Universal Basic Income: A Fix for Means-Tested Welfare

Yuliu Huang

48A Mechanic Street Millburn, NJ, 07041, US

Abstract

Universal basic income (UBI) has emerged as a hotly debated policy proposal around the world, and there have been calls for UBI to replace the heavily scrutinized welfare system in the United States. In this paper, I use the general equilibrium model to explain how data from developing nations demonstrate the great potential of UBI in the United States. Studies find that UBI removes the work disincentive effect caused by means-tested welfare, encourages people to accumulate assets, and provides significant benefits for children. Furthermore, I refute the critics of UBI who disparage it on the basis of cost and temptation goods. I conclude that UBI is the optimal replacement to means-tested welfare because not only does it benefit individuals by lifting them out of poverty, but it also leads to positive macroeconomic results.

Keywords: Public policy, means-tested welfare, UBI, poverty, general equilibrium model

1. Introduction

The current welfare system in America is extremely expensive and ineffective. It has been more than 50 years since former president Lyndon B. Johnson introduced his Great Society programs to improve social welfare and America has spent trillions of dollars in an attempt to benefit those who are most vulnerable in society. Despite these efforts to help those who are disadvantaged, the poverty rate has increased by two percent since these programs were introduced and 40.6 million Americans were still below the poverty line in 2016 (Woodhill 2014 and Semega et. al 2017). Furthermore, there is still a huge racial disparity in poverty as blacks and hispanics account for 44% of those living below the poverty line despite them only comprising 25% of the US population (Burton et. al 2017). There are a few explanations for these phenomena. One important explanation is the welfare cliff, which takes away all benefits if recipients reach a certain level in income. This heavily disincentivizes work because recipients are essentially "punished" for working as they lose all their welfare benefits. As a result, people are trapped in poverty (Butcher 2017). Another factor for this continued level of high poverty is the stigma and shame that is inherently attached to meanstested welfare programs. Critically, this stigma has significantly decreased participation in various types of programs such as SNAP and Medicaid. Studies have shown that people may receive the welfare check but refrain from using them due to the shame factor (Stuber and Schelsinger 2006). The current welfare state does the opposite of what it sought to accomplish and needs to be reformed completely.

UBI, or universal basic income, is a proposed public policy that would replace the current welfare system and that could lift millions of Americans from poverty. The essence of UBI is simply a guaranteed and unconditional cash transfer that will be provided to all US citizens. For instance, former presidential candidate Andrew Yang's campaign featured a Freedom Dividend of \$1,000 per month (Clifford 2019). UBI has the potential to alleviate poverty in the United States for a couple reasons. First, UBI has no means tests, meaning it automatically removes the restrictions that the current welfare system places on recipients and gets rid of the work disincentive. Second, UBI is universal, meaning recipients would not be ashamed of using the transfer. Third, UBI would incentivize people to acquire and save durable assets because it does not impose a limit on assets; this further reduces cyclical poverty, particularly for the recipients' children. Multiple studies that explore the long-term effects of UBI in developing countries and show that such strategies are effective in those contexts. However, the long-term effects of UBI in developed countries like the U.S. have not been explored.

In this paper, I fill this gap by exploring the potential long-term effects of UBI in the US. In the remainder of this paper, I use the general dynamic model as my theoretical approach to analyze the problems with current means tested welfare programs, such as the welfare cliff, asset tests, and their work disincentives. The general dynamic model will also be used to lay out the positive impacts of UBI for individual recipients and the implications for households. Specifically, I discuss UBI's effect on work incentives, its long term economic impacts, and its overall effectiveness on poverty reduction. Ultimately, I address the critics of UBI, refuting the arguments of high cost and consumption of temptation goods. Overall, through lifting restrictions, reducing bureaucracy, and removing stigma, UBI not only lifts people out of poverty but also benefits the economy.

2. Theoretical Approach

The general equilibrium theory will guide this work. The general equilibrium model assumes that people behave rationally and consistently regardless of factors such as wealth. Moreover, all humans behave based on a pleasure-pain calculus as explained by Bentham, taking a utilitarian approach and doing cost-benefit analyses before acting. For instance, if a person passes up a profitable opportunity, the general equilibrium theory would explain the phenomenon by claiming that other financial/non-financial costs must have outweighed the potential benefits. The general equilibrium model puts personal and organizational utility at the center of its predictions (Becker 1976). In this paper, I use the basic cost-benefit analyses involved in the general equilibrium model to explain the failure of the welfare system in the US and the positive results of UBI in developing nations.

I use the general equilibrium theory for two reasons. First, the general equilibrium theory has been historically used to analyze social welfare programs in developed nations (see Peterman and Sommer 2019, Boeters et al. 2006, and Attanasio et al. 2010 as examples). In fact, the general equilibrium model has already been used to quantify the potential effects of UBI, discussing its cost and its macroeconomic impacts on the US economy (Wharton 2018). The general equilibrium theory is still the most prevalent model to analyze welfare programs because it provides the most holistic analysis and includes non market factors (Klaiber and Smith 2010). In fact, it is not just limited to market prices and material goods; the general equilibrium model can be applied to all human behavior (Becker 1976). Second, results from developing nations where UBI has been implemented support the underlying ideas ofthe general equilibrium model; people have been shown to be maximizing benefits through working and acquiring more assets when there are no costs involved.

3. State of the Current Means Tested Welfare System

Means tested welfare (thereafter referred to as MTW) programs in the United States are programs that distribute resources to people below a certain income level, with the aim of lifting these people out of poverty and providing them with sufficient financial resources to meet basic needs. The most notable MTW programs include the Supplemental Nutrition Assistance Program, (SNAP), Medicaid, and Section 8 housing vouchers (Rector 2012). Overall, the federal and state governments spent around 1.1 trillion dollars on MTW in fiscal year 2016 (Rector and Menon 2018). However, despite the intentions of these programs to alleviate poverty, MTW has not truly benefited the most vulnerable people in society (i.e. the poor) and is desperately in need of reform. In reality, the implementation of such welfare programs have only exacerbated poverty in the United States by pushing more people under the poverty line. A multitude of factors contribute to the failure of MTW, with the most prominent ones being the welfare cliff, asset tests, stigma, and bureaucracy.

4. Problems with Means Tested Welfare

4.1 Welfare Cliff

The welfare cliff describes the phenomenon in which welfare benefits phase out as income rises above the poverty line. In fact, the welfare cliff is so severe that in some situations, an additional one dollar earned could lead to a 50% reduction in welfare benefits (US Senate 2012). This issue is also specific to MTW because MTW, by nature, is only distributed to people below a certain income (i.e. the poverty line). As a result, individuals rising out of poverty face an average marginal tax rate of 32% (Butcher 2017). This essentially means that as these individuals' earnings exceed the poverty line, there is a 32% tax on every additional dollar they make despite the actual tax bracket imposing much lower rates on these individuals.

Problematically, the high marginal tax rate has a strong work disincentive. Specifically, individuals may not work to ensure that they retain the benefits because higher earnings inherently disqualifies them from benefits (Banerjee et. al 2016). Empirical evidence quantifies the strong work disincentive associated with the welfare cliff, as welfare recipients work 50% less hours than non-recipients on average, a startling number (Moffitt 1983).

The general equilibrium model explains this work disincentive effect. Recipients perceive their extra work as worthless because as they rise out of poverty, they encounter an extremely high marginal tax rate at 32%. In turn, after doing a basic cost-benefit analysis, these recipients are content with the current benefits since they do not gain much through doing extra work.

Logically, if the government is "punishing" people for working by taking away their welfare benefits, the vast majority of individuals will choose to receive welfare benefits for free as opposed to having most of their income taken away when they do extra work. The strong work disincentive also explains why a significant number of individuals fall back into poverty shortly after rising slightly above the poverty line. People do not have the incentive to work and hence their income will naturally decrease gradually. In fact, two thirds of those who escaped poverty fall back into poverty within a span of five years (McKernan et. al 2009). This data shows how means tested welfare leads to more poverty because it disincentivizes individuals from working hard, pushing their incomes below the poverty line continuously.

4.2 Asset Tests

Asset tests are a way of means-testing individuals. They impose limits on the amount of liquid (i.e. cash) and non-liquid (e.g. cars, houses, etc.) assets that a family can own in order to still receive welfare. In fact, the average asset limit for MTW programs is \$2,000 (Vallas 2014). This means that if a family's savings and other assets exceed \$2,000, they instantly lose all their welfare benefits in a complete phase out (similar to the welfare cliff). However, it is important to note that asset tests have been eliminated in many states and they only remain in 12 states (Dorfman 2016).

Asset tests are problematic because welfare recipients would rather retain the benefits than accumulate assets and lose all the welfare checks that they receive. As a consequence, 40% of households on welfare are liquid asset poor, meaning they do not even have enough money to sustain themselves for three months at the poverty level (NLIHC 2019). The general equilibrium model explains this phenomenon once again because families experience a tradeoff; they have to pick between accumulating assets or receiving welfare. Unfortunately, many pick the latter because they fear that losing welfare, a guaranteed benefit, will be detrimental to their lives.

Tragically, the decisions of these poor households to not accumulate assets adversely affect their children as well. The owning of and passing down of assets are crucial in ending intergenerational poverty. Without the accumulation of liquid and non-liquid assets, the children living with parents on welfare are also likely to be trapped in cyclical poverty. This is because when the parents are without assets, they cannot invest in valuable areas such as health and education, meaning their children do not even have the opportunity to achieve social mobility (Bird 2007). Although asset tests have been eliminated in most states, the existence of asset tests in these 12 states still trap millions of welfare recipients and their children in poverty because they are essentially punished if they accumulate liquid and non-liquid assets.

4.3 Stigma and Bureaucracy

Stigma and bureaucracy are two other critical factors that contribute to the overall failure in the welfare system. Stigma is inherently attached to MTW because it is only distributed to those below the poverty line and causes recipients to feel shame. In turn, stigma has historically discouraged participation in various types of MTW programs such as SNAP and Medicaid (Stuber and Schelsinger 2006). Bureaucracy is also present in MTW and it is very difficult to gain access to/use these welfare benefits in the first place. Overall, ¼ of those in poverty (13 million total) do not have access to any type of government assistance programs (Minton and Giannarelli 2019). As a result of stigma and bureaucracy, 50% of households eligible for SNAP did not participate in the program (Manchester and Mumford 2012). It is clear that stigma (psychological cost) and bureaucracy (time cost) account for the significantly decreased participation in welfare programs. The general dynamic model once again explains this phenomenon because (a) the recipients are sacrificing the profitable opportunity (i.e. welfare benefits) in order to avoid psychological costs (i.e. embarrassment), and (b) the recipients prefer to not receive the benefits due to the time costs (e.g. filling out long registration forms, traveling to government offices, hassle incurred when paying with welfare checks, etc.).

5. UBI's Potential Benefits

5.1 Overview

Due to the numerous problems associated with MTW, UBI has been proposed to replace the current welfare system and provide a much better social safety net for the poor. UBI has been endorsed by a lot of public figures, including renowned economist Milton Friedman, civil rights activist Martin Luther King Jr., technological mogul Elon Musk, and former presidential candidate Andrew Yang. UBI's universality differentiates itself from prior welfare programs in a couple ways. First, everyone receives it regardless of income/assets which eliminates the problems associated with means-tests. Second, its universality should theoretically remove the bureaucracy that makes it difficult to access MTW; the administrative costs should be relatively low because UBI will be administered to all US citizens. Overall, UBI is supposed to remove the restrictions attached to MTW.

5.2 Work Incentive

Past studies demonstrate that UBI does not have the same work disincentive effect that is inflicted by MTW when UBI replaces MTW. Most pilot studies, from developing and developed nations such as South Africa and Finland, find that UBI has no statistically significant effect on the labor supply, meaning it successfully removes the work disincentive effect caused by MTW (Posel et. al 2006, Banerjee et. al 2015, Marinescu 2018, and Kangas et. al 2019). In fact, a study done in South Africa found that cash transfers increased employment because the extra money created more flexibility, allowing individuals to migrate elsewhere and look for better paying jobs (Ardington et. al 2007).

The general equilibrium model supports this removal of the work disincentive effect with UBI; individuals no longer experience a tradeoff in which they have to choose between working while losing all benefits or retaining benefits without working. Because UBI is distributed to all US citizens regardless of their wealth, individuals can be assured that even if they earn income, they will still receive the monthly \$1,000. Thus, individuals will be theoretically encouraged to work because any additional income they earn is now coupled with the unconditional \$1,000 that they are guaranteed each month. With the implementation of UBI, individuals receive the transfer unconditionally, meaning they do not have to worry about being booted off the existing social safety net anymore (Banerjee et. al 2015). They can work their way up the economic ladder, earning more and more income while being assured that the government will provide them with additional money which further raises their standard of living. Although developing nations have differently structured economies compared to the US, rational individuals will make the same decisions; they all have the incentive of making life better for themselves and their families, thus they will be incentivized to work the same amount/more. This stands in stark contrast to the work disincentive embedded in MTW. For these reasons, it can be theorized that the same successful results from developing nations will be achieved in the US.

Despite the Alaska pilot study, the only large-scale UBI experiment done here in the US, finding that there was a slight decrease in working hours, the World Bank's meta-analysis explains that the Alaska findings are relatively inaccurate and not representative of the effects of UBI for two reasons (Jones and Marinescu 2018 and Gentilini et. al 2020). First, the findings done by Jones and Marinescu 2018 only discuss how part time work has increased by 2%; studies of the Alaskan Permanent Dividend still find that the transfer removes the work disincentive effect caused by MTW since there was "no reduction on time spent in paid employment and no impact on early retirement". In fact, the aggregate labor force participation in Alaska continues to trend upwards. Second, the World Bank states that the program in Alaska had an extremely low value (around \$1,000 per year). This is critical because the low value of the transfer did not provide a strong incentive to individuals. (Gentilini et. al 2020). Therefore, for these two reasons, the pilot experiment of UBI in Alaska cannot be relied upon as an accurate evaluation of UBI's work incentive effects. Evidence from the developing world still overwhelmingly demonstrates how UBI will remove the work disincentive effect caused by MTW.

5.3 Assets

Past studies support the idea that UBI would incentivize people to save assets. Studies done in developing nations such as Kenya find that with the distribution of UBI, expenditure on durable (non-liquid) assets increased by 23% (Egger et. al 2019). This meant individuals invested in assets such as livestock and electronics that could benefit them in the future. Furthermore, individuals had much more savings and liquid assets on balance after receiving the unconditional cash transfer (Haushofer and Shapiro 2016).

Under the general equilibrium model, individuals will be incentivized to accumulate assets with UBI; once again, they are no longer punished with losing all welfare benefits if they decide to keep assets. Even if individuals save up a large amount of liquid or non-liquid assets, they still qualify for UBI due to its universality. In turn, individuals should have the incentive to accumulate assets because this benefits them and their children. Not only is this phenomenon observed in developing nations, but empirical evidence from the US itself shows that it has already worked in practice. When asset limits for MTW are relaxed, the median value of liquid assets for recipients doubles (Ratcliffe et. al 2016). This evidence clearly demonstrates that the poor have an incentive to save once they are no longer punished for doing so.

5.4 Effect on Poverty

Results from UBI experiments demonstrate how UBI is able to alleviate poverty in two main ways. First, due the removal of the work disincentive, there is a significant increase in income (without taking the UBI into consideration). Specifically, the revenue for enterprises in experimental villages increased by 45%, which translated into a 60% increase in income for the recipients (Egger et. al 2019). The general equilibrium model accounts for this phenomenon.

Because these experiments removed the welfare cliff, recipients were able to capitalize on the opportunity and maximize their profits economically. For instance, the guaranteed basic income served as a safety net for recipients to fall back on. This likely increased innovation in small businesses because individuals had more flexibility with their finances. As a result, recipients were able to make more revenue from their enterprises and earn higher incomes.

Second, another important impact of UBI is its ability to solve intergenerational poverty in children. A study in Uganda found that youths who received unconditional cash transfers earned 41% more on average compared to youths who did not receive these transfers (Blattman et. al 2013). This is crucial as child poverty is extremely problematic in the United States. One in five children are living in poverty and UBI could lift them out of poverty by providing their parents with the ability to invest in their children's future (Dreyer et. al 2016). People are incentivized to accumulate assets under a UBI. The saving of liquid and non-liquid assets are crucial for ending cyclical poverty because asset poverty has significant impacts on the children of these households.

It is extremely necessary for families to accumulate assets in order to prevent intergenerational poverty in their children, as chronically poor people had significantly less assets compared to those who are never poor (Bird 2007). When families are endowed with more assets, they are more likely to invest in their children's health and education, improving their outcomes in the future. Additionally, through passing down their assets, families further benefit their children and prevent them from falling into the poverty trap. In practice, the UBI experiment allowed families to save more assets which benefited their children in the future, as youths also earned more.

UBI has the potential to accomplish the same in the United States. Rational individuals in the developing world and the US all want to maximize their interests so they will attempt to earn more income. Individuals also are concerned about their children's future, meaning they will be likely to invest in important areas such as health and education with the extra income.

6. Critiques

6.1 Temptation Goods

The notion that UBI will cause a significant number of recipients to purchase temptation goods such as alcohol, tobacco, and illicit drugs is inaccurate for two reasons. First, under the general equilibrium model, rational individuals will perform cost-benefit analyses in order to maximize benefits. In turn, individuals theoretically would not engage in such behavior (e.g. drug use) that (a) harms their well-being, and (b) reduces their economic profits. In fact, a study on cash transfers confirms that families spend little to none on vices while spending much of the money on nutritious food and a World Bank meta-analysis which uses 44 estimates from 19 countries finds that without exception, the cash transfers had no impact on expenditures on temptation goods (Cunha et. al 2011 and Evans and Popova 2014). One study even explains that these cash transfers decrease drug and alcohol use especially among the most disadvantaged people (Marinescu 2018).

Second, drug addicts are irrational individuals who do not consider pragmatic consequences (i.e. the adverse health effects of drugs and alcohol). This means that drug addicts will find ways to purchase temptation goods regardless of government policies (e.g. MTW, UBI, etc.). This cannot be accounted for by UBI because this consequence is not specific to UBI. Plus, the empirical evidence discussed in the previous paragraph clearly demonstrates that UBI does not create an unique incentive for people to purchase temptation goods. UBI will not cause recipients to buy temptation goods because those who are rational will spend it wisely while the irrational individuals will always purchase temptation goods with or without UBI.

6.2 Cost

Most studies put the cost of UBI at over \$3 trillion per year (Greenstein 2019). In reality, UBI will not cost this much and it will not be extremely difficult to fund it. The overarching concern that UBI will have a massive cost due to the size of the program is invalid for two reasons. First, the cost is highly inflated. Most studies that conclude UBI will cost over \$3 trillion dollars only calculated the raw cost by multiplying the number of Americans by \$12,000. On the contrary, they do not take into account the benefits that UBI will bring to the US economy and do not take into account the increase in tax revenue that will inevitably occur once people are lifted out of poverty and earn much higher incomes. Moreover, a simple example illustrates why the gross cost is highly inflated. Let's picture three recipients of UBI. Two of them are currently paying taxes while the third does not. The two that pay taxes contribute to the funding of the UBI while only the third person is a "net" beneficiary since the former two would essentially be paying themselves.

In this scenario, the cost of UBI would be off by a factor of three because only one in three people is net benefiting off UBI. For these reasons, a holistic analysis of UBI finds that the net cost of a \$1,000 UBI would only be \$539 billion, or 25% of current welfare spending (Widerquist 2017).

Second, even if UBI costs slightly more than \$539 billion, there are a multitude of viable funding mechanisms to support its cost. The most viable way to fund UBI is to use current MTW spending. Since UBI will likely serve as the replacement to MTW, it is logical to assume that current MTW spending will be reserved for UBI. In turn, a large sum of money can be reallocated for UBI, as the MTW system costs \$1.1 trillion and 10% is lost in bureaucratic administrative costs (Rector and Menon 2018). Although \$1.1 trillion should be plentiful to fund UBI, another way to fund UBI is using a proposed carbon tax, which is extremely relevant especially with the threat of climate change. A proposal of \$36 per metric ton of carbon would raise over \$190 billion annually for UBI (Fleischer and Hemel 2019) There are a variety of other funding mechanisms as well, including a 10% VAT (valued added tax), wealth tax, and an increase in income tax (Kearney and Mogstad 2019). The cost of UBI is not very expensive compared to our current welfare system and it will be relatively easy to fund.

7. Discussion

So far, only the effects of UBI on the individual/household level have been highlighted. Studies from developing nations show that UBI has a positive effect on the macroeconomic level (i.e. the economy) as well. In fact, the study done in Kenya found that UBI stimulated economic growth in the local economy, producing a fiscal multiplier of 2.6 which is larger than the one in the US. This means that every \$1.00 injected into the economy becomes \$2.60 in return. In addition, the increase in revenue for local enterprises led to a positive spillover effect for the control villages, increasing their incomes as well by 50%. More importantly, this economic growth does not lead to rampant inflation, as prices only went up by 0.1% (Egger et. al 2019).

Additionally, UBI could also benefit those in poverty tremendously through encouraging universal banking. Nearly 25% of all Americans are unbanked or underbanked, meaning they either do not have a bank account or do not use their bank accounts for financial transfers (FDIC 2017). This is highly problematic because these Americans are forced to resort to fringe lenders, or "loan sharks". In fact, more than 10 million Americans have to borrow from these shady lenders each year (Skiba and Tobacman 2019). Critically, the lack of banking is why millions of Americans are trapped in poverty. These payday lenders incur interest rates at 400% on average, forcing low income families to spend 40% of their money paying off these debts and trapping them in poverty (Skiba and Tobacman 2019 and Timmers 2019). Conversely, UBI would promote universal banking in two ways. First is that it is easiest for the federal government to deliver the UBI through bank accounts (Klapper 2017). Second is that UBI will create a stable form of collateral, which would encourage banks to move into poor communities and provide low-income families with banking (Lavinas 2019 and Wykstras 2019). This is crucial as it would finally drive out payday lending and end chronic debts for these poor families.

8. Conclusion

Poverty in the United States is systemic and cyclical, with generations of people born into poverty and unable to escape it. In fact, since 1970, 75% of high poverty neighborhoods were still trapped in poverty by 2010 (Cortright and Mahmoudi 2014). The current MTW system clearly has not done enough to alleviate poverty and allow these people to move up the economic ladder, as the poverty rate has only seen an increase of two percent since the introduction of these programs intended to help the poor (Woodhill 2014).

Conversely, the success of UBI in developing nations provides some insight into what the federal government can do to emulate the same progress being made in these countries. UBI has been shown to remove the work disincentive, incentivize people to accumulate assets, and lift people out of poverty by increasing their income. It is important to note that the purpose of UBI itself is not for individuals to live off of it; it is supposed to assist individuals to pursue a better life and attain social mobility.

Evidence from developing nations overwhelmingly demonstrates UBI's ability to solve the problems created by the current welfare system. Whereas the MTW system creates work disincentives through welfare cliffs and unfairly high marginal tax rates, UBI removes this work disincentive and is supported by empirical evidence. Whereas the MTW system perpetuates poverty by punishing individuals for saving assets, UBI encourages the accumulation of liquid and non-liquid assets, lifting families out of poverty and benefiting their children in the future. UBI also removes stigma with its universality and significantly reduces bureaucracy by removing the vast majority of administrative costs (Colombino 2019).

Although critics of UBI disparage the proposal based on temptation goods spending and cost, both these concerns have been refuted in this paper. There will not be an increase in temptation goods spending due to UBI because (a) empirical evidence support the theory that almost all households are rational and will not spend on alcohol/drugs, and (b) people who consume temptation goods (e.g. drug addicts) are irrational and will find ways to purchase these temptation goods with or without the existence of UBI. The cost of UBI also should not cause any worries because (a) the raw cost is highly inflated while the more accurate estimate only costs a quarter of current welfare spending, and (b) there are many viable funding mechanisms to support a UBI if its cost is slightly more expensive. Therefore, UBI theoretically is the best replacement to the current MTW system.

9. Limitations

There are two main limitations in this paper. First, the vast majority of the UBI experiments were done in developing nations, which primarily have agrarian economies compared to the US's service-sector based economy (Egger et. al 2019, Haushofer and Shapiro 2016, and Blattman et. al 2013). Although the general equilibrium theory states that people should all act consistently as long as they are rational, institutions (e.g. the structure of the economy) still affect the decision making of individuals. Thus, we cannot assume that the benefits of UBI in developing nations will 100% translate if it gets introduced to the US simply because of the vast difference in the economies.

Although there have been pilot experiments done in Alaska and Stockton, more empirical evidence from US pilot experiments should offer us more insight into what UBI's actual effects would be in the United States. These experiments, however, should emulate the size and value of actual UBI proposals in order for the results to be representative of the potential of UBI. This has already been discussed in the World Bank analysis, which points out the main problem with the Alaska experiment to be the extremely low transfer value.

Second, I did not collect data or use primary data analysis; I only compiled past literature and derived my findings from them. I will aim to conduct a first-hand study next time in order to produce more accurate results. Future research in the United States may want to look like this. The UBI experiment will be conducted in the US as a nationwide study. I will control for demographic factors that may inadvertently affect people's income/spending behavior such as ethnicity, sex, age, etc. Furthermore I will create two treatment groups: people on MTW and people in the middle class. Last, in the experiment, each recipient will receive \$1,000 on a monthly basis for a year and I will record certain data.

After the experiments are conducted, the results will be analyzed with a combination of descriptive statistics and longitudinal regression models. I would then focus on two aspects of the findings. One is that I will look at how the incomes for the treatment groups changed after the administering of the unconditional payment. I would expect the income for people who originally were on welfare to increase significantly because UBI removes the work disincentive caused by MTW. I would also expect the income for middle class people to stay at the same level as a UBI would not have much effect on them.

Two is that I would analyze how expenditures for people on welfare differed before the transfer and after the transfer. This would help clarify two major arguments on the issue of UBI. First, it would demonstrate whether people actually invested in durable assets (similar to developing nations) and whether people spent more on health and education to improve the outcomes of their children. Second, it would show if people spent the transfer on temptation goods and simply wasted the money. I would also expect expenditures to not fluctuate significantly for middle class people because they probably have already invested in the key areas of health and education. Overall, these data would create confidence in policymakers for UBI.

References

2017 FDIC National Survey of Unbanked and Underbanked Households—Executive Summary. (2018). 20.

Ardington, C., Case, A., & Hosegood, V. (2007). Labor Supply Responses to Large Social Transfers: Longitudinal Evidence from South Africa. 44.

Banerjee, A. V., Hanna, R., Kreindler, G., & Olken, B. A. (2015). Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs Worldwide. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2703447

Bird, K. (2007). The intergenerational transmission of poverty: An overview. 59.

Blattman, C., Fiala, N., & Martinez, S. (2014). Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda. *The Quarterly Journal of Economics*, 129(2), 697–752. https://doi.org/10.1093/qje/qjt057

- Boeters, S., Gürtzgen, N., & Schnabel, R. (2006). Reforming Social Welfare in Germany: An Applied General Equilibrium Analysis. *German Economic Review*, 7, 363–388. https://doi.org/10.1111/j.1468-0475.2006.00124.x
- Butcher, K. F. (2017). ASSESSING THE LONG-RUN BENEFITS OF TRANSFERS TO LOW-INCOME FAMILIES. 38.
- Clifford, C. (2019). Why everyone is talking about free cash handouts—An explainer on universal basic income. CNBC. https://www.cnbc.com/2019/06/27/free-cash-handouts-what-is-universal-basic-income-or-ubi.html
- Colombino, U. (2019). Is unconditional basic income a viable alternative to other social welfare measures? *IZA World of Labor*. https://doi.org/10.15185/izawol.128.v2
- Cortright, J., & Mahmoudi, D. (2014). Lost in Place: Why the persistence and spread of concentrated poverty—Not gentrification—Is our biggest urban challenge. (City Report, p. 30). http://cityobservatory.org/wp-content/uploads/2014/12/Lost_in_Place_Final_Report.pdf
- Cunha, J., De, G., Pistaferri, L., Jayachandran, S., Hoxby, C., Augenblick, N., Lampe, R., & Roa, C. (2011). *Testing Paternalism: Cash vs. In-kind Transfers*.
- Dorfman, J. (2016). Welfare Offers Short-Term Help And Long-Term Poverty, Thanks To Asset Tests. https://www.forbes.com/sites/jeffreydorfman/2016/10/13/welfare-offers-short-term-help-and-long-term-poverty/#46d241e732cd
- Dreyer, B., Chung, P. J., Szilagyi, P., & Wong, S. (2016). Child Poverty in the United States Today: Introduction and Executive Summary. *Academic Pediatrics*, *16*(3), S1–S5. https://doi.org/10.1016/j.acap.2016.02.010
- Egger, D., Haushofer, J., Miguel, E., Niehaus, P., & Walker, M. (2019). *General Equilibrium Effects of Cash Transfers: Experimental Evidence from Kenya* (No. w26600; p. w26600). National Bureau of Economic Research. https://doi.org/10.3386/w26600
- Evans, D. K., & Popova, A. (2014). Cash Transfers and Temptation Goods: A Review of Global Evidence. *World Bank*, 36.
- Fleischer, M. P., & Hemel, D. (2019). THE ARCHITECTURE OF A BASIC INCOME. 68.
- Gentilini, U. (2020). Exploring Universal Basic Income: A Guide to Navigating Concepts, Evidence, and Practices. 337.
- Greenstein, R. (2016). Commentary: Universal Basic Income May Sound Attractive But, If It Occurred, Would Likelier Increase Poverty Than Reduce It. Center on Budget and Policy Priorities. https://www.cbpp.org/poverty-and-opportunity/commentary-universal-basic-income-may-sound-attractive-but-if-it-occurred
- Haushofer, J., & Shapiro, J. (2016). The Short-term Impact of Unconditional Cash Transfers to the Poor: ExperimentalEvidence from Kenya*. *The Quarterly Journal of Economics*, 131(4), 1973–2042. https://doi.org/10.1093/qje/qjw025
- Jones, D., & Marinescu, I. (2018). THE LABOR MARKET IMPACTS OF UNIVERSAL AND PERMANENT CASH TRANSFERS: EVIDENCE FROM THE ALASKA PERMANENT FUND. 74.
- Kangas, O., Jauhiainen, S., Simanainen, M., & Ylikännö, M. (2019). The basic income experiment 2017–2018 in Finland Preliminary results. 34.
- Kearney, M. S., & Mogstad, M. (2019). Universal Basic Income (UBI) as a Policy Response to Current Challenges. 19.
- Klaiber, A., & Smith, K. (2010). *General Equilibrium Benefit Analyses for Social Programs*. https://evans.uw.edu/sites/default/files/public/General_Equibilbrium_AK_VKS_28Sep2010.pdf
- Klapper, L. (2017). Can universal basic income boost financial inclusion and transparency? *Brookings*. https://www.brookings.edu/blog/future-development/2017/06/15/can-universal-basic-income-boost-financial-inclusion-and-transparency/
- Lavinas, L. (2019). *Can UBI survive financialization?* World Economic Forum. https://www.weforum.org/agenda/2019/06/can-ubi-survive-financialization/
- Manchester, C. F., & Mumford, K. J. (2012). How Costly is Welfare Stigma? Separating Psychological Costs from Time Costs in Food Assistance Programs. 44.
- Marinescu, I. (2018). *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer Programs* (No. w24337; p. w24337). National Bureau of Economic Research. https://doi.org/10.3386/w24337
- McKernan, S.-M., Ratcliffe, C., & Cellini, S. R. (2009). Transitioning In and Out of Poverty. 2.
- Minton, S., & Giannarelli, L. (2019). Five Things You May Not Know about the US Social Safety Net. 14.
- Moffitt, R. (1983). An Economic Model of Welfare Stigma. *The American Economic Review*, 73(5), 1023–1035. JSTOR.
- Options for Universal Basic Income: Dynamic Modeling. (2018). Penn Wharton Budget Model. https://budgetmodel.wharton.upenn.edu/issues/2018/3/29/options-for-universal-basic-income-dynamic-modeling

- Peterman, W. B., & Sommer, K. (2019). A historical welfare analysis of Social Security: Whom did the program benefit? Peterman—2019—Quantitative Economics—Wiley Online Library. https://onlinelibrary.wiley.com/doi/full/10.3982/QE657
- Posel, D., Fairburn, J. A., & Lund, F. (2006). Labour migration and households: A reconsideration of the effects of the social pension on labour supply in South Africa. *Economic Modelling*, 23(5), 836–853. https://doi.org/10.1016/j.econmod.2005.10.010
- Prosperity Now Scorecard Finds Millions of Families Live in Economic Uncertainty. (2019). National Low Income Housing Coalition. https://nlihc.org/resource/prosperity-now-scorecard-finds-millions-families-live-economic-uncertainty
- Ratcliffe, C. (2016). Asset Limits, SNAP Participation, and Financial Stability. 93.
- Rector, R. (2012). Examining the Means-tested Welfare State: 79 Programs and \$927 Billion in Annual Spending. The Heritage Foundation. https://www.heritage.org/testimony/examining-the-means-tested-welfare-state-79-programs-and-927-billion-annual-spending
- Rector, R., & Menon, V. (2018). *Understanding the Hidden \$1.1 Trillion Welfare System and How to Reform It.* The Heritage Foundation. https://www.heritage.org/welfare/report/understanding-the-hidden-11-trillion-welfare-system-and-how-reform-it
- Semega, J., Fontenot, K., & Kollar, M. (2017). *Income and Poverty in the United States: 2016*. The United States Census Bureau. https://www.census.gov/library/publications/2017/demo/p60-259.html
- Shoven, J. B. (2010). *Demography and the Economy*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226754758.001.0001
- Skiba, P. M., & Tobacman, J. (2019). Do Payday Loans Cause Bankruptcy? *The Journal of Law and Economics*, 62(3), 485–519. https://doi.org/10.1086/706201
- Stuber, J., & Schlesinger, M. (2006). Sources of stigma for means-tested government programs. *Social Science & Medicine* (1982), 63(4), 933–945. https://doi.org/10.1016/j.socscimed.2006.01.012
- The 'Welfare Cliff': How The Benefit Scale Discourages Work | U.S. Senate Committee On The Budget. (2012). https://www.budget.senate.gov/newsroom/budget-background/the-welfare-cliff-how-the-benefit-scale-discourages-work
- Timmer, J. (2019). Why debts associated with poverty can cause long-lasting problems. Ars Technica. https://arstechnica.com/science/2019/03/number-of-debts-not-just-amount-causes-psychological-burden/
- Vallas, R., & Valenti, J. (2014). *Asset Limits Are a Barrier to Economic Security and Mobility*. Center for American Progress. https://www.americanprogress.org/issues/poverty/reports/2014/09/10/96754/asset-limits-are-a-barrier-to-economic-security-and-mobility/
- Widerquist, K. (2017). The Cost of Basic Income: Back-of-the-Envelope Calculations. *Basic Income Studies*. https://works.bepress.com/widerquist/75/
- Woodhill, L. (2014). *The War on Poverty Wasn't A Failure—It Was A Catastrophe*. Forbes. https://www.forbes.com/sites/louiswoodhill/2014/03/19/the-war-on-poverty-wasnt-a-failure-it-was-a-catastrophe/
- Wykstra, S. (2019). *Microcredit was a hugely hyped solution to global poverty. What happened?* Vox. https://www.vox.com/future-perfect/2019/1/15/18182167/microcredit-microfinance-poverty-grameen-bank-yunus