TESTING TIME

Uncovering Potential
Impacts of Project Duration
in Basic Income Pilots

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ABSTRACT

In recent years, basic income – sometimes referred to as universal basic income, or, guaranteed annual income – has resurfaced as a mainstream policy proposal. Basic income, in its simplest form, is an unconditional cash transfer from government to individuals or families that provides more dignity to recipients when compared to existing social assistance programs.

There is a growing appetite in Canada to develop more effective poverty reduction strategies, and Ontario has recently taken the lead with a newly deployed Basic Income Pilot Project. This pilot, and others alike, are testing how recipients will use basic income, and whether such a policy would be an innovative replacement for the complicated, contentious, and costly systems currently in place.

The research question in this Major Research Project (MRP) investigates the potential behavioural differences between short-term basic income pilot projects, and permanent policies. With a permanent basic income yet to be implemented, an experimental method was developed to better understand these potential differences.

Using 'Structured Scenario Interviews', the research found significant differences in the ways participants allocated basic income across two hypothetical time-based scenarios: a one-year basic income pilot; and a permanent policy. This method can be used as a complementary tool to adjust policies in existing pilot projects, allowing research teams to better understand expected behaviours under shorter time horizons. The method is applicable to basic income pilot projects in any jurisdiction.



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Introduction

Basic Income is a policy idea intended to provide all citizens with a sufficient financial safety net to afford the basic needs required in their given geographic location. It is an ageold idea but has never been implemented as an actual policy. It has, however, been tested through multiple government-led pilot projects around the world, and has recently returned to the mainstream policy arena.

Its resurgence, at least in the Canadian context, is largely due to three main factors: growing levels of poverty and homelessness, a widening income gap, and anticipated labour market disruptions from advancements in automation and artificial intelligence.² The first two factors have been steadily rising over the past few decades; it is the last point, however, that has garnered the most media attention.

Academics, economists, and policy makers have written extensively on various models, proposals, and implementation strategies. This project is neither in favour or opposed to the idea – it focuses on a specific area of inquiry regarding the design of basic income pilot projects. The research question focuses on the behaviour of basic income recipients in pilot projects, and whether the short-term nature of these studies might influence the ways they use the short-term funds, and why.

Using an experimental method, this project explores how basic income recipients would allocate basic income funds in pilot projects versus universally implemented policies. The hypothesis is that participants' cognizance of pilot projects' expiration dates will alter the perception, and potential, of said funds. For instance, recognition of short-term funding might compel participants to distribute cash in completely different areas than a real basic income. Interpreting the outcomes of a basic income without a strong understanding this issue may provide complications for basic income researchers in the data analysis phase of these pilots.

This MRP seeks to better understand this issue with two cohorts: nine participants with an annual income of less than \$34,000; and 10 participants earning over \$34,000. By thoroughly investigating how, why, and where funds are allocated between the two scenarios — a pilot project, and an actual policy — basic income research teams may have a new tool to adjust for potential discrepancies.

¹ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016. Pg. 9.

² Forget, Evelyn, Dylan Marando, Tonya Surman, and Michael Crawford Urban. Pilot lessons: How to design a basic income pilot project for Ontario. 2016. Pg. 1.

1

Putting Basic Income into Context

This chapter provides a brief explanation of basic income, and why it has resurfaced as a policy option today. There are varying approaches and proposals to basic income – this chapter summarizes the social and economic drivers that are justifying the rationale to test basic income as means to help address poverty, and proactively prepare for a rapidly evolving labour market.

Definition and Brief History

The idea of basic income has become a fashionable policy proposal in recent years, and although it may seem new to the average citizen, its philosophical basis was developed centuries ago.³ At its core, a basic income, sometimes referred to as 'universal basic income', or 'guaranteed annual income', is a 'no strings attached' monetary transfer from government to families or individuals.⁴ Basic income is intended to provide its recipients more dignity than welfare or other social programs, which carry a certain degree of social stigma. These programs are also designed in such a manner that, in order to meet the eligibility criteria, disincentivize labour market participation.⁵ Although it is often branded as a socialist policy, support for the idea has been championed by a diverse collection of "thinkers, activists and policy makers ranging from 18th century revolutionary Thomas Paine, to civil rights activist Martin Luther King Jr, to United States President Richard Nixon".6

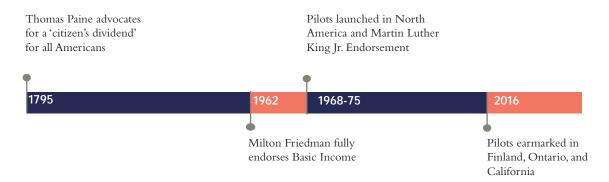
³ Forget, Evelyn, Dylan Marando, Tonya Surman, and Michael Crawford Urban. Pilot lessons: How to design a basic income pilot project for Ontario. 2016. Pg. 1.

⁴ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016. Pg. 9.

⁵ Ibid. Pg. 9.

⁶ Forget, Evelyn, Dylan Marando, Tonya Surman, and Michael Crawford Urban. Pilot lessons: How to design a basic income pilot project for Ontario. 2016. pg. 1.

Figure 1: Basic Income Timeline



There are numerous models and versions of basic income, but the general concept can be defined as a policy whereby a government provides a recurring and predictable income that is sufficient to meet one's basic needs in a given geographic location. There is a wealth of existing resources that break down the nuances and overlap between different forms of basic income, but that is not the purpose of this report. Nevertheless, it is important that the reader possess a broad understanding of the two main models that often get debated and piloted, namely a 'demogrant' and a 'negative income tax'.7

A demogrant provides a fixed payment of a consistent sum to every person, independent of their income, assets, or employment status. In this model, any earnings above what is deemed to be 'low-income' would be taxed according to the broader rate structure.8

A Negative Income Tax (NIT) is a model that follows the characteristics of a refundable tax credit where, for example, if the recipient has

no earnings, they would receive the full basic income amount. However, if income increases, the credit declines, and would end entirely once the amount reaches its cap. Depending on the version of NIT, the recipient's tax credit can therefore come at different ratios.9 An NIT is a completely different model than a demogrant, in that it is means tested and is not 'universal'.

8 Ibid.

⁷ Forget, Evelyn, Dylan Marando, Tonya Surman, and Michael Crawford Urban. Pilot lessons: How to design a basic income pilot project for Ontario. 2016. pg. 3.

Why Now?

Increased global recognition of a limited pool of natural resources has changed the way we view productivity. Advanced computation and the proliferation of the internet has disrupted and decentralized legacy communication systems at unprecedented rates. Globalized trade, migration, and rapid population growth have exacerbated competition and consumption for resources, and have drastically shifted the nature of work. Today's labour market is changing, fast.

Although these shifts are presenting opportunities for some, there is a growing number of individuals and families being left behind. As a result, there are two general directions in which governments can proceed: 1) maintain the status quo and continue to expand old models of public assistance by increasing conditional guaranteed minimum income schemes; or 2) implement an unconditional model of basic income. For the former, there is ample evidence that, due to their conditionality, such schemes, as Van Parijs notes, "have an intrinsic tendency to turn their beneficiaries into a class of permanent welfare claimants. People are entitled to continuing handouts on the condition that they remain destitute and can prove it is involuntary". 11 In this harsh reality, welfare recipients are often subjected to intrusive and humiliating procedures that inhibit any likelihood of breaking free and achieving a sense of dignity.¹² As mentioned, basic income has a long history, but like many policies, it has resurfaced and is currently being tested and considered in various nations across the world, including Canada. It has been discussed in Quebec, Alberta, Prince Edward Island, and Ontario – where one of the world's largest pilots has recently commenced. ¹³

In 2016, the Mowat Centre, in collaboration with the Centre for Social Innovation, provided recommendations on the design of Ontario's pilot in their report, "Pilot Lessons". The report noted that, in addition to testing for new ways to tackle poverty and income inequality, the recent surge in interest in basic income can be attributed to a widespread recognition of the rapidly evolving nature of work.¹⁴

The following section will provide a high-level summary of the state of poverty and income inequality in Canada – with a focus on Ontario.

¹⁰ Van Parijs, Philippe, and Yannick Vanderborght. Basic income: A radical proposal for a free society and a sane economy. Harvard University Press, 2017. Pg. 5.

¹¹ Ibid. Pg. 7.

¹² Van Parijs, Philippe, and Yannick Vanderborght. Basic income:

A radical proposal for a free society and a sane economy. Harvard University Press, 2017. Pg. 7.

¹³ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016. Pg. 9

¹⁴ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016. Pg. 11.

In this harsh reality, welfare recipients are often subjected to intrusive and humiliating procedures that inhibit any likelihood of breaking free and achieving a sense of dignity.

Poverty

Poverty can be measured both in absolute and relative terms. Absolute poverty measures whether individuals have the ability to meet an income threshold for basic survival. This is an international standard that does not take broader 'quality of life' issues or social inequality into consideration. Canada measures poverty in three main ways: the low-income measure (LIM); the LICO (low-income cut-off), and the market basket measure (MBM).¹⁵

With the LIM, poverty rates are calculated as the portion of the population whose income is less than 50 percent of the median family income in any given year. This is a relative measurement that provides an assessment of how impoverished people fare when compared with the general population.¹⁶

The LICO is another relative measure for poverty that provides more nuance than the LIM. It is the income level below which a family would devote at least 20 percent more than the average family to necessities such as food, clothing, and shelter. If people fall below this threshold they would be deemed 'low-income'. ¹⁷

Statistics Canada also produces data on Canadian income through the Market Basket Measure, which is a measure of the disposable income required by a family in order to purchase goods that include shelter, food, transportation, and other basic needs. The MBM stands out amongst other measures as it is more sensitive to the geographical cost variations of goods and services.¹⁸

^{15 &}quot;How Canada Performs." Poverty - Society Provincial Rankings - How Canada Performs, www.conferenceboard.ca/hcp/Provincial/society/poverty. aspx#ftn1-ref. Accessed 8 Feb. 2018.

 $^{16\,}$ Low income measures." Statcan.gc.ca, 27 Nov. 2015, www.statcan.gc.ca/pub/75f0002m/2012002/lim-mfr-eng.htm.

^{17 &}quot;Low income cut-offs." Statistics Canada: Canada's national statistical agency / Statistique Canada: Organisme statistique national du Canada, 27 Nov. 2015, www.statcan.gc.ca/pub/75f0002m/2012002/lico-sfr-eng.htm.

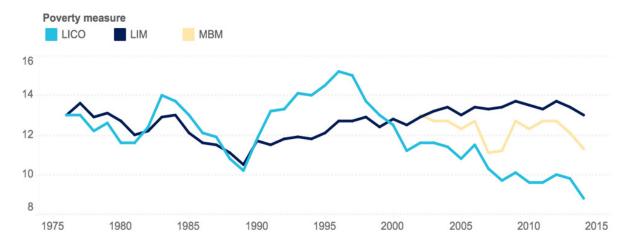
^{18 &}quot;Market Basket Measure (MBM)." National Household Survey (NHS) Dictionary, 4 Jan. 2016, www12.statcan.gc.ca/nhs-enm/2011/ref/dict/pop165-eng.cfm.

Figure 1 compares all three methods of poverty measurement over the last four decades; the Y axis represents the percentage of the Canadian population.

There are numerous critiques to setting policy based solely on insights from high-level quantitative data, where there is an assumed idea of free and equal choice amongst all citizens. The other side of poverty measurement takes a holistic approach, where sociologists study the reasons for poverty, such as "the roles of culture, power, social structure and other factors largely out of the control of the individual."¹⁹

Due to the complex and multidimensional nature of poverty, more needs to be understood about its social and behavioural aspects, such as being health-poor, house-poor, or time-poor, in order to develop effective poverty reduction programs.²⁰ It is therefore crucial that governments go beyond the economic measures for poverty and include the social, political and cultural aspects.

Figure 2: Poverty rates in Canada according to three measurement methodologies



Sources: Statistics Canada; The Conference Board of Canada

^{19 &}quot;Poverty." United Nations Educational, Scientific and Cultural Organization. Accessed February 12, 2018. http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/poverty/.

Table 1: Advantages and Disadvantages of Poverty Measurement Methodologies

Three Ways to Measure Poverty

Advantages Measure **Disadvantages** Low income measure (LIM): the · useful for international · gives no indication on whether the poverty line calculated as 50 per cent comparisons population is able to meet its of the median income of the basic human needs of food, · takes into account the issue of population in that country or region social exclusion clothing, and shelter · changes from year to year (as median income changes) · may send unclear messages about poverty during recession periods · implies, by definition, that poverty will always exist Low income cut-off (LICO): the · takes into account spending on · uses an arbitrary cut-off income level below which a family basic needs: food, clothing, and · is based on decades-old spending would devote at least 20 percentage shelter patterns points more than the average family · does not take into account of their income to food, clothing, and regional differences-e.g., shelter differences in housing costs The LICO is based on 1992 spending patterns. The LICO for a given year is calculated by multiplying the 1992 LICO by the consumer price index (CPI) inflation rate. Market basket measure (MBM): · takes into account spending on · cannot be used for international the disposable income a family would basic needs comparisons need to be able to purchase a basket · does not reflect social exclusion takes into account geographical of goods that includes food, shelter, variations in the costs of items transportation, and other basic needs

Sources: The Conference Board of Canada

Table 1 highlights the pros and cons of these measurements. In addition to these drawbacks, it should be noted that all of these focus on 'income' and 'consumption'. They focus on basic needs and do not take into consideration the 'capability (or empowerment) perspective' – which is concerned with the basic capability for one to function in society.²¹

^{21 &}quot;Poverty." United Nations Educational, Scientific and Cultural Organization. Accessed February 12, 2018. http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/poverty/.



Poverty in Ontario

In Ontario, welfare income has significantly decreased over the past three decades²², and 70 percent of the people who live under the poverty line have at least one job but do not earn enough through minimum wage to make it across the province's poverty threshold.²³ In response to this, the province has recently implemented substantive minimum wage increases as part of their Poverty Reduction Strategy. The legislation was introduced to better align minimum wage growth to inflation in order for working families' incomes to keep pace with the cost of living.²⁴ By 2019, the increases will position full-time minimum wage workers at an approximate \$31,000 annual income – just \$3,000 lower than Ontario's Low-Income Measure, and a massive increase from ~ \$24,000 – the current annual full-time wage.

Although this increase appears to be a gain for minimum wage earners, pundits are deeply divided on the policy's larger consequences. As Canada's largest provincial economy, Ontario makes up approximately 40% of the Gross National Product (GDP), thus the most common question is whether businesses will be able to adjust to these steep increases in such a short period of time. If a sudden influx of employers cannot survive under the new legislation, overall productivity could decline. Similarly, there is good reason to believe that as wages increases, so will the cost of goods and services, leaving low income earners in the same Market Basket Measure as before. Employers may also look to technology as replacement for labour, resulting in increased competition for entry-level and low-income jobs. This will be explored further in the chapter.

²² Boadway, Robin W., Katherine Cuff, and Kourtney Koebel. Designing a basic income guarantee for Canada. No. 1371. Queen's Economics Department Working Paper, 2016. Pg. 2.

²³ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016.

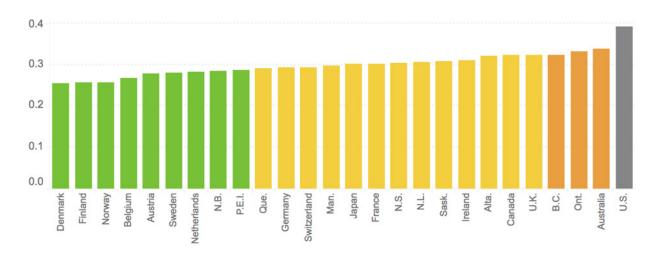
^{24 &}quot;Realizing Our Potential: Ontario's Poverty Reduction Strategy (2014–2019)." Government of Ontario. September 3, 2014. Accessed February 14, 2018. https://www.ontario.ca/page/realizing-our-potential-ontarios-poverty-reduction-strategy-2014-2019-all.

Income Inequality

Income inequality is the extent to which income is distributed unevenly in a given population. It helps indicate the level of equity in a given economy and has implications for positive social outcomes such as 'quality of life', or negative outcomes such as 'crime'. It is closely linked to intergenerational income mobility, which is the degree to which income levels change across generations. The Organization for Economic Cooperation and Development (OECD) contextualizes this by explaining that "the more unequal a society is, the more difficult it is to move up the social ladder, simply because children have a greater gap to make up". 25

As The Conference Board of Canada notes, Canada is among the wealthiest countries in the world when looking at income per capita; this statistic, however, does not indicate the distribution of income, which is often masked by a country's national average. Income inequality is typically measured using a formula called the 'Gini coefficient'. Using a scale of 0 to 1, "The Gini coefficient is the extent to which the distribution of income among individuals within a country deviates from an equal distribution" — where a coefficient of 0 would represent 'exact equality', and a coefficient of 1 represents 'total inequality'. Figure 2 shows Canada, and individual provinces' positions compared to peer OECD countries. Canada falls behind many of its peers, and Ontario falls even further behind Canada.

Figure 3: Income Inequality: Canada (with Provinces) compared to peer OECD countries



Sources: The Conference Board of Canada; OECD

^{25 &}quot;Income Inequality." Income Inequality - Society Provincial Rankings - How Canada Performs. http://www. conferenceboard.ca/hcp/provincial/society/income-inequality. aspx#ftn3-ref.

²⁶ Ibid.

²⁷ Ibid.

The Canadian discourse surrounding income inequality has multiple perspectives. The Institute for Research and Public Policy (IRPP) notes that Canada often gets grouped in with the United States in discussions on income inequality – but there appears to be a more intricate explanation. IRPP noted that the Canadian experience includes substantial increases in earnings and income inequality as far back as the 1980s, but there is only a slight movement in the aggregate measures of income inequality over the past 10 years. In addition, the typical national indicators do not reveal the regional dimensions. Figure 3 shows Canada and select provinces' income inequality since 1980.

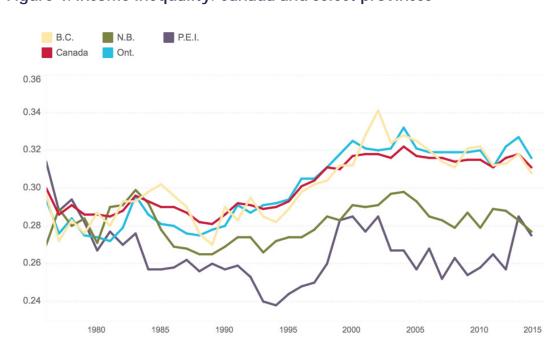


Figure 4: Income Inequality: Canada and select provinces

Sources: The Conference Board of Canada; Statistics Canada

Although the Gini coefficient portrays income inequality in a single number, it is not an ideal measure because:

- It does not provide any indication of standard of living or actual poverty levels, and as a result, it is possible for two regions or countries to have identical Gini coefficients even though they have very different income distributions;
- It is more sensitive to inequalities in the middle of the income spectrum than to the extremes and thus, does not provide enough information on the lowest and highest earners.²⁹

²⁸ Green, David A., W. Craig Riddell, and France St-Hilaire. "Income Inequality in Canada." Institute for Research on Public Policy. February 23, 2017. Accessed February 23, 2018. http://irpp.org/research-studies/aots5-intro/.

^{29 &}quot;Income Inequality." Income Inequality - Society Provincial Rankings - How Canada Performs. http://www.conferenceboard.ca/hcp/provincial/society/income-inequality.aspx#ftn3-ref.

The Future of Work

Basic Income has been trending as a potential policy solution to the current rises in unemployment being caused by rapid technological growth. Many researchers and economists in government, non-profit, and private sectors are projecting dramatic shifts in areas such as robotics and self-driving vehicles, resulting in a massive replacement of human workers by computers.³⁰ Forecasts predict income gaps will widen as a result, increasing wealth and earning power for those who design and control these new technologies, while the availability of 'working class' careers diminish. Recognizing the economic benefits of technological adoption, employers are replacing full-time jobs with more precarious contracts with specific 'a-la-carte' responsibilities. If technological adoption continues to increase at predicted rates, so will these disproportionate labour market trends.31

Skeptics often rebut these projections by pointing to historical examples of increased mechanization and automation, and the economic growth that went along with them.³² It is important to note that, like the idea of basic income, the fear of new technologies taking our jobs is not new. Labour markets have been subject to automation since the industrial revolution, where the first major wave of job insecurity was famously, and violently, protested by the 'Luddites,' radical groups of English workers who destroyed new technology that

they believed was threatening their job security and livelihood.³³

Today, however, the situation is much different. For example, more data was produced between 2011 and 2013 than all previous years of recorded human history. Although the information being produced is mostly unstructured, and commonly referred to as 'big-data,' the skills needed to understand and monetize these massive data sets require advanced skills and education. Moreover, digital technologies allow business models to scale exponentially, allowing private corporations to disrup and monopolize market share at unprecedented rates.

The Brookfield Institute for Innovation and Entrepreneurship summarizes Canada's situation in the 2016 report 'The Talented Mr. Robot'. The report found that 42 percent of the Canadian labour force is at a "high risk" of being affected by automation within the next two decades. This percentage is made up of, on average, individuals with less education, who are currently in lower skilled jobs. The report also found that approximately 42 percent of the tasks currently being done by Canadians can be replaced by technologies that exist today.³⁵ New jobs will always be created as result of technological advancement, but the technical

³⁰ Van Parijs, Philippe, and Yannick Vanderborght. Basic income: A radical proposal for a free society and a sane economy. Harvard University Press, 2017.

³¹ Ibid.

³² Ibid.

³³ Sale, Kirkpatrick. Rebels against the future: the Luddites and their war on the Industrial Revolution: lessons for the computer age. Basic Books, 1996.

³⁴ Gandomi, Amir, and Murtaza Haider. "Beyond the hype: Big data concepts, methods, and analytics." International Journal of Information Management 35, no. 2 (2015): 137–144.

³⁵ Lamb, Creig. "The Talented Mr. Robot: The impact of automation on Canada's workforce." Brookfield Institute for Innovation+ Entrepreneurship (2016). Pg. 3.

knowledge needed for these jobs will require significant training, formal education and creative problem solving – all skills that favour a generally more privileged class.³⁶ If new kinds of jobs will be reserved for the 'highly skilled', what will happen to the bottom half of the divide? This question has been the driving force to bring basic income back to life.

Table 2 summarizes forecasts from other research organizations, projecting similar numbers to Brookfield's. It is important to note that reports by the Brookfield Institute, The C.D. Howe Institute, and the OECD are helping to guide policy decisions, but these are forecasts, and there are various external systemic factors that will either advance or divert these projections. The current momentum and widespread technological embrace does, however, suggest continued advancement and proliferation. Current changes certainly have policy makers concerned that existing poverty and unemployment will only be exacerbated as these technologies become increasingly accessible and profitable for employers.

Table 2: Recent Studies Predicting changes to Canada's Labour Market

Source	Year	Methodology	Country	Predicted work disruption
Brookfield Institute for Innovation and Entrepreneurship	2016	Replication of Frey and Osbourne's ³⁰ occupation- based methodology.	Canada	42% of the Canadian labour force is at high risk of being affected by automation.
C.D. Howe Institute	2017	Adaptation of Frey and Osbourne's ³¹ occupation-based methodology. Advances to the methodology include an updated list of skills that cannot be computerized and weighting of skills level for each occupation by importance of that skill to the occupation.	Canada	35% of occupations are highly susceptible to automation.
Organisation for Economic Co-operation and Development (OECD)	2016	Task-based methodology that spanned 21 countries. Paper argues that an occupation-based methodology creates inflated percentages given that occupations labelled as high-risk still had a considerable portion of tasks that would be difficult to automate.	21 countries, including Canada	In Canada, 38% of jobs are at high risk of being automated.

Sources: Deloitte; Brookfield Institute for Innovation and Entrepreneurship; C.D. Howe Institute; OECD

³⁶ Tarnoff, Ben. "Robots won't just take our jobs – they'll make the rich even richer." The Guardian. March 02, 2017. Accessed March 14, 2018. https://www.theguardian.com/technology/2017/mar/02/robot-tax-job-elimination-livable-wage.

Precarious Work

The conversation surrounding precarious work, or the 'Gig Economy' in Canada, has also become a mainstream concern regarding the future of work. Various reports have revealed that an increasing number of Canadians are employed in jobs that are insecure, contract-based, and often volatile. Deloitte's recent report, "The Intelligence Revolution - Future-proofing Canada's Workforce" refers to people being subjected to these positions as 'contingent workers' – independent contractors, freelancers, independent consultants, or other "off-the-books" employees who join or collaborate with organizations to complete specific tasks, and then move on to their next contract.³⁷ The report highlights that since 1997, Canada's contingent workforce has increased from 4.8 million to 6.1 million, now accounting for approximately one third of all jobs. These numbers are expected to climb, and as Statistics Canada has found, over 90 percent of job growth in 2015 and 2016 were temporary positions, or 'gig work', averaging over 30 percent less pay than permanent positions.³⁸

Although more attention is paid to lower-skilled job disruption, there are increasing threats to medium-to-high earners as well. Traditionally, knowledge-based industries were often insulated from automated technologies. The continuous investment and, as a result, commercialization, of efficient technologies is offering employers new, cost-effective technologies that can have a significant impact on their bottom line.³⁹

As the use of technology increases, it is possible that precarious work will continue to persist, perhaps becoming the new normal. There are numerous challenges to designing policies to support the increasing number of precarious workers; one of which is that the term 'precarious work' itself is not easily defined, causing complications for researchers and analysts to develop a consensus on its broader social and economic implications. There is well-documented evidence, however, to support the decrease of full-time, permanent positions available to Canadian job seekers.⁴⁰

^{37 &}quot;The Intelligence Revolution." Deloitte Canada. Accessed March 14, 2018. https://www2.deloitte.com/ca/en/pages/human-capital/articles/intelligence-revolution.html. Pg. 16

³⁸ Ibid.

³⁹ Lamb, Creig. "The Talented Mr. Robot: The impact of automation on Canada's workforce." Brookfield Institute for Innovation+ Entrepreneurship (2016).

⁴⁰ Fong, Francis. "We don't know the extent of precarious work." Policy Options. January 25, 2018. Accessed February 2, 2018. http://policyoptions.irpp.org/magazines/january-2018/we-dont-know-the-extent-of-precarious-work/.

A Review of Basic Income-Related Experiments

Chapter 1 explored some of the factors that repopularized basic income. Governments around the world are listening and are taking leadership roles in the investigation of how basic income might work if it were to become policy. This chapter will summarize a selection of past and ongoing basic income pilot projects. Understanding the parameters of these experiments is needed in order to best determine how to address the specific area of inquiry for the primary research in Chapter 4.

Negative Income Tax Experiments

Between 1968 and 1980, the United States government launched Negative Income Tax (NIT) experiments in four cities. A Canadian study also took place in the town of Dauphin, Manitoba. These studies were designed to test the effects of addressing family poverty by providing a basic level of income that would bring recipients above the national poverty line.⁴¹ The benefits varied based on the families' income levels, and as a family came closer to the poverty line through their own income, assistance would decrease, and at a certain point would end entirely. 'Pilot Lessons' -The Mowat Centre report referred to in Chapter 1 – provided a comprehensive summary of past NIT experiments that can be referred to in Table 3.

⁴¹ Bureau, US Census. "Data." Poverty Thresholds, www. census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html.

While the researchers conducting studies were primarily interested in studying the impact of a basic income on the number of hours worked as opposed to other social outcomes, participants were found to have experienced a variety of indirect impacts unrelated to work. These other outcomes included: improved education attainment and test scores, a reduction in low birthweight births, and improved nutrition. These findings were later scrutinized by various subsequent commentaries, ⁴² some of which critiqued the studies' relative significance due to methodological drawbacks. ⁴³ The notion that programs were responsible for the reduction of work hours, and whether or not that is significant, has remained contentious. ⁴⁴

Table 3: Summary of Negative Income Tax Experiments in North America

Parameter	New Jersey	Rural (RIME)	Seattle-Denver	Gary	Mincome, Manitoba
Site(s)	Trenton, Patterson- Passaic, and Jersey City, N.J.; Scranton, Pa.	Duplin County, N.C; Pocahontas and Calhoun Counties, Iowa	Seattle, Wash., Denver, Colo.	Gary, Ind.	Winnipeg and Dauphin, Manitoba
Eligibility	Intact households healed by able- bodied males 18-58 with at least one dependent and incomes < 150% of poverty line	Families with at least one dependent and incomes < 150% of poverty line	Families with at least one dependent and incomes < \$11,000 (single- headed) or \$13,000 (double headed)	Black households, head 18-58 with at least one dependent and income < 240% of poverty line	Families with able-bodied heads under 58-years-old, incomes < \$13,000 (family of four)
Sample size	1,357 households; 725 experimentals, 632 controls	809 families: 587 non-aged male- headed, 108 non- aged female-headed, 114 older heads	4, 801 families (Denver 2,758, Seattle 2,043)	1,800 black households, 60% female-headed (125 households added with incomes above 240% of poverty line)	1,300 families and single individuals
Plans [not all t, G combinations included in each experiment; more generous plans (high G, low t) typically excluded]	8 plans; t = .3, .5, .7; G = .5, .75, 1.0, 1.25 of poverty line (\$5,000 for family of 4)	8 plans t = .3, .5, .7; G = .5, .75, 1.0 of poverty line	11 plans; t = .5, .7, .7*, .8* (* indicates tax rate declines per .025 per \$100 income); G = .95, 1.2, 1.4 of poverty line; training counseling, training subsidies (50%, 100%)	4 plans; t = .4, .6; G = .75, 1.0 of poverty line, social services couseling, day care subsidies (35%, 60%, 80%)	Winnipeg; 7 plans; t = .35, .5, .75; G = \$3,800, 4,800, 5,800 (family of four in 1975) Dauphin: 1 plan (saturated site); t = .5; G = \$3,800
Duration/start up date	3 years/1968-69	3 years/1970	3, 5 years, 20 years (Denver only)/1969	3 years/1971	3 years/1975

Note: t refers to the experimental tax rate; G refers to the experimental income guarantee rate.

Source: The Mowat Centre & The Centre for Social Innovation

⁴² Sorman, Guy. "Why Not a Negative Income Tax?" City Journal, 18 Feb. 2016, www.city-journal.org/html/why-not-negative-income-tax-13352.html.

⁴³ Manzi, Jim. "Against the Negative Income Tax." National Review, 15 Feb. 2011, www.nationalreview.com/corner/259761/against-negative-income-tax-jim-manzi.

⁴⁴ Widerquist, Karl. "A failure to communicate: What (if anything) can we learn from the negative income tax experiments?." The Journal of Socio-Economics 34, no. 1 (2005): 49-81.

New Jersey:

The New Jersey Study was the US government's first trial in testing the idea of how a NIT might function, which at the time was receiving bipartisan support and being championed by economists such as Milton Friedman. The main objective of this NIT study focused on whether the new policy discouraged work amongst the participants. It did not take into consideration other potential impacts of the surplus income. The official report concluded there was in a fact a reduction in the hours worked.⁴⁵

Rural (RIME):

The RIME study was intended to complement the more urban-focused New Jersey study. The data varied by region, but the official report found that there was "little clear evidence on hours worked". It did find that there was an overall increase in adequate nutrition, improved school performance among children, and clearly improved "material prosperity".⁴⁶

Denver and Seattle:

As the largest of the NIT experiments, both the Denver and Seattle studies were originally planned to last a total of six years. The projects were later authorized to extend to 20 years for an approximate 6% of the sample. However, initial results of the pilot pointed to a higher than expected decrease in hours worked which led to political abandonment, resulting in an early end to the planned extension. There were 169 total participants, who were promised 20 years of payments, but only received nine, and experimental records were kept for seven. The official report only addressed participants who received payments between three to five years. The findings suggested that the effects on hours worked varied with benefit amounts and pointed to increased rates of education and divorce. The official report's methodology was scrutinized by subsequent literature, citing low sample size and other biasing factors.⁴⁷

⁴⁵ United States, Congress, Office of the Assistant Secretary for Planning and Evaluation. "New Jersey Graduated Work Incentive Experiment. Summary Report." New Jersey Graduated Work Incentive Experiment. Summary Report., 1973.

⁴⁶ United States, Congress, "The rural income maintenance experiment: summary report." The rural income maintenance experiment: summary report, 1976.

⁴⁷ Basilevsky, Alexander, and Derek Hum. "The Seattle–Denver Income Maintenance Experiment (SIME–DIME)." Experimental Social Programs and Analytic Methods, 1984, pp. 176–189., doi:10.1016/b978-0-12-080280-7.50012-x.

Indiana:

The Gary, Indiana experiment was compromised due to discontinuation of enrollment from a large percentage of the sample. This high attrition rate reportedly stemmed from higher income participants who did not see significant benefits from the program, thus leaving little incentive to remain enrolled. There was no final report published from this study. Nevertheless, further analysis pointed to some reduction in the number of hours worked.⁴⁸

Dauphin, Manitoba:

The 1973 Manitoba NIT experiment was cancelled suddenly after a political transition, before an opportunity for proper data analysis. Many years later, in 1993, researchers examined the raw data and concluded there was a reduction in hours worked when compared to general population of Dauphin.⁴⁹ A 2011 study used health administrative data to revisit the impacts of the saturation site compared to surrounding areas. Dr. Evelyn Forget, the lead researcher, found various health-related improvements including "a significant reduction in hospitalization, especially for admissions related to mental health and to accidents and injuries."⁵⁰

⁴⁸ Munnell, Alicia Haydock. "Lessons from the income maintenance experiments: proceedings of a conference held at Melvin Village, New Hampshire, September 1986." Federal Reserve Bank of Boston, Lessons from the income maintenance experiments: proceedings of a conference held at Melvin Village, New Hampshire, September 1986, 1987.

⁴⁹ Hum, Derek, and Wayne Simpson. "Economic response to a guaranteed annual income: experience from Canada and the United States." Journal of Labor Economics 11, no. 1, Part 2 (1993): S263–S296.

⁵⁰ Forget, Evelyn L. "The town with no poverty: The health effects of a Canadian guaranteed annual income field experiment." Canadian Public Policy 37, no. 3 (2011): 283-305.

Pilots in Developing Countries

Basic income is currently being explored in many nations. From Scotland and the Netherlands, to Spain and Brazil, advocacy groups are gaining momentum in their proposals for various forms of the policy. The following two pilot projects provide a brief glimpse into how some developing nations are testing the development of a basic income.

Madhya Pradesh Unconditional Cash Transfers Project

Design Criteria:

Sample size of 6,000 All residents of eight villages Period: 2012–2014

This controlled study, managed by UNICEF and the Self-Employed Women's Association, provided participants up to 300 rupees (~4.50 USD) per month for up to 17 months, with smaller amounts provided to parents on behalf of their children. The payments were intentionally calculated below the level required for "basic needs", as the intention was not to model a substitution for employment. The study found improved nutrition and school attendance, increases in assets, and unlike the NIT studies, increases in overall hours worked.⁵¹

Namibia Basic Income Grant Pilot Project

Design Criteria:

Sample size of 930 All residents under 60 years old Period: 2007–2009

This experiment by the Basic Income Grant Coalition – a local network of churches and service organizations – provided recipients in two villages with 100 Namibian dollars (~7.00 USD) per month for approximately two years. Equally sized payments were provided to parents on behalf of their children.⁵² While this experiment found numerous positive outcomes, it was conducted without a control group.

⁵¹ A Little More. How Much Is It? Piloting Basic Income Transfers in Madhya Pradesh, India. SEWA Bharat / UNICEF, Jan. 2014, unicef.in/Uploads/Publications/Resources/pub_doc83.pdf.

⁵² Standing, Guy. "How Cash Transfers Promote the Case for Basic Income." Basic Income Studies, vol. 3, no. 1, Nov. 2008, doi:10.2202/1932-0183.1106.

Pilots Underway

There are several basic income pilot projects underway today. This section will outline three cases in The United States, Finland, and Canada.

Y Combinator Pilot

Design Criteria

Sample size: Approximately 1,000 (+ 2,000 controlled)

Eligibility: Any individuals between the ages of 21 and 40 whose total household income in the year prior to enrollment did not exceed the area median income of the United States.

Ages: Between 21 and 40

Launch date: 2017

Duration: Between 3 years and 5 years

Y Combinator is an early-stage startup accelerator located in Silicon Valley, California, that has recently started investing in social causes. In an effort to inform academic, policy, and political debates, Y Combinator has partnered with state and local governments to measure various outcomes including: use of time, health and well-being, financials, time and risk preferences, political and social behaviors and attitudes, crime, effects on children, and spillover and network effects outside the household. The pilot will be randomly assigning \$1,000 USD per month to 1000 individuals and families in two (unspecified) US states.⁵³

⁵³ Y Combinator. Basic Income Project Proposal. 2017.

Finland Basic Income Pilot

Design Criteria:

Sample size: 2,000

Eligibility: Diffuse spread across nation, plus 10-30% saturated municipalities

Ages: 18-58

Launch date: 2017 Duration: 2 years

This is the only basic income pilot to be rolled out on a national scale. Each participant has received monthly installments of €560 (\$687.18 USD). Finland's intention is to "reduce the amount of work involved in seeking financial assistance and to free up time and resources for other activities such as working or seeking employment".⁵⁴ The pilot has been designed and deployed by Kela, the Social Insurance Institution of Finland. The 2,000 participants will be selected at random and will receive the basic income unconditionally and without means testing.⁵⁵

⁵⁴ Kangas, Olli. From idea to experiment Report on universal basic income experiment in Finland. Publication. Kela.55 Ibid.

Ontario's Basic Income Pilot

Design Criteria:

Sample Size: 4,000

Eligibility: Must be living on an income under \$34,000 per year if single, or

\$48,000 for couples.

Specific Locations: Hamilton, Brantford, Brant County; Thunder Bay, Municipality of Oliver Paipoonge, Township of Shuniah, Township of Conmee, Township of O'Connor, Township of Gillies; and Lindsay, Ontario.

Ages: 18-64

Duration: 3 years

In March 2016, the Ontario Government committed to this pilot to determine if basic income could reduce poverty in a more sustainable way than the status quo. Its purpose is to "test a growing view at home and abroad that a basic income could build on the success of minimum wage policies and increases in child benefits by providing more consistent and predictable support in the context of today's dynamic labour market".⁵⁶

Payments will be based on 75 percent of the Ontario Low Income Measure (LIM), plus additional broadly available tax credits and benefits. Following a NIT model, the Pilot will ensure that participants receive: up to \$16,989 per year for a single person, less 50% of any earned income; and up to \$24,027 per year for a couple, less 50% of any earned income. People with disabilities will receive up to \$500 per month, additionally.⁵⁷ The Pilot will work in conjunction with the Ontario Ministry of Community and Social Services' Poverty Reduction Strategy and will help to inform a multi-year social assistance reform strategy.⁵⁸

⁵⁶ Segal, Hugh D. "Finding a Better Way: A Basic Income Pilot Project for Ontario." Ontario.ca. August 31, 2016. Accessed February 14, 2018. https://www.ontario.ca/page/finding-better-way-basic-income-pilot-project-ontario#section-1.

⁵⁷ Ibid.

^{58 &}quot;Basic Income Consultations: What we heard." Government of Ontario. March 2017. Accessed December 18, 2017. https://www.ontario.ca/page/basic-income-consultations-what-we-heard.

Existing Forms of 'Basic Income' in Canada

Although Canada does not currently have basic income by definition, it does have numerous government transfer programs that serve a similar, but less substantive, function. In October 2016, The Canadian Centre for Policy Alternatives assembled a report outlining these programs. The report found that as of July 2016, there were 30 federal and provincial support programs, all of which included either a direct bank transfer or cheque. Table 4 provides an overview of these programs for families.

Similar to the current Ontario pilot, the transfer amounts decline as family incomes rise, and are calculated at variable rates in order for governments to better target lower income households.⁵⁹ For example, these function in the same manner as NIT programs, where an increase in annual income results in a decrease in program eligibility. Table 5 summarizes basic income programs per individual, which are guaranteed, regardless of income levels.

⁵⁹ MacDonald, David. Policymaker's Guide to Basic Income. Canadian Centre for Policy Alternatives, 2016.

Table 4: Annual Basic income programs per family in Canada

Program	Single senior	Single adult	Couple with two children	Single parent with one child
1. NFLD Income Supplement (sales tax credit)	\$220	\$220	\$680	\$420
2. NFLD Child Benefit	-	1.0	\$781	\$379
3. NFLD Seniors' Benefit	\$1313	(+)		-
4. PEI Sales Tax Credit	\$110	\$110	\$275	\$165
5. Nova Scotia Child Benefit		-	\$1,450	\$625
6. Nova Scotia Affordable Living Tax Credit (sales tax credit)	\$255	\$255	\$375	\$315
7. NB Low-Income Seniors Benefit	\$400			
8. New Brunswick Child Tax Benefit + School Supplement		1.50	\$700	\$350
9. New Brunswick HST Credit	\$300	\$300	\$800	\$700
10. Quebec Solidarity Tax Credit	\$418	\$418	\$566	\$418
11. Quebec Child Assistance Credit (plus single-parent top-up)		(*)	\$3,587	\$3,231
12. Ontario GIS supplement (GAINS)	\$996			
13. Ontario Sales Tax Credit (included in "Trillium Benefit")	\$291	\$291	\$1,164	\$582
14. Ontario Child Benefit			\$2,712	\$1,356
15. Manitoba Child Benefit			\$840	\$420
16. Manitoba Personal Tax Credit (sales tax credit)	\$308	\$195	\$442	\$221
17. Manitoba 55 Plus Program	\$647			
18. Saskatchewan Low Income Tax Credit (sales tax credit)	\$246	\$246	\$684	\$342
19. Saskatchewan Seniors Income Plan	\$3,240			
20. Alberta Seniors Benefit	\$3,360	(*)		
21. Alberta Child Benefit			\$1650	\$1100
22. B.C. Sales Tax Credit	\$75	\$75	\$150	\$75
23. B.C. Low Income Climate Action Tax Credit	\$115.50	\$115.50	\$300	\$150
24. B.C. Family Bonus Program	-		 (contained in Canada Child Benefit) 	 (contained in Canada Child Benefit)
25. B.C. Early Childhood Tax Benefit			\$660	\$660
26. B.C. Senior's Supplement	\$592			
27. Federal GST Credit	\$276	\$276	\$842	\$421
28. Federal Canada Child Benefit	-	-	\$11,800	\$6,400
29. Federal Guaranteed Income Supplement (GIS)	\$10,277	-	-	-
30. Federal Old Age Security (OAS)	\$6,880			
Quasi-basic income (rent/property tax-dependent)				
31. Quebec Solidarity Tax Credit (housing component), evaluated at \$1,000 a month	\$548	\$548	\$899	\$665
32. Ontario Property Tax Credit & Seniors Rent/Property Tax Grant, evaluated at rent of \$1,000 a month (included in "Trillium Benefit")	\$940	\$520	\$520	\$520
33. Manitoba Education Property Tax Credit, evaluated at rent of \$1,000 a month	\$1,100	\$700	\$700	\$700

Source: Canada Centre for Policy Alternatives

Table 5: Annual basic income programs per individual (by province)

	NL	NB	NS	PEI	ON	QC	MB	SK	AB	ВС
Single senior	\$1,533	\$700	\$255	\$110	\$1,287	\$418	\$955	\$3,486	\$3,360	\$782
Senior couple	\$797	\$500	\$128	\$83	\$1,287	\$283	\$1,004	\$3,066	\$2,520	\$914
Single adult	\$220	\$300	\$255	\$110	\$291	\$418	\$195	\$246	\$0	\$191
Single parent, one child	\$400	\$525	\$470	\$83	\$969	\$1,825	\$321	\$171	\$550	\$443
Single parent, two children	\$467	\$500	\$608	\$73	\$1,195	\$1,615	\$362	\$146	\$550	\$307
Couple w/ two children	\$365	\$375	\$456	\$69	\$969	\$1,038	\$321	\$171	\$413	\$278

Source: Canada Centre for Policy Alternatives

3 Problem Framing

The first two chapters have provided a snapshot on the state of basic income in Canada and abroad. We have explored some of the rationales for implementing such a policy, and why some jurisdictions are investing time and resources to produce evidence on the effects of basic income. This chapter will discuss why pilot projects are needed to justify potential policies, and some of their accompanying challenges. Recognizing the need to test the implications of basic income, the notions of 'time' and 'behaviour' will be explored in order to add to a missing piece of the literature. This will set the stage for the research question, and primary research.

Evidence-Based Policy

In modern western society, using data to inform policy is widely considered to be a superior method of policy making than through 'values-based' decision-making. In a data-hungry world, this is expected of the modern public service. Sanderson notes that one of the key drivers for modernization is through evidence-based policy making and service delivery, and that the new understanding of voters is that "what matters is what works." ⁶⁰ It should be noted, however, that governments typically trail behind the private sector in terms of innovation adoption – new ideas and technologies often need to be vetted before political parties can justify their investment.

Unfortunately, even though policy making is fundamentally a future-oriented activity, "what works" in the past, does not mean the same for the future. The current evidence-based paradigm makes a tacit assumption that findings from the past will continue at a linear rate, irrespective of peripheral disruptions.

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⁶⁰ Sanderson, Ian. "Evaluation, policy learning and evidence-based policy making." Public administration 80, no. 1 (2002): 1-22.

At the political level, governments also often lack the ability to develop a consistent narrative for their constituents. Research often finds outcomes that conflict with political agendas; and, political parties – like any company or organization – require a certain level of 'branding' to build an identity that its users and/or supporters can easily understand. Due to these conflicts, 'evidence-based policy' is rarely defined explicitly.⁶¹

In the case of the Ontario Public Service, a recent statement in December 2017 announced the delivery of "evidencebased, outcome-focused policy" as one of their core principles, describing the process as "using rigorous evidence to inform decisions and achieve better results in more cost-effective ways.⁶²

...the idea of introducing complexity into a system where re-election is often the priority can work against political strategies.

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Challenges with Pilot Projects

Evidence informs the design, implementation, analysis, and decision-making of pilot projects in various ways. As we have seen from Chapter 2, each jurisdiction had varying design criteria, time horizons and measurement areas. It is important to note that these projects have a high amount of nuance. Although modern governments have an increasing expectation to play an "open" role in providing insights on performance and improvement, the idea of introducing complexity into a system where re-election is often the priority can work against political strategies. Chapter 2's example of politically disrupted NIT pilots in Seattle, Denver, and Manitoba are clear examples of how projects can be put to a halt due to politics.

⁶¹ Ibid.

^{62 &}quot;Discussion document: Transforming the Ontario Public Service for the Future." Government of Ontario. February 2017. Accessed January 14, 2017. http://www.ontario.ca/page/discussion-document-transforming-ontario-public-service-future.

⁶³ Sanderson, Ian. "Evaluation, policy learning and evidence-based policy making." Public administration 80, no. 1 (2002): 1-22.

How does Time affect Basic Income Pilot Projects?

As Sanderson notes, there are various issues that can limit the scope for evaluating the impact of pilot projects, and the notion of 'time' is one of the most critical factors. Specifically, how long might it take for the effects of pilots to be manifested and to become capable of measuring and isolating them from other factors - particularly in policies with goals to address complex social and economic problems? To model the conditions under which such a policy would function when fully implemented would take a considerable amount of time. "If the policy aims to change attitudes and behaviour or achieve institutional reform, effects may be difficult to achieve during the course of a pilot project".64

There are systematic reviews acknowledging that limited-time experiments can and do impact participant behaviour, but little is known about the circumstances in which this is likely to occur, or how and why such impacts might occur: "Existing studies are mostly quantitative and designed to identify whether such effects exist. They largely lack important data regarding contextual factors that are relevant to these issues". 65 MacNeil et al. note that these limitations are, however, being explored

through experimental qualitative research methods, which are increasingly being regarded as relevant and useful data to better understand these issues.⁶⁶

All three of the current pilot projects listed in Chapter 2 have acknowledged these concerns, but the recurring theme appears to be that researchers do not know how to mitigate the issue. Despite the lack of understanding of how time affects participant behaviour, there appears to be a lack of urgency and willingness to produce the evidence required to better inform these experiments. It may be possible that this gap in understanding accounts for a significant discrepancy in how the data is interpreted, and thus, how and what policy decisions will be made.

The following excerpts from basic income pilot project research teams point to an acknowledgement of limited time horizons in their studies:

⁶⁴ Sanderson, Ian. "Evaluation, policy learning and evidence-based policy making." Public administration 80, no. 1 (2002): 1-22.

⁶⁵ MacNeill, Virginia, Marian Foley, Alan Quirk, and Jim McCambridge. "Shedding light on research participation effects in behaviour change trials: a qualitative study examining research participant experiences." BMC public health 16, no. 1 (2016): 91.

Y Combinator Pilot

"One of the theoretical advantages of a basic income is that it provides a level of economic security that reduces stress and present bias in decision-making, stimulating investments and other behavioral changes that promote long-term economic self-sufficiency. Existing evidence is limited to the effects of short-term variations in financial resources on cognitive capacity and behavior, however, and it is unclear how long an increase in income must be guaranteed to induce the hypothesized changes in behavior." Note that Y Combinator's public research methodology is absent of any mitigation strategies to address these concerns.

Finland Pilot

The Finland pilot pointed out the challenges associated with providing insight into what would have happened to those receiving basic income had they not received it. This required that the characteristics of the control group match all those of the treatment group, except for the basic income. Finland is carrying out the pilot though Randomized Control Trials (RCTs) and will ensure that the only defining feature is the basic income itself. The differences between the two groups can then be comparatively analyzed. Control groups are helpful, but still do not address the question of changes in participants' behavioural experiences based on the limited duration of the pilots.

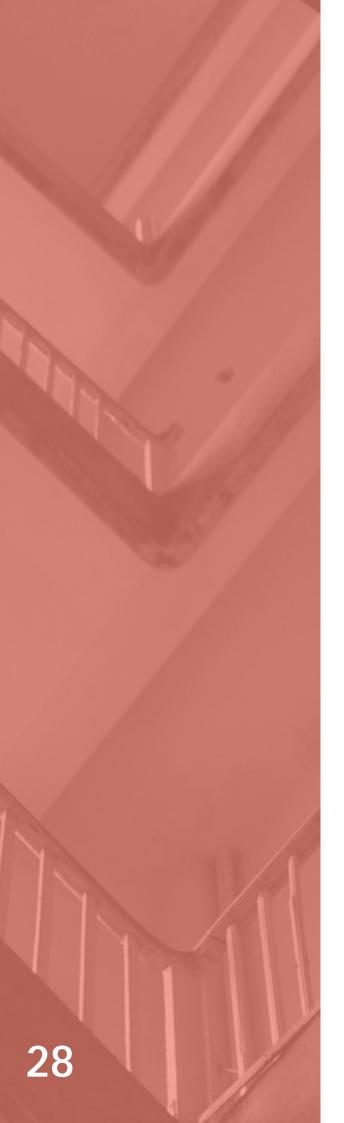
Ontario Pilot

"By nature, the pilot will investigate the impact of a Basic Income during its time frame, for example, three years. There are many reasons to expect that participants' behavioural responses to such a temporary program may differ from the responses that would occur if such a program was anticipated by its recipients to be a permanent one..." Ontario's research methodology is not yet available to the public, therefore there is no way to determine whether this is being addressed, and if so, what measures are being taken.

⁶⁷ Y Combinator. Basic Income Project Proposal. 2017.

⁶⁸ Kangas, Olli. From idea to experiment Report on universal basic income experiment in Finland. Publication. Kela.

⁶⁹ Segal, Hugh D. "Finding a Better Way: A Basic Income Pilot Project for Ontario." Ontario.ca. August 31, 2016. Accessed February 14, 2018. https://www.ontario.ca/page/finding-better-way-basic-income-pilot-project-ontario#section-1.



Ontario Pilot (Continued)

As we have seen, basic income pilots and proposals come in various shapes and sizes – some of which already exist in the Canadian context. Versions of basic income have been studied internationally, but scant attention has been placed on behavioural decision-making processes of participants in limited time horizons.

Similar to the user experience-related discrepancies present in public policy pilot projects, parallels exist in general behaviour-based research studies on addiction and other health-related topics. Pilot projects are designed with the intention to test potential policy innovations, and with testing comes shorter time frames upon which conclusions must be inferred.

When we look at Ontario's three-year pilot as an example, it is not inconceivable to imagine that the participants' recognition of the short-term basic income might affect their decision-making processes and actions as a result. For example, Segal notes that it would seem rational for some recipients to make efforts to save more of their basic income during the pilot if they anticipate those funds to eventually deplete. If this is true, how might behaviour change be captured if the majority is allocated to non-tangible spending such as savings or investments? What other areas, beyond "saving", might be affected by the shorter time frame?

With these potential discrepancies, there is reason to believe that the interpretation of data might suffer as a result. It should be noted that as in Dauphin's NIT experiment, we can expect researchers to return to these datasets many years later for retrospective analysis.

4

Methodology

Context

After a preliminary literature review, it became clear that the largest barriers to implementation for basic income were 1) economic feasibility – under current funding distribution models; and 2) political will. As outlined in Chapter 3, these factors are highly dependent on one another, and any hope at such a policy would need to be tested for social outcomes and economic viability. Testing basic income through pilot projects can be a helpful way to determine a variety of factors, but the notion of limited-time decision-making is an issue that continues to go on unaddressed.

Chapter 3 outlined the complex nature of understanding participants' decision-making processes in research, and how important areas of inquiry are often left unaddressed. The following methodology will attempt to better understand this issue.

After further research, and attending basic incomerelated events in Ontario, the following research questions was formulated:

How might we determine whether the behavioural responses of participants in basic income pilot projects differ from the responses that would occur if a basic income was permanent?

Rationale

The purpose of this method is to determine, to what extent, participants in basic income experiments might be influenced by the short-term nature of their designs. Answering the research question will either: a) find no significant changes in behaviour, giving confidence to existing basic income pilot project methodologies; or b) find significant changes, which may suggest a need for further consideration in the design and evaluations processes.

The results of this research led to the design of a method that will be referred to as 'Structured Scenario Interviews'. This method was developed with intention to provoke a dialogue to better understand the behaviour of participants in basic income pilots. Chapter 2 listed the past and ongoing pilot projects that can continue to be analyzed by subject matter experts – this research question, however, cannot be answered with certainty until several years after one of the jurisdictions implements an actual basic income policy.

Structured Scenario Interviews will shed light on how human behaviour and spending might fluctuate under varying time constraints.

Although researchers are aware of this gap, resolution and mitigation strategies are, seemingly, being overlooked. By better understanding this issue, there is potential to better account for, or adjust for factors affecting the data in the measurement areas of actual pilots.

Structured Scenario Interviews



Step 1: Benchmark User Spending



Step 2: Structured Scenarios



Step 3: Semi-Structured Interviews

Participants and Recruitment

The desired number of participants for the experiment was 20 individuals – either post-secondary education students (full-time or part-time) or 'working professionals'. Participants could be anywhere between 18 and 40 years of age, with an effort to reach a 50/50 female to male ratio. Students were recruited by random interception at OCAD university, the University of Toronto, and Ryerson University. Working professionals were recruited through intermediaries – i.e. individuals within existing networks, or 'friends of friends'.

Consent and Screening

Once potential participants were recruited, they were asked to complete a consent form⁷⁰, and questionnaire to determine the participants' citizenship, age, gender, employment status, and income level.

Twenty participants were recruited to take part in the research. Through remote collaboration, the participants were guided through two timevaried scenarios in an effort to uncover insights into how they might allocate funds; first, under a permanent basic income, and then, a one-year basic income pilot project.

Participants were instructed to attribute a given monthly government stipend (basic income) to any purpose(s) of their choice.

The expenditures – and their accompanying sentiment – were analyzed between the two scenarios.

The 20 sessions were conducted by phone using shared cloud services. Participants screens were shared in order to ensure they were using the data entry forms correctly. The data was captured in real time, while the insights from the semi-structured interviews were captured in note-form by the researcher.

Step 1: Benchmarking User Spending



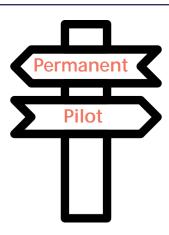
Each participant was asked to take approximately 10 minutes to themselves to write up an approximate list of their current monthly expenses, creating a snapshot of their actual budget. The priming sessions were developed in order to bring forward a more engaged mindset, and to provide a benchmark for the next steps. Participants were asked to fill out the expense section of the Data Entry Form (Table 6).

Table 6: Expense section of data entry form (by anonymous participant)

Monthly Expenses	\$ Amount
Rent	\$1,370.00
Groceries	\$400.00
Energy	\$35.00
Tenant Insurance	\$28.00
Adobe	\$32.00
Apartment Taxes	\$40.80
Life Insurance	\$10.00
Tax	\$100.00
Tuition (monthly)	\$1166.00
Cellphone and Internet	\$110.00
TTC/Zip Car	\$120.00
Clothes/Gifts	\$40.00
Health/Climbing/Amusement	\$80.00
Emergency Savings	
Travel Savings	
Housing Savings	
Total	\$3531.80

This step brought participants' current, actual, financial circumstances into the picture, which acted as a design probe to allow for clearer thinking surrounding their financials.

Step 2: Scenario Exercises



After the budget priming, participants were introduced to the first of two scenarios. This step required a certain level of openness from participants, as the exercise would require imagining how these alternate futures might play out for them.

Table 7: Example of a completed spreadsheet (by anonymous participant)

Monthly Expenses	\$ Amount	Scenario A	Scenario B
Rent	\$1,370.00		
Groceries	\$400.00	\$100.00	
Energy	\$35.00		
Tenant Insurance	\$28.00		
Adobe	\$32.00		
Apartment Taxes	\$40.80		
Life Insurance	\$10.00		
Tax	\$100.00		
Tuition (monthly)	\$1166.00		
Cellphone and Internet	\$110.00		
TTC/Zip Car	\$120.00	\$20.00	
Clothes/Gifts	\$40.00		
Health/Climbing/Amuse-	\$80.00	\$320.00	
ment			
Emergency Savings		\$150.00	
Travel Savings		\$300.00	
Housing Savings		\$510.00	\$1,400.00

Scenario A: Permanent Basic Income

The following script and instructions outline the process for Scenario A:

"Now that you have a bit of a reminder of what your current expenses are, I'd like to ask you to imagine yourself in a hypothetical situation. Please do your best to embody this scenario."

"You are notified by the government that you would be receiving an extra \$1,415 per month (tax free) – no strings attached. Meaning, this money is unconditional, and you would never need to pay it back."

Each participant had time to ask any questions and were then asked to take one minute to internalize and think about this scenario.

Facilitated Instructions:

"Please use column three (Scenario A) to indicate how you would allocate this additional income. You can add any new categories of expenses in the first column if needed"

"Remember: this money is in excess of your current income and/or budget that you just worked on in your budget. It is your money, and you are the only one with the power to allocate it accordingly.

"You can use a calculator if you wish"

"You have 10 minutes. Please begin"

Note: see Table 7 as a reference

Remaining on the phone with participants allowed any questions to be addressed, while ensuring the tasks were being completed correctly. The participants were not actively being monitored – if they had any questions, they could ask and to have their question answered immediately by a simple check of the spreadsheet (Table 7).

Scenario B: One-Year Basic Income Pilot Project

In the next scenario, the parameters were the same as Scenario A, except for the duration.

"For the next scenario, you have learned that you will be receiving the same \$1,415 per month, but it will only be for 12 months. Again, you will still be receiving the same amount, but by this time next year, this additional income will stop."

Once again, the participants had some time to ask any questions, and were then asked to take one minute to internalize and think about the new scenario.

"Please use the fourth column (Scenario B) to allocate your limitedtime income accordingly"

Note: The majority of basic income pilot projects have a longer duration than one year – for example, Ontario's pilot is three years. With the primary concern of this research focusing on 'duration', a one-year time horizon was chosen for this scenario to create the most distinct difference between the two scenarios. This would allow for an emphasized detection of change across the two time horizons.

The scenario exercises required participants to be highly cooperative in order to truly embody these hypothetical future states. Of the 20 participants, there were only three who had a lower level of engagement. The other 17 participants spent a significant amount of time contemplating and asking questions about the scenario dynamics. This step worked as a technique to allow for the subsequent step (semi-structured interviews) to be more seamless.

Step 3: Semi-Structured Interviews



Upon completion of Step 2, participants were asked to participate in semistructured interviews. This crucial step was the means to better understand the sentiment and motivation of basic income allocation between the two durations.

The following open-ended questions were posed:

- 1. What are some of your major financial struggles?
- 2. In scenario A, what did you think about? How did you feel?
- 3. In scenario B, what did you think about? How did you feel?
- 4. Can you compare and contrast the two scenarios?

Step 3 worked as any semi-structured interview would have, using the four questions as a foundation, while exploring any relevant divergent sentiments.

5

& Analysis

Questionnaire Results

Figure 4: Ages of Participants

What is your age?

20 responses

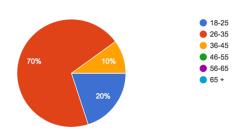


Figure 5: Income of participants

What is your approximate annual income (before taxes)

20 responses

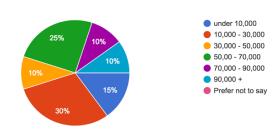
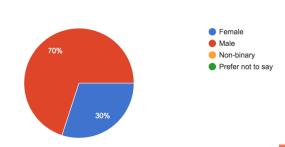


Figure 6: Gender of Participants

What is your gender?

20 responses



Insights:

Having 20 participants with varying ages, incomes and occupations, it was not a surprise that there were wide-ranging results for their actual expenses, and as a result, how they allocated the basic income. In order to analyze the results according to income levels, the participants were divided into the following two groups:

- Group 1 (9 participants) participants with an annual income of less than \$34,000 per year.
- Group 2 (11 participants) participants with an annual income over \$34,000 per year.

The income threshold of \$34,000 was established as a means to place individuals either below or above Ontario's Low-Income Measure. This allowed each group to be analyzed in distinct demographic groups to be compared afterwards.

The results were then coded and sorted to determine how the allocation of income would be useful for an actual pilot project.⁷¹ With this experiment taking place in Ontario, it seemed appropriate to refer to Ontario's specific measurement areas as a starting point. Ontario will be measuring the following seven areas:

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Detecting Areas of Change

Without a public methodology for Ontario's Pilot, there was no way to determine the exact details of each measurement area. Differentiating these areas independent of one another proved to be challenging as there was significant overlap in the areas. Due to these nuances, select areas were grouped together in an effort to develop a more holistic analysis.

Table 8 reveals which measurement areas showed significant change between the two scenarios, and whether or not the groups were affected. The table also introduces the modified sections created for the adjusted interpretation of the results.

Food Security
 Stress and Anxiety
 Mental Health
 Health & Health Care Usage
 Housing Stability
 Education & Training
 Employment & Labour Market

⁷¹ See Appendix 1 for details.

⁷² Ontario Basic Income Pilot. Ontario Public Service, 24 Apr. 2017, www.ontario.ca/page/ontario-basic-incomepilot.

Table 8: Detecting areas of change, and section

Measurement Areas		Group 1 Group 2		New Sections
1	Food Security	Х	Х	
2	Stress and Anxiety	√	√	Section 1: Stress, Anxiety &
3	Mental Health	√	√	Mental Health
4	Health & Health Care Usage	Х	X	
5	Housing Stability	✓	Х	Section 2: Housing Stability
6	Education & Training	√	Х	Section 3: Employment
7	Employment & Labour Market	√	Х	Outcomes

Group 1: Participants earning less than \$34,000 per year (9 participants)

The majority of participants in this Group were either students (some with and some without part-time jobs) or early career professionals. Due to their relatively low-income levels, the differences between the two scenarios affected more measurement areas than Group 2. Despite participants' awareness that this was a hypothetical research exercise, it was interesting to see the level of optimism and engagement that Scenario A (permanent basic income) presented to many in this group.

The modified sections will now be discussed in order to gain insights into how and why participants allocated basic income differently across the two scenarios.

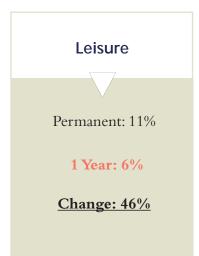
Section 1: Stress, Anxiety & Mental Health

Figure 7 displays the three expense areas that experienced the highest amount of change between the two scenarios. These areas were derived from Step 2 (Structured Scenarios) of the method. See appendix 1 for further coding details. The percentages represent the amount of income that was allocated between Scenario A ("Permanent"), and Scenario B ("1 year").

Figure 7: User spending towards three highest areas of change







Scenario A: Permanent Basic Income

With a permanent basic income, participants in the lower income group explained how there would be a sense of "relief" knowing they would have a safety net for the future. This recognition meant they would be less stressed and anxious, while having more disposable income to spend on more immediate needs, which also proved to have a direct effect on their social lives.

"To think I could catch up on all of my debts in no time, that stress would go away – wow! I wouldn't have to second guess purchases, and I wouldn't have to work like 17 jobs at once."

"I felt like I could take some risks. I allocated a portion of it into stocks

and mutual funds. I could take more investment risks and use the TFSA as a safe option. I also allocated some of it to the "now" – but this would shift as I got older".

Others were explicit about their current lack of savings directly affecting their stress levels, and how they could not experience things that bring them joy due to the feeling of "guilt" associated with their current financial stress. Some participants were aware that putting time and money aside for themselves was necessary.

"These debts, although aren't that much, cause stress and pressure and are always lurking in the background. Being able to save money would be nice but I haven't been able to do this in years".

"Having friends costs money, and I need friends in order to be 'well'.

"The money I'm saving for fun things is more for mental health...like travelling for example".

Participants spoke to their desire to get fitness club memberships, and other forms of strength and cardiovascular exercise, which might have positive effects on their physical and mental health.

"My school doesn't have a gym. I used to really like doing that in my undergrad... and I can't really do things outdoors in the winter..."

Scenario B: One-Year Pilot Project

While the general sentiment in Scenario A presented opportunities for participants to envision certain levels of lifestyle change, Scenario B did not. Participants were very clear that, due to the short-term nature, they would allocate the funds much differently. With this universal understanding, participants opted to "do the smart thing" and make the best use of the funds before its expiration date.

Figure 7 shows how participants allocated 26% more cash to savings and/or investments in Scenario B. Participants increased contributions to tax-free savings accounts, stocks, mutual funds, real estate savings, and emergency funds in this scenario, reinforcing some of the theoretical predictions made by basic income research teams in Chapter 3. Debt repayment also increased by 21%.

Savings and investments increasing in Scenario B influenced the 46% decrease in cash towards leisure-related spending, which was shown to have a direct effect on participants mental health. There was a general sense of neglected social experience and sacrificed friendships due to a lack of disposable income.

"I want to hoard it away until I really need it. It's more of an emergency cushion as opposed to a means to better my future".

The behaviour change in this scenario was clear. The fact that they would only be receiving the basic income for 12 months created a major mental model shift. The overarching theme in Scenario B was for participants "to be strategic".

"That definitely changed the mentality in how I'd save. I would save more and try to erase my debt as opposed to a gradual process...I'd still make more consumer decisions, but overall, I would try to be smarter knowing that I'd only have it for a shorter amount of time".

"I can't think about how I would really grow"

"This is an amount of money that is like a bonus when you're working, and you know it's not going to return; so, in this scenario I would treat it like I never had this money in my hands"

"I'd say that having it for a set amount of time rather than for life would definitely affect my decisions. I would try to be smarter with the limited time with regards to saving".

Section 2: Housing Stability

Figure 8: User spending towards 'home & utilities'



Scenario A: Permanent Basic Income

In Scenario A, many of the participants expressed their desire to upgrade their current living situations. Many discussed how a basic income would allow them to, one day, save enough for a home, or perhaps even an income property.

"Rent would be the first thing. I'd find a place where my wife and I can live without a roommate."

"I could buy a small starter family home first, and work towards improving it, then purchase more property."

"I will spend the rest of the money on housing. I know how housing can be expensive, but now I think I can afford it." "I'm worried about uncertainty, but now I would be able to move out without having to compromise my sense of security."

The idea of a permanent basic income allowed participants to immediately invest in their homes – either by upgrading their renting situation, or by purchasing property.

Scenario B: One-Year Pilot Project

When Scenario B was introduced, spending towards housing had an overall decrease of 50%. Participants chose to be safer with regards to housing upgrades or investments in Scenario B, as they were cognizant that the extra income would only be short-term.

"Well, I can't move out anymore...I would be scared that I wouldn't be able to continue with payment."

"It's not a ton of money, but if was put directly into stocks maybe it could become a down payment on a house in a few years."

"If it was distributed to random spending, it wouldn't feel like much... but if I saved all of it, the lump sum would be a big impact – almost \$17,000 that can be used for a home".

Once again, we see participants spending less on the immediate. Funds in this scenario are being saved or invested instead.

Section 3: Employment Outcomes

Figure 9: User spending towards 'professional development'



Scenario A: Permanent Basic Income

In Scenario A, a number of participants expressed their desire to do more "creative and professional development-related projects". These kinds of extracurricular activities were noted as tools to both boost ambition and happiness, as well as providing skills to "stay competitive", and perhaps generate a passive income, or a "side-hustle". Some participants were explicit about their fear of their skills and education becoming obsolete. One participant was quite confident that their continuous creative and technical skills acquisition would, hopefully, put them "ahead of the curve".

"I've never not had a side project – these things allow me to grow. When I slow down I feel like I'm in a rut. So, if I had more money, I'd throw a big chunk that way."

Increasing skills and experience would, hopefully, lead to more stable, permanent jobs, but Chapter 2 noted the current competitive climate for these more 'secure' roles. Some participants appeared to be aware of this, expressing resentment and lack of hope for growth in their fields. This may be why there was a surprising number of participants who expressed their desire to launch entrepreneurial endeavours in the near future. Whether these were legitimizing existing freelance or art & community-based projects, or starting up small businesses, this direction appeared to be an attractive for some.

"Because it's money I wouldn't have, I'd spend \$500 more (per month) for my art practice – I don't generate income off this, but that is the eventual goal. \$400 would go to community-organizing and creating events for social good. These would be workshops, art shops, music stuff, all kinds of different community activation events."

Another participant spoke to the notion of being "time-broke", specifically regarding their current ambitions being stagnated due to their lack of time die to multiple part-time jobs.

"The extra funds would give me more time because I wouldn't have to work 7 days a week. I am hoping to open my own business soon and freeing up some time would really allow me to actually get this thing started".

Scenario B: One-Year Pilot Project

Ultimately, participants were more likely to take entrepreneurial risks in Scenario A, resulting in a substantial decrease of entrepreneurship-related plans and expenditures in Scenario B. Spending for 'Professional development' decreased by 34% in Scenario B.

"In scenario B I was thinking more long-term. I decreased entrepreneurial stuff and increased long-term financials. The short-term nature wanted me to be safer."

"I don't think I would be able to do the entrepreneurial thing. I feel like it would be a means to an end and would not change my life at all.

"If I only had a year with this money I would do my best to be smart. Rather than taking on creative side project, I'm likely just saving now."

Group 2: Participants earning more than \$34,000 per year (11 Participants)

The sentiment from participants in Group 2 was significantly different than those in Group As higher earners, participants were much more comfortable in their current situations, which resulted in a lower level of engagement from the group. There was a general sense that a basic income would not result in the crucial lifestyle shifts observed with Group 1.

This is not meant to downplay the very real struggle that some people possess in Group 2's demographic. Some of these participants had families, and assets with strict payment obligations. With the research question focused on 'duration', it was an interesting group nonetheless.

Section 1: Stress, Anxiety & Mental Health

Figure 10: User spending towards three highest areas of change







Scenario A: Permanent Basic Income

Similar to Group 1, the higher income group allocated the majority of funds to savings, investments and debt repayment.

Some participants expressed how this would allow them to "make up for the parts of their lives" that they were neglecting. Although participants were earning much more than Group 1, many did not record substantial amounts of savings relative to their income. A basic income allowed some participants to start increasing saving or investing for the future, or by fast-tracking repayment of their existing debt.

"It's like a weight off my shoulders, but it's not like there was much weight in the first place...but whatever tension there was kind of melted away".

"Because I don't have a pension plan I am concerned if I have enough money once I retire. I have a group RRSP but that's quite limited".

"Loans. Student loans are like a cloud above my head."

One participant expressed their willingness to pursue an new creative direction, but the general sentiment was that a permanent basic income would provide "incremental improvement" as opposed to the major changes in Group 1.

"I would be much more poised to pursue a dream or passion. If I could work 20 hours a week and have a relatively equivalent lifestyle then sign me up."

Scenario B: One-Year Pilot Project

Just as Group 1 saw a major behaviour shift in Scenario B, Group 2 did as well. Although the participants, overall, were not as engaged in the exercise, there was a collective acknowledgment of the short-term reality of the pilot, and thus how they allocated the cash. Lifestyles were not significantly altered in Scenario B.

"If anything, it makes it more important to save it because it is finite. You only have it for the year, so you should want to make the most of it."

"I put it all towards savings because it's only for one year. I would save and invest in an income property."

"Scenario B is short-lived, which means I can't really change my lifestyle; I know it wouldn't keep coming, so it would all go towards investments."

Despite the general lack of "real" need for a basic income, Group 2 expressed the same sentiment to be strategic in Scenario B – savings and investments increased by 26%.

6

Discussion

Inside vs. Outside the Lab

The link between behavioural laboratory experiments and actual behaviour are heavily debated, especially in the fields of behavioural psychology and economics. For example, the idea of 'pro-social behaviour' is often cited as a theoretical critique positing that participants in lab experiments subconsciously alter their behaviour in a manner that would benefit, in this case, the researcher. However, other studies have found significant support for the notion that behaviour in artificial experiments do correspond to behaviour outside the lab. 73 Debates will continue, with either side upholding their respective schools of thought.

This report has taken the position that, due to the knowledge gap outlined in Chapter 3, more experimentation was required in order to develop a more informed understanding. So, if we lend credence to the latter argument and assume a certain level of 'truth' in this experiment, the results would indicate a need to make adjustments to the social effects that fail to be fully manifested if an actual basic income were implemented.

Implications for Basic Income Research

While this experiment did not include actual basic income recipients, the differences in income allocation point to patterns that should be considered by researchers and policymakers. This method uncovered interesting patterns of behaviour in specific measurement areas. There is now reason to believe that these patterns may take shape in pilot projects. The differences gleaned from this method may have significant implications for the design of a basic income policy.

The findings in Chapter 5 showed that basic income pilots would likely affect the decision-making of recipients. In an effort to maximize the use of the funds with short-term basic income, a large percentage of participants saved and/or invested the majority of funds. With more money being allocated to these intangible areas, participants had less disposable income to allocate towards immediate needs. As a result, the lifestyles of participants showed less extreme change.

When using Ontario's seven measurement areas as a point of reference, significant changes were observed in three main (modified) areas: 1) Stress, Anxiety & Mental Health; 2) Housing Stability; and 3) Employment and Labour Market Outcomes. The results from the Structured Scenario Interviews, although are limited, provide signals that the impacts of a basic income would be understated if the formulation of a basic income policy relied solely on data from pilot projects.

This research found that the three measurement areas would need to be adjusted to better reflect participant behaviour. The patterns that emerged in Chapter 5 provide people-centred insight that quantitative statistical data would be unable to detect, thus providing a rationale to explore these themes further. Although this method was only designed for 20 participants, it is a starting point for basic income researchers to determine whether they might want to have a closer look at potential methodological drawbacks in this area of inquiry.

As Chapter 3 highlights, there are numerous issues with time limits in pilot projects – and as we have seen from this experiment, there are innate behavioural conditions that play a major role in how participants act, and in this case, how they allocated basic income funds under varying time constraints. In the case of this sample, having a better understanding of these discrepancies would allow research teams to adjust these areas to better reflect how an actual policy might unfold.

Application

The differences of basic income allocation, along with the insights from the semi-structured interviews can be used as a tool for basic income research teams to better determine behavioural differences amongst basic income pilot project recipients.

Figure 11: Proposed use of method

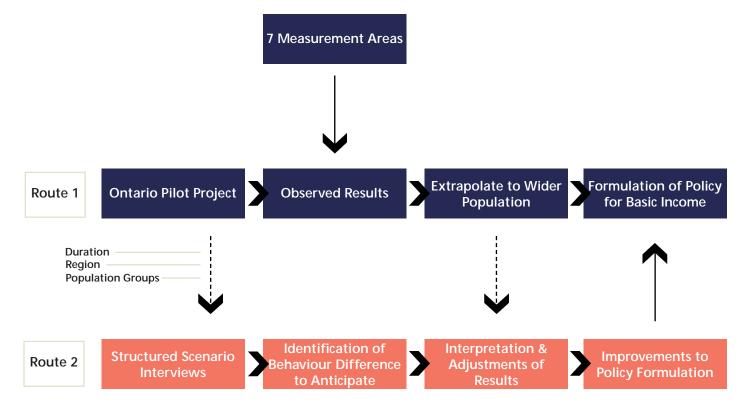


Figure 11 demonstrates how Structured Scenario Interviews might work as a tool to better understand this problem space. For example, 'Route 1' shows how, despite the knowledge gap outlined in Chapter 2, conclusions would be drawn from the 7 measurement areas, without a function to adjust for the behavioural discrepancies discussed in Chapter 5.

'Route 2' includes the application of a qualitative method for research teams to better understand what areas might be under or overrepresented. For example, in the case of this experiment, we observed three measurement areas (Sections 1,2,3) that would need to be adjusted to account for the behavioural outcomes associated with the limited time horizon. In the case of this experiment, we would need to adjust for the

short-term discrepancies by adding emphasis to these areas. This adjustment provides a more accurate representation of the kinds of social effects a basic income might have on its users.

This method has the potential to provide quantitative datasets with nuanced rationales for the human behaviour associated with short-term basic income experiments.

Qualitative analysis may lead to more robust behavioural insights which can be extrapolated to specific demographics.

Without an adjustment tool, the data might be interpreted at face value, and could potentially miss some of the intricacies outlined in this study.

Limitations

Pro-Social Behaviour

As mentioned, the extend at which 'real' evidence can be inferred from laboratory experiments is widely debated. This project is not only 'lab-based', it also requires participants to explore imagined future states. It is therefore important to frame this research as 'user-driven' and 'experimental', as there is no way to determine the level of accuracy of the actions and sentiment provided in the experiment.

Communication of Basic Income Terminology

Step 2 of the method used a demogrant to articulate the parameters of how participants would receive a basic income. This project uses Ontario's pilot as a reference point, which is a negative income tax experiment. A demogrant was chosen in order to make the instructions as simple as possible for the participants. Future iterations of this method could explore an NIT model by either having participants calculate their allotted income. The calculations can also be managed by the researcher – in this case, income levels would need to be specific as opposed to ranges.

Sample

Demographics:

Both income groups were not the most likely candidates for a basic income pilot.

Although Group 1 would have met the criteria for both a negative income tax and a

demogrant, many participants were students and were not struggling with the same kinds of financial issues as other demographics. Group 2 would only meet the criteria for a demogrant. The next iteration of this method would ideally involve participants that are more likely to sign up or be invited to such a pilot. For example, unemployed job-seekers, welfare recipients, and employment insurance recipients would provide better insights for the question at hand.

Gender Ratio:

There was an imbalanced gender ratio of 70% males to 30% females. This unequal ratio may have caused a bias in the results.

Challenges

Participant Interference:

In social science-based experiments such as basic income pilot projects, there may be obstacles with having increased contact with the recipients. Opposition may come in the theory that the very act of holding interviews with participants might sway their thinking in a specific direction. It might be argued that holding these interviews would cause participants to behave differently, resulting in sample biasing. This critique is valid and can be mitigated as follows: Rather than directly involving actual basic income participants, the method could, instead, involve individuals who are not part of the pilot, but who simply meet the eligibility criteria. In this scenario, the pilot's participants would not be interfered with. The Structured Scenario Interviews could be conducted as a discrete subset, and the results could be interpreted accordingly.

Politics:

Although basic income receives bipartisan support, and it is gaining momentum as a potential policy option, it is still perceived as a radical idea to many – specifically demogrant-base models. Government pilots receive ample scrutiny, and the idea of adding experimentation to a 'radical' idea might be faced with pushback. The benefits of such a method would thus need to be proven through continued testing. More data should be produced before this method is applied to a real pilot.

Opportunities

Improving the Dialogue:

Basic income often gets discussed in broad terms. Economic feasibility' is the common topic for debate, while less attention is paid to the kinds of behaviour we might expect from pilots. Pilots do produce valuable data, but the issue of short-term pilots is missed by the general public and may be overlooked by researchers and policymakers. By adding to the literature, we can have an important conversation about user behaviour in these kinds of studies. More experimentation can promote new ways of understanding the people we are designing for.

<u>Improving Microsimulations:</u>

Microsimulations use mathematical models to extrapolate behavioural outcomes of different population groups. These models can simulate large representative populations that draw high-level conclusions that can be applied to aggregated demographic groups in a geographic region.⁷⁴ There have been microsimulations conducted as a means to forecast how a basic income might affect a given economy or society. These studies can be helpful tools but are often critiqued due to their rigid data inputs.

With microsimulations and Structured Scenario Interviews both operating from hypothetical states, there may be an opportunity to use the qualitative data from the interviews to modify the constrained parameters in simulations. It would be worth exploring how more nuanced dataset would change existing simulations in the basic income space.

^{74 &}quot;Microsimulation." Statistics Canada, Government of Canada, 9 Nov. 2015, www.statcan.gc.ca/eng/microsimulation/index.

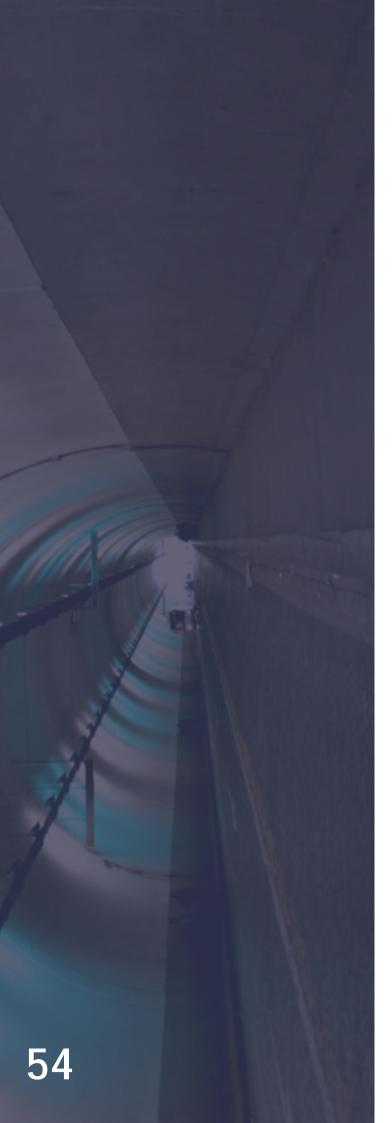
Conclusion

This method explored how basic income recipients might alter the ways they allocate basic income in a pilot project versus a universally implemented policy. The findings concluded that participants allocated funds differently across the two scenarios, validating the hypothesis and answering the primary research question. The Method takes an experimental approach to uncover the findings and proposes an accompanying policy tool for existing pilot methodologies.

Despite the various limitations with the method developed for this study, the use of basic income was proven to shift significantly across the two scenarios. The fact that participants are cognizant of the funds being short-term changes the way they think, feel, and ultimately, how they use basic income.

Significant changes in income allocation were observed in three main areas: 1) Stress, Anxiety & Mental Health; 2) Housing Stability; and 3) Employment and Labour Market Outcomes. The patterns uncovered from the Structured Scenario Interviews suggest the impacts of a basic income in these areas would be understated if the formulation of a basic income policy relied solely on data from pilot projects. This method helps to answer existing methodological uncertainties and adds to the discourse surrounding behavioural outcomes in time-limited experiments.

Structured Scenario Interviews can be used as a complementary method for basic income research teams to better understand how users might behave if an actual basic income were implemented. Subsequent iterations have the potential to be applied to broader population samples from various regions in Ontario's pilot, and experiments in other jurisdictions. More data will build an improved understanding of the anticipated behaviour changes in different regions.



Further Research:

The following topics are recommended for researchers interested in building on the results of this project:

NIT Model & Representative Sample:

A demogrant was used as the basic income model for this experiment. It would be interesting for the next version of this method to use a negative income tax model. This model would be more relevant to Ontario's pilot, for example. It is also recommended that the individuals included in subsequent iterations are from population groups that better fit the eligibility criteria of the jurisdiction at hand.

Basic Income-Driven Entrepreneurship:

A high percentage of participants in Group 1 expressed a keen interest in the pursuit of entrepreneurship in a permanent basic income, but not in the pilot. The idea of a lifelong safety net seemed to promote the idea independent work. It would be interesting to see how low-income individuals might stop looking for jobs and pursue something of their own. What might these kinds of pursuits look like?

Microsimulations:

A method like Structured Scenario
Interviews could alleviate some of the
drawbacks associated with basic income
microsimulations. It would be interesting to
see how potential measurement areas would
scale after adjustments. How might these
models benefit from more nuanced data
input?

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Appendices

Appendix A: Coding the Data

After analyzing the results of each participant, the following nine categories were formed based on recurring areas of basic income allocation in Step 2 of the method:

- 1. Savings & Investments: examples included: tax-free savings accounts, stocks, mutual funds, real estate savings, and emergency funds.
- 2. Debt Payments: ex: student loans, taxes, credit cards, and lines of credit.
- 3. Leisure: ex: travel, restaurants, cinema, alcohol, and sports.
- 4. Home & Utilities: ex: rent, mortgages, internet, electricity, and phone.
- 5. Professional Development: ex: entrepreneurship expenses, premium social networks, courses, office equipment, and event funding.
- 6. Transportation: ex: public transportation, new vehicles, and car-sharing services.
- 7. Groceries: ex: any food purchased for consumption at home.
- 8. Charity: ex: gifts, charity, friendship, and dependent family members.
- 9. Self-Care: ex: fitness memberships, health and beauty products.

Note: these categories only include items that participants applied basic income to. In other words, if a current (actual) expense item did not increase in either scenario, it would be excluded from this data set.

Table 9: Aggregated Data from Entire Sample

Aggregated Data from Entire Sample						
Expense Category	Scena	ario A	Scenario B		\$ Difference	% Change
Leisure	\$3,380	12%	\$1,320 5%		\$2,060 more for SA	58.3%
Savings / investments	\$12,210	44%	\$17,860	65%	\$5,650 more for SB	32.3%
Debt payment	\$4,805	17%	\$4,541	16%	\$264 more for SA	5.8%
Professional Development	\$2,000	7%	\$1,330	5%	\$670 more for SA	28.5%
Transportation	\$1,370	5%	\$0	0%	\$1,370 more for SA	100%
Self care	\$250	0.9%	\$0	0%	\$250 more for SA	100%
Rent + Utlities	\$2,275	8%	\$1,770	6%	\$505 more for SA	25%
Groceries	\$910	3%	\$560	2%	\$350 more for SA	33.3%
Charity	\$650	2%	\$200	0.7%	\$450 more for SA	65%

Table 10: Aggregated Data from Group 1

Aggregated Data From Group 1 (Under 50K)						
Expense Category	Scena	ario A	o A Scenario B		\$ Difference	% Change
Leisure	\$1,530	11%	\$770	6%	\$760 more for SA	45.5%
Savings / investments	\$5,520	40%	\$7,320	54%	\$1800 more for SB	25.9%
Debt payment	\$1,505	11%	\$1,931	14%	\$426 more for SB	21.4%
Professional Development	\$2,000	15%	\$1,330	10%	\$670 more for SA	33.3%
Transportation	\$20	0.1%	\$0	0%	\$20 more for SA	100%
Self care	\$100	0.7%	\$0	0%	\$100 more for SA	100%
Rent + Utlities	\$2,165	16%	\$1,020	8%	\$1,145 more for SA	50%
Groceries	\$710	5.3%	\$560	4%	\$150 more for SA	24.5%
Charity	\$100	0.7%	\$0	0%	\$100 more for SA	100%

Table 11: Aggregated Data from Group 2

Aggregated Data From Group 2 - Over 50K						
Expense Category	Scena	enario A Scenario B		Scenario B		% Change
Leisure	\$1,300	9%	\$870	7%	\$430 more for SA	22.2%
Savings / investments	\$6,840	49%	\$9,140	66%	\$2,300 more for SB	25.8%
Debt payment	\$3,300	24%	\$2,610	20%	\$690 more for SA	16.6%
Professional Development	\$0	0%	\$0	0%	n/a	0.0%
Transportation	\$1,350	10%	\$0	0%	\$1350 more for SA	100%
Self care	\$150	1%	\$0	0%	\$150 more for SA	100%
Rent + Utlities	\$110	0.8%	\$0	0%	\$110 more for SA	100%
Groceries	\$200	1%	\$0	0%	\$200 more for SA	100.0%
Charity	\$550	4%	\$200	2%	\$350 more for SA	50%

Appendix B: Invitation / Consent Form

Project Title: Assessing the impact of project duration on behaviour of pilot project participants

Principal Investigator:
MacKenzie Thorne
MDes Candidate
Strategic Foresight and Innovation
OCAD University
Faculty Supervisor:
Nabil Harfoush, Associate Professor
Faculty of Design
OCAD University

INVITATION

You are invited to participate in a study that involves primary research. The purpose of this study is to investigate the potential effects of project duration on the quality of obtained results in public policy pilot projects.

WHAT'S INVOLVED

You will be asked to take part in a structured research exercise where you will be asked to allocate hypothetical amounts of money to specific purposes. You will also be invited to take part in an interview once the tasks are complete. Participation will take approximately 30 minutes for the core research tasks, and an additional 20 minutes for the discussion at the end.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include: providing important insights to a study that is seeking to improve how such policies might be considered and scaled. Possible risks include: Due to the fact that you will be disclosing and discussing personal financial information, there is a possibility that this may cause discomfort, stress or anxiety. Personal financials can be a sensitive topic for many, and you may feel uncomfortable disclosing income and monthly expenses.

CONFIDENTIALITY

Your name, email address and data entered in the questionnaire and interview will be accessible and attributable by the MacKenzie Thorne and Nabil Harfoush, exclusively – all information you provide is considered confidential, and will not be shared with anyone. Because our interest is in the average responses of the entire group of participants, you will not be identified individually in any way in written reports of this research. All information you provide will be considered confidential and grouped with responses from other participants. MacKenzie will ensure that all information that identifies or could potentially identify you and your comments will be kept confidential.

Cloud data, including consent and questionnaire in google forms and email correspondence, will be stored with two-factor authentication (an extra layer of security that requires not only a password and username but another code that only the account owner has access to). The above-mentioned participant data will only be accessible by Mackenzie Thorne and will be permanently deleted after it has been analyzed. Other records (data entry forms and interview notes) will be kept in a secure folder on MacKenzie's hard drive. All of this work will be executed on an encrypted laptop. All records will be permanently deleted once the project is completed. Data will be kept for 50 days, after which time it will be permanently deleted. Access to this data will be restricted to MacKenzie Thorne and Nabil Harfoush.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time, or to request withdrawal of your data (prior to the data analysis competition date of November 20, 2017), and you may do so without any penalty or loss.

PUBLICATION OF RESULTS

Results of this study may be published in professional and scholarly journals, student's theses, and/or presentations to conferences. In any publication, data will be presented in aggregate forms. Quotations from this event will not be attributed to you without your prior written permission.

Feedback about this study will be available by contacting MacKenzie Thorne. This report will be published via OCAD University's Open Research Depository by February 2018. A summary of the report will be published within one month of publication.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator (MacKenzie Thorne) or the Faculty Supervisor (Nabil Harfoush) using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at OCAD University. If you have any comments or concerns, please contact the Research Ethics Office.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name:		
Signature:	 Date:	

Thank you for your assistance in this project. Please keep a copy of this form for your records.