

Basic Income and Housing Satisfaction: Evidence from the Mincome Experiment

by

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A thesis submitted to the Faculty of Graduate and Postdoctoral
Affairs in partial fulfillment of the requirements for the degree of

Master of Arts

in

Political Economy

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Ottawa, Ontario

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Abstract

This thesis explores two related research questions concerning the Manitoba basic income experiment (Mincome). First, why did the experiment focus on the potential for labour market withdrawal in response to a guaranteed income? I place the history of the basic income idea in the context of the changing paradigm of knowledge and policy production beginning in the late-nineteenth century to show that incorporation into mainstream economic thought leads poverty and basic income researchers to focus narrowly on individual behaviour. Second, in response to the narrow focus on labour supply, I examine Mincome data and use a series of multiple regressions to explore the impact of a basic income on housing satisfaction. While the results are negative, the investigation highlights the importance of variegated knowledge production in the consideration of policy changes and outlines some areas in which future social experimenters might learn from Mincome and its U.S. variants.

Acknowledgements

I acknowledge the following people not because I expect this research to make an impact on them, but rather because they have made an impact on me. First, I thank Donna Coghill for being a sturdy confidant and for instilling in me the motivation to complete this work. Second, two professors of mine, namely, Peter Andrée and Patricia Ballamingie, have supported my work throughout my M.A. and have offered me confidence in my faculties. Likewise, my supervisor, Scott Bennett, for whom this work is impossible without, has offered both support and patience throughout. I thank Jennifer Robson, the External Examiner on my defence committee, for offering her time and guidance. Finally, I thank the friends who have made the past two years unforgettable.

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1 Chapter: Introduction

In this thesis I examine the well-known basic income experiments of the 1960s and 1970s (the NIT experiments). These experiments tested the effects of providing an income guarantee to the poor, through a negative income tax, and were the first large scale social science experiments ever conducted (Widerquist & Sheahan, 2012). This thesis explores two indirectly related research questions with respect to these experiments. First, why did the experiments, as many (Hum & Simpson, 1991; Levine et al., 2002; Rossi, 1975; Solow, 1986) suggest, narrowly focus on the potential for labour market withdrawal in response to a guaranteed income? I place the history of thinking about a basic income in the context of the narrowing of political economic thought amidst changes in the production of social scientific knowledge and the policy process. I show that the incorporation of the basic income idea into mainstream economic thought allowed for increased attention to be paid to aspects of individual behaviour, particularly labour supply, in response to an income guarantee, to the exclusion of other impacts as well as research that focused more on the structural aspects of poverty and the structure-altering potential of a basic income.

As a response to the narrow vision of the possibilities for a basic income under the NIT experiments, I analyse data from the Canadian variant of the experiments (Mincome) to uncover effects unrelated to labour supply. The history of basic income has always been bound up with the notion of poverty reduction and it is with the aim of eliminating poverty that the NIT experiments came to fruition. By providing an income guarantee to the poor, the NIT experiments offer the possibility of exploring various dimensions of poverty and their relationships to (guaranteed) income. This is indeed the

approach taken by Forget (2011) in her now famous study of the health effects of Mincome. I analyse another important dimension of poverty – housing. Whereas housing makes up a large portion of the individuals’ or the family’s budget, I ask whether an income guarantee improves individual satisfaction with housing. With a basic income, it may be possible for households to improve some of the factors that contribute to housing satisfaction through consumptive changes. Increased financial security may allow dwellers to make purchases to improve the physical condition of their housing or increase its level of privacy. Similarly, it may allow dwellers to participate in community activities, increasing their connection to the community and its members. I conduct a quantitative analysis of Mincome data to explore this hypothesis. My results are negative in that a basic income does not appear to influence housing satisfaction. Other housing satisfaction studies and other analyses of NIT experimental data point to difficulty in detecting behavioural or attitudinal changes. This point is particularly important to consider when investigating areas of social life that Mincome and the other NIT experiments did not intend to examine. Nevertheless, the NIT experiments offer a wealth of data that can be used to answer contemporary questions about basic income.

Prying into data from an old experiment may seem like research for the sake of research. However, there is currently much excitement about a basic income in Canada and around the world. Events in Switzerland in 2013 catapulted the idea onto the world stage. Swiss activists collected more than the necessary 100,000 signatures to put to referendum a proposal for a basic income that gives every adult citizen an unconditional grant of 2,500 Swiss francs per month. While the vote may still be some time away as the executive branch of the Swiss government is required to produce a report on the

proposal (Faris, 2014), the broad support for a basic income in Switzerland has generated interest elsewhere. In May 2015, the newly formed Finnish government included the implementation of a basic income experiment as part of its program for government. This marks the first commitment from a European country to run such an experiment (Upton, 2015). At the municipal level, the Dutch city of Utrecht plans to commence a basic income experiment in January of 2016. While in Switzerland the plan before the government is national, unconditional and universal, the Utrecht experiment is more modest. It will only issue monthly basic income payments of 900 euro to a portion of the population already on social assistance. Another group will act as a control group, continuing to receive social assistance under existing arrangements (Ostroff, 2015). Other experiments are already underway or have recently completed in poor villages in India, Brazil and Namibia and early results in terms of employment, nutrition (especially children's) and housing are overwhelmingly positive (Haarmann & Haarmann, 2012; Standing, 2013; Widerquist, 2012).

In Canada, two federal political parties now endorse a basic income (though such endorsement doesn't necessarily mean practical policy implementation). The Liberal Party of Canada passed two policy resolutions on the topic at its 2014 biennial convention in Montréal (Liberal Party of Canada, 2014). Similarly, the Green Party of Canada aims to work towards the gradual implementation of a "Guaranteed Livable Income" (Green Party of Canada, 2014). While the austere Conservative Party of Canada cannot be expected to endorse a basic income, an influential voice in the party has been a proponent for several years. Former Conservative senator Hugh Segal is a champion of the idea and was Deputy Chair of a 2009 Senate Report that recommends the

Government of Canada further examine a basic income policy (Canada, 2009). During the 2015 Premier election campaign in Prince Edward Island, all four provincial party leaders publicly expressed support for a basic income. The winning candidate, Liberal leader Wade MacLauchlan, suggests basic income is a “model program” and supports “evidence-based research” on the idea (Burge, 2015; van Draanen, 2015). The policy is also getting support in Alberta, where both major city mayors, Calgary’s Naheed Nenshi and Edmonton’s Don Iveson, support the idea (Levinson King, 2015). The recent sweep by the left-wing New Democratic Party in the provincial election may bolster the views of the two mayors.¹

In Canada and around the world, engaging in discussions concerning basic income inevitably gives rise to confusion over terminology. A plethora of terms are used to refer to a particular set of ideas or policy proposals, which, in this paper, are broadly termed “basic income.” The designations include: guaranteed annual income (the term historically used most widely in Canada), national dividend, social dividend, citizen’s wage, citizen’s income, social wage, social income, state bonus, negative income tax, among others (Blais, 2002; Widerquist, Vanderborcht, Noguera, & De Wispelaere, 2013). Blais (2002) suggests “basic income” is the most appropriate terminology because it minimizes the risk of misunderstandings and misunderstood associations. However, in years to come, it could very well be that “basic income” becomes a misunderstood association itself. The constant shifting of terminology leads David Purdy

¹ While the presence of an NDP provincial government in Alberta may lend to the possibility for progressive policy changes in the province, it should be noted that neither the Alberta NDP nor the national party express support for a basic income in their platforms. That said, Alberta’s Finance Minister, Joe Ceci, has publicly expressed his support for a basic income (see Ceci & Phair, 2014).

(1994) to suggest that basic income is a “field of debate, rather than a settled programme” (p. 31).

It is instructive to outline a definition. Van Parijs (1992) offers a simple description of a basic income as a government grant paid unconditionally to all² on an individual basis, irrespective of income from other sources and without requiring any present or past work performance. Van Trier (1995) lists three major objectives of a basic income policy. The first is the eradication of poverty. While many countries today have various social assistance programs, these programs are well known to be targeted to the most economically disadvantaged citizens or residents, are conditional and create (poverty or welfare) traps due to the high marginal tax rates imposed on earned income (Blais, 2002). Basic income aims to address the failures of existing policy frameworks by being less conditional (if not unconditional) and by offering a way out of the poverty trap.³ Second, basic income proponents, particularly the economists, point to the pro-market effects of a basic income, especially with respect to the labour market. Basic income (assuming a subsistence or near subsistence level) allows more choice in the

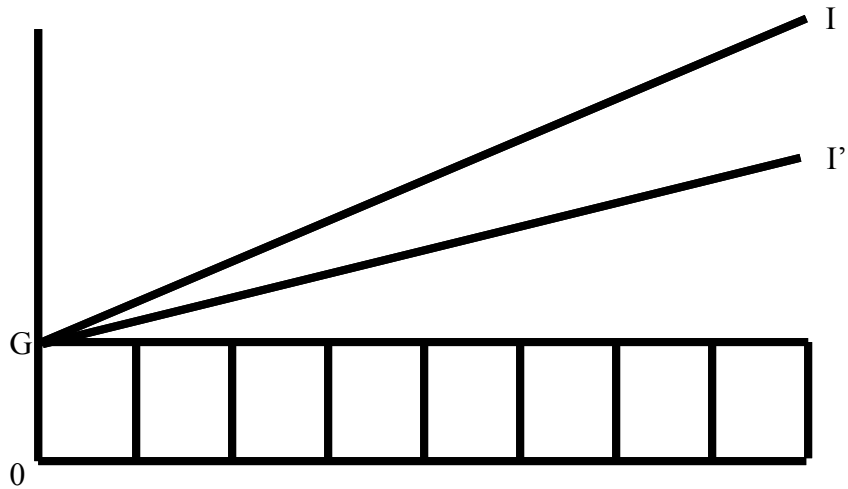
² “All” typically means all the citizens or residents of the country in which the state administers the payment of a basic income.

³ The “poverty trap” refers to a situation in which an individual becomes caught in a situation of long-term unemployment and poverty, leading to a decreasing probability of finding meaningful work due to loss of ability (which may be real and/or perceived by potential employers) (Laurent & L’Horty, 2002). This situation may occur in the case in which social assistance payments actually provide more income than paid work. Another situation may be in the case where paid work provides only a small increase in income over social assistance. In the latter, one may wish to continue to live on social assistance and not have to devote time and effort to paid employment. Current social assistance policies include an exceedingly high tax rate on any earned income up to the amount received from social assistance, creating a situation in which a social assistance recipient that finds paid employment must return part (or all) of their earned income to the tax agency, dissolving the incentive to find work in the first place (Blais, 2002).

amount of work that people want to supply. This means a ‘freer’ equilibrium between labour supplied and labour demanded (Van Trier, 1995). Further, argues James Meade (1990; 1995), a basic income may reduce resistance by workers to new productive changes in the workplace (e.g., replacing human labour with machines) and to greater flexibility in wage rates. A basic income may also allow for more choice with respect to the type of work chosen by leveling the bargaining power of employers and employees. Third, from an administrative perspective, basic income is touted as a more efficient way of providing welfare. Existing systems are notoriously complex and require a large bureaucratic machinery to manage. The need for fact-checking to ensure that conditions are met can also be a degrading experience for the recipient that may result in non take-up costs. Pervading through each of these objectives is the value of freedom (Van Trier, 1995). Basic income provides, what Van Parijs (1995) calls, “real freedom.” Proponents argue that the provision of a basic income allows freedom from poverty, freedom from the market and freedom from the state.

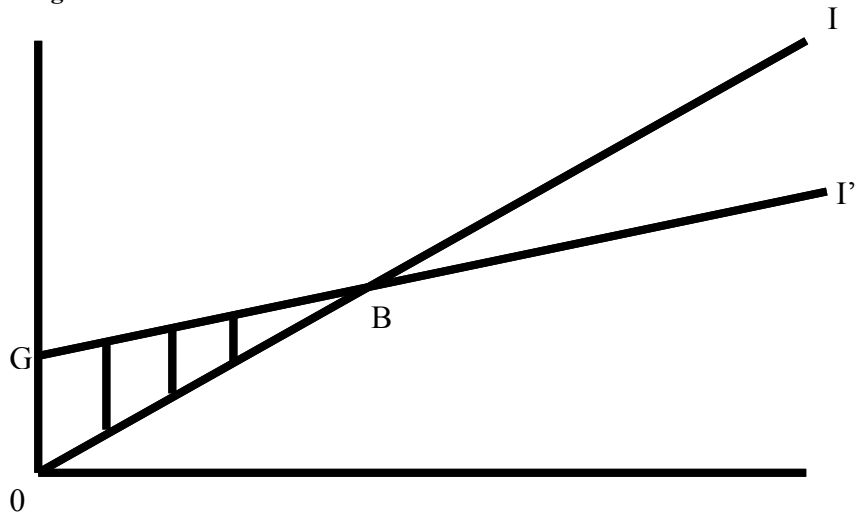
Discussions of basic income tend to focus on one of two models. These two models can be depicted graphically. In the following two graphs, imagine the vertical axis represents after-tax and -transfer income and the horizontal axis represents pre-tax and -transfer income. In each graph, line I shows the distribution of pre-tax and -transfer income while line I’ portrays the distribution of after-tax and -transfer income.

Illustration 1: Minimum Basic Income



The first model may be called the minimum basic income model (MBI) (Van Trier, 1995). The MBI is minimal in the sense that there are minimal conditions placed on receipt of the full grant, in other words, the grant is flat – everybody receives the same amount. The vertically striped area represents that flat grant or basic income, paid equally to all. No person's after-tax and -transfer income shall fall below income G . Any earned income augments total after-tax and -transfer income, however, is taxed positively to fund the grant (this is the difference between $G-I$ and $G-I'$). The other model is the negative income tax (NIT) and can be depicted as so:

Illustration 2: Negative Income Tax



With a NIT, income G is still the lowest after-tax and -transfer income a person can have. However, earned incomes are only taxed beyond a certain income level (point B). Below that level, a negative tax is paid to the tax filers. The main difference between the MBI and the NIT is that a NIT only transfers grants to people below a certain income threshold (in this case, point B) and the grant decreases as earned income increases. Contemporary discussions of basic income tend to focus more on the MBI model, though the NIT is still prevalent. A series of experiments in North America in the 1960s and 1970s put the NIT idea to the test. Four experiments were conducted in the United States and another in Canada. In Canada, the experiment was known as the Manitoba Basic Annual Income Experiment Project (or “Mincome” for short) and was conducted in Manitoba throughout much of the 1970s. Widerquist (2005) suggests that the similarities between the NIT and the MBI models are so great that the experimental findings from the NIT experiments are valuable to the current basic income discussion.

The North American NIT experiments offer a glimpse of what implementation of a basic income might look like and what its implications might be. That said, the experiments primarily examine work response under a basic income (Hum & Simpson, 1991; Levine et al., 2002; Rossi, 1975; Solow, 1986). In other words, the primary research question in each experiment is: ‘will people reduce the amount of hours they work for a wage if they receive a basic income?’ Levine et al. (2002) and Solow (1986) suggest that the narrow interest in the labour supply question is a fatal flaw of the NIT experiments. This suggestion is based on the assumption that a basic income affects other aspects of social life, not only labour supply, and the experiments should have been designed to investigate these other areas as well. This is recognised in subsequent

analyses of experimental data (see Chapter 3) but not sufficiently examined. This thesis addresses a lacuna in Mincome data analysis by examining the experiment's impact on another area of recent policy concern – housing.

Cries of unsustainable housing price increases continue to feature in Canadian news headlines, as they have for several years. These price increases leave low-income earners with fewer options for housing. Suttor (2015) finds that in the period between 1955 and 1980, 33% of new housing production was in rental apartments (and townhouses). From 1980 to 2001, rental unit production gave way to condominium development (built primarily for owner-occupancy) and production of rental units fell to roughly 15% of new production. This leaves low-income renters to “filter” into older, lower quality housing units, making it more difficult to find satisfactory housing.

What is housing satisfaction and why is it important? And how can the Mincome experiment speak to the experience of housing satisfaction under a basic income? Housing satisfaction represents the overall evaluative perceptions that a person has of different aspects of their housing. It is important for two reasons. First, housing satisfaction is considered an important dimension of overall social well-being or quality of life (Diaz-Serrano, 2009; Lu, 1999). For most, primary residence is a place for home and is thus a place for rest, privacy and satisfaction (Lu, 1999; Weidemann & Anderson, 1985). Second, Dahmann (1985) argues that subjective evaluations of housing determine the way individuals respond to their residential environment and form a basis for public action. Finally, evidence gleaned from the Mincome NIT experiment helps to shed light on the current basic income discussion and can inform the public and policy-makers about how a basic income impacts other areas of social life.

This thesis proceeds in five stages: in the next section, I trace the history of basic income and place it in the context of the shift from political economy to economics in order to put the NIT experiments and their focus on labour supply in context. Chapter 3 focuses on the NIT experiments, specifically Mincome and provides some necessary background information on the development of the experiments. I also include here a review of some of the analyses that have been conducted on the NIT experiments, with special attention to housing analyses. This review, along with an exploration of the dimensions of housing satisfaction, informs the theoretical considerations of the subsequent analysis. Housing studies on the U.S. NIT experiments suggest that a basic income has a positive influence on housing outcomes, though these outcomes may be hard to detect from experimental data. Chapter 4 includes a review of the more technical details of the Mincome experiment, including sampling procedures. Because the Mincome experiment (and other NIT experiments) used a cost-benefit constrained randomisation assignment model, there are some methodological issues that I describe in detail. Chapter 4 also discusses the technique of analysis and its limitations and describes the experimental data and the problems that I encountered in working with it. Chapter 5 presents the analysis and findings, which are negative in that for both female and male household heads, a basic income shows no statistically significant effect on housing satisfaction. The negative results are not surprising given previous research and this is revisited in the conclusion. The conclusion also points to the importance of variegated and interdisciplinary knowledge production in the pursuit of knowledge about basic income in particular and poverty more generally, and discusses what future social experimenters might learn from the NIT experiments.

2 Chapter: Political Economy and the Basic Income Idea

Basic income (and other forms of universal grant like basic capital⁴) is not unique to contemporary policy debates. Cunliffe and Erreygers (2004) note that basic income proposals have an intellectually rich, however fractured history that dates back to at least the eighteenth century. This chapter explores this history and places it in the context of the evolution of political economic thought and the professionalisation of academic/policy knowledge. While basic income has always been closely tied to poverty alleviation, the history of basic income ideas shows a pronounced shift from their application as radical propositions to transform the private property system to their use as policy tools to reform or improve upon the system of private enterprise. Along with this shift is a gradual change in the principle unit of analysis in investigations that examine or propose a basic income. I refer to this change as a shift from basic income as radical reform to basic income as economic policy. In sketching the history of basic income, I give some context to the basic income idea. While contemporary discussions of basic income continue to focus on the eradication of poverty or other deprivations (e.g., food insecurity), they also consistently refer to the 1970s negative income tax experiments – which were designed by economists to examine individual work incentives under a NIT program. It is the increasing influence of economists in social policy that establishes the conditions under which the NIT experiments were conducted. As a result, the NIT experiments had less to do with determining the poverty reducing effects of a basic income and more to do with the economic question of labour supply. It is important to

⁴ Basic capital is a policy proposal that would provide all citizens with an unconditional cash sum at the start of their adult life (Cunliffe & Erreygers, 2004). See Section 2.1 for more detail.

understand that poverty and policy analysis (both to which a basic income relates) is about more than inducing (or monitoring) individual behavioural changes. In studying poverty and designing policies that will improve the health and well-being of communities, there must also be consideration of the structured institutional barriers that lead to the prevalence of poverty.

Early (pre-twentieth century) basic income philosophers, and to some extent the Social Credit philosophers of the 1920s and 1930s (though they were less radical), understood the importance of the structural inequalities that give rise to poverty amidst plenty. The shift from structural to more individual analyses of basic income reflects trends in the disintegration of political economy to a diversity of narrowly defined disciplines, including economics in which a new generation of practitioners sought greater scientific rigour (akin to the physical sciences). More specifically, economics embraced methodological individualism over more collective considerations (e.g., class/race/gender divisions). Methodological individualism has its own history that need not be covered at length here, but a quick review is worthwhile. In short, methodological individualism was incorporated into economic theory around 1870, when William Stanley Jevons, Carl Menger and Léon Walras all converged on a system of analysis that used differential calculus to solve problems of maximisation. The maximisation of utility came to be the theoretical model for the analysis of supply and demand in the economy and thus, the model for the analysis of prices, and a subjective theory of value based on individual desires supplanted the labour theory of value popularised by Adam Smith, David Ricardo and Karl Marx. The individual consumer or firm thus became the central unit of analysis for economic science. According to Backhouse (2002), the dominance of

methodological individualism as the method of choice quickly led to a professionalisation of the discipline, as the techniques of analysis became increasingly specialised.

The rest of this chapter examines various perspectives on basic income. At the turn of the twentieth century, there is a noticeable change in the way that a basic income is employed. Prior to 1900, through thinkers like Thomas Spence, Charles Fourier and Joseph Charlier, basic income is either part of, or the principle factor, in the goal to radically transform the institutional arrangements (primarily property, though change in an institution as fundamental as property has consequences in other areas as well) in society. After 1900, basic income takes the shape of a policy prescription to amend or improve the existing economy and institutional arrangements. In this application of the idea its appeal to specialised academics and policy-makers is increasingly important and the authors take their time in explaining how a basic income will improve economic growth, boost employee moral, reduce administrative expenditures, etc. Through the Social Credit Movement, basic income catches the attention of Keynesian economists James Meade and Abba Lerner in the 1930s, to which they apply the methods of mainstream economics, opening the door for the idea's incorporation into the mainstream.

2.1 Basic Income as a Radical Reform

Early basic income philosophers are critical of the unequal economic and institutional arrangements in their societies and conceive of a basic entitlement to fundamentally alter unequal relationships and ensure equality of opportunity for the future. Writing amidst the Industrial Revolution and great economic expansion, the early philosophers argue that the inequalities that they observe are grossly unjust. This

subsection traces the main contributions to basic income prior to 1900. These contributions come at a time of substantial economic change, including land enclosures, mechanisation and free trade, and as a result, extreme insecurity for the working-class.⁵ These changes lead each contributor to offer a radical critique of private property and the basic income proposals they put forth are tied to communal land ownership.

One of the earliest contributions to basic income is the debate between Thomas Spence and Thomas Paine in the late-eighteenth century. Both have reservations about private property as it encroaches on the natural right to subsistence. The latter proposes a one-time payment upon reaching adult life as a compensation for the existence of private property in land (Van Trier, 1995). Paine's proposal is an early form of basic capital, a universal grant just like basic income, which seeks to ameliorate inequalities of opportunity (Cunliffe & Erreygers, 2004). Spence is unconvinced by Paine's proposal, suggesting that it is akin to a thief returning a part of the bounty that they had stolen (Marangos, 2008). Spence is critical of Paine's failure to see the problems inherent in a system of private property, which he suggests is at the root of starvation in society (Chase, 1988; Marangos, 2008). Equal and collective ownership in land is the only way to prevent tyranny and ensure lively democracy, according to Spence, while private property is necessarily expropriation and a limitation to individual freedom.

⁵ Himmelfarb (1983) finds that the poor rates (the taxes levied specifically for poor relief) in England and Wales were £665,000 in 1685, just under £2,000,000 in 1785, over £4,000,000 in 1803, and £8,000,000 by 1817. This growth (roughly twelvefold) in the poor rates greatly outpaces growth in output per capita, which according to the Angus Maddison Database, roughly doubled between 1650 and 1817 in the whole of the United Kingdom (The Maddison Project, 2013).

Spence devises a plan for the parochial ownership of land in which each parish owns and controls the land in its purview. Each parish is to be organized as a joint stock company, to which every resident (irrespective of gender or age) has an equal stake, based on their natural right to the fruits of the earth. The parish community then collects rents for use of the land – be it agriculture, industry, mining, or another activity. The total rent charged is a function of the cost of running a limited government plus a residual, the latter being an unconditional quarterly payment to each member of the joint stock company (Chase, 1988; Cunliffe & Erreygers, 2004). Spence’s system more closely resembles what today is called a “citizen’s dividend,” paid from rents not taxes, and is similar to the Alaska Permanent Fund, which returns to Alaskan residents a portion of the State’s oil royalties.

At first blush, Spence’s agrarianism seems utopian, however, historian of English radical agrarianism, Malcolm Chase (1988), insists that Spence’s ideas are rooted in a sophisticated philosophy that transcends the more mainstream agrarianism of the time, which included shallow calls for a ‘return to the land’ or proposals for full employment (and thus the amelioration of low wages) through the promotion of agricultural output. Spence’s preoccupation with equality in land is rooted in a Lockean state of nature (Chase, 1988). Locke’s system begins with a benign state of nature, in which land is common and available to all. Locke proceeds to introduce a labour theory of value to justify private property, arguing that the application of labour (the private ‘property’ of each individual) to common land implies the personal appropriation of that land and all its bounty. Spence (1793) holds a more critical view of the state of nature:

I enquired whether men left the rude state of a savage voluntarily for greater comforts in a state of civilisation, or whether they were conquered, and compelled

into it for the benefit of their conquerors. My experience compelled me to conclude the latter, for I could observe nothing like the effects of a social compact; wherefore, I conclude that all our boasted civilisation is founded alone on conquest; nor will any men leave their rude state to be treated with contempt, pay rents and taxes, and starve among us.

Private property for Spence then, is not a natural right at all. It is rather an unjust seizure that stems from an inequality of power and is sanctioned only by the ignorance of the mass of the population to their true rights. Spence does not view property on the whole to constitute theft; he grants unequal accumulations of movable property in order to stimulate industry.

Chase (1988) argues that Spence's radical agrarianism then, is not an anti-industrial hark back to old times, but rather is the basis of a more secure social and economic foundation for industrial capitalism. The extent to which Spence's envisioned societal arrangement can be called industrial capitalism is debatable. Given Spence's allowance for private ownership of moveable assets, the formation of capital is theoretically possible. Nonetheless, his view of the state of nature and the logical proceedings that follow offer a radical critique of natural law liberalism in late-eighteenth and early-nineteenth centuries. Further, Spence's insistence on equality and unconditionality (not only with respect to the residual payment but also on gender more generally – Spence insists on full political rights for women) of the basic income payment and the suggestion that it be funded through government revenues (on land) make Spence's contribution to basic income a precursor of later proposals.

The second major contribution to basic income comes from Charles Fourier. Fourier is considered one of the triumvirate of utopian socialists, along with Henri de Saint-Simon and Robert Owen (Beecher, 1986). Fourier is wildly imaginative in his

writings where he presents a blueprint for a harmonious society⁶ in which indigence and discomfort are eliminated and the human passions are cultivated and embraced (Cunliffe & Erreygers, 2004).

Fourier identifies poverty as the “principal cause of social disorders” (Fourier, 1803/1972). In order to combat the ills of poverty, Fourier suggests a “decent minimum” be guaranteed so that no person falls below a determined level of subsistence. Beyond the minimum, the remainder of the produce of society (organised in numerous phalanstères, or communes) is to be distributed proportionately among three elements – labour, capital and talent. Cunliffe and Erreygers (2001) note that Fourier uses “decent minimum” in a variety of ways throughout his writings, but identifies three fundamental characteristics of the scheme: 1) the minimum is supplied only to the poor; 2) the minimum is paid in kind; and 3) the minimum is advanced without any work requirement on the part of the recipient. In one manuscript,⁷ Fourier suggests that the minimum take the form of an allotment of land, though this suggestion is never repeated (Cunliffe & Erreygers, 2001).

Fourier is decidedly less rooted in Lockean theory than Spence. Indeed, throughout his writings, Fourier uses the term “philosophers” (including Locke) in the pejorative, highlighting the fact that their philosophies have failed to address the chief

⁶ Fourier’s harmonious society inspired some two-dozen experimental Fourierist communities in North America in the mid-nineteenth century. However, the failures of these communities to achieve their ends and the trouncing of the European Left in 1848 effectively spelled the end of Fourierism as a distinct social movement (Beecher, 1986). For these reasons, Beecher (1986) explains, Fourier’s thought is typically considered in relation to systems of thought that followed it or as a precursor to the thought of more practical and profound thinkers.

⁷ *Les trois noeuds de mouvement* (1803-1804).

social concern of the modern age – providing subsistence for all. Fourier shunned the key liberal ideas of liberty and equality as chimeras, words without meaning, because the organisation of civilisation denies their possibility (Beecher, 1986). However, like Spence, the concept of the state of nature permeates Fourier’s thought. Fourier suggests that in the state of nature, natural rights provide individuals with an ability to secure their own subsistence, although in civilisation,⁸ these rights are denied to some as others pursue wealth (though Fourier encourages some degree of inequality in wealth as it spurs positive incentives). Fourier, like Paine, believes that there ought to be compensation – the decent minimum – for those who suffer a loss of their natural rights in civilisation. That said, Fourier suggests that capitalist civilisation is incapable of providing a decent minimum due to the nature of work in it. Because work in modern society, by and large, is forced and repugnant, people will choose idleness over work if there exists a viable alternative in the form of a guaranteed decent minimum. To avoid widespread idleness, Fourier argues, the organisation of work must be revamped to make it rewarding and attractive. Only under such conditions is a decent minimum possible (Cunliffe & Erreygers, 2001).

Fourier’s version of the basic income is part of a wider goal of social transformation. Cunliffe and Erreygers (2001) stress the fact that in each of his writings about the decent minimum, Fourier first declares its necessity and then subsequently outlines that it is only feasible once other conditions are met. Thus, Fourier’s basic income is ad-hoc to the harmonious society he hopes to establish. While Fourier shows

⁸ Fourier also uses “civilisation” as a pejorative term in his writings, highlighting imperfection (Beecher, 1986).

concern for collective categories in society (noting a division between labour and capital) and desires to construct a harmonious social fabric, at the core of his theory is an individual psychology – the “anatomy of the passions.” It is the power of these passions that drive human beings to action. Fourier’s individualist and deductive investigative method is akin to the marginal utility theory and methodological individualism that would take over economics in the latter part of the nineteenth century. For Fourier the passions are the laws that govern society, just as utility governs individual behaviour for the economists. From these laws, Fourier drafts his blueprint for change – a change in sync with the human passions – something that the philosophers before him had ignored.

Fourier’s assumptions of individual behaviours and psychology facilitate his insistence that a basic income will spawn idleness, a feature that is emphasised in future basic income proposals and is worth commenting on quickly here. Contemporary basic income proponent Chandra Pasma (2010) argues that the Protestant Work Ethic is the basis for this line of thinking. While I cannot rule out the influence of Protestantism, I do follow Polanyi (1957) and suggest that the lure of scientific rigour and consequently, the use of the deductive method, on behalf of the classical political economists lent credence to the view that an income guarantee will foster idleness. At the outset of the debates over Poor Law administration in Britain, Joseph Townsend and Thomas Malthus used arguments based on biological ‘rules’ to argue against the Poor Laws. Supporting the victims of poverty stricken by economic upheaval was only weakening the human gene pool for the Social Darwinist Townsend and prolonging the population crisis for Malthus. David Ricardo agreed that the Poor Laws should go. He agreed with Malthus’ assessment of population growth and that agricultural land would consequently be pushed

to the margins by industry. Once all land was utilised and in high demand, landlords would be able to squeeze capitalists and workers, harming economic growth. Polanyi (1957) argues that the agreement between Malthus and Ricardo effectively cemented mainstream political economy's opposition to poor relief. This development of 'knowledge' provides a backdrop to the 'laws' that underpin marginal utility theory.

One of Fourier's followers, Joseph Charlier, a Belgian who self-describes at different times as a jurist, writer, accountant, or merchant, offers in 1848 one of the earliest known references to a modern basic income scheme (Cunliffe & Erreygers, 2001).⁹ Like Fourier, Charlier (1848/2004) sees poverty as the principle iniquity of modern society; and like Spence, sees private property at the root of it:

This major aberration by man as to the right to property of the land, which constitutes the basis of civilized societies, forms the stumbling block that has wrecked and will wreck every attempt to improve the condition of the masses... (p. 104)

A distinction between landed and moveable property is present in Charlier's thought and he supports collective property rights for the former and private for the latter. That said, Charlier adds another dimension by interjecting the notion of vital and acquired needs, with the former tied to the land and emanating from a preeminent right to life and the latter the product of the "refinement of the senses" and met with the acquisition of moveable property (Charlier, 2004, p. 107). The fulfillment of acquired needs then, is a matter for individual choice expressed through labour, either in producing the desired assets or purchasing them in the market (Cunliffe & Erreygers, 2001). However, the

⁹ Van Trier (1995) suggests that Milner's State Bonus Scheme (1918) is actually the first "full-blown modern" basic income scheme because land does not play an important part in the argument (p. 31).

fundamental right, the right to life, is hampered in capitalist civilisation as the pursuit of acquired needs through the accumulation of property encroaches on the ability of others to secure their vital needs. The fulfillment of vital needs in a regime of private landownership, without violating legal¹⁰ rights (especially to landed property) is, for Charlier, the problem to be addressed (Charlier, 2004).

Charlier suggests those whose rights are impinged upon by capitalist civilisation should be compensated, however, he disagrees with the position taken by another of Fourier's followers, Victor Considerant, that compensation be offered in the form of a work guarantee. For Charlier, the right to work amounts to an overextension of state influence (Cunliffe & Erreygers, 2001).¹¹ Charlier (2004) finds the state's principle responsibility to be assuring to each member of the polity the fulfillment of their vital needs. God provides to all the means to meet vital needs in nature and the state must ensure the protection of this equality in a society in which rights to the land are not collective. To accomplish this, Charlier's proposal rests on the reassertion of collective land rights, whereby the state owns and manages all land. The state takes the responsibility for ensuring the best use of the land and collects all rents. These rents are then redistributed to the polity through a system of mutual compensation. Landlords are

¹⁰ Charlier (2004) does not concede that private property in land is just, merely because the legal framework of contemporary society declares it so. While the individual that acquires title to land commits no illegality, "the illegality resides in the earlier principle under the authority of which the act is performed" (p. 106).

¹¹ Engels, in a letter to Bernstein in 1884, notes that the right to work had been implemented in France, Britain and Germany "in the only way capitalist society could put it into practice – by building nonsensical national workshops." Engels continues to argue that the right to work is a "cowardly regression" in comparison to the advances of the labour movement with regards to its ability to transform capitalism (Marx & Engels, 1975).

partly¹² compensated for the loss of rents derived from landed property through annual payments and the landless majority receives its share of the common wealth through quarterly “guaranteed minimum” payments. The minimum is paid equally to all, regardless of gender or age, based on the indivisible right to life. Charlier’s proposal is, in many respects, very similar to Spence’s, though Charlier has more faith in national level governance than does Spence.

Building on Fourier’s work disincentive argument, Charlier insists that if a person chose to live solely on the minimum, it is their right to do so. Further, he insists that only a minority would act this way and that for the majority, a guaranteed minimum would actually provide a motivation for labour, because when necessities are met, the extra income earned from labour can be used to obtain enjoyments, not merely necessities. Thus, labour itself is transformed into an activity that confers rewards as opposed to merely meeting basic needs.

For Charlier then, the principle of equality is front and centre in theorising a basic income. Like Spence, the equality principle derives from the inviolable natural right to subsistence and the basic income, or guaranteed minimum, is not merely compensatory, as it is in Fourier’s system, but is in fact an assertion of the equal nature of human beings. Charlier also envisions a radical restructuring of society, like Fourier and Spence before him. All three early basic income philosophers are perturbed by the poverty that plagues their capitalist societies, however, they identify structural institutional arrangements that lead to and perpetuate that poverty. For these thinkers, institutional change is required.

¹² Charlier (2004) proposes that the payments to landlords should continue for four generations.

Basic income is not merely a tool to ameliorate the negative aspects of capitalist society, but rather is part of a wider institutional transformation. The next set of basic income philosophers appear in the twentieth century and treat basic income as a “patch up [to] the system of private enterprise,” to borrow Joan Robinson’s (1937/1949) phrase (p. 74).

2.2 Basic Income as Economic Policy

Basic income after 1900 (at least up until and including the negative income tax experiments) ceases to be bound up with institutional transformation and takes the shape of an economic policy. Poverty alleviation remains at the forefront, however, these thinkers see poverty as a curable ailment to the capitalist system, not a chronic disease. Important to the goal of getting a basic income into policy circles is attracting the attention of notable academics and policy-makers. This is the intent of the State Bonus League, although they find little success. The Social Credit Movement certainly sought to popularise its ideas through orthodox newspapers and pamphlets, and this effort garnered the attention of mainstream academics. From the influence of the Social Credit Movement, many young Keynesians pick up on the basic income idea in the 1930s and 1940s.

The State Bonus League articulates a modern basic income proposal that accepts the existing institutional structure of society – wage labour, private property, the family, and the early welfare state. The State Bonus Scheme, as initially presented by the Milners (1918/2004) in *Scheme for a State Bonus*, familiarly identifies poverty as the “social problem” to solve:

Probably the most generally acceptable definition of the Social Problem is the widespread unhappiness of the poorer classes, seen most strikingly in the squalor and wretchedness of the slums, and forced on our attention most by the

prevalence of industrial unrest, leading constantly to strikes and even violence.
(p. 121)

The “comprehensive” and “simple” solution proposed by the Milners is:

(a) That every individual, all the time, should receive from a central fund some small allowance in money which would be just sufficient to maintain life and liberty if all else failed.

(b) That as everyone is to get a share from this central fund, so everyone who has any income at all should contribute a share each in proportion to his [*sic.*] capacity. (p. 125)

The Milners (2004) go on to suggest that the Bonus should meet basic needs so as to provide economic security, the Bonus should not be so large as to encourage idleness (though like Charlier they argue a Bonus that meets basic needs will not lead to idleness because of the positive incentives paid labour provides in the form of higher income), the payment and collection systems should be simple and require no new infrastructure and that the payment is funded in large part through a flat (20%) tax on income and deductions from dividends and profits. The Milners (2004) urge that their scheme “is a frank recognition that there is an element of Communism underlying many of our existing social arrangements – such as the Poor Law, Health Insurance, Charities, etc.” (p. 128). The State Bonus Scheme, they argue, is a more effective application of this communal principle. The Milners (2004) also suggest that the State Bonus is much more practical than the land reform proposals that emanate from the distributionists (a precursor to Social Credit, see below), the Fourierists and the Spenceans: “[o]bviously giving the equivalent in cash is a great deal simpler than reorganising our whole land system!” (p. 131).

The Milners arrive at a basic income from a concern for morality and humanitarianism – they are members of the Religious Society of Friends (the Quaker

movement). In an effort to make their plan for a more humanitarian distribution of income a reality, Dennis Milner publishes a book in 1920 in which he renames the State Bonus the “minimum income for all” and pitches the idea as a boon to business. Van Trier (1995) finds three dimensions by which both employers and employees benefit, according to Milner’s book. Where labourers get better nutrition, employers get better productivity. Where workers are guaranteed subsistence during economic downturn, employers are guaranteed a market for their goods. Finally, where labourers realise greater equality of income, employers get greater cooperation from employees who now have a certain interest in seeing national productivity rise as this increases the fund from which the minimum income is paid.

Between the Milners’ 1918 state bonus pamphlet and Dennis Milner’s 1920 book on the minimum income for all, a general argument for a basic income is presented to a wide audience, and a more specific argument, from the lens of its benefits to employers,¹³ is developed and intended for a narrower audience (policy-makers). The Scheme appears to have gathered attention from prominent intellectuals and Labour Party officials circa 1920 as well (Van Trier, 1995). In a fundraising letter from Dennis Milner (as cited in Van Trier, 1995) presumably sent in March 1919, J.A. Hobson and Sidney Webb are listed as showing “sympathetic interest” in the idea, while G.D.H. Cole is said to be “definitely agreed” (p. 111-112).¹⁴ The latter also mentions the State Bonus and Dennis

¹³ This is how the argument for a living wage is presented today.

¹⁴ All three were leading figures in British progressive politics. Hobson properly formulated underconsumptionism and theorised imperialism, inspiring Lenin’s famous treatise *Imperialism, the Highest Stage of Capitalism*. He joined the Labour Party in 1919. Webb was a member of the Fabian Society that helped form the London School of

Milner in writings throughout the 1920s. Van Trier (1995) also finds that the Scheme is discussed in Labour Party newspapers and even made it onto the agendas of two Annual Labour Party Conferences in 1920 and 1921. Despite the attention, the State Bonus League appears to receive no further mention after 1921 (Van Trier, 1995). What explains the exceptionally brief appearance of the State Bonus Scheme?

For one, the reaction of the Labour Party to the Scheme was overwhelmingly negative. In 1919, long time civil servant at the Board of Trade, Clara Collet, reviews the Milners' *Scheme for a State Bonus* in *The Economic Journal* and suggests, "the demerits of such a proposal are too obvious to need enumeration" (p. 241). After the 1920 Labour Party Conference it appears that the Labour Party Executive refers the resolution to the Advisory Committee on Trade Policy and Finance. The 1921 Annual Labour Party Conference Report includes a memo from this Committee, approved by the Executive, that overwhelmingly disapproves of the State Bonus Scheme (Van Trier, 1995). Van Trier (1995) argues that the Labour Party's contentions are rooted mostly in political party strategising. The Party felt that taking on an overarching policy like the State Bonus might deter momentum from existing policy platforms. Further, the feeling was that the State Bonus would be difficult to implement should the Labour Party form government and mishandle its implementation, and the consequences would be a negative reaction against the party. The memo also suggests that Labour Party officials felt that the State Bonus offered nothing more than the existing collection of policies already endorsed by the party and was not consistent with the socialist ethic of "to each according

Economics and helped write the Labour Party constitution. Cole wrote extensively on the history of socialism and was a member of both the Fabian Society and the Labour Party.

to their need.” Moreover, the party officials expressed concerns about the Scheme, including tax evasion, inflation and the weakening of labour union power. The negative reaction from the Labour Party certainly didn’t do the State Bonus League any favours. After the snub, it is likely that energies of both the Labour Party and the Religious Society of Friends were devoted to existing policies, undermining momentum for the State Bonus. Van Trier (1995) suggests a second reason for the fleeting momentum of the State Bonus Scheme and that is the arrival of a more “uplifting” social movement – Social Credit (p. 140).

Social Credit is a distributive philosophy that originated in Britain and gained influence around the world in the inter-war period. Canada, for one, has a famed history with Social Credit owing to the majority win of the Alberta Social Credit Party in the province’s 1935 provincial election. Finlay (1972) suggests that the rise of Social Credit emerges from outright rejection of the liberal doctrine, as by the end of the nineteenth century and into the early-twentieth, capitalism had reached its “logical culmination” (p. 56) – monopoly capitalism. Finlay (1972) finds five reasons for which an “underworld”¹⁵ of anti-liberalism grew up in Britain at this time: 1) The principle of competition had been subdued by the concentration of capital in industry and in finance; 2) this concentration was met with the rise of labour unionism and it seemed that the social contract was giving way to a violent confrontation between two armies – workers and capitalists; 3) the notion of inequality between the working and capitalist classes begins

¹⁵ Finlay (1972, p. 1) borrows this term from Keynes (1936/2007) who suggests that economic theories of deficiencies and excesses in effective demand can only be found “in the underworlds of Karl Marx, Silvio Gesell or Major Douglas” (p. 32). The latter is credited as the founder of Social Credit (Finlay, 1972; Walter, 1989).

to figure in British economic literature and enter the minds of an increasingly literate public as statistics gained in prominence and reliability;¹⁶ 4) the Great War brought about state planning, which, following the economic and political turbulence of the Age of Imperialism (1870-1914),¹⁷ brought economic stability; and 5) after the war, a brief post-war boom was swiftly met with another trough. The return to liberalism after the war offered little prospects and it is in this context that Social Credit gained traction.

Finlay (1972) traces the origins of Social Credit to two distinct and poorly articulated bodies of theory that emerge in Britain at the turn of the twentieth century, “underconsumptionism” and “distributism.” The former refers to the idea that economic slumps are caused by barriers to consumption, contrary to the mainstream law proposed by J. B. Say that production creates its own demand. Charlier (2004) demonstrates underconsumptionist thinking:

[I]f one considers the abundance of all kinds of products in the shops, side by side with this mass of men, women and children in rags, does it need more than a little bit of common sense to understand that the cause of industrial anarchy does not reside in the exuberance of the population, but in the poverty of the masses who on average are merely able to meet 1/5 of their needs? The explanation of industrial decadence is therefore not to be sought in competition [increased production], but in this order of things which today condemns 3/4 of the population to suffer all kinds of deprivations, and which ceaselessly tends to expand the already vast domain of misery. And since everything is linked up together in social economy it goes without saying that the industry must collapse if the circle of consumers shrinks. (p. 109-110)

¹⁶ Finlay (1972) cites Sir Leo Chiozza Money, author of *Riches and Poverty* (1913). Money uses 1900 as a base year (100) and finds that in 1893 profits were 86.8 and in 1908 were 112.5. In the same years, wages were 90.1 and 101.0, respectively.

¹⁷ Hobsbawm (1969) notes that the first Great Depression of 1873-1896, while not as disastrous as the 1830s and 1840s or the 1920s and 1930s, marks “a new state of mind of uneasiness and gloom about the prospects of the British economy” (p. 127).

However, Charlier, like Malthus (who theorised “gluts”) before and the underconsumptionists after, never offers an explanation clear enough to rival mainstream economic thinking. The latter group, the distributionists, like Spence and the Fourierists, argue that access to land is essential to life and is therefore a right not to be denied to anyone (Finlay, 1972). The distributionists, on the whole, are wary of the possibility for tyranny brought about by private property in capitalist society.

The oft-credited ‘engineer’ of Social Credit is Major (Clifford Hugh) Douglas. Douglas’ system of thought, Douglasism, forms the backbone of Social Credit Theory. Finlay (1972) suggests that Douglas’ knowledge of economic theory (he was a trained engineer) was weak and that his distributive philosophy was more of a revelation for Douglas (at age forty) than it was a determined finding or intellectual maturing. For this reason, many (Hutchinson & Burkitt, 1997; MacPherson, 1962; Van Trier, 1995) argue that Alfred Richard Orage, editor of *The New Age*, a progressive newspaper in early-twentieth century England, plays an equally, if not more important role in the formation of the Social Credit philosophy.

While for the Milners the State Bonus was an admission of underlying communism in the societal organisation, Douglas comes to the idea of a basic income (which the Social Crediters term, “national dividend”) out of fear of communism, or at the very least, the centralising tendencies of it. Douglas fears organisation and concentration of any sort, extreme left or right, and insists on the development of organic relations in society (Finlay, 1972). “Any policy which aims at the establishment of a complete sovereignty, whether it be a Kaiser, a State, a Trust or a Trade-Union, is a policy of Domination, irrespective of the fine words with which it may be accompanied,”

writes Douglas (1922, p. 5). Finlay (1972) argues that Douglas' anti-organisation stance develops from his view of human nature. Douglas believes that while most are good, some have a propensity for power. Consequently, for Douglas, any pyramidal form of organisation is susceptible to tyranny. Here, like Fourier, Douglas assumes there to be 'laws' that govern human behaviour.

The economics of Douglasism begins with a definition of productive organisations. For Douglas, a dualism exists within all productive organisations. They have a productive role as the producers of goods or services in the "real" economy. They also play a role in the "financial" economy. In this capacity, productive organisations are: 1) a device for the distribution of purchasing power (through wages and salaries) and 2) price-setters. It is the dual nature of the financial economy where Douglas sees problems and it is this tension that leads to his A + B Theorem, which grabbed the attention of several leading economists of the time (Hutchinson & Burkitt, 1997; Van Trier, 1995) – including James Meade and Joan Robinson who continue to pay attention to the Theorem some 20 years after Douglas initially proposes it. If 'A' represents payments for wages and salaries and 'B' represents payments for raw materials, overhead and other costs of production, it is clear that goods currently on the market are priced according to the cost of both 'A' and 'B.' However, Douglas (1920) writes, "since A will not purchase A + B, a proportion of the product at least equivalent to B must be distributed by a form of purchasing power which is not comprised in the descriptions grouped under A" (p. 22). Savings alone cannot finance and purchase future production and credit (domestic or export) must be injected into the system to keep the payments moving. This credit does not come free. The value of the money injected is reflected in

selling prices and eventually paid by consumers in order for productive organisations to pay the banks that lent them the money (Douglas, 1920). The “all-important point” for Douglas in this series of events is: while the price system distributes goods to consumers, the price of any good includes the production (real) cost of that good (labour, raw materials, overhead costs, etc.) and the capital (financial) cost of that good (the cost of money borrowed to finance production). This leaves the community “in the position of having bought both the plant and the product, but having only got delivery – *i.e.*, control – of the product” (Douglas, 1920, p. 34-35).

What are the implications of the A + B Theorem? Following from the theory itself, the implications are debated. This is due to Douglas’ unusual and ambiguous wiring style, a style that allows for multiple interpretations to be taken from a single text (MacPherson, 1962; Van Trier, 1995). Even the most basic claim, that the industrial system is inherently deficient with respect to purchasing power, is disputed. Van Trier (1995) insists that in all of Douglas’ writings some mention of insufficient purchasing power is present, suggesting that the “inherent lack of purchasing power hypothesis” is the “constitutive metaphor” in Douglas’ work (p. 172). Van Trier (1995) also suggests that the “inherent lack of purchasing power hypothesis” is, for Douglas, an indication of eventual breakdown. According to this view, intensified production and technological progress is a law of capitalist society for Douglas, meaning that the gap between ‘A’ and ‘A + B’ will continue to grow, eventually destroying profitability. MacPherson (1962) shares this position, only he suggests that the logical conclusion is continual contraction of the economy, not full-scale breakdown.

On the contrary, Finlay (1972) and Hutchinson and Burkitt (1997) see no inevitable breakdown, growing gap between payments or even a deficiency in purchasing power espoused in the Theorem. The real problem, that they suggest is central for Douglas, is the increasing control that power over credit issue affords financiers. By controlling the flow of 'B' payments, financiers, in effect, have an ownership claim on future production. For Finlay (1972) this claim on future production keeps consumers in a state of servility to their financial masters. By financing the expansion and evolution of the economy, financiers exercise greater and greater control over its trajectory – denying this control from the community as a whole. It is the latter view that gains traction in the practical politics of 1920s and 1930s Britain and spurs the Social Credit Movement.

For Social Credit a basic income, or national dividend, is a logical reply to a situation in which, through a reduced need for human labour, the wage system becomes effectively obsolete as a distributive mechanism. Even in the absence of this situation, a national dividend is an appropriate mechanism to distribute the common inheritance of society, as opposed to allowing financiers to effectively control it. In the late-1920s the Social Credit Movement places the National Dividend at the centre of its political activism (an activism that was nearly non-existent prior to this point). Advocates drew an analogy to the Old Age Pension (first introduced in the U.K. 1908) (Hutchinson & Burkitt, 1997). The receipt of the Old Age Pension was based solely on membership in the community, why shouldn't this be the case for all? Social Credit advocate C. Marshall Hattersley presents a cogent case for the National Dividend in his 1922 book, *The Community's Credit*. Hattersley (1922/2004) contends that all production is the result of the combined effort of three factors: capital, labour and the common cultural

inheritance of the community. In the latter group Hattersley includes ordered government, industrial, social and political organisation, education, religion and the “hundred and one amenities of civilisation” and concludes that all members of the community are the heirs of this “splendid heritage.” “So much is this the case that it is, strictly speaking, impossible for any one man [*sic.*] to be said to be the sole creator of even ‘his own’ [*sic.*] idea or invention. He [*sic.*] has merely manipulated mentally the inventions and ideas of a hundred others” (p. 143). This cultural heritage, Hattersley goes on to define, as a community’s “real credit” (p. 144). To ensure that each member of the community shares in this legacy, Hattersley suggests a National Dividend to be distributed to all, regardless of employment status or financial means. Hattersley suggests some practical reasons for implementing a system of National Dividends: streamlining of the State bureaucracy, putting an end to intrusive inquisition by the State into private lives to determine the results of means-tests, granting women financial independence, and allowing people to pursue their desires (Hattersley, 2004; Van Trier, 1995).

The Social Credit Movement was able to gain popular appeal, unlike the State Bonus League. This popular appeal gathered attention from academics and had some policy influence (though not a lot in Britain). Academic reception of Douglasism among professional economists was negative and the myriad ways that economists refute Douglas’ position is the result of the ambiguous style in which Douglas presents it. (Hutchinson & Burkitt, 1997; Van Trier, 1995). The increasing professionalisation of knowledge and the increasing influence of economists in policy circles made it a career requirement for professional economists to separate themselves from heresy and conform

to the orthodoxy (Backhouse, 2002; Hutchinson & Burkitt, 1997). Hutchinson and Burkitt (1997) write, “[t]he emergence of the career economist, dependent on his/her profession for a livelihood ... restricts validation of economic theory to areas which conform with prevailing financial jurisdiction” (p. 93). That said, aspiring economists looked to Douglas and Social Credit as a breath of fresh air. James Meade, a central figure in the next subsection, described himself as a Social Crediter in the early 1920s (Hutchinson & Burkitt, 1997) and in his pursuit of becoming a professional economist, incorporated the basic income idea into the orthodoxy.

As seen above, a concern for what Keynes (1936/2007) would later popularise as the “principle of effective demand” pervaded the thinking of the underconsumptionists, the State Bonus League and the Social Crediters. That said, these earlier reviewers were not professional economists. The idea of a basic income, or “social dividend” as the Keynesian writers referred to it, is integrated into the modern framework of economic thinking in the inter-war period by two young Keynesians, James Meade and Abba Lerner. They use marginal utility theory and methodological individualism to posit incentives structures that pervade workers’ decisions to work and employers’ decisions to hire. In analysing the Keynesian contribution to basic income, Van Trier (1995) asks: how does the notion of a social dividend enter the Keynesian lexicon? He argues that there are three settings through which Meade and Lerner come to the idea of social dividends: first, the search for a tool to cure the problems of unemployment and steer the economy to full employment; second, the importance of the economic debates about the possibility of a (state) socialist economy (the socialist calculation debate); and third, the fact that many young economists of the 1930s entered the profession with clear social

objectives and a different theoretical background than the classical economists. I argue that it is the latter of these settings that is most important and that the first two are overstated.

Van Trier (1995) argues that the “steering mechanism” function of the social dividend is centrally important to Keynesian thinking on basic income (p. 349-376). Indeed, both Meade and Lerner suggest that one role for social dividends can be a device for steering the economy to full employment, however, each of them discusses this role in the context of a hypothetical planned economy. This is where the socialist calculation debates had an influence on economic thought in the 1920s and 1930s. While Meade and Lerner see the virtues of planning, especially with respect to monopolistic industries, it is clear that each of them is primarily concerned with practical policy proposals to achieve improvements in the capitalist economy. For example, in Meade’s (1936/1946) first book, *Economic Analysis and Policy*, he refers to unemployment as “the most glaring economic absurdity at present” (p. xiv), though he states that it is “capable of solution without any revolutionary change in our economic system” (p. 2). In Meade’s (1949) second book, *Planning and the Price Mechanism*, he states in the Preface:

The thesis of this book is that a large measure of state foresight and intervention is required to guide the economy from war to peace, to prevent inflationary and deflationary pressures, to ensure a tolerably equitable distribution of income and property, and to prevent or to control the anti-social rigging of the market by private interests, but that these objectives can be achieved in an efficient and a free society only if an extensive use is made of the mechanisms of competition, free enterprise and the free market determination of prices and output. (p. v-vi)

Similarly, Lerner (1944) writes in the Introduction to his major work, *The Economics of Control*, that while he originally intended the book to be a development of the theory of the price mechanism in a socialist society:

“it gradually became clear to me that the maintenance and further development of the democratic way of life, as it grew under capitalism and was extended by the labour movement within the capitalist society, not only formed a far more essential part of the socialist ideal than the negative ‘abolition of private property in the instruments of production’ but was in much greater need of careful tending. ... The economics of control is still contrasted with the economics of laissez faire, but control does not necessarily mean collectivism. It suggests the deliberate application of whatever policy will best serve the social interest, without prejudging the issue between collective ownership and administration or some form of private enterprise. (p. vii-viii)

So while both writers hint at the social dividend as a steering mechanism, neither places this role for the social dividend at the forefront of their analysis. In a planned economy, both see the social dividend as a tool for maintaining full employment, but neither proposes a basic income as a tool for the capitalist economy with which they are concerned. The socialist calculation debates, by attracting attention to the theoretical development of a planned economy, certainly expand the imagination of Meade and Lerner with respect to the possibilities for the social dividend, however, both writers clamour for efficient economic policies in a capitalist framework.

Before the socialist calculation debate, late-nineteenth century socialist movements influenced economic thought. The influence of socialism led economists to consider the proper role of the state with respect to intervention in economic life and in so doing, gave birth to welfare economics (Backhouse, 2002), which became a central framework for the Cambridge Keynesians, including Meade and Lerner (Lerner studied under Hayek at the London School of Economics, however, according to Van Trier [1995] had a brief stay at Cambridge where he befriended young Keynesian economists). Welfare economics grows out of the Cambridge tradition, namely through the work of Sidgwick, Marshall and Pigou, who, like Jevons before them, take inspiration from Bentham’s (1748-1832) utilitarianism (Backhouse, 2002; Sen, 1999). A key concern for

welfare economics is to integrate the notion of distribution into marginal economic theory. Amidst growing inequality and industrial unrest in the inter-war period, welfare economics serves as the theoretical lens through which many (soon-to-be Keynesian) economists entered the profession.

Both Meade and Lerner place their work in the context of welfare economics, although they continue to use the established tools of analysis inherited from marginal utility theory. Welfare economics applies these tools in order to argue for more egalitarian social reforms. Meade's first sentence in *Economic Analysis and Policy* (1946) suggests that the economic system should strive to "provide the highest possible standard of living" (p. viii). The subtitle to Lerner's *Economics of Control* (1944) is "Principles of Welfare Economics." In exploring the nature of unemployment (and consequently, poverty) in capitalist society, both writers adopt the rational, calculating, utility maximiser image of human kind and deduce laws of employment from it. For Meade (1946), employers are profit maximisers and will only employ an additional worker if that worker will add to output beyond the wage-rate that that worker will command. In other words, wages in any given firm or industry will automatically adjust so that they equal the value of the marginal product of labour. Highly productive sectors where employers can afford to pay a wage greater than marginal productivity will see an influx of workers until equilibrium is met. Sectors whereby marginal product is lower than the wage will experience contraction until equilibrium is re-established. Lerner (1944), for his part, adopts a rule that prices must equal marginal costs. This is the opposite side of the same coin that Meade's rule is stamped upon, for marginal economic theory suggests that when a firm hires up to the point that wage equals the value of the

marginal product of labour, that firm produces a level of output at which price equals marginal cost.

Meade (1946) argues that this principle applies, not just to those making hiring decisions, but also to those deciding to supply labour:

It is easy to see that if the wage which people are paid for their work is equal to the value of the marginal product of their labour, the amount of labour supplied by a given population will ... tend towards the optimum. For the optimum amount of work will be done so long as people work up to the point at which the marginal disutility of work, i.e. the amount of satisfaction which they would lose by doing another hour's work is just equal to the marginal utility of the marginal product of work, i.e. the additional satisfaction which is to be obtained from the consumption of the extra product due to doing one more hour's work. (p. 259-260).

Consequently, any imbalance between wages and the value of the marginal product of labour will lead to an improper balance between work and leisure in society. Such are the laws of marginal utility theory. Conforming these calculations to reality is absurd. The 'choice' involved in determining one's work hours is severely limited by the nature of work contracts, where hours worked are typically rather fixed. The calculation about whether to work or not is also made in an environment in which one procures their subsistence through the market. A given individual may derive great pleasure from leisure, but the imperatives of food, shelter and clothing, all items that are priced in the market and outside of the worker's control, force them into work. On the contrary, the theory says little about the overall demand for work.

Payment of a social dividend necessarily upsets the balance between work and leisure, according to Meade:

If each individual knows that his [*sic.*] total income will not vary even if his income from work varies, he will no longer have any incentive to choose the best balance between work and leisure. He would presumably work as little as possible. (Meade, 1946, p. 252).

This problem is a “fundamental dilemma” for Meade (p. 253). In a review of Juliet Rhys Williams’ early negative income tax scheme (first published in 1943), Meade (1949) repeats his concern for disincentives to labour. Rhys Williams (1943/2004) herself shares this concern and thus makes her payments contingent on employment. For Lerner, the presence of disincentives to labour is less important. He does not address the dilemma, but rather concludes that because of the desirability of a wage price that is equal to the value of the marginal product of labour, the social dividend should be paid equally to all citizens and not be contingent on earned income. Such a contingency would effectively subsidise paid labour and disturb this balance.

A third young Keynesian also plays with the idea of basic income. Joan Robinson devotes two pages to the idea in her 1937 book, *Introduction to the Theory of Employment*. She too suggests a social dividend as a tool to steer the economy to full employment, though in the case of a capitalist economy. Her vision proposes the printing of new money every week for delivery to each citizen. According to Robinson, this will ensure effective demand and increase hiring. While hinting as its effectiveness, Robinson writes the idea off, as it would rob the monetary authorities over their control of credit creation (the influence of Major Douglas is clear) and possibly result in rising wages and galloping inflation. Without exploring the idea in any detail, Robinson (1937/1949) correctly assesses the relationship of basic income to each of the radical reformers, the policy-makers (monetary authorities) and the Social Crediters (currency reformers):

The bankers [whom are closest with the policy-makers] are afraid, above everything, of inflation, and are light-hearted in allowing unemployment to occur; currency enthusiasts, on the other hand, see the evils of unemployment and mock at the dangers of inflation; while both differ from more radical reformers in

hoping to preserve or patch up the system of private enterprise, rather than to recast it altogether. (p. 74)

The incorporation of basic income into policy circles and ultimately, into marginal utility theory, in effect provides ‘proof’ that an income guarantee will destroy work incentives. This ‘marginalisation’ of the basic income idea cannot be understood as a conscious choice, but rather is part of a process of knowledge formation that is influenced by three interrelated factors: the desire for scientific rigour, the professionalisation of knowledge as the pursuit of rigour involves specialised techniques, and the growing influence that this knowledge has on national policy. Steiner (1971) comments that economists officially supplanted social workers as the foremost authorities and principle theoreticians of poverty and income maintenance in the mid-1960s. I highlight (and I think that Steiner would agree) that the growing influence of economists is a historical process, and not an abrupt shift. In looking at the basic income idea, it is evident that economists began to take on a more influential role in national and political party policy in the early-twentieth century. The Milners’ State Bonus and the National Dividend espoused by Social Crediters both grabbed the attention of influential economists and ultimately inspired a new generation of economists to tinker with those ideas.

The economists of the twentieth century used methods foreign to the nineteenth century theorists examined here. For Spence, Fourier, and Charlier the basic income was a programme for radical structural change. Their investigations were structural, not individual and their analyses of the problems of capitalist society pointed to prevalent institutions of inequality, chiefly, private property. The Milners and the Social Crediters too identified structural inequalities, however, their ideas were filtered through a body of

policy ‘experts’ in which the frame for analysing the basic income idea was inconsistent with structural change. I argue that the Keynesian theorists inherited this frame and consequently examined the basic income through it. As such, rather than theorising how a basic income can induce structural change and ameliorate structural inequalities, the twentieth century analysts examined how a basic income might influence individual market decisions (most importantly, the trade-off between work and leisure). It is in this context that the basic income idea makes an appearance in the War on Poverty in the United States in the 1960s. Indeed, it was recognised that simply giving money to the poor was the simplest way to reduce poverty. But the recipients of that money were also assumed to be calculating, rational individuals for whom any free money would factor into decisions regarding the balance of work and leisure.

In the analysis that follows, I too measure individual responses to a basic income (or an income guarantee more specifically). However, in doing so I want to point out that more structural impacts (including elements of the labour-capital relationship – wages, bargaining, capital investment decisions, etc.) should not be ignored and nor should dimensions of poverty and well-being. As such, I explore housing satisfaction as an element of well-being. In the conclusion to this thesis, I discuss how future experiments might measure elements of structural change.

3 Chapter: The Negative Income Tax Experiments and Theoretical Framework

The previous section examines the historical development of the basic income idea. For all of the thinkers covered, the alleviation of poverty is the overarching concern, however, there is a definite shift in the objectives for which a basic income is to play a part in achieving. The incorporation of basic income into professional academic and policy circles precedes the famous negative income tax experiments that tested the effects of a basic income on individual behaviour. Chief among these effects was labour supply. However, what other areas of social life might a basic income influence? It is important to consider the ways in which an income guarantee affects other areas of peoples' lives. This section reviews the NIT experiments and the analyses of them. Particular attention is paid to housing issues, as Chapter 5 analyses data from the Canadian NIT experiment to understand a basic income's impact on housing satisfaction. A theoretical framework for understanding the expected responses to a basic income with respect to housing satisfaction concludes this chapter.

3.1 Negative Income Tax Experiments in the United States

Following World War II, the prosperity of the 'golden age' put the elimination of poverty into the realm of possibilities. However, the prevailing methods of combatting poverty were failing. Williams (1972) notes that in the mid-1960s the welfare system in the U.S. only covered about one-fourth of the poor persons in the country. Furthermore, benefit levels varied dramatically across the country according to geography, age, sex, and family composition and by taxing earned income by as much as 100%, the programs provided little incentive to find work (Harris, 2002; Williams, 1972). The civil rights

movement was a stark reminder of the persistence of poverty amongst plenty (Forget, 2011).¹⁸ Moynihan (1973) argues that the civil rights movement pushed economic elites, academics and policy analysts to seriously consider welfare reform. Like the score of social reformers covered in the previous sections, the idea of a basic income appears as a solution, irrespective of political inclination (Widerquist & Sheahen, 2012). This section outlines the rise of the negative income tax in the United States in the 1960s.

The idea of a negative income tax in the United States was brought to the attention of academics and policy analysts by free market economist Milton Friedman through a series of lectures in 1956 and in his 1962 book, *Capitalism and Freedom* (Williams, 1972). The negative income tax proposal occupies only a thin chapter in the book, which is otherwise devoted to arguing the benefits of laissez-faire liberalism. Nonetheless, Friedman (1962/1982) accepts that governments have a role to play in poverty alleviation. He argues that because everybody in society benefits from the eradication of poverty, everybody should pitch in. Hence, the tax system can be utilised to achieve this goal.

The election of an activist Democratic administration under John F. Kennedy and later, Lyndon B. Johnson, brought efforts to realise a comprehensive poverty alleviation plan. In 1961, some income support provisions for unemployed parents were added to the basic Aid to Families with Dependent Children (AFDC) program. This represented

¹⁸ Coincidentally, the Black Panther Party was founded in an Office of Economic Opportunity Office (OEO) in Oakland, CA in 1966 by two OEO employees, Bobby Seale and Huey P. Newton. The Party Platform (of which, Moynihan [1973] writes, the initial copies were printed on government mimeograph machines) called on the government to guarantee employment or offer a guaranteed income. The OEO generated much of the advocacy for a negative income tax within the U.S. government (see below).

the first attempt to provide assistance to unemployed employables. 1964 saw the initial rollout of the Food Stamp program (although federal benefit and eligibility standards were not imposed until 1971 and mandatory county participation not required until 1974). Also in 1964, Johnson declared a “War on Poverty” and established the Office for Economic Opportunity (OEO) to oversee anti-poverty projects across government departments and issue annual national Anti-Poverty Plans. However, the broad (and well-defined) strategy of Johnson’s War on Poverty followed from the blueprint laid down by the New Deal, which emphasized employment (stimulation of private employment being favoured, though public works not out of the question), a mandated minimum wage, social insurance, and welfare payments available to those not participating in or left out of paid labour (Harris, 2002). Further, according to King, Jr. (1968), the programs rolled out under the War on Poverty composed a patchwork of uncoordinated attempts to assist the poor. Moynihan (1973) adds that many of the War on Poverty programs were of the “service”-type and provided jobs for those with Master’s degrees instead of putting money into the hands of the poor (p. 54). The OEO then, needed to look beyond the well-drawn strategies of the New Deal if it was to provide a meaningful anti-poverty plan.

The OEO’s first national Anti-Poverty Plan came in October 1965, the same year that all U.S. government departments were instructed to establish central analytical and planning units charged with undertaking policy analysis and research to provide hard bases upon which to make decisions. Economist Robert Lampman, who was familiar with the negative income tax idea and was an early consultant to the OEO, provided a policy paper to the OEO in August 1965 outlining a negative income tax. The October

Anti-Poverty Plan then advocated for the policy, as did a September 1965 report from the White House Task Force on Income Maintenance, chaired by the chairman of the Council of Economic Advisors, Gardner Ackley (Levine, 1975; Williams, 1972). Despite the rising support from progressive bureaucrats, President Johnson never did endorse a negative income tax. Williams (1972) posits several reasons for Johnson's reluctance to buy in. For one, Johnson may simply have preferred the New Deal approach and believed that full employment was possible, though this is only speculative. More concretely, the Vietnam War was occupying intense U.S. government resources in the mid-1960s and Johnson was likely reluctant to sign onto a multi-billion dollar poverty reduction strategy. Public opinion was also not in favour of using the tax system to transfer income from taxpayers to the unemployed or underemployed ('sending hard-earned money to a bunch of bums,' in layperson's terms). There was an institutional barrier as well in that the foremost authority on income maintenance during the Johnson presidency, Wilbur Cohen (second in command at the department of Health, Education and Welfare), was unmoved by the NIT and preferred to see reforms made to the national welfare system. Finally, a lack of empirical evidence concerning how much a negative income tax program might cost and how recipients might respond to 'money for nothing' prevented President Johnson from endorsing the idea. Moynihan (1973) and Williams (1972) both also suggest that the timing was not right for Johnson to get behind such a bold policy. Such bold initiatives are borne out at the beginning of a new administration. By the end of 1965, Johnson had been President for two years and his administration was in place two years before that (under Kennedy).

The myriad conditions that contributed to Johnson's apathy towards a negative income tax, among others, could hinder any type of policy development. Instituting a large-scale social experiment to gain empirical knowledge fixes only one problem – a lack of empirical evidence – and cannot address other issues that influence policy development. This points to the difficulty facing policy analysts and academic researchers alike in influencing policy. Nonetheless, the lack of experimental evidence marked conformity between the interests of both policy analysts and academic researchers and set the stage for the “The New Jersey Graduated Work Incentive Experiment.” Williams (1972) notes that the policy analysts and academics that supported the negative income tax idea had no control over external events like the Vietnam War, nor did they have the political savvy to convince senior politicians and the public of the virtues of the NIT. Their only option was to conduct an experiment to ‘prove’ its virtues.

As the Johnson administration moved towards the end of its tenure, “well advanced” preparations for negative income tax legislation were prepared (Anderson, 1978; Moynihan, 1973, p. 126). By 1968, a general consensus in support of the policy was reached among economists. In the run-up to the 1968 federal election that brought Nixon and the Republicans to power, 1,200 academic economists signed a letter calling on Congress to introduce “a national system of income guarantees and supplements” (as cited in Moynihan, 1973, p. 126). The originators of the letter were all very distinguished professional economists: John Kenneth Galbraith, Paul Samuelson, Robert Lampman, Harold Watts, and James Tobin (Steiner, 1971). The business community was also onside and Moynihan (1973) argues that this predilection was influenced by the

disruptions caused by urban riots. New York Governor Nelson A. Rockefeller convened a meeting in 1967 to discuss “new approaches to public welfare in the United States” (cited in Moynihan, 1973, p. 56). A steering committee emerged to investigate that brought together executives from Xerox, Mobil Oil, Inland Steel, and the New York Stock Exchange. The committee released its report in 1968 and declared that, “it leans in the direction of a negative income tax” (cited in Moynihan, 1973, p. 57). A lead figure for many of the urban rioters that attracted the attention of the business elite was Martin Luther King, Jr., who wrote in his last book before his assassination: “I am now convinced that the simplest solution to poverty is to abolish it directly by a now widely discussed measure: the guaranteed income” (p. 162). The OEO was in-step with this tide of public support for the negative income tax – preparations for the New Jersey Experiment began quietly in mid-1967 (Williams, 1972).

By the time President Richard Nixon took office in 1969, public and Congressional opinion was much more favourable to a negative income tax than in 1965. When it became public that the OEO was funding a research experiment to explore the effects of a negative income tax, Congress expressed little disapproval (Williams, 1972). At the beginning of his tenure and seeking to restore the Republican Party, Nixon was in a position to support such a bold initiative as the negative income tax and he did so with the Family Assistance Plan (FAP). Debate over how to reform the welfare system created a rift in the Republican Party, with conservatives preferring not to supplement the wages of the working poor and limiting relief to the helpless. Bureaucrats from the U.S. Department of Health, Education and Welfare (HEW) held over from the Johnson administration drafted the basic outline of FAP and the plan gained traction in Nixon’s

inner circle as a way to thoroughly begin reform of the welfare system (Harris, 2002).

Nixon announced FAP in a nationally televised address in August 1969 and called it “the most significant piece of social legislation in our nation’s history” (cited in Moynihan, 1973, p. 539).

The designers of the New Jersey Experiment could hardly have anticipated a piece of legislation calling for a negative income tax to be presented to Congress just two years into their experiment and after only one year of actual payments to experimental recipients (Levine, 1975). However, this reality increased the urgency of presenting data from the experiments as members of Congress sought information throughout the legislative process. From the very beginning of the negative income tax discussion in the U.S., the most common fear that politicians and the public had about the policy was that it might kill work incentives (Levine, 1975; 2002); this despite the NIT being designed to improve work incentives relative to conventional welfare programs, the latter of which had exceedingly high marginal tax rates.¹⁹ In fact, getting empirical data about work response was the primary reason for conducting the New Jersey Experiment (Levine, 1975; Williams, 1972; Widerquist, 2005). The release of data was complicated by initial delays in the set up of the experiment. Levine (1975) notes that much of the planning about the New Jersey Experiment was devoted to major problems, rather than logistical or detail issues. When in early 1970, Daniel P. Moynihan, then Nixon’s Counselor to the President, pressed for disclosure of preliminary results from the New Jersey Experiment, experimental recipients had been receiving payments for about 15 months (Levine,

¹⁹ Whereas marginal tax rates of conventional welfare programs might be as high as 100%, the New Jersey experiment tested marginal rates of 30%, 50% and 70%.

1975). A report on the preliminary results from New Jersey issued by the OEO suggested that fears about a negative income tax and the Family Assistance Plan were unfounded and that there was no evidence of a work effort decrease for experimental recipients (Moynihan, 1973; Williams, 1972). The preliminary results were heavily criticized in Congressional hearings for their prematurity (Williams, 1972; Widerquist, 2005). The Family Assistance Plan eventually passed a vote in the House of Representatives, but was defeated by a Senate Finance Committee, never having gone to a vote on the floor of the Senate (Moynihan, 1973).

Other experiments soon followed to gain more data on the impact of a negative tax. “The Rural Income-Maintenance Experiment” in Iowa and North Carolina (1970-1972) studied effects on rural populations; The Seattle/Denver Income-Maintenance Experiments” in Seattle and Denver (1970-1976, some to 1980) examined much larger populations (4,800 families); and “The Gary, Indiana Experiment” in Gary, Indiana (1971-1974) studied effects on single-parents (Widerquist, 2005; Widerquist & Sheahan, 2012). The design of each experiment had control groups continue under existing welfare programs in their respective states, while the treatment groups entered into a negative income tax scheme (Widerquist & Sheahan, 2012). The treatments in each experiment varied, each having a specific combination of income guarantee and tax rate (Anderson, 1978).

Results from the NIT experiments were encouraging from the perspective of supporters who did not anticipate a mass withdrawal from the workforce, however, the political efficacy of these results was nil in the 1970s. Final results from all of the NIT experiments generally confirm the preliminary results from the New Jersey Experiment,

that is, work reductions were minor. Widerquist and Sheahen (2012) compile results from various analyses and find that average working hours among males (primary earners) in treatment groups were between 5-7.9% less than those in control groups. Women in treatment groups produced between a 7-21.1% reduction in work hours relative to control groups. The major results of the NIT experiments were published in 1977 and interpreted negatively. Critics regarded any work reduction as a sign that the experiments proved NIT to be a failed policy, for they saw any size work reduction as too much. The “work-effort reduction” was also misinterpreted as meaning a reduction in the percentage of people that would work for a wage, as opposed to individual annual work hours supplied (Widerquist & Sheahen, 2012).

Prior to the release of final data from the U.S. NIT experiments, Canadian researchers and politicians debated conducting their own social experiment. The developments that led to the Manitoba Basic Annual Income Experiment Project (Mincome) are covered in the next section, before some analyses from the NIT experiments that are relevant to this research are reviewed. The following section on Mincome also more closely examines experimental design, as it is data from this experiment that is analyzed in Chapter 5.

3.2 Mincome

The political sensation surrounding basic income in the United States spilled over the northern border into Canada as well. In 1968, The Economic Council of Canada declared the extent of poverty in Canada a “disgrace” (p. 103), estimating that more than four million Canadians were living in poverty. Prior to 1968, the Canadian government had introduced family allowances, the Canada Pension Plan and legislative changes to

make for universal health insurance (Forget, 2011). The federal government seemed willing to make substantial enhancements to social security in Canada. At the same time the federal government was pushing to ‘repatriate’ the Canadian constitution. Efforts to do so failed in 1971 when Quebec pulled out, citing failure to provide for a jurisdictional settlement on the issue of social policy. Other provinces joined with Quebec’s disappointment when the federal government passed unilateral changes to unemployment insurance. When the welfare ministers from across the country called for a joint review to rationalise social security in Canada, the federal government agreed (Hum & Simpson, 1991).

Also in 1971 came a report from the Special Senate Committee on Poverty, more commonly referred to as the Croll Report,²⁰ that saw a guaranteed annual income as “a means of establishing a floor below which the income of Canadian families will not be allowed to fall” (Canada, 1971, foreward, para. 20). The left-leaning federal New Democratic Party (NDP) echoed the call for a guaranteed income. The NDP also held the balance of power in the minority Liberal government’s Parliament and the latter was forced to work with the NDP on social policy in exchange for support in Parliament. When the twenty-ninth Parliament opened in 1973, policy-makers began debate on a guaranteed annual income policy. The debates made reference to the U.S. experiments (from which final results had not yet been published), where the concern for work disincentives was paramount (Hum & Simpson, 1991).

Even before the Parliamentary debates, NDP Premier Ed Schreyer of Manitoba showed a keen interest in being involved in testing the guaranteed annual income policy.

²⁰ Ontario senator David A. Croll chaired the committee.

In March of 1973, Manitoba submitted a proposal for funding to the federal Department of National Health and Welfare to undertake a guaranteed annual income project. The proposal was approved in June of the same year, and the Manitoba Basic Annual Income Experiment Project officially commenced to review Canada's social security system in the context of a guaranteed annual income. The federal government would cover 75% of the costs, while Manitoba would cover the remaining 25%. The total cost of the project was initially estimated at \$17 million by the Manitoba government. This number, however, was not based on any substantive review of the project's objectives and administration. Rather, it was a number that was deemed appropriate by Manitoba in order to have their project approved. The \$17 million figure ultimately became a hard cap for both levels of government as the project progressed into the late 1970s and inflationary pressures were felt. Under-funding ultimately played a big role in the cessation of the project in 1979. Midway through the experiment two serious modifications were made because of the financial short fall. First, research was retargeted towards administrative issues as opposed to the original work response objective. Second, the research adopted an "archive" strategy where data were collected but no analysis done (Hum & Simpson, 1991). Over the past 35 years, analysis of Mincome data has slowly begun to open these archives. A review of studies analysing Mincome data is provided in Section 3.3.

The design of the Mincome experiment followed from the previous studies conducted in the U.S. For a clear understanding of experimental design, it is useful to outline the basic features of a negative income tax. In general, a negative income tax involves two parameters, the support level and the offset tax rate. The support level is the

income floor. This is the amount that a person or family with no private income will receive (the support level is adjusted for family size and composition). The offset tax rate is applied to the total of private income and the result is subtracted from the support level.

In its simplest terms, a negative income tax can be represented as:

$$P = S - o * I, \text{ where}$$

P = payment

S = support level

o = offset tax rate

I = income from other sources

It follows that if income from other sources (I) is zero, the payment (P) equals the support level (S). For every dollar of outside income, the payment is reduced by a fraction of that income. For example, consider a family with \$10,000 in income from other sources in an NIT scheme with a support level of \$5,800 with an offset tax rate of 50%:

$$P = \$5,800 - (0.5 * \$10,000) = \$800$$

$$\text{Total family income} = \$10,000 + \$800 = \$10,800$$

In the example above, the payment ceases at an annual income of \$11,600 ($P = \$5,800 - (0.5 * \$11,600) = 0$). \$11,600 is thus referred to as the breakeven threshold. The Mincome NIT also included a deduction for net worth to prevent holders of wealth from receiving payments.

The Mincome experiment involved assigning participants to one of several treatment groups, each group being a unique negative income tax program (with a specified support level and offset tax rate). The treatment groups are as follows:

- 1) Support level of \$3,800 and offset tax rate of 0.35

- 2) Support level of \$4,800 and offset tax rate of 0.35
- 3) Support level of \$3,800 and offset tax rate of 0.50
- 4) Support level of \$4,800 and offset tax rate of 0.50
- 5) Support level of \$5,800 and offset tax rate of 0.50
- 6) Support level of \$3,800 and offset tax rate of 0.75
- 7) Support level of \$4,800 and offset tax rate of 0.75
- 8) Support level of \$5,800 and offset tax rate of 0.75

Participants assigned to treatment groups were given monthly payments if their income fell below the breakeven level corresponding to the particular mix of support level and offset tax rate. Hence, inclusion in a treatment group did not imply that a given participant received regular payments. Selection to a treatment group did, however, provide an income guarantee for the participant, as it was assured that their income would not fall below the support level. Incomes had to be reported monthly to receive payment. Income in any month that was above the breakeven level was carried forward and counted as income during months when income fell below the breakeven. These payments were reconciled at (fiscal) year's end and any under- or over-payments were paid or collected (Hum & Choudhry, 1992). Control groups received no monthly payments and their incomes were not guaranteed (except by any existing social assistance programs that they might be on). Both treatment and control groups were interviewed three times a year for three years to obtain information on economic and sociological matters (Hum, Laub & Powell, 1979).

Two main sites were chosen for the Mincome project – the rural town of Dauphin and the urban city of Winnipeg. A series of small rural towns were also included to serve

as controls for Dauphin. Dauphin was a saturation site, in which everybody in the town was eligible for the payments program (those with incomes too high for eligibility did not receive payments, but might be aware of the program nonetheless). This design was chosen in order to ensure policy relevance, in that it provided a realistic environment in which participants were not isolated from one another (Hum, Laub & Powell, 1979).²¹ One drawback of this design is that it is difficult to study the effects of different treatment plans, given that any inequality in payment programs would be obvious to the Dauphin residents (Hum, Laub, Metcalf, & Sabourin, 1979). As such, the Winnipeg site followed a dispersed experimental design, similar to the U.S. experiments. The design was modeled after a laboratory experiment, where subjects are selected randomly and then randomly assigned to treatment or control groups. Modifications to the rule of random selection and assignment were made in Mincome and the U.S. experiments in order to keep the costs of the experiment in check. This is discussed further in Section 4.1. The subjects were “dispersed” in the Winnipeg module in the sense that they were geographically separated from each other (all living in different parts of Winnipeg). Together, the two designs allowed for a fairly robust research program that could measure both individual and family behaviours, as well as community effects, in response to experimental treatments. That said, labour supply response was the key outcome variable of interest and an insufficient (or even miscalculated) research budget prevented a full utilisation of this research capacity. Research in this paper deals only with Winnipeg data and so the Winnipeg site will be the focus of discussion hereinafter.

²¹ Sabourin, Hum, Harrar and Basilevsky (1979) estimate that 78% of eligible participants or non-participants had “heard of” the program. Approximately 34% of them received payments.

Following the North American experiments, political support for a basic income waned. The stagflation crisis of the 1970s put forth a new set of political economic challenges that states needed to address. Keynesian economic theory did not have an answer and the supply-side school gained clout. Standing (1992) notes that “[t]here was a restoration of faith in the market mechanisms and a powerful crusade against institutional means of resolving economic problems” (p. 50). This, however, is not the end of the basic income/negative income tax story. As discussed in the Introduction, the idea is enjoying resurgence today, particularly in the eyes of the public. Being that much of the information about basic income today rests on data gathered through the NIT experiments, and that data from the Mincome experiment is analysed in the following chapter, now is a good time to review the basic theoretical framework that guided the experiments and critically examine previous studies.

3.3 Literature Review and Theoretical Framework

Sociological and economic ‘theories’ drive the hypotheses that underlie most of the studies on NIT experimental data. I use ‘theories’ to suggest that these theses are rather speculative and not the output of rigorous theoretical work. I blend the sociological and economic outlooks with the housing satisfaction literature to construct some elementary hypotheses about how responses about housing satisfaction might have changed during the Mincome experiment. The housing satisfaction literature is also critical to constructing a model for regression analysis, that is, to understand what types of variables might impact housing satisfaction. To this point, no data analysis on housing issues has been conducted from Mincome data. The following surveys the existing analysis of Mincome data, the housing analyses from the U.S. experiments and the

housing satisfaction literature. Again, the primary area of focus of the NIT experiments has been labour supply and only few studies examine the lifestyle and well-being of beneficiaries. It is the goal of this research to help address this dearth of analysis on lifestyle and well-being. Further analysis of lifestyle choices and physical and mental well-being may help to disprove the extreme view that providing cash assistance to low-income persons is futile because the poor will only use those resources frivolously – on drugs, gambling, drink, or unproductive leisure. This view was strengthened in the middle part of the twentieth century by the “culture of poverty” thesis, the name of which can be attributed to Oscar Lewis.²² Lewis suggests that poverty is a subculture with a short- rather than long-term time horizon – immediate sensory fulfillment prevailing over longer-term considerations like personal or professional development. As a subculture, poverty is inherited by successive generations as children are socialised into the culture of poverty. Social scientists that dissent from this view do not disagree with the traits of poverty observed by Lewis, however, they argue that those traits are responses to the conditions of poverty. Survey studies typically show correlation between all sorts of negative conditions (e.g., mental health issues, insomnia, reduced self-esteem, reduced labour force participation, among others) and low-income and ‘conditions of poverty’ theorists argue that improving the conditions of the poor will yield positive results that will ameliorate the individual traits that most agree are common to the poor. The assurance of financial support may lead to political activity (e.g., voting or joining neighbourhood associations), increased interest in education, reduced stress, and

²² It is not accurate to suggest that Lewis developed this theory. It is a view that pervaded thinking during debates about Poor Law reform in the United Kingdom in the early-nineteenth century and likely stretches back beyond that.

improved satisfaction. An improvement of conditions of the poor can be achieved by providing jobs or various services to the poor, or simply by boosting the incomes of the poor, as the negative income tax proponents felt (Baumol, 1977; Rossi, 1975). Both views perpetuate thinking that poverty should be studied at the individual level and this grows out of a more general shift towards methodological individualism as discussed in Chapter 2. While I feel that there is nothing wrong with studying the characteristics or experimental responses of poor persons (and I do just that), this type of research must also be accompanied by research that examines the structure of poverty – inequalities in power and wealth, the institutional make-up of the labour market and the political projects that propagate and reflect these (O'Connor, 2001). Recognising the interconnectedness of different types of social research, this thesis proceeds from the 'conditions of poverty' theory and the hypothesis that a basic income will improve housing satisfaction comes out of a belief that improving the conditions of the poor will help to ameliorate the negative conditions prevalent among that population. Analysis of U.S. experimental data on housing issues lends credence to this hypothesis. A brief review of Mincome data follows next to highlight the state of research on the topic, followed by a review of housing studies from the U.S. experiments.

The main focus, as stated, of both the U.S. experiments and Mincome was to gauge the impact that a basic income would have on work response/labour supply. Economists Derek Hum and Wayne Simpson (1991; 1993a; 1993b; 2001) analyse the Mincome data on this response. They find that “the work disincentive effects of a GAI [guaranteed annual income] are quite modest” (1993a, p. 450). Prescott, Swidinsky and Wilton (1986) find that income net of childcare costs is a strong positive factor in

determining the labour supply of both married and single women (the higher costs of child care, the more hours supplied). Also in terms of labour market research, Evans (1984) reviews the Mincome baseline survey that collected data from potential research participants and finds that single mothers work more than married mothers, however the increased labour market experience does not translate into higher wages. Hum and Choudhry (1992) use Mincome data to determine which variables affect marriage dissolution. Their results suggest that financial concerns are particularly important. Forget's (2011) widely cited study examines data from a provincial health database over the period of the Mincome study and finds that hospitalisation rates in Dauphin declined by 8.5 percent over the period in which Mincome was in effect. Forget also examines school continuation rates from Dauphin and surrounding communities and finds that, during Mincome, grade 11 students in Dauphin were more likely than their rural or urban counterparts to continue to grade 12. Bennett (1986) asks whether the participants in Mincome had a firm understanding of the program's parameters and rules and finds that participants did understand that their benefits would be affected by extra earned or transfer income and were aware of the break-even points. However, they often underestimated the effects of extra earned income (underestimated the reduction in benefits from greater earned income) and the break-evens (thought that benefits would cease at a lower level of income than was actually the case).

Housing issues gather the attention of researchers who examine the U.S. experimental data from New Jersey and the Seattle/Denver Income Maintenance Experiment (SIME/DIME). There are two potential hypotheses that inform these studies. The first is negative, suggesting that a negative income tax experiment that provides an

assurance of income will not influence peoples' lives very much. It may increase spending power, but that increase would not lead to any lasting positive change. This hypothesis matches with the culture of poverty thesis. Alternatively, it is suggested that guaranteeing income will induce positive changes, as an income guarantee will help to ameliorate the negative conditions of the poor. All of the U.S. studies assume the latter, but note that the responses may be hard to detect. Three possible biases may limit participant responses in guaranteed income experiments. First, experiments may suffer from the Hawthorne Effect, whereby responses to experimental treatments are altered because knowledge of the experimental process leads participants to act differently than if they were in a real life situation (Baumol, 1977). Mincome's design sought to limit the Hawthorne Effect by conducting the same interviews for both treatment and control groups and requiring some control groups to submit the same monthly income reporting slips required from participants in treatment groups (Hum, Crest & Komus, 1979). Second, the NIT payments may have been perceived as a windfall of cash, rather than a permanent increase in income. Anderson (1978) critiques the validity of the NIT experiments on the basis of this Windfall Effect bias. In contrast, Baumol (1977) argues that a three-year income guarantee is rather significant for low-income persons who repeatedly deal with job insecurity and a three-year guarantee represents "an extraordinarily reliable source [of income]" (p. 6). Third, Rossi (1975) and Pechman and Timpane (1975) suggest that the relatively homogenous populations studied in the NIT experiments (the English speaking, working age, low-income population) may make it very difficult to detect behavioural or attitudinal changes. The effect of these biases, if any, is unpredictable and extremely difficult (if not impossible) to take into account in

analysis. I will proceed with the hypothesis that a guaranteed income will lead to positive changes in housing satisfaction but am aware that any changes may not show statistical significance. The evidence from U.S. housing studies analysed next confirm that this is an appropriate hypothesis to begin with.

All of the analyses on housing issues from the U.S. experiments follow the same basic design, which is similar to the analysis of Mincome data presented in Chapter 5. Some dependent variable is regressed against a set of theoretical and experimental variables and either compared across time (as I do in Chapter 5) or entered into a regression model that accommodates panel data. The theoretical variables are generally socioeconomic variables (e.g., household income, age, etc.), as well as others that might be expected to influence the dependent variable. The experimental variables used are generally support level (payment received if outside income was nil) and offset tax rate (the rate at which outside income is deducted from the support level). For reasons discussed in Section 4.3, my analysis simply compares treatment versus control. Four studies examine housing related issues from the New Jersey experiments. Nicholson (1977) examines the purchases of appliances and other items (e.g., food, clothing, and furniture) that correspond with 'desirable' household spending. He finds that, in general, there are no significant differences in purchases between treatment and control groups, with the exception of appliance purchases where those assured of a minimum income (the treatment group) increased their purchases. Metcalf (1977) refines this analysis by comparing purchases of durable goods throughout the experiment in an effort to determine if the windfall effect is prevalent. Metcalf's analysis also may shed light on what a permanent negative income tax might mean for low-income families. Metcalf

finds that experimentals tended to make more purchases in the early stages of the experiment and almost no increase in purchases of durables occurs in the latter part of the experiment. Wooldridge (1977) examines the consumption of housing as opposed to household goods and finds strong evidence that the experiment triggered housing upgrades. She notes a five percent increase in the probability of owning a home at the end of the experiment for experimental families that did not receive payments (due to a household income that exceeded the breakeven level). This group also purchased more homes over the course of the experiment than did their relative control families (with similar incomes). This suggests the income guarantee in and of itself, not increased income specifically, gives families/individuals greater ability to purchase a home. Wooldridge posits that this may be the result of increased financial security, either in the eyes of the experimentals or in the eyes of the mortgage lenders that deem credit risk. Wooldridge also notes that experimental renters were more likely to move into more expensive rentals. Poirier (1977) limits his sample to only those that moved and depools the sample according to ethnic background. This technique leads to much weaker conclusions than those found by Wooldridge, that is, Poirier finds little difference in the likelihood of home buying between treatment and control groups. Poirier notes, however, that his choice to stratify the sample by ethnicity produces small sample sizes, compromising inference. There are also two studies on housing from the Seattle/Denver experiment. Pozdena and Johnson (1980) examine housing asset stocks ([non-]mortgage debt, vehicles, durable goods, etc.) and confirm the results that Woodridge came to in examining the New Jersey data – the probability for homeownership for experimentals above the breakeven level is increased significantly. They also find that double-headed

experimental households below the breakeven level significantly reduced mortgage debt, though this is not the case for female-headed households. Avrin (1980) studies the utilisation of housing subsidies among SIME/DIME participants and concludes that there is a lower probability among treatment groups to draw on housing subsidies.

In general, a positive theme emerges from the housing studies. The studies on consumption of household goods tend to show that the experiment influenced the purchase of household durables, namely appliances. The other studies suggest improvements in housing arrangements, be it increased home ownership, higher-end rental arrangements, reduced mortgage debt, or a decreased reliance on housing subsidies. This could indicate a windfall effect, however, it may also suggest that a permanent program will encourage households to improve their asset base. Whatever the case, the worst fears of the culture of poverty thinkers are not borne out by the evidence.

The results from the U.S. housing studies would also indicate that housing satisfaction may be improved for experimentals in the Mincome experiment. Research interest in housing satisfaction gained considerable momentum in the 1960s and 1970s, coinciding with the creation of United States Department of Housing and Urban Development (HUD) in 1965. Much of the research focuses closely on defining housing satisfaction, as well as the determinants of it. The latter research is thus useful for helping to determine which experimental variables to include in a regression analysis. The former can help in assessment of the validity of the housing satisfaction questions asked throughout Mincome. Despite decades of research, there is yet to be a consensus about what the different aspects of housing satisfaction are and along what axes to categorise them. In exploring the role of sociology in housing research, Wirth (1947)

suggests a distinction between the physical aspects of a housing unit and the neighbourhood of which it is a part. Rapoport (1977) also divides the “components” of housing satisfaction into “physical” and “socio-cultural” (p. 61). Cantor and Rees (1982) break the physical aspect into spatial provision and the quality of services available in the community. Others, such as Ginsberg and Churchman (1984), break the physical aspect into its “objective” and “subjective” measures (p. 426). Hartman (1963) also finds the physical-social dichotomy a useful one. However, his research on urban renewal (or slum clearance) in Boston implies that the social aspect of housing satisfaction may be more important, noting that social and cultural values shape the norms and perceptions of the physical world. Hartman finds that residents who think positively of their neighbourhood are very likely to say that they like their dwelling, regardless of physical condition. Campbell, Converse and Rodgers (1976) on the other hand, understand people’s housing environments as “nested environmental realms” (p. 249), where the housing unit is the primary and most immediate realm ahead of the neighbourhood and the community. Rent and Rent (1978) find six categories of inquiry into housing satisfaction: residential satisfaction, structural aspects of the housing unit, previous housing experience, the degree of social participation in society, housing aspirations and the social-psychological perspective of the occupant towards society. Morris and Winter (1975) stress cultural norms in their classification. They find that “[h]ousing needs do not derive from minimum shelter needs or minimum health and safety standards in an absolute sense, but derive from cultural standards against which actual housing conditions are judged” (p. 82). Morris and Winter (1975) identify five different

categories of norms: housing space norms, tenure norms, structure type norms, quality norms, and neighbourhood/location norms.

While different survey instruments vary in regards to their categorisations of the different aspects of housing satisfaction and their rank-order of the most important ones, the distinction between physical condition and social aspects of housing is an enduring theme. Variables for physical condition include perceptions of there being sufficient space or privacy, the quality of the craftsmanship in the structure and the plumbing and/or heating systems (Campbell *et al.*, 1976; Galster & Hesser, 1981; Ginsberg & Churchman, 1984). More objective measurements of a dwelling's physical condition have also been utilised, including: the number of rooms in the house, the square footage, the living density (number of people per room), the floor on which the unit is located, and the structure type (i.e., detached home versus apartment) (Galster & Hesser, 1981; Ginsberg & Churchman, 1984; Morris & Winter, 1975).

The social aspects of housing satisfaction deal with neighbourhood attributes and personal interactions (e.g., with neighbours). Like physical condition, neighbourhood attributes may be measured subjectively or objectively. Subjective measures may include perceptions of the quality of the local school district, the recreational facilities nearby, the noise level, the crime level, the amount of green space nearby, and the distance to relatives, among others (Galster & Hesser, 1981; Gruber & Shelton, 1987; Morris & Winter, 1975). More objective measures might include the mean value of homes in the neighbourhood or the mean incomes of the households (Galster & Hesser, 1981). Rent and Rent (1978) cite Durkheim's (1897) classic *Suicide* study when they note the importance of social participation for not only housing satisfaction, but contentment with

life in general. Ginsberg and Churchman (1984) measure interaction with neighbours by the percentage of neighbours known, the number of visits to neighbours' homes, exchanging of help with neighbours, and perceived similarity to neighbours.

Both social and physical aspects of housing satisfaction are covered in the Mincome survey questions about housing satisfaction (see Appendix A), although the social dimension receives much more emphasis. All of the questions ask respondents about their level of satisfaction on a scale of one to five (coded in an ordinal scale). The only physical dimension that receives attention is satisfaction with space and the number of rooms in the house. The social dimension is covered by several questions, all qualitatively ranked. These include questions about proximity – to shopping, schools, recreation facilities, and relatives – and perception – of neighbours, economic opportunities and costs of living. One downside of the Mincome survey questions is that part way through the experiment, additional questions about housing satisfaction were added. Unfortunately, this additional information cannot be included in housing satisfaction indices when comparing cross-sections of data at the beginning and end of the experiment.

Research also attempts to understand the factors that affect housing satisfaction. Socio-economic status is an important factor. Studies (Hartman, 1963; Galster & Hesser, 1981; Rent & Rent, 1978; Schorr, 1966) of low-income housing in the United States invariably have an element of race due to the racial lines along which poverty is associated in that country.²³ Schorr (1966) also notes that income is essential to

²³ The racial/ethnic aspect is also important in Ginsberg and Churchman's (1984) study of residential satisfaction and mobility in Israel.

improving housing satisfaction as a family might forego spending money to improve their accommodation in the face of a limited family budget. Life cycle position is also a commonly cited factor that influences housing satisfaction, as the requirements of a household with regard to social and physical conditions will change according to family composition (Morris & Winter, 1975). Life cycle variables might include number of children at home and their ages, the age of the household head(s) and marital status (Galster & Hesser, 1981; Ginsberg & Churchman, 1984). Life cycle variables, particularly age of the household head(s) might also be a proxy for previous housing experience (Lane & Kinsey, 1980). The occupant is likely to judge satisfaction with a current dwelling in relation to previous dwellings. The lack of a desired feature in a previous dwelling might reduce satisfaction with the current dwelling (Brink & Johnston, 1979). Tenure status (homeownership) has also been an important variable in predicting housing satisfaction. Elsinga and Hoekstra (2005) and Diaz-Serrano (2009) find that homeowners tend to be more satisfied with their housing than do renters.

To summarise, the previous studies on housing issues from the U.S. experiments suggest that housing satisfaction should see some improvement over the course of the Mincome experiment. By boosting, or at the very least, guaranteeing, income levels it is expected that households will allocate some resources to making improvements in housing, be that through purchases of household goods or a move to a more desired neighbourhood or housing unit. Many of the theoretical housing satisfaction variables are attainable from the Mincome data, with some exceptions. This is discussed further in Section 4.2. Another important point about housing satisfaction is that studies of housing satisfaction consistently report a low amount of variation in housing satisfaction that can

be explained by statistical models (Elsinga & Hoekstra, 2005; Galster & Hesser, 1981; Ginsberg & Churchman, 1984; Morris, Crull & Winter, 1976). Hartman (1963) and Ginsberg and Churchman (1984) agree that this could be due to the high level of satisfaction that is generally expressed by residents. Generally high rates of satisfaction are also present among Mincome research participants, as is shown in the Chapter 5 of this paper.

4 Chapter: Methodology for Quantitative Analysis

The following describes the data utilized in this research and the multiple regression technique of analysis. The technique used in this thesis, not multiple regression specifically, but more generally the process of deriving analyses from individual survey data and developing hypotheses based on empirical evidence, follows the methodological individualism that I describe in Chapter 2. Not only does this type of analysis fit the experimental designs of the NIT experiments, but the experiments themselves were constructed according to this type of analysis. While I am critical of relying exclusively on this type of analysis to inform policy and contribute to knowledge production, it is by no means wrong to seek this type of information. The important thing to consider is what is lost when all research efforts are devoted to understanding the individual behaviours that are a consequence of the poverty that is to be eliminated (O'Connor, 2001). While this analysis may add to the dearth of knowledge that exists about the impact of a basic income on people's lives, it is no substitute for analyses that consider changes in economic structures or the production and reproduction of inequalities in wealth and power.

4.1 Mincome Sampling Procedures

Like any other experiment, sample selection and the procedure for assigning participants to different treatment plans is of critical importance. Sample selection was particularly important in Winnipeg, due to the dispersed experimental design. Census data was used to create a possible sample population, stratified by family type and income level. From there, a pre-experimental interview known as the "screener" was used to narrow the population to one that matched research objectives (Hum et al., 1979).

Because the main objective of the research was to gauge work response, the elderly and the disabled, those away for military purposes, the institutionalised, and those who were members of a religious order were excluded. Due to the nature of the negative income tax system, only low-income families were deemed eligible (an annual income of \$13,000 [1972/1973 dollars] or less for a family of four was deemed low-income). Households with a language barrier to answering surveys in English were also excluded. A “baseline” interview was then conducted on a subset of the remaining households to gather information on income history and net worth. A “normal” income, defined as the expected household income in the absence of the experiment over the three-year experimental period, was determined from the baseline interview and this amount was the criterion for establishing the selection probabilities for the next interview, the “enrolment” interview (Sabourin, 1979). Due to the financial constraints of Mincome, equal allocations to each treatment group were not feasible, as some treatment groups have higher support levels and lower offset tax rates. Further, in order to test experimental effects efficiently, households with higher incomes needed a higher probability of being placed into more generous treatment plans, as a relatively high income may make the household ineligible for payments under less generous plans. Thus, a complex cost-benefit model²⁴ that balanced value of information and financial constraints was used to create varying probabilities for each family type-normal income stratum for the purposes of treatment assignment (Hum et al., 1979). In simpler terms, the probability of being assigned to a particular treatment group depended on family type and normal income, with higher normal income households more likely to be placed in

²⁴ More specifically, an adaption of the Conlisk-Watts model (Hum et al., 1979).

treatments with higher support and breakeven levels. The probability of being assigned to control for any given family in any given family type-normal income stratum was then based on a function of the treatment weights for that stratum (Hum et al., 1979). As Keeley, Spiegelman and West (1980) put it when referring to the Seattle-Denver NIT experiment (which used a similar assignment model), “the distribution of income differs in different NIT treatments, and the distribution of income of controls differs from the distribution of income of persons assigned to any experimental treatment” (p. 20).

This has important implications for analysis. The simplest analytical technique for purely random experiments would be to compare the mean value for a particular outcome for experimentals and controls. But under Mincome, the probability assignment model makes each treatment characteristically different (with respect to family type and normal income) than the others, as it does relative to the control group. This makes comparisons between treatment groups quite complicated. A simplified analysis is conducted in this thesis and is presented in 4.3 in more detail.

4.2 Description of Datasets

The dataset is composed of two Winnipeg Mincome datasets that are based on survey responses from the baseline (Survey 1), enrolment (Survey 2) and periodic interviews (Surveys 3-11). Both of the Mincome datasets were obtained from Mincome files stored at the Industrial Relations and Human Resources Library at the University of Toronto.²⁵ Analysis then, in a broad sense, is secondary data analysis and this research was not subject to ethics review. The first dataset has 445 variables pertaining to income

²⁵ I must acknowledge my supervisor, Scott E. Bennett, who obtained these files and documents for me. Due to his involvement with the Mincome experiment, Dr. Bennett suspected some Mincome material would be archived at the University of Toronto.

and net worth (Minc5). The other has 1,434 variables²⁶ pertaining to family composition and attitudes (Minc6). Each file has 1,290 households (records) of which, 921 participated through to Survey 11 and remained intact (i.e., had no change in headship structure).²⁷ In each dataset the 1,290 households are identified by a unique family identifier (FAMNUM). Different family members are identified by a two-digit code that follows the family identifier and corresponds to a particular relationship with the household head.²⁸ Each variable in the Mincome datasets corresponds with a survey question and is actually a block of 11 variables (columns) – each corresponding to a particular Mincome survey (e.g., VarA1, VarA2, ... , VarA11). Some questions were not asked at each survey and so have an indicator of non-applicability²⁹ in several columns. As such, the actual number of variables in each Mincome dataset is significantly less than the number quoted above.

²⁶ The Minc6 data description document contains several typos. The document refers to 1,408 variables and then proceeds to break the 1,408 down into four different categories: family composition (287 variables), male head attitudes (411 variables), female head attitudes (411 variables), and husband and wife modules (327 variables). Adding the number of variables in each category suggests that there are 1,436 variables in the file. In actuality, there are 1,434 variables in the file as a counting error in the number of questions asked in the household head attitudes categories affects the male and female head categories (the male and female head attitudes categories are composed of the exact same survey questions asked of the male and female household heads individually).

²⁷ Sabourin (1979) finds 966 households that completed through to Survey 11. It is unclear what accounts for the discrepancy. Sabourin's analysis includes participants added as a supplementary sample in 1975. It is possible that Minc5 and Minc6 do not include the supplementary sample. The discrepancy might also be related to miscommunication between the research and operational teams of Mincome – with Sabourin's figures derived from research expectations and Minc5 and Minc6 derived from operational results.

²⁸ The household head is typically assumed to be the adult man in double-headed households.

²⁹ The coding legend is specified in the data description documents, however, the coding scheme appears to vary.

It is clear that less thought was put into the selection of variables pertaining to non-labour supply response/social psychological issues than to variables concerning labour supply. Rossi (1975) argues, at least in the case of the New Jersey experiment, that this has to do with a relative de-emphasis of the role that non-economists played in the planning of the experiment. It is apparent that this was also the case for Mincome, or at least that the input of the non-economists carried less weight (S.E. Bennett, personal communication). Variables important to housing researchers are inconsistent or missing. Data points on housing costs (e.g., mortgages and rents) likely suffered from poor validation, as these variables are extremely inconsistent across time periods. No data exists for the physical aspects of the dwelling (e.g., square footage, hours of direct sunlight, outdoor space, etc.) or previous housing experience. Duration in the current household also suffers from poor data, as this variable contains many missing data points. It is also difficult to discern if a household changed residences during the experiment. Even a variable as important as household income is difficult to construct from these datasets. A whole series of separate income variables must be summated to get a total household income and the reliability of this summation is not perfect. That said, it is notoriously difficult to precisely determine household income. The “normal” income calculated for assignment is not included in these datasets, nor is a variable that indicates whether a household is below or above the breakeven threshold. It is possible that some of this information is available in other Mincome datasets, but I am unaware of this. Researchers that examine consumption behaviour, including the consumption of housing (homeownership) in the New Jersey experiment also suggest weakness in data collection that hinders analysis (Wooldridge, 1977; Rossi, 1975).

Because this analysis requires variables from each of the Mincome datasets, a composite dataset was constructed by joining the Mincome datasets on family identifier. The composite dataset also has 1,290 records. Considerable care was required to identify the pertinent variables (described below) in the Mincome datasets and append them to the composite dataset, as the variables in the raw datasets appear only as V1, V2, ... V1434, for example. The theoretical variables that are available in the Mincome data, include: income, life cycle position variables (household size and age) and tenure status. In place of race/ethnicity I include a variable for years in Canada, given the less defined racial lines in Canada relative to the U.S and the low number of cases that stratifying by ethnicity produces. That said, subsequent analysis might look to examine differences between whites, or long-term Canadians (however defined), and First Nations Peoples. I also include involvement in social clubs as a proxy for social participation/engagement. Completion of high school and car ownership are included to control for educational and income differences, though this is admittedly crude.

4.3 Technique of Analysis

The method of analysis put forth here is multiple regression analysis. Multiple regression allows the researcher to find the impact that several different predictor (independent) variables have on an outcome (dependent variable). As discussed in Section 3.3, housing satisfaction is not a variable that can be predicted on the basis of one predictor; the physical aspects of the dwelling, income, ownership status, etc. all influence housing satisfaction. That said, the varying levels of experimental treatment and the constrained randomisation assignment model employed by Mincome complicates multiple regression. Despite there being different family type and normal income

distributions between treatment groups and between any given treatment group and the control group (discussed above), regression analysis is still plausible. Within each family type-normal income stratum there are no expected non-experimental differences between experimentals and controls, as assignment within a stratum is based on a control weight that is a function of the treatment weights in that stratum. Keeley, Spiegelman and West (1980) explain that this means each person's response with respect to an outcome variable (e.g., housing satisfaction) can be predicted as the sum of: the mean non-experimental effect (i.e., the effect from the various independent variables other than "treatment"), the mean treatment effect and an error term – each within that person's assignment stratum in the experimental period. By collapsing the eight different treatment groups into one (not including the control group), the total non-experimental effect and the total experimental effect can be obtained. In effect, this averages variations in housing satisfaction across the treatment groups. This of course precludes comparisons of experimental effect between treatment groups. However, a more complex analysis that took into account the initial differences in assignment would be hampered by low numbers of observations in each treatment group, negating the validity and inferential power of the analysis.

Four different regression models are run, each conducted with Stata SE 13.1 using the "nestreg" function. In each model, the dependent variable is an index of housing satisfaction and the main independent, or experimental, variable is a dummy variable delineating presence in a treatment group (=1) relative to the control group (=0). The decision to use a summated index for housing satisfaction was made in order to better capture the various dimensions of housing satisfaction (i.e., various physical and social

aspects) in the analysis, rather than using a logit model for “Overall Satisfaction” alone. I anticipated that a factor analysis would capture the different dimensions of housing satisfaction (perhaps physical, social and overall), however, the factors were inconsistent across different survey periods and thus were not used. Other theoretical variables, selected on the basis of their use as predictors in other studies of housing satisfaction and discussed above, are added in a stepwise manner.

Mincome was a panel study and so regression models incorporating these variables are run at different cross-sections of time to compare the effect of the negative income tax on housing satisfaction. More specifically, regression models are run at Survey 2 and Survey 10. Survey 2 was the enrolment survey and completion of this survey was required to be eligible for enrolment in the payments program. Hence, no payments were made to participants before Survey 2, giving a baseline picture of housing satisfaction among participants. Survey 10 occurred approximately three years after Survey 2 and was the second to last interview of the experiment. Only participants that completed both surveys and did not undergo a headship change in their household are included in the analysis. This allows for comparison of standardised coefficients to determine the relative importance of different independent variables in impacting housing satisfaction. This decision, however, may limit the inferential power of the models if the participants that completed to the end of the experiment were characteristically different than those that did not. Sabourin (1979) investigates attrition in the Mincome experiment and finds that for households that enrolled in a payments program attrition was largely based on the generosity of the treatment plan. Less generous plans (including the control group) saw higher attrition throughout the experiment. Sabourin (1979) and Sabourin

and Hum (1979) examine refusals, which differ from attriters in that they never agreed to enroll in a treatment plan. Sabourin (1979) investigates refusals at the baseline interview (Survey 1) and finds that income level was not a strong predictor of completion, while welfare experience was (those with welfare experience were more likely to complete the interview). Households with three or more earners were also more likely to refuse. Sabourin and Hum (1979) investigate non-response at the baseline and enrolment interviews (Surveys 1 and 2) to determine if the subpopulation that participated in the periodic interviews was characteristically different than the general population. They find that non-responders to both interviews were typically families with older heads and higher male head earnings. Kurz (1979) interprets these results and concludes that there is no systematic bias in non-response and attrition. He concludes that while the attrition problem was severe in Mincome, the remaining database was sufficient to draw inferences to the larger population.

The questions asked with regard to housing satisfaction were asked separately to female and male household heads, so the analysis is stratified by gender. It is possible to average male and female responses to get an average household-level housing satisfaction estimate and enter gender as an independent variable, however, this requires using only household-level independent variables. Because age is an important variable to consider when studying housing satisfaction, I have chosen to stratify by gender. The four models included in the proceeding analysis then correspond to: females at Survey 2, males at Survey 2, females at Survey 10, and males at Survey 10.

4.4 Limitations of Multiple Regression Analysis

One of the biggest limitations of multiple regression as a tool for determining causality is the way in which a regression model controls for differences among independent variables. Independent variables can be used as statistical controls in a regression model, allowing the researcher to isolate the effect of any single independent variable. Of course, statistical controls cannot be as effective as experimental controls in controlled laboratory conditions. Allison (1999) uses the example of an analysis of the effectiveness of a training course in improving SAT scores. A regression model can control for 'intelligence' by including high school grad point average (GPA) as a variable in the model. The model can then compare those who took the training course and those who did not across any given GPA score. However, GPA is not the only variable by which people vary. If several other variables are added as controls, it could very well be that only very small groups of individuals align with respect to the various controls, limiting the inferential capability of the model. This problem can be ameliorated with large sample sizes, however, the fact remains that there are an infinite number of ways in which people or circumstances can vary. Experiments, by way of random selection and random assignment to treatment and control groups, can better ensure similarity between groups, as random assignment will average away any differences.

Mincome was indeed an experiment that followed the principles of random selection and assignment (to some degree), however, it was not established to test the effect of a negative income tax on housing satisfaction. Being primarily about labour supply, Mincome's sample was stratified according to family type and normal income, as different labour supply responses were expected for different family types (e.g., single

individuals versus double income families) and income levels. If the experiment was focused on housing satisfaction, variables such as tenure status and/or monthly housing costs may have been selected as stratifying variables. As such, the model used in this analysis relies on the statistical controls, albeit with an enhanced assurance that experimentals and controls are relatively similar.

5 Chapter: Data Analysis

5.1 Description of Variables

During the Mincome experiment, a different mix of questions was asked at different periodic interviews so not to make each interview too long and demanding on the participant. Unfortunately, not all the variables used in the models were asked at Surveys 2 and 10. Variables that were only asked once at the beginning of the experiment are thus assumed to be static throughout the experiment. These variables are membership in clubs (social participation) and completion of high school. In other cases, care is taken to use the nearest response time if the variable is not measured at Surveys 2 or 10. At worst, there is a one-survey gap (approximately three months) and this is assumed to be inconsequential.

With respect to the dependent variable indices of housing satisfaction, summated ratings indices are created for each gender at each point in time. This is consistent with the approach of researchers of the New Jersey experiment who examine social psychological phenomenon (see Rossi, 1975 for a synopsis of studies). Each index contains nine questions that were asked separately to both female and male heads at Surveys 2 and 10. The nine questions ask the respondents to rank on a scale of 1-5, with 1 being “very satisfied” and 5 being “very dissatisfied,” how satisfied they are with different aspects of their housing. Upon creation of an index, the coding of responses has been transposed, so to make greater satisfaction correspond with higher scores. The different aspects of housing satisfaction asked in the surveys include satisfaction with: space and number of rooms, costs of living, shopping facilities, schools in the area, facilities for recreation, type of neighbours, economic opportunity, distance from

relatives, and overall satisfaction. Other questions on housing satisfaction were added towards the end of the experiment (after Survey 7) and therefore cannot be included when drawing comparisons between the beginning and the end of the survey. One of the assumptions of regression analysis is that the dependent variable is continuous. Variables that measure satisfaction on a scale of 1-5 are obviously not continuous, but the creation of a summated index generates a variable that better approximates continuity. The summated indices for housing satisfaction can range between 9 and 45, with higher scores suggesting greater levels of satisfaction. The indices adequately represent the variances in each of the underlying variables. The Cronbach's alpha scores for the indices range from 0.68 to 0.77 and are considered adequate. Summary statistics of the indices are presented in Table 1, stratified by gender and research group (treatment or control).

Table 1: Mean Housing Satisfaction Index Score

Variable	Mean	
	Treatment	Control
Females at Survey 2	n = 213 $\bar{x} = 35.51$	n = 110 $\bar{x} = 35.45$
Females at Survey 10	n = 213 $\bar{x} = 36.95$	n = 110 $\bar{x} = 36.71$
Males at Survey 2	n = 242 $\bar{x} = 35.17$	n = 121 $\bar{x} = 35.05$
Males at Survey 10	n = 242 $\bar{x} = 36.63$	n = 121 $\bar{x} = 36.13$

It is interesting to note that housing satisfaction increases slightly for both female and male heads over the course of the Mincome experiment, however, this is true for both treatment and control groups. This could suggest broader macro-economic changes (e.g., rising property values) or a bias due to reporting effect in that consistently having to evaluate your housing may induce a change in perceptions about housing.

Other variables used in the regression analyses are presented in Table 2. The only theoretical variable that does not relate to socio-economic status is social participation. The latter is a dummy variable created from responses to a question about the number of clubs, organisations or groups attended regularly. This question was only asked once at Survey 2. Socio-economic variables include age, tenure status (dummy), household size, completion of high school (dummy), household income, car ownership (dummy), and years in Canada (dummy). The number of years residing in a country is not generally associated with housing satisfaction models. However, there are too many missing cases in the Mincome data with respect to ethnicity and number of years in the current dwelling. Thus, dummy variables that categorise years in Canada can act as a proxy for number of years in the current dwelling or neighbourhood familiarity. This variable is calculated based on a question asked in Minc6 pertaining to the year and month the respondent entered Canada. Missing data for this question implies that the respondent was born in Canada. Minc6 also asks respondents whether or not they completed high school. Age and household size are calculated from birthdate (BIRTH) and relationship to the head of household (RTH) variables that appear in Minc6. Birthdate for each member of the household is matched to relationship to household head in order to get ages for male and female household heads. Household size is calculated by counting the

number of family members in each household (i.e., how many fields are filled in the relationship to head variable). Tenure status, household income and car ownership are calculated from variables in Minc5. Car ownership is assumed if the family gives a response to a question concerning the total value of all owned vehicles. Household income is the sum of many variables, including: male head job earnings, female head job earnings, the job earnings of other adults in the family, family job transfers (unemployment insurance payments, job training allowances and/or worker's compensation), income received from property (rents and/or board and room income), income from government sources (family allowances, pensions, old age security payments, tax returns), income from private sources (private pension payments, insurance annuities, child support from a previous spouse), and any welfare payments received. Tenure status is the most imprecise variable imputed from the datasets. It is based on the presence of a response to a question concerning the estimated resale value of owned dwellings. Other variables that could be used to identify renters from homeowners are too irregular to be used with any precision. For instance, Minc5 includes a variable for monthly rent paid after the Manitoba rent subsidy, but it is unclear whether a "0" in these fields means that the subsidy covers all rent costs or the household does not rent. There did not seem to be much correlation between this field and estimated resale value of owned dwellings. Another variable, principle outstanding on owned dwelling, is far too inconsistent to be used to determine tenure status. Responses for many families vary greatly from survey to survey. With estimated resale value of owned dwelling, there is greater consistency. When a family's response to this question goes from a positive value to zero, it can be implied that the family no longer owns a home. It is worth noting

that there are far more responses of “0” to the question of estimated resale value of owned dwelling towards the end of the experiment. Did increasingly high mortgage lending rates force the low-income study participants to sell?

Correlations between the independent variables are generally weak ($r < 0.1$). The strongest observed correlation between independent variables is age and household size for male heads of household at $r = 0.44$. All variance inflation factors are just slightly above 1.0, indicating no multicollinearity problems.

Table 2: Independent Variables

Variable	Level of Measurement	Categories/Range
Treatment (assigned at Survey 1)	Nominal (dummy)	0 = control 1 = treatment
Social Participation (asked at Survey 2)	Nominal (dummy)	0 = attend no clubs 1 = attend one club or more
Age (generated from birth year asked at Survey 1)	Ratio	18-65 (women) 19-60 (men)
Tenure Status (based on resale value of owned dwelling asked at Surveys 1 and 10)	Nominal (dummy)	0 = renter 1 = homeowner (non-homeowners assumed to be renting)
Household Size	Ratio	1-13
Completion of High School (asked at Survey 1)	Nominal (dummy)	0 = no 1 = yes
Household Income	Ratio	6 – 27,925

Car Ownership (asked at Surveys 1 and 11)	Nominal (dummy)	0 = no 1 = yes
Years in Canada (asked at Survey 1)	Ordinal (dummies created for groups 1, 2 and 3)	0 = born in Canada 1 = non-recent immigrant 2 = immigrated 5-10 years ago 3 = immigrated less than 5 years ago

5.2 Multivariate Analysis

Ordinary least squares regressions are presented in Tables 3-6 below.

Unstandardised partial regression coefficients are presented with standardised beta coefficients in brackets for ratio level variables. An analysis of results follows in Section 5.3.

Table 3: Female Household Heads at Survey 2 (n = 323)

Step	Variable	
1	Treatment	0.07
	R ²	0.0
2	Treatment	0.10
	Social Participation	1.80***
	R ²	0.02
3	Treatment	0.40
	Social Participation	1.17*
	Age	0.16 (0.25)***
	Tenure Status	0.46
	Household Size	-0.14 (-0.04)
	Completion of High School	0.89
	Household Income	-0.0 (-0.04)
	Car Ownership	1.83***
	Non-Recent Immigrant	-0.17
	Immigrated 5-10 Years Ago	-2.45**
	Immigrated <5 Years Ago	1.73
	R ²	0.09

* = $p < 0.1$

** = $p < 0.05$

*** = $p < 0.01$

Table 4: Female Household Heads at Survey 10 (n = 323)

Step	Variable	
1	Treatment	0.24
	R ²	0.0
2	Treatment	0.24
	Social Participation	0.24
	R ²	0.0
3	Treatment	0.56
	Social Participation	-0.05
	Age	0.10 (0.17)***
	Tenure Status	1.65***
	Household Size	-0.05 (-0.02)
	Completion of High School	1.03*
	Household Income	-0.0 (-0.02)
	Car Ownership	-1.42
	Non-Recent Immigrant	-0.34
	Immigrated 5-10 Years Ago	-2.33*
	Immigrated <5 Years Ago	-0.33
	R ²	0.08

* = $p < 0.1$

** = $p < 0.05$

*** = $p < 0.01$

Table 5: Male Household Heads at Survey 2 (n = 363)

Step	Variable	
1	Treatment	0.12
	R ²	0.0
2	Treatment	0.07
	Social Participation	1.40**
	R ²	0.02
3	Treatment	0.21
	Social Participation	1.30
	Age	0.09 (0.16)***
	Tenure Status	1.08*
	Household Size	-0.05 (-0.02)
	Completion of High School	-0.64
	Household Income	0.0 (0.01)
	Car Ownership	1.11*
	Non-Recent Immigrant	-1.27
	Immigrated 5-10 Years Ago	-1.21*
	Immigrated <5 Years Ago	1.95
	R ²	0.09

* = $p < 0.1$

** = $p < 0.05$

*** = $p < 0.01$

Table 6: Male Household Heads at Survey 10 (n = 363)

Step	Variable	
1	Treatment	0.50
	R ²	0.0
2	Treatment	0.49
	Social Participation	0.35
	R ²	0.00
3	Treatment	0.64
	Social Participation	0.03
	Age	0.13 (0.24)***
	Tenure Status	1.11**
	Household Size	0.08 (0.03)
	Completion of High School	-0.19
	Household Income	0.0 (0.05)
	Car Ownership	-1.63**
	Non-Recent Immigrant	-1.05
	Immigrated 5-10 Years Ago	-3.17***
	Immigrated <5 Years Ago	1.71
R ²	0.13	

* = $p < 0.1$

** = $p < 0.05$

*** = $p < 0.01$

5.3 Analysis

At first glance, the low R^2 values and lack of statistical significance for many of the variables is disconcerting. That said, this is to be expected for both analysis of Mincome data and housing satisfaction studies. With respect to the latter, several authors recognise this phenomenon (Elsinga & Hoekstra, 2005; Galster & Hesser, 1981; Ginsberg & Churchman, 1984; Morris, Crull & Winter, 1976). Elsinga and Hoekstra (2005) and Galster and Hesser (1981) attribute this to the highly subjective nature of evaluations of housing satisfaction. A multitude of personal circumstances contributes to such evaluations and these personalised circumstances cannot be accounted for in a finite set of variables. Economist Robert Solow (1986) remarks on the lack of statistical significance and low coefficient magnitudes in the U.S. NIT experiments as follows:

statistically significant response-coefficients are hard to come by... This is hardly surprising, it is a very common outcome in cross-section studies with individuals as the unit of observation. No doubt it reflects both the inherent variability of each individual's behavior and the variation among individuals in their average response... We are talking about fairly commonplace aspects of behavior, not about responses to exotic stimuli or extreme situations. If sharp responses were to be expected we would already know about them; nobody spends millions of dollars to verify the obvious. (p. 219)

Rossi (1975) adds that the homogenous nature of the participants in the NIT experiments (in this case, low-income, English-speaking and working age households in Winnipeg) probably means that differences in social psychological variables are hard to detect.

Despite low explained variances, trends emerge from the analyses. It is important to note that when reviewing the data from Survey 2 (both women and men) any impact that the treatment is shown to have is irrelevant, because this survey was used to enroll participants into treatment programs. Results from the regression at Survey 10 show that the treatment had no statistically significant impact on housing satisfaction. Again,

detecting statistical significance for responses pertaining to housing satisfaction is infrequent. That said, this analysis, by combining all treatment groups, does not lend itself to producing statistically significant results. Much more complicated analyses may be the subject of future research endeavours, though statistical significance, or even differences in housing satisfaction outcomes among treatment groups, will not be ensured.

Several commonalities with respect to the determinants of housing satisfaction emerge for both women and men. For both women and men, age is a positive and statistically significant determining factor of housing satisfaction. This agrees with studies by Galster and Hesser (1981), who find that older respondents tend to offer higher evaluations for both neighbourhood satisfaction and satisfaction with house size, and Lane and Kinsey (1980) who find that housing satisfaction increases with age.

Tenure status also plays an important role in determining housing satisfaction, confirming findings by Elsinga and Hoekstra (2005) and Diaz-Serrano (2009), which suggest that homeowners typically identify as being more satisfied. Interestingly, for women respondents, tenure status only occupies a statistically significant role at Survey 10. Perhaps a basic income makes homeownership a more realistic and attainable goal and the positive responses reflect such achievement? This would be consistent with studies by Pozdena and Johnson (1980) and Wooldridge (1977) that find an increased probability of homeownership for treatment groups (though this finding is refuted by Poirier [1977]). Unfortunately, the Mincome data contains no straightforward variable on homeownership. Individual perceptions of variables such as “resale value of owned

dwelling” are given but are not reliable enough to make confident estimates of homeownership.

Car ownership shows an interesting pattern for both women and men. At the second survey, car ownership is positively related to housing satisfaction, while the relation is negative at the tenth survey. Could it be that a basic income allows people to accumulate more assets, relegating car ownership to a more general condition and making homeownership a higher goal? Perhaps a basic income allows one (or a family) to move to more suitable accommodations, closer to work or school, thereby limiting a car’s return?

Immigration plays an important role in evaluations of housing satisfaction for both women and men. It appears that being a more recent immigrant (within the five years previous to the start of the experiment) is associated with positive responses to questions about housing satisfaction, while for immigrants living in Canada for a longer period of time, housing satisfaction outcomes decline. Statistics Canada compiled survey data on the immigration cohort of 2000-2001 and asked about various dimensions of satisfaction with life in Canada. The data is analysed by Houle and Schellenberg (2010) who find that between six months and four years of arrival in Canada, the likelihood of being satisfied with life in Canada among respondents declines by four percent. This decrease jumps to six percent when access to housing is the focus of satisfaction. The immigrant adjustment process is no doubt a difficult one and housing is one aspect of that process. After several years in the country it is also likely that settlement services for assistance with housing issues declines as resources move to helping newer arrivals with settlement.

Lastly, it is worthwhile to note that the unstandardised regression coefficients for the presence of a basic income guarantee (Treatment = 1) are greater in Survey 10 than they are in Survey 2 for both women and men, this despite household income having no effect. This suggests that the presence of an income guarantee helps to improve housing satisfaction (though not by a statistically significant margin). This is generally consistent with Wooldridge's (1977) study of homeownership. Wooldridge finds that there is an increased probability of owning a home for those in treatment groups, even for those below the breakeven level (thus, received no payments). However, Wooldridge uses a probit regression model where her dependent variable only takes two variables – own or rent – and this type of model should be used to confirm this finding.

6 Chapter: Conclusion

This thesis provides a new look at the North American negative income tax experiments. I argue that the incorporation of the idea of basic income into mainstream circles in the first half of the twentieth century shifted emphasis from the structure-altering potential of a basic income to the individual behavioural changes that it might induce. This meant that debate about basic income (achieved through a negative income tax) in the 1960s centred on the labour supply responses that it might bring about. Labour supply response is one of many individual behavioural responses that a basic income might induce. Analyses of other types of responses are useful for interpreting the social significance of a basic income (Pechman & Timpane, 1975). This thesis presents an analysis of the impact of a basic income on individual satisfaction with housing. The results are negative – no statistically significant impact can be discerned. While this does not fit with the general theory that, by guaranteeing the earnings of low-income households, a negative income tax allows for consumptive or attitudinal changes that can contribute to an improvement in housing satisfaction, the negative findings are not surprising and match those of other analyses that examine individual satisfaction and well-being.

The limitations of this analysis must also be recognised and might offer some prospects for future research. The model employed here compares responses at two cross-sections of time. This approach is limited, in that it doesn't take into account the effect that previous responses to housing satisfaction have on subsequent responses. That said, a more complex panel data regression model may suffer from missing data and thus a limited number of responses. I have also grouped all treatment groups together to avoid

accounting for differences in assignment probabilities. A more complex analysis might shed light on differences in housing satisfaction between different treatment groups. Several problems with the raw Mincome data were discussed in Chapter 4 and more research efforts should be devoted to cleaning it up and constructing reliable variables (say of household income or homeownership) for future researchers.

The general analysis of individual behaviour employed here is not superior or inferior to more macro-level or structural investigations of poverty or basic income. It is important to theorise and investigate both and to consider the possibilities involved with each type of study. Individual behavioural responses gathered from social experimentation, while providing information about the impact on poverty at the micro-level, can also offer insights into questions about economic and social structures. For example, in a future long-term basic income experiment an analysis of individual wage rates, unionisation rates or union activities more generally might shed light on how the bargaining relationship between workers and employers is altered in the presence of a basic income. Would an increase in wage rates imply that the cost of job loss for employees has been significantly decreased by the basic income, forcing employers to offer more in order to retain skilled workers? These types of investigations may utilise individual-level data (e.g., individual wage rates or union membership), but can shed light on macro-level considerations of inequality and the bargaining relationship between labour and capital. It is also possible with future experimentation to better study various dimensions of poverty. The fundamental allure of a basic income is the potential that it has to ameliorate, or even eliminate poverty in a capitalist society. This point is clear when reviewing the history of the basic income idea as done in Chapter 2 of this work.

More recent experiments in Brazil, India and Namibia have sought to do just this. In Canada, given the support for basic income from the Canadian Medical Association (see Canadian Medical Association, 2015) and Food Secure Canada (see McNicoll, 2015), there should be ample motivation to review health and nutritional outcomes should future experiments take place.

In terms of more structural types of analysis, the body of research on basic income following the negative income tax experiments has begun to address the potential for structural change that a basic income presents. André Gorz (1999) views basic income as a tool to help move beyond the wage-based society and dramatically alter the nature of work. Basic income, in Gorz's view, will produce a more optimal distribution of socially necessary work (both paid and unpaid) and socially produced wealth. Philippe Van Parijs (1995) believes that a basic income can allow people to experience "real freedom." Real freedom includes not only the absence of prevention from exercising one's will, but also the resources to carry out that will. Some may discredit such theorising as utopian and unrealistic, however, as Gorz writes, "it is the function of utopias ... to provide us with the distance from the existing state of affairs which allows us to judge what we *are* doing in the light of what we *could* or *should* do" (p. 113, emphasis in original).

What lessons can be gleaned from the North American NIT experiments? What impact did they have? Ultimately, the experiments did not induce policy-makers to pass some form of basic income legislation in either the U.S. or Canada. Some might call that a failure. However, the experiments are still newsworthy today and their impact on public opinion, at the very least, is long lasting (see Widerquist, 2005 for a survey of [the

largely negative] popular opinion espoused immediately following the experiments. It is my impression that popular opinion is much more positive today). As mentioned in the Introduction, polities and politicians all over the world are talking about basic income and a new round of experiments is possible. There are lessons to be learned from the NIT experiments. Most importantly, a more fruitful combination of disciplinary talents should be leveraged in any future experiment (Rossi, 1975). The fact that several of the sociological variables measured were measured inconsistently or poorly and their recording haphazard, points to the lack of importance that was afforded to them by those in charge of the experiments. While the NIT experiments did not directly influence policy in the 1970s, the U.S. experiments as well as Mincome were both heavily influenced by political decision-making. In New Jersey there was a rush for results, which when released were criticised viciously for being premature. In Manitoba, changes of government and shifting political priorities ended enthusiasm, and ultimately, funding for the project. This suggests that social experimentation is just as political as it is scientific (Levine, 1975). Without making guesses or assumptions about political outcomes, researchers should be aware of this unpredictability.

Appendices

Appendix A Mincome Housing Satisfaction Questions

The following is taken from the data description document for Minc6, the “Family Composition and Attitudes File,” and shows the survey questions that pertain to this study’s dependent variable, housing satisfaction. Note that the “Head Information Records” were asked of female and male heads of households separately. Also note that the summated ratings index used in this study’s regressions reverse the order of the coding to be more intuitive (greater satisfaction associated with higher scores).

“... ”

2.1.2 Head Information Records

...

Field	Name	Description
		Housing Satisfaction Questions
122-125	HS011 to HS014	With space and no. of rooms
126-129	HS021 to HS024	With costs of living here
130-133	HS031 to HS034	With shopping facilities
134-137	HS041 to HS044	With schools in area
138-141	HS051 to HS054	With facilities for recreation
142-145	HS061 to HS064	With type of neighbours
146-149	HS071 to HS074	Economic opportunity
150-153	HS081 to HS084	Distance from relatives
154-157	HS091 to HS094	Overall
158-159	HS101 to HS102	With privacy and noise
160-161	HS111 to HS112	With amount of privacy
162-163	HS121 to HS122	With noise level
164-165	HS131 to HS132	With physical condition--house/apt.
166-167	HS141 to HS142	With landlord of property
168-169	HS151 to HS152	With physical condition--area
170-171	HS161 to HS162	With location satisfaction--buses
172-173	HS171 to HS172	With shopping facilities in area
174-175	HS181 to HS182	With location satisfaction--work
176-177	HS191 to HS192	Convenient recreation and entertainment

178-180

HS201 to HS203

Overall location satisfaction

...

2.2 Detailed Description of Variables and Values

...

2.2.2 Head Information Records

...

122. Fields #122 to 180: Housing satisfaction questions
These attitude questions were asked of heads four times (at Survey 2, 3, 7 and 10), with the following exceptions:

1. The Survey 2 and 3 question probing satisfaction with privacy and noise HS10 was asked as two separate questions for Survey 7 and 10, namely a question on privacy and a separate one on noise (HS11 and HS12).
2. HS13 to HS19 were only asked twice (at Survey 7 and 10).
3. HS20 on overall location satisfaction was asked three times (at Survey 3, 7 and 10).

Each of the questions asked about head's satisfaction with various aspects of their house/apartment or the area they lived in and the coding categories are as follows:

- 1 = very satisfied
- 2 = somewhat satisfied
- 3 = neither satisfied nor dissatisfied
- 4 = somewhat dissatisfied
- 5 = very dissatisfied

...”

Appendix B Partial Correlation Matrices for Multiple Regressions

B.1 Female Heads' Responses at Survey 2

	Treatment	Social Participation	Tenure Status	Age (Surveys 2, 3, 4)	Household Size	Completion of High School	Household Income	Car Ownership
Treatment	1.0000							
Social Participation	-0.0187	1.0000						
Tenure Status	-0.0742	0.0927	1.0000					
Age (Surveys 2, 3, 4)	-0.0965	0.1077	0.3902	1.0000				
Household Size	0.0672	0.0830	0.2018	0.3924	1.0000			
Completion of High School	0.0249	0.0158	-0.0407	-0.1785	-0.2437	1.0000		
Household Income	-0.0387	-0.0731	0.2842	0.1896	0.1157	0.0739	1.0000	
Car Ownership	0.0178	0.1085	0.1654	-0.0244	-0.0412	0.0738	0.1202	1.0000
Non-recent Immigrant	-0.0241	-0.0116	0.0821	0.0673	0.0170	0.0370	0.0051	0.0058
Immigrated 5-10 years Ago	0.0322	-0.0694	-0.0520	0.0304	-0.0867	0.1312	0.0242	0.0022
Immigrated Less Than 5 Years Ago	-0.0166	0.0076	0.0853	-0.0373	0.0291	0.1300	0.0596	-0.1154

Non-recent Immigrant	Immigrated 5-10 years Ago	Immigrated Less Than 5 Years Ago
1.0000		
-0.0806	1.0000	
-0.0757	-0.0555	1.0000

B.2 Female Heads' Responses at Survey 10

	Treatment	Social Participation	Tenure Status	Age (Surveys 8, 9, 10, 11)	Household Size	Completion of High School	Household Income	Car Ownership	Non-recent Immigrant
Treatment	1.0000								
Social Participation	-0.0187	1.0000							
Tenure Status	-0.0792	0.0357	1.0000						
Age (Surveys 8, 9, 10, 11)	-0.0965	0.1077	0.1857	1.0000					
Household Size	0.0672	0.0830	0.0379	0.3924	1.0000				
Completion of High School	0.0249	0.0158	0.1122	-0.1785	-0.2437	1.0000			
Household Income	-0.0257	0.0894	0.2029	0.0982	0.1139	0.0368	1.0000		
Car Ownership	0.0017	0.0306	0.0958	-0.0694	-0.0483	0.1741	0.1917	1.0000	
Non-recent Immigrant	-0.0241	-0.0116	0.0253	0.0673	0.0170	0.0370	0.0133	0.0489	1.0000
Immigrated 5-10 years Ago	0.0322	-0.0694	-0.0040	0.0304	-0.0867	0.1312	-0.0292	-0.0022	-0.0806
Immigrated Less Than 5 Years Ago	-0.0166	0.0076	0.1790	-0.0373	0.0291	0.1300	0.1520	-0.0581	-0.0757

Immigrated 5-10 years Ago	Immigrated Less Than 5 Years Ago
1.0000	
-0.0555	1.0000

B.3 Male Heads' Responses at Survey 2

	Treatment	Social Participation	Tenure Status	Age (Surveys 2, 3, 4)	Household Size	Completion of High School	Household Income	Car Ownership	Non-recent Immigrant
Treatment	1.0000								
Social Participation	0.0375	1.0000							
Tenure Status	-0.0636	0.0113	1.0000						
Age (Surveys 2, 3, 4)	-0.0205	0.0614	0.3478	1.0000					
Household Size	0.0584	0.0158	0.3104	0.4399	1.0000				
Completion of High School	0.0119	0.1517	-0.1254	-0.1980	-0.2963	1.0000			
Household Income	-0.0235	0.0336	0.3387	0.1974	0.2191	-0.0038	1.0000		
Car Ownership	-0.0000	0.0393	0.2371	0.0476	0.1807	-0.0372	0.1692	1.0000	
Non-recent Immigrant	-0.0580	0.0149	0.0183	0.0983	0.0196	-0.0444	0.0553	0.0266	1.0000
Immigrated 5-10 years Ago	0.0171	-0.0374	-0.0503	0.0356	-0.0026	0.1250	0.0266	0.0079	-0.0931
Immigrated Less Than 5 Years Ago	-0.0538	0.0325	0.0714	-0.0107	-0.0492	0.1520	-0.0045	-0.1795	-0.0881

Immigrated 5-10 years Ago	Immigrated Less Than 5 Years Ago
1.0000	
-0.0552	1.0000

B.4 Male Heads' Responses at Survey 10

	Treatment	Social Participation	Tenure Status	Age (Surveys 8 9, 10, 11)	Household Size	Completion of High School	Household Income	Car Ownership	Non-recent Immigrant
Treatment	1.0000								
Social Participation	0.0375	1.0000							
Tenure Status	-0.0629	0.0191	1.0000						
Age (Surveys 8 9, 10, 11)	-0.0205	0.0614	0.2083	1.0000					
Household Size	0.0584	0.0158	0.2275	0.4399	1.0000				
Completion of High School	0.0119	0.1517	-0.0309	-0.1980	-0.2963	1.0000			
Household Income	-0.0272	0.1362	0.2372	0.1699	0.2250	0.0865	1.0000		
Car Ownership	-0.0057	-0.0036	0.1759	-0.0062	0.1549	-0.0422	0.2366	1.0000	
Non-recent Immigrant	-0.0580	0.0149	0.0054	0.0983	0.0196	-0.0444	0.0389	0.0083	1.0000
Immigrated 5-10 years Ago	0.0171	-0.0374	0.0158	0.0356	-0.0026	0.1250	0.0477	0.0247	-0.0931
Immigrated Less Than 5 Years Ago	-0.0538	0.0325	0.1226	-0.0107	-0.0492	0.1520	0.0114	0.0160	-0.0881

Immigrated 5-10 years Ago	Immigrated Less Than 5 Years Ago
1.0000	
-0.0552	1.0000

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