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A Case Study of Financial Literacy and Debt of Immigrants in Lloydminster, Canada

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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

The high debt-to-income ratios and the low financial literacy levels among Canadian immigrants are hindering public welfare, macroeconomic policies, and economic growth. The purpose of this qualitative exploratory case study was to explore why immigrants to Lloydminster, Canada possess high debt-to-income ratios in their financial portfolios by examining pertinent themes and patterns between their debt profiles and their financial literacy levels. The life cycle hypothesis, rational choice theory, and bounded rationality theory grounded the study. Data collection from the purposeful sample included semistructured face-to-face interviews with 13 adult immigrants and a focus group discussion with 6 adult immigrants, all of whom lived, worked, or owned a business in the city of Lloydminster. The application of Yin's 5-step data analytic procedure revealed key findings that described the pattern between immigrants' debt profiles and their financial literacy levels including environmental curiosity, excellent credit score, family survival, rational decision making, social institutions, economic institutions, pressure impacting financial decisions, credit facility impacting financial decisions, emotions impacting financial decisions, and discount deals impacting financial decisions. Immigrants to Canada can utilize the findings from this study to develop their financial literacy levels and stay committed to making sensible financial decisions, thus triggering positive social change. Sound spending habits could have positive implications for Canada's Gross Domestic Product growth and immigrants' wellbeing.

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Dedication

First and foremost, I would like to dedicate this study to the God almighty, the one who gave me life, strength and hope throughout my doctoral study period. I also dedicate this study to my wife, Sandra, daughter, Eniola, son, Teniola and son, Deniola. I know my educational accomplishment would not have been possible without you all supporting and cheering me all the way. To Sandra, my wife, your support both morally and spiritually contributed significantly to the successful completion of my study. Thank you for your understanding, patience and bearing with my usual absence most weekends while working on my dissertation. To my parents, Pastor & Pastor (Mrs) Durodola, thank you both for your support, encouragements and prayers. I also want to thank my parents in-law Mr & Mrs Emma Grey Leonge for your prayers and understanding. God bless you. Finally, I want to thank every member of RCCG DestinyHouse parish for your prayers, support and understanding. May God bless you all richly in Jesus name.

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I would like to acknowledge and to appreciate my committee members, chair, Dr Steven Tippins, second committee member, Dr Patricia Fusch and university research reviewer, Dr Anton Camarota for your guidance, support, patience and prompt feedbacks throughout my doctoral study process. Thank you all for your invaluable inputs, and I sincerely appreciate your dedication and expert guidance. I would also like to acknowledge the support of the vice president academic at Lakeland College in the person of Michael Crowe, particular reference goes to the financial bursary that Michael approved towards my field work. Thanks Michael your support was helpful while carrying out my field work. I also acknowledged my faculty dean at Lakeland College Brad Onofrychuk and my department chair, Ben Acquaye for all your support and understanding during my doctoral journey. Thank you all.

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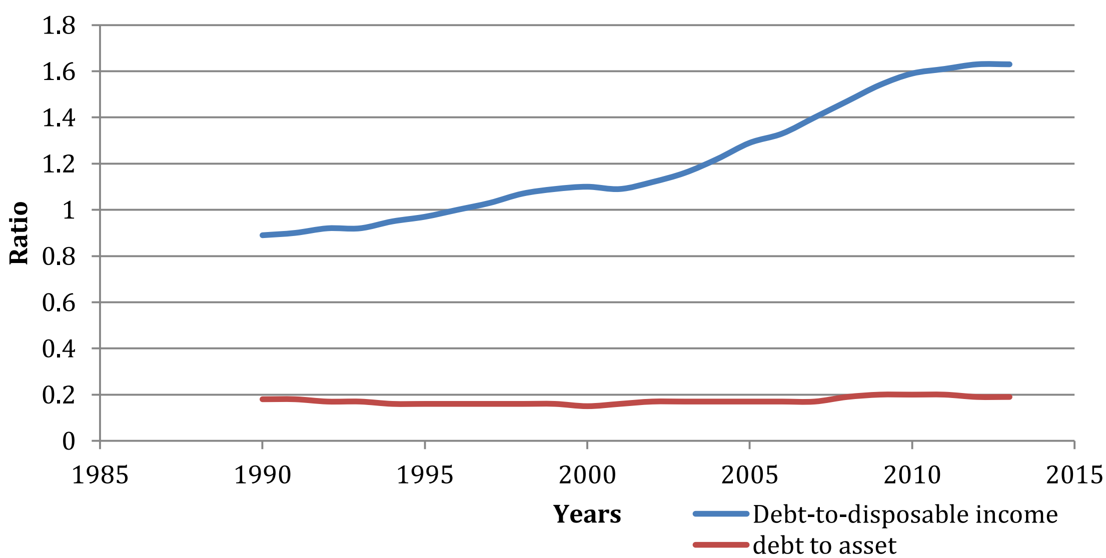
Chapter 1: Introduction

It is entrenched within the Canadian culture to use debt to finance large expenses such as education, home purchase, medical care, and even to pay for day to day expenses through the acquisition of goods and services (Chawla & Uppal, 2012). D'Astous and Miquelon (1991) submitted that 8.18 million bank credit cards were in circulation in Canada in 1977, and by 1988 this number had spiked to 19.4 million cards, accounting for $3.61 billion in sales transactions. An individual must start building a credit score as soon as he or she becomes economically active, and debt becomes an economic part of life. Recent data as indicated by figure 1 below showed that household debt in Canada has spiked to a record high level. For instance figure 1 below illustrate the trending nature of household debt between the period 1990 and 2013. The aggregate ratio of household debt to disposable income was 1.63 in 2013, implying that for every $1 of disposable income, there is a corresponding $1.63 of debt as against $0.89 in 1990.

Figure 1: Household debt as a proportion of assets and disposable income 1990-2013



Note: Adapted from Statistics Canada 2016. Retrieved from http://www.statcan.gc.ca/pub/75-006-x/2015001/article/14167-eng.htm#n4

It appears that the debt situation of immigrants to Canada could be worse than that of an average Canadian. Table 1 below indicates that the proportion of indebted families who immigrated within the last 10 years was 76 % in 2012, up from 63 % in 1999, whereas 71 % of Canadian-born families had high debt load in 2012 versus 68 % in 1999. To explore this observation, I researched the high debt to income ratio among immigrants to Canada.

Table 1: Percentage of Families with Debt 1999 and 2013

Family type with Debt	1999	2012
	Percentage	
Immigrated within the last 10 years	63.0	76.0
More than 10 years since immigration	62.9	66.3
Canadian-born	68.3	71.8

Note: Adapted from Citizenship and Immigration Canada 2016.

The continuous well-being of immigrants in Canada could boost the government's effort to expand the Canadian market through proactive immigration programs. While there is a quantity of literature focusing on the financial literacy of Canadians (Chawla & Uppal, 2012; Hurst, 2011), no stand-alone study on the financial literacy of immigrants exists. This study explores the financial literacy levels of immigrants to Lloydminster, Canada, with particular emphasis on exploring themes and patterns between immigrant's financial literacy and their debt profile. The findings of the study could provide useful insights into how immigrants to Canada can develop the knowledge needed to make rational financial decisions. This chapter continues with a background of the study, a statement of the research problem, the purpose of the study, specific research questions, and a theoretical framework; definitions of terms, assumptions, scope and delimitations, limitations, and the significance of the study.

Background of the Study

Population growth is an important prerequisite for a country's healthy economic growth (Nadeau, 2011), and the Canadian government's immigration program was established to encourage economic growth in Canada. Dungan, Fang, and Gunderson (2013) noted that the inflow of immigrants into Canada has yielded significant improvement in the Canadian real gross domestic product (GDP) and GDP per capita. As Canada has many immigrants, the high debt-to-disposable income ratio involves both Canadians and immigrants.

Immigrants are individuals or groups of people who moved either temporarily or permanently from one geographical region to another due to a range of factors such as economic and political instability (Heilbrunn, Gorodzeisky & Glikman 2016). The Canadian immigration program has expanded activities in the Canadian domestic labour market, eliminating the particular problem of acute skill shortages often previously observed in designated professions (Nadeau, 2011; Oreopoulos, 2011). Notwithstanding the positive contribution provided by the Canadian immigration program to the Canadian labour market, integrating into Canadian society poses a significant challenge to immigrants. Immigrants face a new macroeconomic environment, and new financial decisions (Oreopoulos, 2011).Financial literacy can curb rising debt (Keown, 2011; Steele & Anderson, 2016). Steele and Anderson (2016) noted that because consumers are bombarded daily with a barrage of financial decisions, coupled with a financial market that offers a wide array of debt instruments, a high level of financial knowledge is required to make monetary decisions. Keown (2011), however, showed that immigrants to Canada possess an extremely low level of financial education.

Keown (2011) carried out a national survey involving Canadians ages 18 to 64 to determine their level of financial literacy. The survey was based on the 2009 Canadian Financial Capability Survey and included 14 objective questions related to inflation, interest rates, credit reports, credit ratings, stocks and risk, insurance, taxation, debts and loans, and banking fees. Canadians who took part in the survey got an average score of 64 percent, implying that they got 9 out of 14 questions correctly.

Immigrants who participated in this survey had lower financial knowledge scores compared to scores of Canadians. This finding suggested that immigrants are deficient in basic financial literacy concepts, and therefore lack the financial knowledge needed to settle successfully in Canada. It is not clear whether the government provides sufficiently for immigrants' financial education. For example, The Financial Consumer Agency of Canada has an information section on financial literacy in a welcome guide that is typically given to newcomers once they arrive at the Canadian border. This section highlights key financial concepts such as money, taxation, banking and credits, and loans.

This document represents the only available government-sponsored information resource available to newcomers to Canada (Financial Consumer Agency of Canada, 2014). In this study, I explored possible patterns which might exist between the current level of financial literacy held by immigrants to Canada and their debt profile. My goal was to determine whether there is sufficient information in the financial literacy section in the Canadian welcome guide to allow immigrants to handle their financial affairs successfully, or whether more needs to be done to help immigrants overcome financial naiveté and settle more profitably into Canadian society.

Problem Statement

The high debt-to-income ratio prevalent among Canadians in general is becoming a critical problem (Allen & Damar, 2012; Crawford & Faruqui, 2012; Hurst, 2011) as a result of persistent spending habits that reflect low financial literacy (Gale, Harris, & Levine, 2012; Lusardi & Mitchell 2013; Sevim, Temizel, & Sayilir, 2012). As there is evidence that immigrants to Canada possess a particularly low level of financial education (Keown, 2011), it is likely that their debt-to-income ratio is higher than that of Canadians. Canada's population growth is immigrant dependent (Oreopoulos, 2011); therefore, the high debt-to-income ratio among both immigrants and Canadians has disagreeable consequences for public welfare, macroeconomic policies, and economic growth. The general problem was the Canadian high debt-to-income ratio, particularly among immigrants in Lloydminster Canada and their low financial literacy levels. The specific problem was that Canadians including immigrants often possess high debt-to-income ratio in their financial portfolios.

Purpose of the Study

The purpose of this qualitative case study was to explore why immigrants to Lloydminster Canada possess high debt-to-income ratios in their financial portfolios. I used two qualitative data gathering methods; an in-depth one-on-one semistructured interview and a focus group interview. Considering the observed high debt-to-income ratio among Canadians including immigrants, the purpose of this study was to explore any evolving patterns and themes between their debt profile and their financial literacy levels. For this reason, I explored the following questions: (i) why do immigrants to Canada possess high debt-to-income ratios in their financial portfolios? And (ii) how do immigrants' financial literacy levels affect their financial decisions? To answer these questions, immigrants who have relocated permanently to Lloydminster, Canada, participated in an in-depth, one-on-one interview and a focus group discussion.

Research Questions

I explored the following research questions in a one-on-one interviews and a focus group discussion involving immigrants to Lloydminster, Canada: The overarching research question for this study was to explore why do immigrants to Canada possess high debt-to-income ratios in their financial portfolios? The sub-questions were

I. What is the financial literacy level of the immigrants?

II. How much debt have the immigrants accumulated since they arrived in Canada?

III. What factors enhance the financial literacy development among the immigrants?

IV. What are the sources of financial literacy education for the immigrants?

V. How does the financial literacy level of the immigrants affect their financial decisions?

Conceptual Framework

Financial literacy revolves around the rudimentary concepts of savings and consumption; therefore, the conceptual framework of this study reflect the life-cycle hypothesis (LCH) proposed by Modigliani and Brumberg (1954). The life cycle hypothesis provides a basis for understanding the interaction of savings, consumption, and income of an individual over his or her lifetime. The life cycle hypothesis establishes that consumption and income patterns are often unequal at different periods within the lifespan of an individual. When income falls short of consumption needs, there is a tendency—especially in the case of younger people—to utilize credit facilities. Older people have retirement in view, and their earnings often exceed their consumption. The life cycle hypothesis can guide a rational individual with the required level of financial sophistication to organize his or her finances to deliver optimal satisfaction throughout a lifetime.

The rational choice theory (Goode, 1997) and the bounded rationality theory (March, 1978) also pertain to this study. According to the rational choice theory, a rational agent considers the available information, the riskiness of an event, and the cost and benefit of a decision before choosing an optimal line of action. Such analysis based decisions are limited to the amount of information available to the decision agent according to the bounded rationality theory (March, 1978). I discussed the relationship of these theories to the study of immigrant financial knowledge in chapter 2.

Nature of the Study

The purpose of this qualitative case study was to explore why immigrants to Lloydminster Canada possess high debt-to-income ratios in their financial portfolios. I chose the qualitative approach because its central goal is to discover or explore a given phenomenon. A quantitative methodology would be inappropriate in this case because it specializes in investigating cause and effect relationships with particular reference to statistical analysis (Janesick, 2011). A mixed method will not suffice because it contains elements of quantitative inquiry which in this case will not be relevant on the basis of the nature of this study's research questions. From a qualitative research design standpoint, five approaches are feasible namely; case study, phenomenology, narrative, ethnography and grounded theory. The phenomenology approach wouldn’t fit into this study because it focuses on understanding the social and psychological phenomena from the perspectives of the target audience (Janesick 2011). The narrative approach wouldn’t fit in either because it engages with the compilation of stories involving research subjects and chronologically ordering and extracting salient points from the stories documented (Janesick 2011).

In the case of ethnography, this approach is tenable only when a researcher is interested in a systematic study or observation of people and their cultural orientation. The underlying goal is to explore cultural phenomenon by observing the society from the perspective of the research subject (Janesick 2011). Meanwhile, for a grounded theory research, its core objective is to develop a theory which could help explain the pertinent issues of interest as it affects a given population and how the issues may be resolved

(Janesick 2011). The grounded theory clearly will not be applicable for this study. The case study design was chosen due to its potential to generate a rich collection of data from individuals (Yin, 2013). Consequently, the populations of interest are immigrant families who have moved to the city of Lloydminster on a permanent basis. The City of Lloydminster is located on the border between the two largest provinces (Alberta and Saskatchewan) in the Canadian Prairies. Due to job availability, Alberta and Saskatchewan are presently attracting more immigrants than the other Canadian provinces (Oreopoulos, 2011); therefore, the City of Lloydminster provides the required diversity and depth of opinion and views pertaining to financial literacy and debt study among immigrants.

Qualitative Method

The case study method enables researchers to retain the meaningful attributes of real life events (Yin, 2013). The in-depth interview process entails extended discussions with research subjects, following a structured, semistructured, or unstructured pattern based on the degree of predetermination of a question sequence (Janesick, 2011). I recorded and transcribed the interviews. I selected the semistructured option because it enables the blend of flexibility and structure preferred by the investigator.

To confirm the results from the in-depth interviews, I triangulated the data from another sample of respondents who participated in a semistructured focus group discussion in which the researcher raised questions for participants to analyze and discuss (Yin, 2013). I expected this procedure to elicit a detailed and rich collection of data that will cast light on the problem statement.

A purposive sampling method was used to select 19 individuals, homogenous by culture, educational status, and financial status, from immigrant families in Lloydminster, Canada. The concept of data saturation applies in this case. Data saturation occurs when additional data collection brings in repetitive information with no significant new information, such that further coding is no longer necessary (Fusch & Ness, 2015). I analyzed the data collected from both in-depth interviews and focus group discussions using NVivo qualitative software which permits an electronic conversion and analyses of narrative data. I used the Yin's five-step data analysis which entails: understand the data, focus the analysis, categorize the information, identify themes or patterns, and organize themes and patterns into coherent categories (Yin, 2013).

Definitions

Some of the terms used in this study are defined below:

Bounded rationality theory: This theory assumes that decisions made by an individual are limited by the rationality of the individual, the available information, the tractability of the decision problem, the cognitive limitations of the individual's mind, and the time available to make the decision (Simon, 1990).

Credit score: A quantitative measure of the risk involved in offering a monetary loan to a borrower. The score is calculated using the individual's historical loan data and his repayment performance (Allen & Basiri 2016).

Economic welfare: Welfare economics represents the optimal allocation of resources and its social consequences (Arrow, 1962).

Financial literacy: The level of working knowledge of financial concepts and tools needed to make rational financial decisions (Lusardi, & Mitchell, 2013).

Immigrants to Canada: Individuals and families who have left their home countries to live in Canada (Heilbrunn et al., 2016).

Labor market: An arrangement, physical or virtual, that brings together the supply and demand of labor services (Goodman, 1970).

Life cycle hypothesis: A theoretical proposition that establishes a connection between consumption, savings, and income of an individual during his or her lifetime (Hall, 1978). Modigliani and Brumberg (1954) established a theory of spending based on the idea that people make intelligent choices about how much they want to spend at each age, limited only by the resources available over their lives; that is, consumers will apportion income between current consumption and future consumption.

Population growth: An upward adjustment to the population figures of a country due to the interplay of the birth rate, the death rate, and migration (Coale & Hoover, 2015).

Assumptions

For the purpose of this study, I assumed that immigrants to Canada have no extensive prior knowledge about the Canadian financial landscape before arriving in Canada. I assumed that the Canadian financial system is unique to Canada and that immigrants cannot make rational financial decisions in Canada based on the financial conditions of their country of origin. I assumed that the participants in this study are not finance scholars/researchers with above average finance knowledge, nor are they experts practicing as financial advisors within the Canadian financial services industry. Finally, I assumed that immigrants to Canada do not have carry-over debt from their originating countries. These assumptions provide a valid foundation for subsequent discussions of the debt profile and financial literacy of immigrants to Canada

Scope and Delimitations of the Study

The scope of this study was limited to the specific research problems highlighted earlier as they relate to immigrants to Canada. The research questions focused on immigrants to Lloydminster, Canada. Immigrants are involved in the increasing high debt-to-income ratio prevalent in Canada. The observed low financial literacy level of immigrants makes them more vulnerable than Canadians to making irrational financial decisions (Keown, 2011). Lloydminster, a border city linking the two largest provinces (Alberta and Saskatchewan) in the Canadian Prairies, attracts immigrants to the oil and farming industries, the main sources of earnings in Alberta. The findings from this research can be transferred to other studies pertaining to financial literacy and debt burden and might curb potential reckless spending habits among Canadians.

Limitations

The first step before data collection in a case study is to decide the specific area to study which also implies the identification of research participants and the particular case in question (Yin, 2009). This implies the determination of whether the study should be a single case or multiple cases. This study represents a single case study scenario. According to Yin (2009), a single case design is similar to a single experiment. One notable rationale for a single case study is when the researcher aspires to explore a circumstance peculiar to an everyday situation (Yin, 2009). In this case study, I explored the financial literacy and the debt load of immigrants to Lloydminster, Canada. Due to the subjective nature of a qualitative study wherein variables were explained but not tested, the researcher may not be able to generalize the findings of a single case study to the entire population from which the sample evolved. Another researcher hoping to replicate the study using similar circumstances may obtain a different outcome. This is one important difference between qualitative and quantitative research.

Furthermore, I carried out this study in the city of Lloydminster, Canada; a similar study in a different location in Canada might produce different results. Also, as the researcher, I might unconsciously introduce personal biases into the data, for example, my personal experience as an immigrant to Canada. Being aware of this danger, I made every attempt to stay objective and neutral throughout the study, and to subtract my personal opinions and ideas from the research process.

Significance of the Study

In this study, I focused on household debt and financial literacy level of immigrants in Canada. This study falls under the broader field of financial management, with remarkable social implications. My study also possesses strong potential to enrich existing literature on financial literacy.

Significance to Practice

The continuous well-being of immigrants in Canada could boost the government's effort to expand the Canadian market through proactive immigration programs (Dungan et al., 2013). The Canadian government needs to achieve population growth through a well-executed immigration program (Dung et al., 2013). This study concerns the degree of financial literacy development and economic welfare of immigrants coming to Canada and can add important data to existing literature on Canada's immigration policies and the financial literacy of Canadians. The study is unique in that it explored whether there are adequate provisions for immigrants in Canada regarding financial education and whether the Canadian government should create avenues or institutions for the financial education of immigrants, or task the private sector with such responsibilities.

Significance to Theory

This research introduced new ideas and concepts to the existing literature on financial literacy. The study is original in that it highlighted the importance of financial literacy as people acting as economic agents migrate from one part of the world to another. Lessons on the importance of financial literacy that evolve from the study add to data in the existing literature, providing insights to other countries that aspire to attract skilled migrants.

Significance to Social Change

The quality of financial decisions made by households determines the household's welfare and well-being (Ohlsson, 2012). Whether financial decisions do or do not add value is heavily influenced by a person's financial literacy level (Ohlsson, 2012; Rooij, Lusardi, & Alessie, 2011). Good individual spending habits have implications for a country's gross domestic product growth, production scale, and economic development (Rooij et al., 2011).

Personal financial management in aggregate determines the pool of savings available for investment at a national level (Ohlsson, 2012). Also, good spending habits in aggregate help the government with monetary and fiscal policies (Lusardi & Mitchell, 2013). This study draws attention to the financial literacy of immigrants to Canada, and thereby paves the way for government efforts to improve resources that can elevate that literacy.

Summary and Transition

A high debt-to-income ratio has aggravating adverse consequences for societal wellbeing (Allen & Damar, 2012). Unfortunately, this trend continues to depict the financial condition of an average Canadian household. Particularly among immigrants to Canada, the condition is worse in comparison to Canadian-born households (Keown, 2011). There is, therefore, an urgent need to curb this negative trend to provide for positive social change. Lusardi and Mitchell (2013) established a link between financial literacy and sound financial decision. If economic agents are fully aware of the pros and cons of their intended financial decisions, especially those that pertain to debt contracts, they might make decisions that should not jeopardize their finances in the future. Financial literacy relates to possessing the cognitive ability to evaluate an appropriate set of financial decisions. This study explored the financial literacy levels of immigrants and how that knowledge affects their financial decisions.

Canada possesses a robust and massive financial market where new debt instruments are being turned out on a regular basis and where banks are increasingly becoming aggressive in their marketing outreach. There is an urgent need to review the financial literacy levels of Canadian consumers, particularly those who are vulnerable because of language and custom changes, such as immigrants.

In chapter 2, I reviewed the theoretical framework of the study and the literature on the debt trend in Canada, the consequences of this trend for social wellbeing, financial literacy levels in Canada, the Canadian immigration program, and the need to help immigrants adjust to a new financial reality. In chapter 3, I described the methodology that provided a systematic inquiry into the research questions stated in this chapter. In Chapter 4, I presented the findings of the study and an in-depth analysis of the results. In chapter 5, I collated the research results, draw conclusions, and suggested areas for future research.

Chapter 2: Literature Review

A literature review revealed that there is currently a high debt-to-income ratio prevalent among Canadians (Allen & Damar, 2012; Crawford & Faruqui, 2012; Hurst, 2011), and that immigrants to Canada exhibit an even higher debt-to-income ratio than that existing in Canadian born households (Hurst, 2011). Immigrants to Canada comprise a significant part of the Canadian society (Oreopoulos, 2011), and their higher debt-to-income ratio relative to Canadian born households is an added drain on the Canadian economy. As a high debt-to-income ratio can be logically accompanied by a low level of financial literacy (Keown, 2011), this study explored possible patterns and themes which exist between immigrants' financial literacy level and their levels of debt. Keown (2011) noted that a strong link exists between financial literacy and financial behaviors such as savings and demand for credit facilities. It is reasonable to assume that immigrants who arrive in Canada with little knowledge about the Canadian financial system will tend to exhibit financial behaviors that are counterproductive.

Zuhair, Wickremasinghe, and Natoli (2015) submitted that newly arrived immigrants encounter challenges with respect to accessing financial information and general handling of financial matters in their new environment. As a result, a series of ill-informed financial decisions often lead to adverse socioeconomic consequences. For instance, an accumulation of debt due to bad choices could prevent immigrants from achieving future important goals such as buying a house, furthering their education, and saving for retirement (Pooler, & He, 2016; Strauss, & McGrath, 2016).

Poor financial decisions may even lead to more complicated social and psychological problems such as divorce, mental illness, emotional stress, depression, and low self-esteem (Capuano & Ramsay, 2011; O’Donovan 2016).In alignment with the stated problem and the purpose of the study, the balance of this chapter includes: a description of the search strategy used to compile the literature cited; a discussion of three key theoretical propositions—the life cycle hypothesis (Modigliani & Brumberg, 1954), the rational choice theory (Morgan, 2006), and the bounded rationality theory (March, 1978); and an extensive review of the literature pertaining to the household debt trend in Canada.

Literature Search Strategy

The literature discussed in this chapter was obtained primarily from peer-reviewed journal articles and academic and professional databases located at the Walden University Library database. The database searches were carried out using ABI/INFORM, Academic Search Complete, Business Source Complete, ProQuest Central, Political Science Complete, and EBSCO*host*.

The Web-based search engine Google Scholar was consulted in the search for relevant studies. Searches were initially conducted on a wider scale and were gradually narrowed down to articles containing specific terms and concepts published within the last five years, according to Walden University’s 85 percent rule. The following cogent terms reflect the primary search variables used to develop the literature discussed in this chapter: *prospect theory*, *rationality theory*, *financial literacy*, *immigrants to Canada*, *debt-to-income ratio*, *financial behavior*, *life cycle hypothesis*, *credit score*, and *economic* *welfare.* Searches for government related terminologies were performed using Statistics Canada and government websites pertaining to Canadian immigration.

Theoretical Foundations

The Life Cycle Hypothesis (LCH)

The original submission of the life cycle hypothesis (LCH) is traceable to the pioneering work of Modigliani and Brumberg (1954) and Friedman (1952). The LCH describes the ideal behavior of an individual economic agent pertaining to income, savings, and consumption from a microeconomic standpoint. According to the LCH, an individual is expected to organize his or her savings and consumption patterns in ways that sustain marginal utility over a lifetime (Lusardi & Mitchell, 2014).

The LCH generally assumes that an individual has the required financial knowledge and sophistication necessary to orchestrate savings and consumption in a way that maximizes their utility at every point over his or her lifetime (Lusardi & Mitchell, 2014). The LHC provides a balanced argument regarding the challenges faced when trying to decide consumption levels for now and the future (Elsayed & Wahba 2016).

Based on current income and the prospect of future income, individuals are prone to adjust their consumption patterns in a random fashion. Typically, when income earned falls short of expectations due to macroeconomic uncertainties such as job loss, profit loss, or an economic downturn, individuals tend to consume beyond their earnings in a bid to maintain marginal utility. Then, when consumption exceeds income, the difference is captured by borrowing (Friedman, 2016; Lusardi & Mitchell, 2014).

Conversely, when income earned exceeds consumption, the excess is put away as savings against the future (Lusardi, & Mitchell, 2014; Setterfield, & Kim, 2016). Considering the random pattern exhibited by income, households should save in the current period to accumulate wealth that can assist in maintaining smooth consumption in the future when income falls (Modiglianni, 1966). The LCH was empirically tested to determine the sensitivity of an individual's consumption pattern to income growth during upturn and downturn of the business cycle, and was found to be robust enough to explain the random nature of income and the subsequent sensitivity of the individual's consumption pattern to changes in income (Tian et al., 2016).

The LCH is dynamic in time throughout the life span of an individual because household consumption and savings are not solely based on current income, but are also dependent on the future financial situation. Individual consumers, when they are young, will plan to save money in anticipation of a time in the future when they will retire from work; at that time they will want to be able to maintain their standard of living while living on their savings. In the retirement phase of life, individuals are usually constrained to consume more and save less (Friedman, 2016).

The LCH has the capacity to accommodate seasonal fluctuations in an individual's consumption pattern, even though the initial assumption was to balance consumption with savings over the lifetime of the consumer. Particularly in the case of predictable seasonal fluctuations, an individual can anticipate such fluctuations and adjust consumption behavior accordingly (Cashin & Unayama, 2016).

Typical examples of seasonal fluctuations in consumption are festivals like Christmas and vacation trips. Such fluctuations can also be covered using debt funding against future income anticipated (D'Astous & Miquelon, 1991). The sensitivity of an individual's consumption pattern to changes in income is described in the LCH by two factors: demographic factors and labor market status (Yogo 2016). Demographic factors such as age, gender, race, and family type play significant roles in the sensitivity of consumption to changes in income. The status of an individual in the labor market also plays a significant role in how a consumption pattern is played out, especially when income is affected. An individual on a limited term employment contract will consume and save differently from an individual who has full term permanent employment with benefits and a pension (Yogo 2016).

The LCH incorporates behavioral tendencies into the art of balancing consumption and savings decisions over the lifetime of a consumer. Behavioral elements such as self-control, temptation due to uncontrolled cravings, and greed, affect consumption and savings behavior in different ways. The introduction of behavioral elements such as habit formation or addiction makes the consumption and savings pattern of consumers unpredictable and, as a result, stochastic in nature (Hedoin 2016).

While trying to balance consumption and savings on the basis of an individual's income over his or her lifetime, it is assumed that individuals seek to maintain a constant marginal utility (Lusardi & Mitchell, 2013). It is assumed that individuals are rational in their decision making in their efforts to maintain a constant marginal utility. On the basis of this assertion, I introduce the rational choice theory (Morgan 2006) to explain how perceived rational choices in decision making impact our aggregate decisions and what the outcomes are, as opposed to what they were supposed to be.

Rational Choice Theory

Historically, the rational choice theory (RCT) is derived from a family of theories with diverse versions and assumptions; to clarify the evolution of the theory, I begin the analysis with the seminal work of William Stanley Jevons (1863). Jevons, a former mathematician and economist, is credited with the marginal utility theory, a precursor to the rational choice theory (Morgan, 2006). Jevons' contributions to the mathematical derivation of the decision process of individuals paved the way for the emergence of neoclassical economics in the 20th century.

According to Morgan (2006), and in line with the original submission by Jevons (1863), the rational choice theory assumes that individuals naturally make logically sensible decisions that deliver the greatest benefit and the highest satisfaction or utility (Morgan, 2006; Scott, 2000). This assertion gave birth to the economic man being referred to as the calculative consumer (Morgan, 2006). The rational choice theory (RCT) is popularly used to model social and economic behavior of individuals in a society. The RCT rests on the assumption that complex social interactions can be explained and understood by observing individual actions in their microunits. In this case, aggregate behavior in our society should mirror the sum of individuals' choices. This notion is called *methodological individualism* (Scott, 2000; Boudon, 2009).

RCT assumes that rational individuals anticipate the results of possible courses of action, and are able to determine which course of action will deliver the most benefit and the highest level of utility (Scott, 2006). In other words, a rational economic agent arrives at an optimal choice only after a rigorous process of cost-benefit analysis of alternative courses of action. As rightly observed by Boudon (2009), individuals are majorly concerned about the consequences of their decisions. This is called the postulate of *egoism*. In addition, the RCT proposes that the reasons leading to an individual's action or decision are known to them and are particular to them. This is known as the postulate of *rationality.* The RCT is strongly supported by the principle of transitivity, which suggests that if an individual prefers a to b and b to c, such an individual will prefer a to c (Hedoin 2016).

Before making a decision, an individual evaluates a finite set of options, determines the consequences of each option, arranges the options according to their importance and value, and, on the basis of this process, identifies the optimal option that delivers the highest satisfaction intended (Burns & Roszkowska, 2016). As such, individuals within the RCT domain are referred to as *homo-economicus*, which implies that they are rational and self-interested.

Some of the RCT assumptions are unrealistic; for instance, the assumption that individuals have complete information regarding the various options at their disposal (Sen, 1997). They submitted that individuals are often ignorant about their intended actions and are not fully aware of the consequences of their planned action. On the basis of the observed limitations of the RCT, the bounded rationality theory (March, 1978) emerged with appropriate provisions for the inherent limitations surrounding an individual's decisions.

Bounded Rationality Theory

The bounded rationality theory (BRT) was proposed by Herbert A Simon in 1957 and cited over 50 years later in *Models of Man, Social and Rational* (Klaes & Sent, 2005). The BRT was established on the notion that when economic agents make decisions, their rationality is *limited* based on available information, complexity of the decision problem, cognitive limitation of the mind, and time constraints (Conlisk, 1996; Simon, 1956). Consequently, decision makers conduct themselves as *satisficers* which implies the act of seeking a satisfactory solution to problems instead of an optimal solution (Simon, 1956).

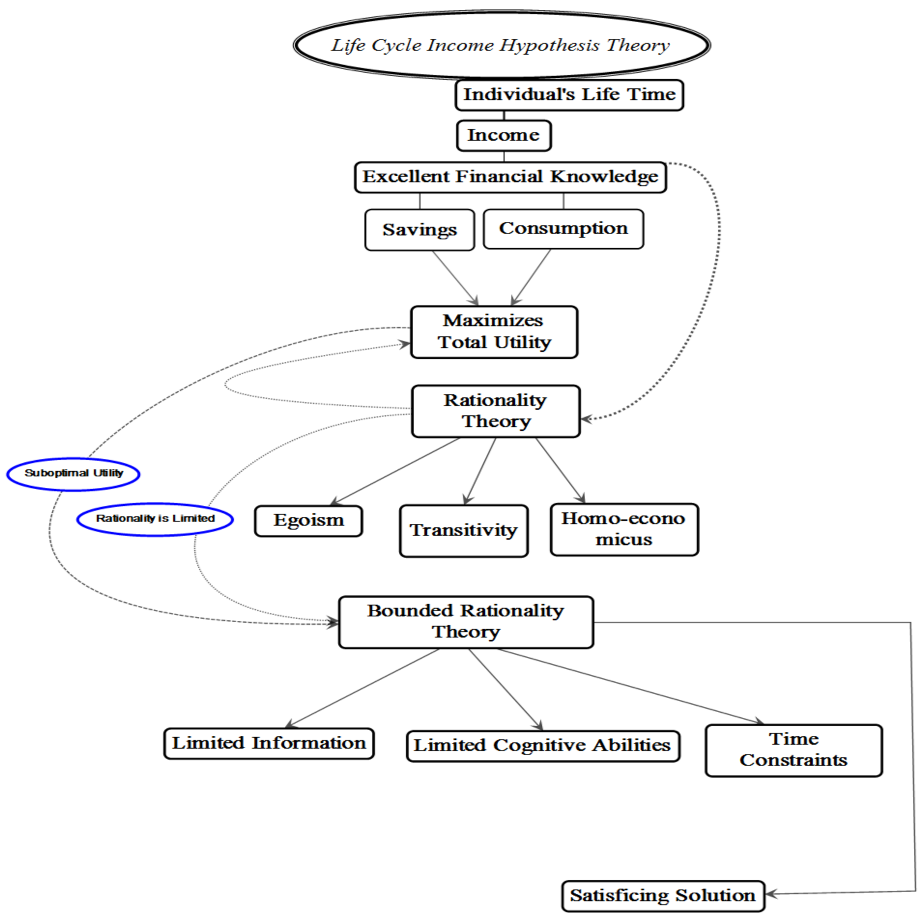
Satisficing is a merger of the two words *sufficing* and *satisfying* (Gigerenzer & Goldstein, 1996; Wu & Scott, 2016). The BRT contends that perfectly rational decisions are impractical in the real sense because of apparent limitations pertaining to information inaccessibility, limited human cognitive abilities, and information processing constraints such as the receiving, storing, retrieving, and transmission of information (Simon, 1956, 1999). Implicitly, and from a broader perspective, the BRT antagonizes numerous economic, political, and sociological solutions proposed in the literature as being able to solve global socioeconomic and sociopolitical problems. The BRT argues that solutions proposed to solve global socioeconomic and sociopolitical problems are suboptimal because an optimal solution lies outside the reach of humans due to the limitations mentioned earlier (Barros, 2010; Foss & Weber, 2016). A historical analysis of the emergence of the BRT coupled with its metamorphosis over the years indicated that the limitations attributed to the cognitive capabilities of individuals resulting in suboptimal decisions have undergone different phases of description. Between 1880 and 1935, the limited cognitive ability was referred to as *finite intelligence*. During the post-World War II years, the literature adopted the *limited rationality* concept. In 1922, *incomplete rationality* was prominent and from 1965 to 1975 *limited rationality* was used. Since 1975, *bounded rationality* has become the norm (Klaes & Sent, 2005).

One notable cognitive limitation supported by the BRT that could lead to a suboptimal decision is cognitive bias. Cognitive biases could evolve through heuristics, which could end in large systematic errors in decision making. Heuristics in this case involve the use of past experience to decide on steps pertaining to the future (Foss & Weber, 2016). To summarize (Figure 2), the bounded rationality theory establishes that individuals are limited in their quest to make rational decisions that could deliver results of maximum utility (Simon, 1956). Because of limited access to pertinent information, limited cognitive ability, and limited information processing skills (Conlisk, 1996), an economic agent will settle for a satisficing solution instead of aiming for an optimal solution (Wu & Scott, 2016).

Synthesizing the Theories

Figure 2 below illustrates a synthesis of all the three theories discussed earlier. Starting with the Life Cycle Income Hypothesis (LCH), economic agents are assumed to possess excellent financial knowledge and as such understand how and when to allocate their income between consumption and savings over their life time in a way that will sustain their marginal utility (Lusardi & Mitchell, 2014). The LCH describes a perfect and ideal world, one in which all economic agents possess the required financial sophistication needed to maximize total utility throughout their life time (Attanasio & Browning, 1993). The rational choice theory (RCT) on the other hand support the notion that individuals are rational animals and will always make logically sensible decisions that will deliver the greatest benefit for the maximal satisfaction (Scott, 2000).

Figure 2: Synthesizing the Life Cycle Hypothesis



Note: Adapted from (Friedman, 1952; Modigliani & Brumberg, 1954), the rational choice theory (Jevons, 1863; Morgan, 2006), and the bounded rationality theory (Simon, 1957, as cited in Klaes & Sent, 2005).

According to the RCT model, rational economic agent will consider alternative courses of action by taking every bit of information into consideration using a meticulous process of cost-benefit analysis, before deciding on the optimal course of action that will deliver maximum satisfaction (Boudon, 2009; Morgan, 20006). The bounded rationality theory (BRT) introduces the realism point of view by arguing that economic agent cannot obtain an optimal solution to life's decision due to apparent limitations but will settle for satisficing solution (Gigerenzer & Goldstein, 1996; Wu & Scott, 2016). These apparent limitations are solely responsible for such suboptimal solution to life's decisions. These limitations are; limited information accessibility, limited cognitive abilities and information processing and timing constraints (Simon, 1999). Against the foregoing discussions, while the LCH and RCT argue for a perfect and ideal situation, the BRT settle for a realistic world view characterized by imperfections in decision making.

Rationale for Choice of Theories and their Relevance to the Study

The overarching goal of this study is to consider the high debt-to-income ratio which is prevalent among Canadian immigrants (Allen & Damar, 2012), and more importantly explore any evolving patterns and themes between their debt profile and their financial literacy level. Considering that this research goal connect financial knowledge to financial decisions, the life cycle income hypothesis provides the logical basis or model upon which individuals make financial decisions over their life time. The life cycle income hypothesis posits that economic agents have the requisite knowledge as to when to consume and save money such that marginal utility is sustained throughout their life time (Lusardi & Mitchell, 2014).

Furthermore, economic agents in an ideal situation are considered rational human beings. This rationality assumption indicates that individuals will always make decisions that will deliver optimum benefit and satisfaction. A rational consumer will consider alternative courses of action using a systematic process of cost-benefit analysis and, in the process decide on the optimal course of action that will deliver the expected level of satisfaction (Boudon, 2009; Scott, 2000).

In other words, the rational choice theory provides the theoretical support for the Life cycle income hypothesis by submitting that the decision on financial issues over the life time of a consumer is made in self-interest and for personal satisfaction. This theoretical support argument justifies the inclusion of the rational choice theory in this study.

Collectively, both the life cycle income hypothesis and the rational choice theory presents the ideal world situation or what ought to be condition, which might be an illusion when we consider what obtains in reality. In other to present a balanced view of the preceding argument, the bounded rationality theory was introduced to argue for the apparent limitations faced by so called rational consumers.

According to the bounded rationality theory, even though rational consumers wants to make optimal decisions, they end up settling for satisficing decisions due to obvious limitations pertaining to information accessibility, limited cognitive abilities and time constraints (Conlisk, 1996; Foss & Weber, 2016). Intuitively, if economic agents can break certain limiting barriers, they can move closer to optimal solutions to life's decision particularly financial decisions. The bounded rationality theory provides the argument to support the need to explore whether immigrants to Canada end up making suboptimal financial decisions because of the limitations imposed on them due to lack of financial literacy pertaining to the Canadian financial system.

Literature Review

Household Debt Trend and Implications for Socioeconomic Well-being

A practical way to measure the quality of financial decisions by household is the rate at which households accumulate debt (Faruqui, 2008; Lusardi & Tufano, 2015). Faruqui (2008) noted that debt-to-disposable income in Canada grew from 110 percent in 1999 to 127 percent in 2007, and increased to 150 percent by 2011 (Bailliu, Kartashova, & Meh, 2011). In the United States, debt-to-disposable income rose from 72.1 percent in 1980 to 139.7 percent in 2006 (Barba & Pivetti, 2009).

Crawford and Faruqui (2011) indicated that the rising household indebtedness is consistent across many advanced economies. For instance in the United Kingdom and the Eurozone economies, debt-to-disposable income rose from 80 percent in 1987 to 142 percent in 2011 and from 80 percent in 2000 to 110 percent in 2011, respectively (Crawford & Faruqui, 2011). The debt-to-income ratios in the Netherlands and Ireland were significantly higher than those in the other European countries (Crawford & Faruqui, 2011).

A rising debt-to-income ratio has significant adverse implications for socioeconomic wellbeing. For instance, Uppal and LaRochelle-Cote (2015) pointed out that the consumer debt was higher than the post-tax income in 14 percent of Canadian households in 2012, which means that a sizeable portion of after tax income was used to service monthly payments on outstanding debt in these households, with aggravating consequences to family welfare. A high debt load combined with job loss may put household welfare at risk (Chawla, 2011).

If debt is used prudently, productively, and in moderation, it contributes positively to welfare, but if used in excess and if used for counterproductive projects, it can elicit untold hardship such as bankruptcy and financial ruin (Cecchetti, Mohanty, & Zampolli, 2011). At an economy-wide level, high debt can impede the delivery of essential government services (Cecchetti et al., 2011).

Consumer debt can lead to psychological distress (Brown & Gray, 2016). Particularly, unsecured debt is observed to have a significant negative impact on the psychological well-being of individuals. Thus, the psychological costs to taking on debt can include potential consequences of defaulting (e.g., in the case of unexpected job loss) or welfare loss as a result of funds allotted to repayment of debt, to mention two (Grafova, 2015).

In the United States, Berger, Collins, and Cuesta (2013) studied how various types of debt affect people. They used data from the National Survey of Families and Households in conjunction with an ordinary least squares regression analysis coupled with individual-specific exogenous variables to identify a strong association between debt and depression among study participants. Similarly, Jarl, Cantor-Graae, Chak, Sunbaunat, and Larsson (2015) showed that stress due to accumulated debt could lead to physical health conditions such as ulcers, migraine headaches, and heart malfunction.

In other cases, mortgage foreclosures have been linked to frequent hospital visits for a broad range of mental and physical health conditions (Currie & Tekin, 2015). Dunn and Mirzaie (2015) examined the relationship between psychological health and a series of debt types. The study observed eight different debt types and discovered that collateralized debt has a lower negative impact than noncollateralized debt on an individual.

Students who are in debt are considered to be prone to acute symptoms of psychological distress with apparent negative impact on their academic performance (Harrison & Agnew, 2016; Lusardi & Mitchell, 2013). Individuals having high debt-to-asset ratios have lower ability than individuals with a balanced debt-to-asset ratio to absorb a negative income shock, such as a sudden interest rate increase (Hurst, 2011; Meh, Terajima, Chen, & Carter, 2009).

From a macroeconomic perspective, a high debt-to-income ratio among households can result in lenders being hesitant to offer credit; this hesitancy eventually slows economic activities on the demand side of the economy, culminating in unemployment and recession (Maroto, 2016; Martins, 2011; McCallum, 2011).

Canadian consumers represent 60 percent of the Canadian economy and therefore determine the condition of the economy as a whole (McCallum, 2011). Furthermore, high debt-to-income levels among homeowners make them vulnerable to housing and labor market instability and can lead to insolvency in the face of macroeconomic shocks, lower living standards, and systemic instability within the local community (Walks, 2013; Zinman, 2014).

Outstanding debt in households with high debt-to-income ratios make such households vulnerable when interest rates are increased. This can increase the probability of such households defaulting on their payments and increases the chance of household bankruptcy. Bankruptcy entails a range of inconveniences such as mandatory and supervised repayment plans, mandatory credit management seminars, and restrictions to credit access (Allen & Damar, 2011; MacGee, 2012).

From a broader paradigm, a persistent rise in an economy-wide debt-to-income ratio, could lead to a fragile financial system. A massive scale of default by debtors could cause systemic crisis and panic among financial institutions. As large lenders become hesitant to approve credit, a slowdown develops on both demand and supply sides of the economy (Kim, 2016).

In the case of young people just coming out of college, high debt loads such student loans and credit cards outstanding can hinder them from accumulating wealth in the near future. Berger and Houle (2016) explored the relationship between parent's debt and their children's socioemotional well-being. They used a behavioral problem index to proxy socioemotional well-being and estimated an ordinary least squares regression model including a series of control variables. They discovered that high parental debt is strongly associated with the low socioemotional well-being of a child. Particularly for unsecured debt, a strong negative association exists between a parent's unsecured debt and a child's socioemotional well-being.

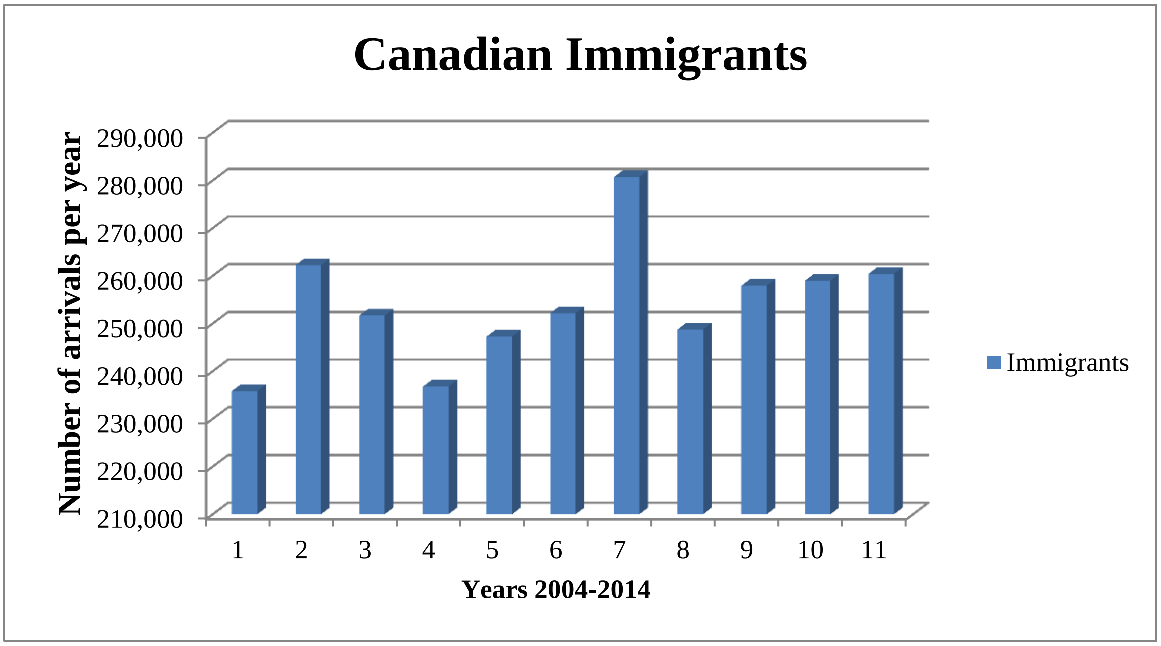
The foregoing reports indicate that a high debt-to-income ratio can have an overwhelmingly negative effect on a developed economy. In the case of Canada, the high debt-to-income ratio is a social phenomenon in need of urgent attention (Chawla, 2011). Because the high debt trend can have a negative effect on both Canadian born and immigrant individuals, it could discourage immigrants both skilled and unskilled from coming to Canada. Furthermore, when immigrants to Canada face barriers to integration into Canadian society and successful settlement, news travels, and potential immigrants are discouraged from immigrating to Canada (Garang, 2012; Pitt, Sherman, & MacDonald, 2016). The next section examines research regarding the significance of Canadian immigrants to the Canadian economy.

Canadian Immigrants and the Canadian Economy

From 1960, immigration has been a significant source of population growth in countries such as Australia, New Zealand, the United States, and Canada (Bonikowska, Hou, & Picot, 2016; Peters & Vink 2016). Notable sources of immigrants include Africa, Asia, the Caribbean, and the Middle East (Peters & Vink 2016). As a result of this migration trend, most developed countries at the receiving end of migrant inflow have become increasingly diverse in culture and ethnicity (Morissette & Galarneau, 2016; Peters & Vink 2016). Immigration is considered to be the defining identity for Canada, and a significant component of Canada's nation building strategy (Amoyaw & Abada, 2016). Immigrants come to Canada because they were sponsored by families within Canada; because they are internationally trained; because they are refugees, temporary foreign workers, live-in caregivers, business immigrants, or protected persons; or because they are humanitarian and compassionate cases, foreign students or provincial nominees (Mukhtar, Dean, Wilson, Ghassemi, & Wilson 2016).

Figure 3 denotes the quantity of immigrants who arrived in Canada between 2004 and 2014. The average arrival rate was around 250,000 per year, making Canada one of the most attractive destinations for immigrants from all over the world (Citizenship and Immigration Canada, 2016). A rough estimate shows that by 2013, approximately half of the Canadian population over 15 years of age either had one foreign born parent or was foreign born themselves (VS Council, 2016). Anecdotal evidence shows that immigrants represent over 20 percent of the total Canadian population, the highest proportion among the G8 countries (Citizenship and Immigration Canada, 2016).

Figure 3: Immigrants to Canada 2004-2014



Source: Immigrants to Canada 2004-2014. Author’s design using data from Citizenship and Immigration Canada

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The sustenance of meaningful growth of the Canadian economy hinges on the success of the Canadian immigration program (Avni, 2012). Because the Canadian labor market is characterized by skill shortages in designated professions, skilled immigrants present the most effective way of filling the vacuum (Avni, 2012). By filling the vacuum, production bottlenecks are improved, thereby causing positive growth in the Canadian GDP per capita (Dungan et al., 2010; Nadeau, 2011).

On the demand side of the economy, an influx of immigrants naturally stimulates aggregate demand across all sectors of the economy, ranging from consumables to real estate (Dungan et al., 2010). On the supply side of the economy, an influx of immigrants leads to an increase in the volume of transactions and economic activities (Dungan et al., 2010). Immigrants who join the workforce provide an increase in tax revenue for the government (Dungan et al., 2010). An influx of young families as immigrants helps to balance an ageing population, as is the case in Canada.

According to the Canadian immigration guidelines, immigrants landing in Canada must come with unencumbered funds for personal upkeep pending the time they will secure paying jobs (Citizenship and Immigration Canada, 2016). Dungan et al. (2010) observed that 100,000 immigrants who arrived Canada in 2009 brought in $1.1 billion as foreign capital inflow which serves as an injection into the Canadian system. Immigrants also contribute to innovation in Canada by virtue of their international experience (Dungan et al., 2010).

Immigrants admitted to Canada under the business category have had direct positive impact on GDP growth through capital inflow and through using cash injections to start businesses that also create jobs (Green, Liu, Ostrovsky, & Picot, 2016). Green et al. (2016) noted that the rate at which entrepreneurial driven immigrants start businesses is higher than the rate Canadian born counterparts start businesses. In other words, the propensity to be self-employed is higher among immigrants than among Canadian born individuals. Canada's immigration program is designed to deliver an economic advantage for Canada within the global market. As such, a majority of immigrants admitted to Canada have choice skill sets, high levels of education, and are still very energetic and active in the labor market (Amoyaw & Abada, 2016; Fuller & Martin, 2012).

It is clear that immigrants in Canada impact the Canadian economy positively (Dungan et al., 2010), and that immigrants are important in the future competitive positioning of Canada in the global market (Avni, 2012). The literature reports the fact that Canadian society, which includes immigrants, presents a rising debt-to-income ratio (Allen & Damar, 2012; Crawford & Faruqui, 2012; Hurst, 2011). It is also reported that immigrants to Canada possess an extremely low level of financial education (Keown, 2011); therefore, it is necessary to explore whether low financial literacy is responsible for the high debt-to-income ratio found among immigrants. The proceeding discussion will therefore explore the role of financial literacy in the quality of financial behavior as measured by debt levels. The discussion includes the global society, the Canadian society, and immigrants within the Canadian society.

Financial Literacy and Financial Behavior: Global Perspectives

Financial literacy refers to the appropriate application of the knowledge of financial concepts to make informed, effective and productive decisions regarding money matters (Atkinson & Messy 2012; Capuano & Ramsay, 2011). A plethora of studies have examined the link between financial literacy and financial behavior.

For consumers in the United States, there exists a statistically significant relationship between financial knowledge and financial practices. Consumers who know more about cash-flow management, credit management, savings and investment make better decisions about money matters. These informed consumers tend to exhibit good savings habit, pay off outstanding loans and possess excellent credit score (Hilgert, Hogarth, & Beverly, 2003). Similarly, Sarnovics, Mavlutova, Peiseniece, and Berzina (2016) noted that consumers who were well grounded in basic financial knowledge were better investors, were able to manage their debt responsibly, and were able to carry out appropriate budgeting.

In the case of New Zealand, small businesses stand a good chance of survival and growth only if their managers possess certain basic financial literacy skills such as cash budgeting, cash flow management, interest rate and inflation. These basic financial skills are helpful when making decisions pertaining to how to finance businesses and how to avoid insolvency (Samkin, Pitu, & Low 2014). In Uganda, Small and medium scale enterprises (SMEs) stand a good chance of having their loan application approved if the bank consider them to be well equipped to handle financial decisions effectively (Korutaro Nkundabanyanga, Kasozi, Nalukenge, & Tauringana 2014).

Financial literacy plays an influential role on the outcome of a financial product marketing campaign. Consumers who are knowledgeable about financial concepts tend to respond better to financial product marketing campaign by financial institutions. Meanwhile consumers who are financially illiterate may struggle to understand product attributes and benefit and as such may respond negatively to such campaign (DeArmond 2010).

Consumers who are financially naïve end up being exploited by credit card issuing banks by luring them into signing up for credit cards with high interest rate. Meanwhile, consumers having excellent financial knowledge more often than not end up with low cost, high benefit credit cards. This finding implies that consumers who are ignorant of financial concepts end up accumulating debt excessively due to apparent poor choices (Ricaldi, Finke, & Huston 2013). The foregoing finding further suggests that financial literacy is a critical requirement in the choice of suitable and cost effective debt instruments. In the same vein, Allgood and Walstad (2011) contended that a significant relationship exists between financial literacy and credit card behavior.

In India, financial inclusion is attainable within an economy if the financial literacy level is improved upon nationally. Financial inclusion in this case is defined as the percentage of the entire population with access to banking services as opposed to those without banking privileges (Raina 2014).

The Indian society generally is characterized by low level of financial literacy. Particularly, certain demographic groups such as women, individuals with low level education, low income families, ethnic minorities and aged population have been observed to possess extremely low level of financial literacy. This observation has consequently led to an extreme case of financial exclusion where a significant percentage of the population remains unbanked. This analysis further suggests that because financial literacy could contribute positively to economic and social development, the Reserve Bank of India has a responsibility to promote financial literacy (Singh, 2014).

Evidence from the United States, the Netherlands and Germany suggests that financial literacy was lower for women when compared with men. Because women tend to live longer than men, low financial literacy for women imply that women who have retired or advanced in age might end up making poor choices regarding financial decisions which is typically accompanied by economic hardship (Bucher-Koenen, Lusardi, Alessie, & Van Rooij 2014).

The current level of financial literacy in Australia has improved significantly compared to a decade ago. Considering the recent proliferation of a wide array of financial instruments within the banking sector and the aggressive marketing antics exhibited by financial services providers across the country, there is still room for improvement (Worthington 2013).

Financial literacy affects the prevention of homelessness in Australia. Financially literate individuals are well equipped to organize their finances such that late or no payment of their mortgage obligation is avoided. Furthermore, financial counselling and financial training could alleviate the negative effect of psychological stress experienced by families having financial challenges. The quality of financial education received also improved the ability of families to manage their finances and helped them to cope with economic instability (Steen & Mackenzie 2013).

There is a strong association between financial literacy and consumer behaviour for decisions pertaining to financial product for consumers in Australia. Individuals with higher levels of financial literacy behaved optimally in regard to financially related decisions. Evidence suggests that Australians in general possess reasonably high levels of financial literacy while the middle class and traditionally disadvantaged Australians possess below average financial literacy. Therefore in order to improve how consumers behave regarding the consumption of financial product, demographic group with low level of financial literacy need financial education (Capuano & Ramsay 2011).

In the same vein, a survey of Australian University students showed a generally low level of personal finance education. There was a significant association between a student's field of study and that student's knowledge of basic financial knowledge. Students studying business as a discipline have better knowledge of finance concept relative to students in health sciences and arts. This finding supports the need for a proactive program to equip university students with appropriate level of financial education (Cull & Whitton 2011)

Motivated by the belief that national financial security can be achieved only if citizens are financially literate, Taylor and Wagland (2011) examined existing government policies and initiatives put in place to improve financial literacy in Australia and New Zealand. Their findings showed that even though there was marginal improvement in the financial literacy level within the period under study (2008-2010) in both countries, a minority of citizens retained a low level of financial literacy. The authors recommended that more attention regarding financial literacy be directed to the disadvantaged group.

In an economy such as the United States which is characterized by an array of complex choices with regards to borrowing, savings and investing, there is always a need to explore the interaction among key variables such as level of debt, debt literacy and people's experiences. Demographic groups such as women, elderly and the divorced are known to possess extremely low level of debt literacy and as such are highly indebted with unpleasant adverse economic experience (Lusardi & Tufano 2015).

For older adult in the United States, both health and financial literacy are vital for their overall health and wellbeing. Evidence showed that health and financial literacy were positively correlated with educational status and income level, and that older adults with superior literacy levels pertaining to health and finances made productive decisions regarding their lifestyles (James, Boyle, Bennett, & Bennett 2012).

In the same vein, individuals approaching retirement age in the United States were observed to possess below national average financial literacy score. The below national average financial literacy score of the participants suggested a need for remedial action to raise the financial literacy of this segment of the U.S. population in order to increase their wellbeing and to protect them from predatory financial practices (Lusardi, 2012).

Titko, Lace, and Polajeva (2015) developed a well-structured instrument to evaluate the level of financial sophistication among students in the Baltic countries Latvia, Lithuania, and Estonia. The study outcome showed that people in Latvia, Lithuania, and Estonia had significantly different perceptions of the importance of financial literacy. Latvia was at the bottom of the pack regarding financial literacy, followed by Lithuania and Estonia.

Austin and Arnott-Hill (2014) evaluated past studies on the impact of financial education on the behavior of consumers and their financial literacy levels. The link between financial education and financial behavior is mixed. Austin and Arnott-Hill (2014) evaluated past studies on the impact of financial education on the behavior of consumers and their financial literacy levels. While some studies established a strong association between good financial knowledge and sensible financial behavior (Hilgert et al., 2003; Sarnovics et al., 2016), other studies revealed that high financial literacy does not imply optimal financial decision making (Glaser & Walther, 2013).

Yates and Ward (2011) studied how financial knowledge is transferred from high school to college and finally to adulthood. Through an extensive review and critique of the literature emphasizing financial literacy at the high school, college, and adult stages of life, the authors attempted to determine how adults acquire financial knowledge. There was evidence in the findings that financial knowledge acquired during high school was transferred through to adult life, implying that high school is not too early to begin financial literacy training.

The widespread findings of low financial literacy levels across the United States prompted Gale et al. (2012) to investigate the economic outcomes of financial illiteracy among American households and to determine whether financial education could improve household savings. The authors examined past research on the economic importance of financial literacy and concluded that financial education could help individuals understand the need to save money and invest, and that an aggregate improvement in savings culture nationwide could lead to economic growth at the macro level.

Smyczek and Matysiewicz (2015) explored the nature and the depth of financial literacy among consumers in the countries Germany, Poland, Romania, Spain, and the United Kingdom. A survey of 62 questions (six concerning demographic/socioeconomic information and 56 on financial concepts) revealed that respondents from the selected countries possessed extremely low levels of financial literacy accompanied by evidence of poor financial decisions as measured by the amount of debt accumulated by consumers in those countries.

Against the negative impact of the 2008 global financial crisis, there was a renewed drive to promote financial literacy across the United States. Eades, Bannister, Hensley, Kieffer, and Staten (2012) analysed the role of professors in improving financial literacy in the United States. The outcome suggested that proactive programs seeking to educate students about financial concepts and sound financial decision making could impact the society positively and help solve the problems associated with poor financial decisions.

In Taiwan, Deng, Chi, Tang, and Chen (2013) examined how the financial literacy background of teachers impacted the effectiveness of their financial education teaching. The study showed that teachers who had excellent financial literacy training were more effective than teachers with poor financial literacy training in conveying their knowledge to learners.

Young people often find themselves in debt due to student loans, credit cards, and mortgages, studied financial literacy among youths in the United States. Lusardi and Mitchell administered a financial literacy test administered to study participants showed that fewer than 27 percent of respondents had a basic knowledge of concepts such as inflation, interest rates, and risk diversification. They also discovered that youths whose parents were fairly knowledgeable about basic finance understood finance and economics better than youths whose parents had low financial literacy.

Financial literacy has the potential for significant contribution to economic growth. Statistical evidence from the United States, Germany, the Netherlands, Japan, Australia, Russia and Romania showed that individuals who are financially literate also cultivate good savings habit, a necessary requirement for economic growth. Based on the life cycle hypothesis (Friedman, 1952; Modigliani & Brumberg, 1954), which explains how individuals apportion income between consumption and savings over their lifetime while maintaining a constant marginal utility, savings deposit is loaned out to investors who in turn use the borrowed funds for expansion of production capacity within the economy (Lusardi and Mitchell 2014).

A high level of financial literacy may be rendered useless if an individual's decisions are based solely on hunches rather than on factual knowledge. Glaser and Walther (2013) carried out an innovative experimental design wherein participants studied stock market behavior and were asked to decide whether to buy, sell, or run. Their findings indicated that financial decisions by individuals were made in some cases based on intuition rather than knowledge, implying that financial literacy might not be the sole variable influencing people’s actions. This finding was consistent with Altman (2012) wherein the author contended that due to behavioral biases and error inherent in man, financial literacy might not really improve decision-making pertaining to financial matters, disputing the notion that financial literacy automatically leads to responsible financial behavior.

Brimble and Blue (2013) examined the nature and the delivery of financial literacy education and its effectiveness in influencing financial decisions. They contended that a single one size fits all curriculum that does not recognize gender differences, age categories, or cultural uniqueness might not achieve the desired results. The authors examined four financial literacy programs applicable to a couple of indigenous communities in Australia. They discovered that when the financial literacy curriculum was modified to suit the context of the communities at the receiving end, it achieved greater impact.

A growing trend in the United States, toward materialism led to both financial and psychological costs wherein people acquire liabilities using debt funding. A survey of 1000 college students and 200 accounting professionals suggested that financial literacy education had the potential to decrease materialism, improve good financial habits, and as a result create happiness and psychological wellbeing (Smith, Richards, & Shelton 2016).

Furthermore, financial literacy education, access to information technology, and Internet access could help individuals with low and middle incomes manage their finances better. In a telephone survey, 28 participants were asked questions related to (i) their knowledge of financial concepts and (ii) their access to information technology and the Internet. The findings revealed that individuals with more knowledge of financial concepts who were also computer savvy tended to manage their finances better than individuals with low financial knowledge and minimal access to information technology (Servon & Kaestner (2008).

More financial literacy is socially and generally preferred to less financial literacy particularly in the United States. The benefit of financial literacy to the society depended on the interaction between each person's initial net worth and the subsequent literacy induced gains and how financial literacy affected the volatility of their wealth. Consequently, for societal well-being, more financial literacy is better than less (Williams & Satchell 2011).

In Iran, financial literacy, financial well-being, and financial concerns are all considered intertwined. Individuals who are financially literate have less financial concerns while those who are ignorant about financial concepts encounter emotional distress. Also, educational status and age were positively correlated with financial literacy and well-being and that higher levels of financial literacy impacted financial well-being positively, resulting in less worry about financial matters (Taft, Hosein, Mehrizi, & Roshan 2013).

Financial Literacy and Financial Behavior: Canadian Perspectives

The macroeconomic instability initiated by the subprime mortgage crisis in the United States inspired a nationwide inquiry into how to improve financial literacy of Canadians (Bramley, 2012). The study made use of information gathered via written comments and public sessions in Canada's provinces and territories. The final report included 30 recommendations on how to improve the financial knowledge, skills, and confidence of Canadians with respect to making reasonable financial decisions. Five priorities were summarized: (i) a need for shared responsibilities of promoting financial literacy among public, private, and not-for-profit sectors of the economy; (ii) the country's leadership should spearhead the drive; (iii) financial literacy should be perceived as a lifelong learning process; (iv) new processes for educating the public should be invented while improving on existing processes; and (v) evaluation of results achieved should be performed and accountability for such results should be assigned on a continuous basis.

A nationwide investigation into Canadians' financial knowledge and conduct, and its impact on financial decision making showed that: (i) Canadian men had a higher financial literacy score than women, (ii) self-employed individuals had a slightly higher score than individuals employed by someone else, (iii) the association between educational status and financial knowledge was positive and strong, (iv) immigrants to Canada had significantly low financial literacy relative to the financial literacy of Canadian born individuals (Keown 2011).

An examination of the nature and the components of consumer credit such as automobile loans, credit card debt, and lines of credit for Canadian consumers gave great insight to what kind of debt Canadians are signing into. Most Canadian household have credit cards, auto-loans and mortgage. This inquiry was motivated by the unprecedented high debt-to-income ratio prevalent in Canada, which is recorded to be higher than the debt level of households in the United States. Therefore in other to curb this unfortunate trend, it is important to improve the financial literacy levels of Canadians (MacGee 2012).

In other to improve financial literacy in Canada, business professors who are also adult educators can use their skills to assist new parents in Canada to become financially literate. If academics and knowledge-based organizations partnered with their community, they could help adult learners to improve their financial literacy (English, MacAulay, and Mahaffey 2012).

Katherine (2011) examined the debt holding condition of older Canadians. This study set out to explore the debt condition of older Canadians in order to refute the notion in the literature that debt is prevalent only among young people (Copeland, 2013; Draut & McGhee, 2004). The 2009 Canadian Financial Capability Survey, however, showed that one in every three retired individuals had either mortgage or consumer debt. Therefore, financial literacy programs should not focus only on young people, but older people, too, could benefit from such programs.

Financial literacy levels in Canada impacts retirement planning for Canadians closer to retirement. According to the Canadian Financial Capability Survey (2009), which showed that low levels of financial literacy exist in Canada, retirees who are ignorant of financial concepts stand the risk of a bleak life post retirement. Therefore Canadians who are close to retirement need to plan for postretirement life; that is, they need to access a financial literacy training program (Boisclair, Lusardi, & Michaud 2015).

Nicolini, Cude, and Chatterjee (2013) examined whether factors causing people to seek financial education are the same across the developed countries Canada, Italy, the United Kingdom, and the United States, or whether each country has unique characteristics pertaining to financial literacy. By constructing a financial literacy index from multiple choice questions, the authors identified significant differences among countries. The link between educational status and financial literacy was stronger in Canada relative to the other countries surveyed. Also, Canadian respondents who were married behaved more responsibly than unmarried Canadians when it came to managing their finances.

There is a strong connection between the financial literacy of Canadian university students and their prior educational background. Students with business background had better grounding in financial education than students from other disciplines, and male students had better understanding of financial concepts than female students (Morris & Koffi 2015).

A comparative analysis of financial literacy around the world using the 2014 Standard & Poor's Ratings Services Global Financial Literacy Survey showed that countries need to do more to promote financial literacy. Considering how financial literacy impacts financial behavior in 140 countries, reckless spending poses a risk to societal wellbeing. Canada, with a financial literacy level of 68 percent, scored better than many other countries. Possibly, the high educational level of Canadians contributed to their financial literacy score, but there was room for improvement (Klapper, Lusardi, & Oudheusden 2014).

An inquiry into the impact of financial literacy on the survival rate of new business ventures in Canada showed that financial literacy is critical for success in business. The argument for studying new business venture rested on the fact that job creation and positive economic growth at the macro-level is determined by how many business ventures succeed and grow accordingly. Those entrepreneurs who had low levels of financial literacy struggled to succeed while those with high levels of financial literacy excelled in their business endeavors (Wise 2013).

Pinto (2016) investigated the political quagmire and the role of politicians surrounding the structuring and the approval of financial literacy education in Canada. Shortly after the 2008 global financial crisis, there arose an outcry from all relevant stakeholders about the need to educate Canadians on how to make informed financial decisions. Various stakeholders' and politicians' opinions were evaluated via unstructured interview. Through a deductive argumentative analysis, the author submitted that even though the society recognized the need to step up financial literacy education right from primary school, the legalization of such policy was a victim of political tussle, especially among parliamentarians.

An investigation into the significance of teaching financial literacy and the use of digital technology in teaching financial literacy within the classroom showed that financial literacy was as important as any other popular subject currently being taught within the school curriculum and that school teachers can encourage the use of digital technology to teach financial literacy (Arora, 2016).

Identified Gap, Summary, and Conclusion

To explore and understand pertinent patterns and themes which exist between Canadian immigrants' high debt and their low financial literacy level, I reviewed extant literature regarding the rising household debt trend in Canada and its implication for socioeconomic well-being, the significance to the Canadian economy of immigrants to Canada, and the link between financial literacy and financial behavior from Canadian and global perspectives.

Consequences to the emerging high debt to income trend prevalent in Canada have been well documented in the literature. A high debt-to-income ratio could affect family welfare and subject households to financial risks (Chawla, 2011; Uppal & LaRochelle-Cote, 2015) and cause psychological distress, emotional instability, depression, and mild health conditions such as ulcers, migraine headaches, and heart disease (Brown & Gray 2016; Berger et al., 2013; Currie & Tekin, 2014; Grafova, 2015; Hedoin, 2016). High debt can lead to foreclosures, high vulnerability to macroeconomic shocks, economic recession, and bankruptcy (Damar, 2011; Kim, 2016; Lusardi & Mitchell, 2013; MacGee, 2012; Walk, 2013; Zinman, 2014). The significance of the foregoing literature is to indicate that high debt is not a desirable trend.

The literature showed that immigrants to Canada play a significant role in the continuous well-being of Canada as a country. For instance, Canadian immigrants provide critical skills and labor market participation in professions that are experiencing acute shortages in Canada; stimulate aggregate demand in the economy; increase tax revenue for the government; put less demand on social services, thereby saving government money; provide cash injection into the economy due to mandatory unencumbered funds they bring to Canada; and bring a strong entrepreneurial spirit needed for job creation (Amayaw & Abada, 2016; Dungan et al., 2010; Fuller & Martin, 2012; Green et al., 2016; Nadeau, 2011). The foregoing literature on immigrant conclusively showed that immigrants' welfare is important to Canada.

The foregoing two literature themes illustrate the dangers of high debt and the significance of immigrants to the Canadian economy. Considering that this study seeks to understand whether low financial literacy is responsible for Canadian immigrant's high debt-to-income, it is important to examine the literature linking financial knowledge to financial behavior. From a global perspective, a plethora of studies have shown that financial literacy levels influence attitude and behavior related to financial decisions. For instance, people who are well grounded in financial literacy save for retirement, are better investors, pay their debts promptly, manage their debt better, stand a better chance of managing small businesses successfully, do not fall for deceptive marketing campaigns, sign up for credit contracts that have good terms and conditions, (Allgood & Walstad, 2011; Bucher-Koenen et al., 2014; DeArmond, 2010; Korutaro et al., 2014; Raina, 2014; Ricaldi et al., 2013; Samkin et al., 2014).

Several studies examined Canadians' financial literacy levels and financial behaviors and efforts by stakeholders to improve financial literacy levels for the country as a whole (Bramley, 2012; Keown, 2011; MacGee, 2012; English et al., 2012; Katherine, 2011; Boisclair et al., 2015). The abovementioned literature on financial knowledge and behaviour illustrate that financial literacy could be linked to the rising debt as it is the case in Canada.

From the evolving discussion as above, there are two separate body of literature; one examines the rising debt trend in Canada and the consequences while the other examine the low financial literacy levels in Canada including immigrants. I found no study that explored intricate trends, patterns or themes between Canadian immigrants' high debt to income ratio and their low financial literacy levels. The closest study was Keown (2011) who studied financial literacy levels across Canada with a section dedicated to the analysis of financial literacy levels of immigrant families in Canada. This study will fill this gap by focusing on the themes and patterns between high debt-to-income ratio prevalent among immigrant families in Canada and their low financial literacy levels. Chapter 3 will review the proposed qualitative research method to be used in this study with a specific focus on the case study approach.

Chapter 3: Research Method

The purpose of this qualitative case study research was to explore why immigrants to Canada possess high debt-to-income ratios in their financial portfolios by exploring pertinent patterns and themes between their debt profile and their financial literacy levels. This chapter discussed the research problem, the research rationale, the research questions, including the study methodology and data analysis. The concluding section addressed threats to validity of the findings, ethical issues, and the potential of the findings for social change.

Research Design and Rationale

The overarching research question for this study was to explore why do immigrants to Canada possess high debt-to-income ratios in their financial portfolios? The following sub-questions were explored:

i. What is the financial literacy level of immigrants to Lloydminster, Canada?

ii. How much debt have immigrants accumulated since they arrived in Lloydminster, Canada?

iii. What factors enhance financial literacy development among immigrants to Lloydminster, Canada?

iv. What are the sources of financial literacy education for immigrants to Lloydminster, Canada?

v. How does the financial literacy level of immigrants affect their financial decisions?

The phenomena of interest in this study are the high debt-to-income ratio observed among immigrants to Canada (Allen & Damar, 2012; Keown, 2011) and whether any pattern exists between their debt profile and their financial literacy level. Two variables from the preceding statement relate to debt levels and financial literacy. One variable is *debt*, which refers to borrowed funds in which payment must be made, and includes payment of the cost of borrowing (Faruqui, 2008). The other variable is *financial literacy.* An individual's financial literacy refers to his or her knowledge and understanding of financial concepts and financial terminologies; financial literacy implies the level at which an individual can process such knowledge to make informed, confident decisions that are optimal for the individual's finances (Capuano & Ramsay, 2011).

In other to explore the phenomena of interest as highlighted in the paragraph above, I adopted the qualitative research tradition. Qualitative research enables an in-depth exploration and understanding of the interpretation provided by groups or individuals to social or human problems (Malagan-Maldonado 2014). Relating this definition to this study, the social problem of interest is the observed high debt-to-income ratio prevalent in Canada, and the groups of people understudy are immigrants to Canada. The qualitative research tradition, also, allows the use of inductive reasoning to synthesize textual or narrative data. This method of research focuses on textual data as opposed to numerical data as is the case for quantitative research. Furthermore, qualitative research is subjective as it exposes a researcher to multiple realities regarding a given phenomenon which is subject to diverse interpretation depending on individual perspectives (Malagan-Maldonado 2014). On the basis of the aforementioned attributes, as they relate to qualitative research, it follows logically that this method of research is most suitable to the research goals of this study.

Considering other research traditions in the loop, both the quantitative and mixed method research was inappropriate for this study. Quantitative research, for instance, can only be used to examine variables that can be measured numerically and analyzed using statistical method which is not the case for this study. Furthermore, quantitative research employs both objective and deductive reasoning approach while this study adopts an inductive reasoning approach which is also subjective in nature. In the case of the mixed method tradition, there is a fair combination of both the qualitative and quantitative approaches. It involves a deliberate leveraging on the strength of both approaches such that the overall quality of such study is better than either a qualitative or quantitative research when considered individually (Malagan-Maldonado 2014). Linking the mixed method to this study, it is apparent that the quantitative element is nonexistent or irrelevant therefore rendering the mixed method approach void.

Under the qualitative research platform, five approaches are feasible: case study, phenomenology, narrative, ethnography, and grounded theory. The phenomenology approach focuses on understanding the social and psychological phenomena of the target audience (Janesick, 2011). The narrative approach operates through the compilation of research subjects' stories, chronologically ordering and extracting salient points from the documented narrative (Janesick, 2011). Ethnography involves an exploration of cultural phenomena by observing cultural backgrounds or orientations from the perspectives of research participants (Janesick, 2011). Grounded theory research develops a theory that can explain issues of interest that affect a target audience and how the issues may be resolved (Janesick, 2011). As phenomenology, narrative, ethnography, and grounded theory approaches would not be the best ways to explore immigrants' debt-to-income ratios and their financial literacy; I used a qualitative case study approach to explore the research questions.

Case study research represents an in-depth exploration of a social phenomenon embedded within practical life issues, especially in situations whereby the phenomenon and the context in which it occurs are intertwined (Yin, 2009,). Case study research follows a systematic procedure, especially where in-depth data gathering is required (Cronin, 2014).

Rubaie (2002) submitted that case study research provides a robust understanding of a phenomenon that emerges from complexities linked to interpersonal activities in a wide social context. A qualitative case study is resourceful in exploratory, explanatory, and descriptive forms (Yin, 2009), and is useful in the study of contemporary events wherein relevant variables cannot be susceptible to manipulation as they can be in a controlled environment (Yin, 2009). A case study can provide a rich collection of data by enabling the researcher to directly observe and interview persons connected to the event or phenomenon of interest (Cronin, 2014; Yin, 2009).

The unit of analysis applicable to this case study is immigrant families who have moved to Lloydminster, Canada, from various parts of the world. The phenomena of interest are their high debt-to-income ratios and their financial literacy levels.

Quantitative methodology investigates cause and effect relationships using statistical analyses (Janesick, 2011), and thus would be inappropriate in this study.

Role of the Researcher

My role as an observer demands that I observe, gather and present honest textual data or information about the nature of the study. While interviewing participants, I took advantage of unexpected opportunities to gather data by being sensitive to responses from participants, posing questions that will elicit answers that will enrich the findings of the study. All participants are not personally related to me nor do we share a professional affiliation.

During the interview, I followed an interview guide (see Appendix B) letting the prepared questions lead the way to avoid unwarranted and irrelevant discussion. I listened attentively to participants in other to capture data in its raw and original form. To avoid introducing personal bias into the findings of the study, I submerged my personal ideologies, opinions, and preconceptions. I adhered to standard ethical procedures, which include securing the full consent of participants and making sure they are comfortable taking part in the study. I also ensured the confidentiality of the information provided by the respondents. I ensured that the identities of participants were well protected. The only relationship I had with any participant in the study was that we reside in the same geographical location.

Methodology

Participant Selection Logic

I selected participants in this study via a purposive sampling method. Teddie and Tashakkori (2009) indicated that purposive sampling is not random; it involves a selection of units of analysis based on a specific purpose. In this case, I targeted immigrant individuals who reside permanently in the City of Lloydminster, Canada. My goal was to interview maximum 20 people. Regarding the focus group size, Fusch and Ness (2015) noted that a reasonable focus group should be between 6 and 12 participants such that the group is sufficiently small for everyone to talk and share their experiences and beliefs and at the same time large enough to include a diversity of views and opinions. The nature of a focus group interview is that it enables a flexible unstructured discussion among participants in the group (Fusch & Ness, 2015). If moderated by an experienced facilitator, the evolving discussion brings out multiple views on the topic of interest and enriches the data emerging from the study (Greenwood, Holley, Ellmers, Mein, & Cloud, 2016).

I interviewed new participants until the data collected became redundant. Fusch and Ness (2015) indicated that data saturation implies that no new information is forthcoming and no new coding or theme is possible. Data saturation depict situations when there exists enough information to replicate the study (Walker, 2012). Data saturation is important in a case study because it determines the quality of the research outcome and the issues around content validity (Kerr, Nixon, & Wild, 2010).

Participants in the study must be immigrants who reside permanently in the City of Lloydminster, Canada. Participants must not be Canadian born; they must have emigrated from any foreign country with the intention of settling permanently in Lloydminster, Canada. In other words, participants will not be temporary visitors to Canada and will not possess temporary study permits as international students. Qualified individuals must either possess a work permit or must have permanent residency status in Canada, or Canadian citizenship. Furthermore, to qualify for the study, an individual must be employed or own a business that produces a regular income stream. Participants in the study must be working adults, not minors or retirees.

To recruit participants in the study, I contacted families who have moved from any part of the world and have come to live in Lloydminster, Canada. Possible places of contact were the church where I know most immigrant families worship, the center for new immigrant services managed by the City of Lloydminster government; word-of-mouth referrals could pass as a source of study participants. Upon contact with a willing participant, I scheduled a convenient time to conduct an interview and arranged for the participant to join a focus group discussion. Interviews were conducted face-to-face for all participants.

Instrumentation

I used published data collection instruments, supporting electronic hardware, and researcher-developed instruments to pursue the study. The choice of data collection instrument was guided by the need to acquire data that will provide answers to the research questions. A description of the data collection instrument applicable to each research question follows.

The first research question queries the financial literacy level of immigrants to Lloydminster, Canada. To answer this question I used 14 financial literacy interview questions (located in Appendix A) indicated in Keown (2011) where a literacy test was used to determine the Canadian financial capability index in a nation-wide survey carried out in 2009. I administered the instrument either orally over the phone or in a face to face format, depending on the unique circumstances of the respondent, and the responses analyzed in line with the answer keys provided in Keown (2011) study.

The second, third, and fourth research questions asked how much debt an immigrant has acquired since his or her arrival in Canada, what factors have enhanced the financial literacy of the participant, and sources of financial literacy education the participant has used. I framed the questions in a semistructured format within an interview platform. The questions posed in the interview was a combination of questions used in published studies from Keown (2011) and Lusardi & Tufano (2009) and questions that I designed based on similar studies in peer-reviewed journals. Keown (2011) collected demographic data and examined the financial literacy levels of over 8,000 Canadians based on a 2009 financial capability survey. The authors found widespread differences in financial literacy scores across different demographic characteristics. I adopted data gathering instruments based on the demographic data employed in the study mentioned above. In a national sample of Americans, Lusardi and Tufano (2009) examined the levels of debt literacy, the financial experiences, and how participants rated themselves in terms of debt literacy. These questioning instruments featured prominently in this study.

The fifth research question asks what role financial literacy plays in immigrants' financial decisions. This open-ended question formed the basis for discussion in the focus group discussion. The instrument used for this inquiry was derived from Hilgert et al. (2003) where the authors examined the link between an individual's financial literacy and that individual's financial decisions. Hilgert et al. (2003) explored the role of each participant's financial knowledge in four key areas of personal financial management: cash-flow management, credit management, saving, and investment. The same instrument was used in this study to gather data in a focus group. Textual data was collected using an audiotape recorder, a videotape recorder, and analyzed with NVivo data analysis software.

Procedures for Recruitment, Participation, and Data Collection

Data collection procedure in a case study research does not follow a routinized structure (Yin 2009), rather the collection of rich data must be accompanied by a fair amount of adaptiveness and flexibility, including the task of asking relevant and pertinent questions and being a good listener (Yin 2009). For the purpose of this study, I collected data in Lloydminster Canada from immigrant individuals that fit in with the criteria mentioned in the earlier paragraph. I collected case study in-depth interview data in-person and via the telephone. I conducted the in-person interview when it suits the schedule and the preference of the participants; otherwise, the telephonic interview became an alternative. It is also important to mention that I was solely responsible for data collection in this case. While conducting the interview, I followed a focused systematic line of inquiry as indicated by the interview guide (located in Appendix B), and at the same time allowed room for flexibility as regards questioning techniques. Yin (2009) noted that a case study research interview having flexible questioning built into it often result in the collection of rich data. The flexible questioning reflected probing, open-ended questioning in a way that facilitated the kind of responses that produced a rich collection of data.

The duration of the interviews including the total number of questions asked vary with participants. Even though all participants gained access to the same amount of semi-structured questions, the flexible questions will vary with individual responses to an earlier question. Data collected in the interviews were captured on an audio tape recorder and transcribed for analysis. Transcription is outsourced to a professional transcriber and then verified by comparing the transcribed document with the audio version.

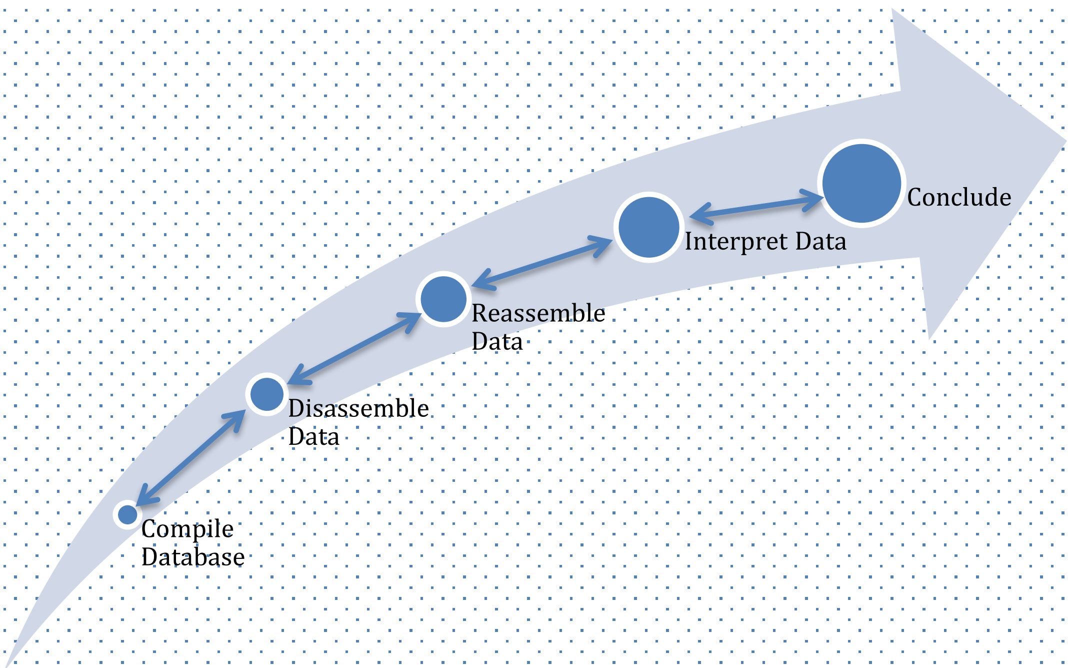
To establish openness and transparency and to avoid misquoting participants, a copy of the transcript was sent to the participant for verification, and for revision if necessary. In the case where initial participants were not sufficient for data saturation, I contacted the same participants again for a follow-up and probing question until the data is saturated.

The second data collection method used was a focus group discussion. The nature of focus group interview is such that it enables a flexible unstructured discussion between the participants in the group (Fusch & Ness, 2015). The evolving discussion if moderated by experienced facilitator brings out multiple views on the topic for discussion and enriches the data being documented from the study (Greenwood et al., 2016). The focus group session lasted between 50 and 80 minutes and subsequently terminated when the data became redundant. The focus group discussion guide can is in Appendix C. The discussion proceedings were captured with an audio tape recorder, transcribed by a professional transcriber, and subsequently analyzed using NVivo qualitative analysis software.

Data Analysis Plan

The questions built into the semistructured interview and focus group discussion were designed to explore the research questions that form the focus of this study. Proper analysis of the data gathered is pertinent to gain insight into the central research goal of the study. Yin (2015) noted that three considerations must form the basis of qualitative data analysis: a need to check and recheck the accuracy of the data, a requirement to carry out the analysis as thoroughly as possible instead of seeking an easy way out, and an acknowledgement of possible biases introduced by the values and opinions of the researcher. Furthermore, I used the concept of triangulation to explore multiple sources of evidence so that data analysis passes the test of credibility (Fusch & Ness, 2015). Triangulation refers to interviewing the same people at different places over an extended period (data triangulation), multiple evaluators (investigator triangulation), multiple perspectives to the same textual data (theory triangulation) and multiple methods; within method and between methods (methodological triangulation) in the study of a chosen phenomenon (Patton 2002). For the purpose of this study, I used methodological triangulation by collecting textual data from multiple sources with the objective to corroborate the same phenomenon (known as within method). The justification for engaging triangulation is to establish the accuracy of the study findings and consistency of the study findings (Fusch & Ness, 2015). A five-step data analysis procedure (Figure 4) proposed by Yin (2015) forms the data analytic procedure in this research. The five steps give structure to the data to counter criticisms in the literature that case study methodology lacks universally accepted analytic structure (Cronin, 2014; Harland, 2014; DaMota Pedrosa, Naslund, & Jasmand, 2011).

Figure 4: Five Steps Procedure for Qualitative Data Analysis



(Author's design using concepts from Yin, 2015)

As soon as I completed data collection, the data compilation involved sorting the field notes collected from field work. I arranged notes that contained textual data in a meaningful order before embarking on analysis. The compilation includes rereading the transcribed notes over and over again to refresh my memory about the field interviews and the focus group discussions. This exercise helped me to assimilate the information more thoughtfully at a more measured rate and gave me an opportunity to connect the data with the original research question. I was mindful of new insights into issues surrounding the research questions. Also, I watched out for certain words used by interviewees to ascertain whether they were important or should be wiped out. Finally, I placed the data into a consistent format, known as data record, which could be used for further analysis, thus completing step 1 of Yin's procedure Yin (2015).

After establishing familiarity with the textual data obtained in the field, I embarked on step 2 (Yin, 2015), disassembly. I broke down the compiled textual data into smaller fragments and assigned a label to each fragment. To compartmentalize the fragments, I identified specific field actions, specific opinions, and explanations of participants, and assigned them level 1 coding. When I noticed that some items were similar, I placed them under a broader category; I reclassified them with level 2 codes as discussed by Yin (2015).

Because of the complexity that could arise while coding, I decided to code line by line responses provided by participants during the interview and the focus group discussion. Furthermore, to make disassembling less clumsy, I avoided repetitive coding statements and participant statements that were unrelated to the questions asked during the interview. Reassembly of the data (Yin, 2015) entailed the use of substantive themes to combine fragmented items into different groups such that the new formation was different from the original note. During this phase, I attempted to identify patterns by checking to see whether different events or experiences as documented by different participants were related to each other. I checked if participants with similar demographic data were responding similarly to the same question. I followed a recursive process of mixing and matching the coded fragments under different arrangements and themes until credible and relevant patterns emerged that seemed satisfactory. After identifying credible and interesting patterns, I proceeded to step 4 (Yin, 2015), interpretation, that is, I looked for a close alliance of the data with the research questions. I scanned the reassembled data starting from the broader perspective and narrowing down in close alignment with the research objectives to bring out salient points. This alignment was necessary because two independent researchers having access to the reassembled data can come up with two totally different interpretations. After providing an extensive interpretation, I put forward a focused and concise conclusion to wrap up the five-step data analysis process described in Yin (2015).

Issues of Trustworthiness

Credibility

Credible findings in a study are believable and can be used confidently by other researchers to explore related topics. Criticism from the literature regarding Case study methodology was that it lacked the rigor required of high-quality research (Yin, 2009). To establish credibility for this study, I used member checking and peer review. Member checking is a procedure whereby a researcher reviews the textual data and emerging interpretations with respondents or participants which provided the data, with the goal to confirm that the textual data attributed to the respondent was correctly documented and interpreted within the appropriate context (Harland, 2014; Moll, 2012; Murakami, 2013).

To member check, I initiated a follow-up interview with each participant, either face to face or by telephone, to confirm that the textual data attributed to that participant was correctly documented and interpreted within the appropriate context. If the participant is not reachable, I presented his or her data to my research committee for peer review. In the case of focus group discussion, I initiated member checking by relaying the interpretation documented from the focus group to each participant in the focus group discussion to establish interpretive validity. My goal was to confirm that the interpretation given to the information the participants shared was accurate.

Transferability

Research findings are transferable if an independent or neutral researcher can take the findings of a particular study and apply them in a totally different setting (Yin, 2015). Marshall and Rossman (2016) indicated that a case study researcher cannot attain generalizability or achieve external validity with the findings from their research as is the case in a quantitative research, rather, the task of showing that a set of findings is relevant in a totally different setting lies at the corridor of another researcher doing a similar study.

For the purpose of this study, I provided certain indicators that could enable comparison in the future. For instance, I included the interview protocols and questions, and the focus group questions in Appendixes A and B, respectively. Data gathering and analysis procedures, and the findings of the study were documented in great detail to allow a future researcher to perform a comparative study.

Dependability

To establish dependability and rigor in the study, I put in place an explicit audit trail (Radley & Chamberlain, 2011). Patton (2002) indicated that an audit trail assists a researcher to minimize bias and maximize the accuracy of textual data analysis in qualitative inquiry. Following the notion that the data should speak for itself, I presented the data collected during interviews and focus group discussions undiluted without any personal bias. In line with this mindset, I provided an expansive description of how the data collection instruments were created and used. I also described fully the research design and the processes undertaken to evaluate, analyze, and describe the data. I ensured that biases in the form of personal opinions, ideologies, and perspectives on issues or arguments relating to the research questions did not interfere with data collection and data analysis. Finally, the peer review approach to establishing transferability helped to establish dependability.

Confirmability

Confirmability ensures that if an independent researcher adopts the same research design, data collection protocols, and analysis used in this study, he or she could arrive at the same conclusion (Patton, 2002). Therefore, I ensured that data gathering, analysis, interpretation, and conclusion were explicit accompanied with an elaborate narration of the line of thought that produced the study findings such that an independent researcher could reproduce the experiment. In other to establish confirmability, I introduced the principle of reflexivity. Reflexivity entails a researcher's meditation on how the research problem evolved, how pre-existing knowledge about the problem changed in the light of new understandings and how a new path emerged within that line of inquiry (Patton 2002). Therefore, if the reflexivity process was made explicit through in-depth narration, it affords an independent researcher to put on the lens through which the study was initiated and carried out, allowing the independent researcher to see and agree with the same conclusion. In line with the foregoing discussion, I established a well-documented and detailed description of the reasoning that produced every step of the research.

Ethical Procedures

To ensure ethical compliance, I made a comprehensive application to the Institutional Review Board (IRB) and permission granted before I embarked on data gathering. Participants were interviewed or invited to participate in the focus group discussion only after filling out a consent form acknowledging their willingness to participate in the study. The consent form indicated that participants could withdraw from the study at any time.

Participant consent was obtained before interviews and focus group discussions were audio recorded. Consent forms were emailed to participants two weeks before the scheduled interview or focus group discussion. Participants were requested to send their consent within a week or two, so I could determine who would participate in the study. I also ensured that I keep the line of communication open during this period to address any concerns or issues that may arise while I secure the consent of the participants. In the case of participant withdrawal from the study before or during the study, his or her contribution was acknowledged with a thank you card and data already collected deleted or destroyed.

Data collected in the study is kept confidential, and participants' identities not captured. Sensitive information regarding a participant's financial condition is kept secured in password protected format for five years after shredding the transcribed hard copy materials. Participant information was not discussed with a third party to ensure confidentiality.

There is no emerging conflicts of interest, power differentials, or life-threatening procedures in this study. Participants were offered tea and refreshments during the focus group discussion and a thank you card at the end of the project. There were no other incentives to participate except to contribute to human knowledge.

Summary

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Chapter 4: Results

This qualitative case study explored patterns and themes between the financial literacy levels and debt of immigrants to Lloydminster, Canada, to determine why these individuals possess high debt in their financial portfolios. Thirteen individuals who are immigrants to Canada and who reside in the City of Lloydminster, Alberta, were selected for face-to-face in-depth interviews in this study. Six additional individuals were engaged in a focus group discussion. The main question explored in this study was: Why do immigrants to Canada possess high debt-to-income ratios in their financial portfolios?

The sub-questions that guided the study were:

i. What is the financial literacy level of immigrants to Lloydminster, Canada?

ii. How much debt have immigrants accumulated since they arrived in Lloydminster, Canada?

iii. What factors enhance financial literacy development among immigrants to Lloydminster, Canada?

iv. What are the sources of financial literacy education for immigrants to Lloydminster, Canada?

v. How do the financial literacy levels of immigrants affect their financial decisions?

The body of this chapter included the research setting of the qualitative study, participant demographic information, and other characteristics relevant to the study. This chapter also covered the data collection and the data analysis methods employed and provided evidence of trustworthiness in the data. The chapter concluded with a summary of the findings.

Research Setting

I conducted the interviews and the focus group discussion in a face-to-face format with the accompanying privilege of observing participants' body language and facial expressions. I captured the interviews and the focus group discussion data using a voice tracer digital audio and video recorder. All the participants involved in the study have live and physical addresses in Lloydminster, Alberta.

Interviews and the focus group discussion were conducted with participant consent at Lakeland College after 6:30 pm Mountain Time to avoid work hours. Surprisingly, participants agreed to participate at the college rather than in their homes or offices. Lakeland College is the only community-based College in Lloydminster.

Before the interview, I established rapport with each participant and expressed appreciation for his/her consent to participate in the interview. I explained the interview process and how the data collected is used to each interview or focus group participant. I also informed each participant that I would email him/her a copy of the interpretation captured from the data shared by the participants for member checking. In the case of the focus group discussion, for member checking each participant had access to the audio recording after the discussion and after transcription, the interpretation assigned to the data gathered was made available to each participant to establish internal validity. I asked participants if they had questions or objections before we began the interview/focus group procedures.

Demographics

Thirteen individuals participated in the in-depth interview, and six individuals participated in the focus group discussion. I used a purposeful sampling strategy based on the criteria explained in chapter 3. Purposeful sampling enabled me to select individuals who were immigrants to Canada and who were also working in the City of Lloydminster. During the interview, I was able to collect pertinent demographic data from participants

Table 2

Participant Demographic Data

Participants	**Gender**	**Age**	**Years in Canada**	**Profession**	**Debt**	**Highest Qualification**
Participant 1	*Male*	*34*	*6*	Steam and pipe fitter	$262,420	Bachelor's degree
Participant 2	Female	45	15	Cake decorator	$11,300	Diploma
Participant 3	Male	30	3	Power line technician	$436,017.75	Certificate
Participant 4	Male	37	4	Power line technician	$466,550	Bachelor's degree
Participant 5	Male	39	4	College Instructor	$400,499	MBA
Participant 6	Female	32	1	English Instructor	$960	Bachelor's degree
Participant 7	*Male*	*24*	*5*	Financial advisor	$17,600	Bachelor's degree
Participant 8	Female	38	5	Insurance processor	$500,400	Master's degree
Participant 9	Female	41	9	Nursing	$1,057,700	Bachelor's degree
Participant 10	Male	43	9	Physician	$1,065,000	Medical degree
Participant 11	Male	48	2	Physician	$405,480	Medical degree
Participant 12	Female	39	7	Nursing assistant	$452,000	Bachelor's degree
Participant 13	Female	51	12	Clothing manager	$0	Bachelor's degree

Source: Data compiled from interviews conducted in this study.

The 13 interview participants were coded P1, P2, P3, etc. and their demographic data displayed in Table 2. Among the 13 participants interviewed, seven were male, and six were female. The average age of interview participants was 39; the oldest was 51, and the youngest was 24. The shortest and longest lengths of Canadian habitation were just over one year and 15 years, respectively, for the interview participants. Participants' professions ranged from electrical engineering to the health sector and included individuals with and without postsecondary education. A two-year diploma and a master's degree were the lowest and highest academic qualifications, respectively. The data collected did not include demographic variables for participants in the focus group discussion.

Data Collection

Data were collected from 13 immigrants to Canada using a semistructured interview instrument and from six immigrants to Canada during a focus group discussion. I collected the data in a face to face format both in the case of the interviews conducted and the focus group discussion. Yin (2015) noted that face to face interview presents the interviewer the opportunity to observe nonverbal cues regarding the interviewee.

Instruments

I, the researcher, was the primary data collection instrument for this case study research. I used semistructured interview and focused group discussion instruments. Each interview conducted consisted of 14 open-ended interview questions (see Appendix A) to ascertain each participant's financial literacy level and an additional 12 open-ended interview questions (see Appendix B) to understand (i) each participant's debt level, (ii) factors enhancing the financial literacy development of each participant, and (iii) sources of the financial literacy education of each participant since he/she arrived Canada.

For the focus group discussion, I used four open-ended questions (see Appendix C) to facilitate discussion that would illuminate the relationship between an immigrant's financial literacy and his or her financial decisions. Fusch and Ness (2015) noted that a focus group interview is capable of unpacking a wide array of perspectives on a chosen topic when moderated by an experienced researcher.

Data Collection Techniques

The data collection process began after receiving Institutional Review Board (IRB) approval. I approached immigrants in an evening ESL (English as a second language) class organized by the Catholic Social Services for immigrant families in Lloydminster. I also approached immigrants who attended the Redeemed Christian Church of God in Lloydminster. I introduced myself, and my study to 20 immigrants from these two organizations and 19 (13 for the in-depth interview and 6 for the focus group discussion) of these immigrants offered to participate in the study. They returned the approved consent forms with their signatures appended within a week of receiving them, and I scheduled face-to-face interviews, suggesting that we meet at a quiet and convenient location devoid of distraction. Surprisingly and independently, they all agreed to meet with me at Lakeland College in Lloydminster. The interviews and the focus group discussion were scheduled and carried out between December 12 and December 19, 2016. Each interview ranged from 24–45 minutes, while the focus group discussion lasted approximately 43 minutes.

I began the interviews with a brief synopsis of the purpose and the objectives of the study. I thanked the participants for taking the time to participate in the study. I reviewed the consent form with each participant, reiterating that if they wished to withdraw at any time during the interview or focus group discussion, they should not hesitate to let me know. I informed them that their personal information would only be used for the purpose intended and that I would assign pseudonyms to maintain confidentiality and anonymity. When the participants acknowledged that they understood the preliminary information provided and that they wished to participate in the study, I proceeded to conduct the interviews and to arrange the focus group discussion. I captured interview data using a digital audio tape, and audio including a video device for the focus group data. The videotape did not provide significant information additional to the data captured by the audio device.

Data Organization Techniques

Upon completion of each interview, I forwarded the applicable audio file in an MP3 format to the transcriber to convert the audio file to textual data in a Microsoft Word document. This approach was adopted to utilize time appropriately; by the time I completed a subsequent interview, the document for the previous interview was transcribed and ready for reading and member checking. One week after I completed the final interview, all of the 13 interviews and the focus group audio files were available in MS Word format. As soon as I received the transcribed document, I went through it line by line to confirm data accuracy. Once this procedure was carried out for all the audio files, I sent each participant his or her script to review the result and confirm their meaning and interpretation.

I implemented this approach for both the interview and focus group discussion. I received positive feedback from each participant that the data were accurate and the meaning intended were appropriately captured within a week of sending the transcribed documents to participants. Once I completed this process, I uploaded the textual word document into NVivo 11 Pro for further processing.

Data Analysis

Analysis of qualitative case study data requires that a researcher organizes the data collected, identify emerging themes and patterns, and synthesize the data to illustrate study outcomes (Harland 2014). Yin (2015) proposed a five-step procedure to perform qualitative data analysis of a case study: data compilation, data disassembling, data reassembling, data interpretation, and conclusion formation. This procedure reflects the analytic process used in this study.

This study explored five broad-based research questions, and the data collected for each question required a different approach to data analysis. The first research question explored the financial literacy levels of the participant. To provide an answer to this question, I converted 14 financial literacy questions in survey format into a semistructured interview format. I adopted these 14 financial literacy questions from the study by Keown (2011), and the participant's responses were analyzed using the answer keys provided by Keown (2011).

The second research question explored how much debt the participant had accumulated since he or she had arrived in Canada. To answer this question, specific questions pertaining to the participant's debt featured in the semistructured interview questions and actual data collected in this regard provided the amount of debt owed by the participant at the time of the interview. The third research question explored factors that enhance financial literacy development among immigrants to Lloydminster, Canada. To explore this, I collected data using semistructured face-to-face interviews with 13 participants. After data collection, I forwarded the audio file to the transcriber for transcription into Microsoft Word. When I received the transcribed document, I listened to the audio file again and checked for data accuracy by comparing the audio data with the Microsoft Word format.

After checking and establishing the accuracy of the data, I imported the data in the Microsoft Word document into NVivo 11 Pro for coding and analysis. I compiled and disassembled the data, extracted a pertinent interpretation, and arrived at a conclusion that would reflect the meaning of the collected data (Yin 2015). Data coding is performed to search for patterns and insights in the data that can lead to an answer to the research question. Yin (2015) noted that identifying codes or themes and creating categories and keeping track of the frequency of different statements that are similar can assist the researcher in the data analysis.

Following this process, I organized the collected data into meaningful themes and categories that relate to factors that could enhance financial literacy among immigrants to Lloydminster, Canada. Four themes emerged from participant interviews: (a) excellent credit score, (b) environmental curiosity, (c) family survival, and (d) rational financial decision. The fourth research question explored the sources of financial literacy education for immigrants to Lloydminster, Canada. The data analysis procedure used was similar to that used to analyze research question three. Data were collected and imported into NVivo 11 Pro for analysis. After importing data into NVivo 11 Pro, I started the coding process by setting up nodes related to each unique source of financial literacy education as submitted by participants during the in-depth interview. Two themes emerged; they were: (a) social institutions, (b) economic institutions.

The fifth research question asked how the financial literacy levels of immigrants affect their financial decisions. The data collected during the focus group discussion was transcribed using the procedures mentioned earlier and later imported into NVivo 11 Pro for coding to search for emergent themes. I identified four themes: (a) credit facility impact on financial decision, (b) discount deals affecting financial decisions, (c) emotions impacting financial decisions, (d) pressure impacting financial decisions.

Evidence of Trustworthiness

I collected the data with attention to the ethical standards set by the Institutional Review Board. Upon receiving IRB approval, I approached immigrants in the City of Lloydminster that fit the research criteria and sent them the approved letter of invitation and a consent form. Participants who responded and consented to participate were invited to attend an interview arranged at a time and venue that was convenient for both participant and interviewer or to a focus group discussion. While the interview was ongoing, particularly after interviewing 19 participants, it became apparent that responses were repetitive which pointed to the fact that I had reached saturation. Fusch and Ness (2015) indicated that data saturation is achieved at the point where data becomes repetitive. I used a participant number (1–13) for each transcription and recording to establish the anonymity of each participant. When the interview commenced, I thanked the participant and told him or her that within one week I would send a review of the interview for them to check the accuracy and the interpretation of the data provided. During the interview, participants were put at ease to share their views and opinions.

Credibility

Minimization, or better, elimination of errors and biases in the textual data collected from participants during qualitative research improves the reliability of the results (Yin 2015). In the same vein, credibility refers to the extent to which data collected and analyzed are acceptable to the participants (Murakami 2013). Member checking provided the participants with a review of my interpretation of the textual data obtained from them and established data credibility. After each interview, I forwarded the audio recording to the transcriber. When I received the transcription, I compared the transcription with the audio file to check that what was in the audio file was accurately transcribed into Microsoft Word. I then forwarded the documented interpretation from the data gathered from participants via email to the relevant interview participant for review and to check that what was captured and interpreted was what he or she meant to say and that the assigned interpretation captured is within the right context. At the end of the focus group discussion, I asked participants to wait while the audio was played back so they could review the discussion that had taken place. A researcher can confirm the credibility of data captured in an interview when participants cross check the data submitted for correct and appropriate interpretation (Yin 2015).

Transferability

Transferability depicts the extent at which the findings of a study can be used in other situations or with other participants (Moll 2012). To ensure transferability of this study, I provided a detailed analysis and description of the data and the findings; however, transferability is at the discretion of the reader as to whether to use it or not. In addition, I explain the criteria for choosing participants for this study and the data analysis detail. It would be interesting to see what findings other researchers would discover using the same line of inquiry.

Dependability

A researcher attains dependability when he or she uses research methods that have been used consistently in the literature and which is considered reliable for data analysis (Radley & Chamberlain 2011). For example, Radley and Chamberlain (2011) noted that member checking is a reliable tool for ensuring dependability. To achieve dependable data in this study, I employed a member checking technique by providing the interpretation assigned to the data gathered to participants to review the interpretation and confirm that the meaning given to the data captured during the interviews and the focus group were accurate. Paton (2002) argued that an explicit audit trail of the entire research process can add to the dependability of study outcomes. To increase dependability in this study, I provided an extensive description of the steps taken throughout the study, including the software used for data analysis.

Confirmability

Confirmability is the extent to which genuine findings evolve from a study following a credible research process; confirmability is not a byproduct of the researcher's bias or prejudice (Patton 2002). Confirmability implies that if the research design, data collection protocols, and analyses are carried out by another researcher, a similar conclusion could surface regarding the hypothesis of the study. In the present study, the data gathering, the analysis, and the line of thought that led to the findings and conclusions were well detailed and explained in plain language.

Study Results

This section presents a detailed discussion of the results of the study in relation to the five research questions that guided the study. I presented the results in chronological order according to the research questions observed in this study. Also, both theoretical framework and literature evidence was reviewed to support the findings reported in this section.

Findings

Research Question i

The first sub research question (i) asked, what is the financial literacy level of immigrants to Lloydminster, Canada? Fourteen financial literacy questions were adopted from Keown (2011) and converted to an in-depth interview question format. I analyzed participants' responses according to the answer keys provided in Keown (2011). Table 3 illustrates the financial literacy level, the gender, and the number of years living in Canada for the 13 participants interviewed.

Table 3

Participants' Financial Literacy Level

Participant	Gender	Financial Literacy Score	Financial Literacy level (percent)	Years in Canada
P1	*M*	11/14	79 %	6
P2	*F*	9/14	64 %	15
P3	*M*	10/14	71 %	3
P4	*M*	9/14	64 %	4
P5	*M*	13/14	92 %	4
P6	*F*	8/14	57 %	1
P7	*M*	9/14	64 %	5
P8	*F*	10/14	71 %	5
P9	*F*	8/14	57 %	9
P10	*M*	10/14	71 %	9
P11	*M*	9/14	64 %	2
P12	*F*	7/14	50 %	7
P13	*F*	6/14	43 %	12

Source: Data compiled from interviews conducted in this study.

According to Keown (2011), the Canada-wide average financial literacy (FL) score was 67 percent implying that Canadians scored on average 9.5 out of 14 questions. Only five of the participants in this study scored above the national average score while the other participants scored below the national average score. This finding further corroborates Keown's claim that immigrants tend to possess lower financial knowledge than people born in Canada.

The financial literacy score of men and women participants in this study showed that male participants had higher FL scores than female participants. Table 3 shows that only one female participant scored above the national average score, whereas four men scored above the national average score. Moreover, the lowest score, 43 percent, was attained by a female participant and the highest score, 92 percent, was attained by a male participant. This finding links up with previous research that showed that men have more financial knowledge than women (Keown 2011; Lusardi & Mitchell; Lusardi & Tufano 2015). Keown (2011) also noted that immigrants who have been in Canada longer have higher financial knowledge than immigrants who have recently arrived in Canada. This study does not support this claim. For instance, participant P13 who has been in Canada for 12 years scored 43 per cent while participant P3 who has been in Canada for just three years scored 71 percent. Conclusively, immigrants' financial literacy development does not reflect a systematic process wherein as people arrive the shores of Canada, they gained access to a well-structured program focused on developing their financial literacy level.

Research Question ii

The second research question explored how much debt immigrants had accumulated since they arrived in Canada. To answer this question, direct, relevant questions about debt such as credit card balances outstanding, student loan amounts outstanding, amounts owing on a mortgage, outstanding amounts on auto-loans, personal loans, were built into the interview questions (see Appendix A). Table 4 illustrates the debt reported by each participant, the length of time each participant has lived in Canada, and the participant's highest educational qualification.

Table 4

Participants' Debt Profile

Participant	Debt	Number of years in Canada	Highest Educational Qualification
P1	$262,420	6	Bachelor's degree
P2	$11.300	15	Diploma
P3	$436,017	3	Certificate
P4	$466,550	4	Bachelor's degree
P5	$400,499	4	MBA
P6	*$960*	1	Bachelor's degree
P7	$17,600	5	Bachelor's degree
P8	$500,400	5	Master's degree
P9	$1,057,700	9	Bachelor's degree
P10	$1,065,000	9	Medical degree
P11	$405,480	2	Medical degree
P12	$452,000	7	Bachelor's degree
P13	$0	12	Bachelor's degree

Source: Data compiled from interviews conducted in this study.

A deductive analysis of the relationship between participants' debt and the number of years they've lived in Canada (Table 4) shows that participants who have been in Canada for more than 10 years have lower debt relative to participants who have been in Canada for less than 10 years. For instance, participants P2 and P13 have been in Canada for 15 and 12 years, respectively, and they owe $11,300 and $0, respectively. Meanwhile, participants P9 and P10 who have been in Canada for nine years owe above $1 million each.

According to Chawla and Uppal (2012), the average national debt in Canada is $114,400. Relating this figure to the debt profile illustrated in Table 4, nine out of 13 participants owe above the average national debt, and all nine participants have been in Canada for less than 10 years. The average debt of the 13 participants is $390,455, which is well above the Canadian national average debt. Also, participants with more education who have the potential to access higher paying jobs, have higher debt. For instance, participant P9, with a bachelor degree, owes $1 million, and participants P10 and P11, both with medical degrees, owe $1 million and $400,000, respectively. These findings align with those in the literature in that there exists a positive relationship between income level and debt level; individuals with higher income possess a greater threshold to take on more debt (Bailliu et al., 2011; Crawford & Faruqui 2011; Lusardi & Tufano, 2015).

Research Question iii

The third research question explores factors that enhance financial literacy development among immigrants to Lloydminster, Canada. Initial codes were from the interview data imported into NVivo 11 Pro. Four relevant themes emerged from the initial codes. Table 5 contains the four emergent themes. To establish the reliability of the findings of this qualitative study, I discussed the themes in the light of findings reported in the literature and the theoretical foundation that underpins this study. The foregoing analysis and interpretation of the findings addressed the research question under study. The four emerging themes that surfaced were: (a) excellent credit score, (b) environmental curiosity, (c) family survival, and (d) rational decision making. Table 5 presents the frequency of the four themes identified in the interviews. In Table 5, *n* represents the frequency of a word or concept in relation to the total number of words in the 13 interviews.

Table 5

Frequency of Emergent Themes-Research Question iii

Emergent Themes	n	% of rate of coverage
Environmental curiosity	4	5.43 %
Excellent credit score	2	2.91 %
Family survival	2	1.99 %
Rational decision making	11	21.86 %

Source: Data compiled from interviews conducted in this study.

Research Question iv

The fourth research question explored sources of financial literacy education for immigrants to Lloydminster, Canada. I extracted initial codes from the interview data imported into NVivo 11 Pro. I began the coding process by initiating nodes related to each unique source of financial literacy education as submitted by participants during the interview. Two major themes emerged: (a) Social institutions, and (b) economic institutions. I illustrated the themes in Table 6. The two themes are discussed further in light of the literature and the theoretical foundation that underpins this study.

Table 6

Frequency of Emergent Themes-Research Question iv

Emergent Themes	n	% of rate of coverage
Economic Institutions	7	3.10 %
Social Institutions	29	19.91 %

Source: Data compiled from interviews conducted in this study.

Research Question v

The fifth research question explored how financial literacy levels of immigrants affect their financial decisions. The focus group discussion was used to collect data, and the data transcribed and imported into NVivo 11 Pro for coding to search for emergent themes. There were six participants in the focus group discussion represented by participants 1–6. Four major themes identified were: (a) credit facility impact on financial decisions, (b) discount deals affecting financial decisions, (c) emotions impacting financial decisions, and (d) pressure impacting financial decisions. To assure the reliability of the findings of the qualitative study, I discuss these themes in the light of the literature and the theoretical foundation that underpins this study. I illustrated the themes in Table 7. The foregoing analysis and interpretation of the findings addressed the research question under study. I used the acronym FD to depict Financial decision.

Table 7

Frequency of Emergent Themes-Research Question v

Emergent Themes	n	% of rate of coverage
Pressure impacting FD*	16	16.46 %
Credit facility impacting FD	2	2.49 %
Emotions impacting FD	7	2.25 %
Discount deals impacting FD	2	1.23%

Source: Data compiled from interviews conducted in this study.
* Financial decisions.

Research regarding the relationship between financial education and financial behavior has had mixed results. While some studies indicated that financial education significantly impacts financial behavior (Hilgert et al., 2003; Lusardi & Tufano 2015;

Taylor & Wagland 2011), others showed that financial literacy does not consistently impact financial behavior (Glaser & Walther, 2013; Smyczek & Matysiewicz 2015). Glaser and Walther (2013) noted that financial literacy does not always influence financial decisions; that is, an economic agent can make suboptimal financial decisions due to prevailing circumstances, not because of ignorance. Participants' responses in the focus group conducted in this study overwhelmingly showed that financial literacy does not always influence financial decisions. Individuals can make decisions that could put their finances in jeopardy, not out of naivety but due to extraneous circumstances. The themes discussed highlight emerging situations that can overrule the financial knowledge of a person who is making a financial decision.

Emerging Themes

Emergent Theme One: Environmental Curiosity

The theme of environmental curiosity (Table 5) emerged from interview data that were collected and transcribed before being processed using NVivo 11. Participants interviewed submitted that a major catalyst for their financial literacy development was the desire to understand and comprehend their new Canadian environment. This mindset derives from an adventurous mentality which seeks to acquire as much information as possible pertaining to a new environment. This psychological impulse relates to one of the conceptual framework underpinning this study such as the bounded rationality theory (Conlisk, 1996; Simon, 1956) which stipulates that economic agents' are limited in their rational decisions by the information at their disposal. Participants noted that when they arrived in Canada, they couldn’t make good decisions because they had limited information. Participants submitted that by asking questions and wanting to understand the financial landscape in Canada, they will be better able to make rational decisions. Participants P1, P2 and P3 unanimously opined that "the key to making safe decisions is to understand the way of doing things in Canada" (personal communication, December 14 & 15, 2016). While trying to understand the new environment, they noticed that they unconsciously kept comparing the way things were done back home with the Canadian way of doing things. This ongoing process gave them a sense of belonging to the new environment, Canada, now called home. Mukhtar et al. (2016) noted that when immigrants come to Canada, they typically arrive with a foreign certificate, foreign training, a foreign language, foreign culture, and foreign economic experience. Once they settle down, the first task is to explore their new environment. The faster the exploratory process, the higher is the level of adaptability to processes that distinguish the new environment from that of other countries. The environmental curiosity theme cuts across all sectors in the new environment, and its impact on financial literacy development is relevant to this study. Environmental curiosity is a significant factor driving financial literacy development among immigrants in Canada.

Emergent Theme Two: Excellent Credit Score

The theme excellent credit score (Table 5) emerged from nodes created while coding using NVivo 11 Pro. A credit score is a point system computed based on an individual’s loan and bill payment history (Keown 2011). D’Astous and Miquelon (1991) noted that once an individual becomes economically active, he or she must strive to build a good credit score to be able to access credit facilities such as credit cards, personal loans, and mortgages. Participants' responses during the interviews showed that having a poor credit score is tantamount to being blacklisted or labeled as a high-risk borrower. An individual with a poor credit score struggles to access loans, credit cards, and mortgages. Participants believed that a major driver of financial literacy development for those new to Canada is the need to understand how to manage one's credit score. The consensus opinion among participants was that financial literacy informs borrowers as to the size of debt load they can take on to avoid bankruptcy and that financial literacy provides a concept of the time value of money and informs about the different costs of different types of borrowing. Thus, an immigrant with no prior experience of credit history is motivated to learn how a credit score is computed, and how an individual can build an excellent credit rating. According to the life cycle hypothesis of saving (Modigliani, 1966), an individual often allocates a balance between income consumption and income savings over a lifetime (Lusardi & Mitchell 2014). There are situations in which an individual's consumption exceeds his or her income and borrowing become the next available option with the expectation of repayment using future income. If such an individual possesses a poor credit score, the borrowing option is inaccessible because the individual is considered to be a high-risk borrower.

Emergent Theme Three: Family Survival

Family survival (Table 5) emerged as a major theme while coding the interview script in NVivo 11 Pro. Most of the people who come to Canada from other parts of the world do so because of economic factors (Garang, 2012). The popular perception is that Canada represents a land of immense opportunity for economic welfare and wealth creation (Garang, 2012). Most families immigrate to Canada in search of a better quality of life, where the political structures support the rule of law and property rights. Garang (2012) reported some of the difficulties refugees and immigrants face when settling in Canada, citing both visible and invisible barriers. When immigrants come to Canada, the initial underlying drive is to survive. Survival in this context implies having access to basic amenities such as a place to live, warm clothes to wear (especially during winter), food to eat, and schooling for children.

Participants' responses from the interview showed that in a bid to survive in the new environment, immigrants have to learn some basic financial concepts that can facilitate their survival: how to open chequing and savings accounts, how to apply for a credit card, how to pay for utilities such as electric power and telephone and for optional services such as cable TV and the Internet.

Emergent Theme Four: Rational Decision Making

Rational decision making (Table 5) emerged as a major theme while coding participants' responses in NVivo 11 Pro. Participants indicated that in a bid to stay away from debt, invest regularly, avoid taking an unwarranted risk and also avoid poverty they had to make rational financial decisions. This theme connects technically to the rational choice theory (RCT) and the literature on decision making. The RCT postulates that individuals aspire to make logically sensible decisions that guarantee the greatest benefit and deliver the highest satisfaction (Morgan, 2006). The RCT suggests that an economic agent always considers multiple options for achieving a goal, and after a meticulous process of analysis settles for the option that delivers the greatest benefit and satisfaction (Boudon, 2009; Hedoin, 2016).

Participants' responses from the interview indicated that new immigrants to Canada who desire to make financial decisions that deliver the greatest benefit and maximize satisfaction must acquire the kind of financial knowledge that enables such decisions. The bottom line is that high-quality financial decisions thrive on financial literacy. Consequently, for immigrants coming to Canada, the desire to make financial decisions that deliver positive outcomes motivates them to develop financial literacy.

Rational decision making also motivated the desire to invest. The life cycle hypothesis of saving, proposed by Franco Modigliani in 1966, was evident in this case. Economic factors are major reasons for immigrants to emigrate from a known culture and environment to an unfamiliar environment (Green et al., 2016).

Participants submitted that by coming to Canada, they stand a better chance of finding a better quality of life and more prosperity. They pointed out that one strategy for creating wealth is to save and invest both in Canada and back home. Therefore, in order to make profitable investment decisions, immigrants decided to upgrade their financial literacy levels to include profitable investment vehicles offered in Canada. The life cycle income hypothesis posits that an individual, being a rational economic agent, allocates income between savings and consumption in ways that sustain marginal utility over a lifetime (Elsayed & Wahba, 2016; Lusardi & Mitchell, 2014).

Participants perceived Canada to be a land of opportunities where they can make lots of money, save money, and invest money. To live the dream, they developed a strong appetite to learn how money grows through proactive investment both in the financial market and the real sector of the economy. By this analysis, the desire to invest represents a strong factor that motivates immigrants to develop their financial literacy levels once they arrive on the shores of Canada.

Another key factor motivated by rational decision was risk aversion. Risk defined in the context of financial dexterity refers to uncertainty about the outcome of financial decisions (Scott 2000). In the decision making literature, for every choice made there is an attached level of risk (Scott, 2000). Boudon (2009) noted that rational economic agents are significantly concerned about the consequences of their actions. A risk-averse individual painstakingly considers the consequences of every action in order to mitigate risk. Participants in the study opined that every financial decision made in Canada would carry a fair amount of risk. Participants noted that all financial decisions have legal consequences and making these financial decisions without adequate knowledge of the risk involved could be dangerous. Participants pointed out that to avoid taking on harmful risk, newcomers to Canada need to raise their levels of financial literacy.

Participant P13 said, "I don't sign any contract related to payment unless I have studied the content of the contract and understands exactly what I am signing up for" (personal communication, December 14, 2016). The major themes that emerged from the study indicated that the need to avoid the kinds of risk that could jeopardize their dream of being successful in Canada drives immigrants' financial literacy development.

Rational decision was considered highly important by immigrants in a bid to avoid poverty. According to Citizenship and Immigration Canada (2016), more than 65 percent of immigrants per year originate from Asia, the Middle East, Africa, and the Caribbean. According to the World Health Organization (WHO) report, these regions possess high levels of poverty (Garrang, 2012). Participants in this study submitted that a major reason for seeking financial literacy education was to avoid poverty. Poverty in this context is a level of acute deprivation of the basic necessities of life (Fuller & Martin, 2012). Participant P6 said, "when I first arrived in Canada and saw homeless people on the streets of Montreal, I was shocked at this sight and considered it unbelievable" (personal communication, December 15, 2016). Until she arrived in Canada, she had the impression that everyone in Canada was rich and able to afford life's comforts. Upon the realization that poverty was possible in Canada, she decided she was not going to be a victim of poverty and must do everything legally possible to avoid poverty. One way to avoid poverty is to learn basic financial skills so that she wouldn't end up being homeless.

Participant P6 indicated that "some homeless people once had jobs, but due to financial mismanagement and poor decisions they were declared bankrupt and ended up on the street" (personal communication, December 15, 2016). According to the tenets of life cycle hypothesis, an individual economic agent allocates current income between savings and consumption so as to maximize marginal utility over a life time (Elsayed & Wahba 2016). And by allocating a proportion of their current income to savings, that individual makes provision for the future so as to avoid poverty (Lusardi & Mitchell, 2014).

The final reason why immigrants consider rational decision making as paramount is the need to be debt free. According to the life cycle hypothesis of saving (Modigliani, 1966), a rational economic agent allocates his or her income between consumption and savings so as to maintain a constant marginal utility over a lifetime (Modiglianni & Brumberg, 1954). At the early stages of an individual's life cycle, the natural demands of life, such as owning a house, a car, and other necessities, demands that consumption exceeds income. At this point, the individual has only one choice, which is to borrow money. Faruqui (2008) noted that Canadian debt is at a critically high level. The debt level in Canada is so high, a sizeable portion of after-tax income is used to service monthly payments of outstanding loans; this situation hurts family welfare (Uppal & La Rochelle, 2015).

Cecchetti et al. (2011) indicated that if an individual uses debt responsibly, it contributes positively to welfare, but if used in excess and for counterproductive projects it can lead to a decline in welfare. Participants' debt profiles in this study overwhelmingly showed that debt is a problem for the immigrants taking part in the study; across the 13 participants, the debt averaged \$390,455, which is above the Canada-wide average debt of \$114,400. Participants unanimously agreed that the desire to be debt free drives them to develop their financial literacy levels.

Emergent Theme Five: Economic Institutions

Economic institutions particularly banking institution emerged as a theme while coding the interviews with NVivo 11 Pro. The bounded rationality theory (Simon, 1956) postulates that an economic agent faces limitations in decision making by the amount of information the agent has access to. According to this theory, an individual will settle for a satisficing solution to a problem, a solution which is satisfying based on the information at the individual's disposal but is often not optimal (Wu & Scott, 2016). In order to make better decisions, an individual will tend to search for more information.

Participants in this study noted that banks provided them with information and education regarding financial concepts when they first came to Canada. Participant P6 said “when I arrived in Canada I visited a major commercial bank where I was taught how to open chequing and savings accounts, how to apply for a credit card, how to manage credit card payments without damaging my credit score, and how to pay bills online through the Internet and telephone banking” (personal communication, December 15, 2016). Participant P5 indicated that “in addition to the training I received at the bank, I also got some educational brochures to take home for further reading” (personal communication, December 16, 2016). These materials gave him extensive information regarding how the Canadian consumer financial market operates.

Emergent Theme Six: Social Institutions

While coding using NVivo 11 Pro, a unique node was created for the theme social institutions (Table 6) and the following social structures were noted by participants namely; church, families and friends, internet and media, postsecondary institutions and workplace as a source of financial literacy for immigrants to Canada. In line with the bounded rationality theory (Simon, 1956), immigrants' face limitation in economic decisions due to limited information at their disposal. Participant P2 said, "when I arrived Canada newly, a finance seminar organized by the church I was attending at that time gave me my first financial literacy training" (personal communication, December 16, 2016). Participant P4 mentioned that "fellow believers within the church helped me to understand some basic financial concepts that were new to me and which are needed to settle down in Canada" (personal communication, December 14, 2016). The quest for more information was as a result of the need by immigrants to reduce the limitations on rational decision imposed by limited information. The comments attributed to the theme church were brief and alluded to by two participants only.

Families and friends emerged as major social structures which provide newcomers to Canada with some basic information on financial literacy. This argument rests on the bounded rationality theory (Simon, 1956). To make quality decisions, an economic agent must increase his or her knowledge of the particular decision area (Conlisk, 1996). Most immigrants coming to Canada do so based on recommendations from friends and families who already reside in Canada (Mukhtar et al., 2016; Wilson 2016). When immigrants arrive in Canada, this circle of influence becomes a source of information, and the immigrants rely on this information to settle down. Interview participant P1 said, "when I moved to Canada from Jamaica, a friend who had been in Canada before me informed me about the importance of having an excellent credit score" (personal communication, December 12, 2016). This was a valuable piece of information for someone coming from Jamaica where there was nothing like a credit score or a credit history.

Participant P2 submitted that when she arrived in Canada, she made new friends who gave her hints on a range of financially related decisions needed to settle in Canada. Participants P3, P4, and P5 also mentioned that friends they met in Canada helped them learn about particular aspects of the Canadian financial landscape. Participant P6 was fortunate to have a family member who lived in Canada before she arrived and who gave her the financial information she needed to settle in Canada.

The Internet and other media also surfaced among the participants interviewed as a significant source of financial education. According to Barros (2010) regarding bounded rationality theory, the antidote to eliminating limitations imposed by current knowledge on decision making is to seek more knowledge. In a bid to make better financial decisions, immigrants search for the information that they need to be comfortable in the new environment. The popularity of the Internet and social media make them common routes for information access. Participants in the study cited the Internet and traditional media such as television, magazines, newspapers, and radio as sources of financial literacy development. For instance, participant P4 said "online blogs and dedicated financial news sites were good sources of financial literacy development for me" (personal communication, December 15, 2016). Participant P5 said, "I check customers' comments on the Internet before deciding which bank to use to manage my finances" (personal communication, December 17, 2016).

Participant P6 submitted that she carried out lots of Internet searches using Google to understand financial concepts that were new to her. Participant P7 stated that he regularly reads newspapers and magazines, particularly the business and finance sections. Participant P8 indicated that she listens to radio commentaries on finance related issues, including dedicated finance channels such as CNN money and CNBC.

A handful of participants commented that Postsecondary institution and workplace provided them with valuable information on basic financial concepts needed to survive while in Canada. In the quest to expand their knowledge and to prepare for a possible career switch, immigrants often enroll in a diploma program at a postsecondary institution once they arrive in Canada. Participant P4 said that "by enrolling in a business program in Canada, I had the opportunity to learn about the Canadian financial system" (personal communication, December 15, 2016). Participant P11 mentioned that coworkers, where he was working, helped him to develop his financial literacy level. Participant P7 got a job at one of the commercial banks as a financial advisor, and while training for the position he developed his financial literacy to an advanced level.

Emergent Theme Seven: Credit Facility Impacting Financial Decisions (FD)

Credit facility impacting financial decisions emerged as a major theme in the focus group discussion. Participants indicated that the buy now, pay later mentality in Canada played an important role in financial decisions. Participant P10 mentioned that "the ease of obtaining credit propelled people to make financial decisions without considering the repercussions" (focus group communication, December 17, 2016).

He acknowledged that many of his purchases would not have surfaced if credit facilities were unavailable. Participant P2 agreed with this fact and mentioned that his current mortgage obligation would not have been possible back home in Jamaica where the norm is for you to build your house using your money, not borrowed funds. The foregoing argument leans on the fact that the ease of securing credit facility is an important factor responsible for high debt.

Emergent Theme Eight: Discount Deals Impacting Financial Decisions (FD)

Discount deals impacting financial decisions emerged as a major theme in the focus group discussion when it was coded using NVivo 11 Pro. Discounts, or significant reductions in the regular price of items, are often used by retail stores to entice customers to purchase their products. Participants P1 and P2 observed that a discount deal could make an individual purchase items they don't necessarily need. The purchase is carried out simply because there is a massive price reduction, not because the individual has such needs. Thus, need and affordability are not criteria for the purchase; the price reduction is the sole reason for the purchase.

Emergent Theme Nine: Emotions Impacting Financial Decisions (FD)

Emotions impacting financial decisions emerged as a major theme in the focus group discussion that was coded using NVivo 11 Pro. One argument that was consistent among participants was the link between spontaneous reaction and emotion driven financial decision. Suboptimal financial decisions can be propelled by emotion, especially among women, according to participant P3. Participant P5 mentioned that an individual in a depressed state of mind might suddenly consider going shopping to lift his or her spirits. Participant P6 pointed out that "our decisions are often driven by feelings" (focus group communication, December 17, 2016). Especially when important celebrations for us or our loved ones are approaching, we want to spend regardless of whether it is our money or borrowed money.

Spending without a prior plan is spontaneous spending, and often such spending is performed without mapping out a payment plan. Participants P3 and P5 submitted that buying on impulse could be dangerous and could put an individual in a financial mess. Participant P6 noted that some impulse spending could be traceable to emotional issues, and family pressure, whereby a family member requests immediate assistance.

Emergent Theme Ten: Pressure Impacting Financial Decisions (FD)

Pressure impacting financial decisions emerged as a major theme in the focus group discussion when it was coded using NVivo 11 Pro. Overwhelming evidence among participants also pointed to habits having strong influence as a significant pressure point. Pressure, here, refers to social forces such as family and friends, people who have a strong influence on an individual's financial decisions. During the focus group discussion, pressure was a popular theme which resonated across the spectrum of participants. Participant P1 contended that pressure often propels spending decisions, even though the decision does not make sense from a financial perspective. Participant P2 was more direct. She said "family members back home believe that their relative in Canada is doing exceptionally well and as such should be able to assist them financially when they have a need, even when I don't have cash, family members often put me under pressure to withdraw cash from my credit card, incurring huge interest costs” (focus group communication, December 17, 2016).

Participant P3 submitted that “even the church can pressure an individual for donations” (focus group communication, December 17, 2016). Participant P5 pointed out that the pressure is higher for a man with family responsibilities. Participant P6 noted that pressure often mounts during festive seasons, such as Christmas when there is a pressing need to give gifts to loved ones. Participant P4 added social trends to the list of financial pressures. He observed that there was pressure to upgrade a phone, for example, not because it malfunctions but because a new version is available and everyone else is upgrading.

A habit is a consistent pattern of behavior which eventually becomes a way of life. Participant P1 noted that once a spending event becomes a habit, even if it is expensive to maintain it will be repeated regardless of whether it makes sense in terms of financial literacy. In his opinion, once an individual imbibes a spending habit financial literacy becomes useless. Participant P2 gave an example: "if an individual develops a habit of eating at an expensive restaurant, even though it is cheaper to eat at home such individual will keep spending to maintain the lavish lifestyle” (focus group communication, December 17, 2016). Habit thus becomes a strong influencer when it comes to financial decisions.

Summary

This study explored why immigrants to Lloydminster, Canada, possess high debt in their financial portfolio by exploring patterns and themes in their debt profiles and their financial literacy levels. Five research questions guided the study. I analyzed the data using the five-step procedure suggested by Yin (2015), and the program NVivo 11 Pro. Themes that emerged from participant interviews and the focus group were subjected to research questions iii, iv, and v, and the results compared with empirical literature and the theoretical framework that supported the study. There were no discrepant cases. I highlighted the issues pertaining to trustworthiness in the data collection and the analysis process. I illustrated the demographic data for the 13 participants interviewed in the study. Finally, I incorporated an extensive discussion regarding participants' member checking responses procedure.

In chapter 5, I provided an interpretation of the findings, the limitations of the study, and recommendation for further research. I also suggested implications for positive social change at both individual and social levels. Chapter 5 ends with the conclusions derived from the study.

Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative case study explored why immigrants to Lloydminster, Canada, possess high debt in their financial portfolio by exploring pertinent patterns and themes in their debt profile and their financial literacy levels. The population for this qualitative study included immigrants residing in Lloydminster, Canada. The study explored participants' financial literacy levels, their debt profiles, sources of their financial literacy education, factors that enhanced their financial literacy development, and how their financial literacy levels have affected their financial decisions.

Thirteen immigrants to Canada participated in a semistructured in-depth interview, and an additional six immigrants to Canada participated in a focus group discussion. All immigrants were working in Lloydminster, Canada. Key findings showed that the majority of immigrants that participated in the interview had low to medium financial literacy levels, somewhat below the Canada-wide national average literacy score, accompanied by high debt profiles. Four themes pertaining to factors that enhance immigrants' financial literacy development emerged in the interviews and the focus group discussion: (a) excellent credit score, (b) environmental curiosity, (c) family survival, (d) rational decision making.

Regarding sources of the immigrants' financial literacy education, two themes emerged: (a) social institutions, and (b) economic institutions. Four themes emerged pertaining to how immigrants' financial literacy levels impact their financial decisions: (a) credit facilities' impact on financial decisions, (b) discount deals impacting financial decisions, (c) emotions impacting financial decisions, (d) pressure impacting financial decisions. The remaining sections of this chapter include an interpretation of the findings, limitations of the study, recommendation for practice, future research, implications for positive social change, and a conclusion.

Interpretation of Findings

An exploration into the financial literacy levels of immigrants that participated in the study showed that they possess low to medium financial literacy levels. By comparing their financial literacy score to the national average score, only five participants out of 13 scored above the national average score. This finding aligns with reports in the literature that immigrants possess low financial literacy levels relative to Canadian-born individuals (Chawla & Uppal, 2012; Keown, 2011). Meanwhile, the literature is vast about the benefits of having sound financial literacy education. Such benefits include good saving habits, responsible debt management, and ability to make intelligent financial decisions (Allgood & Walstad 2011; De Armond, 2010; Ricaldi et al., 2013).

Immigrants and Financial Literacy

In the light of the study findings, immigrants with low financial literacy education stand a high chance of making irrational financial decisions with adverse consequences to their wellbeing (Keown 2011). Because of their naivety, immigrants in this category may become easy catches for sales-driven financial advisors working for commercial banks deceiving consumers into signing up for debt instruments with outrageous interest payments. At the macro level, poor immigrants' economic welfare due to their ignorance, could on a larger scale discourage future immigrants from coming to Canada. Such a trend would hinder the Canadian government's drive to boost the Canadian population and Canadian economic growth through a proactive immigration program. Long-term consequences might entail immigrant decisions to consider other immigrant-friendly destinations such as New Zealand and Australia.

Another finding gleaned from the study was that male participants had higher financial literacy scores than female participants. This finding is consistent with reports in the literature indicating that women possess lower financial literacy education than men (Keown 2011; Lusardi & Mitchell 2013; Lusardi & Tufano 2015). Modern trends regarding family decision making indicate that financial decisions are made jointly by women and men, with women taking on increased roles in family financial decision-making (Lusardi & Mitchell 2013). Against this background, women with low financial literacy might initiate suboptimal financial decisions, jeopardizing family welfare.

Finally, a separate thread of finding from the study refutes the claim in the literature that immigrants who have been in Canada longer possess higher financial literacy education (Keown, 2011). A comparative analysis of participants' financial literacy scores and the number of years they have lived in Canada produced mixed results; that is, some immigrants who have lived in Canada for longer periods had lower financial literacy scores than some immigrants who have lived in Canada for shorter periods. This implies that the number of years in Canada does not automatically translate to having superior financial literacy education.

Immigrants and Debt Levels

Data regarding research question ii showed that the average debt load of the 13 participants ($390,455) was above the Canadian national average debt of $114,400, as noted in Chawla and Uppal (2012). The study findings further revealed that immigrants who have been in Canada for more than 10 years have lower debt than immigrants who have been in Canada for less than 10 years. This finding suggests that when immigrants come to Canada, they are pressured to access debt to survive. Mortgages, credit cards, lines of credit, and student loans become necessities. As time passes, immigrants begin to pay down their debt, and they can access cheaper funding having built their credit scores to levels that lenders consider low risk. This finding also suggests that banks and other lenders go after new immigrants to allure them into signing for all kinds of debt products. As they become more familiar with the Canadian environment, immigrants can understand how the financial system operates and can navigate toward reductions in their debt obligations.

Two other critical findings from research question ii were that immigrants with higher qualifications such as medical or master's degrees are likely to be in possession of better-paying jobs and are likely to have higher debt obligations. These findings are consistent with reports in the literature that a positive and direct relationship exists between income level and debt level, and that individuals with higher income tend to take on more debt (Crawford & Faruqui, 2011; Lusardi & Tufano, 2015).

Immigrants' Financial Literacy Development

Themes which emerged regarding financial literacy development among immigrants showed that immigrants have many legitimate and cogent reasons to develop their financial literacy levels as soon as they arrive in Canada. The first major theme which is environmental curiosity suggests that when immigrants arrive in Canada, their first instinct is to learn about and understand their new environment, which includes the Canadian financial landscape. They need to investigate in order to understand the differences between their home country and Canada. This urge makes immigrants explore every available avenue that can enable them to better understand their new environment. The bounded rationality theory (Conlisk, 1996; Simon, 1956) provides an unequivocal explanation for why economic agents would like to overcome their information limitation in a bid to make better decisions. According to the bounded rationality theory, economic agents struggle to make rational decisions as a result of the limited amount of information at their disposal. As a result, an individual interested in making a better decision must strive to expand their information pool (Conlisk, 1996; Simon, 1956).

Another major factor under rational financial decision theme that emerged from the study that would be expected to enhance financial literacy development among immigrants was the desire to invest. Many immigrants perceive Canada to be a land of opportunities where they can establish themselves financially and become wealthy (Garang, 2012). On arrival in Canada, immigrants are apt to start exploring how they can invest and earn a decent return on their investment. In this process, they gain access to basic knowledge of investment opportunities and the risks involved in such opportunities. This knowledge forms an important part of immigrants' financial literacy development. It is as simple as learning how to send money back to their home country. The life cycle hypothesis of savings proposed by Modigliani and Brumberg (1954) suggests that rational individuals allocate their income between consumption and savings over a life time. The desire to save therefore derives from the theoretical framework underpinning this study such as the life cycle hypothesis.

Another major theme identified was excellent credit score. Once immigrants arrive in Canada, they are made to understand the importance of having a good credit history (D'Astous & Miquelon, 1991). Therefore, immigrants develop their financial literacy levels to build excellent credit records. Learning the rudiments of avoiding late payments, forms part of immigrants' financial literacy education.

Family survival also emerged as a major theme under this category as it relates to the enhancement of financial literacy development among immigrants. As soon as immigrants arrive in Canada, the foremost goal is to survive by gaining access to basic necessities of life such as accommodation, warm clothing especially during winter season and food to eat (D'Astous & Miquelon, 1991). Especially for immigrants' families with children, enrolling their children in school becomes a paramount goal.

In a bid to survive in the new environment, immigrants are pressured to learn some basic financial concepts such as how to operate a bank account, how to pay bills, how to obtain and manage a credit card and how to transport themselves from one point to another (Garang, 2012).

Another major theme discovered in this study was rational decision making. The desire to be comfortable in the new environment puts a strong emphasis on rational decision-making. A key conceptual framework which underpins this study was the rational choice theory. According to the rational choice theory, a rational individual will consider a wide array of choices in a bid to settle for the option which delivers the greatest amount of benefit and satisfaction (Boudon, 2009; Hedoin, 2016). As such financial literacy forms part of the tools needed to adequately carry out an extensive cost-benefit analysis of decision alternatives before arriving at the optimal decision.

Risk aversion evolved as a strong factor under rational financial decision due to the sensitiveness of immigrants to uncertainties surrounding decision outcomes. Most immigrants are risk averse and as such desire to learn and understand both the legal and economic consequences of every decision made. Risk in this context refers to uncertainties pertaining to consequences of decisions made (Scott, 2000). This desire to avoid risk propels them to learn and acquire background information for every decision contemplated. Most immigrants possess strong incentive to avoid exposure to the kind of risk that could frustrate their dream of being successful while in Canada (Garang, 2012).

Finally, immigrants are motivated to upgrade their financial literacy levels in order to avoid poverty and to live debt free. Poverty avoidance and debt freedom which emerged as pillars of rational financial decision form part of the reason why most immigrants move to Canada. They believe they will find greener pastures in Canada compared to the economic terrain left behind in their home countries (Green et al., 2016). Once they enter Canada, they will do anything legally possible to make sure that their standards of living improve.

Sources of Financial Education for Immigrants

Data from this study showed that the immigrants participating in the study gained access to financial literacy training from diverse formal and informal sources. Two themed sources emerged through this inquiry; social institutions and economic institutions. Specific social institutions alluded to by participants included church, families and friends, the internet and traditional media and, postsecondary education and workplace, while economic institution mentioned by participants is the banking institution. A couple of participants indicated that they learned basic financial concepts from the bank that provided them with banking services. The problem with this source is that the kind of education they will get from a bank will work in the bank's favor through the promotion and sales of bank products (Steen & Mackenzie 2013). Thus, a bank source of financial information might not function to educate immigrants for their good without introducing a conflict of interests.

Another source of financial literacy was the church, which in this context represented a spiritual place or gathering in accordance with the Christian faith. The church's primary responsibility is to provide spiritual services, but one participant was able to attend a one-off finance seminar organized by the church she was attending. Even though this is a laudable initiative of the church, a one-off seminar is grossly inadequate to equip a newcomer to Canada with enough education to make informed financial decisions. Participants reported obtaining informal financial tutoring from families and friends. Such information can be useful, but some might be flawed. People tend to offer advice or information based on their experience or based on third-party opinions. Inaccurate information from these sources has the potential to mislead an individual into making erroneous decisions (Glaser & Walther, 2013). Some participants submitted that they obtained financial literacy education upon enrolling in a college after they arrived in Canada. One participant obtained financial education through the financial institution that hired him. College financial literacy education might be more theoretical than practical, as the material in question focuses on courses relevant to the program enrolled in by the student. Work place training can be useful but will provide a narrow range of financial literacy education that focuses on the financial objectives of the management. Such training might be inadequate to equip an individual with the ability to make beneficial, broad-based financial decisions.

Finally, a surprising observation in this analysis was that none of the participants mentioned that they received assistance from the Canadian government about formal financial literacy training when they arrived in Canada. Keown (2011) noted that immigrants on arrival at the Canadian border are handed a book titled "newcomers to Canada" with a section of the book consisting of financial literacy information. It is, however, surprising that none of the immigrants that participated in this study mentioned this handbook as the source of their financial literacy education.

Link Between Financial Knowledge and Financial Decisions

While exploring the interaction between the financial literacy levels of immigrants and their financial decisions, I identified four major themes. Data analyzed showed that immigrants do not always apply their financial literacy knowledge to financial decisions. In fact, one participant noted that it is one thing to have knowledge of finance, but it is a different ball game to utilize that knowledge when making financial decisions (Smyczek and Matysiewicz 2015).

Participants in the focus group discussion identified a range of exogenous factors that impact financial decisions. For instance, the first theme which is pressure from families, friends, and the society at large plays a leading role in influencing financial decisions. Especially, pressure from families back home resonated across the spectrum of participants during the discussion. When family members from an immigrant's country of origin have a pressing need, they usually mount pressure on their relative in Canada who they believe is rich enough to assist them. The pressure exerted by personal habit was another factor identified by participants that affect financial decisions. Financial output for certain luxuries can become a routine conduct that is difficult to change. Participants submitted that craving can be stronger than reason when the decision to spend or to not spend on a habitual amenity is made (Glaser & Walther, 2013). Even though an individual understands the consequences of being in debt, that individual prefers to spend money just to satisfy his or her cravings.

Another factor influencing financial decisions is credit availability. In a credit-driven economy such as Canada where credit payment is readily available, most people make purchases they would not have made if cash was the only payment option available(Steen & Mackenzie 2013). To make the situation worse, banks use credit facilities as a marketing strategy to draw people into transactions that will put them in debt. This creates a mindset that people can purchase something even when they don’t have the cash to cover the payment. This is a subtle tactic that influences financial decisions.

Particularly for women, emotions were identified by participants as playing a role in influencing financial decisions. People tend to spend in order to feel good or to get out of a depressed frame of mind. When people are extremely happy, they might decide to give their loved ones an expensive treat they cannot afford. Financial decisions in this regard are made based on feelings rather than reason (Boisclair, Lusardi, & Michaud 2015).

Participants recognized discount deals as a factor influencing financial decisions. This method is often used by marketers to encourage people to buy things they don't necessarily need because the items are selling for less than the regular price. This bait is often hard to resist thereby overruling financial common sense (Taft, Hosein, Mehrizi, & Roshan 2013). Participants acknowledged that discount deals could produce a spontaneous buying reaction rather than a serious financial decision.

Limitations of the Study

The fact that all participants in this qualitative case study were immigrants to Lloydminster, Canada, constitutes a limitation of the study, because a researcher replicating the study using participants who are not immigrants to Lloydminster, Canada, might obtain a different outcome. A second limitation is that the findings of the study do not represent the opinion of all immigrants to Canada. The concept external validity accurately explains this phenomenon. Marshall and Rossman (2016) indicated that a case study researcher cannot attain generalizability or achieve external validity of the findings in his or her research as reflected in a quantitative study, rather, the task of showing that a set of findings is relevant in a totally different setting lies with another researcher doing a similar study.

A third limitation is possible if some participants did not provide accurate and complete responses to interview questions due to poor memory recall (Yin, 2015). A fourth limitation lies in the researcher's interpretation of the data. A member checking procedure was employed to reduce the researcher's personal bias in the analysis of participants' responses. Furthermore, I indicated in chapter one that one key limitation possible in this study was the introduction of bias into the study by the researcher. This is a particularly sensitive limitation considering that I came to Canada as an immigrant, and have had personal experience as per the issues that I explored in this study. Throughout the study, I had to consciously tame my personal bias by not allowing my opinion interfere with the data collected during the data gathering phase. I also ensured that my body language and facial expressions did not influence the opinion and the ideas submitted by participants throughout the research process.

Recommendations

The first recommendation for future research is to explore the relationship between immigrants’ financial literacy levels and their debt profile according to their country of origin. This involves identifying immigrants as participants from one country and comparing the study outcome with immigrants from another country. This would enable us to understand country-specific factors that influence people’s attitudes to debt and financial literacy. Bucher-Koenen et al. (2014) noted that people’s attitudes to financial literacy differ from country to country.

The second recommendation for future research is to apply the same methodology and procedure as used in this study, to Canadian-born individuals and compare the study outcomes with the results from this study. This comparative analysis could reveal how Canadian-born individuals apply their financial literacy knowledge to financial decisions.

The subprime crisis in the United States in 2008 has led to a renewed drive for Canadians to develop their financial literacy levels (Bramley, 2012). Whether this drive has yielded improvement in the financial literacy of Canadians is yet to be explored.

The third recommendation for future research is to examine the argument put forward in this study in a quantitative paradigm. A quantitative analysis of debt accumulation by immigrants after they arrive in Canada under different macroeconomic conditions could examine whether macroeconomic conditions play a significant role in immigrants' debt accumulation. A similar study was carried out by Gale et al. (2012) using multivariate modeling of the economic outcomes of financial illiteracy among American households. A quantitative analysis has the advantage of attributing measurement to the relationship among variables.

The fourth recommendation for future research is to replicate the methodology used in this study in provinces other than Alberta. The objective is to compare immigrants' financial experiences in different Canadian provinces. Studies have shown that people from different geographical regions do exhibit different levels of financial literacy.

For instance, Smyczek and Matysiewicz (2015) explored the levels and the depth of financial literacy among selected participants in the countries Germany, Poland, Romania, Spain, and the United Kingdom. A survey of questions bothering on demographic/socioeconomic information and the knowledge of financial concepts showed that participants from the selected countries possessed different levels of financial literacy accompanied by evidence of poor financial decisions as measured by the amount of debt accumulated by participants in those countries. A similar study comparing the financial literacy of consumers across the provinces in Canada could reveal the level of financial literacy region by region.

The fifth recommendation for future research is to explore the link between culture and financial decisions. The goal is to examine how different cultural backgrounds influence immigrants' financial decisions. Culture is an important concept in the social environment (Dungan et al., 2010). Culture reflects an integrated, often complex, interaction of human knowledge, belief, and acceptable norms in the society (Amoyaw & Abada, 2016).

Culture is transmitted from one generation to another and has a large and interesting influence on human behavior. Therefore, it is worthwhile to examine how culture impacts immigrants' financial decisions. This inquiry could unveil the impact of certain cultural traits on societal wellbeing which could lead to recommendations that might establish positive social change for the society understudy.

Another research area that one could explore is a gender-based comparative qualitative analysis of female immigrants' financial literacy and their debt profile as it relates to their male counterparts. This study could assist to provide an in-depth understanding of gender differences regarding the attitude of female and male to financial education and how such knowledge impact financial decisions holding other exogenous variables constant. Lusardi and Tufano (2015) carried out a study in the case of the United States by exploring the financial literacy levels of certain demographic groups within the American society. The demographic groups' understudy were women, elderly and the divorced. Their finding showed that women especially possess low levels of financial literacy with negative consequences on financial decisions.

Finally, an important area that a researcher could explore is to carry out a comparative analysis of the rate financial literacy development and the rate of debt accumulation of postsecondary students of immigrant parents and Canadian-born parents. The underlying goal is to determine whether postsecondary students by Canadian parent develop faster in their financial education than students from immigrants' families. The study could also throw some light on whether students from Canadian parent accumulate debt faster than students from immigrants' families.

Implications

Contribution to Practice

An improved wellbeing of immigrants in Canada could boost the Canadian government's effort to grow the Canadian population and the economy through a proactive immigration program (Dungan et al., 2013). The findings in this study showed that immigrants accumulate debt soon after they arrive in Canada and that immigrants possess low financial literacy levels. In addition, this study revealed that immigrants access financial literacy education from questionable sources characterized by the provision of inaccurate and unreliable information.

If the government could provide financial literacy education to immigrants following a systematic curriculum, immigrants could be equipped with the tools to make informed financial decisions, a situation that would impact their wellbeing positively.

Since Canada has an immigrant dependent economy, this would improve Canada's wellbeing.

The Canadian government needs a more formal structure in place to equip immigrants with financial literacy when they arrive in Canada. The structure should be available in all provinces and should follow a systematic process of teaching immigrants how to survive and cope financially in their new country. Based on the findings of this study, such a structure is nonexistent.

According to Citizenship and Immigration Canada (2016), immigrants aspiring to come to Canada under the Federal Skilled Trades Program must pass an English literacy test. I consider financial literacy to be of equal importance as English literacy, and as such provisions are required for immigrants' financial literacy education as well. For immigrants who have moved to Canada but need financial literacy development, the Canadian government could partner with nongovernmental organizations (NGOs) to place offices in provincial districts and communities where immigrants could receive financial literacy training as they integrate into the Canadian society.

Contribution to Individuals

When asked how they rank themselves with regard to financial literacy, most immigrants assign themselves a pass mark. When interviewed in-depth they realize they have been operating on assumptions. The study revealed that the sources of financial literacy education for many immigrants are families and friends. These sources are not accurate or reliable for informed financial decision making. Therefore, immigrants will have fewer problems when they arrive in Canada if they seek financial literacy education from credible sources. Also, this study revealed that there is a difference between having financial knowledge and utilizing that knowledge. Data gathered in the focus group discussion indicated that factors such as family pressure, habits, emotions, credit facility availability, and discount deals often overrule reason when making financial decisions. Furthermore, financial mismanagement by a member of one household has a trickle-down effect on the other members of that household. Given this finding, immigrants need to be informed about accountability in the Canadian environment, especially where finances are concerned.

Contribution to Society

Canadian society, and particularly the Canadian economy, will be better off if individuals develop their financial literacy levels and make sensible financial decisions. Ohlsson (2012) submitted that the quality of financial decisions made by a household determines the household’s welfare and economic wellbeing. Sound spending habits in the individual will have positive implications for Canada’s gross domestic product growth, production scale, and economic development (Rooij et al., 2011). Thrifty savings habits on aggregate determine the availability of savings for investment at a national level (Ohlsson, 2012). In other words, a society that is financially literate will have a strong economy.

Contribution to Theory

This study fills a gap in the literature by exploring themes and patterns of immigrants' financial literacy and the implication of this literacy to their debt profiles. The study adds to existing literature on the levels of financial literacy in Canadian immigrants, sources of financial education for Canadian immigrants, immigrant debt levels and the impact of financial literacy on immigrant debt levels, and the field of behavioral finance. The contribution to the field of behavioral finance emerged when participants in the focus group discussion observed that financial decisions are influenced by emotions, habits, cultural orientation, and social influence.

Conclusion

This qualitative case study explored why immigrants to Lloydminster, Canada, possess high debt in their financial portfolios by exploring the relationship between their debt profiles and their financial literacy levels. From the 1960s', immigration has been a major source of population growth for Canada (Bonikowska et al., 2016; Peters & Vink, 2016). Amoyaw and Abada (2016) noted that immigration is part of the Canadian cultural heritage and an important component of Canada's nation building strategy. As such, any form of systematic inquiry into immigrant's welfare and socioeconomic challenges in Canada has the potential to add value to Canada as a country.

Five sub-questions guided the inquiry in this study. The findings indicated that immigrants who participated in the study possessed low to medium financial literacy levels compared with the national average score reported in Keown (2011). The findings revealed that immigrants possessed high debt considering the number of years they have been in Canada and tended to rely on informal sources for financial information when they arrived in Canada. To improve the financial conditions of immigrants, there is an urgent need to have government supervised facilities on the ground that can facilitate financial literacy education for immigrants following a systematic curriculum. As the study showed that immigrants have multiple and cogent reasons why they should develop their financial literacy levels when they come to Canada, they would likely take part in such government facilities rather than gather information from informal and unreliable sources.

Finally, the study showed that financial literacy is not the sole determinant of financial decisions made by immigrants. Factors such as emotions, habits, social pressures, spontaneous reactions, easy credit, and discount deals all play important roles in immigrants' financial decision making.

The overarching question in this study was why do immigrants to Lloydminster, Canada, possess high debt in their financial portfolios? The answer is because they have low financial literacy levels and their financial literacy education is often redundant when making financial decisions. Factors other than financial education often stimulate unwise financial activity. A more pragmatic solution by the government such as the implementation and the enforcement of a formal financial education curriculum training for all immigrants before gaining access to credit could help raise immigrants' financial literacy level and also help lower debt levels. In addition, well-coordinated advocacy publicity by the government focusing on why rational financial decisions are important for all decisions could help lower debt levels in Canada, particularly for immigrants. On aggregate, monies adequately spent could help raise GDP growth in the appropriate sectors of the economy and create positive social change for the country as a whole.

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Appendix A: The financial literacy in-depth interview questions of the Canadian Financial Capability

Each of the 14 questions is listed below.

1. If the inflation rate is 5% and the interest rate you get on your savings is 3%, can you explain what will happen to the purchasing power of your savings in a year's time?

2. What is a credit report?

3. Who insures your stocks in the stock market?

4. By using unit pricing at the grocery store, you can easily compare the cost of any brand and any package size. Explain.

5. Consider the following scenarios, a young single woman with two young children, a young single woman without children, an elderly retired man, with a wife who is also retired and a young married man without children. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance? Please explain your choice.

6. If you had a savings account at a bank, which situation below would be correct concerning the interest that you would earn on this account? Sales tax may be charged on the interest that you earn, you cannot earn interest until you pass your 18th birthday, earnings from savings account interest may not be taxed and income tax may be charged on the interest if your income is high enough. Please explain.

7. Inflation can cause difficulty in many ways. Which of the following groups would have the greatest problem during periods of high inflation that lasts several years? Young working couples with no children, young working couples with children, older working couples saving for retirement and older people living on fixed retirement income. Please explain.

8. Lindsay has saved $12,000 for her university expenses by working part-time. Her plan is to start university next year and she needs all of the money she saved. Which of the following investment is the safest place for her university money? Corporate bonds, mutual funds, a bank savings account, locked in a safe at home and stocks. Please explain your choice.

9. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation? A twenty-five year corporate bond, a house financed with a fixed-rate mortgage, a 10-year bond issued by a corporation and a certificate of deposit at a bank. Explain.

10. Under which of the following circumstances would it be financially beneficial to borrow money to buy something now and repay it with future income? When something goes on sale, when the interest on the loan is greater than the interest obtained from a savings account, when buying something on credit allows someone to get a much better paying job and when it is always more beneficial to borrow money to buy something Explain

11. Which of the following statements is not correct about most ATM (Automated Teller Machine) cards? You can get cash anywhere in the world with no fee, you must have a bank account to have an ATM card, you can generally get cash 24 hours-a-day and when you can generally obtain information concerning your bank balance at an ATM machine. Explain the rationale behind your choice.

12. Which of the following can hurt your credit rating? By making late payments on loans and debts, by staying in one job too long, by living in the same location too long or by using your credit card frequently for purchases. Explain why?

13. Which of the following can affect the amount of interest that you would pay on a loan? Your credit rating, how much you borrow, how long you take to repay the loan or all of the above. Explain

14. Which of the following will help lower the cost of a house? By paying off the mortgage over a long period of time, by agreeing to pay the current rate of interest on the mortgage for as many years as possible, by making a larger down payment at the time of purchase or by making a smaller down payment at the time of purchase Please explain.

Appendix B: Interview Protocol and Questions

Project: A Case Study of financial literacy and debt of immigrants in Lloydminster Canada

Date:

The purpose of the study is to explore the high debt to income ratio among immigrants to Lloydminster Canada, and to inquire possible patterns and themes between their debt profile and financial literacy levels. The interview questions are provided below. Your participation in this study is completely voluntary. If you chose not to participate or to withdraw from the interview at any time, you can do so without any pressure. There were no foreseeable risks to you from participating in this study. The researcher will not include your responses in the research study and will keep your identity confidential.

Questions:

1. What is your age?

2. What is your gender?

3. How long have you been in Canada?

4. What is your highest level of academic education? Please explain

5. What is your current Job?

6. How many credit cards do you have?

6a. What is your outstanding balance on each?

6b. How do you make your payment? Please explain.

7. What is your outstanding line of credit balance?

7a. How do you make your payment? Please explain.

8. What is your outstanding balance on your mortgage?

9. What is your outstanding balance of your student loan?

10. How would you describe your financial education in line with the Canadian banking and finance industry? Please explain.

11. What factors enhance your financial literacy development since you arrived Canada? Please explain?

12. What are the sources of your financial literacy education since you arrived Canada? Please explain?

Thank you for your cooperation and participation in this study. The responses you provided was beneficial in helping to understand why immigrants have high debt to income ratio with particular reference to financial literacy levels. It will also add to the existing literature on debt and financial literacy within the academic community.

Appendix C: Focus Group Discussion Protocol and Question

Project: A Case Study of financial literacy and debt of immigrants in Lloydminster Canada

Date:

The purpose of the study is to explore the high debt to income ratio among immigrants to Lloydminster Canada, and to inquire possible patterns and themes between their debt profile and financial literacy levels. The discussion questions are provided below. Your participation in this study is completely voluntary. If you chose not to participate or to withdraw from the discussion at any time, you can do so without any pressure. There were no foreseeable risks to you from participating in this study. The researcher will keep your identity confidential.

Questions

1. Do you fully consider and utilize your financial literacy knowledge for every financial decision you make?
2. Have you skipped monthly payment on the outstanding balance on your credit card before?

2b. Were you aware of the implication?

2c. If you had skipped payment before and were aware of the implication, why did you skip your payment?

3. What other reasons are there that could influence your financial decisions other than financial literacy?

4. If you have large savings and a large outstanding balance owing on your credit card, does it make sense to pay down your outstanding balance or keep the savings intact against rainy day? Explain what you will do and why?

Thank you for your cooperation and participation in this study. The responses you provided was beneficial in helping to understand why immigrants have high debt to income ratio with particular reference to financial literacy levels. It will also add to the existing literature on debt and financial literacy within the academic community.