# Universal Basic Income Impact: A Meta-Analysis of Long-Run Labor and Health Outcomes from Global Pilots

## I. Executive Summary

This meta-analysis synthesizes the existing global evidence on the long-term impacts of Universal Basic Income (UBI) pilot programs on labor market outcomes and the health of recipients. The findings reveal a complex landscape with varied effects depending on the specific design of the UBI pilot, the socio-economic context, and the duration of the intervention. While concerns about widespread labor force withdrawal have not been consistently substantiated, some pilots indicate modest reductions in working hours, often coupled with shifts towards self-employment, entrepreneurship, or increased time spent on education. The impact on health outcomes appears more consistently positive, with many pilots reporting improvements in mental health, reductions in hospitalization rates, and better nutritional status, particularly in developing economies. However, the long-term effects on healthcare access remain less clear. Methodological limitations, including the relatively short duration of many pilots and the challenges of isolating UBI's impact from other confounding factors, necessitate cautious interpretation of the current evidence. Further long-term research, especially on the effects of large-scale UBI implementations, is crucial to fully understand its potential and inform policy decisions.

#### II. Introduction

Universal Basic Income (UBI) is a social welfare system where all citizens or residents of a country or region regularly receive an unconditional sum of money, regardless of their income, employment status, or any other conditions.<sup>1</sup> This concept, characterized by its universality, unconditionality, provision as a cash payment, regular periodicity, and individual recipient focus, has garnered increasing attention as a potential mechanism to address pressing societal challenges. These challenges include persistent poverty, widening income inequality, and growing economic insecurity, particularly in light of rapid technological advancements and the evolving nature of labor markets.<sup>5</sup> The potential for automation to displace significant portions of the workforce has further fueled the debate around UBI as a proactive measure to ensure a basic standard of living for all.<sup>6</sup>The idea of a guaranteed income has a rich historical context, with various forms of basic income proposals and experiments dating back decades across different parts of the world.<sup>13</sup>

This report aims to contribute to the ongoing discourse by conducting a meta-analysis of the existing global evidence on the long-term impacts of UBI pilot programs. The primary focus is on understanding the sustained effects of these interventions on two critical areas: labor market participation and the health of the recipients. By examining

findings from a diverse range of pilot projects that have tracked outcomes beyond the initial intervention period, this analysis seeks to identify overarching trends, highlight significant contradictions in the data, and ultimately provide valuable insights to inform future policy decisions regarding UBI.

# III. Global Landscape of UBI Pilot Programs

Over the years, numerous UBI pilot programs have been implemented across the globe, reflecting a widespread interest in exploring the feasibility and effects of this policy.<sup>3</sup> These pilots have spanned various regions, including North America, Africa, Asia, and Europe, indicating a global curiosity about the potential of UBI to address diverse socio-economic challenges. However, the outcomes of these pilots might be influenced by the specific context in which they were conducted, given the significant differences in economic structures, social safety nets, and cultural norms across these regions.

These UBI pilot programs exhibit considerable heterogeneity in their design, which is crucial to consider when analyzing and comparing their outcomes. One key differentiating factor is the **duration** of the pilots, ranging from short-term interventions lasting a few months to longer-term studies spanning several years or even ongoing initiatives. The **scale** of these programs also varies significantly, with some pilots involving a small number of individuals or households, while others encompass entire villages or even cities. The **payment levels**, including the amount of basic income provided and the frequency of payments (e.g., monthly, bi-weekly), represent another important dimension of variation. Furthermore, the **conditions** attached to the cash transfers differ across pilots, with some providing truly unconditional income while others involve certain requirements. Finally, the **funding source** for these pilots varies, with some being primarily supported by government funds, others by private philanthropic organizations, and some through a combination of both. This diversity in pilot designs suggests that the effects of UBI on labor and health outcomes might be contingent upon these specific program characteristics.

Notable examples of UBI pilot programs across different regions include:

**North America:** The "Mincome" experiment in Manitoba, Canada (1974-1979), stands out as a large-scale social experiment that provided a guaranteed annual income to residents of Dauphin and other sites. <sup>15</sup> In the United States, several Negative Income Tax (NIT) experiments were conducted in the 1960s and 1970s in states like New Jersey, Iowa, Colorado, and Indiana. <sup>26</sup> More recently, the Stockton Economic Empowerment Demonstration (SEED) in California (2019) provided a monthly guaranteed income to a selected group of residents <sup>26</sup>, and Ontario, Canada, launched a Basic Income Pilot Project in 2017. <sup>26</sup>

**Africa:** GiveDirectly has been conducting a significant long-term UBI study in Kenya since 2016, providing monthly cash transfers to thousands of individuals in rural villages

for either two or twelve years.<sup>3</sup> Namibia also implemented a Basic Income Grant Coalition pilot program in the village of Otjivero in 2008-2009.<sup>26</sup>

**Asia:** In India, a notable UBI pilot project was conducted in the state of Madhya Pradesh starting in 2010, involving multiple villages and providing unconditional cash transfers to residents.<sup>26</sup> Iran implemented a nationwide unconditional cash transfer program in 2010, replacing subsidies on essential goods.<sup>3</sup> Additionally, a non-profit initiative called GoodDollar was launched in Israel in 2018, aiming to provide universal basic income through blockchain technology.<sup>26</sup>

**Europe:** Finland conducted a nationwide UBI experiment in 2017-2018, providing an unconditional income to a randomly selected group of unemployed individuals.<sup>3</sup> The Netherlands has also experimented with social assistance programs that incorporate elements of basic income in various municipalities.<sup>23</sup> Scotland has been actively researching the feasibility of a basic income pilot since 2018 and has launched a pilot for care leavers.<sup>26</sup> Spain introduced a guaranteed minimum income scheme called "ingreso mínimo vital" in 2020, and Catalonia has planned a UBI pilot.<sup>23</sup> Germany launched a UBI pilot project in 2020 <sup>26</sup>, and Wales initiated a guaranteed income scheme for young people leaving the state care system in 2022.<sup>26</sup>

The sheer number and diversity of these UBI pilot programs underscore a significant global effort to understand the potential impacts of providing a basic income. Analyzing the long-term outcomes of these varied initiatives is crucial for developing a nuanced understanding of UBI's effects on both labor market dynamics and the health and well-being of individuals.

#### IV. Long-Term Impacts on Labor Market Outcomes

Examining the long-term effects of UBI on labor market outcomes reveals a complex picture that challenges simplistic assumptions about work disincentives.

Regarding **employment rates and stability**, the evidence from various UBI pilots suggests that the impact on long-term employment is not uniformly negative, and in some cases, it can even be positive. The Mincome experiment in Manitoba indicated modest reductions in working hours, primarily among married women and teenage boys who chose to stay in school longer, while primary wage earners showed only a slight decrease in work. Similarly, the US NIT experiments in the 1960s and 1970s found a moderate reduction in work effort but also an increase in school attendance. In contrast, the GiveDirectly UBI study in Kenya found no evidence of increased idleness among recipients. Instead, participants became more entrepreneurial and experienced an increase in their overall earnings. Notably, the Stockton SEED program in the US reported an increase in full-time employment among recipients. However, the Finnish UBI experiment did not find any significant change in employment levels in the short term and the ORUS study in the US observed a 3.9 percentage point decrease in labor market participation. These varying results suggest that the impact of UBI on employment rates is likely influenced by factors such as the generosity of the UBI, the

duration of the pilot, and the prevailing economic conditions. Some evidence points towards a potential shift towards self-employment and entrepreneurship rather than a complete withdrawal from the labor market, indicating a possible transformation in the nature of work.

Analyzing **changes in hours worked and the nature of employment** provides further insights. The Mincome experiment showed a small impact on overall labor markets, with slight decreases in working hours for men and more pronounced but still modest reductions for women.<sup>30</sup> Teenage boys in the Mincome study, however, used the opportunity to extend their education.<sup>16</sup> The GiveDirectly Kenya study highlighted a significant shift in the type of employment, with recipients moving from wage work in agriculture towards non-agricultural self-employment.<sup>20</sup> The ORUS study in the US documented a reduction in work hours among participants.<sup>69</sup>These findings suggest that while UBI might lead to a decrease in total hours worked in some contexts, this reduction could be accompanied by positive changes such as increased time spent on education, skill development, or starting new businesses, indicating a potential shift towards more fulfilling or productive activities rather than simply less labor.

The potential of UBI to influence **job search**, **skill development**, **and education** is another important consideration. The Mincome experiment demonstrated that teenage boys were more likely to remain in school longer when provided with a basic income. Similarly, the US NIT experiments observed an increase in school attendance among participants. The Stockton SEED program suggested that UBI provided individuals with the time and financial security to apply for better jobs. These observations imply that UBI might alleviate the immediate pressure to accept any available employment, allowing individuals to engage in more effective job searching for roles that better match their skills and aspirations or to pursue further education and training that could lead to higher-quality employment opportunities in the long term.

Furthermore, several UBI pilot programs have explored the **impact on entrepreneurship and economic activity**. The GiveDirectly study in Kenya found that recipients became more entrepreneurial, with a notable increase in savings and risk-taking behaviors. Importantly, lump-sum transfers in this study were particularly effective in fostering the creation of new businesses. The UBI pilot in Madhya Pradesh, India, also reported an increase in the number of new business start-ups within the participating villages. Similarly, the Basic Income Grant Coalition pilot in Namibia observed an increase in income-generating activities and small business entrepreneurship among recipients. These findings, particularly from developing economies, suggest that UBI can have a positive long-term impact on fostering entrepreneurial endeavors and stimulating local economic activity, potentially by providing the initial capital or the financial security needed for individuals to take the risks associated with starting their own businesses.

## V. Long-Term Impacts on Health Outcomes

The meta-analysis of UBI pilot programs also reveals significant insights into the long-term impacts on various health outcomes.

In terms of physical health indicators, several studies have reported positive longterm effects. The Mincome experiment in Manitoba showed a notable decrease in hospital visits, particularly for work-related injuries and accidents, although the initial analysis did not establish a direct causal link between income support and health outcomes. However, a later re-analysis of the Mincome data using health administration records did find a significant reduction in hospitalization rates, especially for accidents. injuries, and mental health diagnoses. 16 Some of the US NIT experiments indicated positive effects on birthweight among specific groups of recipients. 15 The UBI pilot in Madhya Pradesh, India, reported improvements in sanitation, access to clean water, and the adoption of more efficient cooking and lighting sources. Additionally, the study found improvements in child weight-for-age and increased consumption of nutritious foods among the participants. 61 The Namibia Basic Income Grant pilot observed a significant reduction in child malnutrition rates and an improvement in the overall health status of residents.<sup>57</sup> The GiveDirectly UBI study in Kenya consistently reported improved food security among recipients.<sup>20</sup> Furthermore, the Alaska Permanent Fund dividend program has been associated with increased birth weight and a potential reduction in rates of obesity among young children. 15 These findings collectively suggest that long-term UBI or similar cash transfer programs can lead to positive impacts on various aspects of physical health, particularly in areas related to nutrition. child health, and safety, likely due to improved living conditions and a reduction in financial stress.

The impact of UBI on mental health and well-being has also been a focus of several long-term studies. The Mincome experiment in Manitoba reported a reduction in rates of psychiatric hospitalization and the number of mental illness-related consultations with health professionals. 16 The Stockton SEED program in the US found a decrease in anxiety and depression levels among recipients, along with an overall improvement in mental health. 43 Participants in the Finnish UBI experiment reported being more satisfied with their lives and experiencing less mental strain compared to the control group.<sup>29</sup> The GiveDirectly UBI study in Kenya indicated better physical and mental health among transfer recipients during the COVID-19 pandemic.<sup>45</sup>Another study by GiveDirectly in Kenya found improvements in psychological well-being, including increased happiness and life satisfaction, and reductions in stress, worries, and depression.<sup>20</sup> However, the ORUS study in the US did not find significant long-term improvements in mental health in its main analysis.<sup>73</sup> Overall, a significant body of evidence suggests that UBI can have a positive long-term impact on mental health and overall well-being, potentially by reducing financial stress, increasing the sense of security and autonomy, and improving overall life satisfaction.

The long-term effects of UBI on **healthcare access and utilization** are less definitively established. Research on the Alaska Permanent Fund dividend suggests an increased likelihood of residents seeking primary and preventative care services.<sup>74</sup> The GiveDirectly UBI study in Kenya reported a reduced probability of recipients seeking

medical attention at a hospital during the COVID-19 pandemic, which could potentially free up health system capacity. However, the Stockton SEED program did not find any evidence that the ability of recipients to access healthcare providers changed, even though their health outcomes improved. These mixed findings indicate that while increased income from UBI might enable individuals to afford healthcare or take time off for appointments, it might not necessarily address all systemic barriers to healthcare access, such as the availability of services or the cost of insurance and treatment in certain contexts.

Finally, some UBI pilot programs have examined the **impact on health behaviors**. The GiveDirectly study in Kenya found no increase in alcohol consumption among recipients and even a perceived decrease in alcohol consumption within the community.<sup>20</sup> The study on the effects of Native American casino dividends also reported reduced parental alcohol consumption.<sup>26</sup> These findings suggest that UBI does not necessarily lead to negative changes in health-related behaviors and might even contribute to positive shifts in some areas.

## VI. Cross-Pilot Analysis and Synthesis

A comparative analysis of the long-term labor market outcomes across various UBI pilot programs reveals both consistent findings and notable discrepancies. For instance, in several developing country contexts like Kenya and Namibia, UBI appears to foster a shift towards self-employment and entrepreneurial activities. This trend could be attributed to the lack of traditional employment opportunities and the capital constraints faced by individuals in these settings, where even a modest basic income can provide the initial investment or security needed to start a small business. However, the impact on overall employment rates varies. While Stockton SEED reported an increase in full-time employment <sup>43</sup>, other pilots like the ORUS study in the US found a decrease in labor market participation. These differences might be explained by the level of the UBI provided relative to the local poverty line and average wages, as well as the duration of the intervention. A more generous and longer-term UBI might provide individuals with greater flexibility in their labor market decisions.

Similarly, the comparative analysis of long-term health outcomes across different pilots highlights both common trends and inconsistencies. Improvements in mental health, such as reduced stress, anxiety, and depression, are frequently reported across diverse settings, including Canada, the US, Finland, and Kenya. <sup>16</sup>This suggests that the financial security provided by UBI can have a significant positive impact on psychological well-being, regardless of the specific economic context. Positive effects on child health, such as reduced malnutrition and improved birth outcomes, have also been observed in pilots conducted in India, Namibia, and through the Alaska Permanent Fund. <sup>15</sup> However, the long-term impact on healthcare access shows more mixed results, with some evidence of increased preventative care in Alaska <sup>74</sup> but little change observed in other pilots like Stockton SEED. <sup>75</sup> These variations could be due to the differences in existing healthcare systems and the extent to which UBI payments are sufficient to overcome financial barriers to accessing care.

Overall, the synthesis of findings from global UBI pilots indicates that while concerns about a widespread collapse of the labor market might be overstated, the impact on employment can vary depending on the specific context and design of the UBI. On the other hand, the evidence for positive long-term health outcomes, particularly for mental health and child well-being, appears more consistent across different settings.

To facilitate a direct comparison, the following table summarizes the key long-term labor and health outcomes of some major UBI pilots along with their key design features:

Table 1: Summary of Key Global UBI Pilot Programs and Their Long-Term Labor and Health Outcomes

| Pilot<br>Program<br>Name and<br>Location        | Duration                          | Monthly<br>Payment<br>(USD<br>Equivalent)                         | Conditions                                       | Key Long-<br>Term Labor<br>Market<br>Outcomes                            | Key Long-Term<br>Health<br>Outcomes                                                                                                       |
|-------------------------------------------------|-----------------------------------|-------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Mincome,<br>Manitoba,<br>Canada                 | 5 years                           | ~\$400-<br>~\$600 (for a<br>family of four<br>in 2020<br>dollars) | Income<br>guarantee<br>with benefit<br>reduction | Modest reduction in working hours, increased school enrollment for teens | Reduced<br>hospitalization<br>rates (especially<br>for mental health<br>and accidents),<br>fewer physician<br>visits for mental<br>health |
| US NIT<br>Experiments<br>(Various<br>Locations) | ~3-5<br>years                     | Varied,<br>around<br>poverty line                                 | Benefit<br>reduction<br>based on<br>income       | Moderate reduction in work effort, increased school attendance           | Mixed, some positive effects on birthweight in specific groups                                                                            |
| GiveDirectly,<br>Kenya                          | Ongoing<br>(some for<br>12 years) | ~\$22.50                                                          | Unconditional                                    | No increased idleness, shift to self-employment, increased earnings      | Improved food<br>security, better<br>mental health,<br>reduced<br>likelihood of<br>sickness during<br>pandemic                            |
| Stockton<br>SEED, USA                           | 2 years                           | \$500                                                             | Unconditional                                    | Increased full-<br>time<br>employment                                    | Reduced anxiety<br>and depression,<br>improved mental<br>health                                                                           |
| Finland UBI<br>Experiment                       | 2 years                           | ~\$620                                                            | Unconditional<br>(to<br>unemployed)              | No significant change in employment                                      | More life<br>satisfaction, less<br>mental strain                                                                                          |

|                                     |               |                                           |               | levels (short-<br>term)                                                    |                                                                                               |
|-------------------------------------|---------------|-------------------------------------------|---------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Madhya<br>Pradesh,<br>India         | ~1.5<br>years | ~\$4.40<br>(adult),<br>~\$2.20<br>(child) | Unconditional | decrease in<br>wage labor,<br>shift to own-<br>farm work,<br>increased new | Improved sanitation, access to clean water, better child weight-for- age, increased nutrition |
| Namibia<br>Basic<br>Income<br>Grant | 2 years       | ~\$9                                      | Unconditional | Increased income-generating                                                | Reduced poverty and child malnutrition, improved health status                                |

VII. Methodological Considerations and Limitations of Existing Research

The methodologies employed in UBI pilot programs vary, with many relying on the strengths of randomized controlled trials (RCTs) to establish causal relationships between the basic income provision and the observed outcomes.<sup>56</sup> However, conducting long-term social experiments presents inherent challenges. One significant limitation is the potential for attrition bias, where participants may drop out of the study over time, potentially skewing the results. Furthermore, generalizing findings from specific pilot programs, which often involve relatively small sample sizes and are conducted in particular geographic and socio-economic contexts, to broader populations or different settings requires careful consideration.<sup>5</sup>

Many UBI pilots, including some of the most widely cited, have been relatively short-term, often lasting only one to two years.<sup>19</sup> This limited duration might not be sufficient to capture the truly long-run effects of a UBI, as individuals and communities may take more time to fully adjust their behaviors and economic activities in response to a sustained basic income. For instance, long-term impacts on career choices, educational attainment, and overall societal structures might only become apparent over a more extended period.<sup>9</sup>

Several potential **confounding factors** could also influence the observed outcomes in UBI pilot programs. Local economic conditions, such as changes in employment opportunities or the cost of living during the pilot period, could affect labor market outcomes independently of the UBI. The presence of existing social programs and how UBI interacts with them can also play a significant role. Other concurrent policy changes at the local or national level might also influence the health and well-being of participants, making it challenging to isolate the specific impact of the UBI intervention. The complexity of social and economic systems makes it difficult to definitively attribute all observed changes solely to the provision of a basic income.

Furthermore, there are inherent **limitations in generalizing findings** from relatively small-scale, short-term pilots to the potential impacts of a large-scale, permanent UBI program implemented at a national or global level.<sup>5</sup> The macroeconomic effects of a universal basic income, such as potential impacts on inflation, overall economic growth, and the national budget, might differ significantly from those observed in localized pilots. Behavioral responses of individuals and the broader society could also evolve over time if UBI becomes a permanent feature of the social landscape, which might not be fully captured in short-term experiments. Therefore, while the evidence from existing UBI pilots provides valuable insights, caution is warranted when extrapolating these findings to predict the outcomes of a full-scale UBI implementation.

## VIII. Policy Implications and Future Research Directions

The findings from the meta-analysis of global UBI pilots carry several important **implications for potential broader implementation of UBI**. The evidence suggests that concerns about widespread and sustained labor force withdrawal due to UBI might be overstated, as many pilots show either modest reductions in work or even shifts towards more productive activities like self-employment and education.<sup>20</sup> However, the design of a UBI program, particularly the level of payment provided, is a crucial consideration to balance the goal of providing a basic income floor with the need to maintain incentives for work and economic participation.<sup>5</sup> The integration of UBI with existing social welfare programs also needs careful planning to avoid unintended consequences or inefficiencies.<sup>5</sup>

The current body of research also highlights several **key areas for future research**. There is a significant need for more long-term studies that track the impacts of UBI over extended periods to understand the sustained effects on labor, health, and overall well-being as individuals and communities fully adapt. Further investigation into the macroeconomic effects of implementing UBI at a large scale, including its impact on inflation, economic growth, and government finances, is crucial. Research should also focus on elucidating the specific mechanisms through which UBI impacts health outcomes, exploring the pathways related to poverty reduction, stress reduction, and changes in health behaviors. Studying the effects of UBI in diverse cultural and economic contexts is also essential to understand how its impacts might vary across different populations. Finally, more research is needed on the optimal ways to integrate UBI with existing social welfare programs to create a comprehensive and effective social safety net.

#### IX. Conclusion

This meta-analysis of global UBI pilot programs provides a comprehensive overview of the current evidence regarding the long-term impacts on labor market outcomes and the health of recipients. While the effects on employment appear nuanced and context-dependent, with some evidence of modest reductions in working hours potentially offset by increases in self-employment and education, the impact on health outcomes is generally positive, particularly for mental health and in improving living conditions that

affect physical well-being. However, methodological limitations and the challenges of generalizing from small-scale pilots necessitate a cautious approach to interpreting these findings. For policymakers considering broader UBI implementation, the evidence suggests that concerns about widespread labor force withdrawal might be overblown, but careful attention to program design, payment levels, and integration with existing systems is crucial. Future research should prioritize long-term studies, investigations into macroeconomic effects and health impact mechanisms, and explorations of UBI's effectiveness across diverse contexts and in conjunction with existing social welfare structures. Ultimately, a deeper and more nuanced understanding of these long-run impacts is essential to determine the potential role of UBI in addressing the complex socio-economic challenges of the 21st century.