Claims Made For or About a Basic Income

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Abstract

Basic income has been promoted as an important policy tool for a long list of reasons, ranging from supporting increased entrepreneurial activity to increasing mental health. In this paper, I assess some of the key claims made about the impacts of a basic income: that it is simple to implement by using the tax system; that it reduces the welfare wall, increasing labour supply among IA recipients; that it would increase volunteering and caregiving; that it would improve child well-being, education and development; that it would lead to an increase in entrepreneurship; that it would reduce crime rates; that it would improve health outcomes and reduce health care system costs; and that it would lead to higher wages and better working conditions for low wage workers. I also consider some claims about negative effects, raised by basic income opponents, such as the claim that it would lead to an overall decrease in labour supply in the paid labour market. The assessment is based on the research papers commissioned for British Columbia's Expert Panel on Basic Income. Overall, some of the claims for positive effects from a basic income receive support from the empirical evidence while others do not but even where there are positive outcomes a basic income is often not the most direct way to achieve the outcome and it is often difficult to determine whether a basic income would be better than income received through other, conditional programs.

Introduction

Basic income has been promoted as an important policy tool for a long list of reasons, ranging from supporting increased entrepreneurial activity to increasing mental health. In this paper, I assess some of the key claims made about the impacts of a basic income. I also consider some claims about negative effects, raised by basic income opponents. The assessment is based on the research papers commissioned for British Columbia's Expert Panel on Basic Income, and the reader is encouraged to look up those papers the Panel's website for detailed descriptions of the evidence as well as extensive literature reviews.

1. Using the Tax System Means a Basic Income Is Easy to Implement

One claim advanced for a basic income is that it can be administered through the tax system, making it more transparent, easier to access, and less costly to administer than other transfer approaches. For example, Philippe Van Parijs, one of the leading advocates for a basic income, states, "… in sufficiently formalized economies with tax systems that work reasonably well, the overall administrative cost of achieving any given rate of take-up among net beneficiaries can safely be expected to be less for a universal scheme than for a means-tested one" (Van Parijs & Vanderborght, 2017, p. 18). In the Canadian context, Forget (2018) similarly argues that "the basic income could be offered at very low administrative cost because it could be delivered through the income tax system" (p. 162)

In recent years, the federal and provincial governments have moved more and more to using the tax system as a benefit delivery system with key integrated elements such as the Canadian Child Benefit (CCB) and the GST rebate. This certainly raises the possibility that a basic income could be delivered simply and at low cost using the same platform. Moreover, as discussed in Tedds (2017), delivering benefits through the tax system has advantages in terms of ease of access, reduced administrative costs, and reduced stigma from benefit receipt. However, this approach faces two key problems. The first is that a substantial proportion of Canadians do not file taxes in a given year, and a non-trivial proportion are not found in tax-related administrative data at all. If these people are disproportionately the least well-off, then this obviously raises concerns about this approach to delivering what would be the central benefit in a redesigned support system. The second is that the tax system operates at annual frequency, implying a lack of responsiveness to changes affecting people at the time those changes happen. We will discuss each of these issues in turn.

People Missed by the Tax System

Green, Gutierrez et al. (2020) examine the question of who could be missed by a tax based distribution system using linked data from individual tax records (specifically the T1

Family File [T1FF], containing all information on all T1 forms filed back to 1982), the 2016 census, and death records. In a first exercise, they use a linkage of everyone present in the 2016 census to the T1FF to get a count of people who were captured by the census but did not file taxes for the 2015 tax year. They place people into three categories: Tax Filers for the 2015 tax year; Linked Non-Filers (people for whom there are records in the Canada Revenue Agency [CRA] system but who did not file taxes for 2015; and the Non-Linked (people who are not in the CRA system at all). The income data in the 2016 census is taken from the person's T1, so they impute income for non-filers based on the person's tax forms, such as T4s if they are present, and a combination of information from previous tax years and a nearest neighbour matching to other, comparable people if other tax forms do not exist.

They find that 89.1% of people in the census (over age 19) filed taxes for the 2015 tax year, while 7.4% did not file taxes for that year but were in the CRA system, and 3.5% were not in the CRA system. This fits with results in Robson and Schwartz (in press), who use data from the Canadian Survey of Financial Security to examine patterns of tax non-filing. In the context of that survey, Statistics Canada links the survey respondents to their tax records based on location of residence, age, gender, and some survey responses on income. The cases that Statistics Canada was not able to match are counted as non-filers and amount to approximately 12% of the sample (weighted). They also report numbers from Statistics Canada publications showing that the agency's estimates of non-filing based on census data is around 14%. Their data does not permit a further breakdown of non-filers into the Linked Non-Filers and the Not Linked categories.

Using the imputed income data, Green et al. (2020) find that individuals in the first decile of employment earnings are slightly more likely to be Not Linked (4.1% compared to 3.5% for the population as a whole) but much more likely to be Linked Non-filers (19.2% compared to 7.4% for the population as a whole). The same pattern holds for the Disposable Income distribution.

Thus, what is associated with low predicted earnings and income is not so much being missing from the tax system altogether as not filing in a given tax year. Recall that to be in the Linked Non-Filer state, a person can have current tax year forms from employers or governments while not filing their T1 and/or have filed in an earlier year or simply having a Social Insurance Number but not filing in 2016. It is also worth noting that the people in the bottom earnings decile likely have a strong incentive to file, since they would get the maximum GST credit as well as B.C.'s carbon tax credit. Recall that the table only includes people age 20, so the results do not reflect a lack of access to the GST credit for teenagers.

These results raise three points of interest. First, that there is a significant group at the bottom of the distribution who would be missed by a tax based distribution of a basic income—or at least would be missed in some years. Second, those people are not responding to the

incentives of the available tax credits and might not file in response to incentives associated with a basic income. Third, a tax system in which a T1 form is automatically filed for anyone who has information that has generated any tax form in a year would pick up many of the non-filers and address the issues raised here. In the remainder of the income distribution there is a slight U-shape, with those in the top income decile having the highest filing rates. Thus, a "universal" benefit delivered through the tax system would go disproportionately to those higher up in the distribution.

The results in Green, Gutierrez et al. (2020) also show that among Linked Non-Filers in a year, approximately half file taxes in the following year. This implies that non-filing is a relatively persistent state but also that people move out of that state at a sizable rate.

The raw correlations with income carry over to a regression context where individual characteristics such as education and gender are controlled for. In those estimates, a person from a low-income family who does not work during the year is 16 percentage points less likely to file taxes than a person from a middle-income family who does work.

Overall, the results from this first exercise in Green, Gutierrez et al. (2020) point to a conclusion that not being in the tax system at all does not appear to have strong associations with characteristics that would place a person at the bottom of the income and earnings distribution. However, not filing taxes in a given year does have a strong association with having zero earnings and being in the first decile of the family income distribution. The concern, then, is less with people falling through the cracks altogether in the sense of not interacting with the tax and transfer system at all than that the system, at least as currently constituted, generates a systematic and substantial under-filing of taxes by the least well-off.

Of course, this exercise and the one in Robson and Schwartz (in press) are incomplete to the extent that people are not counted by the census or not captured in the Survey of Financial Security. Green, Gutierrez et al. (2020) address this using death records for deaths in 2017 linked to the 2016 census and the 2016 and 2017 T1FF. The idea is that the death records provide a complete accounting for anyone who dies in Canada, providing some insight into how many are missed in census and/or tax records.

Based on the linkage to death records, just over 13% of people who died in 2017 in Canada were not in the 2016 census. As much as 3.6% of people were not in either tax system records or the census. These people are very disproportionately likely to have died from a death of despair (suicide, drugs- or alcohol-related death). In particular, in 2017, deaths of despair made up 4.5% of all deaths in Canada but 17% of deaths for people who are missing from both census and tax data. Notably, while 8% of all deaths did not have an associated T1 record for the 2015 tax year, 27% did not have such a record among those who died a death of despair. Further, the people who died in 2017 who were not in tax or census records were more likely to live in poor neighbourhoods with high proportions of Indigenous people and immigrants and where

geographic mobility rates are high. This suggests that the people missing from both survey and tax data are more likely to be from vulnerable populations than the people who are in the census but are not linked to tax system data. Given that they are missing from both tax-related and survey attempts by the government to contact them, they would likely be a particularly difficult group to reach with tax-based social benefits. The high proportion of them who died from deaths of despair implies that this omission is particularly troubling.

Adding together the Green et al. (2020) estimates of the people not in either tax data or the census to their numbers on people present in the census who are not in the tax system, between 3% and 6.6% of the Canadian population are not known to the tax system at all. Added to the people who do not file taxes in a year, between 11% and 15% of the population are either not in the tax system at all or do not file taxes in a year. These findings complement those in Robson and Schultz (in press), who find that approximately 12% of respondents to a Statistics Canada survey did not file taxes in the survey year.

Taken together, results in Green, Gutierrez et al. (2020) and Robson and Schwartz (in press) imply that delivering a universal benefit through the current tax system would miss a considerable number of people, particularly among the lowest-income and most vulnerable populations. Indeed, a universal benefit would go disproportionately to those with characteristics that put them at the top of the income and resource distributions. Of course, the offering of a sizable basic income would provide an incentive for more people to file taxes. The evidence on the responsiveness to such incentives in the Green, Gutierrez et al. (2020) data is mixed. They find that people with children have higher filing rates, fitting with incentives to do so to get the Canada Child Benefit (though this may also reflect recent actions by the federal government to ensure use of those benefits). However, the low rates of filing among those in the bottom earnings decile point in the opposite direction, since those people have an incentive to file in order to get GST and carbon tax credits.

Problems With Responsiveness

The second complicating issue with using the tax system to deliver a basic income is responsiveness to negative events at the time they happen. This issue arises because of the annual nature of tax filing and its timing relative to the tax year. These characteristics of income tax filing and assessment can lead to considerable lags between when a person's income falls and when benefits intended to help make up for that fall would be delivered. In the extreme, if a person lost their job in January of, say, 2020, this would not be reported to the tax system until the spring of 2021. If the income drop was persistent enough to imply a very low income for the 2020 tax year, then the person would be assessed as deserving a benefit, which could start to flow in May of 2021 at the earliest—16 months after the initial income drop. Moreover, if the job loss in January 2020 lasted only a few months and the person was able to earn income in the remainder of the year, then any assessed benefits could be small because the income loss is

averaged with earnings from the rest of the year and would arrive at a time when the person no longer needs them.

Notice that this description of basic income benefits assumes an income-conditioned form of a basic income, with a basic guarantee amount that is reduced as the person acquires income from other sources. A demogrant version of a basic income, in which everyone is sent a cheque of the same size on an annual or sub-annual basis, would not suffer from issues of timing relative to negative events like job loss because the benefit does not vary with time. However, a demogrant suffers from other issues in relation to negative income events. Cost restrictions may mean the demogrant is small relative to the poverty line and certainly small relative to the median income. That would mean that the income drop most households would face (from their regular income stream to the basic income alone) would be substantial. In addition, whether the demogrant was large or small, the fact that it would be paid out on a continuous basis means that people would build it into their regular spending patterns, such as decisions on how expensive an apartment to rent or whether to buy a car. At the point of income loss, then, households would face considerable stress in trying to meet their financial obligations with the basic income alone. In both senses, a demogrant would not be responsive to a negative income shock in a way that would help people with the stress of that shock. What would be needed in that case is something that looks more like insurance—a conditional payment—rather than an unconditional, constant payment.

The problem with responsiveness is recognized by some basic income proponents. Forget (2018) presents descriptions of different paths to a full basic income system, including one in which the provincial Income Assistance (IA) systems remain intact during the transition. She points out that in that case the IA systems can provide immediate responses to negative events like job loss, while the basic income is delivered on an annual basis through the tax system. It is not clear from her description how responsiveness would be addressed once the transition to a full basic income system (and the elimination of the IA system) is achieved. In a sense, this mixed approach highlights the advantages of some version of the current, conditional system over a tax-delivered basic income. Segal et al. (2020) argue, instead, for using a delivery mechanism like that used for the Canada Emergency Response Benefit (CERB) in which people apply (either online or with help) at the time of an income drop and are paid on a "trust then verify" approach. This approach still requires people to have a valid Social Insurance Number, which is not the case for the 3% to 6.6% of people missing from the system in the Green, Gutierrez et al. (2020) analysis. Moreover, the verify part of "trust then verify" has not yet been tested and could involve substantial issues relating to trying to recover overpayments from lower-income households.

Many of the issues related to responsiveness and coverage impair the effectiveness of current delivery of benefits through the tax system. Petit et al. (2020) and others argue that a

continued emphasis of the tax system on benefit delivery (and proposed expansions) imply a need to reform the tax system to include elements such as automatic tax filing and real-time, third-party information filing. Implementing those reforms would make a basic income a more viable approach, though it would still not overcome the issues that we discussed with trying to use a demogrant to replace insurance. It would also not fix issues with the people who are not known to the tax system (or even the census) at all—that is, people for whom there is no information to auto-fill a tax form. Approaches to finding and helping those people are required under any policy approach. Thus, claims about the simplicity of implementing a basic income through the tax system do not apply to this population, at least.

Conclusion

The Canadian tax system as it is currently constructed does not fit with the claim that a basic income could be easily distributed through the tax system. Between 11% and 14% of people do not file taxes in a year and, within that number, between 3% and 6.6% are not known to the tax system at all. This severely hampers the ability to deliver benefits through the tax system to those who need it most. Further, the annual orientation of the tax system means it is not responsive to income problems at the time they occur. Reforming the tax system to include both automatic tax filing and real-time reporting would help with both of these problems, and both are required even without implementing a basic income. If those reforms are implemented, then the claim of ease of delivery of a basic income through the tax system becomes more realistic (which it is not under the current system). But even then, the problem of finding and delivering benefits to people who are not in contact with the tax system implies that a basic income does not have any advantage in helping at least this part of the population and may be less effective than existing IA systems in helping them.

2. Claims Related to Work

A variety of claims are made about the impact of a basic income on work. Proponents argue that it will actually increase the tendency to take paid work through lowering the welfare wall. Opponents argue that it will induce people to work less because they can afford to work less—to which proponents respond that we need to be careful about how we define work: less paid work does not necessarily imply less time spent making productive contributions. People may use the income security of a basic income as a basis for doing more caregiving or volunteering. We will discuss each of these claims in turn.

Positive: A Basic Income Would Lower the Welfare Wall and Encourage Work

Standard transfer programs, like B.C.'s IA program, have a combination of a guaranteed annual income (G) for those with no other income sources and a rate at which the benefit is

reduced as recipients earn other income (BRR). The combination of G and the BRR determine the income range over which benefits are paid out. This will be the range up to BE (the break-even income level), the level of income beyond which the household does not receive any benefits. G, BRR, and BE are tied together with an iron law, G/BRR = BE. So, for a given G, if BRR is reduced, then BE increases and more people receive benefits. That means that if a government wants to focus its IA expenditures on low-income people, then it will implement a high BRR. But that high BRR is a strong disincentive for those on IA to take up work because they face what are effectively high tax rates on each dollar earned. In B.C.'s case, with a BRR=100%, an extra hour of work has no impact on the person's total income until they reach the BE level. These strong disincentives comprise what is sometimes called the welfare wall—a wall that is made higher by the fact that various kinds of non-income supports such as health supplements are also lost when a person earns enough income to leave IA. There is evidence that the welfare wall has real effects on labour supply behaviour.

Proponents of a basic income argue that a basic income program will lower the welfare wall, inducing more people to work (Van Parijs & Vanderborght, 2017, p. 19). Green, Tedds, et al. (2020) undertook a simulation exercise using administrative data to search for the optimal parameters in basic income systems for reducing the poverty rate. Their results reflect the iron law relating G, BRR, and BE. As the cost the government is assumed to spend on a refundable tax credit (RTC) form of a basic income is raised, the optimal approach for lowering the poverty rate is to raise both G and the BRR—that is, to both have higher benefits for those with the lowest income and focus the payments more on that group, effectively raising the welfare wall. In other words, RTC and negative income tax (NIT) versions of a basic income face the same issue with creating a welfare wall as IA systems. The existence of welfare walls is not an argument for a basic income, at least in these forms; it is a trade-off that any redistribution system needs to wrestle with.

One possible response is that a demogrant version of a basic income avoids high BRRs because the same amount is paid to everyone, so there is not a range of income over which benefits are reduced as earned income increases. This feature of a demogrant, however, is only apparent rather than real. The basic income must be paid for in some way and we show in the section presenting simulation results that a demogrant is a particularly expensive program. To the extent that expense must be covered by income taxes, there will be an increase in tax rates somewhere, even if they are not explicitly tied to the basic income. Thus, a demogrant ends up being effectively equivalent to an NIT or RTC version of a basic income and, as a result, the same arguments we just made about welfare walls hold here as well.

This is not to say the argument about welfare walls is incorrect. In their re-evaluation of Mincome data, Riddell and Riddell (2020) find that the main group in receipt of income assistance benefits in Manitoba at the time (lone parents) did show an increase in their propensity

to work in paid employment, as the Mincome scheme lowered the welfare wall. Milligan and Stabile (2007), using variation across provinces in the extent to which they clawed back the federal National Child Benefit from income assistance payments (and, therefore, the extent to which they reduced the welfare wall) find that both hours and participation rates of less-educated mothers, in particular, increased when the welfare wall was lowered. But, again, this is an argument about paying attention to BRRs in any program, not an argument in favour of a basic income, per se.

Negative: A Basic Income Would Reduce Participation in Paid Work

The opposite work effect is often raised as a claim by those who oppose a basic income: that it disincentivizes paid work, leading to potential problems for the economy and for the tax revenues to pay for a basic income. Green (2020a) shows that basic economic theory shows that both of these claims can be true at the same time: an increase in the guaranteed income, G, combined with a reduction in the BRR (which is what might one observe if a basic income were to replace IA in B.C.) could induce more participation by those who are in receipt of benefits and not currently working because of a lowering of the welfare wall. At the same time, higher incomes and effective marginal tax rates for people higher up in the earnings distribution means those people will have an incentive to work less. The relevant question is whether people respond strongly to those disincentives, cutting back their hours of work. That response is captured in the elasticity of labour supply with respect to the wage (how much do people increase their hours of work when their wage increases) and the elasticity of labour supply with respect to income (how much do they cut back their hours of work if their non-work income increases). Green (2020a) summarizes the existing literature estimating these elasticities, including the new work by Riddell and Riddell (2020) and other papers with estimates using Canadian data using variation from income assistance programs. That literature points to small labour supply elasticities in general and particularly small ones for people who are currently working above-average hours per week. More specifically, Green (2020) concludes:

> Overall, based on estimates in various related literatures and an exercise using those estimates in conjunction with Census data for B.C., a shift to a generous basic income scheme would likely have limited impacts on total hours worked in the economy. It would also likely have small effects in drawing IA recipients into work through lowering the welfare wall. At the same time, there are some groups—notably those without children—for whom predicted hours reductions are somewhat larger. Concerns for those groups could be mitigated by implementing a wage or earnings subsidy in conjunction with the basic income. But the key conclusion is that hours impacts are likely not large enough for them to be the main factor in deciding on whether to adopt a basic income.

Thus, a basic income would likely have negative effects on paid work but not to a large enough extent to justify a strong argument against a basic income.

Positive: A Basic Income Would Increase Non-Paid Work Such as Caregiving and Volunteering

To the extent that a basic income does reduce paid work, it may do so through allowing people to spend more time in caregiving and volunteering. Forget (2018) argues that "some work is important to the well-being of society but is not part of the paid labour market" (p. 90), citing spending time taking care of family members, and spending time in creative or voluntary pursuits. She also argues that some of the time may be spent in leisure but that "wealthy societies can afford to take some of their wealth in the form of a greater quality of life associated with time away from paid labour"(p. 90). The desire to fund the latter through public taxes and transfers is obviously something to be determined through the political process, and we will not try to assess it. However, we can consider at least indirect evidence on non-paid work in caregiving and volunteering.

We do not know of any direct evidence on receipt of transfers and time allocation to caregiving. The closest we have are the responses of parental labour supply to benefits targeting children. In recent decades, Canada has had several child-targeted benefits that resemble various forms of a basic income. Schirle (2015) examines the implementation of the Universal Child Care Benefit (2006), which provided $100 per month per child under age six to all families regardless of income starting in 2006. The benefit was taxable, so it had differential impact for high- and low-income families. Schirle finds that both hours of work and participation rates declined for mothers of young children, with particularly large effects for less-educated mothers. She also finds some evidence of a shift in expenditures toward child-focused expenditures, fitting with a notion that families responded to the benefits in ways that helped children. However, there is no dataset available to determine whether reduced paid work by mothers was offset by increased caregiving. In a similar vein, Riddell and Riddell (2020) show that in the Mincome experiment, married women with children reduced their mean hours of paid work by approximately 40%. They did not, however, reduce their probability of participation, so it looks as if they cut back on hours of work to spend more time in hours at home (likely in child care). These women report an accompanying increase in life satisfaction. Thus, these results fit with married women shifting their work hours from the market to home. Interestingly, single mothers had entirely opposite patterns: increased hours of work and participation and decreased life satisfaction. For them, lowering the welfare wall seemed to draw them into paid work, but this shift made them less happy. Thus, claims that a basic income would support moves to types of work that are outside the paid labour market are not universally true.

Campolieti et al. (2009) examine volunteering among people with a disability, providing evidence on correlations with different types of disability benefit receipt, education, and

household income, among other factors. They find that people who receive benefits from Canada Pension Plan disability benefits (CPP-D) are more likely to volunteer than people with a disability who are not in receipt of these benefits or people receiving benefits from workers' compensation. Since CPP-D does not discourage volunteering while workers' compensation does, they interpret these findings as fitting with the incentives in each system. This might be evidence that a consistent form of transfers (without paid work requirements) can lead to more volunteering, but their data does not have variation that could allow them to identify causal effects of benefit receipt. Moreover, they find no effect of household income on volunteering. Again, there is no way to connect this to the causal effect of income on volunteering (especially since what one needs is potential income rather than realized income), but this correlation may not fit with a volunteering effect of increasing income through, say, a basic income.

In an interesting study, Costa-Font et al. (2018) examine the impact of a Spanish reform that introduced unconditional (on income) supports for people with disabilities. The list of supports included cash benefits for spending on informal caregiving, say, from friends or family (though there was no auditing to make sure of how it was spent). The authors find an increase in the use of informal caregiving after the introduction of the policy. This raises the interesting possibility that a basic income would increase caregiving through an alternative channel other than freeing up time for benevolent acts: people in need of caregiving might spend some of the basic income to pay informal caregivers.

Conclusion

Overall, there is little direct evidence for the claim of increased volunteering and caregiving in response to a basic income. Increased income assistance or child-related transfers appear to lead to some decreases in paid work on the part of less-educated mothers in particular, but there is no evidence on whether those decreases are matched with increases in caregiving. At the same time, lowering the welfare wall (as would happen with a basic income) leads to mothers working more, so for this disadvantaged population the effects could work in the opposite direction. Volunteering effects are even more uncertain. The direct evidence is on reducing work requirements of benefit receipt, which is feature of a basic income but could also be a separate policy recommendation in its own right. A basic income may also result in the monetizing of informal caregiving, which would likely have adverse effects on community building.

3. A Basic Income Would Improve Child Well-Being, Development, and Education

Forget (2018) presents evidence that children from lower-income households have poorer outcomes in terms of health and education. She argues that this may come partly from direct material deprivation and partly from the unrelenting stress of low and uncertain income streams. She states that a basic income can

> address such fundamental issues as material deprivation and income insecurity. A basic income is designed precisely to reduce the debilitating chronic stress associated with these factors. Moreover, a basic income may address some of the social exclusion associated with poverty. People with the resources to allow their children to participate in low-paid internships or to attend university can give their children a fair chance to benefit from opportunities that high income families take for granted. (p. 63).

Similarly, Van Parijs and Vanderborght(2017) state,

> Like other ways of making family income more secure, basic income can be expected to have a beneficial effect on children's health and education…by facilitating chosen part-time work and promoting a smoother conciliation of work and family life, it enables parents to devote more attention to their children when this is most needed. (p. 25)

Jones and Stabile (2020) provide both a review of existing evidence on the effects of income transfers on child outcomes and a new assessment of the impact of a universal child benefit in Canada on test-score outcomes for children in B.C. They divide income transfer programs into three types: work-based programs such as the Earned Income Tax Credit in the United States and the Canada Worker's Benefit (CWB); unconditional but means-tested benefits, such as the Canadian Child Benefit (CCB); and unconditional and universal cash transfers such as the Universal Child Care Benefit (UCCB) that preceded the CCB in Canada. Reviewing evidence from various countries (though, with a focus on Canada), they conclude that transfer income improves cognitive, social, behavioural, and physical outcomes for children and infants. The sizes of the estimates vary substantially across studies and there is some heterogeneity in the effects in other dimensions. For example, they conclude that boys tend to benefit more in terms of academic achievement, while for girls the positive estimated effects are more in the realm of behavioural issues such as aggression. Importantly, they see similar-sized effects from work- and non-work-based programs.

In their empirical work, Jones and Stabile (2020) examine the impact of the introduction of the UCCB on the Foundations Skills Assessment tests taken by all B.C. students in Grades 4 and 7. Recall that the UCCB was a universal payment of $100 per month for all children under age six but it was taxable, so it would have a much greater impact for lower-income families. The fact that it was for children under age six while the outcome is test scores in grades 4 and 7 means the authors are looking at longer-term outcomes of transfers during infancy. They find that the UCCB reduced the test performance gaps between children living in low- and high-income neighbourhoods by as much as 50%.

Forget (2011) examines data from the Mincome experiment for the saturation site at Dauphin, Manitoba. Using provincial enrolment records, she shows that continuation rates from Grade 11 to Grade 12 for high school students in Dauphin increased substantially relative to

students either in Winnipeg or in the rest of the province other than Winnipeg during the Mincome experiment, falling back to prior levels after the experiment ended. She argues that this could have arisen as a result of reductions in perceived risk during Mincome.

These various positive effects on social behaviour, cognitive skills, and education from transfer income could arise through different channels: increased spending on goods related to child health and education; reduced stress in the household; and increases in parental time with children as a result of reductions in paid work. Najjarrezaparast and Pendakur (2020) examine changes in household expenditures for households with below-median incomes as a result of the introduction of the CCB in 2016. They find that the CCB increased income by roughly $4,300 on average for these lower-income households and that that translated into a $3,000 (or, roughly, 10%) increase in consumption expenditures. The lion's share of the increased expenditures was on housing and was mainly by households that rented their accommodations. There were also increases in spending on food and clothing—but, notably, only on children's clothing. These patterns are interesting, since they may indicate that families see themselves as most constrained in their spending on housing. Jones et al. (2019) use variation from the various child benefit policies that have been in place in Canada since 1993 to examine impacts on child-related spending. They find evidence of increased spending on education-related goods such as computers and on food. There is also some evidence of reduced spending on cigarettes and alcohol.

We have already seen that increased transfers not tied to work can reduce maternal paid work, though we don't have direct evidence on the extent to which this translates to increased child care. There is also evidence of reduced stress in families, such as reduced rates of maternal depression and, in some papers, lower rates of smoking and drinking.

Jones and Stabile (2020) conclude that there is a considerable body of evidence on positive behavioural, developmental, and educational effects from increased transfer income, particularly for lower-income families. However, as described earlier, the estimated effects are quite similar for the three different types of programs and the variability in estimates is sufficiently high that they argue, "it isn't clear that one can conclude that one type of benefit income delivery system has a much larger impact on child outcomes than another" (p. 8). This is particularly notable when one considers that the paper includes comparisons of work-based and non-work-based benefits, which might, in itself, suggest that parental-time-with-children channels are not the main determining mechanism.

Based on Jones and Stabile's (2020) conclusions, it appears that existing evidence points to substantial returns in terms of child outcomes for providing transfers to low-income households, but there is no clear case that such transfers achieve better outcomes if they are delivered in a basic income form.

4. A Basic Income Would Increase Entrepreneurship

Van Parijs and Vanderborght (2017) argue that "by providing an unconditional floor, a basic income can be expected to help unleash entrepreneurship by better buffering the self-employed, worker cooperatives, and capital-labor partnerships against the risk of uncertain and fluctuating incomes" (p. 24). Similarly, Standing (2017) argues that "having economic security would make people more willing to take entrepreneurial risks." The argument is essentially that people are not taking enough risks on innovative ideas because of fear of the large income loss consequences of failure. Such an argument implies that entrepreneurial investment is at an inefficiently low level and that providing a basic income would help in achieving an efficient level. More specifically, the argument must be that people who are interested in pursuing innovative ideas are not able to buy the right level of insurance against failure and that providing a permanent income guarantee is the right way to provide that insurance. Supporting the efficient level of entrepreneurial activity is key: we do not want to set up a system where people use society's resources to pursue any random idea that comes to them or, on the other side, to have a system that disincentivizes or blocks people from pursuing productive ideas.

In any discussion of entrepreneurial activity it is important to separate true entrepreneurship, in the sense of pursuing a productive idea that could develop into a firm with many employees, from simply starting a business. In particular, Lester (2020) distinguishes between "necessity" self-employment in which individuals open a small business (usually employing only themselves) because of a lack of options in paid employment and "opportunity" self-employment in which individuals open businesses to pursue an innovative idea. Necessity self-employment is most associated with low individual work characteristics such as low education and pays much lower incomes with higher variability than either opportunity self-employment or paid employment (Lester, 2020). Necessity self-employment is mainly associated with unincorporated, own-account self-employment, while opportunity self-employment is associated with opening an incorporated firm. The hassle of incorporation is generally seen as only worthwhile if there is a productive idea with upside potential. Green et al. (2020) show that the rates of movement from own-account self-employment to incorporated firm ownership are very low and argue that one should see own-account, unincorporated self-employment more as a (poor) labour market state somewhat related to unemployment than as entrepreneurship. Necessity self-employment is more an employment status of last resort than an attempt to implement an innovative idea.

The division into different types of self-employment is important for discussing the role of a basic income relative to firm opening. As Lester (2020) points out, the own-account self-employed are a group that appear to need help since they have very low incomes, but they are underserved by income support programs. In particular, by Lester's count, only 2.1% of government spending on active labour market programs targets the self-employed (a much

smaller proportion than their proportion of all workers), and the self-employed have limited access to employment insurance. Thus, a basic income could be seen as a way of providing support for people in an unfortunate labour market state who currently have few supports. Of course, if a basic income helps make self-employment less risky by providing them with income in periods of business downturn or failure, then entering self-employment will become more attractive. It is not clear whether this would be a good outcome given the arguments that this tends to be a low-income, high-variability employment state and only rarely a path to establishing an incorporated firm. Indeed, it could serve to subsidize the type of unstable employment related to ride-sharing and other "disruptive" technology employment—employment that is a source of potential concern in terms of worker rights and dignity.

What about for start-ups of incorporated firms? Lester (2020) argues that one could see concerns for such start-ups in a number of dimensions, including the red tape of incorporating a new firm, difficulties in implementing bankruptcy proceedings, and licensing requirements in some occupations. He argues that B.C. ranks well in terms of costs of opening a business based on international standards and concludes that the province does not have excessive licensing requirements for low-skilled occupations, but that further investigation of these issues for B.C. is warranted. He also points out that a variable income stream, such as might arise in the early years of a firm's life, implies higher average tax payments in a progressive tax system than a less variable stream with the same mean. Based on this, he argues for an investigation into allowing income averaging across years in tax calculations. Acquiring health and work injury coverage could also be problematic for entrepreneurs, reducing the attractiveness of opening a firm. Of course, B.C.'s Medical Services Plan provides coverage regardless of employment status (an advantage relative to the United States) and Fair PharmaCare provides similar help in terms of affording drugs for low-income households—again, regardless of employment status. This suggests that some types of basic services support may be at least as helpful in providing a favourable climate for opening businesses as providing a basic income.

The main argument raised by basic income proponents, though, is essentially about providing a backstop for entrepreneurs taking a chance on a new idea. This brings us back to the question of efficiency and insurance markets. New entrepreneurs cannot buy private insurance against business failure for standard information reasons related to insurance. An insurance company does not have as much information about the functioning of the business and the viability of its underlying idea as the entrepreneur and so will be afraid either that only entrepreneurs who are uncertain that their idea is good will buy insurance (adverse selection) or that entrepreneurs may purposefully drive their business into failure in order to collect the insurance money (moral hazard). The fact that this insurance is not available while employment insurance exists for paid employees tilts the playing field against opening a new business in an inefficient way. We want potential entrepreneurs to bear some of the risk of a new start-up (to

have “skin in the game”), but they shouldn’t face more risk than they do as employees simply because of a lack of available insurance. The question is, then, whether a basic income would be the best means of providing that insurance. On one hand, a basic income for all would provide the exact same type of “insurance” for both employees and the self-employed, levelling the playing field in this dimension so that people can make a balanced decision as to whether to open a firm. But a basic income will typically do a poor job of providing insurance. In an NIT or RTC form of basic income, the income guarantee will likely be relatively low, given the costliness of these systems, implying that entrepreneurs (and workers) could see it as an inadequate form of insurance—that is, one that does not allow them to keep their consumption levels anywhere near where they were when employed. In a demogrant version of basic income, people will tend to build the basic income into their daily spending decisions, implying that it is not there as a separate amount of money if their business fails (i.e., that it is not truly insurance). The federal government is currently examining mechanisms to provide business or income insurance to the self-employed, and that more direct approach seems preferable.

Conclusion

A basic income is likely not an effective policy tool if the goal is to increase entrepreneurial activity. In part, it may serve to increase own-account self-employment, which is often a poor labour market state that we would want to help people leave, not attract them into (though Lester [2020] argues that it may reduce own-account self-employment by inducing people not to work at all, which also may not be a desirable outcome). For that group of firm owners, the best approach is probably to give them access to training programs to help them leave self-employment. For incorporated firm owners, part of what may be needed is reductions in bureaucratic, licensing, health, and tax-related barriers to opening a firm. Lester (2020) calls for investigations of possible barriers. There is an imbalance in the availability of income insurance for entrepreneurs and the paid employed that may lead to an inefficiently low number of new firm start-ups. But the best solution to that problem lies with improved insurance, not a basic income, which is an imperfect substitute for insurance.

5. A Basic Income Will Improve Health

Forget (2018) argues that health outcomes are strongly associated with both material deprivation and income insecurity and that a basic income can help with these conditions, stating, “A basic income is designed precisely to reduce the debilitating chronic stress associated with these factors” (p. 63). Moreover, she argues that improved health outcomes is a key way for a basic income to pay for itself, arguing that it “will pay off in a need for fewer hospital beds and lower demands placed on family doctors, who too often find themselves prescribing

antidepressants and anti-anxiety medications to people living with the stress of chronic poverty and economic insecurity"(p. 63).

Evidence on the Association of Self-Reported Health Outcomes With Transfer Income

As Forget (2018) points out, there is considerable evidence of the relationship between low family income and poor health outcomes, showing up, for example, in higher rates of premature births and low birth weight, which are, themselves, associated with poorer outcomes of various kinds later in life. As she also points out, though, it is not immediately clear whether these associations reflect causation: that is, whether an intervention that improves family incomes will also improve health. It is instructive to discuss some of the studies that have investigated that causal link. In particular, we focus on estimated effects of variants of a basic income or near–basic incomes. In all of these studies, health measures are self-reported and are broken down into mental health outcomes and general health outcomes. The former are seen as giving evidence on a potential impact of a basic income in reducing stress in a household because there is a secure source of income. The latter will include mental health effects plus physical health impacts.

While not a true basic income, the Finnish experiment providing a guaranteed income for a short time to long-term unemployment benefit users provides evidence on the impacts of transfer benefits on a variety of outcomes, including health. The results of that study indicate that access to ongoing benefits results in an improvement in overall health (with 14% of the treatment group saying their health is poor or very poor compared to 17% of the control group) and mental health (with 25% of the treatments saying they have lost interest in previously enjoyable things compared to 34% of the controls).

Another version of a basic income is found in the Eastern Band of the Cherokee Nation (in the United States), who were being followed in a study by researchers at Duke University at a time when a casino was opened, with proceeds distributed to band members as an annual dividend. Costello et al. (2010) compared changes in various health outcomes for the band members with a comparison group of non-band members. They found that the band members who lived in households receiving the dividend during childhood experienced decreases in any psychiatric disorder during adolescence as well as in young adulthood (i.e., by age 21). They also found reductions in alcohol and cannabis use. The outcome measures were gathered based on structured interviews conducted by trained interviewers, making them more rigorous than pure self-reports but still not assessments by physicians.

McIntyre et al. (2016) investigate the impact of a basic income, in particular, by using the example of Old Age Security/Guaranteed Income Supplement (OAS/GIS) income for seniors. In particular, they select a sample of low-income individuals from the 2009 Canadian Community Health Survey and compare self-reported health outcomes for those just below the age of eligibility for OAS/GIS (i.e., ages 60–64) to those just over the age of eligibility (ages 65–69). In

their sample, transfers—Employment Insurance (EI), IA, and worker's compensation (WC)—are the main income source for 35% of those age 60–64, while OAS/GIS benefits are the main source of income for 86% of those age 65–69. They show that the proportion reporting poor or fair mental health declines from 18% for 60–64-year-olds to 10% for 65–69-year-olds. In a regression context, in which they control for age and income, they find that poor or fair overall health is 16% lower among those whose income source is OAS/GIS benefits than for those whose income source is EI, IA, or WC. Given that they control for income and housing wealth, they interpret this as evidence that a guaranteed income is a better way to provide income support, arguing that the lower stress associated with a permanent income stream could be the main mechanism. Fitting with this conclusion, they show that poor or fair mental health is 8% lower for those with income from OAS/GIS benefits than for those with IA/EI/WC income, though this difference appears not to be statistically significant. The interpretation of these results is complicated by the fact that the IA/EI/WC category includes workers' compensation, which is necessarily a lower health state. In addition, with almost everyone over age 65 having OAS/GIS benefits as their main source of income and with these benefits being much higher than benefits from IA, identification of OAS/GIS effects from age or income level effects is challenging and must ultimately rely on functional form assumptions.

Milligan and Stabile (2011) use variation in child-related benefits paid to households across years and provinces associated with the Canada Child Tax Benefit (CCTB) and the National Child Benefit Supplement (NCBS) to study both child and parental health, among other outcomes. The CCTB and NCBS are effectively versions of a basic income targeting families with children under age 17. They find that increases in income due to these programs significantly reduced children's emotional disorder-anxiety score as well as significantly reducing maternal depression. On the other hand, it had little discernable impact on overall health of either the mother or the children. As with the other studies, the health outcome scores are based on self-reports.

Jones and Stabile (2020) report on estimates using other variation and from other countries also showing that transfer income tends to reduce maternal depression. Overall, the studies point to an increase in self-reported mental health outcomes with increases in transfer income and, in particular, with transfers that have a basic income type of form. There is less clear-cut evidence on positive effects on overall health, with most studies showing smaller and not statistically significant effects. The effects that are seen in overall health measures could just be reflecting the mental health component of overall health. Thus, there is evidence in favour of the hypothesis that having a consistent income source reduces stress and increases mental health for low-income households—mothers and children. Reductions in rates of alcohol, tobacco, and drug use that have been documented in some studies are seen as a reflection of that reduced stress.

Evidence of Impacts on Health System Resource Use

A second element of the claims about basic income and health outcomes is that improved health leads to reduced use of health-care resources—that is, fewer visits to hospitals and doctors' offices. This is sometimes put forward as one way in which a basic income can, in essence, help pay for itself. One of the main pieces of information on this impact comes from a reanalysis of Mincome data in Forget (2011). Forget uses community-level health records for Dauphin, Manitoba (the saturation site in the experiment) and a set of matched people from the rest of the province to examine impacts on hospital and doctor visits. She argues that hospitalization dropped by 8.5% in Dauphin relative to the control group because of the basic income and that this suggests that there could be considerable savings in health spending from implementing a basic income. She found that the drop in hospitalizations was driven by drops in accidents and injuries and in mental health diagnoses, both of which she attributes to reductions in financial stress because of the basic income.

It is worth highlighting, at the outset, the important distinction between health outcomes and use of the health-care system. A basic income could reduce stress (as the self-reported measures used in the papers described above indicate), but it could also alter the way people choose to use the health-care system. Reductions in stress could reduce the need for hospital visits and doctor's appointments. At the same time, having a reliable income could allow people the "luxury" of taking time off work to get a medical issue addressed. In private correspondence, Forget argues that this is the reason for the increase in hospitalizations seen in the first year of Mincome for those in Dauphin, shown in Figure 2 in her paper: farmers could now afford to take the time off to get minor surgeries done. These forces go in the opposite direction and would imply an increase in health-care spending. That increase would not be a bad outcome. One thing we might want from a basic income is that it allows people to take actions to look after their health before problems reach catastrophic levels.

Green (2020b) uses the data from Figure 2 in Forget (2011) to re-examine the impact of Mincome on hospitalizations in Dauphin. That figure shows the levels of hospitalizations in Dauphin and the control sample for the years spanning the Mincome experiment. In it, hospitalization rates are about 8.5% higher in Dauphin than the control sample but converge to those in the control sample by 1979. Since the Mincome experiment occurs in the middle of this convergence, Forget (2011) argues that the convergence is due to the introduction of the basic income.

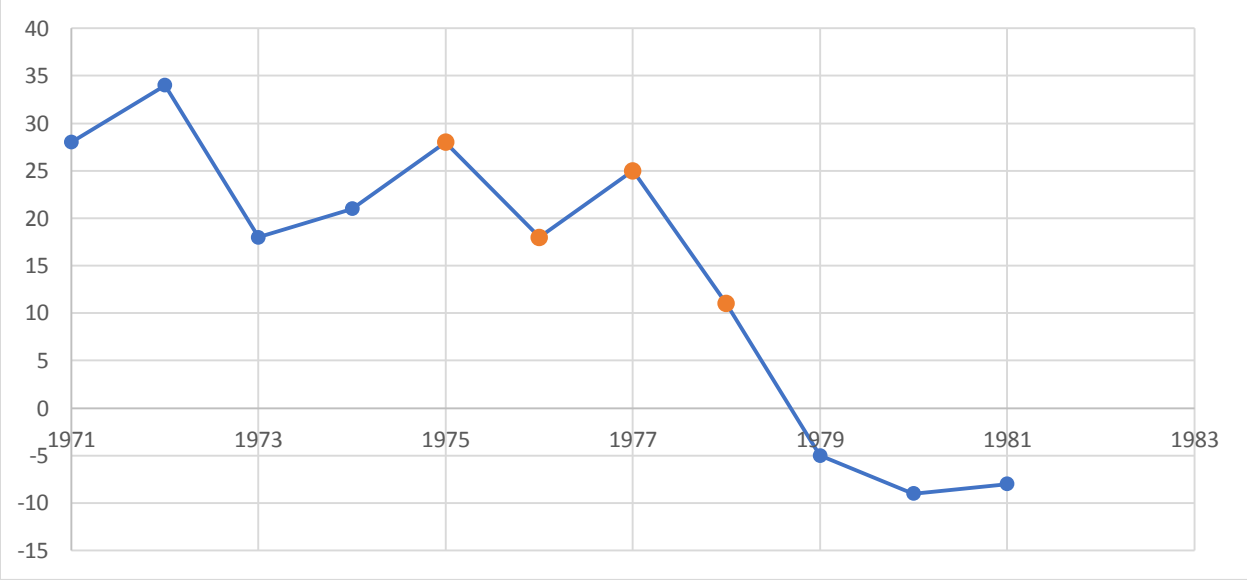
Figure 1 shows the difference between the Dauphin and control lines from Figure 2 in Forget (2011).[1] It is this difference that identifies the potential effects of the experiments, and so

[1] More precisely, the data for the years 1970 through 1974 were provided by Professor Forget. Those data were in six-month intervals but are noisy to read, so I followed her approach in Forget (2011) and plotted the annual totals. Since 1970 did not have a full year's worth of data, I do not include it. Figure 2 in Forget (2011) did not include

it is useful to plot it directly. The points with the orange dots correspond to the Mincome experiment years. Note that while Forget's original data was at the individual level, the comparisons are at the community level (comparing Dauphin to a control community constructed using matched observations). That means that the community is the actual level of data variation being used in her analysis, so a complete evaluation can be done without access to the individual level data.

Figure 1

Difference Between Dauphin and Control Hospitalizations, From Figure 4 in Forget (2011)



This figure is effectively an event study exercise, showing how Dauphin differed from the control sample in each year before, during, and after the Mincome experiment. Two key points follow from this figure. First, the convergence in hospitalization rates between Dauphin and the controls happens almost entirely after the experiment has ended. If the line in the figure were stopped at the end of the experiment in 1978, the result would be a line portion that is downward sloping and variable without the Mincome years (the orange dots) looking very different from the trend before Mincome. This leads to the second point—that there was already a trend toward convergence underway before Mincome. Indeed, one could read this figure as showing a trend that is interrupted by a set of positive deviations from the trend during the Mincome years (i.e., one could notionally extend the pre-Mincome trend and pretty much see it as continuing in the post-Mincome period). In trying to identify the effects of the experiment, the pre-trend is important. If there is already convergence underway before the experiment occurs,

1981, but it was in an updated figure kindly shared by Professor Forget and I include it here. For the years after 1974, I eyeballed the values from that figure, since the precise underlying values were not available for those years.

then any long-term convergence cannot be attributed to the basic income experiment. It is not clear where the downward trend comes from, but Forget (2011) notes the installation of a "fairly new" hospital in Dauphin in the pre-Mincome years such that "it is certainly possible that some of the comparison group may have had less convenient access to hospitals than the Dauphin residents, leading them to forgo voluntary treatment" (p. 295). It could be the case that the hospital led to an initial set of admissions and procedures in Dauphin that took years to clear through.

Forget (2011) examines these patterns using a difference-in-difference type of econometric specification. However, her specification does not allow for the existence of a pre-trend, and Green (2020b) argues that there are other non-standard elements to the specification. Even if her exact specification is used, when the post-Mincome years are dropped, the estimated effect of the experiment becomes very small and not statistically significant. This fits with the evidence from the figure that it is the post-experiment years that drive the convergence result. The problem with this is that Forget's argument is that the Mincome basic income reduced hospitalizations by reducing financial stress, but it is hard to see how it could continue to reduce stress several years after the benefits stopped flowing. Interestingly, if one allows for a pre-experiment difference in trends between Dauphin and the controls (as the figure indicates is needed), the Mincome effect on hospitalizations actually turns positive. This could fit with the earlier argument that the basic income allowed people to take time off work to go to the hospital.

In a further examination of health and employment outcomes related to benefit receipt, Green, Hicks, and Warburton (2020) use linked B.C. administration data to examine the impact of benefit denial under IA.[2] In particular, they employ two related strategies. The first uses variation from a natural experiment in the IA system in 1996 that was previously studied in Green and Warburton (2005). In that year, a new set of verification officers (VOs) were introduced in some IA offices. The VOs re-examined applications that had already been given approval by the initial assessment worker. The empirical approach was to compare outcomes in offices with VOs and those in a set of other offices chosen to match the VO offices in terms of case characteristics and trends. Green and Warburton (2005) examined subsequent IA receipt, finding that for those who were denied benefits if they faced a VO but would have received benefits in a non-VO office, the effect of being granted benefits on subsequent IA receipt declined quickly after the assessment and was essentially zero after approximately two years. Interestingly, they show that this happened mainly because those who were granted benefits moved out of IA receipt rather than because those who were denied benefits found a way to get

[2] The data was used as part of the Guaranteed Basic Income project, commissioned by the Ministry of Social Development and Poverty Reduction, Province of British Columbia, and includes: Income Assistance data (British Columbia Ministry of Social Development and Poverty Reduction(2019); MSP billing data (British Columbia Ministry of Health (2019a, c); health outcome data (British Columbia Ministry of Health 2019b,d); and death records (British Columbia Ministry of Health(2019e).

onto IA later. That is, this marginal group affected by the tightening of the IA system were truly using the system in a short-term way.

Green, Hicks, and Warburton (2020) use the same natural experiment but look at other outcomes. They also use further related variation. After the 1996 natural experiment, VOs were extended to work in all IA offices. The second approach is to use variation that comes from variability in VO office rejection rates to examine the effect of being denied benefits. This approach identifies effects for people who are rejected by high rejection rate VOs but who would not be rejected if they happened to encounter a lower rejection rate VO. Under both approaches, the authors find support for the conclusion in Green and Warburton (2005) that this group of people at the margin of being given benefits move off IA receipt relatively quickly and have receipt that falls to the same levels as they would experience if they had been rejected in the VO assessment within two years after the assessment. They also find that the difference in their likelihood of being employed in a good job (defined as one in which the employer pays the individual's MSP premiums) is small and not statistically significantly different from zero starting within six months after the assessment and continuing for at least three years afterward. On the health side, the effect on MSP-listed health expenditures is not statistically significantly different from zero in any month after assessment and is variable in sign and relatively small. This is also true when looking at MSP expenditures on mental-health-related codes. There is, however, some evidence of benefit denial causing an increase in the cumulative probability of death by two years after the assessment. The size of the impact is small (since, of course, the probability of death is not large in the first place) and is statistically significantly different from zero at the 10% significance level but not at the 5% level.

The evidence from Green, Hicks, and Warburton (2020) supports the conclusions from the earlier studies. That is, losing transfer income for the marginal group affected by a tightening of the IA system does not alter medical system usage rates as reflected in the person showing up with an MSP billing. However, it may be associated with a small increase in deaths, pointing again to the distinction between actual health and health system use.

Conclusions

The claim that transfer income can help in reducing stress and improving self-perceived mental health is supported in the data. Importantly, some of the variation used in establishing this claim comes from forms of a basic income such as old age benefits, child benefits, and dividend payments to First Nations community members. However, new assessments of the data on health-care system usage point to a conclusion of no effect or even possibly increased hospital usage when transfer income access is provided. Thus, a basic income seems to help with health but not in a way that will provide savings in health-care costs.

6. A Basic Income Will Reduce Crime Rates

Another way that a basic income is claimed to both provide direct benefits and reduce other expenditures is through reducing crime. Several papers have attempted to assess this channel. Calnitsky and Gonalons-Pons (2018) examines crime impacts using the Mincome experiment, working with Statistics Canada crime data for Dauphin and a set of 15 similar-sized towns in Saskatchewan and Manitoba. Once again, the basic approach is difference-in-differences but augmented to include demographic and other community-level variables in order to allow for ongoing changes that could confound results. Unfortunately, the authors do not just include obvious controls such as the age composition but also labour force participation rates and average family income. The latter might be affected by the introduction of the basic income and so controlling for them essentially removes channels through which a basic income could operate. This may imply that they obtain under-estimates of basic income impacts. controls. Their impact on ultimate estimates of the impact of a guaranteed annual income on crime is uncertain.

The initial plotted results in Calnitsky and Gonalons-Pons (2018), showing impacts over time, have some confusing elements. In particular, the first Mincome payment was December 1, 1974, but substantial differences between Dauphin and the comparisons emerge in 1974. There was an advance information campaign, but it seems unlikely that people would cut back on property crime because of a promise of basic income to come later. For property crime—depending partly on exactly how we view 1974—Dauphin and the comparable towns appear to be trending in opposite directions before the experiment. Moreover, Dauphin continues to have lower rates of property crime in 1978 and 1979, after the experiment is over. That fits more with Dauphin being on a different trend than a pure treatment effect. On the other hand, violent crime follows a pattern that fits better with a treatment effect: the rates for Dauphin and other similar-sized towns are very similar through 1974, diverge during the experiment, and then come back together afterwards. The implication is that there is some evidence of beneficial effects on violent crime of a relatively substantial size but uncertain evidence on the property crime impacts.

Akee et al. (2010) use the Eastern Cherokee Band dividend to examine the impact on crime, finding a 22% reduction in self-reported criminal activity among youth from families in receipt of the benefits, with much of the reduction in terms of minor crimes and drug dealing. Combined with the Mincome evidence, this does point to some reduction in crime rates associated with a basic income.

7. A Basic Income Will Raise Wages

It has been argued that a basic income is a tool for better wages and working conditions, especially for low-skilled workers (Van Parijs & Vanderborght, 2017). There are two mechanisms through which this could occur. The first is a simple demand and supply channel. If a basic income induces some unskilled workers to withdraw from the labour market, then supply will be reduced and, as long as the demand for labour is not perfectly elastic, wages will rise. Rothstein (2010) used this framework to examine the impact of the Earned Income Tax Credit (EITC) in the United States on wage setting. He worked with estimated demand and supply elasticities, calibrating a simple equilibrium model. His results implied that the EITC reduced wages to an extent that substantially reduced the benefits of the program, essentially transferring some of the benefit money to employers and consumers. He then argued that a combination of the EITC with a minimum wage could be effective in making sure the benefits actually ended up with workers. Fortin et al. (2020) implement that same model, with modifications to fit it to the B.C. case, to examine the potential impact of a basic income on wage setting here. They follow Kasy (2018), who argues that a basic income is a superior program because it has the potential to raise wages as well as transfer income directly. Of course, the extent to which this is true depends on the relative size of labour demand and supply elasticities. Both are typically estimated to be small. That means that introducing a basic income may only move the labour supply curve a small amount, but even small changes applied to a very inelastic demand curve could induce sizable wage increases.

The second route through which a basic income can affect wages is through its impacts on bargaining. In a standard search and bargaining model, workers and firms have some difficulty meeting each other. Once they do meet, there is an advantage for both to stay together rather than breaking up the match and looking for another partner. In this situation, the wage is the outcome of a bilateral bargain, with the bargained wage reflecting the relative bargaining strengths of the workers and firms. Those strengths depend on how well they would each do if the bargain is broken up—how credible is their threat of walking away from the bargaining table. In labour markets with high employment rates, workers are able to find new jobs quickly while firms face strong competition to attract new workers, so the worker's outside option is better and bargained wages will be higher, for example. Benefits that are paid when a worker is not employed, such as unemployment insurance benefits or a basic income, will strengthen the workers' hand at the bargaining table. That strength could show up in wages or it could show up in the form of better working conditions, depending on the relative value to workers and the relative cost to the firm of working conditions versus wages. It is worth noting that this second channel for affecting wages can operate even if workers do not withdraw their labour in response to the introduction of a basic income.

There is by now considerable evidence that wages do have this type of form, where outside options matter. For example, Beaudry et al. (2012) show that workers in a given industry (e.g., construction) are paid higher wages in local labour markets where there are higher-paying firms such as steel mills than ones where the employment structure is dominated by lower-paying firms such as call centres. This is because a worker's outside option includes the possibility of getting a high-paid steel job in the first firm, and the worker can use that as a threat in bargaining. Beaudry et al. (2012) find that these effects are substantial. On the other hand, Jager et al. (2019) examine the wage impacts of a major unemployment insurance reform in Austria and find no effect on wages.

In an attempt to examine this issue in a Canadian context, David Green and James Townsend estimated impacts on the wage distribution of changes in disability benefits across provinces and over time as part of the basic income panel investigations. To this point, this exercise has resulted in quite imprecise estimates so that it is hard to say whether these policy changes (some of which have been substantial) have had an impact on wage setting in Canada.

Overall, there is good reason to believe that a basic income could result in higher wages for low-income individuals. However, the empirical evidence available so far provides unclear guidance on whether this effect would be likely to happen, in fact, and how large it would be.

Summary

The claims made for a basic income receive varying amounts of support from empirical investigations done for our panel as well as work by other researchers.

The claim that a basic income would be easier to implement than other approaches because it can be provided as a tax credit does not hold up. The proportion of individuals not in the tax system is substantial and solving that problem would be costly for a basic income, or any other, approach.

There is little direct evidence on the claim of increased volunteering and caregiving in response to a basic income. Participation response for mothers not in receipt of IA suggest there might be some increase in caregiving for children but this is partially offset by a tendency for lone mothers on IA to move into work if the welfare wall is lowered. Volunteering effects are uncertain but there could be a monetizing of services that may be detrimental to communities.

Based on Jones and Stabile(2020)'s conclusions, it appears that existing evidence points to substantial returns in terms of child outcomes to providing transfers to low income households but there is no clear case that such transfers achieve better outcomes if they are delivered in a basic income form.

A basic income is likely not an effective policy tool if the goal is to increase entrepreneurial activity. In part, it may serve to increase own-account self-employment, which is often a poor labour market state that we would want to help people leave, not attract them into.

For that group of firm owners, the best approach is probably to give them access to training programs to help them leave self-employment. For incorporated firm owners, part of what may be needed is reductions in bureaucratic, licensing, health, and tax-related barriers to opening a firm. Lester(2020) calls for investigations of possible barriers. There is an imbalance in the availability of income insurance for entrepreneurs and the paid employed that may lead to an inefficiently low number of new firm start-ups. But the best solution to that problem lies with improved insurance not a basic income, which is an imperfect substitute for insurance.

On the positive side, the claim that transfer income can help in reducing stress and improving self-perceived mental health is supported in the data. However, new assessments of the data on health care system usage point to a conclusion of no effect or even possibly increases in hospital usage when transfer income access is provided. Thus, a basic income seems to help with health but not in a way that will provide savings of health care costs.

Also on the positive side, there is evidence that a basic income will reduce crime rates, though whether the effect would be more in terms of violent crime, drug dealing, or property crime is uncertain.

Finally, there is some hope that a basic income could result in higher wages and, possibly, better working conditions, though the extent of this effect is currently uncertain. And, of course, a basic income would not be the most direct approach to achieving these goals. That would be accomplished through labour regulation and supporting union bargaining.

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