), but its impact on the mental health of communities and individuals needs to be further explored.

In Saskatchewan, like much of Canada, political polarization has intensified, particularly during, and as a result of, the pandemic (Provost 2022). Jaffe and Quark (2021) argue that decades of neoliberal policymaking and agricultural restructuring have intensified rural

inequality and individualism by undermining the social resources necessary for the welfare and prosperity of individuals and their communities. This has contributed to the increase in social polarization in agricultural areas and across the province of Saskatchewan³⁷. While social polarization has been studied in rural areas in the US and Canada (see Pied and Sappleton 2023 and Holowach and Parkins 2023), the impact on agricultural communities warrants further exploration, particularly with regards to the Canadian setting and how it impacts or interacts with mental health. More needs to be understood about this topic, especially as it may affect the function and viability of democratic institutions.

Finally, it has been argued that one of the biggest changes to farming in past 50 years has been the shift away from mixed family farming towards large-scale farming which exclusively farms a particular commodity like wheat or dairy (Knutilla, 2023). This shift in farm operations also has a noted impact on social solidarity within farming communities. As Jaffe and Quark (2021) write: “Solidarities among producers are breaking down as the interests of farmers of different sizes continue to diverge and farmers overtly compete with each other for land and labour.” They further add that the decline of mixed farming has “threatened old solidarities based on common interests” (p.110).

As farmers increasingly see one another as competitors “rather than producers with common interests and circumstances,” the social distance between farmers has widened, which “blunt[s] successful strategies used in the past, such as organizing to influence farm policy or secure greater market power” (p. 110-111). The potential impact of this apparent erosion of social cohesion among farmers is a crucial area of research. This is particularly urgent given the

³⁷ While these authors write specifically about the farming sector, this chapter is part of a larger collection of works about the rise in populism and polarization in the province of Saskatchewan.

escalating challenges of climate change, where a unified approach will be critical for the effective development and execution of policies and mitigation strategies.

Saskatchewan has been described as the birthplace of agrarian socialism in North America (Jaffe and Elliott 2021), but as Knutilla (2023) writes, agrarian class consciousness has shifted away from community thinking towards an “individualist and entrepreneurial world view” (p. XXIV). As we will see in the next section, I argue this is a direct result of the internalization of neoliberal discourses and ideology.

Micro-level: the individual and neoliberal subjectivity

Neoliberal ideology emphasizes individual freedom and responsibility (Knutilla 2023).

Freedom—as Braedley and Luxton (2010) argue: is “tied to capitalism as a system that promotes expansions of wealth” and allows individuals the ability “to pursue wealth, and therefore to pursue their desires” (p. 7). In this way, neoliberalism promotes the idea that individual’s freedom of choice is maximized through competition, while being strongly opposed to collectivism or economic redistribution (p. 8). The discourse of individual freedom was noted frequently in this research, particularly from Wheat Board opponents, who were in favour of the free market and discussed “marketing freedom” and “marketing choice” at multiple points throughout the interviews. Regardless of whether marketing freedom led to financial gains or losses, the sentiment that “the choice was ours” (F03) was paramount. Freedom and choice superseded the risk involved with farming in the free-market.

Farmers discussed having the freedom to choose which company they sold their grain to, if they wanted to sell it as feed/ethanol or for human consumption, and if they wanted to drive it further distances to take advantage of better pricing. Farmers also had the option to not sell their

grain, but rather hold on to it until prices for their commodities increased³⁸. These choices helped foster a sense of marketing freedom and marketing choice among farmers, even in instances where the number of grain companies a farmer could sell to was limited.

Some questioned whether farmers truly have the capacity to make knowledgeable choices and to effectively control their income generation. For example, one informant—a farmer who was involved with both the Canadian Wheat Board and the NFU—discussed how he felt farmers were actually limited in their ability to command a good price for their grain because of something called a commodity trap marketing³⁹ system, which he felt farmers were now in but about which they were unaware.

He explained that the commodity trap marketing system refers to a situation where farmers make sales decisions based on limited information, often without considering broader market trends, international pricing or logistics—because they don't have access to that information. Although farmers may be making what they feel is the best decision at the time for their farm, “farmers were actually making the wrong decision because they weren't seeing the bigger picture. They were only seeing the picture as it related to their own farm... and they don't necessarily know it.” This informant saw this as not only being to the detriment of the individual farmer, but for all grain farmers collectively. As he explains “...and when they're making that wrong decision, they might be bringing other farmers' incomes down with them because the grain companies are only going to buy grain from the farmers that are asking the lowest amount of money. So, individual farmers can affect the market by selling too early” (I09).

³⁸ Delaying the selling of grain differs for any individual farmer based on their income needs and storage ability.

³⁹ Informant attributed “commodity trap marketing” to Marlene Boersch from Mercantile Consulting Venture.

The larger question of individual choice as framed within neoliberal discourse has been subject to extensive critique within the social sciences. Braedley and Luxton (2010) question the value of individual choice within the larger context of capitalist relations of production, writing that, “while neoliberals stress that individuals make choices, we see that individuals make choices under conditions that are not of their own making. These conditions are frequently shaped by decisions made by the small number of people who hold the reins of power” (p. 11). In the context of grain farming, the ‘people who hold the reins of power’ are grain corporations and corporations in other parts of the food system who wield considerable power over farmers, especially with regards to grain contracts. This is perhaps unsurprising given that large transnational agri-food companies have revenues described as “dwarf[ing] those of many governments” (p. 216). As an example, Cargill– a main grain handler in Saskatchewan–operates in 125 countries and had a revenue of \$134.5 billion in 2021 (Knuttila 2023).

Neoliberal formulations of Freedom have been similarly critiqued. For example, Knuttila (2023) writes, “In class-structured societies, the notion of freedom is mediated by the fact that freedom for one class may not necessarily entail freedom for another” (p. 190). He further adds:

The end of the CWB meant the end of the concept of producers pooling their grain to provide a greater degree of equity in the form of returns for all producers, regardless of the size of their operations. Also lost was equal access to all markets (regional, national, and international) for all producers, again regardless of size, and access to the resources necessary to organize and arrange the marketing of their grain. Lastly, lost was the single desk that sold all producers' grain in an orderly manner, as opposed to multiple producers scrambling and competing for markets as best they can (p. 109).

Another theme which arose in conversation with farmers was that of personal responsibility. Personal responsibility was seen as necessary for both taking care of one's farm, and for one's own mental health, with the latter being attributed to individual's innate levels of resilience, with some being able to cope better than others to stressful events. There was also the characterization of the "other" farmer, who did not thrive after the demise of the Board because they were viewed as unskilled, unmotivated or dependent on the desk. While there might be some acknowledgment in larger structural factors shaping their farming environment (e.g. cost-price squeeze, climate change), it ultimately came down to the individual and their ability to adapt and manage to their own environment as well as manage their own feelings and well-being.

The concept of neoliberal subjectivity offers a helpful lens to explore how neoliberalism can shape individual farmers' perceptions of both themselves and of other farmers. Houghton (2019), building off the work of Michel Foucault⁴⁰, views neoliberal subjectivity as embedded into the thoughts and actions of people, forming a 'common-sense', a set of heuristics through which we understand and interpret the world. This also shapes how people understand themselves as individuals and how they develop their identities. Houghton writes: "The ideal neoliberal subject seeks to make an enterprise of their own life....The discourse of the neoliberal era of capitalism differs from previous iterations of capitalism because it places the responsibility for securing satisfaction primarily on the individual, making it the consequence of personal choice" (p. 623). Neoliberal discourses provide farmers a locus and sense of control over their

⁴⁰ Foucault, M. (1988) 'Technologies of the self', in L.H. Martin, H. Gutman and P.H. Hutton (eds.) *Technologies of the self: A seminar with Michel Foucault*. USA: University of Massachusetts Press. Foucault, M. (2010) *The birth of biopolitics: Lectures at the Collège de France 1978-1979*, trans. G. Burchell. Basingstoke: Palgrave MacMillan.

own lives, even amidst impending environmental collapse and growing corporate concentration.

This is also referred to as “responsibilization” which Pyysiäinen, Halpin, and Guilfoyle (2017) defines as “a governance praxis that operates through ascribing freedom and autonomy to individuals and agents...while simultaneously appealing to individual responsibility-taking, independent self-steering and ‘self-care’” (p 216). In their paper examining Australian neoliberal agricultural policies, they argue that responsibilization can be viewed as farmers’ striving to maintain personal control in the context of uncertainty, as well as through an ‘appeal of freedom’ mechanism, which relies on “discourses that tap into and resonate with the subjects’ desires of personal freedom, quality of life and fulfillment of self realization potential” (p. 219).

In many ways, the idea of collusion ties together both marketing freedom and responsibilization, as it is a way to negotiate the benefits of collective activity but couched in terms of individual freedom and, importantly, freedom from government intervention. A farmer-controlled wheat cartel could allow farmers to market collectively, but on their own terms, which may appeal to a sense of freedom and control. Additional research is required to deepen our understanding of this topic and to gauge how widespread this idea actually is.

Another finding from this research was that perceptions of farming after the Wheat Board differed between opponents and supporters, including differences in self-perceived stress. In this case, opponents reported feeling less stress with regards to grain marketing compared with Wheat Board supporters. This finding may not be all that unique given that studies have found that politically conservative individuals are happier than liberals (Schlenker, Chambers, and Le 2012). These researchers suggest that the “happiness gap” may be accounted for by personality differences and attitudes associated with positive adjustment and mental health. Specifically, they found that conservatives had a more positive outlook, expressed greater personal agency,

more transcendent moral beliefs and a generalized belief in fairness which accounted for them being happier. A more recent study looking at greater life satisfaction, similarly, found that conservatives reported greater meaning and purpose in life than liberals. This finding was significant after adjusting for religiosity (Newman et al. 2019).

It's also important to consider additional factors that might explain the difference in self-reported stress, such as differences in farm size and income among groups. Opponents owned larger farms on average, with the average acreage for this group being 9,129 acres, compared with an average of 5,480 acres for supporters and those who were neutral. This financial and territorial advantage might have reduced stress levels among these larger-acreage farmers, making them feel less pressured in terms of marketing their products. Therefore, it would be beneficial to conduct more research into the relationship between happiness, self-perceived stress, and ideological divisions, especially within the context of Canadian farming.

The role of neoliberal discourses on mediating mental health should also be explored especially as neoliberal ideology—while at the collective level is associated with overall poorer collective health—at the individual level may promote self-esteem, self-efficacy, and self-reliance (Girerd, Verniers, and Bonnot 2021).

To explore this further, research in Canada during the height of the COVID-19 pandemic examined how neoliberal ideology can impact health and well-being at the individual level. They did this by examining three separate beliefs underpinned by neoliberal ideology, including “Personal Wherewithal” (e.g, “Any goal can be achieved with enough hard work and talent”) and found that this belief was associated with higher life satisfaction and higher self-rated physical health as well as social trust. This discourse type was also associated with lower loneliness and having fewer health diagnoses (Card and Hepburn 2023).

Indeed, there is a growing literature on the effects of neoliberalism on health including Kingsmith's (2023) recent work examining increasing anxiety in modern capitalist societies, known as 'anxio-capitalism' (2023, p. ii), which is worthy of further exploration by health scholars.

Chapter conclusion

Critical realism aims to explaining social phenomena by uncovering the underlying, or casual mechanisms, process and structures (in the real) that produce events in the empirical or actual levels (Scambler 2001). Using CR methodology, this research has looked for the 'story behind the story' and identified neoliberal ideology and neoliberal policymaking as an underlying causal mechanism. This chapter explored the multi-levelled impacts of neoliberal policies on agriculture in Saskatchewan. Particularly, I examined how the shift away from Keynesian policies towards neoliberal policymaking has facilitated a number of changes in agriculture including increased financialization and consolidation of farmland, rural depopulation as well as increased social polarizations. This chapter has also discussed the broader implications of neoliberalism on the individual farmer, including how neoliberal subjectivity may be further fostering individualism and entrepreneurial world view over collective solidarity, and the possible impact that neoliberal ideology may have on individual health and well-being.

In the next and final chapter of this dissertation, I will discuss some policy options which address some of the underlying systemic factors contributing to stress in the farming sector, including growing corporate power in the grain sector. This final chapter will also discuss limitations to this study as well as identify future areas of research.

Chapter 8: Conclusions, policy recommendations and future directions

The purpose of this research was to examine the social, political and economic impacts that removing the Canadian Wheat Board had on the lives of grain and oilseed farmers in Western Canada and on their mental health and well-being. This research is significant for two key reasons. First, the impact of removing the Wheat Board has not been previously examined, both in terms of its economic impact and in terms of its impact on individual farmers and rural communities in Western Canada. Secondly, this study was conducted against backdrop of a burgeoning mental health crisis among Canadian farmers—a crisis inextricably linked with the social determinants of health. It was important, then, to examine the removal of the Wheat Board as policy, with its attendant effects on the distribution of the social determinants of health. This research was guided by existing literature linking larger agricultural policies—particularly trade liberalization, and market volatility to declining mental health and increased farmer suicide (Purdon and Palleja 2020; Alt 2019; Kennedy and King 2014; Merriott 2016). In the Canadian setting, this also included research indicating that past market uncertainties, particularly in hog farming, have led to high rates of farm closures and declining mental health among these producers (Nairn, personal communication, 2018).

To examine the impact of dismantling the Wheat Board on western Canadian grain farmers, research was conducted through in-depth semi-structured interviews with both farmers and informants, and was guided by four broad questions: 1) What are the associated ideological, political and economic underpinnings of the policy related to the removal of the Wheat Board's single desk powers? 2) What has been the social, political, and economic impact of this policy change on farmers in Saskatchewan? 3) What are the lived experiences and self-reported mental health statuses of farmers in light of the dismantling of the Board?; and finally, 4) How do

farmers perceive the policy environment they inhabit, and what sense do they have of how these environments have affected their wellbeing?

This research found that dismantling of the Canadian Wheat Board impacted both Saskatchewan grain farmers and grain farming across Canada in a number of ways. The removal of the Board has likely meant that grain farmers are generating less income today, because they are now hiring specialists or have other costs associated with operating in this new environment. They are also likely receiving less for the value of their grain because, unlike the Wheat Board which prioritized maximizing returns for farmers, grain companies prioritize their own profits. The loss of the Board was also seen as potentially escalating farm inequalities and the attendant consequences therein.

Despite the Wheat Board's monopoly ending a decade prior to this research, it remains a highly contentious issue among farmers and policymakers, one which is likely intensified by misinformation and debates on social media. For the most part, perceptions of farming post- the Canadian Wheat Board are split between farmers who identify as supporters or opponents of the Board. Notably, opponents reported less overall stress with regards to grain marketing and price volatility compared with Wheat Board supporters. Opponents of the Wheat Board also generally believed that they had greater control over their operations, that there was adequate competition among grain companies, and saw the current system as more transparent compared with Wheat Board supporters. Farmers in both groups, however, identified corporate concentration and lack of adequate competition in the grain sector as a major concern and a source of stress. Proposed solutions to the problem varied. While some supporters suggested reinstating the Canadian Wheat Board, two opponents suggested price-fixing or establishing a farmer-led cartel to gain market power.

Finally, I argue that the key themes which arose from this research can be understood by situating them within the larger context of neoliberalism. Specifically, they reflect the broader shift towards neoliberal capitalism and the subsequent 'neoliberalization' of agriculture, which has resulted from decades of policymaking at the macro-level. This shift has had profound effect on the agricultural sector and has implications for collective solidarity at the community level.

Policy recommendations

This thesis presents areas of policy action to improve farmer mental health by addressing economic precarity and corporate power in the grain sector, enhancing mental health services, and revitalizing rural communities and the farming sector at large. The five recommendations include:

1. **Reinstating the Canadian Wheat Board:** Restore stability and collective marketing power for grain farmers, providing a more predictable and equitable selling environment.
2. **Strengthening Canada's Competition Act:** Help curb corporate monopolies and promote fair competition in the grain sector.
3. **Strengthening grain contract protections:** Ensure transparency and fairness in agreements between farmers and grain companies.
4. **Expanding access to mental health care for farmers:** Increase availability and accessibility of mental health services tailored to the unique needs of the farming community.

5. **Rebuilding rural infrastructure:** Invest in rural infrastructure to foster community resilience, enhance social cohesion, and counteract the negative effects of rural depopulation and political polarization.

These recommendations range from specific and targeted policies to broader and more general initiatives, collectively aiming to enhance the welfare and prosperity of rural communities while addressing the structural factors impacting farmer mental health . While this research is specifically based in Saskatchewan, these recommendations are transferable to the rest of the Prairie region as well.

As economic precarity is a key driver of poor mental health, it is crucial that policies which can address this issue are enacted. There are a number of points within the food system where action can be taken that targets economic instability, including the cost-price squeeze, commodity speculation, financialization of farmland and the climate crisis. Examples of policies which could mitigate the destabilizing effects of commodity speculation and the cost-price squeeze could include reinstating or establishing single-desk selling or supply management systems for commodities currently in the open market. Legislation establishing the inalienable right of farmers to save, reuse, exchange and sell seed could help mitigate the effects of the cost-price squeeze (Mendly-Zambo and the NFU 2023). The first three policy tools discussed in this thesis are specifically aimed at addressing economic instability and include reinstating a single-desk seller to sell western Canadian grain, strengthening Canada's Competition Act, as well as enhancing grain contract protections. These policies are intended to wrest power away from grain corporations and tilt the balance back towards the farmer. Recommendation 4 is concerned with expanding access to specialized, inclusive, and accessible mental health services for

farmers. The final recommendation is aimed more broadly at revitalizing rural communities and enhancing overall social and economic well-being in agricultural communities.

Recommendation 1: Reinstate the Canadian Wheat Board

Reinstating the Canadian Wheat Board is one possible way to level the playing field for farmers contending with large corporations in the grain sector. The Wheat Board was created to ensure farmers received equitable prices for wheat and barley in an era when the grain and rail sectors were dominated by a few powerful companies, and the history of the Canadian Wheat Board is part of a larger history of Canadian producers struggling to better their material reality (Winson 1993).

Today's agricultural landscape, dominated by a few private grain companies and two major railways, Canadian Pacific Railway and Canadian National Railway, resembles the early 20th century, leaving farmers with little negotiating power over the sale and shipping of their grain. Reinstating the Canadian Wheat Board could restore stability to the farming sector by enhancing collective marketing power for grain farmers. This could potentially alleviate stress for many farmers, especially those operating small to mid-sized or mixed-commodity farms by providing a more predictable and equitable selling environment. As one farmer noted “Now, if I had a Wheat Board back again, I would lose some of my stress, that’s for sure” (F06).

The extent of farmer support for reinstating the Canadian Wheat Board is uncertain as this topic was not directly investigated in the study. Nevertheless, this research did find that numerous supporters of the Board, along with two of its critics, would be open to its return albeit with adjustments to provide farmers with increased independence and flexibility. Another frequently mentioned suggestion was that the Wheat Board “could have done better in getting its

information out to farmers. The information was there but not in a farmer friendly fashion” (F11). This sentiment was echoed by others in this study who felt that the work that the Board did was underappreciated because it was not properly communicated to the public and to farmers. As one farmer said, “the Wheat Board didn’t have a good enough marketer to market themselves back to the people” (F14). Any new iteration of the Board would have to focus on communicating its benefits to farmers. As one informant explained to me, the Canadian Wheat Board was able to provide commercial financing to customers for their purchase. The Board was underwritten by the Canadian Government and was able to borrow the money used for customer financing at the same interest rates as banks, meaning the Board profited from interest charged for customer financing, and redistributed that profit back to farmers. In this way the Board provided financial advantages above and beyond the just the sale of grain that farmers selling in an open market can’t access.

Calls to reinstate the Wheat Board have periodically made headlines. In particular, the Canadian Wheat Board Alliance made such a call in 2016 (Canadian Press 2016), and the issue resurfaced in 2018 when the Union of Canadian Transportation Employees (UCTE), representing port and transport workers in Churchill, Manitoba, urged the federal government to reacquire the Canadian Wheat Board from the Saudi consortium that now owns it. This latest call was in response to a trade dispute, following the Saudi government's announcement that they would cease purchasing Canadian grain. In their press release UCTE argued that this move by Saudi Arabia illustrates a disregard for the priorities of Canadian grain farmers, and furthermore unlike the Wheat Board, there is “clear evidence that they can no longer be trusted to put the interests of grain farmers first” (UCTE 2018). The UCTE also emphasized that the Canadian Wheat Board once provided a swift and effective system for marketing Canadian grain, which has now been

jeopardized by foreign ownership, posing risks to Canadian suppliers and employment. UCTE also organized a petition demanding the repurchase of the Canadian Wheat Board from Saudi ownership which had approximately 25,000 signatures, indicating widespread public support. The National Farmers' Union also support the return of the Wheat Board, seeing it as a tool which would "provide the best risk management system while ensuring farmers get the full value of their crop when sold" (NFU, 2021, 2020).

If the Canadian Wheat Board were to be reinstated, it is important to note that it would require the cooperation of all grain farmers, as the board has not had success as a voluntary marketing agency in the past. As discussed in Chapter 4, such a system was implemented in both 1935 and 2011, allowing farmers the option of either delivering their grain to the Wheat Board or to private grain companies. This choice often led to farmers opting to sell to the Board when prices dropped below the initial payment and the Federal government would thus absorb the losses rather than the farmer (Magnan, 2016, p. 51). Conversely, when market prices were high, farmers tended to sell through to private grain companies and the Board would have difficulty finding grain to fulfill its contracts (Measner 2007).

Re-establishing "wheat pools" could be another strategy to regain market control and fairness for farmers by collectively marketing grain and redistributing the returns back to the farmer (Magnan 2016). The Wheat Pools of the 1930s, however, collapsed when wheat prices plummeted, leaving the pools in financial ruin. Winson (1993) points out the inherent vulnerability of cooperative pools in an economy predominantly governed by private market dynamics, and so this system may be likely to fail again.

When informants were questioned about the potential mental health benefits of reinstating the Board, some affirmed it might help, but also pointed out the deep polarization

around the issue was made worse by social media and the proliferation of misinformation. Online discussions have become contentious, as one informant noted “you've got people accusing other people of being socialists and communists or fascists.” Even though the Board could potentially provide mental health benefits by reducing stress associated with marketing grain, it is unlikely that the Board will be reinstated given the current divisiveness of the issue. In light of this divisiveness, policy tools to reduce corporate concentration in the grain sector including the strengthening of the Competition Act, should be explored.

Recommendation 2: Strengthen Canada's Competition Act

Growing corporate concentration undermines the development of sustainable and equitable food systems (Clapp, 2021). As Jennifer Clapp (2021) writes, strong policies in areas including labour and health regulations, social and environmental which were aimed at reigning in corporate concentration would improve competition in the food system, and would prevent the “race to the bottom” dynamics that “encourage firms to externalize costs to stay afloat in the market” (p. 406). These policies would require international coordination to ensure that corporations did not bypass these regulations by going to jurisdictions with less stringent regulations. In the Canadian setting, work can begin by strengthening Canada's Competition Act and empowering Canada's Competition Bureau.

Although farmers today are producing larger volumes of commodities than ever before, the majority of wealth created through this production is captured by corporations at various points of the agri-food chain, including farm inputs, food processing, commodity trading and others (NFU 2023). Canada's competition Act has not been effective in restraining unfettered growth in corporate concentration in many sectors, especially in agri-food (NFU 2023).

The weakness of Canada's Competition Act was highlighted during the recent food price crisis in 2023. Major supermarkets, including Loblaws, Empire Company (Sobeys), and Metro Company have faced allegations of price gouging and profiteering by significantly raising their food prices well above the cost of inflation (Evans, 2023a). In response to escalating food prices and market consolidation, the Canadian Government implemented amendments to the Competition Act in late 2023 (Competition Bureau 2023). These amendments are intended to bolster the Competition Bureau's ability to challenge anti-competitive mergers, particularly in the grocery sector, as part of a wider initiative to address rising food costs (Reuters 2023) and include:

- Creating a framework for market studies with information gathering powers;
- Repealing the efficiencies defence for anti-competitive mergers and business collaborations;
- Simplifying the legal test for abuse of dominance and increase the maximum penalties available; and,
- Expanding the scope of the law to restrict more anti-competitive business collaborations.

The effectiveness of these changes in mitigating the rising cost of food as well as improving competition in the farming sector remains to be seen. These changes, however, do not seem as robust as what was called for by the NFU, which lobbied for a more rigorous overhaul to the Competition Act to safeguard the interests of the farming community including:

- Prevent companies from using intellectual property rights and data mining to support uncompetitive and/or exploitive behaviour; and
- Provide the Competition Bureau with strong and effective investigation and enforcement authorities, including the ability to compel information from companies.

There are other policy tools which have the potential to significantly improve farmers' lives in the face of growing corporate concentration. Although not a comprehensive list, these include the right to use saved seeds, the right to repair farm equipment as well as legislating corporations to make fairer contracts which are more transparent and easier for the farmer to understand, particularly in the context of grain farmers as discussed in Chapter 6.

Recommendation 3: Strengthen grain contracts protections

Western Canadian Wheat Growers, the NFU and APAS farm organizations which represent farmers across the political spectrum are all concerned about the one-sided nature of grain contracts between farmers and large grain corporations. As discussed previously, contracts often lack transparency, include terms and conditions that are difficult to understand, and penalize farmers if they are late or unable to deliver grain. Furthermore, the contracts are viewed as being written in favor of the buyer, exacerbating the inherent risks and uncertainties of farming. For these reasons, it is essential to strengthen contract protections to provide some protection for farmers entering these contracts.

APAS called on the Minister of Agriculture and Agri-Food Canada to weigh in on contract protections, although no specific recommendations were given. Strengthening protections for farmers and balancing the playing field could include adding an obligatory Force Majeure Clause (Act of God clause) and the creation of a standard contract.

A Force Majeure clause, which translates to “greater force”, would protect farmers in the event of unforeseen events such as natural disasters or other uncontrollable circumstance which prevents farmers from fulfilling their contractual obligations. In short, a Force Majeure clause

“excuses a party from performing its obligations under the agreement if there is some unforeseen event beyond the control of that party” (Government of Canada 2019b). The NFU is advocating for such a clause, and notes that the Canadian Wheat Board during its operation offered Force Majeure clauses on delivery contracts to farmers. The loss of the Board, they argue, has resulted in more risk for farmers when selling grain (NFU 2021). In the interim they suggest that companies should be required to provide the option to carry over shortfalls to the following year, allowing farmers to fulfill their contractual obligations at the original price (NFU 2021).

The federal government should also standardize contract templates for all farmers to ensure transparency and predictability in the selling of their grain, irrespective of what company they are selling and delivering to. Other countries, including Australia, already use standardized contracts (Pratt 2023). Therefore some grain companies which operate in both Canada and Australia, will already be familiar with this concept and practice (Vossler 2024). This sets a strong precedent for establishing standardized contracts in the Canadian grain sector and is supported by both farm organizations APAS and Sask Wheat (Vossler 2024).

Recommendation 4: Expand access to mental health care for farmers

While addressing the role of structural factors which shape mental health and well-being are critical for meaningful change, continued support for farmers at the individual level is also needed. In the NFU/CCPA report, we urged governments to significantly increase investment in mental health supports with a focus on ensuring inclusivity for all farmers and farm workers, including Black, Indigenous, and 2SLGBTQ+ communities.

Many informants interviewed for this research echoed the importance of increasing and improving mental health supports to farmers, especially providing supports which were

specifically tailored to the reality of farmers. As one informant and mental health expert said “from a policy perspective, the federal government can and should fund specialised services for farmers, whether it be a standalone helpline or one that's embedded within an existing crisis and distress centre.” She argued that farmers would “benefit from speaking to someone with that...lived experience.” Another informant added to this by suggesting “health professional practicums that were specific to rural communities.” He also added that a practicum would not only have the benefit of working directly with farmers, but that the student would be “also learning about the history of the place. You're also learning...our colonial history of the place. You're learning about what's happened, you know, through the loss of the Canadian Wheat Board and what's happening through trade agreements. So that you can have a thorough understanding of this fabric.” Calls for supports tailored to farmers have been also made by researchers and farm organizations (Finnigan 2019), and in the past five years huge strides have been made to increase services including, for example, the recently implemented stress line and free counselling sessions through the Ontario Farmer Wellness Initiative.

Recommendation 5: Rebuild rural infrastructure

As discussed at length throughout out this thesis, rural de-population has significantly altered the physical and social landscape of rural communities. Rural decline has also had a direct negative impact on farmer mental health as there is now “greater isolation, less support, [and] less community” (I04). Mitigating rural depopulation and rural decline in Canada's agricultural regions is not a straightforward task and will require all levels of government to invest in revitalized rural infrastructure. Strategic regional initiatives that focus on repopulating and maintaining such infrastructure are vital for bolstering mental health and fostering social

cohesion. This includes investing in schools, hospitals, transportation networks and communication systems, and community centers. Re-establishing the Saskatchewan Transportation Company's Crown status to ensure that rural areas have reliable and affordable service would be an excellent place to start.

There is also an urgent need for policies which address the financialization of farmland which have put small and medium-sized farms, as well as new farmers hoping to buy land, at a significant disadvantage. Additionally, introducing incentives for small and mid-sized farmers to adopt agroecological practices can serve a dual purpose: these practices are labor-intensive rather than reliant on industrial inputs, thereby bringing people back to the farm while contributing to climate change mitigation through reduction of greenhouse gas emissions and enhance crop productivity, soil fertility, and biodiversity.

Finally, reinvesting in rural areas is necessary to help stem the growth of political polarization. As described in earlier sections of this thesis, declining local economies and services in rural agricultural communities are contributing to social or regional isolation, which can drive rightwing populism and social polarization (Breau et al., 2020; Hertz, 2020). The neoliberalization of farming is a central driver of this hollowing out of rural areas, leading to significant economic and social downturn (Campbell-Gale et al., 2023) and a fragmentation of rural Saskatchewan communities (Knuttila 2023). Reinvesting in rural areas can help reduce growing political polarization by promoting economic growth and community development (Pipa and Geismar, 2020). But as Pipa and Geismar (2020) note in the US context, rather than focus on statistics such as increased job numbers, or number of services provided, “[government] agencies and states should seek to measure improvements in equity and overall quality of life” (p. 20). By focusing on developmental policies and programs—including those aimed at social

and community development—they argue governments will “build economic resilience, and create the conditions for long-term prosperity (p. 9).

In 2019, the Liberal government under Prime Minister Justin Trudeau created a new portfolio—Minister of Rural Economic Development—which released a strategy designed to address the priorities of rural Canada with input from rural Canadians from across the country. The establishment this new portfolio indicates that the issue of rural decline is of growing concern, however the outcome of that action is not yet known. Canada can and should look to the EU for further examples of rural development, including the longstanding LEADER program which makes funds available for community development and economic diversification (OECD 2020).

Limitations and future directions

Despite thorough planning and best efforts, this research faced certain limitations. Notably, the interviews were carried out during the initial phase of the COVID-19 pandemic when social distancing measures were in effect. At this time, York University prohibited conducting research, including interviews, in person. This meant that the original plan to administer a validated questionnaire examining mental health was no longer possible. In the original design of this study, a comprehensive mental health questionnaire was going to be completed by the farmer at the beginning of the interview and anonymized for confidentiality. Administering the questionnaire over the phone would have removed that confidentiality. Another option was to have farmers complete the questionnaire via SurveyMonkey. Considering farmers’ high workloads and the frequent survey request they receive, there was a concern that asking participants to complete the survey at another time would lead to low response rates and

contribute to survey-fatigue. In the end I decided to ask only two mental health questions, specifically related to the marketing of grain and price volatility.

Phone interviews, however, did have some advantages. It allowed some farmers to multitask and continue with their work during our conversations. This alone may have made them more inclined to participate.

Another limitation of this study was the previously mentioned selection bias, as I was only able to interview farmers who were currently farming, or retired, but not those who exited the industry for financial reasons. Additionally, the inclusion of more female participants would have added additional depth to this research.

Despite these limitations, this research spurred many new questions and areas for future investigation, including the need to understand more fully the impact of social polarization and disinformation on the mental health of farmers, especially those living in agricultural communities. My proposed future postdoctoral research will examine how the hollowing out of rural agricultural communities resulting from decades of neoliberal trade and welfare policies—may have facilitated the conditions in which online disinformation and polarization have flourished. Furthermore, this research will examine how the rise of disinformation and polarization potentially interacts with the mental health outcomes of farmers in rural Saskatchewan.

Final concluding thoughts

The discussions I had with farmers and informants for this doctoral research have been invaluable for understanding the realities of farming after the Canadian Wheat Board, and the impact this change has had on farmer mental health. At its core, the farmer mental health crisis can be understood as a health equity issue. These health inequities are not naturally occurring,

but rather politically determined (Bambra 2011). They are a result of public policymaking which has, to a large extent, been influenced by the business sector's ability to shape public policy in its own interest. The dismantling of the Canadian Wheat Board was no exception. Knutilla (2023) notes how the private sector, including the Business Council of Manitoba, lobbied the federal government to dismantle it. Health inequities are not only shaped by policy that places business interests first, but by a lack of policy, including policy or legislation which would address climate change, and protect farmers from the effects of rampant corporate concentration and the growing financialization of farmland. Many times during this research farmers said that they bear the brunt of the risk associated with farming. It does not have to be this way.

Senator Bernie Sanders, in his 2020 presidential bid, included a platform specifically aimed at revitalizing rural areas and levelling the playing field between farmers and farm workers on the one hand, and the corporate sector on the other. This platform also addressed the potential for agriculture to mitigate the climate crisis by promoting the use of regenerative farming practices (Bernie 2019). The level of detail present in this platform is evidence that the problems of rural decline and poor farmer mental health are not only recognized, but that policy solutions that could improve the mental health of farmers and help communities thrive have already been formulated. The lack of action by governments in Canada, especially at the federal level, reinforces the notion that declining farmer mental health as well as rural decline are the result of political choice and neglect.

References:

Aggleton, P. 1990. *Health*. London UK: Routledge.

Alberta Pork. 2020. "Price negotiating power balance hurts producers."

<https://www.albertapork.com/2020/09/21/price-negotiating-power-balance-hurts-producers/>.

Alt, Sivi. 2019. "Farmer Suicides and the Function of Death in Neoliberal Biopolitics." *Journal of International Political Sociology* 13 (1):37-52.

Amenta, Edwin, and Kelly M Ramsey. 2010. "Institutional theory." In *Handbook of politics*, 15-39. Springer.

Andersen, Kirsty, Jacinta Hawgood, Helen Klieve, Kairi Kõlves, and Diego De Leo. 2010.

"Suicide in selected occupations in Queensland: evidence from the State suicide register." *Australian & New Zealand Journal of Psychiatry* 44 (3):243-249.

APAS. 2021. APAS releases first results of producer survey on grain contracts.

Arnason, R. 2023. "Big, bigger, biggest." *The Western Producer*.

<https://www.producer.com/news/big-bigger-biggest/>.

Ashton, Niki. 2011. *House of Commons Debates*. Canada. October 20.

Aske, Katherine. 2022. *Finance in the Fields: Investors, Lenders, Farmers, and the Future of Farmland in Alberta*. Parkland Institute.

Atamanenko, Alex. 2011. *House of Commons Debates*. Canada. October 20.

Bali, Azad Singh, Michael Howlett, Jenny M Lewis, and M Ramesh. 2021. *Procedural policy tools in theory and practice*. Oxford University Press.

- Bambra, C. 2007. "Going beyond the three worlds of welfare capitalism: regime theory and public health research." *Journal of Epidemiology & Community Health* 61 (12):1098-1102.
- Bambra, C. 2011a. *Work, worklessness, and the political economy of health*: OUP Oxford.
- Bambra, C. 2011b. "Work, worklessness and the political economy of health inequalities." *Journal of Epidemiology & Community Health* 65 (9):746-750.
- Bambra, C, N Reibling, and C McNamara. 2018. "States of health: Welfare regimes, health and healthcare." In *The Routledge handbook of the welfare state*, edited by B. Greve, 254-266.
- Bartley, Mel. 2016. *Health inequality: an introduction to concepts, theories and methods*: John Wiley & Sons.
- Bedard, D. 2020. "Home / Hogs / Pig farmers seek aid of \$20 per hog against... Pig farmers seek aid of \$20 per hog against market crash." *AgCanada*.
<https://www.agcanada.com/daily/pig-farmers-seek-aid-of-20-per-hog-against-market-crash>.
- Bhaskar, Roy. 2013. *A realist theory of science*: Routledge.
- Blaxter, M. 2010. *Health*. 2nd ed. Cambridge UK: Polity Press.
- Boehm, Terry. 2020. "2020 hindsight: Ending the Canadian Wheat Board was an economic tragedy." <https://www.nfu.ca/2020-hindsight-ending-the-canadian-wheat-board-was-an-economic-tragedy/>.
- Booth, Nicholas J, and Keith Lloyd. 2000. "Stress in farmers." *International Journal of Social Psychiatry* 46 (1):67-73.

- Brady, David. 2003. "The politics of poverty: Left political institutions, the welfare state, and poverty." *Social Forces* 82:557-588.
- Braedley, Susan, and Meg Luxton. 2010. *Neoliberalism and everyday life*: McGill-Queen's Press-MQUP.
- Braun, Virginia, and Victoria Clarke. 2006. "Using thematic analysis in psychology." *Qualitative research in psychology* 3 (2):77-101.
- Braveman, Paula, and Sofia Gruskin. 2003. "Defining equity in health." *Journal of Epidemiology & Community Health* 57 (4):254-258.
- Brekveld, P. 2022. "OFA outlines the impacts on farmers as price-takers."
<https://ofa.on.ca/newsroom/ofa-outlines-the-impacts-on-farmers-as-price-takers/>.
- Brew, Bronwyn, Kerry Inder, Joanne Allen, Matthew Thomas, and Brian Kelly. 2016. "The health and wellbeing of Australian farmers: a longitudinal cohort study." *BMC public health* 16 (1):1-11.
- Brisson, Yan. 2015. "The changing face of the Canadian hog industry." accessed March 15.
<https://www150.statcan.gc.ca/n1/pub/96-325-x/2014001/article/14027-eng.htm#n3>.
- Bryant, T. 2002. "Role of knowledge in public health and health promotion policy change." *Health Promotion International* 17 (1):89-98.
- Bryant, T. 2015. "implications of Public Policy change Models for Addressing income-related Health inequalities." *Canadian Public Policy* 41 (Supplement 2):S10-S16.
- Bryant, T. 2016. *Healthy Policy In Canada*. Second ed: Canadian Scholar's Press.
- Bryant, T, and D Raphael. 2020. *The politics of health in the Canadian welfare state*: Canadian Scholars' Press.

- Bryant, T, D Raphael, and M Rioux. 2010. "Researching health: knowledge paradigms, methodologies, and methods." In *Staying Alive: Critical Perspectives on Health, Illness, and Health Care*, edited by T Bryant, D Raphael and M Rioux, 121-144. Toronto: Canadian Scholars Press.
- Campbell-Gale, Holly K, Amber J Fletcher, and Maureen G Reed. 2023. "'A heart attack away from boarding up Main Street': How neoliberalization of farming shapes adaptive capacity to climate change in rural and small-town Saskatchewan, Canada." *Journal of Rural Studies* 97:365-374.
- Canadian Transportation Agency. 2020. "The Maximum Revenue Entitlement: A Guide." <https://otc-cta.gc.ca/eng/publication/maximum-revenue-entitlement-a-guide>.
- Canadian Press. 2016. "Prairie farmers calling for return of the Canadian Wheat Board." Global News. <https://globalnews.ca/news/2517715/prairie-farmers-calling-for-return-of-the-canadian-wheat-board/>.
- Canadian Press. 2018. "'We are free:' Churchill celebrates return of train service with prime minister." *Edmonton Journal*. <https://edmontonjournal.com/news/news-news/churchill-train-service-to-be-back-to-normal-by-end-of-november-trudeau/wcm/bf8d23fb-1e93-4b09-a5e5-5e478966b16f>.
- Card, Kiffer G, and Kirk J Hepburn. 2023. "Is Neoliberalism Killing Us? A Cross Sectional Study of the Impact of Neoliberal Beliefs on Health and Social Wellbeing in the Midst of the COVID-19 Pandemic." *International Journal of Social Determinants of Health and Health Services* 53 (3):363-373.
- Carter, Nancy, D Bryant-Lukosius, A DiCenso, J Blythe, and A Neville. 2014. "The use of triangulation in qualitative research." *Oncology Nursing Forum* 41 (5):545-547.

- Casey, Patrick H, Pippa M Simpson, Jeffrey M Gossett, Margaret L Bogle, Catherine M Champagne, Carol Connell, David Harsha, Beverly McCabe-Sellers, James M Robbins, and Janice E Stuff. 2006. "The association of child and household food insecurity with childhood overweight status." *Pediatrics* 118 (5):e1406-e1413.
- CBC News. 2006. "Farm country split over wheat board firing." *CBC*.
<https://www.cbc.ca/news/canada/farm-country-split-over-wheat-board-firing-1.629821>.
- CBC News. 2007. "Most Manitoba farmers want to keep wheat board: plebiscite." *CBC*.
<https://www.cbc.ca/news/canada/manitoba/most-manitoba-farmers-want-to-keep-wheat-board-plebiscite-1.644304>.
- Cecco, Leyland. 2019. "Canada's farmers pushed to the brink by politics, weather and banks." *The Gaurdian*. <https://www.theguardian.com/world/2019/nov/18/high-debts-and-low-yields-push-canadas-farmers-to-the-brink>.
- Charlton, John. 1995. "Trends and patterns in suicide in England and Wales." *International journal of epidemiology* 24 (Supplement_1):S45-S52.
- Clapp, J. 2012. "Who governs global food prices?" In *Critical perspectives in food studies*. Oxford University Press.
- Clapp, J. 2021. "The problem with growing corporate concentration and power in the global food system." *Nature Food* 2 (6):404-408.
- Coburn, D. 2004. "Beyond the income inequality hypothesis: class, neo-liberalism, and health inequalities." *Social Science & Medicine* 58 (1):41-56.
- Coburn, D. 2010. "Health and health care: a political economy perspective." In *Staying alive: Critical perspectives on health, illness, and health care*, edited by T Bryant, D Raphael and M Rioux, 65-91.

- Competition Bureau. 2023. "Important amendments to modernize the Competition Act receive Royal Assent." <https://www.canada.ca/en/competition-bureau/news/2023/12/important-amendments-to-modernize-the-competition-act-receive-royal-assent.html>.
- Cottrell, Allin. 1984. *Social classes in Marxist theory*: Routledge/Thoemms Press.
- Creswell, John W, and J David Creswell. 2017. *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Cross, B. 2013. "CWB: one year in an open market." *The Western Producer*.
<https://www.producer.com/news/cwb-one-year-in-an-open-market/>.
- Danermark, Berth, Mats Ekström, and Jan Ch Karlsson. 2019. *Explaining society: Critical realism in the social sciences*: Routledge.
- Das, Anindya. 2017. "Farmers' suicide and agrarian crisis: Social policy and public mental health." *Indian journal of psychiatry* 59 (3).
- Dawson, A. 2022. "Farmers' CWB class action lawsuit gets certified." *AG Canada*.
<https://www.agcanada.com/daily/farmers-cwb-class-action-lawsuit-gets-certified>.
- Denzin, Norman K. 1978. *Sociological methods: A sourcebook*. New York, NY: McGraw-Hill.
- Denzin, Norman K, and Yvonna S Lincoln. 2011. *The Sage handbook of qualitative research*: sage.
- Do More Agriculture Foundation. 2020. "About us." <https://www.domore.ag/>.
- Do More Agriculture Foundation. 2022. "Community Fund."
<https://www.domore.ag/community-fund>.
- Dougherty, Charles J. 1993. "Bad faith and victimblaming: the limits of health promotion." *Health Care Analysis* 1 (2):111-119.
- Dreeshen, Early. 2011. *House of Commons Debates*. Canada. October 18.

- Easter, Wayne. 2011. *House of Commons Debates*. Canada. October 18.
- Eisler, Dale. 2022. *From Left to Right: Saskatchewan's Political and Economic Transformation*: University of Regina Press.
- Ellwood, Wayne. 2010. *The no-nonsense guide to globalization*: New Internationalist.
- Emerson, David. 2015. Pathways: Connecting Canada's Transportation System to the World—. Canada Transportation Act Review.
- Esping-Andersen, G. 1990. "The Three Worlds of Welfare Capitalism" Cambridge, Polity Press.
- Essex, Jamey. 2016. "The neoliberalization of agriculture: Regimes, resistance, and resilience." In *Handbook of Neoliberalism*, 514-525. Routledge.
- ETC Group. 2022. Food barons 2022. Crisis Profiteering, Digitalization and Shifting Power.
- Eyking, Mark. 2011. *House of Commons Debates*. Canada. October 20.
- Farnsworth, Kevin, and Chris Holden. 2006. "The business-social policy nexus: corporate power and corporate inputs into social policy." *Journal of Social Policy* 35 (3):473-494.
- Fairbairn, M. 2010. "Framing Resistance: International Food Regimes & the Roots of Food Sovereignty." In *Food sovereignty: Reconnecting food, nature & community*, edited by H Wittman. Pambazuka.
- Farm Credit Canada. 2019. "Debt-to-equity ratio: Leverage assets for farm financial fitness." <https://www.fcc-fac.ca/en/knowledge/economics/debt-to-equity-ratio-leverage-assets-for-farm-financial-fitness>.
- Farm Credit Canada. 2020. Rooted in Strength: taking care of our families and ourselves.
- Farm Management Canada. 2020. Healthy Minds, Healthy Farms: Exploring the Connection between Mental Health and Farm Business Management.

- Farm Safety Nova Scotia. 2022. Accessed September 10. <https://farmsafetyns.ca/farm-family-support-center/>.
- Farmers Talk. 2023. "Farmer Assistance Program of PEI." <https://www.farmerstalk.ca/fap>.
- Farnsworth, Kevin, and Chris Holden. 2006. "The business-social policy nexus: corporate power and corporate inputs into social policy." *Journal of Social Policy* 35 (3):473-494.
- Farrants, K, and C Bamba. 2017. "Neoliberalism and the recommodification of health inequalities: A case study of the Swedish welfare state 1980 to 2011." *Scandinavian Journal of Public Health*:1403494817709191.
- Finnigan, Pat. 2019. "Mental Health: A Priority for Our Farmers." *Report of the Standing Committee on Agriculture and Agri-Food. 42nd Parliament 3rd session*.
- Fletcher, Amber J. 2013. "The view from here: Agricultural policy, climate change, and the future of farm women in Saskatchewan." Faculty of Graduate Studies and Research, University of Regina.
- Fletcher, Amber J. 2017. "Applying critical realism in qualitative research: methodology meets method." *International journal of social research methodology* 20 (2):181-194.
- Fletcher, Amber J, Nancy Sah Akwen, Margot Hurlbert, and Harry P Diaz. 2020. "'You relied on God and your neighbour to get through it': social capital and climate change adaptation in the rural Canadian Prairies." *Regional Environmental Change* 20 (2):1-15.
- Fraser, Caitlin E, Kelvin B Smith, Fiona Judd, John S Humphreys, Lyn J Fragar, and Amanda Henderson. 2005. "Farming and mental health problems and mental illness." *International Journal of Social Psychiatry* 51 (4):340-349.

- Frieden, J. 2020. "The political economy of economic policy."
<https://www.imf.org/Publications/fandd/issues/2020/06/political-economy-of-economic-policy-jeff-frieden>.
- Friedmann, Harriet. 1993. "The political economy of food: a global crisis." *New left review* (197):29-57.
- Friedmann, Harriet. 2005. "From colonialism to green capitalism: Social movements and emergence of food regimes." In *New directions in the sociology of global development*. Emerald Group Publishing Limited.
- Friedmann, Harriet, and Philip McMichael. 1989. "Agriculture and the state system: The rise and decline of national agricultures, 1870 to the present." *Sociologia ruralis* 29 (2):93-117.
- Fulton, Murray. 2012. *Challenges Facing the Grain Handling and Transportation System in Western Canada in a Post Canadian Wheat Board Environment*: Johnson-Shoyama Graduate School of Public Policy.
- Ganti, Tejaswini. 2014. "Neoliberalism." *Annual Review of Anthropology* 43:89-104.
- Gartzou-Katsouyanni, Kira, Max Kiefel, and Javier José Olivas Osuna. 2022. "Voting for your pocketbook, but against your pocketbook? A study of Brexit at the local level." *Politics & Society* 50 (1):3-43.
- George, Susan, and Nigel Paige. 1982. *Food for beginners: Writers and Readers*.
- Gerry, Ritz. 2011. *House of Commons Debates*. Canada. October 20.
- Girerd, Lola, Catherine Verniers, and Virginie Bonnot. 2021. "Neoliberal ideology in France: a qualitative inquiry." *Frontiers in Psychology* 12:686391.
- Goldner, Elliot M, Dan Bilsker, and Emily Jenkins. 2016. *A concise introduction to mental health in Canada*: Canadian Scholars' Press.

- Government of Canada. 2019a. "Suicide in Canada: Key statistics (infographic)." accessed July 5. <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-canada-key-statistics-infographic.html>.
- Government of Canada. 2019b. "Chapter 6 - Standard Clauses" <https://www.canada.ca/en/heritage-information-network/services/intellectual-property-copyright/guide-developing-digital-licensing-agreement-strategy/standard-clauses.html>.
- Government of Canada. 2022. "Overview of Canada's agriculture and agri-food sector." accessed November 7. <https://agriculture.canada.ca/en/canadas-agriculture-sectors/overview-canadas-agriculture-and-agri-food-sector>.
- Government of Canada. 2023. "AgPal." accessed November 5. <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-canada-key-statistics-infographic.html>.
- Graham, Hilary. 2007. *Unequal lives: health and socioeconomic inequalities*: McGraw-Hill Education (UK).
- Gray, Richard. 2015. The economic impacts of elevated export basis levels on western Canadian grain producers 2012/13, 2013/14 and 2014/15.
- Great Plains. 2022. "May is Mental Health Awareness Month." <https://gpcah.public-health.uiowa.edu/mental-health-awareness-resource/>.
- Greenhill, Jennene, Debra King, Anna Lane, and Colin MacDougall. 2009. "Understanding resilience in South Australian farm families." *Rural Society* 19 (4):318-325.
- Gregoire, Alain. 2002. "The mental health of farmers." *Occupational Medicine* 52 (8):471-476.
- Groguhé, Sadia. 2011. *House of Commons Debates*. Canada. October 20.
- Guardian Network. 2022. accessed September 10. <https://www.guardiannetwork.ca/>.

- Guba, E. 1990. *The paradigm dialog*: Sage Publications.
- Hagen, Briana NM, Alex Sawatzky, Sherilee L Harper, Terri L O'Sullivan, and Andria Jones-Bitton. 2021. "What Impacts Perceived Stress among Canadian Farmers? A Mixed-Methods Analysis." *International Journal of Environmental Research and Public Health* 18 (14):7366.
- Hall, Peter. 1993. "Policy paradigms, social learning, and the state: the case of economic policymaking in Britain." *Comparative politics*: 275-296.
- Hall, Peter A, and Michèle Lamont. 2009. *Successful societies: How institutions and culture affect health*: Cambridge University Press.
- Hall, Peter, and R Taylor. 1996. "Political science and the three new institutionalisms." *Political studies* 44 (5):936-957.
- Hall, Phoebe. 1975. *Change, choice, and conflict in social policy*: Heinemann Educational Books.
- Health Council of Canada. 2010. *Stepping it up: Moving the focus from health care in Canada to a healthier Canada*: Health Council of Canada.
- Herman, Dakota J. 2019. "Let's talk... about farmers: Trump's Trade War and a looming mental health crisis." *University of Toronto Medical Journal* 96 (2).
- Hillyer, J. 2011. House of Commons Debates. Canada. October 25.
- Hoback, Randy. 2011. *House of Commons Debates*. Canada. October 20.
- Hobsbawm, Eric. 1996. *Age of revolution: 1789-1848*: Hachette UK.
- Hoddy, Eric T. 2019. "Critical realism in empirical research: employing techniques from grounded theory methodology." *International Journal of Social Research Methodology* 22 (1):111-124.

- Hogan, John, and Michael Howlett. 2015. *Policy Paradigms in Theory and Practice: Discourses, Ideas and Anomalies in Public Policy Dynamics*: Springer.
- Holmes, Andrew Gary Darwin. 2020. "Researcher Positionality--A Consideration of Its Influence and Place in Qualitative Research--A New Researcher Guide." *Shanlax International Journal of Education* 8 (4):1-10.
- Holowach, Monique, and John R Parkins. 2023. "Unraveling the link between political polarization and wind energy perspectives: Insights from a survey of agricultural landowners in Alberta, Canada." *Energy & Environment*:0958305X231199150.
- Holt-Giménez, Eric. 2017. *A Foodie's Guide to Capitalism: Understanding the Political Economy of what We Eat*: NYU Press.
- Holtslander, C. 2023. "Bunge-Viterra merger has drastic implications for Canadian farmers."
- Honourable Marie-Claude Bibeau. 2023. Report to Parliament on the Review of the Agricultural Marketing Programs Act (2016 – 2021). Government of Canada.
- Hounscome, Barry, Rhiannon T Edwards, Natalia Hounscome, and Gareth Edwards-Jones. 2012. "Psychological morbidity of farmers and non-farming population: results from a UK survey." *Community mental health journal* 48 (4):503-510.
- Howard, Philip H. 2016. *Concentration and power in the food system: Who controls what we eat?* Vol. 3: Bloomsbury Publishing.
- Howell, Alison, and Jijian Voronka. 2012. "Introduction: The politics of resilience and recovery in mental health care." *Studies in Social Justice* 6 (1):1-7.
- Jack, Caroline. 2017. "Lexicon of lies: Terms for problematic information."
- Jaffe, JoAnn, and Patricia W Elliott. 2021. *Divided: Populism, Polarization and Power in the New Saskatchewan*: Fernwood Publishing.

Jaffe, JoAnn, and Amy Quark. 2021. "Not your grandparent's rural Saskatchewan." In *Divided: Populism, Polarization and Power in the New Saskatchewan*, edited by JoAnn Jaffe and Patricia W Elliott. Fernwood Publishing.

Jochum, Gunter. 2023. Impact of potential Viterra-Bunge merger on farmers. In *BNN Bloomberg*. BNN Bloomberg.

Jones-Bitton, Andria, Colleen Best, Jennifer Mactavish, Stephen Fleming, and Sandra Hoy. 2019. "Stress, anxiety, depression, and resilience in Canadian farmers." *Social psychiatry and psychiatric epidemiology*:1-8.

Jones-Bitton, Andria, Briana Hagen, Stephen J Fleming, and Sandra Hoy. 2019. "Farmer burnout in Canada." *International journal of environmental research and public health* 16 (24):5074.

Kanamori, Mariko, Masamichi Hanazato, Katsunori Kondo, Andrew Stickley, and Naoki Kondo. 2021. "Neighborhood farm density, types of agriculture, and depressive symptoms among older farmers: a cross-sectional study." *BMC public health* 21 (1):1-11.

KAP. 2021. "In the Know." accessed June 5. <https://www.kap.ca/events/in-the-know/>.

Katz, Claudio J. 1993. "Karl Marx on the transition from feudalism to capitalism." *Theory and Society* 22 (3):363-389.

Kawachi, I, SV Subramanian, and N Almeida-Filho. 2002. "A glossary for health inequalities." *Journal of Epidemiology and Community Health* 56 (9):647-652.

Kennedy, Jonathan, and Lawrence King. 2014. "The political economy of farmers' suicides in India: indebted cash-crop farmers with marginal landholdings explain state-level variation in suicide rates." *Globalization and health* 10 (16):1-9.

Kent, T. 2021. "Re: General Opinion on Enforceability of Grain Contracts."

- Kingdon, John W, and James A Thurber. 1984. *Agendas, alternatives, and public policies*. Vol. 45: Little, Brown Boston.
- Kingsmith, AT. 2023. "The Political Life of Anxiety: Market Psychopathologies and the Production of Subjectivity." York University.
- Knuttila, M. 2023. *Eroding a Way of Life: Neoliberalism and the Family Farm* Regina: University of Regina Press.
- Kolstrup, Christina, Marja Kallioniemi, Peter Lundqvist, Hanna-Riitta Kymäläinen, Lorann Stallones, and Susan Brumby. 2013. "International perspectives on psychosocial working conditions, mental health, and stress of dairy farm operators." *Journal of agromedicine* 18 (3):244-255.
- Kubik, Wendee, and Robert J Moore. 2001. *Women's Diverse Roles in the Farm Economy and the Consequences for Their Health, Well-being and Quality of Life*: University of Regina, Canadian Plains Research Center.
- Kuhn, T S. 1970. The structure of scientific revolutions, *International Encyclopedia of Unified Science*, vol. 2, no. 2. Chicago: The University of Chicago Press.
- Labonte, Ronald. 1993. *Health promotion and empowerment: practice frameworks*: Centre for Health Promotion, University of Toronto.
- Lamont, Dougald. 2016. Loss of Canadian Wheat Board behind Churchill failure. *Winnipeg Free Press*. <https://www.winnipegfreepress.com/opinion/analysis/loss-of-canadian-wheat-board-behind-churchill-failure-389143221.html>.
- Lamoureux, Kevin. 2011. *House of Commons Debates*. Canada. October 18.

- Langille, D. 2016. "Follow the money: How business and politics define our health. ." In *Social determinants of health: Canadian perspectives*, edited by D Raphael, 470-490. Toronto: Canadian Scholars' Press.
- Larsen, Ken. 2019. "Larsen: Canada has lost credibility and grain customer trust thanks to deregulation." <https://www.ontariofarmer.com/opinion/comments/larsen-canada-has-lost-credibility-and-grain-customer-trust-thanks-to-deregulation>.
- Larsen, Laura. 2017. "An evaluation of the present situation for western Canadian grain farmers within a historical context." *A report prepared for the Canadian Wheat Board Alliance*. Internet Source: http://www.cwbafacts.ca/wp-content/uploads/2016/04/Evaluation-of-present-situation-for-Western-Canadian-grain-farmers_revised.pdf.
- Latham, Earl. 1952. "The group basis of politics: Notes for a theory." *American Political Science Review* 46 (2):376-397.
- Lawani, A. 2020. "Critical realism: what you should know and how to apply it." *Qualitative research journal*.
- Lawson, T. 1997. *Economics and reality*: Routledge.
- Lekachman, R. 1981. *Capitalism for beginners*: Pantheon.
- Low, J. M., G. R. Griffith, and C. L. Alston. 1996. "Australian farm work injuries: incidence, diversity and personal risk factors." *Aust J Rural Health* 4 (3):179-89. doi: 10.1111/j.1440-1584.1996.tb00207.x.
- MacRae, R. 2020. "Corporate concentration." <https://foodpolicyforcanada.info.yorku.ca/backgroundunder/problems/corporate-concentration/>.
- Magdoff, F. 2012. "Food as a Commodity." *Monthly Review* 63 (8):15-22.

Magdoff, F, and Tokar, B. 2009. "Agriculture and food in crisis." *Monthly Review* 61 (3):1-16.

Magnan, A, Davidson M, and Desmarais, A. 2022. "'They call it progress, but we don't see it as progress': farm consolidation and land concentration in Saskatchewan, Canada." *Agriculture and Human Values*:1-14.

Magnan, A. 2015. "The financialization of agri-food in Canada and Australia: Corporate farmland and farm ownership in the grains and oilseed sector." *Journal of Rural Studies* 41:1-12.

Magnan, A. 2016. *When Wheat Was King: The Rise and Fall of the Canada-UK Grain Trade*: UBC Press.

Magnan, André, Melissa Davidson, and Annette Aurélie Desmarais. 2022b. "'They call it progress, but we don't see it as progress': farm consolidation and land concentration in Saskatchewan, Canada." *Agriculture and Human Values*:1-14.

Marx, Karl. 1967 [1867]. "The Secret of Primitive Accumulation." In *Capital: a critique of political economy*. New York: International Publishers Co.

Marmot, Michael G, Geoffrey Rose, Martin Shipley, and Peter J Hamilton. 1978. "Employment grade and coronary heart disease in British civil servants." *Journal of Epidemiology & Community Health* 32 (4):244-249.

Marmot, Michael G, Stephen Stansfeld, Chandra Patel, Fiona North, Jenny Head, Ian White, Eric Brunner, Amanda Feeney, and G Davey Smith. 1991. "Health inequalities among British civil servants: the Whitehall II study." *The Lancet* 337 (8754):1387-1393.

Maxwell, Joseph A. 2012. *A realist approach for qualitative research*: Sage.

- McCoy, Jennifer, Tahmina Rahman, and Murat Somer. 2018. "Polarization and the global crisis of democracy: Common patterns, dynamics, and pernicious consequences for democratic polities." *American Behavioral Scientist* 62 (1):16-42.
- McGregor, Jaynce. 2014. "Why is the Canadian Wheat Board opposed to a farmer-led bid?" *CBC*. <https://www.cbc.ca/news/politics/why-is-the-canadian-wheat-board-opposed-to-a-farmer-led-bid-1.2857788>.
- McGregor, Jaynce. 2015. "Investor G3 Global Grain Group to take over wheat board." *CBC*. <https://www.cbc.ca/news/politics/investor-g3-global-grain-group-to-take-over-wheat-board-1.3033665>.
- McMichael, P. 2005. "Global Development and the Corporate Food Regime." In *New directions in the sociology of global development*. Emerald Group Publishing Limited.
- McMichael, P. 2009. "The world food crisis in historical perspective." *Monthly Review* 61 (3):32.
- McMichael, P. 2012. "The land grab and corporate food regime restructuring." *The Journal of Peasant Studies* 39 (3-4):681-701.
- McMichael, P. 2013. *Food regimes and agrarian questions*: Fernwood Publishing.
- McNally, R. 2023. "One-sided grain contracts need to change." <https://apas.ca/news/listing/one-sided-grain-contracts-need-to-change>.
- Measner, Adrian. 2007. "The global grain trade and the Canadian Wheat Board." In *Our board our business: Why farmers support the Canadian Wheat Board*, edited by Terry Pugh and Darrell McLaughlin, 30-41. Fernwood Publishing.
- Melberg, Kjersti. 2003. "Farming, stress and psychological well-being: the case of Norwegian farm spouses." *Sociologia Ruralis* 43 (1):56-76.

- Mendly-Zambo, Z and the NFU. 2023. Looking Upstream at the Farmer Mental Health Crisis in Canada. Canadian Center for Policy Alternatives.
- Mercantile Consulting Ventures. 2022. Producer Contract Review.
- Merriott, Dominic. 2016. "Factors associated with the farmer suicide crisis in India." *Journal of epidemiology and global health* 6 (4):217-227.
- Mukumbang, Ferdinand C. 2021. "Retroductive theorizing: A contribution of critical realism to mixed methods research." *Journal of Mixed Methods Research*:15586898211049847.
- Mussell, Al, and D Dedley. 2021. Size Economies and Stratification in Primary Agriculture: Understanding the Implications. Agri-Food Economic Systems.
- Myles, John. 1998. "How to design a "Liberal" welfare state: A comparison of Canada and the United States." *Social Policy & Administration* 32 (4):341-364.
- Nairn, P. 2018. "Ontario Federation of Agriculture. Personal phone call." September 27.
- Navarro, V. 1999. "Health and equity in the world in the era of "globalization"." *International journal of health services* 29 (2):215-226.
- Navarro, V, ed. 2007. *Neoliberalism, Globalization, and Inequalities: Consequences for Health and Quality of Life*. Amityville NY: Baywood Press.
- Newman, David B, Norbert Schwarz, Jesse Graham, and Arthur A Stone. 2019. "Conservatives report greater meaning in life than liberals." *Social Psychological and Personality Science* 10 (4):494-503.
- NFU. 2019. "Supply Management." accessed March 15. <https://www.nfu.ca/campaigns/supply-management/>.
- NFU. 2020. "Canadian Wheat Board." <https://www.nfu.ca/campaigns/grain-marketing-and-transportation/canadian-wheat-board/>.

- NFU. 2021. "NFU calls for universal "Act of God" clause in forward contracts." National Farmers Union. <https://www.nfu.ca/nfu-calls-for-universal-act-of-god-clause-in-forward-contracts/>.
- NFU. 2023. "The Competition Act as a Tool for Democracy – Fairness for Farmers." <https://www.nfu.ca/policy/the-competition-act-as-a-tool-for-democracy-fairness-for-farmers/>
- OECD. 2020. Rural Well-Being: Geography of Opportunities, OECD Rural Studies. OECD Publishing Paris, France.
- Office of the United States Trade Representative. 2018. "UNITED STATES–MEXICO–CANADA TRADE FACT SHEET Agriculture: Market Access and Dairy Outcomes of the USMC Agreement." <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/fact-sheets/market-access-and-dairy-outcomes>.
- Okay, K. 2023. "The effect of grain elevator market concentration on Saskatchewan farmland prices." Master of Science, University of Saskatchewan.
- Olsen, G. 2010. *Power and Inequality: A Comparative Introduction*. Toronto: Oxford University Press.
- Orloff, Ann. 1996. "Gender in the welfare state." *Annual review of sociology* 22 (1):51-78.
- Owram, Kristine. 2016. "A rich harvest: How the Canadian Wheat Board's demise unleashed a grain bonanza." *Financial Post*. <https://business.financialpost.com/transportation/a-rich-harvest-how-the-canadian-wheat-boards-demise-unleashed-a-grain-bonanza>.
- Peekhaus, Wilhelm. 2011. "Primitive accumulation and enclosure of the commons: genetically engineered seeds and Canadian jurisprudence." *Science & Society* 75 (4):529-554.

- Perceval, Meg, Victoria Ross, Kairi Kõlves, Prasuna Reddy, and Diego De Leo. 2018. "Social factors and Australian farmer suicide: a qualitative study." *BMC Public Health* 18 (1):1-7.
- Perkins, John H. 1990. "The Rockefeller Foundation and the green revolution, 1941–1956." *Agriculture and Human Values* 7 (3-4):6-18.
- Pied, Claudine, and Shan Sappleton. 2023. "Disrupting Political Polarization: The Role of Politics in Explanations of Farm Loss in Southern Wisconsin☆." *Rural Sociology* 88 (4):1103-1130.
- Pipa, A., and Geismar, N. 2020. President-elect Biden: Want to reduce polarization? Modernize federal rural policy. Brookings. <https://www.brookings.edu/articles/president-elect-biden-want-to-reduce-polarization-modernize-federal-rural-policy/>.
- Pipa, A., and Geismar, N. 2021. "Reimagining rural policy: Organizing federal assistance to maximize rural prosperity." <https://www.brookings.edu/wp-content/uploads/2020/11/Rural-Dev-Assistance-Brief.pdf>.
- Pot, Lisa. 2019. "Be empathetic not sympathetic." *The Rural Voice*.
- Pratt, S. 2023. "Contract issue 'settled' for grain handlers." *The Western Producer*. <https://www.producer.com/news/contract-issue-settled-for-grain-handlers/>.
- Provost, K. 2022. "Survey suggests 27% of Sask. residents changed their political views during pandemic." <https://www.cbc.ca/news/canada/saskatchewan/survey-pandemic-political-views-change-1.6433408>.
- Prys-Hansen, Miriam. 2023. "The Global South: A Problematic Term." <https://ip-quarterly.com/en/global-south-problematic-term>.

- Pugh, Terry. 2007. "The Canadian Wheat Board single desk." In *Our board our business: Why farmers support the Canadian Wheat Board*, edited by Terry Pugh and Darrell McLaughlin, 9-17. Fernwood Publishing.
- Pugh, Terry, and Darrell McLaughlin. 2007. *Our board our business: Why farmers support the Canadian Wheat Board*: Fernwood Publishing.
- Purdon, N, and L Palleja. 2020. "'I thought I was going to die': Canadian farmers open up about struggles with mental health." *CBC*. <https://www.cbc.ca/news/health/the-national-farmers-mental-health-1.5431158>.
- Pyysiäinen, Jarkko, Darren Halpin, and Andrew Guilfoyle. 2017. "Neoliberal governance and 'responsibilization' of agents: reassessing the mechanisms of responsibility-shift in neoliberal discursive environments." *Distinktion: Journal of Social Theory* 18 (2):215-235.
- Qualman, D. 2011. "Advancing agriculture by destroying farms? The state of agriculture in Canada." In *Food sovereignty in Canada: Creating just and sustainable food systems*, edited by H Wittman, A Desmarais and N Wiebe, 20-42. Fernwood Pub.
- Qualman, D. 2019. Tackling the Farm Crisis and the Climate Crisis.
- Raphael, D. 2002. *Social justice is good for our hearts: why societal factors--not lifestyles--are major causes of heart disease in Canada and elsewhere*: CSJ Foundation for Research and Education.
- Raphael, D. 2003. "Bridging the gap between knowledge and action on the societal determinants of cardiovascular disease: how one Canadian community effort hit – and hurdled – the lifestyle wall." *Health Education* 103 (3):177-189. doi: doi:10.1108/09654280310472397.

- Raphael, D. 2010. *Health and Illness*: Fernwood Pub.
- Raphael, D. 2012. *Tackling Health Inequalities*. Toronto: Canadian Scholars' Press.
- Raphael, D. 2015. "Beyond policy analysis: The raw politics behind opposition to healthy public policy." *Health Promotion International* 30 (2):380-396.
- Raphael, D., and T. Bryant. 2004. "The welfare state as a determinant of women's health: Support for women's quality of life in Canada and four comparison nations." *Health Policy* 68:63-79.
- Raphael, D., and T. Bryant. 2015. "Power, intersectionality and the life course: Identifying the political and economic structures of welfare states that support or threaten health." *Social Theory & Health* 13 (3-4):245-266.
- Reuters. 2023. "Canada plans to amend competition laws to control rising food prices." Reuters. <https://www.reuters.com/world/americas/canada-plans-amend-competition-laws-control-rising-food-prices-2023-09-15/>
- Ringgenberg, Wendy, Corinne Peek-Asa, Kelley Donham, and Marizen Ramirez. 2018. "Trends and characteristics of occupational suicide and homicide in farmers and agriculture workers, 1992–2010." *The Journal of Rural Health* 34 (3):246-253.
- Robson, Ian. 2017. "Omnitrax not solely to blame for derailing Port of Churchill." <https://www.nfu.ca/omnitrax-not-solely-to-blame-for-derailing-port-of-churchill/>.
- Rosset, Peter. 2006. *Food is different: Why the WTO should get out of agriculture*: Zed Books.
- Ruckert, Arne, and Ronald Labonté. 2014. "The global financial crisis and health equity: early experiences from Canada." *Globalization and health* 10 (1):2.
- Ruckert, Arne, and Ronald Labonté. 2017. "Health inequities in the age of austerity: the need for social protection policies." *Social Science & Medicine* 187:306-311.

- Russell, Peter A. 2012. *How agriculture made Canada: Farming in the nineteenth century*. Vol. 1: McGill-Queen's Press-MQUP.
- Saint-Arnaud, S, and P Bernard. 2003. "Convergence or resilience? A hierarchical cluster analysis of the welfare regimes in advanced countries." *Current Sociology* 51 (5):499-527.
- Sanders, B. 2019. "Revitalizing Rural America." <https://berniesanders.com/issues/revitalizing-rural-america/>
- Sanscartier, M D. 2015. "A brave new citizenry: exploring Canadian welfare state retrenchment through changing citizenship."
- Santos, Emelyne Gabrielly de Oliveira, Paulo Roberto Queiroz, Aryelly Dayane da Silva Nunes, Kelly Graziani Giacchero Vedana, and Isabelle Ribeiro Barbosa. 2021. "Factors associated with suicidal behavior in farmers: a systematic review." *International journal of environmental research and public health* 18 (12):6522.
- Saskatchewan. 2024. "Population." <https://dashboard.saskatchewan.ca/people-community/people/population>.
- Sayer, R Andrew. 2000. *Method in social science: A realist approach*: Psychology Press.
- Scambler, Graham. 2001. "Critical realism, sociology and health inequalities: social class as a generative mechanism and its media of enactment." *Alethia* 4 (1):35-42.
- Schlenker, Barry R, John R Chambers, and Bonnie M Le. 2012. "Conservatives are happier than liberals, but why? Political ideology, personality, and life satisfaction." *Journal of Research in Personality* 46 (2):127-146.
- Scott-Samuel, A. 2012. "Forward: Straight talk about health equity." In *Tackling Health Inequalities*, edited by D Raphael. Toronto: Canadian Scholars' Press.

- Sgro, Judy. 2011. *House of Commons Debates*. Canada. October 20.
- Sharkey, J. 2018. "Farmer mental health focus of new University of Guelph course." accessed September 12th. <https://www.cbc.ca/news/canada/kitchener-waterloo/university-guelph-mental-health-suicide-1.4806312>.
- Shorthouse, Molly, and Louise Stone. 2018. "Inequity amplified: climate change, the Australian farmer, and mental health." *The Medical Journal of Australia* 209 (4):156-157.
- Shiva, Vandana. 2004. "The future of food: countering globalisation and recolonisation of Indian agriculture." *Futures* 36 (6-7):715-732.
- Simkin, Sue, Keith Hawton, Joan Fagg, and Aslog Malmberg. 1998. "Stress in farmers: a survey of farmers in England and Wales." *Occupational and environmental medicine* 55 (11):729-734.
- Simpson, K, R Sebastian, T Arbuckle, C Bancej, and William Pickett. 2004. "Stress on the farm and its association with injury." *Journal of agricultural safety and health* 10 (3):141.
- Skogstad, Grace. 2005. "The dynamics of institutional transformation: the case of the Canadian wheat board." *Canadian Journal of Political Science/Revue canadienne de science politique* 38 (3):529-548.
- Skogstad, Grace. 2008. *Internationalization and Canadian agriculture: Policy and governing paradigms*. Vol. 30: University of Toronto Press.
- Skogstad, Grace, and Tanya Whyte. 2015. "Authority contests, power and policy paradigm change: Explaining developments in grain marketing policy in Prairie Canada." *Canadian Journal of Political Science/Revue canadienne de science politique* 48 (1):79-100.

- Smith, David E. 2009. "Saskatchewan: A distinct political culture." In *Perspectives of Saskatchewan*, 37-56.
- St-Onge, Josee. 2018. "Farmers need to talk about stress, depression, says #DoMoreAg co-founder." CBC News. <https://www.cbc.ca/news/canada/edmonton/farmers-do-more-agriculture-mental-health-stress-1.4510905>.
- St. Pierre, M, and S Mhlanga. 2022. Saskatchewan continues to live up to the title of breadbasket of Canada. Statistics Canada.
- Stanley-Clarke, Nicky. 2019. "The role of agricultural professionals in identifying, mitigating and supporting farming families during times of stress: Findings of a qualitative study." *Australian Journal of Rural Health* 27 (3):203-209.
- Statistics Canada. 2017. "A portrait of a 21st century agricultural operation." <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14811-eng.htm>.
- Statistics Canada. 2017. "Saskatchewan remains the breadbasket of Canada." <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14807-eng.htm>.
- Statistics Canada. 2018. Farm income, 2018. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/190528/dq190528a-eng.pdf?st=7SL5uHey>.
- Statistics Canada. 2022a. Canada's 2021 Census of Agriculture: A story about the transformation of the agriculture industry and adaptiveness of Canadian farmers.
- Statistics Canada. 2022b. "Growing and raising costs for farmers." <https://www.statcan.gc.ca/o1/en/plus/2413-growing-and-raising-costs-farmers>.
- Statistics Canada. 2022c. Land use, Census of Agriculture historical data. In *Table 32-10-0153-01*

- Statistics Canada. 2022d. "Overview of Canada's agriculture and agri-food sector."
<https://agriculture.canada.ca/en/canadas-agriculture-sectors/overview-canadas-agriculture-and-agri-food-sector>.
- Statistics Canada. 2023. "Rail transportation, 2021." <https://www150.statcan.gc.ca/n1/daily-quotidien/230405/dq230405b-eng.htm>.
- Stewart, Alexander J, Nolan McCarty, and Joanna J Bryson. 2020. "Polarization under rising inequality and economic decline." *Science advances* 6 (50):eabd4201.
- Storseth, Brian. 2011. *House of Commons Debates*. Canada. October 20.
- Tasca, Cecilia, Mariangela Rapetti, Mauro Giovanni Carta, and Bianca Fadda. 2012. "Women and hysteria in the history of mental health." *Clinical practice and epidemiology in mental health: CP & EMH* 8:110.
- Tait, Carrie, and Jessica Leeder. 2019. "With high stress, anxiety and depression, 40 per cent of Canadian farmers uneasy about seeking help." *The Globe and Mail*.
<https://www.theglobeandmail.com/canada/alberta/article-with-high-stress-anxiety-and-depression-40-per-cent-of-canadian/>
- Teghtsoonian, Katherine. 2009. "Depression and mental health in neoliberal times: A critical analysis of policy and discourse." *Social science & medicine* 69 (1):28-35.
- Thompson, Rochelle, Briana NM Hagen, Margaret N Lumley, Charlotte B Winder, Basem Gohar, and Andria Jones-Bitton. 2022. "Mental Health and Substance Use of Farmers in Canada during COVID-19." *International Journal of Environmental Research and Public Health* 19 (20):13566.
- Tilley, Lisa, Ashok Kumar, and Thomas Cowan. 2017. Introduction: Enclosures and discontents: Primitive accumulation and resistance under globalised capital. Taylor & Francis.

- Tilzey, Mark. 2019. "Food regimes, capital, state, and class: Friedmann and McMichael revisited." *Sociologia Ruralis* 59 (2):230-254.
- Tremblay, DG. 2016. "Precarious Work and the Labour Market." In *Social determinants of health: Canadian perspectives*, 32-56.
- UCTE. 2018. Union demands Canada take Wheat Board back from Saudis.
<https://unioncte.ca/union-demands-canada-take-wheat-board-back-from-saudis/>
- Union des producteurs agricoles. 2022. "AGIR EN SENTINELLE POUR LA PRÉVENTION DU SUICIDE – DÉCLINAISON AGRICOLE." accessed September 10.
<https://uplus.upa.qc.ca/formation/sentinelle-milieu-agricole-3/>.
- Vaseth, M, and D Balaam. 2024. "Political economy."
<https://www.britannica.com/money/political-economy>.
- Vasist, Pramukh Nanjundaswamy, Debashis Chatterjee, and Satish Krishnan. 2023. "The Polarizing Impact of Political Disinformation and Hate Speech: A Cross-country Configural Narrative." *Information Systems Frontiers*:1-26.
- Via Campesina. 1996. The right to produce and access to land.
- Vossler, Glenda-Lee. 2024. "CGC should be involved in standardizing grain contracts."
PortageOnline. <https://portageonline.com/articles/cgc-should-be-involved-in-standardizing-grain-contracts>.
- Walks, Alan. 2014. "From financialization to sociospatial polarization of the city? Evidence from Canada." *Economic Geography* 90 (1):33-66.
- Wallis, Alison, and Maureen F Dollard. 2008. "Local and global factors in work stress--The Australian dairy farming exemplar." *Scandinavian Journal of Work, Environment & Health* 34 (6):66.

- Walt, Gill. 1994. *Health policy: an introduction to process and power*: Witwatersrand University Press Johannesburg.
- Warner, Benjamin P. 2019. "Explaining political polarization in environmental governance using narrative analysis." *Ecology and Society* 24 (3).
- White, Ed. 2023. "Farm balance sheet looks 'awesome,' says FCC." *Western Producer*.
<https://www.producer.com/news/farm-balance-sheet-looks-awesome-says-fcc/>.
- Whitehead, Margaret. 1991. "The concepts and principles of equity and health." *Health promotion international* 6 (3):217-228.
- Wichers, G. 2024. "Farm debt has room to grow." *Western Producer*.
<https://www.producer.com/news/farm-debt-has-room-to-grow/>.
- Wiebe, N. 2016. "Crisis in the Food System: the Farm Crisis." In *Critical perspectives in food studies*, edited by Mustafa Koç, Jennifer Sumner and Anthony Winson. Oxford University Press.
- Wiebe, N. 2017. "Crisis in the Food System: the Farm Crisis." In *Critical perspectives in food studies*, edited by Mustafa Koç, Jennifer Sumner and Anthony Winson. Oxford University Press.
- Wiebe, N. 2022. "Crisis in the Food System: the Farm Crisis." In *Critical perspectives in food studies*, edited by Mustafa Koç, Jennifer Sumner and Anthony Winson. Oxford University Press.
- Williams, R. 2001. "The ongoing farm crisis: Health, mental health and safety issues in Wisconsin." *Rural Mental Health* 26 (4):15-17.
- Wilson, CF. 1978. *A century of Canadian grain*. Saskatoon, Saskatchewan: Western Producer Prairie Books.

- Wilson, John. 1988. "Positivism, Idealism, and Realism." In *Social theory*. Englewood Cliffs NJ: Prentice Hall.
- Winson, Anthony. 1993. *The intimate commodity: food and the development of the agro-industrial complex in Canada*: Garamond Press.
- Wood, Allen. 2004. Karl Marx, 2nd Expanded Edition. London: Routledge.
- World Health Organization. 2018. "Social determinants of health." accessed June 12.
http://www.who.int/social_determinants/en/.
- Yazd, Sahar Daghigh, Sarah Ann Wheeler, and Alec Zuo. 2019. "Key risk factors affecting farmers' mental health: A systematic review." *International journal of environmental research and public health* 16 (23):4849.
- Zimmer, Bob. 2011. *House of Commons Debates*. Canada. October 20.

Appendices

Appendix A: Informant recruitment email

Dear [name],

My name is Zsofia Mendly-Zambo, I am a PhD student at York University. I am conducting a research study on the impact that changes to the Canadian Wheat Board have had on grain farmers in Canada. My goal is to understand how changes in grain selling have impacted the day-to-day operations and lived experiences of farmers, including impacts on mental health and well-being.

I was hoping you would be interested in being interviewed for this research. Because of your experience at Manitoba Farm, Rural & Northern Support Services, I thought you would be an ideal person to approach about participating in an interview for this project.

It's alright if you do not have familiarity with the Canadian Wheat Board, I would still be excited to speak with you about farmer mental health. I have included a more formal invitation at the end of this email.

Thank you for your time and consideration,

- Zsofia

Canadian Wheat Board Study: The goal of this project is to understand how changes to the way grain is marketed in Canadian prairie provinces has impacted farm operations and farmer well-being and mental health. This research will help inform future public policy making as well as help policymakers and Canadians understand the scope of challenges and opportunities farmers face today.

The results of this study will be reported as part Ms. Mendly-Zambo's PhD dissertation and will also be shared through research summaries, a media release, and with two or more scholarly publications. The interview will take approximately 30-60 minutes, and will be audio recorded, and you will have the option to remain anonymous or to be identified when we share results from the study. You may participate in this interview even if you choose to not be audio recorded. Participation in an interview is of course voluntary, although any contribution is very appreciated.

Zsofia Mendly-Zambo MSc, MA
PhD Candidate, Health Policy and Equity
Faculty of Health Policy and Management
York University, Toronto, ON M3J 1P3, Canada
+1 647 228 2664
zzambo@yorku.ca

Appendix B: Letter of consent



York University
School of Health Policy & Management
Main Office Room 314
Stong Building
4700 Keele Street
Toronto ON • Canada M3J 1P3

Date: _____

Letter of Informed Consent - Interview

Study Name: The Canadian Wheat Board Study

Researcher name: Zsofia Zambo (PhD Candidate, year IV), York University. Principal investigator

Purpose/Objectives of the Study

Zsofia Zambo is leading a study on the impacts of changes to the Canadian Wheat Board on Canadian farmers. The Canadian Wheat Board (CWB) was a 'single desk seller' which oversaw collective marketing of both barley and wheat farmers exporting to global markets. The removal of the CWB's single desk powers in 2012 has caused changes in transporting, handling and marketing grain crops, yet the impact on farmers' day-to-day experiences is largely unknown, specifically with regards to mental health, and well-being.

This information will be collected through interviews and a questionnaire. The results of this study will be reported as part of Ms. Zambo's PhD dissertation and will be shared by research summaries, a media release, and with two or more scholarly publications.

Field work for this study is being supervised by Dr. Dennis Raphael (draphael@yorku.ca). Dennis Raphael is a health policy professor in the School of Health Policy and Management at York University.

Procedures involved in the Research

You are invited to participate in this research. During interviews, you may choose not to answer questions. We estimate the interview will require approximately 60 minutes of your time and will be conducted and recorded using online meeting platform Zoom. You may participate in this interview even if you choose to not be audio recorded.

The expected duration of this research study will be through December 2021 and all interview participants are entered into a draw to win a \$250 gas gift card. In addition, grain farmers will

receive an honorarium in the form of a \$25 Amazon gift card, while key informants (policy makers and stakeholders) will receive a \$10 Amazon gift card.

Potential Benefits

Benefits from participating in this study include a contribution to the collective body of knowledge on the relationship between agriculture policy and the health of farmers which to date is lacking a Canadian perspective.

Potential Harms, Risks or Discomforts to Participants

This research has been classified as minimal risk, meaning the probability and magnitude of possible harms implied by participation in the research are no greater than those encountered by participants in those aspects of their everyday life that relate to the research. We do not foresee any risks or discomfort from your participation in the research. Given the sensitive nature of discussing experiences related to mental health and stress, however, it is possible that you may experience mild psychological discomfort. At the end of the interview you will be provided with a list of mental health resources.

Voluntary Participation and Withdrawal: Your participation is voluntary; you retain the right to refuse to participate and may withdraw from the study at any time. During interviews, you may choose not to answer questions. Your decision not to volunteer, to stop participating, or to refuse to answer particular questions will not influence the nature of the ongoing relationship you may have with the researchers or study staff, or the nature of your relationship with York University either now, or in the future. Furthermore, if you decide to stop participating, you may withdraw without penalty, financial or otherwise, and you will still be entered into the draw for the \$250 gas card and you will still receive the appropriate gift card.

We will be happy to answer any questions you have about the research process during or after the interview. To withdraw from the study, contact Zsofia Zambo, at zzambo@yorku.ca. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible. You have the right to withdraw up to the point that the results have been published or disseminated. If the results have already been published or disseminated, data cannot be withdrawn from those texts; however, it will be withdrawn from future publications or other dissemination.

Study Results

Please contact Ms. Zambo for information on the dissemination and publication of study results zzambo@yorku.ca.

Confidentiality:

This study will use the Zoom to collect data, which is an externally hosted cloud-based service. When information is transmitted over the internet privacy cannot be guaranteed. There is always a risk your responses may be intercepted by a third party (e.g., government agencies, hackers). Further, while York University researchers will not collect or use IP address or other information which could link your participant to your computer or electronic devices without informing you, there is a small risk with any platform such as this of data that is collected on external servers falling outside the control of the research team. If you are concerned about this, we would be

happy to make alternative arrangements (where possible) for you to participate, perhaps via telephone. Please contact Ms. Zambo for further information.

Recordings (audio/video) will be saved in a password protected file to Ms. Zambo's local computer, not the cloud based service. Interviews will be transcribed using Otter.ai which is available through York Universities' Zoom service. As such, data is covered and protected by York's agreement with Zoom, which has preferable data security and privacy terms.

Please note that it is the expectation that participants agree not to make any unauthorized recordings of the content of a meeting / data collection session.

Furthermore, hand written notes will be taken using pen and paper during the interview to note any additional information or observations that aren't captured on tape. Physical copies of interview transcripts, consent forms as well as questionnaires will be kept in a locked cabinet. During the analysis and presentations, all data records will be coded, removing any direct and indirect identifiers to ensure privacy. Raw data from this study will only be accessed by Ms. Zambo.

Unless you choose otherwise, all information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research.

All data collected, including interviews, questionnaires, digital recordings will be kept for a period of 5 years. By May 2025, all documents digital and physical will be disposed. Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me at zzambo@yorku.ca or my supervisor, Dr. Dennis Raphael at draphael@yorku.ca and/or 416-736-2100, ext. 22053. You may also contact the Graduate Program in Health at gradhlth@yorku.ca and/or 416-736-5157.

This research has received ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Consent Form

By signing below, I agree to participate in the Canadian Wheat Board Study.

I have read the information presented in the letter of informed consent being conducted by Zsofia Zambo, PhD at York University. I have had the opportunity to ask questions about my involvement in this study and to receive any additional details. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

I understand that I have the right to withdraw from the study at any time and that confidentiality and/or anonymity of all results will be preserved. If I have any questions about the study, I should contact Zsofia Zambo at zzambo@yorku.ca, or Dr. Raphael at draphael@yorku.ca and/or 416-736-2100, ext. 22053. If I have any concerns regarding my rights or welfare as a participant in this research study, I can contact the Office of Research Ethics at York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

If you would like to be identified by name and position in any final presentations of interview data (e.g. summaries, reports, academic papers, presentations), please check below:

I would like to be identified by name and position in results based on this data (e.g. summaries, reports, academic papers, presentations).

If you did not check above, you will not be identified in any presentations of interview data.

Name (please print) _____

Signature _____
Participant

Date _____

Signature _____
Principal Investigator

Date _____

Additional consent

1. Audio recording

I consent to the audio-recording of my interview(s).

Signature _____
Participant (name)

Date _____

Once signed, you will receive a copy of this consent form.

Appendix C: Farmer recruitment email

Canadian Wheat Board Research Project

Dear [name],

My name is Zsofia Mendly-Zambo, I am a PhD student at York University. I am conducting a research study on the impact that changes to the Canadian Wheat Board have had on grain farmers in Saskatchewan. My goal is to understand how changes in grain selling have impacted the day-to-day operations and lived experiences of farmers, including impacts on well-being.

I was given your name and contact from [name], and I was hoping you would be interested in being interviewed for this research. For your time and effort, you will be compensated a \$25 gift card.

I have included a more formal invitation at the end of this email.

Thank you for your time and consideration,

- Zsofia

Canadian Wheat Board Study: The goal of this project is to understand how changes to the way grain is marketed in Saskatchewan has impacted farm operations and farmer well-being. This research will help inform future public policy making as well as help policymakers and Canadians understand the scope of challenges and opportunities farmers face today.

The results of this study will be reported as part Ms. Mendly-Zambo's PhD dissertation and will also be shared through research summaries, a media release, and with two or more scholarly publications. The interview will take approximately 45-60 minutes and will take place by either telephone or computer (Zoom). The interview will be audio recorded, and you will have the option to remain anonymous or to be identified when we share results from the study. You may participate in this interview even if you choose to not be audio recorded. Participation in an interview is of course voluntary, although any contribution is very appreciated.

Zsofia Mendly-Zambo MSc, MA
PhD Candidate, Health Policy and Equity
Faculty of Health Policy and Management
York University, Toronto, ON M3J 1P3, Canada
+1 647 228 2664
zzambo@yorku.ca

Appendix D: Recruitment poster

Canadian Wheat Board Study



My name is Zsofia Mendly-Zambo and I am a PhD student at York University. I am conducting a research study on the impact that changes to the Canadian Wheat Board have had on grain farmers in Canada.

Specifically, my goal is to:

- Understand how changes to the Wheat Board have impacted farmers, not only in the operation of their farms, but also on their overall well-being.
- Inform future public policy making as well as help policymakers and Canadians understand the scope of challenges faced by farmers today.

If you are a grain producer in Saskatchewan who has been in operation since at least 2009, or a retired grain producer (retired anytime after 2013), I would love to speak with you.

All participants will receive a \$25 gift card, and will be entered into a draw for a \$250 gas gift card (approx. 1 in 25 chance of winning). Time commitment is estimated to be about 60 minutes, and interviews can be done by phone or computer.

To participate, email zzambo@yorku.ca, or call (647) 228 2664

This research has received ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Supervisor: Dennis Raphael, PhD, Health
Policy and Equity, York University
416-736-2100, ext. 22134
email: draphael@yorku.ca



Appendix E: Informant interview questions

Canadian Wheat Board Study Informant Interview Questions

About the interviewee questions

How would you describe your current job position and duties?

1. Canadian Farmers

How familiar are you with the Western prairie grain sector in Canada?

- 1 – Not at all familiar
- 2 – Slightly familiar
- 3 – Somewhat familiar
- 4 – Moderately familiar
- 5 – Extremely familiar

[If answered, not at all, or slightly familiar skip to section 3]

In your opinion, what are some of the main opportunities and challenges facing grain farmers today, or Canadian farmers (if not familiar with grain farmers)?

What are the most important changes grain farmers have experienced in the last ten years?

2. Canadian Wheat Board

How familiar are you with the Canadian Wheat Board?

- 1 – Not at all familiar
- 2 – Slightly familiar
- 3 – Somewhat familiar
- 4 – Moderately familiar
- 5 – Extremely familiar

In your opinion what has been the impact of removing the CWB's single desk seller powers?
Follow up: On small and mid-sized farms? On large farms?

Follow up: on farm/rural and port communities? (Port communities that have or are now transporting grain. example, Churchill Manitoba).

Grain marketing

What challenges have emerged for farmer operators as they have had to adapt to marketing/selling their own wheat and barley?

Prompt: technological challenges, knowledge of grain marketing, low prices, few buyers

Follow up 1: Was a new skillset required? If so, where/how have they acquired these skills?

Follow up 2: Overall, how well have farm operators adapted to having to market their own wheat and barley?

Has the open market for wheat and barley impacted grain prices? Producer's overall net profit? If so, in what direction and why?

How has the requirement to market their own wheat and barley impacted quality of life for farm operators in terms of time spent working/work-life balance?

Do you see the marketing/selling of grain as being a source of stress for a producer?

Do you see the price volatility of grain as being a source of stress for a producer?

How much control do you think farmers have over their:

- ability to market their commodities?
- income?
- grain handling and transportation of their commodities?

Grain Handling and Transportation

How has grain handling and transportation changed since the dismantling of the CWB?

Policy

Do you think deregulation of the CWB impacted male and female farm operators equally?

Follow up: On big and small farms equally?

Overall, do you think farmers are better off with, or without, the CWB as a single desk seller?

Were you initially for, against, or neutral with regards to the removal of the CWB's single desk seller powers and has your opinion changed over time?

Follow up: Do you believe the way in which those changes were made was fair and democratic?

What does the term 'marketing choice' mean to you?

Follow up: Is there enough competition in the market to allow small and mid-sized farms to have a choice of who they sell to?

Mental Health & Well-being

How would you characterize the mental health and well-being of Canadian farmers?

In your opinion, what are some of the factors that might be affecting farmers' mental health and well-being?

Do you think the changes to the Canadian Wheat Board have directly or indirectly impacted the on the mental health and well-being of prairie farmers?

If not: on the quality of life of prairie farmers?

What do you think are some of the barriers to improving the mental health and well-being of farmers?

What role, if any, does your organization play with regards to the mental health and well-being of farmers?

Policy and Mental health

Do you think agriculture policy in general can impact on farmers' mental health and well-being?

What role do you see governments (at any level) playing in improving farmer mental health and well-being?

Prompt: What type of supports do you think are needed to improve farmer mental health?

Prompt: What types of policies?

Before this interview, I sent you the recommendations set out by the House of Commons Standing Committee on Agriculture and Agri food from their report *Mental health: a priority for our farmers*. Have you had a chance to look over these recommendations?

If no – briefly list the 10 recommendations (see suppl. material).

If yes: What is your opinion on these recommendations? Is there anything you think is missing from this list, or otherwise any changes you would like to see?

Is there any policy related specifically to agriculture you think would improve mental health?

Prompt: Business management risk program, implementing supply management, single-desk selling, changes to trade

What do you think farmers view as the causes of poor mental health? And do you think they are aware of the economic and political structures that shape their mental health and well-being?

Wrap up questions

What else would you like to add or mention, regarding any of the topics we covered?

Is there anyone you can recommend who might be interested in participating in this research? Either a farmer, or policymaker or stakeholder.

Is it alright if I contact you by email if I require further clarification on anything we discussed here today?

“Thank you again for taking time out of your busy schedule to meet with me today. The information you have provided has been very valuable to our study. Again, I just want to reiterate that everything we have discussed today is confidential.”

Appendix F: List of mental health recommendations

MENTAL HEALTH: A PRIORITY FOR OUR FARMERS LIST OF RECOMMENDATIONS

As a result of their deliberations committees may make recommendations which they include in their reports for the consideration of the House of Commons or the Government.

Recommendations related to this study are listed below.

Recommendation 1

The Committee recommends that the Government of Canada examine the process of audits and labour reviews in order to 1) ensure the least amount of stress and disruption to the agricultural producer and those dependent on them for work since extremely negative impact on the mental well-being of the producers and those around them can result from poorly managed audits and labour reviews, and 2) whenever possible, give consideration to practical experience when filling positions of auditors as they best understand the processes that the producers go through.

Recommendation 2

The Committee recommends that the Government of Canada and pertinent departments, when considering and implementing regulatory change, take into account the impact any changes may have on agricultural producers and related industry persons and mitigate potential stressors by 1) giving ample time for consultation, 2) ensuring that all persons affected by the changes are kept informed from beginning to end and 3) give full consideration to withdrawing said changes or amending them if the impact is found to be of great negative impact on the Canadian agricultural sector.

Recommendation 3

Given the prevalence of government initiatives, studies, and programs to combat cyber bullying and other forms of intimidation and coercion targeted at students and vulnerable Canadians, the Government should engage with farmers and agricultural stakeholder groups to develop public awareness campaigns and strategies to combat the growing incidence of cyber bullying, intimidation, and threats targeted at Canada's agricultural workers which results in a significant increase in stress. In addition, the Committee recommends that the Government of Canada consider including any form of intimidation or cyberbullying targeted at any group of Canadians based on their occupation or place of residence as a Criminal Code offense.

Recommendation 4

The Committee recommends that the Government of Canada accelerate the deployment of high-speed Internet infrastructure in Canada's rural and remote regions.

Recommendation 5

The Committee recommends that the Government of Canada work with the recognized and accredited organizations to better tailor mental health care and insurance coverage to farmers' specific needs.

Recommendation 6

The Committee recommends that the Government of Canada invest in educating business partners and other stakeholders who work with farmers to detect the signs of psychological disorders and distress in order to refer them to resources that can help them.

Recommendation 7

The Committee recommends that the Government of Canada contribute to building capacity in mental health awareness and prevention so that future farmers are informed of the challenges they may face.

Recommendation 8

The Committee recommends that the Government of Canada, in cooperation with its provincial and territorial counterparts, fund the activities of recognized and accredited organizations that provide mental health assistance to farmers and their families.

Recommendation 9

The Committee recommends that the Government of Canada oversee the national coordination of various research and prevention activities targeting the mental health of farmers.

Recommendation 10

The Committee recommends that the Government of Canada facilitate, coordinate and promote telephone help lines and e-mental health services for farmers and Canadians living in rural areas.

Appendix G: Farmer interview questions

Canadian Wheat Board Study Interview Questions for Farmers

Demographic Questions

What is your age?

Where do you farm and how long have you been farming?
(If retired) What year did you retire?

Can you tell me about your farm operation and size?

Can you describe your current duties on the farm?

Do you belong to any societies, organizations, or groups (political or otherwise)?

Canadian Wheat Board Questions

In your opinion, what has been the impact (if any) of removing the CWB's single desk seller powers in 2012?

Prompt 1: For you personally, in general, and on the community you live in?

Marketing

Who is primarily responsible for marketing/selling of grain on your farm operation?

How did you/they adapt to marketing/selling wheat and barley (or CWB grains) after the dismantling of the CWB?

Prompt: technological challenges, knowledge of grain marketing, prices, buyers

Follow up: Was a new skillset required? If so, where/how did you/they acquire these skills? Learning curve?

Was marketing/selling of grain initially a difficult transition, and if so, did it get easier with time?

Have you invested in any grain storage infrastructure on your farm since 2011? If so, why?

What share of your grain production do you sell in a crop year?

1. Nearly everything
2. We sell most
3. We sell about half
4. We sell less than half

Was this the same under the CWB?

Are you producing significantly more grain now than you were in 2011? If so, why?

Are you producing different grain than you were in 2011, if so why?

How has grain handing and transportation changed for you since changes to the CWB?

Prompt: Do you use truck or producer cars to haul grain (same or different under the CWB).

If using producer cars: have you experienced any delays with producer cars?

If yes: can you speak about that a little more?

If there have been delays, were these stressful experiences?

Do you experience more or fewer delays than when you operated under the CWB?

Have you ever had problems with grain delivery times? For example, has an elevator or company significantly delayed when you can deliver grain?

If yes: can you speak about that a little more?

Was that experience stressful?

Has that created difficulties related to cash flow?

Do you experience more or fewer delays than when you operated under the CWB?

Aside from marketing/selling your own grain, have you had to make any other changes to your farm operation as a result of changes to the wheat board?

Prompt: hiring of consultants, change in crop planted

Market Choice

How many grain elevators are within what you consider to be a reasonable driving distance from your farm?

Do you feel that there is enough competition in the market to allow you to obtain good prices for your grain?

Has the open market for wheat and barley impacted grain prices? Or your overall net profit? If so, in what direction and why?

Did you, or do you now, deal with G3 Grains? (Global Grain Group-the company that emerged from the CWB's privatization and sale to Bunge and SALIC (Saudi Arabia).

Transparency

Did you feel the CWB obtained fair prices for grain on behalf of farmers?
Follow up: Do you feel the current system is transparent?
Do you feel that basis is transparent?

Do you think changes to the CWB impacted big and small farms equally?
Younger/older farmers equally?
Male and female farm operators equally?

Do you think changes to the CWB increased or decreased inequalities between farmers?
If so, has that impacted social cohesion/rural life?
If inequality has increased, has it created any tensions between farm operators?

Well-being

Do you feel that marketing/selling of grain has been a source of stress in your life?

- How would you rate that stress on a scale of 1 – 5, 1 being not stressful and 5 being extremely stressful

Do you feel that the price volatility of grain has been a source of stress in your life?

- How would you rate that stress on a scale of 1 – 5, 1 being not stressful and 5 being extremely stressful

How much control do you feel you have over your ability to:

- Obtain a fair price for your grain?
- Obtain fair value for the quality of grain you produce?
- Generate income? (under the wheat board or presently)
- Over Grain handling and transportation?

Has the requirement to market your own wheat and barley impacted your quality of life in terms of time spent working/work-life balance?

Do you feel that changes to the Canadian Wheat Board have affected (Either now, or at the time of transition) your, or those you care about, overall:

- Levels of stress
- Levels of anxiety
- Moods [Incidence of depression]
- Overall happiness

If yes to any of these, please elaborate.

What do you feel are some of the main factors contributing to stress and poor mental health in the farming profession? This could be for yourself personally, or for grain farmers in general.

In your opinion, who is in the best position to address mental health among farmers
Yourself/the individual – your responsibility to seek help and take care of yourself
Community organizations, health centres and non-profits – to issue support and services including tele-health lines and more mental health service providers
Governments via agriculture policy and providing support and services including internet

What type of supports, policies, or other actions do you think are needed to improve farmer mental health and well-being?

Wrap up questions

Did you feel the CWB was working in farmers' best interests?

Were you initially for, against, or neutral with regards to the removal of the CWB's single desk seller powers and has your opinion changed over time?

What else would like to add or mention, regarding any of the topics we covered?

For demographics, would you mind telling me what revenue category your farm fits into? (Net farm revenues).

- under \$10,000 to \$49,999
- \$50,000 to \$99,999
- \$100,000 to \$249,999
- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$2,499,999
- \$2,500,000 and over

Do you know your farm debt ratio? (total farm liabilities/total farm assets)

If not, what is your approximate value of your debt, if any?

Do you feel you have a low, medium, or high debt load?

On a scale of 1 - 5, how financially stable do you feel you are currently?

- 1 being unstable, 5 being extremely stable

Who could you recommend who might be interested in participating in this research?

I am particularly looking for female operators, and those who are no longer farming, either retired or who stopped working for financial reasons (had to be in operation until at least 2013).

Because this interview touched on issues related to mental health and well-being, it's usual practice based on our research ethics protocol, to send some information regarding resources that are available in your area.

Appendix H: Example follow-up email to farmers with mental health resources

Dear [name],

Thank you for taking the time to speak with me last week. I really enjoyed our discussion.

As I mentioned, because this interview touched on issues related to mental health and well-being, it's usual practice based on our research ethics protocol, to send some information regarding resources that are available in your area.

I will also be sending along a gift card later this month as a token of my appreciation.

Thanks again,
Zsofia

Saskatchewan Farm Stress Line
1-800-667-4442

Useful Websites

<https://www.saskatchewan.ca/residents/health/accessing-health-care-services/mental-health-and-addictions-support-services/mental-health-support/mental-health-and-illness>

<https://www.saskatchewan.ca/residents/health/accessing-health-care-services/health-care-facilities>

<https://www.domore.ag/resources>

Appendix I: Additional Data and Tables

Table 1. Rating of marketing stress and price volatility stress

Group	Do you feel that selling of grain has been a source of stress in your life?	Rating of 1-5	Do you feel that the price volatility of grain has been a source of stress in your life?	Rating of 1-5	
<i>Neutral (n=2)</i>	Yes	2	Yes	3 or 4*	
	No	0	Yes	3	
	Group Average	1	Group Average	3.25	
<i>Pro/Supporters (n =8)</i>	Yes	3	No	2	
	Yes	4 or 5	Yes	4 or 5	
	Yes	5 during harvest, 2 the rest of year	Yes	5	
	Yes	3	Yes	4	
	Yes	2	No answer	No answer	
	Yes	5	Yes	4	
	Yes	3	No	2	
	Yes	4	Yes	4	
	Group Average	3.5	Group Average	3.6	
	<i>Anti/Opponents (n =6)**</i>	No	2	No	1
		No	1	No	3 or 4
Yes		2 or 3	Yes	3	
No		1	No	1	
No		2	Yes	3 or 4	
No		2	No answer	3	
Group Average		1.74		2.5	
Total		2.53		3.1	

*In instances where two numbers were provided an average of these numbers was taken to calculate the average scores.

**One participant from this group did not answer these questions

Appendix J: Six policy recommendations for improving farmer mental health from Mendly-Zambo and the NFU (2023).

Recommendation 1: Implement policies that enhance economic stability for farmers and farm workers. Since economic instability is a key driver of poor mental health, implementing policies to enhance economic stability for farmers and farm workers is critical. These include policies that address key drivers of economic uncertainty, including the cost-price squeeze, commodity volatility, corporate concentration and the climate crisis. Stronger competition policies, in particular, would foster a more equitable distribution of power within the food system.

Recommendation 2: Continue and enhance supports to farmers transitioning to sustainable farming practices. Support farmers as they transition from the current industrial agri-food system towards one that is sustainable and resilient in the face of the current climate crisis. Promoting the adoption of sustainable farming practices and agro-ecological approaches would reduce greenhouse gas emissions and enhance crop productivity, soil fertility, and biodiversity.

Recommendation 3: Include food sovereignty in the federal goals for agriculture. The Canadian government should be facilitating the growth of sustainable and local food systems. One such way is to support food sovereignty, which would help create a sustainable and local food system that prioritizes the health and well-being of farmers, farm workers, communities, and the environment.

Recommendation 4: Rebuild rural infrastructure. To counter intensifying rural de-population in agricultural communities across Canada, governments at all levels need to revitalize and rebuild rural infrastructure, including schools, hospitals, and transportation and communication systems. Regional investments and programs aimed at repopulating and sustaining rural infrastructure will help promote mental health and social cohesion.

Recommendation 5: Address on-going discrimination and violence in the farming sector. In order to make an inclusive farming environment, governments must take meaningful action against violence towards Indigenous, Black, and racialized groups as well as 2SLGBTQ+ individuals, women, and other equity-deserving groups. Every farmer deserves dignity, respect and to feel safe and secure in their work. Considerable effort is needed to make farming a more inclusive and equitable industry.

Recommendation 6: Expand access to mental health care for farmers and support existing farm organizations that are providing support, advocacy, and research. To support farmers while making the systemic changes needed to address the upstream causes of poor mental health, governments should significantly increase investment in mental health supports, and ensure inclusivity for all farmers and farm workers, including Black, Indigenous, and 2SLGBTQ+ communities.